

Making Epicurean Canonics Understandable

Post by “Susan Hill” of October 30, 2020 at 6:49 PM

My apologies that I have been slow to respond/participate in many posts of late. The quantity is so great that is difficult to know where to begin. I need to backtrack and pull together the central arguments of the issue.

There is clearly a huge epistemological concern on how one can approach fields of human knowledge and experience that cannot be measured by the usual tools of science. There seems to be a debate over whether anything can be known except by the scientific method. I think I can add a little bit to that conversation.

It is right that it would be good to see what Epicurus’ answer would be to this also, and so I need to review the material re inference, etc. It may help us to understand how he arrived at the conclusions that he did.

I have some work to do on this before I can participate usefully in this discussion, let alone in a Skype debate. But I’ll see what I can come up with this weekend.

Post by “Cassius” of October 30, 2020 at 7:36 PM

[Quote from Susan Hill](#)

There is clearly a huge epistemological concern on how one can approach fields of human knowledge and experience that cannot be measured by the usual tools of science. There seems to be a debate over whether anything can be known except by the scientific method.

For example, and on one of the most important examples, related to but separate from divinity: "Life After Death."

No one has ever reliably been shown to have "been there and come back to testify about it." Depending on your definition of "scientific" there is in fact no "scientific" proof of life after death, to my understanding anyway. If we line up 1000 scientists, I would expect 1000 of them to agree that there is no scientific proof of it.

But "1000 scientists say so" is not sufficient proof for very many good people. We can say that they ought to be better educated, or read some physics books, and that's definitely true - they should. But most of us have to deal with people who want to say:

1 - No one has ever been there so we don't know.

2 - YOU have never died and come back, so YOU don't know.

3 - There are all sorts of reports from people I trust who say that they have had "near-death" experiences.

4 - Plato had some really great arguments about recollection from past lives being the basis of the way we think.

5 - it seems that most cultures over the centuries have had some form of the view of life after death, so like the 50,000 Frenchmen, they can't all be wrong, can they?

6 - And lots more I don't have the creativity to list.

I am firmly convinced with DeWitt that Epicurus was attempting to create a "[Philosophy for the Millions](#)" and I personally think that's a highly worthwhile goal. People who live their lives in fear of hell can have those lives greatly improved, and reduce their tendency to cut our heads off, if they can be persuaded not to worry about heaven and hell. That's a highly desirable goal, and it comes down to discussing issues of evidence like we're talking about now.

Even if we didn't live in a world of propaganda wars where almost everything has been politicized to the point where nobody trusts anybody any more, I do believe that there are legitimate questions that face even the most educated of us, just like they face the less educated with greater force.

As best I understand it, there is no god and no "bright line" reason to accept any particular standard of proof as "certain" -- and that's in large part because we don't have a clear idea what "certain" means.

All of these issues are very important and very deep.

Post by “Elayne” of October 31, 2020 at 6:05 AM

Cassius, I think it's not quite that confusing, and that it's easy to make things sound deeper than they are.

When it comes to what I know, I stick to the Canon-- I don't put anything derived from reason in the "I know this" category. For prolepses, I do not include anything as known which contradicts my senses. Which rules out anything like supernatural gods, a realm of pure forms, string theory, Lawrence Krauss's ideas, elementary particles being hard bodies, or a universal consciousness which I could contact with my mind.

What I know with confidence is the data itself, confirmed by multiple encounters with reality and by the confluence of my senses, processed only to the unavoidable degree of those innate pattern recognitions which are inseparable from cognition. Any heuristics which are avoidable, like sunk cost, I can learn to avoid with practice.

Using the senses to obtain data does not require reason or the scientific method. It is a matter of direct encounter. If we don't start from that, all is confusion.

I also know my feelings directly, the only way feelings can be known. I have 100% confidence that my feelings are real.

The separate question is: how are these observations related to each other? What's causing the thing I'm observing? What's producing my prolepsis? What's triggering my feelings? What might be going on that I haven't yet directly or consciously observed? This is the question I think we are debating-- the mechanisms and explanations.

