

Episode Twenty-Seven: There Is A Limit To The Size of Atoms

Post by “Cassius” of July 17, 2020 at 2:53 PM

Note: In this episode, we could not remember whether Lucretius had previously stated that the atoms had a limit to smallness, and we discussed how Lucretius needed to be taking the position that there was both a limit on smallness and on largeness in order for the system to make sense.

This may appear in several sections, but it appears that it occurs in Book One around 593:

Munro:

[593] Then again since there is ever a bounding point to bodies, which appears to us to be a least, there ought in the same way to be a bounding point the least conceivable to that first body which already is beyond what our senses can perceive: that point sure enough is without parts and consists of a least nature and never has existed apart by itself and will not be able in future so to exist, since it is in itself a part of that other; and so a first and single part and then other and other similar parts in succession fill up in close serried mass the nature of the first body; and since these cannot exist by themselves, they must cleave to that from which they cannot in any way be torn.

First-beginnings therefore are of solid singleness, massed together and cohering closely by means of least parts, not compounded out of a union of those parts, but, rather, strong in everlasting singleness. From them nature allows nothing to be torn, nothing further to be worn away, reserving them as seeds for things.

[609] Again unless there shall be a least, the very smallest bodies will consist of infinite parts, inasmuch as the half of the half will always have a half and nothing will set bounds to the division. Therefore between the sum of things and the least of things what difference will there be? There will be no distinction at all; for how absolutely infinite soever the whole sum is, yet the things which are smallest will equally consist of infinite parts. Now since on this head true reason protests and denies that the mind can believe it, you must yield and admit that there exist such things as are possessed of no parts and are of a least nature. And since these exist, those first bodies also you must admit to be solid and everlasting.