

A Challenge To Epicurean Thinking Grounded in Epistemology and Physics

Post by "Cassius" of March 12, 2022 at 11:32 AM

The following post was added to the Epicurean Philosophy thread at [facebook today by a D. O'Connell](#). Feel free to check it out if you like for other responses, but I am posting it here so I can add my response to it. I am sure some of you here can do better:

Quote

The problem with atomism is that we don't actually *know* whether the universe is comprised of irreducible atoms. I don't actually think we can reasonably accept philosophical naturalism as "true" since we just don't know. Is methodological naturalism/skepticism compatible with Epicureanism? Can we be accept that we don't know whether atomism is true or not, and still follow through to the four cures etc? Does it still hold together?

Cassius' Response:

I would propose in response to your question that the word you put in quotes ("know") is where some people are going to agree with Epicurus and some will never agree with him.

Epicurus taught irreducible primary entities because such a theory gives the basis for how the universe may work using non-supernatural means. Irreducible entities that have existed eternally need no supernatural creator or custodian.

Epicurus also had a theory of epistemology grounded in premises stemming from a non-supernatural universe in which he held that while the universe is in constant flux, the flux is not so fast and unintelligible that our senses cannot navigate it. From such a perspective the question of "knowing" has a practical focus - can we learn enough through our senses to survive? - and not an absolute focus based assertions of a supernatural "absolute" truth.

If one takes the position that "we just don't know" things about the nature of the way the universe works, because we don't know (and can never know) all the facts that we might like to know, then one is on the slippery slope to radical skepticism. That road that leads to nihilism and ultimately to despair and death, and the only way for a practical person to get off that road is to grapple with what it means to "know" something, and then reach for support from a practical perspective on knowledge such as Epicurus suggests.

From Torquatus in Cicero's On Ends:

Moreover, unless the constitution of the world is thoroughly understood, we shall by no means be able to justify the verdicts of our senses. Further, our mental perceptions all arise from our sensations; and if these are all to be true, as the system of Epicurus proves to us, then only will cognition and perception become possible. Now those who invalidate sensations and say that perception is altogether impossible, cannot even clear the way for this very argument of theirs when they have thrust the senses aside. Moreover, when cognition and knowledge have been invalidated, every principle concerning the conduct of life and the performance of its business becomes invalidated. So from natural science we borrow courage to withstand the fear of death, and firmness to face superstitious dread, and tranquility of mind, through the removal of ignorance concerning the mysteries of the world, and self-control, arising from the elucidation of the nature of the passions and their different classes, and as I shewed just now, our leader again has established the canon and criterion of knowledge and thus has imparted to us a method for marking off falsehood from truth.

Further, I would suggest that referencing "four cures" is much less effective than focusing on the full statements of the first four principle doctrines, because those doctrines are positive assertions about the nature of the universe and much more than a cure for anxiety.

For me, the system of Epicurus holds together even more firmly than it ever did, because after almost three thousand years of scientific advancement we have no reason to question his ultimate conclusions as to how to live:

- (1) There are no supernatural gods who either created the universe or reward their friends or punish their enemies.
- (2) There is no existence after death in which we might be burned for eternity in hell, nor any heaven to look for as a reward for following unprovable religious promises.
- (3) It is pleasure and pain (widely understood, to include all types of physical and mental feelings) which serve as the ultimate guides for life and by which all decisions must be evaluated.
- (4) There are no absolute ethical rules in life (such as "virtue" in the abstract) to follow in place of the guidance of pleasure and pain (item 3)

Post by "Cassius" of March 12, 2022 at 7:02 PM

Some quite interesting responses!

[Chaz Ajy:](#)

We do know the world is made of atoms. The contemporary thing where everything is non-existent or mind-made is just sensationalism. Think about it: if atoms are imaginary, then why does IBM have to go through such pains to make their little movies where they use just individual atoms then (see "A Boy and His Atom")? Shouldn't they just be able to imagine the movie into existence? If atoms don't exist when a human eye isn't observing them, then why doesn't the cat in Schrodinger's box observe them? Since atoms are too small to see with the eye anyway, how could we say that they must be observed by consciousness to exist? If they don't exist when not observed, then why would they interact and then make a wave pattern when observed again? If they make a wave pattern, doesn't that mean that they exist as a wave when unobserved? In reality, all of the fantastical interpretations of quantum mechanics that seem to harm our concrete understanding of the world are just that: interpretations.

