

# Infinity and the Expanding Universe

Post by "Cassius" of July 24, 2020 at 8:34 AM

## [Quote from Don](#)

My take recently was that something doesn't need to be literally infinite for us humans to consider it so. An example is the task of counting of all the grains of sand on every beach and in every desert on Earth. Sure, that's a finite number but for all intents and purposes it might as well be infinite in relation to a human lifespan.

My personal take is that Epicurus is stressing the need to think about and get comfortable with the idea that there are certain things that are very difficult to get our minds around. He's saying that instead of defaulting to some mystical attitude that "it must be god/divine/magical," we should come to terms with the limits of our capabilities and get comfortable with making decisions within that scope, with is itself a very desirable thing to be good at.

I also think personally there is an important distinction between "uncountable because we don't have the time or ability" (the grains of sand on the beach) vs. "uncountable because it in fact has no limit on the number of instances" (the number of stars or planets or whatever in the universe).

That's why personally for me when we discuss (in the podcasts for example) that it doesn't matter whether the heat death of the universe theory is correct or not, because the time span is too great to be of relevance to us, I personally don't find that a satisfactory place to stop. I don't think Epicurus would have accepted (or suggest that we should entertain) any theory as possible which would postulate that anything could go to nothing, or come from nothing, much less the universe as a whole.

I personally think that the bigger picture argument (will "everything" at some point cease to exist") requires addressing directly. Personally for myself, I am confident that the right answer is "no, the universe will never cease to exist" even though I am not and never will be an expert physicist. At some point the "logical" argument becomes so overwhelming, despite our absolute inability to "be there and experience if for ourselves," that it deserves to be treated as if we are "certain" of it (whatever meaning we assign to "certainty").

So in the end I trace all these issues back together to thinking that Epicurus is asking us to confront the overall general question "How do we take a position when the evidence is less complete than we would like?"

In some cases it is going to be appropriate to "wait" for more evidence, and in some cases it is appropriate to consider ourselves to be "certain" even as we are. One of the major factors in

deciding when it's appropriate to wait or not is whether "waiting" would conflict with prior premises that we have accepted with certain. Of course in that case if we are rigorous we would never wait at all or hesitate to pronounce the theory as invalid.

Another factor would be whether the issue is particularly damage-causing, such as opening the possibility of the supernatural, and we also have to consider that we aren't having these discussions in a vacuum among dedicated scientists, but among normal people who will never be specialists, so we need to be concerned about the "practical" effect of theoretical speculation on them. In the end the ultimate goal is NOT "wisdom" or "truth" in the abstract sense (probably a cue there for the nearby "[Abstract Ideas](#)" thread).

To me, the issue of studying infinity and similar questions is closely related to the issue of how to think about day to day issues and so its of immediate importance for that reason.