

What is Consciousness?

Part II: Materialism vs Dualism

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0 Last time

- Conscious experience is **subjective** and **qualitative**. Its subjective, qualitative character is summed up in the phrase '**what it's like**'. If you're conscious, there is something it's like to be you.
- This leads to the question: why does brain activity give rise to conscious experience?
- Chalmers (1995) distinguishes the '**easy**' problems of consciousness from the '**hard problem**'.
- The '**easy** problems' concern the neural mechanisms underlying abilities and functions associated with conscious experience.
- The **hard problem** is that of explaining why brain activity gives rise to subjective, qualitative experience at all.
- The neuroscience of consciousness has tended to avoid the hard problem and focus on the 'easy' problems.
- Some philosophers, such as Dennett, deny there really is a hard problem.

This time: Should a theory of conscious experience be **materialist** or **dualist**?

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.

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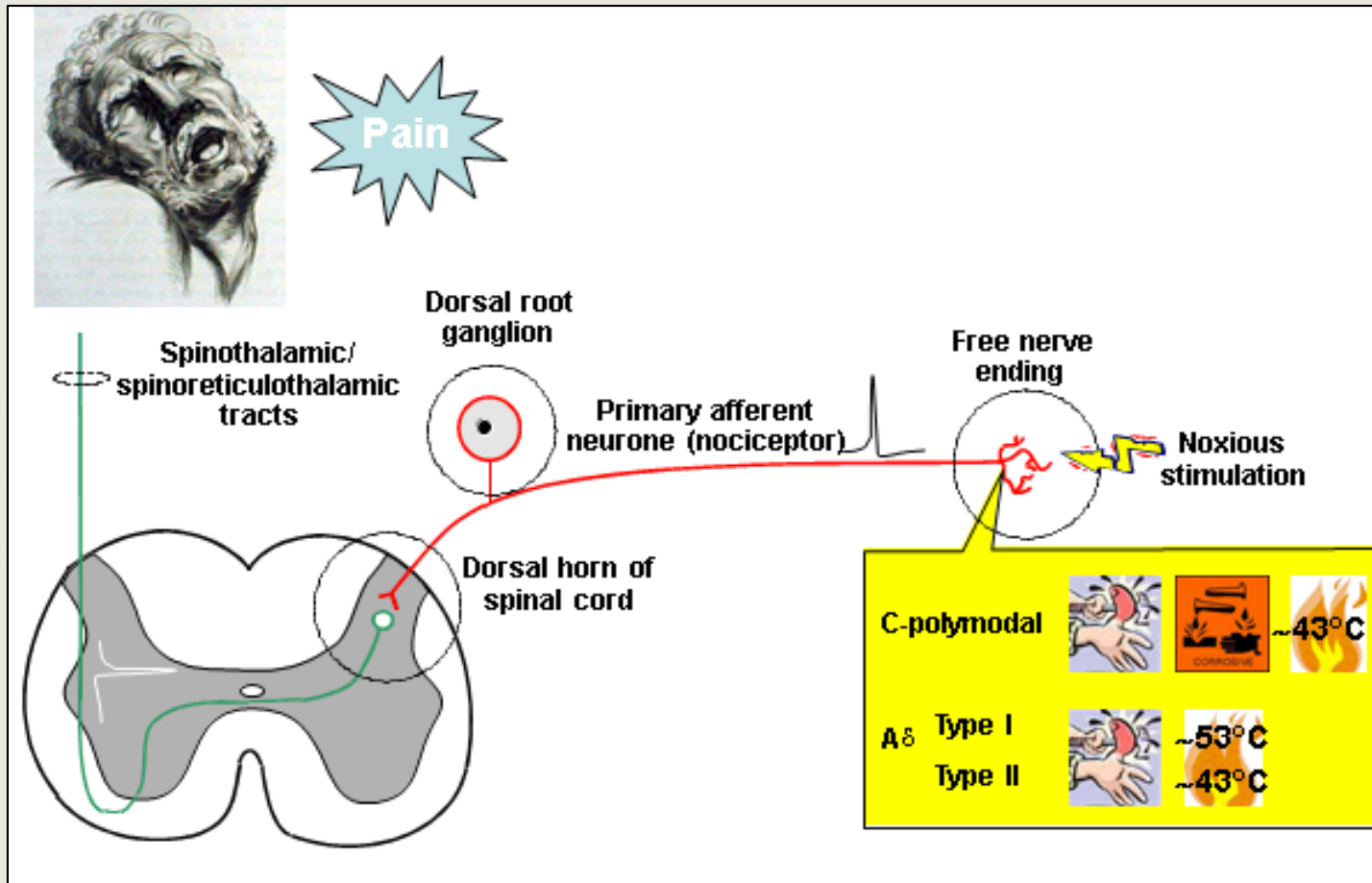
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- ‘**Physical**’ should be understood broadly to encompass all the laws, properties, entities (etc.) of **chemistry** and **biology** as well as those of **physics**.
- The assumption (on both sides) is that these are all **fundamentally physical**,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

Qualism: 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.

