

# Theories of the Mind-Body Relationship

Lecture Four: Part 2

Identity Theory and Eliminativism

# Identity Theory

Mental states are brain states

# Identity Theory

## aka: The 'Australian Thesis'

- Two main kinds:
- Type-Type
- Token-Token (arose later – a strategic retreat)

# Why is the Identity Theory Thought to be Plausible

- Just as science showed us that lightening just is a certain kind of electrical discharge...
- Science is showing us that mental states just are states of the brain
- Neuroscience is appealing to many (it seems to 'pop the hood' on behavioral dispositions)
- Lots of pictures of the neural correlates of various mental activities in journals

# Type-Type Identity Theory

- Types of mental states are types of brain states (e.g., pain = c fibers firing)

# Problems with Type-Type Identity Theory

## Species chauvinism

- If mental states = brain states then beings without brains (e.g., computer programs, robots, certain kinds of alien, angels, god) can't have mental states
- If dolphins don't have c-fibers (or whatever brain state we are in when we are in pain) then they can't be in pain

# Problems with Type-Type Identity Theory

## Leibniz Law objections

- If you have  $x$  and  $y$  and you want to know whether  $x = y$  (where  $=$  is the identity relation that each object bears to itself)
- Then if you can find a property that  $x$  has that  $y$  lacks (or vice versa)
- You can conclude that  $x$  does not  $= y$

# Problems with Type-Type Identity Theory

- Some candidates:
  - My pain is in my toe but my brain is in my head
  - My beliefs can be true or false but brain states can't be



# Responses

- It might *seem to you* that they have different properties...
- But that is a feature of *you* and you are *simply wrong or misguided*

# Responses

- E.g., your brain *represents* bodily damage in your toe and that state of your brain just is pain. So the pain is in your brain but your brain *represents* the pain as being in your toe.
- Similarly, what your brain *represents* can be true or false (e.g., referred pain) and beliefs are just your brain *representing* things to be in a certain way

# Currently...

- A number of neuroscientists / cognitive neuroscientists think that type-type identities have been or will be made between mental or cognitive states and neuro-physiological states
- A number of other neuroscientists or cognitive neuroscientists think that actually type-type identities haven't been as forthcoming as we would have hoped
- The latter thought has fuelled the two further developments that we will consider

# Eliminativism

There aren't any mental states  
(get over it!!!)

# Eliminativism

- Folk-psychology and our common-sense understanding of mental states involves our committing to a certain view of their nature (e.g., that mental states are types of brain states)
- It turns out that (according to some neuroscientists) mental states aren't correlated with brain states
- Therefore, neuroscience has shown us that there aren't any mental states. Just like science showed us there isn't phlogiston

# Eliminativism

- Paul and Patricia Churchland think that as neuroscience matures the vocabulary of neuroscience will come to replace the vocabulary of folk-psychology / mentalistic discourse
- Neuroscience textbooks don't talk about 'belief' so some of our mentalistic discourse already has been eliminated

# Problems for Eliminativism

- But that is just crazy!!!
- Even mature neuroscience will not be able to capture the phenomenon at the grain that folk psychology does (e.g., predicting turning up to class next week) but these predictions are indispensable to us in our daily lives (more on this later)
- Perhaps any theory that commits us to concluding that 'there aren't any mental states' must be false

# Problems for Mentalistic Discourse

- But then is mentalistic discourse scientific if it isn't open to being falsified?
- What does that imply for a science of cognition?