And most of them stem from the fact that some of the early interpreters were really into Hinduism's Advaita Vedanta, which is a form of subjective idealism. People like the idea that things aren't just atoms, and that we can control our reality with our minds. But, nope, atoms exist, even though they spread out when isolated and super-cooled. And even then, they still follow rules that are not dependent on any observer. The macro world is made of atoms. This has been proven. One has to jump through hoops to get an atom into a wave state. See Rodney Brookes' "Fields of Color" book for a full explanation of quantum field theory. Here is a quote, where Brookes answers the question, "What is the most widely accepted solution of Schrödinger's cat thought experiment?": "The measurement problem is also solved by quantum collapse. There is no role of the observer. Quantum collapse happens whether or not someone is looking. In Schrödinger's cat experiment, if the radiated quantum collapses into an atom in the Geiger counter, the cat dies. If it doesn't, the cat lives.

...

Is that all there is to it? Did I give too little space to discussing these "profound" paradoxes? Well, that's really all there is to it. In QFT everything is fields. They spread out, they collapse, and they do all this without requiring an observer. When I hear people complaining about the weirdness and inaccessibility of modern physics, I want to ask, "What part of Quantum Field Theory don't you understand?"

ALSO from Chaz:

See also, this paper abstract: Realist Analysis of Six Controversial Quantum Issues - Art Hobson

This paper presents a philosophically realistic analysis of quantization, field-particle duality, superposition, entanglement, nonlocality, and measurement. These are logically related: Realistically understanding measurement depends on realistically understanding superposition,

entanglement, and nonlocality; understanding these three depends on understanding field-particle duality and quantization. This paper resolves all six, based on a realistic view of standard quantum physics. It concludes that, for these issues, standard quantum physics is consistent with scientific practice since Copernicus: Nature exists on its own and science's goal is to understand its operating principles, which are independent of humans. Quantum theory need not be regarded as merely the study of what humans can know about the microscopic world, but can instead view it as the study of real quanta such as electrons, photons, and atoms. This position has long been argued by Mario Bunge.

All this modern science means that there is no reason to question Epicurus's atomic theory into non existence. We may need to tweak it a little, but the core points are totally valid.

Cassius:

Chaz I am not sufficiently well read to comment on the specifics of your posts, but I want to thank you for them and say how much I appreciate your contributing them. It looks like they give anyone wanting to explore these issues some excellent places to start!

Are those of us who don't have the training or time or ability to follow the details of these arguments ourselves to end up in the same position as "the masses" who we regard as having no choice but "trust in the experts" just like we are alleged to have to trust in those who teach divine revelation?

I don't think so. I think Epicurus' viewpoint offers a "common sense" approach that most anyone can grasp, and it makes sense for us to consider the burden of proof to be on those who seek to overturn the reality of the senses, and it makes sense that we should live life as nature tells us, regardless of theories that are beyond our ability to evaluate.

But since everyone has a different perspective and level of training and ability, it makes sense that some are going to want and to need more explanation of these theories than will others. It's very helpful to know that there are authorities such as those who you cite who evaluate the issues at highly technical levels and yet conclude that the basic take-home conclusions remain sound.

Again, I appreciate your contributions and those of others who are well read in this area very much!

Post by "EricR" of March 14, 2022 at 9:25 AM

I find it difficult to understand that in the era of the atom bomb, anyone can say we don't know whether or not atoms exist.

However, I would say that we don't know whether atoms (and void) are ALL that exists. It is the idea that there could be something other than material existence, that in my view is a more accurate way to think about this question. In this case, I think can say that we don't know.

Since we do know that atoms exist, this basis for Epicurean philosophy remains sound. Even if we were to discover some other thing that supercedes or is a substrata for atoms, it would not negate the reality of atoms and void. Because they still exist and are functioning to combine in the multitude of ways that create physical reality regardless of anything else that may exist.