As I've mentioned before, I have a form of synesthesia. Certain words and feelings have colors and tastes for me. Those sensations are real-- I accept them. But what causes them? Does the word "bitter" actually throw off particles that bind with my taste buds? Do other people without synesthesia just not have sensitive taste buds, because they haven't trained them? That is a question not about my experience but about the cause.

My preference is to continue to always use evidence. That is the only way I know of to avoid getting fooled into thinking things like the multiverse must be real simply because it isn't ruled out. This is where the scientific method has been shown to be so useful in helping us rank reliability of conclusions on a scale (the scale itself being a prolepsis). It allows me to feel confident in explanations about data. And this is the point where confident "enough" shows up.

On the degree of confidence, it is true that people can have different levels of preference and comfort, but if two people have agreed that the data was collected accurately and reproducibly,

then there should not be confusion over what the p value is and which conclusions are more reliable than others when there's a comparison. It's not arbitrary, because it is grounded in the senses.

Comparing experimental reliability is entirely different from deriving conclusions from logic alone (string theory, a realm of pure forms, analogies about shapes of what we can't see, what completely blissful beings would look like, bitter foods bind my taste receptors so bitter words must do the same) or intuition about causes (dreams come from outer space, this sensation I have of contacting an unseen intelligence is caused by a being even though I have no sensory confirmation).

A prolepsis can help us identify a pattern, but it cannot tell us what the cause of the pattern is most likely to be.

Whenever you see me object to a conclusion, it is on the grounds that logic alone is different from experimental data with at least some idea of reliability to consider, no matter how minimal. Guessing at the shape of elementary particles based on analogy is reason based, not observation based. Nothing about reason based guesses is anything but hypothetical to me. All those things go in the tbd basket. I'm fine with people having different comfort levels once there's some sort of sense evidence-- but when there's zero sense evidence, I find it not a whit different from the world of pure forms.

So there's my bright line on causal explanations: at least some sense evidence vs zero evidence, and then when I have some evidence, I choose the explanation with the highest available reliability to base my action decisions on, because that is the most secure way to achieve pleasure. If I want to dig a well, and the well is part of my pleasure requirement, a secure source of water-- I'm not going to hire a magician to advise me on where to dig. I'm going to use methods which have been demonstrated more reliable.

Post by “Elayne” of October 31, 2020 at 6:13 AM

So applying that to life after death-- there's zero sense evidence, despite people having the common intuition of it. Which means automatically that I don't have to consider it as worth worrying about-- I could stop there. If I want to, I can dig into biology, neuroscience, physics, for observations about how things work, the nature of things. But if I'm not interested, I can just say meh, haven't seen it done, come back when you have data and a mechanism.

Post by "Cassius" of October 31, 2020 at 7:10 AM

The posts above in this thread are excellent and need to be extended - but they don't really fit under the "Friendly Debate Show" topic where they started. I'll move these either to a totally new thread under the Canon category or somewhere else.

If someone thinks "Making Epicurean Canonics Understandable" could be improved, let me know!

Post by "Cassius" of October 31, 2020 at 7:22 AM

[Quote from Elayne](#)

So there's my bright line on causal explanations: at least some sense evidence vs zero evidence, and then when I have some evidence, I choose the explanation with the highest available reliability to base my action decisions on, because that is the most secure way to achieve pleasure

OK to extend the discussion I expect at least one question someone would ask would be:

How do you fit the requirement of "some sense evidence" into the framework of "circumstantial evidence" vs. "direct evidence?" It is common in our society to consider that circumstantial evidence can be held to be sufficient when direct evidence is unavailable. Is that appropriate, and if so under what conditions?

For example, do you mean that one or more people must be able to see, touch, hear, smell, or taste the phenomena directly before you would consider the existence of the phenomena to be reliably proven? Or do you allow that it is possible based on things which are seen, touch, heard, smelled, or tasted to *infer* the existence of other phenomena which cannot be observed directly?

