

The Atomic Billiard Board, or: Understanding the Swerve to Mechanistic Determinism

Post by "Cassius" of November 12, 2022 at 9:16 AM

Charles do not let me hijack this thread but I have another comment which I also think is relevant, and it relates to the cliché that "absence of evidence of a thing is not evidence of the absence of that thing." See: https://en.wikipedia.org/wiki/Evidence_of_absence

Quote

Evidence of absence and absence of evidence are similar but distinct concepts. This distinction is captured in the [aphorism](#) "Absence of evidence is not evidence of absence." Often attributed to [Martin Rees](#) or [Carl Sagan](#), versions of this [antimetabole](#) appeared as early as the 19th century.^[1] In Sagan's words, the expression is a critique of the "impatience with ambiguity" exhibited by [appeals to ignorance](#).^[2] Despite what the expression may seem to imply, a lack of evidence can be informative. For example, when testing a new drug, if no harmful effects are observed then this suggests that the drug is safe.^[3] This is because, if the drug were harmful, evidence of that fact can be expected to turn up during testing. The expectation of evidence makes its absence significant.^[4]

When you combine that with Epicurus' observation that: "*But that nothing at all swerves from the straight direction of its path, what sense is there which can descry?*" as explained by Sedley, you have I think the key to observing that these earlier materialists were regressing from Epicurus rather than progressing. And why did they do so, given that Lucretius was plainly in front of them?

I would say that they regressed due to their failure to appreciate the epistemological issues that Epicurus had identified in "waiting" and also in rigorously making sure that **all** evidence that bears on a subject is included in the opinion. Following Sedley's lead, they should have realized that we can in our own observation plainly observe - and therefore we can confidently conclude -- that some free will exists. "Will I pick up the salt or the pepper first?" Nothing by our own minds decides which we will do. Given then that free will exists to any degree, there must be a mechanism at the atomic level which allows for non-mechanical operations of at least some atoms at some times. I suspect Sedley is correct and this is the true origin of the swerve theory.

Personally I would say the same thing applies to the size of the universe and also to its eternality. Today, no matter how many times astronomers look in their telescopes (or the equivalent) and say that "all matter is expanding outward" they always have to keep in mind

that this observation applies only to the limits of their observations. As to the size of the universe the logical arguments that Epicurus raised that what we observe is not compatible with limited void but unlimited matter, or with unlimited matter and limited void, but only with unlimited matter AND unlimited void, still carry weight -- and for me personally I believe them to be decisive. The same thing goes that nothing comes from nothing and therefore there was never a beginning point for the universe as a whole. Everyone's personal mileage on these issues may vary, but this seems to be the way Epicurus was reasoning and it surely seems persuasive to me.

But while "your mileage may vary" on any individual question, it ought to be accepted by everyone IMHO that observations must always be evaluated within the limits of what they are able to perceive. Epicurus wasn't strictly an empiricist and he didn't (like Frances Wright seems to have done) swear off having confidence in theories where he found the confidence warranted. To do so - to say that no conclusions are ever possible unless you have observed something personally yourself - would be (as a friend observed to me once) an extreme form of skepticism in itself.

I would expect that as we read back through the last several hundred years of materialism that that is what we are going to find -- that these scholars, whether under the influence of the church or otherwise - failed to appreciate the epistemological issues that Epicurus and Lucretius interwove into their physics.