

## What is Consciousness? Part II: Materialism vs Dualism

**Last time:** The *hard problem* of consciousness is the problem of explaining why brain activity gives rise to the subjective, qualitative character of conscious experience.

### I. The old rivals

Philosophical theories of consciousness aim (in the long term!) to solve the hard problem. But there is fundamental disagreement about the kind of solution we should be looking for:

*Materialism (physicalism):* conscious experience is fundamentally a *physical* phenomenon, ultimately based in physical processes occurring in the brain. To explain conscious experience, we *do not* need to posit any fundamentally non-physical properties, processes, forces, entities, substances or laws.

*Dualism:* conscious experience, although dependent on brain function, is *not* itself a fundamentally physical phenomenon. To explain conscious experience, we *do* need to posit at least some fundamentally non-physical properties, processes, forces, entities, substances or laws.

‘Physical’ should be understood broadly to encompass all the laws, properties, entities (etc.) of *chemistry* and *biology* as well as those of physics—the assumption being that these are all *fundamentally physical*, in the sense that they derive from the fundamental constituents of reality revealed by physics.

The debate in a nutshell: dualism has terrible problems accounting for *mental causation*, whereas materialism clashes with deeply held *intuitions* about the *distinctness* of mind and body.

### 2. The causal argument for materialism<sup>1</sup>

Papineau (2002, p. 17):

‘Many effects that we attribute to conscious causes have full physical causes. But it would be absurd to suppose that these effects are caused twice over. So the conscious causes must be identical to some part of those physical causes.’

A reconstruction of the argument:

- (1) Some conscious experiences have physical effects. (*Mental causation*)
- (2) All physical effects are fully caused by purely physical causes. (*Causal closure of the physical*)
- (3) The physical effects of conscious experiences are not always overdetermined by distinct causes. (*No overdetermination*)
- (4) Some conscious experiences are purely physical causes.
- (5) If some conscious experiences are purely physical causes, then materialism is true.
- (6) Materialism is true.

The *causal closure of the physical* (Premise 2) is the key plank in the materialist’s case. Why believe it?

- ‘The theories and discoveries of thousands of physicists since the 1930s have resulted in a remarkable insight into the fundamental structure of matter: everything in the universe is found to be made from a few basic building blocks called fundamental particles, governed by four fundamental forces.’ (CERN website)

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<sup>1</sup> Sometimes also called the ‘causal exclusion argument’ or ‘exclusion argument’.

- The materialist's motivation (see Papineau): Over a century of experimental physiology and neuroscience has found zero evidence for a new fundamental force (the 'mind force') at work inside conscious beings. The very idea (not absurd 100 years ago) now seems absurd.

The causal argument backs the dualist into a corner:

Reject (1) → Concede that conscious experience is causally inert, i.e. 'epiphenomenal'.

Reject (2) → Hold out for some strange new physics (e.g. a 'mind force').

Reject (3) → Concede that conscious experience, although not strictly inert, merely 'over-causes' events that are already caused by fundamental physical forces.

### 3. Conceivability arguments for dualism<sup>2</sup>

*Zombies*: creatures physically identical to us without conscious experiences.

*Ghosts*: creatures experientially identical to us without physical form.

It's a point of agreement between materialists and dualists that zombies and ghosts do not exist. But the dualist maintains that they are *possible* in the broadest sense of the word (i.e. they are 'metaphysically' or 'logically' possible), whereas the materialist must deny this.

Conceivability arguments have the following form:

- (1) If zombies/ghosts are possible, then materialism is false.
- (2) If zombies/ghosts are conceivable, then they are possible.
- (3) Zombies/ghosts are conceivable.
- (4) Materialism is false.

Why does materialism require the *impossibility* of zombies/ghosts, and not just their *non-existence*?

- Materialism posits an *identity relation* between conscious experiences and physical causes to reconcile mental causation with the causal closure of the physical.
- But the metaphysical possibility of zombies/ghosts is enough to show that conscious experiences are *metaphysically distinct* from (i.e. *non-identical to*) their physical correlates.

Conceivability arguments back the materialist into a corner:

Reject (1) → Try to reformulate materialism in a zombie/ghost-compatible way.

Reject (2) → Argue that conceivability is not a guide to possibility in this case (but why not?).

Reject (3) → Argue that zombies/ghosts are not genuinely conceivable at all.

#### Primary reading:

Crane, Tim. 2016. *The Mechanical Mind: A Philosophical Introduction to Minds, Machines and Mental Representation*. 3rd Edition. Chapter 13 (or 2nd edition, Chapter 6).

#### Further reading:

Chalmers, David J. 1996. *The Conscious Mind: In Search of a Fundamental Theory*, especially Chapters 3 and 4.

Crane, Tim. 2016. *The Mechanical Mind: A Philosophical Introduction to Minds, Machines and Mental Representation*. 3rd Edition. Chapter 13 (or 2nd edition, Chapter 6).

Mørch, Hedda Hassel. 2017. Is matter conscious? *Nautilus Magazine*, April 6

2017. <http://nautil.us/issue/47/consciousness/is-matter-conscious>

Papineau, David. 2002. *Thinking about Consciousness*, Chapter 1.

**For more on this topic, take PH221: Problems of Analytic Philosophy.**

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<sup>2</sup> Sometimes also called 'modal arguments'.