For example, what status would you assign to the theory of atomism prior to the date when atoms could be observed directly by an electron microscope? (I am presuming that's the right terminology and that atoms in fact can today be visualized.) Presumably you will say that once atoms were observed directly then the reliability of the assertion of their existence improved incrementally. But prior to their observation was there not a great deal of reason to be confident in their existence even though they could not be directly observed?

706 CONVICTION UPON CIRCUMSTANTIAL EVIDENCE.

In the trial of capital cases there are two time-honored maxims which have always obtained. (1.) That *circumstantial evidence falls short of positive proof*: (2.) That *it is better that ten guilty persons should escape than one innocent person should suffer*. The first qualified by no restriction or limitation is not altogether true. For the conclusion that results from a concurrence of well authenticated circumstances, is always more to be depended upon than what is called positive proof in criminal matters, if unconfirmed by circumstances, i. e., the oath of a single witness, who, after all, may be influenced by prejudice, or mistaken; and if by the word "better," in the second maxim, is meant more conducive to general utility, it would also seem to be unsound. And here we may endeavor to ascertain clearly what is understood in legal parlance by "circumstantial evidence." It may be observed that, every conclusion of the judgment, whatever may be its subject, is the result of evidence, a word which (derived from words in the dead languages signifying "to see," "to know,") by a natural sequence is applied to denote the means by which any alleged matter of fact, the truth of which is submitted to investigation, is established or disproved; circumstantial evidence is of a nature identical with direct evidence, the distinction being, that by direct evidence is intended evidence which applies directly to the fact which forms the subject of inquiry, the *factum probandum*: circumstantial evidence is equally direct in its nature, but, as its name imports, it is direct evidence of a minor fact or facts, incidental to or usually connected with some other fact as

is closely analogous in that sometimes in these senses (i.e, when

its accident, and from which such other fact is inferred. Upon this general definition jurists substantially agree. For an illustration, then, of direct and indirect evidence, let us take a simple example. A witness deposes that he saw A. inflict a wound on B., from which cause B. instantly died; this is a case of direct evidence. C. dies of poison, D. is proved to have had malice against him, and to have purchased poison wrapped in a particular paper, which paper is found in a secret drawer of D., but the poison gone. The evidence of these facts is direct, the facts themselves are indirect and circumstantial, as applicable to the inquiry whether a murder has been committed and whether it was committed by D. The judgment in such a case is essentially deductive and inferential. A distinguished statesman and orator (Burke's Works, vol. II., p. 624), has advanced the unqualified

That comes from [this](#) article.

Post by "Don" of October 31, 2020 at 8:14 AM

I was going to bring up the problem of eyewitness testimony, [Cassius](#) . You beat me to it.

Post by "Elayne" of October 31, 2020 at 9:37 AM

Cassius, is there any study of which types of convictions have been most overturned by DNA evidence? That would help me know whether I think courts are wise to use circumstantial evidence and how much leads to higher accuracy. Considering the stakes -- a person's life or freedom-- I hope we are relying on some measure of accuracy better than "we've always done it this way and it sounds like it would be right."

In medicine, we don't have a category "circumstantial evidence", but it sounds like it would apply to times when it looks like an infectious agent is the cause of a disease but Koch's postulates haven't been fully satisfied. It sounds like it would basically be uncertainty about a causal relationship. IMO that is not the same as a total lack of evidence. A total lack of sense

evidence would be guessing the shapes of elementary particles in the time of Epicurus. There wasn't "circumstantial" evidence. Analogy is not evidence.

In medicine, situations of incomplete or indirect evidence can be acted on but not placed in a category of definite conclusions. They would be in the suspense account pending direct evidence, because we know those conclusions are more likely to need modifying later. There should not be a rush to decide, but we can still take action.

