

Episode Thirty-Two: The Atoms Are Colorless, But the Implications Are Not

Post by “Cassius” of August 1, 2020 at 1:02 PM

Welcome to Episode Thirty-Two of Lucretius Today.

I am your host Cassius, and together with my panelists from the EpicureanFriends.com forum, we'll walk you through the six books of Lucretius' poem, and discuss how Epicurean philosophy can apply to you today. Be aware that none of us are professional philosophers, and everyone here is a self-taught Epicurean. We encourage you to study Epicurus for yourself, and we suggest the best place to start is the book, "Epicurus and His Philosophy" by Canadian professor Norman DeWitt.

Before we start, here are three ground rules.

First: Our aim is to bring you an accurate presentation of [classical Epicurean philosophy](#) as the ancient Epicureans understood it, which may or may not agree with what you here about Epicurus at other places today.

Second: We aren't talking about Lucretius with the goal of promoting any modern political perspective. Epicurus must be understood on his own, and not in terms of competitive schools which may seem similar to Epicurus, but are fundamentally different and incompatible, such as Stoicism, Humanism, Buddhism, Taoism, Atheism, and Marxism.

Third: The essential base of Epicurean philosophy is a fundamental view of the nature of the universe. When you read the words of Lucretius you will find that Epicurus did not teach the pursuit of virtue or of luxury or of simple living. or science, as ends in themselves, but rather the pursuit of pleasure. From this perspective it is **feeling** which is the guide to life, and not supernatural gods, idealism, or virtue ethics. And as important as anything else, Epicurus taught that there is no life after death, and that any happiness we will ever have must come in THIS life, which is why it is so important not to waste time in confusion.

Now let's join the discussion with Martin reading today's text:

Latin text location: Approximately [lines 730-787](#)

Munro Summary: [Notes on the text](#)

730—756: atoms have no colour whatever: the mind has to conceive them as without colour; for any colour may change into any other; but the first bodies are unchangeable, or things would pass into nothing.— He proceeds to shew that atoms have none of what are called secondary qualities, colour and the like: the import of this section is briefly given by Epicurus in Diog. x 54 τὰς ἀτόμους ὑπομένειν μηδέμιαν ποῖότητα τῶν φαινομένων προσφαισθῆναι πλὴν σχήματος καὶ βάρους καὶ μεγέθους καὶ ὅσα ἐξ ἀνάγκης σχήματι συμβῆναι ἄντι. ποῖότης γὰρ πάντα μεταβάλλει, αἱ δ' ἀτόμοι οὐδὲν μεταβάλλουσιν, ἐπισημότερον δὲ τι ὑπομένειν ἐν ταῖς αἰ-

757—767: again if atoms have no colour, but beget any colour by their different shapes positions motions and the like, you can explain change of colour; thus the green sea becomes white: why? by its elements changing their order, and by some going, others coming: but green elements could not become white. But if you say they have different colours, then you should see in the one colour of the sea others quite different mixed up, as in a square composed of various shapes you see these shapes; again these shapes do not prevent the whole exterior being square; but different colours would prevent a thing being of one colour.

Daniel Brown:

Now, come on, attend to the rules which I have found, by a labor very delightful to myself; lest you should think those bodies that appear white to your eyes are composed of white seeds, or such as show black, are formed of black; or what color so-ever a thing wears, you should conclude the cause of it to be that the seeds of which it is made are stained with the same color. For the principles of matter are void of all color, both like or unlike what appears upon the bodies they produce. If you should chance to think that the Mind cannot possibly form an idea of seeds without color, you are under a strange mistake; for persons born blind, who never saw the light of the Sun, yet discover bodies by the touch, as if they had no manner of color belonging to them. So that seeds imbued with no color can offer themselves to our mind, and be conceived by us. And besides, the things we touch in the dark night we distinguish without any regard to the color they may otherwise appear in.

That seeds may be void of color I have shown; I shall now prove that they actually are so. Now every color may be changed one into another; but the principles of things will by no means admit of change, there necessarily must be something that remains immutable, lest all things should be utterly reduced to nothing; for whatsoever is changed, and breaks the bounds of its first nature, instantly dies, and is no more what first it was. Be cautious therefore, how you stain the seeds of things with color, lest all things should recur to nothing, and be utterly destroyed.