I The old rivals

A classic materialist thesis:
Pain = firing of C- or A δ -fibres



(Drawing by Stuart Irvine, presumed public domain)

I The old rivals

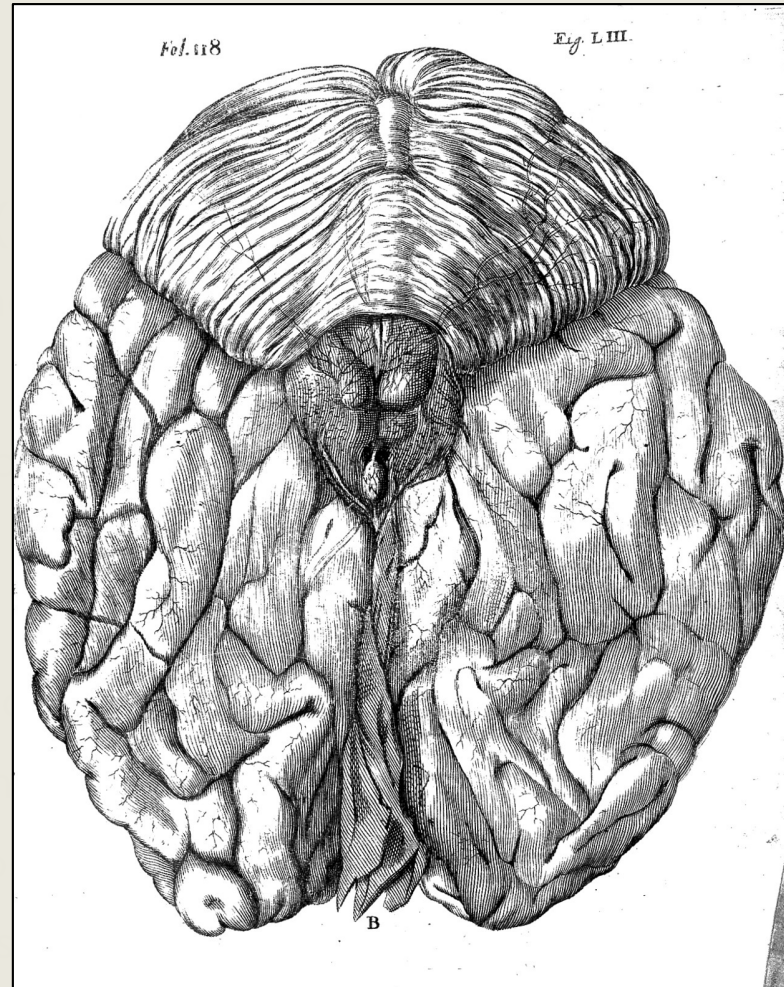
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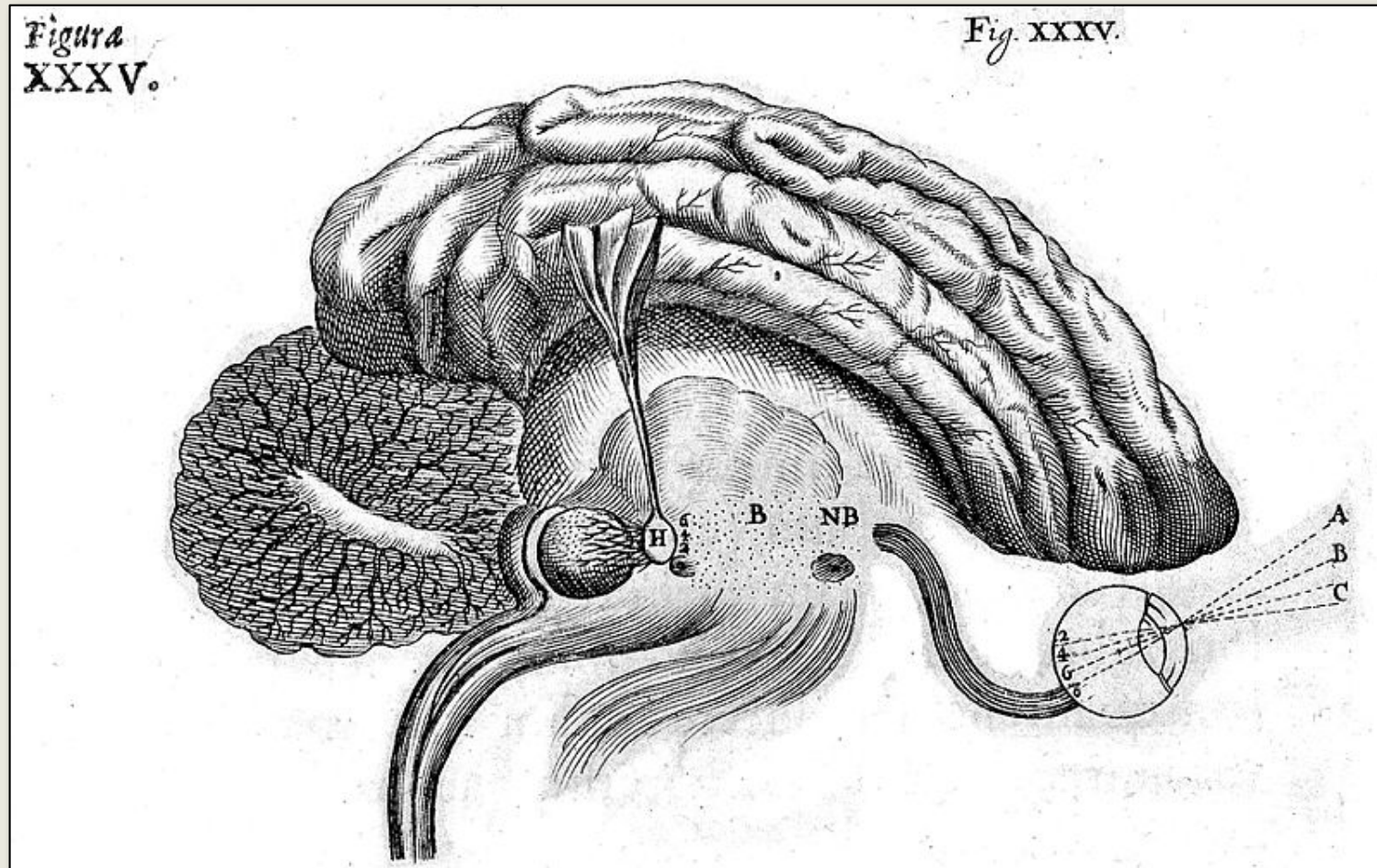
‘Cartesian dualism’