I think of an eyewitness account of an event as a situation of incomplete sense data-- the scene wasn't run multiple times, looked at up close and repeatedly. Often only a portion of the events are witnessed. It would be like a case study-- a lower degree of reliability. But it's still better than asking someone who didn't see any of it to draw a picture of a robber based on their imagination. The data lawyers call circumstantial is still sense data-- it's not an imaginary or indirect weapon, for instance, or an imaginary or indirect body. It's not someone having a dream that their neighbor is a witch and calling for a trial-- there are sense observations, even if incomplete.

Post by “Elayne” of October 31, 2020 at 9:46 AM

For the earliest atomists, there was some sense evidence that matter is composed of particles smaller than we can see, rather than springing out of nothing. Some of it was partial and indirect, but it wasn't just an idea. Lucretius described a lot of it.

There was not evidence regarding what the smallest particles looked like, at least not that I've seen so far. That's why both Martin and I said whoa, just a minute, in those sections.

And so far it has held up that when at least some evidence was used for conclusions, those conclusions have more often stood the test of time, but where only analogy was used, those conclusions have often been revised.

Post by “Cassius” of October 31, 2020 at 10:05 AM

[Quote from Elayne](#)

In medicine, situations of incomplete or indirect evidence can be acted on but not placed in a category of definite conclusions. They would be in the suspense account pending direct evidence,

And thus we are reminded of one of the key Epicurean canonical concepts about which we do have reliable text evidence -- "WAITING" 😊

Post by “Don” of October 31, 2020 at 4:14 PM

Quote from Elayne

There was not evidence regarding what the smallest particles looked like, at least not that I've seen so far. That's why both Martin and I said whoa, just a minute, in those sections.

I had the exact opposite reaction to those sections. I admit there aren't hooked atoms and smooth atoms as far as shape, but it seems to me that Epicurus and Lucretius got the actions of the atoms/seeds/particles right. They didn't have any other way of describing it so they went with shape. But the carbon of diamond is held in a rigid crystalline structure, difficult to disentangle: like fish hooks tangled in a box. Atoms in water are moving around randomly, sliding around against each other smoothly.

It doesn't matter to me if they got the shape wrong, but the analogy to how particles move - we might have to look at our level of molecules or atoms, not quarks or strings - seems remarkably close to our understanding at the level of atoms coming together to form compounds.

Post by “Cassius” of October 31, 2020 at 4:47 PM

In addition to what you're saying, Don, I personally considered that part of the discussion to fall under the "multiple possibilities" part of the canon, with them taking the position that these were plausible possibilities, but there might be others that could be suggested that would also be consistent with observations.

Post by “Don” of November 1, 2020 at 12:54 AM

Have you seen Sedley's paper on Epicurus's On Nature, Book 28? it includes commentary and translation from the Herculaneum scroll. I downloaded it from Academia. Not finished reading yet, but it has some very interesting parts about prolepses, epibolē, eidola (images), memory, and more. Directly relevant to the current conversation!

Post by “Cassius” of November 1, 2020 at 3:58 AM

Thank you Don. I think I have seen this bit it is challenging to remember... I guess what we're really missing is an update to Baileys Extant Remains or Useners collection or at least some kind of "glossary" or topical list of references so that newer material can be accessed in the same way.

That really needs to be on the list of future topics and maybe that is something that working together some of us can collaborate on.

We probably have enough people to give that a try. Anyone want to suggest a format that is group-workable? Probably a wiki is near the top of logical things to use, and designed for group access, but there may be other better suited tools?

Post by “Elayne” of November 1, 2020 at 8:56 AM

Some miscellaneous thoughts...

Don, as far as atoms or molecules and their shapes-- Epicurus was talking about indivisible particles, which would be what we now call elementary particles. He reasoned that they would have to be innumerable, and that isn't what things appear to be at present. There's no strong reason why elementary particles would have to be innumerable, and right now it looks like there are a fairly small number of types. I do think he was incredibly insightful, and I would have been fine with these ideas as `_hypotheses_` rather than as conclusions.

On the multiple explanations-- that is also ok but I don't see mention of the possibility of explanations that have not been thought of yet.

