Episode Forty - The Mind and Spirit Are Bodily, Composed of Very Fine Atoms

Post by “Cassius” of October 9, 2020 at 5:47 AM

References to "Emergence" / "Emergent Properties" / "Emergent Qualities"- These may be the best terms, or at least the best current terms, to describe how elemental particles which are non-living can combine to produce something that is living (or how non-intelligent particles can combine to produce intelligence).

Quality / Event / Accident vs Property / Essential Conjunct In Lucretius Book One:

[420] All nature therefore, in itself considered, is one of these, is body or is space, in which all things are placed, and from which the various motions of all beings spring. That there is body common sense will show, this as a fundamental truth must be allowed, or there is nothing we can fix as certain in our pursuit of hidden things, by which to find the Truth, or prove it when 'tis found. Then if there were no place or space, we call it void, bodies would have no where to be, nor could they move at all, as we have fully proved to you before.

[431] Besides, there is nothing you can strictly say, “It is neither body nor void,” which you may call a third degree of things distinct from these. For every being must in quantity be more or less; and if it can be touched, though ne'er so small or light, it must be body, and so esteemed; but if it can't be touched, and has not in itself a power to stop the course of other bodies as they pass, this is the void we call an empty space.

[439] Again, whatever is must either act itself, or be by other agents acted on; or must be something in which other bodies must have a place and move; but nothing without body can act, or be acted on; and where can this be done, but in a vacuum or empty space? Therefore, beside what body is or space, no third degree in nature can be found, nothing that ever can affect our sense, or by the power of thought can be conceived. All other things you'll find essential conjuncts, or else the events or accidents of these. I call essential conjunct what's so joined to a thing that it cannot, without fatal violence, be forced or parted from it; is weight to stones, to fire heat, moisture to the Sea, touch to all bodies, and not to be touched essential is to void. But, on the contrary, Bondage, Liberty, Riches, Poverty, War, Concord, or the like, which not affect the nature of the thing, but when they come or go, the thing remains entire; these, as it is fit we should, we call Events.

[460] Time likewise of itself is nothing; our sense collects from things themselves what has been done long since, the thing that present is, and what's to come. For no one, we must own, ever thought of Time distinct from things in motion or at rest.

[465] For when the poets sing of Helen's rape, or of the Trojan State subdued by war, we must not say that these things do exist now in themselves, since Time, irrevocably past, has long since swept away that race of men that were the cause of those events; for every act is either properly the event of things, or of the places where those things are done.

[472] Further, if things were not of matter formed, were there no place or space where things might act, the fire that burned in Paris' heart, blown up by love of Helen's beauty, had never raised the famous contests of a cruel war; nor had the wooden horse set Troy on fire, discharging from his belly in the night the armed Greeks: from whence you plainly see that actions do not of themselves subsist, as bodies do, nor are in nature such as is a void, but rather are more justly called the events of body, and of space, where things are carried on.

[484] Lastly, bodies are either the first seeds of things, or formed by the uniting of those seeds. The simple seeds of things no force can strain, their solid parts will never be subdued. Though it is difficult, I own, to think that any thing in nature can be found perfectly solid; for heaven's thunder passes through the walls of houses, just as sound or words; iron in the fire grows hot, and burning stones fly into pieces by the raging heat; the stiffness of the gold is loosed by fire, and made to run; the hard and solid brass, subdued by flames, dissolves; the heat and piercing cold passes through silver; both of these we find as in our hand we hold a cup, and at the top pour water hot or cold: so nothing wholly solid seems to be found in nature. But because reason and the fixed state of things oblige me, here, I beg, while in few verses we evince that there are beings that consist of solid and everlasting matter which we call the seeds, the first principles of things, from whence the whole of things begin to be.

Emergence at Wikipedia

Aristotle, *Metaphysics (Aristotle)*, Book H 1045a 8–10: "... the totality is not, as it were, a mere heap, but the whole is something besides the parts ...", i.e., the whole is other than the sum of the parts.

