

# Episode Thirty-Two: The Atoms Are Colorless, But the Implications Are Not

**Post by "Cassius" of August 22, 2020 at 10:01 PM**

Don as I recall from the episode there was discussion to the effect that "indivisible" ultimate particles might be sustainable by modern science and something that we can or should still maintain to be true, but not "immutable."

I think that's probably the issue you're addressing but I am not quite sure from what you wrote where you would come down on that.

Could you clarify what you're saying as it applies to that issue?

Over the last several episodes - and this is likely to continue - I think we're debating explicitly or implicitly our varying perspectives on whether Epicurus / Lucretius were going too far in their logical extrapolations about ultimate particles, or whether there is a perspective based on a combination of logic and observation in which their opinions were justified or even may still be justified in certain respects. Certainly as we drill down deeper into the atom then the levels that we once thought to be uncuttable are now cuttable, but how really does that translate into an expectation as to whether there is a limit on uncuttability. I thought Elayne made a significant point about how we need to hold "both sides" (those who say there is a limit, and those who say there is not) to the same standard of proof, which certainly makes sense to me, but on the other hand it is not clear to me what that standard of proof really is.

I think this "standard of proof" issue is what we are really wrestling with, and we need to be as clear as possible about the "standard of proof" position we think is correct when we reach the limit of observation available to us at a particular moment.

I am definitely interested in hearing what you (Don) or anyone else may be thinking after hearing these recent discussions on this issue. This is going to be a recurring issue as we go through the rest of the book and it would be good if we could begin to come to terms with a general approach to this issue, which is I think directly related to some of the details discussed in Philodemus' "On Methods of Inference."