The multiple answers part reminds me of medicine today. When we write our "Assessment and Plan" section of medical notes, the assessment contains a "differential diagnosis"-- the possible diagnoses that would fit the patient's symptoms, ranked in order of likelihood according to best fit. There's always the awareness that there could be something else not listed. And then there's a plan for how to pin things down, what tests we are going to do. Some of the tests clearly rule out certain possible diagnoses... other times we are just improving the reliability of our working diagnosis.

I don't know if there is a word for the group of possible conclusions in physics, a sort of differential diagnosis of matter.

At least one of the conclusions Epicurus thought could have no possible other explanation is longer considered accurate-- the concept of "void." As far as I can tell, physicists today consider a "pure vacuum", even between atoms or particles, to be an idea, not something that actually exists. Another is the conclusion that the universe had no beginning-- that is unclear, but there's no reason IMO that material reality with a beginning re-introduces the possibility of supernatural gods. As Martin has said, for our current purposes, the universe has been around long enough that it might as well have had no beginning.

It seems like a waste of time to me to get upset about research findings which suggest some of our fundamental understandings about the nature of reality need to be overturned. This happens every so often, and I think it is wisest to be willing to abandon any conclusion no matter how much we care about it, or at least hold a particular conclusion more loosely when it is challenged. Sometimes experimental data throws all our models in disarray-- we don't know what it means, whether the data had issues or our models have issues, but there's no reason to insist on which way it is pending further investigation.

Epicurus thought anxiety was produced by the unknown, but I will say from my clinical experience that it is more often produced by not having learned to be comfortable with the unknown. The cure for an anxious patient who can't let go of the need to be sure is not, it turns out, further evidence or hard evidence-- that doesn't work. It makes them more anxious, which is counter-intuitive. The treatment is learning that uncertainty doesn't kill them, and that they can go on enjoying life even if they don't know everything. We would not have known this solution, which is counter to what Epicurus thought, if we had not done research. I've helped patients with this in person enough times to be convinced of it with my own senses.

For example, parents who want to reassure an anxious child that there are no monsters will intuitively make a show of shining a light in the closets and under the bed to prove nothing is there. For anxious children, this backfires in them requiring more and more elaborate reassurance, often taking hours. When young, some will respond to "monster spray" on the pillow, but this doesn't work for the truly anxious. There is no level of proof they will accept. What does work? Saying "I see you are afraid of monsters these days. I remember when I used

to be afraid of that. Can you draw me a picture?" and just proceed as if their fear isn't anything to worry about-- it is normal.

Even though Epicurus thought that at a certain point, there was no pleasure reason to keep investigating phenomena, I am not sure I agree with that, besides just the pleasure of science. Much of what we have learned so far about physics has been used to develop real world applications. How do we know yet what we might be able to do with more information which might help solve problems and create more pleasure than pain? Yes, physics research led to nuclear weapons, but it also led to advances in medicine. We would have been able to relieve Epicurus' kidney stones today using technology from applied physics.

In medicine, we have a saying "don't marry your diagnosis too soon", which reminds me of what Epicurus said about not reaching premature conclusions.

Post by “Kalosyni” of October 27, 2025 at 2:30 PM

I've been pondering in my mind what would be the most succinct way to state the Epicurean canon, and I see this thread with the title: "Making Epicurean Canonics Understandable" which seems like a good place to post (but I have not read the posts here yet, as I wanted to make my statement while it was still fresh in my mind.)

So here it goes:

1. What is "true and false" is known through the physical senses
2. What is "good and bad" is known by feelings of pleasure or pain
3. What is "right or wrong" is known through the mental anticipations

I don't have any particular text source for these statements in mind, and they may be wrong especially the third one. But I am hoping that people can correct me and hopefully make equally short statements that summarize the canon, such that the mind can comprehend them easily and they can be remembered easily.

-- [Cassius](#) [Don](#) [Joshua](#) [Bryan](#) @Eikadistes (and anyone else).