

## Eliminative Materialism

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## Concerns with Identity Theory

- The main concern with the Identity Theory is not whether a material account of the mental is correct
  - It is thought to be correct
- The main concern is that there will not be any one-to-one match-ups between folk psychology and the concepts of neuroscience
  - This one-to-one match-up (type-type identity) is what intertheoretic reduction requires
  - Lots of different systems could instantiate some defined functional organization

## Eliminative Materialism

- EM also doubts that there will be a one-to-one match-up between neuroscience and folk psychology
- "As the eliminative materialists see it, the one-to-one match-ups will not be found, and our commonsense psychological framework will not enjoy an intertheoretic reduction, *because our commonsense psychological framework is a false and radically misleading conception of the causes of human behavior and the nature of cognitive activity*. On this view, folk psychology is not just an incomplete representation of our inner natures; it is an outright misrepresentation of our internal states and activities." (289)

## Eliminative Materialism Argument

1. If a correct neuroscientific account of behavior and cognitive activities is to be type-type identical with folk psychological concepts of behavior and cognitive activities, then each theory's conceptual framework must accurately represent behavior and cognitive activities.
  2. "Our commonsense psychological framework is a false and radically misleading conception of the causes of human behavior and the nature of cognitive activity."
  3. Therefore, "we cannot expect a truly adequate neuroscientific account of our inner lives to provide theoretical categories that match up nicely with the categories of our commonsense framework."
  4. Theories which misrepresent the way the world is and which cannot be reduced will be eliminated.
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5. Hence, folk psychological theories will be eliminated.

## Historical Cases of Elimination of Old, Inaccurate Theories

- Heat as Fluid in Bodies: an 18-19th century theory
  - There existed an explanatory story of "caloric" that captured the main features of heat
  - But, it became clear that heat was mean molecular kinetic energy
  - There was no one-to-one match-up between caloric (a substance) and m.m.k.e. (a motion) so caloric was eliminated
- "it was finally agreed that there is no such thing as caloric. Caloric was simply eliminated from our accepted ontology." (289)

## Historical Cases of Elimination of Old, Inaccurate Theories

- Phlogiston: a spirit-like substance that is released when a piece of wood burns or metal rusts
- What was learned was that there is not something that is released but something that is gained, namely oxygen
  - The phlogiston theory misdescribed what was really happening
  - So, it was eliminated from science

## Historical Cases of Elimination of Old, Inaccurate Theories

- Crystal Sphere: anyone can look up at night and discover the stars moving through the heavens
  - Before Copernicus, the theory was that the sphere was made of (crystal) and how it moved (the gods) was the astronomical topic for 2000 years
  - Copernicus gave us a new model for viewing the heavens and movement of stars
    - The theory of a moving, crystal sphere disappeared

## Historical Cases of Elimination of Old, Inaccurate Theories

- Witches: the concept of witches has its origins in psychosis and the reason for the behavior was attributed to demonic forces
  - But, we concluded that witches do not exist
- "We concluded that the concept of a witch is an element in a conceptual framework that misrepresents so badly the phenomena to which it was standardly applied that literal application of the notion should be permanently withdrawn. Modern theories of mental disfunction led to the elimination of witches from our serious ontology." (289)

## Folk Psychology and Elimination

- Folk psychological concepts (like belief, desire, fear, sensation, etc.) are also going to be eliminated
- With a mature neuroscience, folk psychology will look just like alchemy, phlogiston, crystal spheres, and witches--an inferior and inadequate conceptual framework
- Eventually, we will reconceive our behaviors and mental activities within a more accurate conceptual framework

## First Argument For Eliminative Materialism

- Folk psychology fails to provide any explanations or predictions about fundamental cognitive and behavioral activities
  - e.g., sleep, learning, intelligence, and mental illness are all not understood or explained by folk psychology
- For folk psychology, the mind is mysterious
  - It is more mysterious when one considers damaged, abnormal brains

## Second Argument For Eliminative Materialism

- A large number of our past folk theories have been shown to be explanatorily inadequate or false
- Thus, it is highly unlikely that folk psychology will get it right when so many others have been wrong

## Third Argument For Eliminative Materialism

- This argument is against the likelihood that there will be intertheoretic reduction according to identity theory and functionalism
- A new theory must entail a set of linking principles between the mature neuroscience and folk psychology
- "There are vastly many more ways of being an explanatorily successful neuroscience while *not* mirroring the structure of folk psychology, than there are ways of being an explanatorily successful neuroscience while also *mirroring* the very specific structure of folk psychology." (291)
- So, the probability of eliminative materialism being right is higher than either identity theory or functionalism

## First Argument Against Eliminative Materialism

1. If eliminative materialism were true, then one's introspection would not directly reveal the existence of pains, beliefs, desires, fears, and so on.
2. "One's introspection reveals directly the existence of pains, beliefs, desires, fears, and so forth. Their existence is as obvious as anything could be."

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3. Thus, eliminative materialism is false.

## The Eliminative Materialist's Reply

- This argument makes the same mistake as a medieval person's claim that there exist crystal spheres or witches because one has seen it with one's own eyes. It's as obvious as anything....
- But, all observation occurs within a conceptual framework and our observational judgements are only as good (accurate) as our conceptual framework
- One needs to reconceive one's conceptual framework and not assume it is true

## Second Argument Against Eliminative Materialism

1. If it is true and meaningful that commonsense mental states do not exist, then that claim expresses a certain belief, intention to communicate, and knowledge of language.
2. But, if the statement is true, then the mental states used to express the statement do not exist.

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3. Therefore, the statement is a meaningless string of noises and scribbles and cannot be true.

## The Eliminative Materialist's Reply

- The second argument begs the question
- The argument analyzes meaningfulness by presupposing a certain conceptual system, namely a folk psychological theory of meaning
  - If eliminative materialism is true, then meaningfulness will have a different source than that embedded in folk psychological theory
  - See a historical parallel on p. 292

## Third Argument Against Eliminative Materialism

1. Folk psychology is not as bad as the eliminative materialist makes it out to be.
  2. A mature neuroscience will require that some folk psychological concepts are eliminated, but not all.
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3. A complete elimination of folk psychology is not necessary or forthcoming.

## The Eliminative Materialist's Reply

- There are two possible and mutually exclusive extremes: pure reduction and pure elimination
  - There's a continuum that exists between these extremes and the final outcome may appear somewhere along this continuum
  - Where things end up will be decided by empirical science
- Churchland's objective is to make a plausible case for the revolutionary extreme of pure elimination of folk psychology