

Key Citations - The Universe As Infinite In Space - Many Worlds With Life

Post by “Cassius” of October 4, 2023 at 4:45 PM

1. *Velleius, in Cicero's On The Nature of The Gods, XIX* - Moreover, there is the supremely potent principle of infinity, which claims the closest and most careful study....
2. *Epicurus to Herodotus 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. [46] Moreover, there are images like in shape to the solid bodies, far surpassing perceptible things in their subtlety of texture. For it is not impossible that such emanations should be formed in that which surrounds the objects, nor that there should be opportunities for the formation of such hollow and thin frames, nor that there should be effluences which preserve the respective position and order which they had before in the solid bodies: these images we call idols.
3. *Epicurus to Pythocles 117* - All these things, Pythocles, you must bear in mind; for thus you will escape in most things from superstition and will be enabled to understand what is akin to them. And most of all give yourself up to the study of the beginnings and of infinity and of the things akin to them, and also of the criteria of truth and of the feelings, and of the purpose for which we reason out these things. For these points when they are thoroughly studied will most easily enable you to understand the causes of the details. But those who have not thoroughly taken these things to heart could not rightly study them in themselves, nor have they made their own the reason for observing them.
4. *Epicurus to Menoecus* - [135] ... Meditate therefore on these things and things akin to them night and day by yourself; and with a companion like to yourself, and never shall you be disturbed waking or asleep, but you shall live like a god among men. For a man who lives among immortal blessings is not like unto a mortal being.
5. *Lucretius Book 2, Bailey: [522]* And since I have taught this much, I will hasten to link on a truth which holds to it and wins belief from it, that the first-beginnings of things, which are formed with a shape like to one another, are in number infinite. For since the difference of forms is limited, it must needs be that those which are alike are unlimited, or else that the sum of matter is created limited, which I have proved not to be, showing in my verses that the tiny bodies of matter from everlasting always keep up the sum of things, as the team of blows is harnessed on unbroken on every side. [532] For in that you see that certain animals are more rare, and perceive that nature is less fruitful in

them, yet in another quarter and spot, in some distant lands, there may be many in that kind, and so the tale is made up; even as in the race of four-footed beasts we see that elephants with their snaky hands come first of all, by whose many thousands India is embattled with a bulwark of ivory, so that no way can be found into its inner parts: so great is the multitude of those beasts, whereof we see but a very few samples. [541] But still, let me grant this too, let there be, if you will, some one thing unique, alone in the body of its birth, to which there is not a fellow in the whole wide world; yet unless there is an unlimited stock of matter, from which it might be conceived and brought to birth, it will not be able to be created, nor, after that, to grow on and be nourished.

6. Lucretius [2:1048] First of all, we find that in every direction everywhere, and on either side, above and below, through all the universe, there is no limit, as I have shown, and indeed the truth cries out for itself and the nature of the deep shines clear. Now in no way must we think it likely, since towards every side is infinite empty space, and seeds in unnumbered numbers in the deep universe fly about in many ways driven on in everlasting motion, that this one world and sky was brought to birth, but that beyond it all those bodies of matter do naught; above all, since this world was so made by nature, as the seeds of things themselves of their own accord, jostling from time to time, were driven together in many ways, rashly, idly, and in vain, and at last those united, which, suddenly cast together, might become ever and anon the beginnings of great things, of earth and sea and sky, and the race of living things. Wherefore, again and again, you must needs confess that there are here and there other gatherings of matter, such as is this, which the ether holds in its greedy grip.
7. Lucretius [2:1067] Moreover, when there is much matter ready to hand, when space is there, and no thing, no cause delays, things must, we may be sure, be carried on and completed. As it is, if there is so great a store of seeds as the whole life of living things could not number, and if the same force and nature abides which could throw together the seeds of things, each into their place in like manner as they are thrown together here, it must needs be that you confess that there are other worlds in other regions, and diverse races of men and tribes of wild beasts.
8. *Lucretius Book 2: 1077 - Bailey*: [1077] This there is too that in the universe there is nothing single, nothing born unique and growing unique and alone, but it is always of some tribe, and there are many things in the same race. First of all turn your mind to living creatures; you will find that in this wise is begotten the race of wild beasts that haunts the mountains, in this wise the stock of men, in this wise again the dumb herds of scaly fishes, and all the bodies of flying fowls. Wherefore you must confess in the same way that sky and earth and sun, moon, sea, and all else that exists, are not unique, but rather of number numberless; inasmuch as the deep-fixed boundary-stone of life awaits these as surely, and they are just as much of a body that has birth, as every race which is here on earth, abounding in things after its kind.
9. *Lucretius Book 3 Bailey - [843]* And even if the nature of mind and the power of soul has feeling, after it has been rent asunder from our body, yet it is naught to us, who are made one by the mating and marriage of body and soul. Nor, if time should gather together our substance after our decease and bring it back again as it is now placed, if once more the

light of life should be vouchsafed to us, yet, even were that done, it would not concern us at all, when once the remembrance of our former selves were snapped in twain. And even now we care not at all for the selves that we once were, not at all are we touched by any torturing pain for them. For when you look back over all the lapse of immeasurable time that now is gone, and think how manifold are the motions of matter, you could easily believe this too, that these same seeds, whereof we now are made, have often been placed in the same order as they are now; and yet we cannot recall that in our mind's memory; for in between lies a break in life, and all the motions have wandered everywhere far astray from sense.

10. Diogenes of Oinoanda Letter to Antipater - Fr. 63 So, as I was saying, having had my appetite most keenly whetted by all the advantage of the voyage, I shall try to meet you as soon as winter had ended, sailing first either to Athens or to Chalcis and Boeotia. But, since this is uncertain, both on account of the changeability and inconstancy of our fortunes and on account of my old age besides, I am sending you, in accordance with your request, the arguments concerning an infinite number of worlds. And you have enjoyed good fortune in the matter; for, before your letter arrived, Theodoridas of Lindus, a member of our school not unknown to you, who is still a novice in philosophy, was dealing with the same doctrine. And this doctrine came to be better articulated as a result of being turned over between the two of us face to face; for our agreements and disagreements with one another, and also our questionings, rendered the inquiry into the object of our search more precise. I am therefore sending you that dialogue, Antipater, so that you may be in the same position as if you yourself were present, like Theodoridas, agreeing about some matters and making further inquiries in cases where you had doubts. The dialogue began something like this: «Diogenes,» said Theodoridas, «that the [doctrine laid down] by Epicurus on an infinite number of worlds is true [I am confident], as [if] Epicurus