The background of the slide is a dark, textured surface composed of numerous thin, vertical lines of varying heights and colors, including shades of blue, orange, and white, creating a dynamic, digital or data-like effect.

Clarifying Physicalism: The completeness question

PHIL451

Plan

- Quick review
- Clarifying the thesis of physicalism



reading

- Daniel Stoljar, “Physicalism” (SEP entry), §§1-3;
- William Seager, *Theories of Consciousness*, pp. 7-13

Physicalism

As a first pass, physicalists assert that *everything is physical*.

But what exactly does this mean? In particular, we can ask:

- 1) The Completeness Question: What does it mean to say that everything is physical?
- 2) The Condition Question: What does it mean to say that everything is physical?

We will begin by discussing the *former* question.

Problems for the “everything is physical” formulation

- The phrase “everything is x” is ambiguous between different possible readings.
- More gravely, on some readings, it misclassifies recognizably physicalist positions as non-physicalist, and, on other readings, it misclassifies recognizably non-physicalist positions as physicalist.
 - Oh dear!

‘Identity Physicalism’ (cf. Stoljar §2.2)

One natural way to interpret the expression ‘everything is physical’ is as asserting a relation of *strict numerical identity* between mental and physical entities. Stoljar dubs this ‘Identity Physicalism’.

In turn, we can distinguish two different versions of ‘Identity Physicalism’:

- Token-Identity Physicalism (‘Token Physicalism’ for short)
 - A thesis about *particulars*
- Type-Identity Physicalism (‘Type Physicalism’ for short)
 - A thesis about *properties*

‘Identity Physicalism’ (i): Token Physicalism

The paradigm of a ‘particular’ is a substance (ordinary object or thing), where a ‘substance’ is an unrepeatable entity which *possesses* various properties and which *persists* through time.

- Token Physicalism: For every actual particular, x , there exists a physical particular, y , such that $x = y$.
 - More intuitively, all actual particulars are physical objects

Problems with Token Physicalism

As an explication of the thesis of Physicalism, Token Physicalism seems both too strong *and* too weak.

- It is *too strong* because physicalists need not claim that everything in the world is a physical object.
 - E.g., physicalists are under no obligation to claim that the Supreme Court of Canada is a physical object (Stoljar, §2.2.1).
- It is *too weak* because some anti-physicalists concede that all particulars are physical.
 - E.g., while Substance Dualists will reject Token Physicalism, Property Dualists grant it. According to the latter, all actual particulars (including you and me) are physical objects, though some (including you and me) possess *irreducibly nonphysical* properties in addition to physical properties.

‘Identity Physicalism’ (ii): Type Physicalism

Type-Identity Physicalism: For every actually instantiated property, F, there is some physical property, G, such that $F = G$.

- More intuitively: every property of an object is a *physical* property.
- E.g., the mental property of *being in pain* is one and the same as a certain physical property of the brain – say, the property of heightened C-Fiber activation.
 - Cf. J.C.C. Smart (1959)
 - The argument from simplicity/parsimony

‘Identity Physicalism’ (ii): Type Physicalism

- Type Physicalism is also sometimes called ‘Reductive Physicalism.’
- This is because these philosophers claim that all mental properties (e.g., experiences of pain) *metaphysically reduce* to – i.e., are numerically one and the same as – certain empirically discoverable physical properties (standardly, certain types of brain state).