Besides, though Nature bestows no color upon seeds, yet they are endued with different figures, from which they form and vary the colors of every kind which show upon them. (For it is of great concern what seeds unite with others, and what positions they are preserved, and what motions they give and receive among themselves;) and thus you may readily account why things that just before appeared black, should suddenly look white. As the sea, when the rough winds enrage the waters, grows white with foaming waves. So you may say of what commonly appears black to us, when the seeds of which it is formed are mingled, and their order changed, when some new seeds are added, and some old ones are removed, the direct consequence is that its color is changed, and appears white. But if the water of the sea consisted essentially of

blue particles, it could by no means change into a white color. Disturb the order of the seeds how you would, the principles that are blue would never pass into white.

But if you say that the seeds which make the sea look of one uniform white are stained with different colors, as a perfect square that is one figure, is made up of several bodies that are of several figures, then it would follow that, as we perfectly see that dissimilar figures which the square contains within it, so we might discover in the water of the sea, or in any other body of one simple color, the mixed and different colors from which that simple color proceeds.

Besides, the dissimilar figures that go to make up a square do by no means hinder that the surface of the body should appear square, but a mixed variety of colors will forever prevent that the surface of any body should appear of one fixed and uniform color. And then the very reason that would incline us sometimes to impute colors to seeds is by this means destroyed, or, in this case, white Bodies are not produced from white, or black from black, but from seeds of various colors. Now a white would much sooner proceed from seeds of no color at all, than from such as are black, or any other opposite color whatsoever.

Besides, since colors cannot appear without light, and since the seeds of things cannot appear in the light, you may thence conclude that they are covered with no colors at all. For how can any color show itself in the dark, which surround in the light itself, as it is differently struck either with a direct or oblique ray of light? After this manner, the plumes of doves, which grow about their neck, and are an ornament to it, show themselves in the sun. In one position they appear red like a fiery carbuncle, in another light, the greenness of the emerald is mixed with a sky blue. So, likewise, the tail of the peacock, all filled with light, changes its colors, as the rays strike directly or obliquely upon it. Since therefore colors are produced only by the strokes of light, we cannot suppose that they can possibly exist without it.

Munro:

Now mark, and apprehend precepts amassed by my welcome toil, lest haply you deem that those things which you see with your eyes to be bright, because white are formed of white principles, or that the things which are black are born from black seed, or that things which are steeped in any other color bear that color because the bodies of matter are dyed with a color like to it. For the bodies of matter have no color at all either like to the things or unlike. But if haply it seems to you that no impression of the mind can throw itself into these bodies, you wander far astray. For since men born blind who have never beheld the light of the sun, yet recognize bodies by touch, though linked with no color for them from their first birth, you are to know that bodies can fall under the ken of our mind too, though stained with no color. Again, whatever things we ourselves touch in the thick darkness, we do not perceive to be dyed with any color. And since I prove that this is the case, I will now show that there are things [which are possessed of no color].

Well any color without any exception changes into any other; and this first-beginnings ought in no wise to do: something unchangeable must remain over, that all things be not utterly reduced to nothing. For whenever a thing changes and quits its proper limits, at once this

change of state is the death of that which it was before. Therefore mind not to dye with color the seeds of things, that you may not have all things altogether returning to nothing.

Moreover, if no quality of color is assigned to first-beginnings and they are yet possessed of varied shapes out of which they beget colors of every kind and change them about by reason that it makes a great difference with what other seeds and in what position the seeds are severally held in union and what motions they mutually impart and receive, you can explain at once with the greatest ease why those things which just before were of a black color, may become all at once of marble whiteness; as the sea, when mighty winds have stirred up its waters, is changed into white waves of the brightness of marble: you may say that when the matter of that which we often see to be black has been mixed up anew and the arrangement of its first-beginnings has been changed and some have been added and some been taken away, the immediate result is that it appears bright and white. But if the waters of the sea consisted of azure seeds, they could in no wise become white; for however much you jumble together seeds which are azure, they can never pass into a marble color. But if the seeds which make up the one unmixed brightness of the sea are dyed some with one, some with other colors, just as often out of different forms and varied shapes something square and of a uniform figure is made up, in that case it were natural that as we see unlike forms contained in the square, so we should see in the water of the sea or in any other one and unmixed brightness colors widely unlike and different to one another.

Moreover the unlike figures do not in the least hinder or prevent the whole figure from being a square on the outside; but the various colors of things are a let and hindrance to the whole things being of a uniform brightness.

