

Epicurus On The Issue of The Universe Being Infinite In Space

Post by “Cassius” of January 23, 2021 at 9:14 AM

Text references:

[41] ... Moreover, the universe is boundless. For that which is bounded has an extreme point: and the extreme point is seen against something else. So that as it has no extreme point, it has no limit; and as it has no limit, it must be boundless and not bounded.

[42] Furthermore, the infinite is boundless both in the number of the bodies and in the extent of the void. For if on the one hand the void were boundless, and the bodies limited in number, the bodies could not stay anywhere, but would be carried about and scattered through the infinite void, not having other bodies to support them and keep them in place by means of collisions. But if, on the other hand, the void were limited, the infinite bodies would not have room wherein to take their place.

...

[45] These brief sayings, if all these points are borne in mind, afford a sufficient outline for our understanding of the nature of existing things. Furthermore, there are infinite worlds both like and unlike this world of ours. For the atoms being infinite in number, as was proved already, are borne on far out into space. For those atoms, which are of such nature that a world could be created out of them or made by them, have not been used up either on one world or on a limited number of worlds, nor again on all the worlds which are alike, or on those which are different from these. So that there nowhere exists an obstacle to the infinite number of the worlds.

Book One:

[958] The whole universe then is bounded in no direction of its ways; for then it would be bound to have an extreme point. Now it is seen that nothing can have an extreme point, unless there be something beyond to bound it, so that there is seen to be a spot further than which the nature of our sense cannot follow it. As it is, since we must admit that there is nothing outside the whole sum, it has not an extreme point, it lacks therefore bound and limit. Nor does it matter in which quarter of it you take your stand; so true is it that, whatever place every man takes up, he leaves the whole boundless just as much on every side.

[968] Moreover, suppose now that all space were created finite, if one were to run on to the end, to its furthest coasts, and throw a flying dart, would you have it that that dart, hurled with might and main, goes on whither it is sped and flies afar, or do you think that something can check and bar its way? For one or the other you must needs admit and choose. Yet both shut off your escape and constrain you to grant that the universe spreads out free from limit. For whether there is something to check it and bring it about that it arrives not whither it was sped, nor plants itself in the goal, or whether it fares forward, it set not forth from the end. In this way I will press on, and wherever you shall set the furthest coasts, I shall ask what then becomes of the dart. It will come to pass that nowhere can a bound be set and room for flight ever prolongs the chance of flight. Lastly, before our eyes one thing is seen to bound another; air is as a wall between the hills, and mountains between tracts of air, land bounds the sea, and again sea bounds all lands; yet the universe in truth there is nothing to limit outside.

[984] Moreover, if all the space in the whole universe were shut in on all sides, and were created with borders determined, and had been bounded, then the store of matter would have flowed together with solid weight from all sides to the bottom, nor could anything be carried on beneath the canopy of the sky, nor would there be sky at all, nor the light of the sun, since in truth all matter would lie idle piled together by sinking down from limitless time. But as it is, no rest, we may be sure, has been granted to the bodies of the first-beginnings, because there is no bottom at all, whither they may, as it were, flow together, and make their resting-place. All things are for ever carried on in ceaseless movement from all sides, and bodies of matter, are even stirred up and supplied from beneath out of limitless space.

Loeb here has [998] Lastly, one thing is seen before our eyes to be the limit of another; air separates hills and mountains air, earth bounds sea and contrariwise the sea is the boundary of all lands; the universe, however, has nothing outside to be its limit.

[1002] The nature of room then and the space of the deep is such that neither
Lucretius: could the bright thunderbolts course through it in their career, gliding on through
<https://www.epicurean.com/epicurean-philosophy/loeb-1002-the-nature-of-room-then-and-the-space-of-the-deep-is-such-that-neither-could-the-bright-thunderbolts-course-through-it-in-their-career-gliding-on-through-the-air-while-less-to-traverse-as-they-travel-so-far-on-every-side-spreads-out-huge-room-for-things-free-from-limit-in-all-directions-everywhere-1002>
the air, while less to traverse as they travel; so far on every side spreads out huge room for things, free²
from limit in all directions everywhere. [