I'm not sure if any speculation about what may or may not be beyond atoms/void actually matters.

We still have to pursue our own happiness and enjoyment of life on our own.

Post by “Eikadistes” of March 14, 2022 at 12:41 PM

[Quote from EricR](#)

there could be something other than material existence

There is, and you already mentioned it: Void.

Void is immaterial.

For something else to be immaterial, it must be void.

Post by “EricR” of March 14, 2022 at 12:57 PM

You are correct, and I've used incorrect phrasing. But I think you know what I meant.

Post by “Cassius” of March 14, 2022 at 2:16 PM

<https://www.epicureanfriends.com/thread/2430-a-challenge-to-epicurean-thinking-grounded-in-epistemology-and-physics/>

Yes Eric you're now fully focusing on the epistemology issue, which is where we need to focus here and in your recent question about [what keeps you from fully embracing Epicurean Philosophy](#).

If we can't answer which confidence a child's question such as "There COULD be pink ponies dancing on the other side of the moon, right Dad?"

...then we can't answer anything with confidence at all.

So we need to address questions such as:

1. "Under what circumstances, if any, do we admit as 'possibilities' things for which there is no evidence whatsoever of any kind?"
2. "Under what circumstances, if any, do we admit as 'possibilities' things for which the evidence that is asserted is through reasoning that is consistent within itself, but which cannot be validated through evidence perceptible to the senses?"
3. "Under what circumstances, if any, do we admit as 'possibilities' assertions about which we have no experience whatsoever, neither positive nor negative, either inferential or perceptible?"

We got into this issue to degree in our last podcast (not yet posted) but we didn't make much progress.

My suggested questions are amateurish and need a lot of polishing, but I am convinced that this is a direction we need to explore. The hints in the [principal doctrines](#) and in Philodemus (On Signs) and other places give us a starting point, but what's left to us is not articulated in way that most normal people in 2022 can grasp the direction.

Post by “EricR” of March 14, 2022 at 3:39 PM

The answer to the question about pink ponies I would give is the same for any assertion like that, "yes, there may be conditions and/or circumstances about which we have no information yet that could allow for this. But, under our current understanding, common sense determines that it is highly improbable".

All I am saying is that there are mysteries. But, in the context of our personal lives and pleasant living, some mysteries are so beyond our capabilities that they just don't matter. We "know" the existence of atoms. Beyond that, we are blind which renders such speculation useless.

I have no problem with the possibility of things beyond our ability to know. But again, I don't think they matter in any practical sense. Which of course gives rise to the question, why am I bothering to talk about this? Fair question.

I will admit that for some people, admission of metaphysical possibilities opens the door to religious assertions. Therin lies the danger. But am not one of those people.

Post by “Cassius” of March 14, 2022 at 3:49 PM

You may not be one of them, and I grant that some aren't, but I truly believe that is a small minority of people, and under pressure, that number shrinks even more dramatically.

I think that Epicurus was attempting to deal with EXACTLY what you are raising here, and I think he thought that we could do very much better than had been done previously - and I would say since then too - to explain this issue and provide an answer to people of relatively normal intelligence.

Yes it does require some degree of brainpower and experience "to be able to figure the problem out" (a phrase in one of the PD's or fragments) but I think that's exactly what Epicurus was working on, and I frankly think that it constitutes probably the most important part of his project both then and now for us today.

Yes Epicurus was good with observations, and good with coming up with logical deductions, but this issue of "how to think" constitutes pretty much the ultimate challenge where religion beats (or nihilism) beats us back again and again.

We can do much better than we've done already to reconstruct Epicurus' work in this area.

Quote

I'll get our podcast from yesterday up as soon as I can while these issues are fresh in our minds, because I think we're talking about exactly the point introduced in Herodotus as:

[38] For this purpose it is essential that the first mental image associated with each word should be regarded, and that there should be no need of explanation, if we are really to have a standard to which to refer a problem of investigation or reflection or a mental inference. And besides we must keep all our investigations in accord with our sensations, and in particular with the immediate apprehensions whether of the mind or of any one of the instruments of judgment, and likewise in accord with the feelings

existing in us, in order that we may have indications whereby we may judge both the problem of sense perception and the unseen. Having made these points clear, we must now consider things imperceptible to the senses.