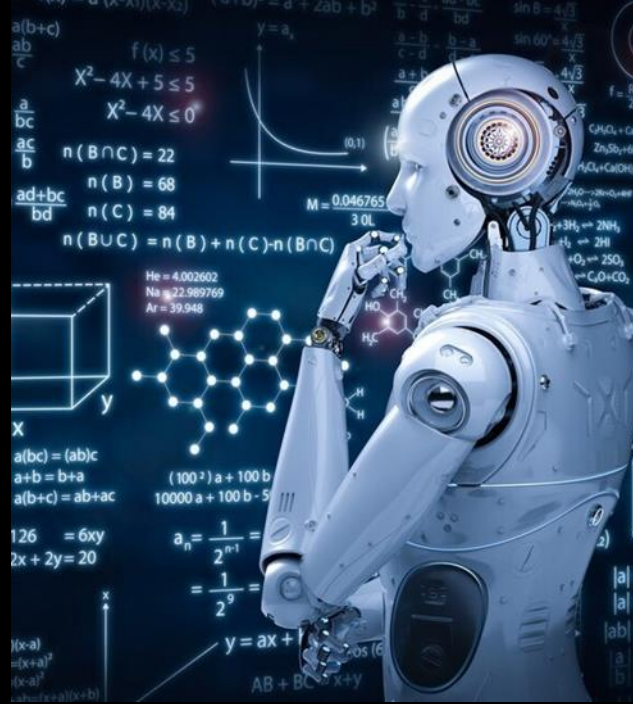
A cautionary note about 'Reductionism'

The term 'Reductionism' is a bit slippery.

Contrast:

- Conceptual Reductionism: For each mental predicate F, there is a physical predicate G such that a sentence of the form 'x is F iff x is G' is analytically true.
- Inter-theoretic Reductionism: For each mental predicate F, there is a physical (say, neuroscientific) predicate G such that a sentence of the form 'x is F iff x is G' expresses a bridge law.
- Metaphysical Reductionism: Mental properties are identical with physical (e.g., neuroscientific) properties.
 - The last of these is what most philosophers working today mean when they self-identify as a 'Reductive Physicalist.'

- Note that Type Physicalism seems to avoid the challenges that we saw for Token Physicalism ...
 - Since Type Physicalism makes a claim about properties rather than particulars, it does not incorrectly classify the Supreme Court of Canada as a physical object.
 - Since Type Physicalism claims that mental properties are identical to physical properties, it does not misclassify Property Dualists as physicalists.
- So, are we there yet?
 - Not quite ...



The Multiple Realizability Argument against Reductive Physicalism



The Multiple Realizability Argument against Reductive Physicalism

Premise 1: There could be alien creatures with mental lives similar to ours.

Premise 2: These creatures might be so different from us physiologically that no physical (e.g., brain) state identifiable in us can occur in them.

Assumption for reductio: Reductive physicalism is true, and each mental state (e.g., pain) is numerically identical to a certain physical state (e.g., C-fibre activation).

Conclusion 1: These alien creatures do not have any mental state that we also have. (from **Premise 2** and **Assumption**)

Conclusion 2: Reductive Physicalism is false. (from the contradiction between **Premise 1** and **Conclusion 1**).

Nonreductive Physicalism

According to Nonreductive Physicalists, mental properties are *distinct from* but nevertheless *realized* or *constituted by* physical properties.

The most well-known version of Nonreductive Physicalism is called “(Role) Functionalism”:

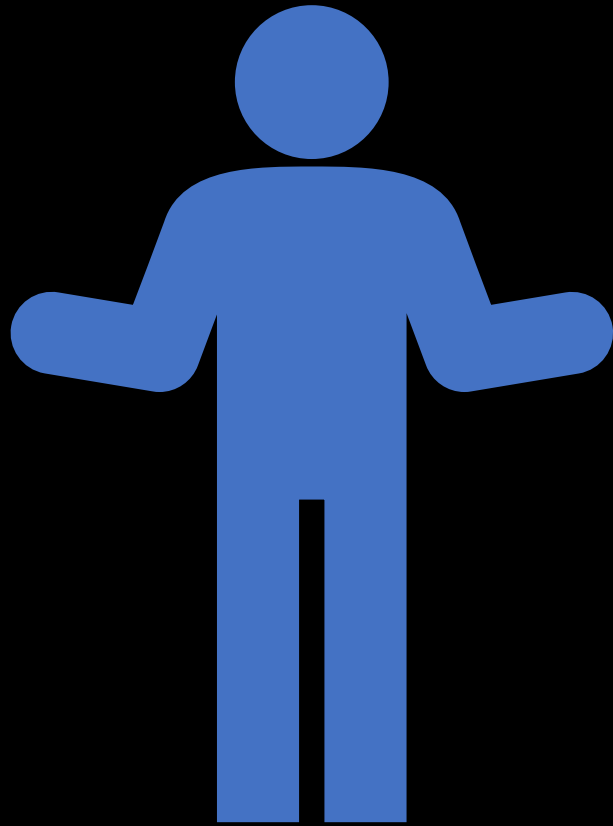
(Role) Functionalism: mental terms like ‘pain’ refer to second-order functional role properties (e.g., “Pain is the property of having some property or other that realizes the PAIN role”).

