

The Cause of Modern Physics is Philosophy

Intro

Metaphysics of Physics is the crucial voice of reason in the philosophy of science, rarely found anywhere else in the world today.

We are equipped with the fundamental principles of a rational philosophy that gives us the edge, may make us misfits in the mainstream sciences but also attracts rational minds.

With this show, we are fighting for a more rational world, mostly by looking through the lens of the philosophy of science.

We raise awareness of issues within the philosophy of science and present alternative and rational approaches.

The irrationality of modern physics is the focus of this channel. We have covered topics such as:

The irrationality of Stephen Hawking. The universe and the Big Bang. The philosophy of Niels Bohr. The achievements of Isaac Newton. Optical illusions and the validity of the senses.

If you think that science is about explaining a knowable reality, then this is the channel for you.

If you want to learn more about the irrationality of modern physics, then you are in the right place.

I am your host Ashna. My husband, Dwayne Davies is the primary content creator and your guide through the hallowed halls of the philosophy of science.

We will discuss the problems in modern physics and more and how we can live in a more rational world!

Check out our website at metaphysicsofphysics.com.

The Show Itself

Hi everyone! Welcome to the first of the Metaphysics of Physics video podcast. Today we are going over quotes that help to show that the cause of the irrationality in modern physics is philosophy.

If you are a long-time fan of Metaphysics of Physics, then you will know that modern physics is full of crazy absurdities. Such as things being particles and waves at the same time.

And things not being real unless they are observed.

Or the tendency to treat obvious concepts such as that of "dimension" or "time" as though they were physical things. Or that the universe is made from mathematics!

Why do educated people take such nonsense seriously? Is it because reality is as weird as physicists like to believe? And do we just have to accept this?

No! If you examine all these kinds of claims, you will not find any evidence that supports them. All these claims are simply baseless, nonsensical interpretations of experiments and/or mathematical equations. There is never a shred of evidence that supports any of these interpretations.

Ah, but what about all the alleged experimental evidence. Yes, what about it? In no case can it reasonably be interpreted as supporting any such anti-reality position. No experiment ever performed will ever show that reality is not real or that it is unknowable.

If reality was not real, the results of experiments would not be real and they would demonstrate nothing. If reality was unknowable, then you could never learn that by performing experiments that could not reveal that.

Or in other words: you cannot use reality to demonstrate that there is no reality. You cannot claim knowledge that proves that knowledge is impossible.

Why then do physicists take any of this seriously? It is because of the ideas that physicists have accepted either passively or actively. It is because of the philosophies that those in physics have blindly accepted or have actively embraced. Philosophies which lead them to interpret reality through the twisted lenses of those very philosophies which are hostile to reality and knowledge.

What kind of philosophies might these be? The kind that asserts that what we call reality is an illusion and that we might as well give up trying to understand how it works. Instead, they claim that we should confine

ourselves to studying only mathematical appearances. As that is all they believe we shall ever know about.

Today we are going to explore some quotes from physicists. We will start with Niels Bohr and his contemporaries. They started physics down the road of abandoning reality in favor of mathematical appearances.

And then we shall turn to more recent physicists who evidently agree with Bohr and his peers.

We shall see that the absurdities of modern physics should come as no surprise. The people inflicting modern physics with these absurdities are simply being consistent with the philosophy of Bohr and the like.

The philosophy which dominates science today and which is shaped by the Neo-Kantian philosophies that have dominated our culture for over a hundred years.

Without any further ado, let us look at some of these quotes. And then discuss what kind of philosophical premises motivated them.

Everything we call real is made of things that cannot be regarded as real." - Niels Bohr

Bohr believed that we could never know reality as it is. We can merely develop a pragmatic abstract description consistent with what we observe. Which is merely an illusion, not things as they are.

If we cannot know reality, then one might ask "towards what purpose?" do we have science? Creating science-fiction?

That seems rather pointless to me. But pragmatists would assert that there is some use in describing illusions. If they help us live better lives as we navigate our way around all these illusions.

