

TRACING THE ORIGIN OF LIFE

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There is no natural discontinuity between life and the rest of creation. Scientific conclusions that include discontinuity in the operation of the universe are representative of theoretical error. This is true for gaps existing within mechanical theory, and it is true for the gap between mechanical theory and life. The universe includes mechanics, life and intelligence, all of which had the same origin. The universe gave birth to life. We are formed from its substance and are a part of its nature. Our particles of matter existed for eons as part of the inanimate universe before they joined together and became us. Our insignificant amount of common matter did not change its nature when it became us. It is still a part of the nature of the full universe. It will return again to the inanimate universe and be indistinguishable.

There are no physics defined properties that measure differently for the particles of life. There is no physical evidence to support the emergence of a separate unique force that changes inanimate matter into animate matter. In a properly defined universe there would be no need to arbitrarily and belatedly add a mysterious theoretical essence as the cause of life. There would be no need for dualism. Dualism incorporates discontinuity in the nature of the universe. A correctly defined universe would be monistic, and it would show full continuous unity. Discontinuity and absolute separation are not compatible with physical, scientific predictability and unity.

If there were fundamental separation at any point, then the universe would not be predictable. It would not be orderly. Order and predictability are the same property. There is order and predictability in the universe. This orderly operation requires that unity is a certainty. That is why we can formulate laws and principles. Laws and principles are evidence of order. Evidence of disorder is lack of laws and principles. This order has its roots in the nature of the universe reaching all the way back to its origin. The predictability of the universe is certain evidence for the existence of fundamental unity. Even though this unity has not yet been theoretically described, it is certain it must exist. If lack of order were a part of the universe, it would destroy order and predictability.

The interpretation of empirical evidence should be directed, from the start, by the requirement for fundamental unity. The understanding of a unified universe begins with analyzing the universe as a unified whole. The isolated interpretations of different looking phenomena may, at times, be temporarily necessary for practical reasons, but it should always be treated as something to be corrected as soon as possible. The practice of hanging on to piecemeal, diverse interpretations of various parts of the operation of the universe is the main reason for lack of progress in our quest to achieve a unified understanding. This failure begins at the fundamental level. It is evidence there is something wrong at the fundamental level.

What is wrong is the interpretations of the fundamentals were not guided by the requirement for fundamental unity. Fundamental unity cannot be derived from fundamentals that are themselves derived from a perspective of disunity. The fundamentals of theoretical physics were assumed from their inception, with only superficial justification, to be unique and separate. Their effects looked different and their causes were assumed to be different. Their effects were interpreted to be mechanical and, their causes were defined as being mechanical. There was no inclusion of life and intelligence. There was, and still is, only mechanical force moving inanimate objects around.

The mechanical interpretation offered by theoretical physics has institutionalized fundamental disunity. Mechanics places severe limitations on scientific understanding. The problem is not only disunity; it includes the whole mathematical framework used to support physics theory. Physics theory describes the universe by the use of the mechanical tool of mathematics. Physics theory is restricted by mathematics to yielding only mechanical results. It cannot address life and intelligence.

We know matter participates in life. The mechanical matter of theoretical physics does not recognize this. There is no defined force of life. There is no defined force of intelligence. If mechanical theory correctly defined the universe, then the universe would be a machine with no life and no intelligence. There is no mechanical theory that can predict and explain the emergence of life. There is no probability function derived from mechanics that offers any probability for the birth of life. The probability of life occurring by mechanical means is zero.

For theoretical physics, there are only mechanical particles of matter forming mechanical atoms that form mechanical molecules. It is at the molecular level that the severe limits of materialism become clear. This is where the mechanical interpretation of the universe is exposed for its very shallow level of understanding. The properties of molecules consist of more than mechanical forces that just push and pull. Molecules exhibit properties whose usefulness reaches far beyond the property of motion.

There are molecules that direct the design of life. That life and intelligence appear to be attached to some of these molecules is due to causes beyond the descriptive power of, and completely absent from, the theories of present day science. In order to raise the scientific probability of life above zero, it is necessary to move beyond the mechanics of motion and search for reasons why molecules acquire purpose. It is the purpose of our molecules to raise life and intelligence to the level necessary to achieve human awareness. What is the property of our molecules that can produce such a purpose? What is the origin of the purpose of life?