- If (as non-reductive physicalists believe) physicalism is true of the actual world, then the ‘pain role’ is realized by physical properties (e.g., C-fiber firing).

Nonreductive Physicalism

Other elaborations of Nonreductive Physicalism:

- *The determinable-determinate strategy*: every mental property M is a determinable of some determinate physical properties $P_1, P_2, \dots P_n$. (Stephen Yablo, 'Mental Causation,' 1992)
 - On this view, mental properties (e.g., pain) are related to their physical realizers (C-fibers firing, D-fibers firing, etc.) as colours (e.g., red) stand to their specific shades (scarlet, crimson, etc.).
- *The causal subset strategy*: every mental property M is a proper part – in particular, a causal subset – of physical properties $P_1, P_2, \dots P_n$. (Jessica Wilson, Sydney Shoemaker)



We now want a definition of physicalism
will be broad enough to encompass
Reductive *and* Nonreductive Physicalism
but narrow enough to exclude Property
Dualism.

Metaphysical Supervenience

To meet this requirement, we must finally replace our simple “everything is physical” slogan with something technically more precise.

A historically popular way to do this is by invoking the concept of ‘metaphysical supervenience.’



Metaphysical Supervenience



“A dot-matrix picture has global properties — it is symmetrical, it is cluttered, and whatnot — and yet all there is to the picture is dots and non-dots at each point of the matrix. The global properties are nothing but patterns in the dots. They supervene: no two pictures could differ in their global properties without differing, somewhere, in whether there is or there isn't a dot.”(David Lewis 1986, p. 14).



Supervenience

Some things to note about Lewis's example:

- The total configuration of dots in the dot matrix are fully sufficient to account for the global properties (e.g., the depicted scene). The former set of microlevel facts *entail* or *necessitate* the latter set of macrolevel facts.
- Any two pictures that are exactly alike with respect to the configuration of dots will be exactly similar with respect to their global properties.
- Any two pictures that *differ* with respect to their global properties *must* differ in somehow in the dots are configured. There can be no macrolevel difference without a corresponding microlevel difference.



Supervenience Physicalism

According to Supervenience Physicalism, we find exactly the same sort of dependence relation in the case of mental properties on microphysical properties:

The physical properties instantiated in our world : the mental properties instantiated in our world :: the dots in the pointillist painting : the global properties of the pointillist painting.

Supervenience Physicalism

“[M]ental characteristics are in some sense dependent, or supervenient, on physical characteristics. Such supervenience might be taken to mean that there cannot be two events alike in all physical respects but differing in some mental respect, or that an object cannot alter in some mental respect without altering in some physical respect” (Donald Davidson 1970, p. 214).



Supervenience Physicalism

Supervenience Physicalism (a.k.a., Minimal Physicalism): Physicalism is true at a possible world w if and only if any world that is a *minimal physical duplicate* of w is a duplicate *simpliciter* (i.e., a complete duplicate). (cf. Jackson 1993)

A “minimal physical duplicate of w ” is a possible world that is identical in all physical respects to w and that does not contain *anything else* in addition.

- Question: Why do you think we need the “and that does not contain anything else” clause? Answer: see Stoljar’s discussion of the “Epiphenomenal Ectoplasm Problem” under “Supervenience: Further Issues”.

