# Thinking About Epicurean Viewpoints Such As The Eternal / Infinite Universe, And How To Discuss Them

### Post by “Cassius” of January 10, 2021 at 12:29 PM

This is a thread to discuss general issues as to how modern-day Epicureans should think today about Epicurus' views on the age and size of the universe. The same questions arise as to infinite divisibility, whether the universe has a center, and other issues as well, but probably it would be best to focus on Epicurus' views on the eternality and infinity of the universe as presenting the clearest field for debate.

If you check Wikipedia under "Age of the Universe" you will find the answer defined in terms of "the time elapsed since the Big Bang." which is listed at being somewhere around 14 billion years. Wikipedia further states that the "steady-state model" is now rejected by the vast majority of cosmologists, astrophysicists and astronomers, as the observational evidence points to a hot Big Bang cosmology with a finite age of the universe, which the steady-state model does not predict.

As to the size of the universe, wikipedia is less harsh on the Epicurean position, restricting its position to the "observable universe:"

Because we cannot observe space beyond the edge of the observable universe, it is unknown whether the size of the universe in its totality is finite or infinite.[3][57][58] Estimates suggest that the whole universe, if finite, must be more than 250 times larger than the observable universe.[59] Some disputed[60] estimates for the total size of the universe, if finite, reach as high as _____ as implied by a suggested resolution of the No-Boundary Proposal.[61][b]

How do we approach talking about these issues in an Epicurean context? Most of us (certainly including me) are not astrophysicists, and we don't have any direct evidence other than our own personal observations of life here on Earth and what we can see into the sky. Based on simple human observations that here on earth nothing comes from nothing and nothing goes to nothing, Epicurus erected a chain argument that ultimately in its widest sense the universe must be eternal in time and infinite in size in order for what we see here on Earth to make sense.

Most ordinary people do not have training in astrophysics, and if they are going to take the analysis beyond Epicurus' chain reasoning they will have to decide what they are going to believe based on testimony of "experts" who tell us that they have data and analysis that leads them in a particular direction. It probably isn't necessary to point out, however, that not all experts always agree, and that even when a majority agree on a particular position, "majorities of experts" in human history have regularly been wrong on any number of positions. Yet on the other hand, majorities of experts are frequently correct, and we have a wonderful world of

technology and science that is built on foundations of scientific consensus that have proven to be very reliable.

Before we go further it's worth pointing out that Epicurus' method of reasoning was to first make observations of the evidence that is available to us here on earth, and then on the basis of analogy attempt to deduce conclusions on matters for which we lack the ability to get up close to make direct observation. This is the case not only in astronomy but also in terms of the atom - no one in Epicurus' time ever observed an "atom" directly, and even what we call "atoms" today (which are divisible, and thus not strictly what Epicurus was referring to) are difficult to observe directly. Nevertheless Epicurus made many insightful observations about the nature of atoms by drawing inferences based on analogy with things that could be soon.

Epicurus also recognized the limits of reasoning by analogy, and he affirmed especially in relation to the study of the stars that we regularly do not have enough evidence to select only one theory from among the many theories that can seem possible based on the evidence, and in such cases the only responsible course is to admit that the various possibilities which the evidence does not contradict could in fact be true, and not attempt to select among them.

So how do we approach the issues of infinity and eternality?

As to eternality, as I see it we do have evidence indicating that the universe is eternal, just as Epicurus reasoned. For every day of my life, and to the best of my credible reading every day of every other human's life in the past, nothing has ever been seen to go to nothing, and nothing has ever been seen to come from nothing. To me that is strong evidence that the rule of nothing from nothing and nothing to nothing is correct, and I have no reason to suspect that it is not correct throughout the universe. I therefore would not admit that we have no evidence for the conclusion that the universe as a whole is eternal.l

In the face of this, a certain number, and perhaps a strong majority, of professional physicists have accumulated some very interesting data about the nature of the universe. One thing I observe about those physicists is that they do not seem to agree among themselves about the interpretation of that data. We can pretty easily google and come up with links that reference scientists who do continue to hold that the data indicates that the universe as a whole is eternal in time. It appears that everyone's data, however tends to point to a "big bang" that occurred in at least one area of the total universe about 14 billion years ago. As I see it, that does not cause me a bit of concern, because the scientists appear to me to admit that they are talking about only the "observable" universe, and so the observation that in one segment of the universe the matter expanded or exploded from a smaller mass would in no way violate the rule of nothing from nothing nothing to nothing which all of human sensation has otherwise indicated to be true. There seems to be no reason to argue that that mass came from nowhere, and the observable universe limitation means that the rest of the universe is not even being addressed, so accepting a "big bang" in our corner of the universe is entirely consistent with the universe as a whole continuing on from eternity, perhaps with an unending series of expansions and contractions throughout the entire whole.

