Mind Brain Type Identity Theory

What you need to know:

All mental states are identical to brain states ('ontological' reduction) although 'mental state' and 'brain state' are not synonymous (so not an 'analytic' reduction).

Issues including:

- dualist arguments applied to mind-brain type identity theory
- issues with providing the type identities (the multiple realisability of mental states).

Mind-Brain Type Identity Theory

The mind is the brain, and all mental states and processes are identical with brain states and processes.
Mental states are ontologically reducible to brain states.
However, there is no analytic reduction, as 'mental state' and 'brain state' do not mean the same thing.
It argues that each type of mental state is identical to a type of brain state e.g. pain is a type of mental state; two individuals in pain are two tokens of the same type of mental state.

The Spatial Location problem for Mind-Brain Type Identity Theory

According to Leibniz's law, if we can find a property of the mind that the brain does not possess, or a property of the brain that the mind does not possess, then we will have demonstrated that the mind cannot be the brain.
The fact that brain states have a spatial location, but mental states do not, suggests they cannot be identical. Identity theorists respond by saying that we may not be used to speaking about our mental states in this way but that when we learn the identities we may come to do so.

Possible Exam Questions

What is ontological reduction? (3 marks)
What is the difference between ontological reduction and analytic reduction? (3 marks)
What does it mean to say Mind-brain type identity theory is an ontological reduction, but not an analytic reduction? (3 marks)
What claim does Mind–brain type identity theory make regarding statements about mental states? (3 marks)
Briefly outline Mind–brain type identity theory (5 marks)
Briefly outline Mind–brain type identity theory and the issues related to it (12 marks)
Outline mind-brain type identity theory and explain how the issue of multiple realisability challenges this view. (12 marks)
What are the similarities and differences between analytical behaviourism and Mind Brain Type Identity Theory? (12 marks)
Are mental states ontologically reducible to brain states? (25 marks)
Briefly explain issues with providing the type identities and how this might challenge Mind Brain Type identity Theory. (5 marks)
Briefly explain how a dualist might challenge Mind Brain Type Identity Theory. (5 marks)

Arguments in favour of Mind-Brain Type Identity Theory

- Science has been successful in demonstrating that once-mysterious aspects of reality can be given physicalist explanations (e.g. science explains rainbows in terms of wavelengths of light)
- The theory of evolution regards all features of human beings as the consequence of a material process. Consciousness, therefore, would have gradually emerged as our brains became increasingly complex.
- A range of types of mental states can today be correlated with activity in specific regions of the brain.
- Damage to the brain affects mental capacities.
- It does not suffer from some the problems faced by dualism (e.g. the problem of causal interaction; the problem of other minds)
- Unlike philosophical behaviourism, allows mental states a causal role in producing behaviour, which appears, intuitively, to be correct.
- Ockham's razor tells us that we should not multiply entities unnecessarily, and in Mind-Brain Type Identity theory there is only one entity.

Mind Brain Type Identity Theory

Key terms

Mind Brain Type Identity Theory: All mental states are identical to brain states ('ontological' reduction) although 'mental state' and 'brain state' are not synonymous (so not an 'analytic' reduction).

Ontological Reduction: an explanation of one kind of phenomenon in terms of something more fundamental. It means they are ultimately the same thing under different descriptions.

Analytic Reduction: to reduce one phenomenon to another by explaining one in terms of the other. It is concerned with the meaning of the language we use to talk about the phenomena and claims that all that is said about one phenomenon can be translated into talk about another without loss of meaning.

Numerical Identity: where two things are identical and refer to only one entity.

Qualitative Identity: where two things are similar in their qualities, but refer to more than one entity.

Meaning: According to Mind-brain Type Identity Theory, the words 'mind' and 'brain' may have different meanings to us, but refer ultimately to the same thing.

Reference: According to Mind-brain Type Identity Theory, the words 'mind' and 'brain' may have the same reference (they both refer to the brain), but the words 'mind' and 'brain' mean something different in our use of language.

Type: a general class of mental state (e.g. pain, intention, belief)

Token: a specific instance of a type

Intentionality: where a mental state is directed beyond itself; it is about something. E.g. by belief that it is raining is about the rain.

Chauvinism: the ungrounded belief in the superiority of one's own nationality, sex or race. In Philosophy it is used to refer to the implication that other species could not possess certain types of mental states.

The irreducibility of intentionality

Dualists claim intentionality cannot be the property of something purely physical. Intentionality is when a belief or desire is directed beyond themselves - it is about something e.g. my desire for cabbage soup is about cabbage soup. Just as, if 3 sticks fall from the tree and make an arrow shape, they are not pointing at anything unless a mind says they are. Equally, a mental state cannot be about anything unless a mind (non-material) makes it so. A simple arrangement of neurons in your brain cannot be about anything.

The chauvinism of type identity

If pain were identical to brain processes in humans (c fibres firing), this would imply other that animals that have other types of brain to humans (e.g. dogs) do not experience pain. However, it, is implausible to suggest animals do not experience pain. Therefore, pain cannot be identical to a particular neurological activity.

It is chauvinistic to claim that because an alien or animal has a different type of brain to others, they are not capable of beliefs, pain etc.

The multiple realisibility of mental states

Type identity implies that it is not possible for the same type of mental state to be realised by different types of brain state.
For example, if two people believe it is raining, they must both have the same neurophysiological process going on. If the brain state were destroyed, it would be impossible to have the same belief again. However, this is not how the brain works. We are able to recover from brain damage and re-form the same types of beliefs.