The purpose of correct theory would be to unify mechanics, life and intelligence. In order for the universe to be predictable it is necessary for all of the operation of the universe to emerge in an orderly manner from a unified cause. Our discovery and scientific unification of all the parts of the universe must be possible because we are endowed with the intelligence necessary to comprehend it. There is no other place for it to be. It cannot come from mathematics. Math can only give back what is initially put into it. Math does not produce interpretations. It can only carry them along like philosophical notes. It does this whether or not the interpretations are correct. The math is used to predict future motion by means of extrapolation from empirical evidence of prior motion. Successful predictions of motion are not sufficient to validate the truth of theoretical ideas about the nature of the universe.

We supply the interpretations by means of the intelligence supplied to us. The interpretations may be wrong; however, our intelligence is real. Our intelligence belongs to the universe. The

universe passed intelligence on to us. The empirical means by which this intelligence is carried are particles of matter. According to empirical evidence all properties, with which we are endowed, appear to be attached to particles of matter. We are formed from particles of matter, and we have intelligence. Our particles of matter have to be involved in the establishment of our intelligence. Our life and our intelligence are established by the means of our molecules. Our molecules were formed from particles of matter obeying the real, as yet unknown, laws of operation of the universe.

For science to understand life and intelligence, it must find the cause for the origin of life and intelligence among the properties of particles of matter. These properties must be traceable from us all the way back to the origin of the universe. There is no intermediate time where a new unique property of matter was added on. The practice of tracing life down the scale of complexity to a point where its traits, as we macroscopically define them, seem to disappear is not really the practice of tracing life. It is instead the practice of tracing our understanding of life. This understanding is tenuous and artificial. It is representative of our present limited knowledge.

Understanding and awareness did not start with our macroscopic emergence. Awareness does not begin at the point where we define it or even where we represent it. Its origin belongs with the origin of all things. Our own emergence also does not start where we choose to define it. Both origins are to be found with the origin of all things. Awareness is usually defined as if it is an added on magical power distinct from the nature of basic matter. Awareness cannot be a product of a mechanical universe. If the universe were really mechanical, then awareness would represent the unnatural. This theoretical contradiction cannot exist in the real natural universe.

Awareness is a property produced by a universe capable of life and intelligence. We know we exercise awareness, and yet theoretical physics says the material of the universe does not. Our low level of understanding results from a perspective of separation and does not embrace the expanse that brought us into being. The traits we use to define life and intelligence were formed from a perspective of isolation. We think ourselves to be unique even from the matter from which we are composed. We view our matter as mechanical parts and ourselves as complex life and high intelligence. Our matter is not credited with exhibiting any life and intelligence.

Yet we know we share the nature of the expanse. We know we share it, but do not yet know a physical property by which we share it. We do not yet know the most important traits of the universe that gave us birth. The artificial, self-imposed limitation of our isolationist viewpoint is the reason why there is the practice of separating parts of the universe into life and non-life. The perception of an intrinsic separation of life and non-life is a human perception and is not warranted by empirical evidence. The empirical evidence shows we are formed from common material of the universe.

There is no natural separation between life and other matter except in degree. The properties of life must be the result of complex combinations of the real properties of matter. Lack of understanding is the reason for today's incorrect and incomplete theory. Such mistaken theory requires leaps of faith to loosely join its disparate ideas together. The leaps of faith are then woven into scientific arguments. The arguments rest upon the idea that significant, complex change can occur rapidly or even instantaneously. Complex causes are theorized to emerge or appear as needed. There is no continuity of theory to fill in the gaps.

Both physics and biology make use of this theory repair kit. The causes for such change are defined as unknowable, emergent properties. Even the fundamental properties of theoretical

physics are emergent properties. The evolution of life in a mechanical universe is an emergent property. The current theoretical separation between mechanical properties and life is the basis for arguments in favor of discontinuity or punctuated change. This is due to acceptance of the theory of emergent properties.

Emergent properties are evidence the theory leading up to the emergent property is either incomplete or wrong. The word emergent is a substitute for saying the means cannot be shown. Since the means of existence cannot be shown for any fundamental cause, the concept of emergence is applicable to them all. The origins of all fundamental causes are undefined. They each appear miraculously. They have no history or reason for coming into existence. They are the theoretical, materialistic miracles that form the foundation of theoretical physics.

This is the philosophical, mental, quicksand that forms the foundation from which the materialistic *natural*, i.e. mechanical and speculative, causes of theoretical physics are imagined to exist. These guesses were raised to the status of *natural* by belief alone. In theoretical physics, there are no provable *natural* causes. There are only theoretically proposed causes. Many are guesses made at an early time with a simple level of knowledge. Many of these early guesses became embedded fixtures upon which further theory remains dependent. This leaves them, and all theory using them, vulnerable to being wrong.