It's when we turn to "things imperceptible to the senses" that we need to observe his process of reasoning and use that to explain statements such as [PD22-25](#). Right now we largely skip over them fairly superficially, but it's likely Epicurus thought they were key to unwinding exactly what we are asking.

[PD22](#). We must consider both the real purpose, and all the evidence of direct perception, to which we always refer the conclusions of opinion; otherwise, all will be full of doubt and confusion.

[PD23](#). If you fight against all sensations, you will have no standard by which to judge even those of them which you say are false.

[PD24](#). If you reject any single sensation, and fail to distinguish between the conclusion of opinion, as to the appearance awaiting confirmation, and that which is actually given by the sensation or feeling, or each intuitive apprehension of the mind, you will confound all other sensations, as well, with the same groundless opinion, so that you will reject every standard of judgment. And if among the mental images created by your opinion you affirm both that which awaits confirmation, and that which does not, you will not escape error, since you will have preserved the whole cause of doubt in every judgment between what is right and what is wrong.

[PD25](#). If on each occasion, instead of referring your actions to the end of nature, you turn to some other, nearer, standard, when you are making a choice or an avoidance, your actions will not be consistent with your principles.

Post by “EricR” of March 14, 2022 at 4:17 PM

Thanks, that is very helpful. The line in [PD25](#) about referring actions to the end of nature is particularly relevant. It speaks to what I said about the danger of admitting other metaphysical possibilities.

Is it fair to say that once one opens those doors, the tsunami of speculative theories, assertions, floods the philosophical landscape? Once someone buys into any of these explanations, it often leads to the wide variety of religious beliefs which Epicurus faced from all sides.

And that is a big part of what he was dealing with.

Post by “Cassius” of March 14, 2022 at 5:32 PM

Yes I would say that us a fair conclusion.

But I think Epicurus was looking for greater precision in describing the problem and addressing it.

Part of it is no doubt " the canon of truth" in which had his three categories of tools by which to judge that which is perceptible.

But - anticipating and negating Frances Wright's "don't worry about it" position, I think it's clear that Epicurus thought we can develop some "rules of thought" by which to judge the imperceptible. He was clearly willing to take firm positions on things like infinite divisibility, and I think he was right that we can develop some pretty clear bright line rules along the line of -

1. The conclusions which we find to be confirmable by using the three legs of the canon of truth (both as to the perceptible and the imperceptible) are never to be considered overthrowable by opinions reached through reasoning which cannot be confirmed through the canon of truth.

2. The goal of life set by nature is to beings who live happily by following the lead of pleasure and pain, not to be beings who are professional speculators wasting time on questions which can never be answered and on activities which are not consistent with nature's goal.

No doubt we can do better than that to articulate the principle but I think that is the right direction.

Post by “EricR” of March 14, 2022 at 6:19 PM

Ok thanks. I look forward to hearing and discussing more.

I hope members here understand that I am not trying to negate EP or argue for an alternative position. I genuinely stumble over this point. Frankly, without solidly finding firm philosophical ground for asserting there is "nothing other than atoms and void" and being able to explain this, EP is in the same position as other systems of thought, and yes, religions. ie: a metaphysical belief system.

I seriously want to penetrate Epicurean thinking on this as the entire philosophy hinges on it. As I said, it still holds me back.

Post by “Cassius” of March 14, 2022 at 6:30 PM

[Quote from EricR](#)

I genuinely stumble over this point. Frankly, without solidly finding firm philosophical ground for asserting there is "nothing other than atoms and void" and being able to explain this, EP is in the same position as other systems of thought, and yes, religions. ie: a metaphysical belief system.

I completely agree. I think the footing is essentially there, but that's my personal opinion and as far as I know there is no one currently in the "Epicurean movement" who is articulating it sufficiently.

