

Metaphysics Review

The world is rational

– but not *completely* rational

- The world is rational:
 - The world is structured by possible states of affairs, differential equations, etc.
 - The Principle of Sufficient Reason (PSR) widely holds
- The world is not completely rational:
 - The World is “more than” the actual world
 - Concrete existence isn’t a concept
 - Ontological dependence isn’t a logical relation
 - PSR doesn’t hold in general

Possible worlds, and the World

“By a possible world, we mean simply a complete specification of a way the World might have been, a specification so precise and definite that it settles every single detail, no matter how minor.”

“It is important not to confuse the actual world with the World. The actual world is a mere specification, a description of a way for things to be. It has only the kind of abstract reality that belongs to a story or a scenario or a computer program. The World, however, is not a description of a way for things to be: it is, so to speak, the things themselves.”

(Peter van Inwagen)

A physicist ponders existence

“Even if there is only one possible unified theory, it is just a set of rules and equations. **What is it that breathes fire into the equations and makes a universe for them to describe?**... Why does the universe go to all the bother of existing? Is the unified theory so compelling that it brings about its own existence? Or does it need a creator ...

(Stephen Hawking, *A Brief History of Time*, p. 192)

“Once Einstein said that the problem of the Now worried him seriously. He explained that the experience of the Now means something special for man, something essentially different from the past and the future, but that **this important difference does not and cannot occur within physics.** ...

pp. 37-38 of Carnap, R. (1963), “Carnap’s Intellectual Biography” in *The Philosophy of Rudolf Carnap*, P. A. Schilpp (ed.), pp. 3-84. La Salle, IL: Open Court.

Carnap replies

“I remarked that **all that occurs objectively can be described in science**; on the one hand the temporal sequence of events is described in physics; and, on the other hand, the peculiarities of man’s experiences with respect to time, including his different attitude towards past, present, and future, can be described and (in principle) explained in psychology.

But Einstein thought that these scientific descriptions cannot possibly satisfy our human needs; that **there is something essential about the Now which is just outside the realm of science.**”

Arthur Eddington weighs in

The great thing about time is that it goes on. But this is an aspect of it which the physicist sometimes seems inclined to neglect. In the four-dimensional world considered in the last chapter the events past and future lie spread out before us as in a map. The events are there in their proper spatial and temporal relation; but there is no indication that they undergo what has been described as “the formality of taking place” ...

Something must be added to the geometrical conceptions comprised in Minkowski's world before it becomes a complete picture of the world as we know it.

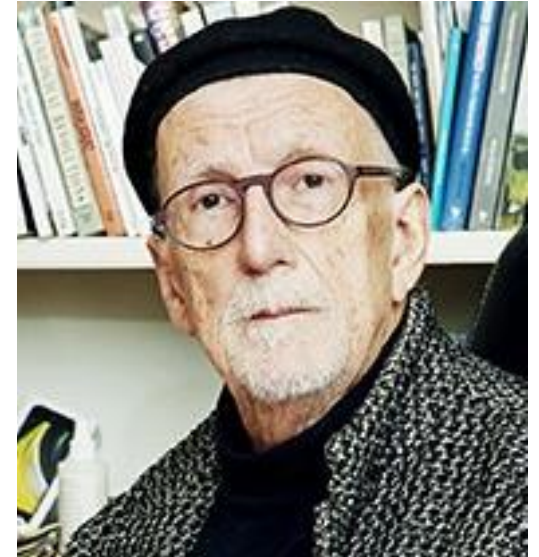
The Nature of the Physical World, 1928

1. Fundamentals

- Realism vs. anti-realism
- Realism:
 - the world contains objective facts, possible states of affairs, external objects, objective probabilities.
- The 'no miracles' argument

An extreme case of anti-realism!

“This insistence on seeing scientific facts as purely social constructions sometimes led Latour to conclusions that were seen as absurd outside the community of social theorists. In 1998, for example, Latour rejected as anachronistic the recent discovery that the pharaoh Ramses II had died of tuberculosis, asserting that the tubercle bacillus was discovered only in 1882 and could not properly be said to have existed before then.”



--*Encyclopedia Britannica*

Summary table (realist view)

Mind	World
Subjective (“internal”)	Objective (“external”)
Map	Territory
Proposition (statement, thought)	Possible state of affairs
True proposition	Fact (= actual state of affairs)
Internal object (idea, percept)	External object
Concepts	Properties (Natural kinds?)
Epistemic probability	Objective chance

The main argument for realism

- The predictive success of science would be a statistical 'miracle' if our beliefs didn't correspond to the world.
- E.g. Newton predicted that the earth would be flatter at the north pole than at the equator.