Of the Composition of Causes (1859) - John Stuart Mill :

This law of nature is called, in mechanical philosophy, the principle of the Composition of Forces: and in imitation of that well-chosen expression, I shall give the name of the Composition of Causes to the principle which is exemplified in all cases in which the joint effect of several causes is identical with the sum of their separate effects.

This principle, however, by no means prevails in all departments of the field of nature. The chemical combination of two substances produces, as is well known, a third substance with properties entirely different from those of either of the two substances separately, or of both of them taken together. Not a trace of the properties of hydrogen or of oxygen is observable in those of their compound, water. The taste of sugar of lead is not the sum of the tastes of its component elements, acetic acid and lead or its oxide; nor is the color of green vitriol a mixture of the colors of sulphuric acid and copper. This explains why mechanics is a deductive or

demonstrative science, and chemistry not. In the one, we can compute the effects of all combinations of causes, whether real or hypothetical, from the laws which we know to govern those causes when acting separately; because they continue to observe the same laws when in combination, which they observed when separate: whatever would have happened in consequence of each cause taken by itself, happens when they are together, and we have only to cast up the results. Not so in the phenomena which are the peculiar subject of the science of chemistry. There, most of the uniformities to which the causes conformed when separate, cease altogether when they are conjoined; and we are not, at least in the present state of our knowledge, able to foresee what result will follow from any new combination, until we have tried it by specific experiment.

If this be true of chemical combinations, it is still more true of those far more complex combinations of elements which constitute organized bodies; and in which those extraordinary new uniformities arise, which are called the laws of life. All organized bodies are composed of parts, similar to those composing inorganic nature, and which have even themselves existed in an inorganic state; but the phenomena of life, which result from the juxtaposition of those parts in a certain manner, bear no analogy to any of the effects which would be produced by the action of the component substances considered as mere physical agents. To whatever degree we might imagine our knowledge of the properties of the several ingredients of a living body to be extended and perfected, it is certain that no mere summing up of the separate actions of those elements will ever amount to the action of the living body itself. The tongue, for instance, is, like all other parts of the animal frame, composed of gelatine, fibrin, and other products of the chemistry of digestion, but from no knowledge of the properties of those substances could we ever predict that it could taste, unless gelatine or fibrin could themselves taste; for no elementary fact can be in the conclusion, which was not first in the premisses.

Stanford Encylopedia of Philosophy on Emergence (article one)

Stanford Encylopedia of Philosophy on Emergence (article two)

Charles helped me find the article below. Unfortunately it's focused on obscure modern writers so I don't find it useful.

American Philosophical Quarterly
Volume 31, Number 2, April 1994

EMERGENT PROPERTIES

Timothy O'Connor

All organized bodies are composed of parts, similar to those composing inorganic nature, and which have even themselves existed in an inorganic state; but the phenomena of life, which result from the juxtaposition of those parts in a certain manner, bear no analogy to any of the effects which would be produced by the action of the component substances considered as mere physical agents. To whatever degree we might imagine our knowledge of the properties of the several ingredients of a living body to be extended and perfected, it is certain that no mere summing up of the separate actions of those elements will ever amount to the action of the living body itself.

—J.S. Mill, *A System of Logic*, Bk. III, Ch. 6, §1

IN attempting to develop an ontology adequate to account for some of the more puzzling features of the natural world, several philosophers and scientists in the past century have tried to articulate a *via media* between the extremes of radical dualism and reductionism. This middle road consists in the claim that the phenomenon in question is at once *grounded in* and yet *emergent from* the underlying material structure with which it is associated. At various times, this claim has been made with respect to the ve-

potheses about the mental in recent days. Sections I-II concern some of the major formulations of the concept of property emergence and pointing out their weaknesses, before is provided an alternative account in section III. My criticisms of these earlier approaches do not take the form of charging that they fail to accord with a pre-analytic notion, since whatever content has come to be associated with this term through previous philosophical usage is sufficiently vague as to