

To What Extent, If Any, Does Modern Physics Invalidate Epicurean Philosophy?

Post by "Cassius" of August 15, 2020 at 9:56 PM

Ilkka:

I've never had any trouble integrating modern particle physics and Epicurean philosophy... But I'm not a physicist.

It's only an accident of history that we use "atom" in a different way than Epicurus did. It would have saved us a lot of confusion if we didn't. Modern meaning and the ancient one are two different things.

In the context of Epicurean philosophy we can say atom and be understood to mean "the smallest possible particle". In the context of modern physics that statement is false, because we know that there are smaller particles than those that physicists call atoms.

I think that we as modern Epicureans should -- in the interest of clarity -- use modern terms.

It seems to me that there is no difference in saying "atoms and void" or "mass-energy and space-time". These statements are synonymous.

We should also remember that while Epicurean ethics rest on the study of nature, both rest on epistemology. The physical theories must change with new knowledge, and so must the ethical theories.

But what has actually changed in practical, human terms?

If the elementary particles are quanta, for example, would pleasure cease being the foundation of human morality? I think not.

Similarly the fact that the universe is billions of years old is in practice an eternity. The numbers remain so staggeringly large as to be unfathomable. When we assign 14.3 as the age of the universe we're creating a mirage that we think we understand: we know that a mirage is a reflection... but what we see is an image hovering in the air.

If quantum theory is true, the particles are still moving randomly. Still swerving. As far as I the layman can make out...

As a final note I'd like to ask a question: What do you think Epicurus would do if he was presented with the evidence we have available to us?

I think he would rejoice... and update his physics.