Post by “Eikadistes” of March 14, 2022 at 7:40 PM

[Quote from EricR](#)

Frankly, without solidly finding firm philosophical ground for asserting there is "nothing other than atoms and void" and being able to explain this, EP is in the same position as other systems of thought, and yes, religions. ie: a metaphysical belief system.

Philosophically, atomism is a clever answer to Parmenides' proposition that there is no change versus Heraclitus' proposition that everything is change. If we are to question atomism, and propose that *there can be existing things made of something besides particles*, we must provide an alternative answer to the Parmenides vs. Heraclitus debate.

What else could comprise reality besides parts that can be re-arranged to make wholes?

And **that's** the grounding. Atomism is true because no other position resolves that philosophical debate.

Post by “EricR” of March 15, 2022 at 8:20 AM

[Quote from Nate](#)

What else could comprise reality besides parts that can be re-arranged to make wholes?

Answer: Reality is comprised of whatever causes parts to combine to make wholes. Do parts combine without a cause? Can they cause themselves to combine due to their inherent attributes? If so, what caused those attributes? Is there an infinite regress of causes, meaning nothing started this process?

There are serious philosophical arguments involved in this, but they take us a long way from EP and what I think is its strength, a practical set of principles for achieving happiness in the world.

This is as far as I wish to go with this topic. Better brains than mine grapple with questions like this.

Post by “Cassius” of March 15, 2022 at 8:55 AM

[Quote from EricR](#)

There are serious philosophical arguments involved in this, but they take us a long way from EP and what I think is its strength, a practical set of principles for achieving happiness in the world.

Eric the only thing that you have typed that I disagree with is the "they take us a long way from EP." And I say that because I think its strength IS a practical set of principles for achieving happiness, and I think also that Epicurus agreed with you that one of the tool sets that is necessary for the greatest happiness is the ability to deal with epistemological questions with dexterity.

What you're talking about here is pretty much what I see as the number one weakness of "modern" Epicureans - we're focusing too much on the broad ethical generalizations and not enough on the reasoning process that supports it.

I have been convinced for a long time, and am getting more convinced every day, that the looseness and ambiguity with which many people seem to interpret the ethical pronouncements derives from this failure to understand the metaphysical / epistemological approach that Epicurus was teaching.

In that sense "Modern Epicureanism" in many camps has become a lot like "Modern Stoicism": Divorce the philosophy from its physics and epistemology and you end up with a gooey (and ineffective) self-medication for pain that is 180 degrees away from what the founders of both schools were trying to accomplish. Both modern Stoics and modern Epicureans would be better off just checking themselves into a psychiatric or medical clinic if "freedom from pain" or "apathy" is all that they want from life.

That's why I think the best term for what we should be doing here is "Classical Epicurean" philosophy - and one of the main things on the agenda needs to be to make more progress on the issues we're discussing in this thread.

Post by "Cassius" of March 15, 2022 at 12:44 PM

Going back to the post that started this thread, it seems to me that even the most devoted proponent of whatever latest theory is out there in the scientific community ought to be experienced enough to see that over and over and over the "latest theory" gets turned to dust by something newer sooner or later.

If we accept that likelihood, then we either turn to Francis Wright style "forget the whole thing" compartmentalization (because she's still very firm on certain conclusions) or we take a broader position on "going with the best we have available to us" which recognizes that there is a balance between the latest science vs never letting "the latest science" trump the conclusions that are based on the three-legged canonical analysis.

It seems to me that's the direction that needs explanation and articulation but it's the direction that Epicurus was headed based on sound reasoning.

Post by "Eikadistes" of March 15, 2022 at 4:35 PM

[Quote from EricR](#)

Answer: Reality is comprised of whatever causes parts to combine to make wholes.

@EricR I just want to acknowledge that the reason I've been asking this specific line of questions is to demonstrate that all of your questions seem to demand Stoic and Skeptic answers. For example, you just stated, if I understand you correctly, that reality is not made of

"things", but rather, "the reason things do the things they do." You just perfectly described Heraclitus' *logos* and the *eternal fire* of the Stoics, being the active principle that animates inert matter.

With respect, I am proposing that these questions are incoherent. We're chasing ghosts.