Notes about Supervenience Physicalism

- If Supervenience Physicalism is true, then a minimal physical duplicate of our world is *thereby* a mental or psychological duplicate of our world.
- Supervenience Physicalism correctly classifies Nonreductive Physicalism as a version of Physicalism: while mental and properties are *distinct*, the former metaphysically supervene on the latter.
- Supervenience Physicalism correctly classifies Reductive (i.e., Type) Physicalism as a version of Physicalism, because every property (trivially) supervenes on itself.
- Supervenience Physicalism seems to correctly classify other Physicalist views, such as ‘Eliminativism’ (i.e., the denial that any mental properties are actually instantiated in our world).
- Supervenience Physicalism also avoids the difficulties that dogged Token Physicalism.
 - While the Supreme Court of Canada is not itself a physical object, it metaphysically supervenes on physical objects.
 - While Property Dualists and Nonreductive Physicalists each claim that mental and physical properties are nonidentical, Property Dualists deny that mental properties supervene *metaphysically* on physical properties.

Notes about Supervenience Physicalism

- Supervenience Physicalism is consistent with there being possible worlds in which physicalism is false. Hence, it is consistent with the claim that Physicalism, if true, is contingently true, i.e., true of the world that we happen to occupy.
 - Note though: metaphysical supervenience does seem to *involve* a necessity claim – namely, that every property instantiated in our world is metaphysically necessitated by some physical property.
- Supervenience Physicalism offers a ‘modal’ definition of physicalism, i.e., a definition in terms of how mental properties and physical properties covary across possible worlds. However, it remains silent about the exact non-modal relation *in virtue of which* the two sets of properties modally covary.
 - Opinions differ over whether such silence is a feature or a bug ...
 - Even if one believes that Supervenience Physicalism is ultimately *insufficient* as a definition of physicalism, it seems at least to identify a necessary condition or core commitment of Physicalism.

A Continuum of Views on Mind and Body

Moving from left to right, we move from positions that are least “physicalist” to those that are most “physicalist”:

Substance Dualism

Property Dualism

Nonreductive Physicalism

Reductive Physicalism

Later in the term, we will meet alternatives to these views, but these are the traditional options.

Substance Dualism

Substance Dualism: Minds are nonphysical substances.

- Substantivalism: There are minds, and they are substances or objects (traditionally: 'spirits' or 'souls'). "To have a mind" is for there to be a *thing* that is one's mind.
 - Immaterialism: Minds (or mental substances) are wholly mental and nonphysical.
 - Property Non-Identity: Mental properties are numerically distinct from physical properties. (Mental properties the 'spiritual' properties of a nonphysical soul).
-
- Substance Dualists reject each of: Token Physicalism, Type Physicalism, and Supervenience Physicalism.

Property Dualism

Property Dualism: Substantivalism is false: to have a mind is not for there to be a special mental substance that is one's mind. It is for one's (physical) body or brain to have certain distinctive mental properties. But these distinctive mental properties are wholly nonphysical in nature – i.e., they are neither identical to, nor metaphysically supervenient upon, any physical properties of the brain or body.

- Rejects Substance Dualism's Substantivalism but upholds Property Non-Identity.
- Rejects Type Physicalism and Supervenience Physicalism but is consistent with Token Physicalism (at least as applied to mentality).

Nonreductive Physicalism

Nonreductive Physicalism: Supervenience Physicalism is true but mental properties are numerically distinct from physical properties. This is *not* because mental properties are fundamentally nonphysical. Rather, it is because they are “higher-order” properties that are realized by some physical property or other.

- Rejects Type Physicalism but is consistent with Token Physicalism.
- Affirms Property Non-Identity, but in a radically different way than Property Dualists do.
 - The difference between Nonreductive Physicalists and Property Dualists is that the former upholds, while the latter rejects, Supervenience Physicalism.

Reductive Physicalism

Reductive Physicalism: Supervenience Physicalism is true and mental properties are strictly numerically identical with (first-order) physical properties (e.g., physical states of the brain).

- Accepts Token *and* Type Physicalism (applied to mentality) and rejects Property Non-Identity.