Voltaire:

« Vous avez confirmé dans
ces lieux pleins d'ennui
Ce que Newton connut sans
sortir de chez lui. »

2. Causation

- Hume is committed to empiricism, and can only see the 'necessary connection' part of causation as something subjective (in the eye of the beholder).
- Anscombe sees causation as objective
 - She says it's ontological dependence, not 'necessary connection'.
 - So, Anscombe accepts indeterministic causation
- Ontological dependence is different from 'probabilistic causation' (chance-raising)

Causation = ontological dependence

- “causality consists in the derivativeness of an effect from its causes. This is the core, the common feature, of causality in its various kinds. **Effects derive from, arise out of, come of, their causes.** For example, everyone will grant that physical parenthood is a causal relation. Here the derivation is material, by fission. **Now analysis in terms of necessity or universality does not tell us of this derivedness of the effect; rather it forgets about that.** For the necessity will be that of laws of nature; through it *we* shall be able to derive knowledge of the effect from knowledge of the cause, or vice versa, but that does not show us the cause as source of the effect. Causation, then, is not to be identified with necessitation.”
- (Anscombe reading, p. 6)

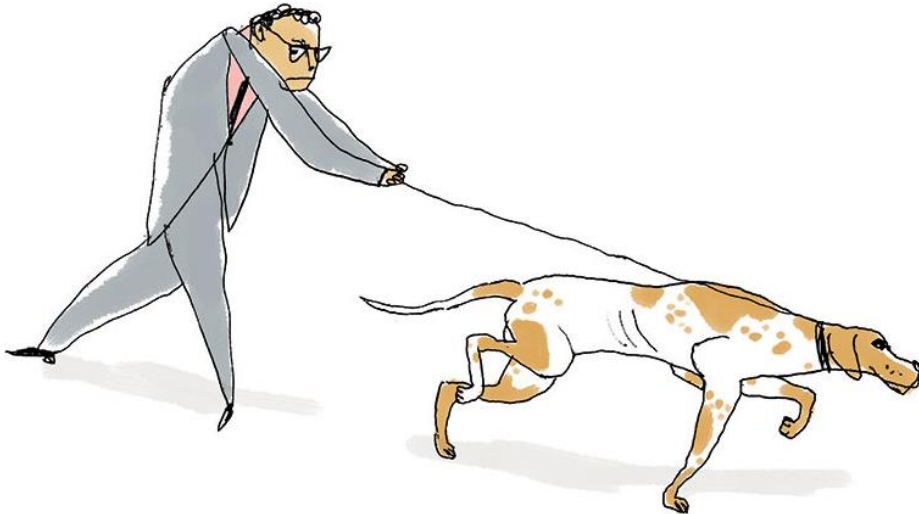
Problems for probabilistic theories

4. Is there really causation by omission?



Support by double prevention?

- Is the ladder supporting the woman here?
- (Is the man?)



3. Cosmological and Ontological arguments

- Why is there something rather than nothing?
 - Because a **logically necessary** being exists?
 - But what kind of thing must exist, as a matter of logic?
- An uncaused (independent) being?
 - There is a strong argument that an independent being must exist, *if anything exists*.
 - Proving that an independent being is necessary requires PSR.
- A maximal (greatest possible) being?
- A being that is the ontological basis for logic itself?

E.g. Samuel Clarke

(A Demonstration of the Being and Attributes of God, 1704.)

1. Whatever exists is either a dependent being or an independent being;

∴ 2. Either there exists an independent being or every being is dependent;

3. It is false that every being is dependent;

∴ 4. There exists an **independent** being;

∴ 5. There exists a **necessary** being.

The Modal Ontological Argument

- A contingent being doesn't match up to our conception of God:
 - If any being is God, then it exists necessarily
 - If any being is God, then it doesn't just happen to have divine attributes (e.g. omnipotence), but has them necessarily.
- Take this conception of God, and add the premise that it's *logically possible* for such a being to exist. Then it follows that God exists.

Thomas Aquinas:

"Even if there were no human intellects, there could be truths because of their relation to the divine intellect. But if, *per impossible*, there were no intellects at all, but things continued to exist, then there would be no such reality as truth." (*De Veritate* Q. 1, Article II, Reply).

- If God provides the very *ontological basis* for rational thought, so that without him no thought would exist, then God's existence is a logical necessity. God cannot be rationally conceived not to exist.

4. Arguments from Design

- Paley argues that design is the **best explanation** of life.
- Darwin has a better explanation! (Natural selection)
 - (Darwin claims that NS can do the job)
 - Most biologists and philosophers now agree
 - (But only because they're committed to naturalism, and there's no naturalistic alternative to NS?)
 - Plantinga: no one has shown that NS works.
 - Mayfield: "the essence of what evolution does is to **accumulate information**"
 - Me: natural processes cannot create information