

"I am a brain Watson. The rest of me is mere appendix. Therefore it is the brain I must consider."

-Sherlock Holmes

Two connected outstanding issues for the Materialist:

- (1) Why do Descartes' epistemic arguments really fail? What is the mind like such that we could think of it "in two ways" like Clark Kent and Superman?
- (2) Without a positive account of materialism, how do we know the materialist doesn't face problems even worse than she accuses the dualist of facing?

Identity Theory

Recall: neuroscience tells us mental states are *correlated* with brain states. E.g.,

- Injuries to the brain impair our mental life or personalities.
- Severe injuries to the brain seem to *halt* our mental life (e.g. as with a concussion)
- Chemical changes in our brain (e.g. by use of alcohol or drugs) bring about changes to our moods and emotions.

How can we explain these correlations?

- (a) chance.
- (b) minds cause brains [i.e. mental states cause brain states]
- (c) brains cause minds
- (d) minds and brains have a separate, common cause.
- (e) minds simply are brains.

(Mind-Brain) Identity Theory: mental states are just physical states of the brain.

Smart's Arguments for Identity Theory

Occam's Razor:

Formulation 1 – we shouldn't posit more entities beyond what is necessary.

Formulation 2 – if two theories make the same predictions, the simpler one is better.

Smart's argument from simplicity:

A theory which takes minds and brains to be distinct is one which has "extra entities" which play no obvious explanatory role. That is,

- (a) A theory which takes minds to be brains is simpler:
 - it posits many fewer entities.
 - all entities are of the same kind (i.e the physical kind), and interact in the same ways.
- (b) Not only this, but the theory on which minds and brains are identical can explain everything that the theory that minds and brains are distinct can.

So, minds are just brains.

An explanatory argument (this capitalizes on causal problems for dualism):

A theory which takes minds to be brains is better equipped to explain certain kinds of mental causation. (E.g., why does pain cause distress? Because the pain-brain-state causes the distress-brain-state). A theory which takes mental states to be distinct from brain states has to account for two more causal links and correlations (and it is not obvious how).

So the theory that minds are brains has more explanatory power than rival theories.

So, minds are just brains.

Understanding Identity Theory

Smart's warning: this theory does not state that talk about minds and talk about brains have the same *meaning*. That would be very hard to believe.

Smart's gives an analogy from lightning: Lighting just is an electrical discharge. That doesn't mean that when someone says "there's lightening over there" they *mean* "there's an electrical discharge over there". It took scientific investigation to find out that lightening is just an electrical discharge. (This helps us understand why the Cartesian epistemological arguments might fail.)

Types v. Tokens

How many words are written below?

blue and blue and blue

If you said "two" you're thinking of word *types*. If you said "five" you're thinking of word *tokens*.

Mental State Types v. Mental State Tokens

Mental states, like words, have types and tokens of those types. For example:

Marla thinks the steelers will win the game, and Ahmed thinks that too.

How many thoughts were had? If you said "one" you're thinking of thought *types*. If you said "two" you're thinking of thought *tokens*.

Type Identity Theory: Every type of mental state is identical with some type of brain state.

Token Identity Theory: Every token of a mental state is identical with some particular state of a particular brain.

Type identity theory *entails* token identity theory, but not vice versa. So, in general,

- (A) Type theory is harder to defend, but much more informative and explanatory.
- (B) Token theory is easier to defend, but much less informative and explanatory.