The suggestion seems to be made, however, that "the universe as a whole" might have come from nothing, or that "we don't know" is an acceptable resting point for the analysis. Either contention leads to a confrontation between the observations I myself have made, plus what seems to be reliable evidence of all humans who have ever lived in the past against a contention made by specific experts on the basis of very complicated calculations and observations that are disputed by members of their own field. When I consider the caveats that the experts use like referring to the "observable universe," it seems to me to be very reasonable to consider that the observations made by the latest technology may be explainable by other means without the need to throw out the eternal universe starting point. So based on this analysis it seems to me this situation is far from being conclusive enough to simply say "Epicurus was wrong about the universe being eternal."

As part of the analysis of the competing viewpoints, I would then want to examine the credibility of each of those who make these assertions, including examining what agendas and philosophical and religious views those experts bring to the table, to see if their conclusions appear to have been influenced by those factors. It's my experience, and I gather the experience of humanity, that very rare is the person who is totally objective and even-handed in their conclusions.

All of which leads me back to the question of how we live today and talk about our own viewpoints. My tentative formulation of the issue is to say something like "Scientists disagree but Epicurus held that the universe was eternal, this is why he held that position, and everyone should make up their own mind about what they think and how they want to apply the conclusions in their own lives.

It's my view, and I think good Epicurean theory, that our personal goal of happy living and peace of mind requires that we have a coherent understanding of the nature of the universe as natural and not subject to the whim of supernatural gods or other uncertainties that we can't evaluate and consider in our planning of our lives. Maintaining that outlook on life, while also acknowledging that new evidence is constantly coming our way and has to be incorporated into our viewpoints,. is more important that my taking a position to affirm or disagree with a particular expert whose statements contradict what I observe for myself. I am thinking that the proper approach is to politely acknowledge the disagreement and move on with my life -- always open to new evidence, of course, but not worrying that bedrock principles such as "nothing from nothing" or their logical extensions are likely to be undermined. And if someone suggestions that those bedrock principles have been undermined, or totally overthrown, I would expect clear and convincing evidence before I accepted it.

In court, to my understanding, we have an analogous issue. In cases where technical expertise is beyond the capacity of ordinary jurors, the American legal system allows lawyers to call expert witnesses to testify. Before those experts are allowed to give opinion testimony, however, they must be "qualified" to the court by the process of each side asking questions of the expert to determine their background, training, standing in the profession, and similar issues that bear on credibility. It is then the judge who decides whether the expert should be

allowed to give opinion testimony, but importantly the jury is not required to believe the expert. The American legal system allows the layperson jurors to accept or reject all or part of the opinion testimony, and this is especially important to realize given what is generally the case: that both sides of an argument call their own experts, each of whom gives conflicting opinions about the ultimate question. Observing that the American trial court system operates in this way does not prove anything, but it seems to me to be a very reasonable way to proceed - to acknowledge that experts can be very helpful but should never be allowed to usurp the weighing and credibility functions of a judge or jury -- the same functions which our own minds have to perform in making the most important decisions of life.

I realize that I have spent most of this post talking about eternality, and hardly mentioned infinity in space or infinite divisibility. Epicurus considered both of these additional issues to be important to a coherent philosophy, but I won't try to extend this post by citing arguments on these issues. I'll just say that the wikipedia article on size of the universe seems to be much less helpful in supporting anyone who would say "Epicurus was wrong" on these issues. I am sure there is other and better evidence than wikipedia on these issues and we can use this or other threads to explore those questions.

All of this takes us back to questions of teamwork and cooperation and forum moderation which go along with building an Epicurean community. It causes me no concern to include in Epicurean discussions the argument that modern physics contradicts the "nothing from nothing" principle, because it's also a core Epicurean value that if there is new evidence on a subject then than new evidence needs to be incorporated into the conclusions made about that subject. I wouldn't take the position that nothing from nothing / eternal universe has to be accepted by everyone who claims to be an Epicurean, but in reverse, my view would be that the "eternal universe" theory deserves continued consideration within ongoing Epicurean discussion.

In conclusion, I wouldn't think anyone but each of us ourselves should be overly concerned with our own personal positions, so I think most of what we want to discuss as participants in this forum is a matter of "moderation" issues going forward. These issues will come up over and over so no doubt the basic positions on all sides will require constant repetition. But in terms of deciding how to describe a general attitude toward the entire subject, I am thinking that the general attitude could be summarized as something like "the evidence has been developed a lot since Epicurus' day, but that there is still a lot to be learned from Epicurus' approach and conclusions, and everyone has to decide for themselves what conclusions to accept and what conclusions to reject."

All comments and opinions are welcome and would be helpful in sorting through these issues.