Then too the reason which leads and draws us on sometimes to assign colors to the first-beginnings of things, falls to the ground, since white things are not produced from white, nor those which are black from black, but out of things of various colors. For white things will much more readily rise up and be born from no color than from a black or any other color which thwarts and opposes it. Moreover since colors cannot exist without light and first-beginnings of things do not come out into the light, you may be sure they are clothed with no color. For what color can there be in total darkness? Nay it changes in the light itself according as its brightness comes from a straight or slanting stroke of light. After this fashion the down which encircles and crowns the nape and throat of doves shows itself in the sun: at one time it is ruddy with the hue of bright pyropus; at another it appears by a certain way of looking at it to blend with coral-red green emeralds. The tail of the peacock when it is saturated with abundant light, changes in like fashion its colors as it turns about. And since these colors are begotten by a certain stroke of light, sure enough you must believe that they cannot be produced without it.

Bailey:

Come now, listen to discourse gathered by my joyful labour, lest by chance you should think that these white things, which you perceive shining bright before your eyes are made of white first-beginnings, or that things which are black are born of black seeds; or should believe that

things which are steeped in any other colour you will, bear this colour because the bodies of matter are dyed with a colour like it. For the bodies of matter have no colour at all, neither like things nor again unlike them. And if by chance it seems to you that the mind cannot project itself into these bodies, you wander far astray. For since those born blind, who have never descried the light of the sun, yet know bodies by touch, never linked with colour for them from the outset of their life, you may know that for our mind too, bodies painted with no tint may become a clear concept. Again, we ourselves feel that whatever we touch in blind darkness is not dyed with any colour. And since I convince you that this may be, I will now teach you that [the first-beginnings] are [deprived of all colour].

For any colour, whatever it be, changes into any other; but the first-beginnings ought in no wise to do this. For it must needs be that something abides unchangeable, that all things be not utterly brought to naught. For whenever a thing changes and passes out of its own limits, straightway this is the death of that which was before. Therefore take care not to dye with colour the seeds of things, lest you see all things altogether pass away to naught.

Moreover, if the nature of colour has not been granted to the first-beginnings, and yet they are endowed with diverse forms, out of which they beget and vary colours of every kind, forasmuch as it is of great matter with what others all the seeds are bound up, and in what position, and what movements they mutually give and receive, you can most easily at once give account, why those things which were a little while before of black colour, are able of a sudden to become of marble whiteness; as the sea, when mighty winds have stirred its level waters, is turned into white waves of shining marble. For you might say that when the substance of that which we often see black has been mingled up, and the order of its first-beginnings changed and certain things added and taken away, straightway it comes to pass that it is seen shining and white. But if the level waters of the ocean were made of sky-blue seeds, they could in no wise grow white. For in whatever way you were to jostle together seeds which are sky-blue, never can they pass into a marble colour.

But if the seeds which make up the single unmixed brightness of the sea are dyed with this colour and that, even as often out of different forms and diverse shapes some square thing is made up with a single shape, then it were natural that, as in the square we perceive that there are unlike forms, so we should perceive in the water of the ocean, or in any other single and unmixed brightness, colours far different and diverse one from another. Moreover, the unlike shapes do not a whit thwart and hinder the whole from being square in its outline; but the diverse colours in things do check and prevent the whole thing being of a single brightness. Then, further, the reason which leads us on and entices us sometimes to assign colours to the first-beginnings of things, is gone, since white things are not made of white, nor those which are seen black of black, but of diverse colours. And in very truth much more readily will white things be born and rise up out of no colour than out of black, or any other colour you will which fights with it and thwarts it.

Moreover, since colours cannot be without light nor do the first-beginnings of things come out into the light, you may know how they are not clothed with any colour. For what colour can there be in blind darkness? Nay even in the light it changes according as it shines brightly,

struck with a straight or slanting beam of light; even as the plumage of doves, which is set about their throats and crowns their necks, is seen in the sunshine; for anon it comes to pass that it is red with bright garnet, sometimes in a certain view it comes to pass that it seems to mingle green emeralds among coral. And the tail of the peacock, when it is bathed in bounteous light, in like manner changes its colours as it moves round; and since these colours are begotten by a certain stroke of light, you may know that we must not think that they could come to be without it. And since the pupil of the eye receives in itself a certain kind of blow, when it is said to perceive white colour, and another again, when it perceives black and the rest, nor does it matter with what colour things you touch may choose to be endowed, but rather with what sort of shape they are fitted, you may know that the first-beginnings have no need of colours, but by their diverse forms produce diverse kinds of touch.