"Isolated material particles are abstractions, their properties being definable and observable only through their interaction with other systems." - Niels Bohr.

We are to view things such as an "electron" or a "proton" as abstract descriptions. We should not think that we know anything about what they are. No, we are merely creating abstract descriptions. And then identifying relationships between these abstractions.

After all, if we cannot know reality as it is, and all we have are illusions to work with, then should we not at least try to find out how these illusions are connected? At least then we can learn to live in this world of illusions.

"I consider those developments in physics during the last decades which have shown how problematical such concepts as "objective" and "subjective" are, a great liberation of thought." - Niels Bohr.

Here Bohr exposes his pragmatism. He does not consider it worthwhile to discuss whether the abstractions he holds so dear are "objective" or "subjective". He is merely concerned with whether they might prove pragmatically useful.

If we cannot know reality, then what use is it to say whether something is objective or subjective? We can never know. We can only know whether abstractions are useful.

A reasonable person might say that abstractions are only useful if they are objective.

Bohr believed that we cannot know whether something is objective or not, so considers it pointless to consider such things.

"We must be clear that when it comes to atoms, language can be used only as in poetry. The poet, too, is not nearly so concerned with describing facts as with creating images and establishing mental connections." - Niels Bohr

Bohr enjoyed the fact that so much of the quantum physics he was developing made no sense. He reveled in its frequent contradictions and insisted that different aspects of the same thing could be in a kind of conflict (but were complementary) with each other. Of course, he urged his peers to accept such conflicts!

He was like one of those deranged poets who enjoys constructing rhymes that make no sense. But who nonetheless insists that his poetry is of great depth and significance.

Except he was not merely some poet filling his victim's ears with an insult to the Muses. He was detaching physics from reality while insisting

that physics does not need it. While insisting that instead it needs beautiful descriptions of contradictions!

“There is no quantum world. There is only an abstract quantum physical description. It is wrong to think that the task of physics is to find out how nature is. Physics concerns what we can say about Nature.” - Niels Bohr

That sums it all up. According to Bohr, the point of physics is not to learn about the fundamental nature of the physical world. What then is the point of physics?

According to Bohr, it is about whatever we want to say about reality. Without concerning ourselves with things like objectivity, logic or the true nature of things. It is all about "poetry" and the relationships between meaningless abstractions with no connection to an unknowable reality.

Of course, physics is about explaining the real physical world. But according to Bohr we cannot know the real world, let alone explain it!

You can read more about the philosophy of Bohr in [episode seven](#) of the podcast. There we cover his philosophy in some depth.

Bohr and his disciples had an enormous influence on physics and later physicists. But he was not the only person to assert such things.

For instance, we have this quote from Werner Heisenberg:

“I think that modern physics has definitely decided in favor of Plato. In fact, the smallest units of matter are not physical objects in the ordinary sense; they are forms, ideas which can be expressed unambiguously only in mathematical language.” - Werner Heisenberg

No, science has never indicated any such thing and it never will. It never could. Nothing in the natural world is made up out of Platonic "Forms".

Here Heisenberg lays bare the Platonic form of his mind.

Let us look at the views of the young Albert Einstein. It should be noted that the young Einstein was a rabid Neo-Kantian. Later in his life, his philosophy was more in the lines of more traditional rationalists such as Spinoza.

"We must remember that we do not observe nature as it actually exists, but nature exposed to our methods of perception. The theories determine what we can or cannot observe...Reality is an illusion, albeit a persistent one." - Albert Einstein

This is very Kantian. Einstein believed that do not observe reality as it is. Instead, we observe reality distorted by the lenses of our senses. This is a view which many of his peers shared and which many today agree with.

"I became more and more convinced that even nature could be understood as a relatively simple mathematical structure." - Albert Einstein

Einstein toyed with the idea that reality itself could be a mathematical structure.

That strongly reminds me of Platonism. Regardless, many physicists in modern times agree with Einstein! We have many people, such as Max Tegmark who think [reality is mathematics!](#)

So far, we have discussed physicists of the early twentieth century. Now let us jump ahead to those from the late twentieth century and early 21st centuries.