(Image from Wellcome Images, CC-BY 4.0 licensed)

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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:

The debate in a nutshell:

- Dualism has terrible problems accounting for **mental causation**.
- Materialism clashes with deeply held **intuitions** about the **distinctness** of mind and body.

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.

2 The causal argument for materialism

A reconstruction of the argument:

1) Some conscious experiences have physical effects. (Mental causation)

‘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**.’

Papineau (2002, p. 17)

6) Materialism is true.

2 The causal argument for materialism

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.

2 The causal argument for materialism

The **causal closure of the physical** 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)

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.

2 The causal argument for materialism

The causal argument backs the dualist into a corner:

Reject (1) [*Mental causation*] →

Concede that conscious experience is causally inert, i.e. 'epiphenomenal'.

Reject (2) [*Causal closure of the physical*] →

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

Reject (3) [*No overdetermination*] →

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

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.

3 Conceivability arguments for dualism

Zombies: creatures physically identical to us without conscious experiences.

Ghosts: creatures experientially identical to us without physical form.

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**.

3 Conceivability arguments for dualism

Zombies: creatures physically identical to us without conscious experiences.

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.

3 Conceivability arguments for dualism

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.

4 Summary

- The philosophical literature on consciousness is dominated by the clash between **materialism** and **dualism**.
- At the heart of the debate is the question of whether, to explain consciousness, we need to posit any **fundamentally non-physical** properties, processes, forces, entities, substances or laws.
- Dualism has trouble accounting for **mental causation**. This challenge is formulated precisely and powerfully in the **causal argument for materialism**.
- Materialism clashes with deeply held **intuitions** about the **distinctness** of mind and body. This challenge is formulated precisely and powerfully in **conceivability arguments for dualism**.

Epilogue: Dissatisfaction with both materialism and dualism has led philosophers throughout history (and in the present day too) to explore radical alternatives such as **panpsychism** (see the article by Mørch).

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