

Two Physicalisms

Alyssa Ney

Philosophy, UC Davis

aney@ucdavis.edu

UC DAVIS

UNIVERSITY OF CALIFORNIA

Why do we or why should we think that mental phenomena like intelligence, agency, or consciousness are explainable in physical terms?

Why should anyone care to search for a better understanding of when we have an intelligent or conscious being, or of when we have an agent in terms of information processing, neural correlates, or some other physical features?

And is it reasonable to try to do so?

Why is it reasonable to search for explanations of intelligence, agency, consciousness in physical terms?

Common answer:

Because our world is (exhaustively) fundamentally physical.

I.e.

The world is fundamentally the way physics says it is.

Hempel's Dilemma

“The physicalistic claim that the language of physics can serve as a unitary language of science is inherently obscure: The language of *what* physics is meant? Surely not that of, say, 18th century physics; for it contains terms like ‘caloric fluid’, whose use is governed by theoretical assumptions now thought false. Nor can the language of contemporary physics claim the role of unitary language, since it will no doubt undergo further changes, too. The thesis of physicalism would seem to require a language in which a *true* theory of all physical phenomena can be formulated. But it is quite unclear what is to be understood here by a physical phenomenon.” (1980)

Crane and Mellor (1990): “Physicalism is the wrong answer to an essentially trivial question.”

Physicalism as Futurism

The world is fundamentally the way the true (future) completed physics says it is.

“[Physicalism] is the thesis that physics – something not too different from present-day physics, though presumably somewhat improved – is a comprehensive theory of the world, complete as well as correct.” (Lewis 1983)

“Physicalism claims that all facts obtain in virtue of the distribution of the fundamental entities and properties – whatever they turn out to be – of completed fundamental physics.” (Loewer 2001)

Futurism: Complaints

- Futurist physicalism fails to provide any positive content for physicalism to serve as a guide to scientific or other explanatory projects.
- We have no justification for thinking there will ever be a complete physical theory. Physicalism should be construed so as to be independent of this assumption or it is unmotivated.

Physicalism as an Attitude

Van Fraassen (2002) *The Empirical Stance* :

“Whenever philosophers take some general feature of physics and use it to identify what is material, what happens? Physics soon goes on to describe things that lack that feature and are altogether different. When that happens, does materialism bite the dust? Surely not!”

“If the “physicalist” or “naturalist” part of this philosophical position is mainly the desire or commitment to have metaphysics guided by physics, then it is something that **cannot be captured in any thesis or factual belief**... it is not identifiable with a theory about what there is but **only with an attitude or cluster or attitudes**. These attitudes include strong deference to the current content of science in matters of opinion about what there is. They include also an inclination (and perhaps a commitment, at least an intention) to accept (approximate) completeness claims for science as actually constituted at any given time.”

There are several reasonable claims that have caused philosophers of science to back away from physicalism.

These mark important lessons/milestones of late-twentieth century philosophy of science, but fail to make a compelling case against physicalism as I argue it is reasonable to interpret it:

- Sometimes the best explanation of a phenomenon is not the physical explanation, but rather some “higher level” or “special science” explanation. (cf. Putnam’s square peg/round hole)
- Physicists rarely try to formulate theories of everything from which we could derive all true facts of the universe, but mostly try to model some local phenomenon or other. Physics is just one among many special sciences. (cf. Cartwright)
- Claims of the fundamentality of one science can lead to a dangerous monopolization of resources that might be better used on other projects that would have a more beneficial impact on our world. (also cf. Cartwright)

A More Modest Physicalism

All mental phenomena can be explained in physical terms.

Inductive argument:

1. Many macrophysical phenomena of living organisms have received physical explanations.

Therefore,

2. All macrophysical phenomena of living organisms will receive physical explanations.

Noam Chomsky, *Language and Problems of Knowledge*

“If the best theory of the material world that we can construct includes a variety of forces, particles that have no mass, and other entities that would have been offensive to the “scientific common sense” of the Cartesians, then so be it: We conclude that these are properties of the physical world, the world of body. The conclusions are tentative, as befits empirical hypotheses, but are not subject to criticism because they transcend some *a priori* conception of body. There is no longer any definite conception of body. Rather, the material world is whatever we discover it to be, with whatever properties it must be assumed to have for the purposes of explanatory theory.”

Hempel (1970) *Philosophy of Natural Science*:

“[M]echanism is perhaps best construed, **not as a specific thesis or theory about the character of biological processes, but as a heuristic maxim, as a principle for the guidance of research.** Thus understood, it enjoins the scientist to persist in the search for basic physico-chemical theories of biological phenomena rather than resign himself to the view that the concepts and principles of physics and chemistry are powerless to give an adequate account of the phenomena of life. Adherence to this maxim has certainly proved very successful in biophysical and biochemical research – a credential that cannot be matched by the vitalistic view of life.”