

Eric's personal outline

Post by "Cassius" of September 23, 2024 at 4:43 PM

[Quote from Eric](#)

What are the philosophical implications if matter/energy is indivisible and what if it is not (other than whether Epicurus was right or not)?

As you indicated, I will answer this on a philosophical level without representing that I have any ability to argue the latest physics research. Keep in mind I don't represent that I am the reincarnation of Epicurus - I am just trying to do a reasonable job of reconstructing his thought processes, and offering one possible way of doing that. Your mileage will vary.

First, it is well document that Epicurus thought that taking positions on the implications of infinity was very important in constructing a rational view of existence in which we can hope to live happily. In doing so it seems he was as much concerned about the harmful implications of what I will call "inward" infinity as he was about the helpful implications of "outward" infinity.

The implications of "outward" infinity of the universe is first of all logical (as a matter of definition, what could possibly be "outside" of everything that exists?). This approach to infinity gives us a means of explaining how our particular world came into existence from an eternal universe without the intervention of supernatural forces. This is a very powerful antidote to the "intelligent design" and similar arguments based on complexity and similar reasoning.

On the other hand, "downward" infinity would imply something at or very close to a violation of the "nothing goes to nothing" observation. The presumption that there is at some point a "smallest" that has an unchanging nature gives us an explanation for the regularity of the universe that allows us to have confidence that the regularity need not be supernaturally created and sustained. It doesn't matter whether the source of the regularity is at what we call today the molecular or atomic or subatomic levels. What matters is that "somewhere" on the way down there is a point of unchanging nature which sustains the regularity that we see at our level. It appears Epicurus was thinking that it is as important to have a reasonable theory to give us confidence in regularity of nature without supernatural control both on the upside and the downside.

I would equate this to why Epicurus thought it was important to posit the existence of life in the universe other than only here on Earth. The implications of thinking that we are the only living things in the universe, or that we are the highest, are too profoundly disruptive to ignore without taking a position.

In the end you're right that it doesn't matter to some people whether the mechanism of natural regularity is different from the way Epicurus explained it. It also doesn't matter to some people if the Earth is the only place in the universe where life exists. But many people (and I would argue it's the large majority of people) find that leaving such questions without an answer that comports with the logic of what we see around us is a very unsatisfactory thing to do. They want to know that they are living their best life, to the best of their ability given the information available to them, and they want a logical foundation for their decision-making while they are alive. They can't afford to wait for next year's or next decade's or next centuries' scientific research.

We've had numbers of discussions in the past touching on the overall issue you are raising. Epicurus was not primarily a Physicist. He was a philosopher whose major concern was doing the best he could for himself and his friends and anyone who would listen to come up with a rational way of life that makes the most sense for people who reject supernatural explanations which have no evidence to support them. I wouldn't go to Epicurus to construct a nuclear reactor any more than I would go to him for brain surgery.

It's two separate contexts: If someone's primary interest is the very latest research in physics, you go one place. If you want a rational evidence-based way to live your life, you go to another place. Everyone has to pick their focus and their goal and decide what is most important to them. There's no necessary conflict between the two, but if the ever-changing opinions of the latest physics research leads someone into radical skepticism, then that's a very bad result.