We will start with Stephen Hawking. Our [second episode](#) dealt with his irrationality. Let us look (again) at a few of his irrational claims.

"Do we really have reason to believe that an objective reality exists?" - Hawking

Yes, we do! The fact that you are here to spout such nonsense proves that we do!

An "objective reality" is just another way of saying that things exist and have identity.

This is axiomatic and there is no logical way to escape this. Everything we observe and know about the universe reaffirms this. So, yes, we do have reason to believe that an objective exists.

Of course, Hawking does not know any of this. He, like most before him, has passively adopted the philosophy that objective reality does not exist. That we must simply describe mathematical appearances.

"One might think this means that imaginary numbers are just a mathematical game having nothing to do with the real world. From the viewpoint of positivist philosophy, however, one cannot determine what is real. All one can do is find which mathematical models describe the universe we live in." - Hawking

Is it then any wonder that so much of physics today is so unscientific?

Let us move on from Hawking and see what some of his peers have to say.

"Einstein, in the special theory of relativity, proved that different observers, in different states of motion, see different realities." - Leonard Susskind

Susskind is embracing Einstein's naked subjectivism. Special relativity is based on the premise that reality is different for different observers.

Therefore, would it surprise you that Susskind is a proponent of parallel universes? It should come as little surprise. Once you accept this kind of subjectivity, it is not a large step from "different observers see the same facts according to their own subjective viewpoint" to "there is no one objective reality, but a whole bunch of realities subjectively determined by causeless variations".

"In the end, labelling one realm or another a parallel universe is merely a question of language." - Brian Greene

One cannot determine what is real?

Bohr would have agreed. All one can do is come up with mathematical models. In other words, mathematical descriptions.

Does that sound familiar? Bohr urged us to come up with pragmatic descriptions of relationships between illusions. Mathematics is an obvious way to describe such pragmatic relationships and it should come as no surprise that Bohr was big on such mathematical descriptions of appearances.

So, it should come as little surprise that Hawking and most physicists today are still big on it. It is about all they think physics is good for. Not explaining reality as it is, but just describing relationships between abstractions.

"Science predicts that many different kinds of universe will be spontaneously created out of nothing. It is a matter of chance which one we are in." - Hawking

No, science most certainly does not predict any such thing. No reasonable scientist ever would either. What should we expect from one that has already abandoned reality and therefore logic and reason?

Why not resort to supernatural causes? That is, things which happen without cause! Why not embrace acausality and say that things just happen?

If you are going to take that attitude, why bother with science at all? The point of physics is to understand and explain how the natural world works. If you can just say "it just happened for no reason", why bother?

Sound familiar? Remember, Bohr believed that physics was just a matter of poetic language, not the description of an objective reality.

Brian Greene agrees that this is just a matter of language, however, he cares less about poetic language.

I think by now you get the idea. We have looked at several quotes and caught a glimpse of the philosophical motives behind them. Perhaps you are starting to see that the issues here might be philosophical and not due to the fact that reality is afflicted with a kind of vagueness.

We will end with a quote that accurately sums up the pathetic state of modern physics and the consequences of all the ideas expressed by the previous quotes.

"After decades of closely studying quantum mechanics, and after having accumulated a wealth of data confirming its probabilistic predictions, no one has been able to explain why only one of the many possible outcomes in any given situation actually happens." - Brian Greene

That is accurate. As far as actual explanations of how things work or why anything happens, modern physics has very little to offer.

Why should we expect it to be any different if these people are operating under the premises that they cannot know reality but are simply describing mathematical appearances?

The cause of all this is philosophy.

We shall return to this topic and look at more quotes as we dive deeper into this. I hope you enjoyed our brief overview.

Outro

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And as always, you are welcome to send in questions to questions@metaphysicsofphysics.com. Or you can also contact us via contact@metaphysicsofphysics.com if you want to talk to us about physics, philosophy of science or anything relevant at all. We are always looking for more people to interview or appear on the show!

Please tune in for the next episode and start thinking of some questions! Until then, stay rational!