Post by "Cassius" of March 15, 2022 at 5:44 PM

[Quote from Nate](#)

With respect, I am proposing that these questions are incoherent. We're chasing ghosts.

The part of this conversation that I want to emphasize is that even though I think this ("chasing ghosts") is true in at least a figurative sense, I think these "ghosts" are very real in the sense that they inhabit (or "possess") probably 90% or more of the people in the world.

Of course a forum like this has multiple reasons for existence, and from at least one perspective we are talking to people who are highly educated and sympathetic with Epicurus' positions, so we can use shorthand to remind each other of particular traps or lines of thought that are dead ends.

But I think if we stop there (as we often do) we're missing one of the greatest hurdles in front of us, which - if we could get over it - would really open a new world of "[Philosophy for the Millions](#)" (DeWitt's term).

The "millions" out there are trapped every day by fallacies of reasoning which we ought to be able to do more to address. I am all in favor of us continuing to strain out ever bit of meaning we can about the "pleasure" discussions, and I'll continue to engage in that as always in the past.

But I just want to emphasize that the issues being discussed in this thread need to be addressed in a similar way -- we need more materials dedicated to explaining from the ground up (and yes to younger people too) how these questions arise and how they can be met and defeated.

There's a very unattractive "logic game" side of this that is distasteful to deal with, but all of us want more "Epicurean Friends" in our daily local lives, and I think this "thinking" issue poses as much of an obstacle to that as anything regarding pleasure vs virtue.

So what I would say is that yes the arguments that Eric is suggesting are probably defective in a number of ways, but we need to be able to point to a well-developed explanation that addresses from the ground up how the different varieties of incorrect assumptions arise, and have to be defeated.

And that's a project we've hardly - if at all - begun.

We can and should address the individual questions like Eric is raising, but we've got to integrate them into a broader presentation so we can not only say "that's incorrect reasoning" but point to a clear explanation as to how that is so.

This is gonna take a lot of effort and won't be accomplished quickly but it has to be done.

Post by “Cassius” of March 16, 2022 at 4:12 PM

Followup to the original thread:

[Henrik Eberhardt](#)

I think there is - though I cant really say where - examples of epicureus or at least ancient epicureans say its prudent to say that at the point we dont know the answer to this problem though it surely is one. I think there is two important things to say about the atomism point that everyone can have an opinion on in addition to what [Cassius Amicus](#) mentions - 1) if something is put forth that is in direct conflict with observable reality (like I would say part of quantum mechanics is) then there is something wrong with the theory, not nature. A cat is either dead or alive thats observable logic. 2) there is no need to go to any supernatural explanation just because the exact nature of the phenomena is unknown. We dont know why eels migrate as they do but there is nothing indicating its supernatural. Some day we might know. Surely the nature of existence has greater implications but the logic is the same. We dont assume supernatural eel-explanations as we have no indication of this (and if we had that would change the nature of nature just as much). Same - that we dont know exactly the nature of the substance of nature does not make the direct (or indirect) empirism of epicureanism less valid. I even think that the epicurean atoms more represent a concept then an exact description but that is a more diffuse argument and not really the essence of the matter I would say. Hope this has some validity for you

Post by “Eikadistes” of March 16, 2022 at 6:16 PM

<https://www.epicureanfriends.com/thread/2430-a-challenge-to-epicurean-thinking-grounded-in-epistemology-and-physics/>

I like that description.

We don't assume that supernatural explanations when proposing a hypothesis because it refutes the the intention of hypothesizing in the first place. "There is no explanation" is not an explanation. In Epicurus' time, the reason for celestial objects revolving was not understood. Similarly, in our time, coherence between gravity and quantum physics is not understood. Like Epicurus, we have a variety of sometimes mutually-exclusive hypotheses to solve these unknowns. I propose, like the revolving of the planets, we will eventually provide a functional description of the coherence between gravity and quantum physics that does not rely on imagined paradoxes like "immaterial matter".

Post by “Matt” of March 16, 2022 at 10:23 PM

Atoms and void...and turtles all the way down.

I wish I had more time to discuss this!