There is another reason for expecting they are wrong. So long as there is more than one fundamental *given*, or guess, about why patterns in effects occur, then fundamental unity has been sacrificed for expediency. It is evidence of theoretical error. Such Incorrect theory may have practical use, but cannot advance understanding. It is based upon misunderstanding. It is an impediment to progress toward the establishment of fundamental unity. Fundamental unity must reveal itself even within the limited context of mechanics. A requirement of correct theory is that it leads to unity. The correct interpretation for the full universe will lead us to full, scientific, fundamental unity. The property of life must flow as naturally from the nature of the universe as should mechanical theory. Full fundamental unity must include the properties of mechanics, life and intelligence.

Fundamental unity would allow all effects to be traced back to their origin. The act of tracing properties that give rise to life is equivalent with the act of defining the properties of the universe. So long as we are not able to define the operation of a unified universe, we will also not be able to define life and intelligence. We will be able to trace life when we finally understand the universe. We are only just beginning to gain this understanding. Our theory needs to return to its roots and be made new. All theoretical work that cannot predict the emergence of life and intelligence is either incomplete or in error. Currently its incompleteness is not just that of a missing final step. Its incompleteness reaches all the way from basic motion to all other properties participating in the emergence of life.

Physics is the study of motion and does not include the study of life or intelligence or anything between the properties of motion and life. Physics is the study of patterns in changes of velocity. It is change of velocity that tells us everything we know about mechanics. However, change is also a part of the rest of the properties of the universe. Change is a greater property of life than of motion. Science is missing knowledge of the kind of changes occurring to the particles of matter that produce recognizable life and intelligence.

The missing scientific knowledge pertains to the real nature of all properties. It pertains to learning the reasons why effects occur. We don't even know why these particles change their velocities, so our knowledge of them offers us no understanding about why life and intelligence

occur. For this reason it is not now possible to trace life and intelligence down to the fundamental particles. Science is incapable of linking the mechanical interpretation of the universe to life and intelligence. It is even incapable of uniting its theoretical mechanical causes together. That is why theoretical *givens* are necessary. The theoretical *given* properties of the universe are representative of theoretical discontinuity and lack of understanding.

In our real universe there is continuity and unity from beginning to end. For science to diminish the number of *givens*, or unexplained miracles, included in its theories, it must find a fundamental property of matter that acts in ever increasing complexity reaching from the beginning of the operation of the universe all the way to the human mind. Science needs one original miracle, but one miracle should be enough. There is a theoretical need for one first *given* for all of existence. There should be no need for additional science miracles because the evolution of an orderly universe requires all things must work together. They are bound to a unified purpose. They share a common purpose because they share a common cause. They are fundamentally unified, because they have a common origin.

Fundamental unity can be initially represented by mechanics. This fundamental, mechanical unity will require the recognition of one original, material cause for all effects. This original cause must form the basis of the fundamentals of mechanical science. The original cause would represent the reason for the existence and operation of the mechanical universe. Everything that was ever mechanically possible would already be included in the properties of the original cause. Either this or added on *givens* must be unexplainably and arbitrarily added. Religious viewpoints may appreciate many miracles, but science cannot. One miracle should be enough for scientific purposes. If it weren't enough, then the mechanical operation of the universe would not be predictable.

For the purpose of solving mechanical problems it is useful to define this original miracle as a mechanical cause of motion. That is sufficient to theoretically start off a mechanical universe. All resulting mechanical effects would be defined as being different aspects of the same original cause or force. A single, fundamental, theoretical, mechanical cause is the only crutch that should be necessary. Any additional theoretical material causes are evidence that the materialist explanation has gone astray from competently defining a mechanical universe. The original cause must have a nature that is flexible enough to carry the information necessary for the entire mechanical evolution of the universe. After this is achieved we still would only have materialism.

Beyond the mechanics of materialism there is a great deal more to account for in the complete evolution of the universe. The unification of mechanics, life and intelligence will explain both atomic phenomena and human consciousness. It will describe the natures of motion and awareness. It is the case that there are wondrous properties of molecules that are not understood from the combined theoretical mechanical properties of the particles that constitute them. Molecules of life are proof that the mechanical theories of physics do not describe what is really happening in this universe. If we are going to understand life, then we will first have to understand that we have not yet learned the natural properties of the particles.