

Who Is a God Like Thee?

MARTIN FRANZMANN

The Theses Of Agreement
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Creation And Evolution:
A New Departure

STEVEN A. HEIN

The Questions of the
Upper Room

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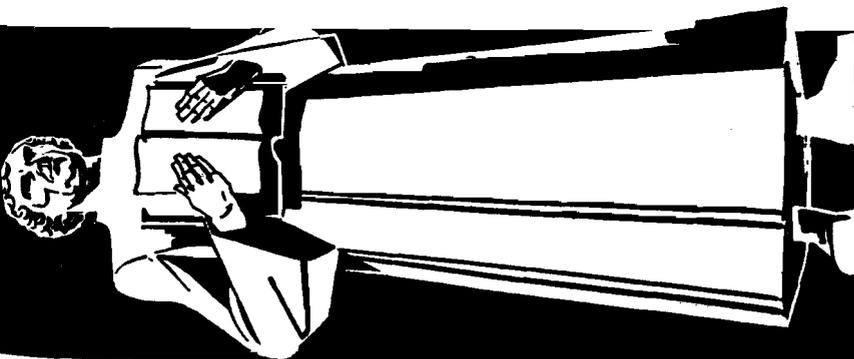
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Creation And Evolution: A New Departure

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INTRODUCTION

Whatever additional factors may be added to natural selection—and Darwin himself fully admitted that there might be others—the theory of an evolution process in the formation of the universe and of animated nature is established, and the old theory of direct creation is gone forever.¹

THE ABOVE OBSERVATION WAS MADE by Andrew Dickson White in his two volume work, *A History of the Warfare of Science with Theology in Christendom* in 1913. White believed that by 1913, the war between science and theology concerning the formation of the universe was nearly at an end. Science had triumphed in the "last battle" which pitted naturalistic evolution on one side and Christian theistic creation on the other. As science had previously demonstrated that God is not in the clouds causing the rain and thunder, so also by 1913, science had shown that the origin of life itself could be explained adequately without any need to invoke the supernatural and its problematic resident Deity. As science marches on, the footprints of God seem to grow more and more faint. This has caused theologians to yell, "Have faith!" and has caused the philosophy of scientific materialism to become an almost monolithic cultural *Weltanschauung* among intellectuals on both sides of the Iron Curtain. The material universe is the only reality. All phenomena, especially the formation of the universe, can be explained in terms of physical laws and molecular properties. Despite this almost monolithic philosophical view in the scientific community today, rumbles of discontent can be heard. Many young scientists working in the areas of physics, mathematics and cybernetics are beginning to question the adequacy of naturalistic evolutionary principles and materialistic world-views that have caused Darwinian evolution as a foundation.

It is the purpose of this paper to demonstrate that, as Darwin suspected, it is reasonable to believe that there are missing factors in the Darwinian hypothesis. Discussion will be limited to the subject of abiogenesis (the emergence of life from non-life), yet the physical and chemical principles involved in this area are identical to those of phylogenesis (development of species). Recent discoveries concerning the structure and function of the DNA molecule, advances in cybernetic technology and research, and the entrance of physicists and mathematicians into the abiogenetic field have brought new light upon the subject of the formation and maintenance of organic life. Part of this paper will entail a critical examination of the Darwinian hypothesis in light of recent research in the above noted areas. Part two will present a new (or possibly old) hypothesis

which will incorporate or account for those necessary factors not found in the Darwinian theory.

I. THE DARWINIAN HYPOTHESIS RE-EXAMINED

Living creatures on earth are a direct product of the earth. There is now little doubt that living things owe their origin entirely to certain physical and chemical properties of the ancient earth. Nothing supernatural was involved—only time and natural physical and chemical laws operating within a peculiarly suitable earthly environment. Given such an environment, life probably had to happen.²

This statement by Professor Paul B. Weisz provides an excellent summary of the Darwinian explanation of abiogenesis. The supernatural is totally unnecessary to account for life. The evolutionary hypothesis stated as an equation could be formulated in the following way: inorganic matter (with its inherent known properties) + random chemical reactions + time = organic life. Non-living matter, in the passage of time, became ordered progressively until it reached a stage of complexity sufficient to support the biochemistry of life as we know it. Evolutionists admit that the probability of non-living matter so arranging itself up to the complex state of the self-replicating cell by random chemical reactions is indeed small. Yet the process is defended by claiming the passage of long spans of time to make this improbable event probable. With enough time, as Weisz states, "Life probably had to happen."

The Darwinian hypothesis assumes (as is necessary for scientific investigation) that the physical and chemical properties of the earth were the same at the time of abiogenesis as we observe them to be today. With this uniformitarian principle the rationale is that, given enough time, the mechanism of random chemical reactions of the basic building blocks of life (biomonomers) would sooner or later produce the specific macromolecules which bear life as we know it.

The amount of time necessary for this improbable event to occur is not known, nor has it been possible to compute it on today's most sophisticated computers. Most estimates call for a time span of five hundred million years or more, but there is little agreement or precision on this point among the leading proponents of the evolutionary hypothesis.

Today, however, many are beginning to question the adequacy of the "random reaction" factor in evolutionary thought as it relates to the probability of abiogenesis over large spans of time. As a symposium on Darwinian thought in 1966, M.I.T. Professor Mark Eden had the following to say:

It is our contention that if "random" is given a serious and crucial interpretation from a probabilistic point of view, the randomness postulate is highly implausible and that an adequate scientific theory of evolution must await the discovery and elucidation of new natural laws—physical, physiochemical and biological.³

Why are Eden and many other scientists becoming skeptical about the probability of abiogenesis by a purely random reaction mechanism? Harold Blum in *Time's Arrow and Evolution* points out that statistical probability over long periods of time applies only to non-reversible systems. Says Blum:

I should want to play down still more the importance of the great amount of time available for highly improbable events to occur. One may take the view that the greater the time elapsed the greater should be the approach to equilibrium, the most probable state, and it seems that this ought to take precedence in our thinking over the idea that time provides the possibility for the occurrence of the highly improbable.⁴

The Darwinian theory has overlooked the concept of equilibrium. The concept of long-time spans to render the improbable event probable is only valid in principle with non-reversible systems. The problem with the evolutionists' application of this probability scheme to chemical reactions is that chemical reactions are usually reversible. Hence, Dr. A. E. Wilder Smith maintains:

. . . increasing the time factor in reversible reactions merely increases the chances that equilibrium rather than the improbable will be reached. Living biochemicals are highly improbable structures. Thus, increasing the time span allotted to a reversible reaction will bring equilibrium—not the increasing complexity which leads to life.⁵

"The longer the time allowed for a reversible synthesis to occur, the more likely the reverse reaction, or decomposition also becomes."⁶

Dr. Marcel P. Schützenberger, a leading expert in cybernetic technology, reported at the Wistar Institute of Anatomy and Biology that computer attempts to simulate random selection in chemical reactions were unsuccessful in detecting any measurable drift toward molecular specificity. Darwinism asserts that a drift toward greater molecular specificity leads up to the macromolecular proteins that support life *can* and *did* result by random selection. Yet, according to Schützenberger, computer attempts to simulate such a situation to the extent of arriving at any measurable drift toward detectible specificity just jam. The computer can find nothing to compute. The interpretation of these experiments is that no selective pressure is exercised from random selection in a closed-system.

. . . we find that we have no chance (less than $1/10^{1000}$) even to see what the modified program would compute: it just jams. . . . Thus, to conclude, we believe that there is a considerable gap in the Neo-Darwinian theory of evolution, and we believe this gap to be of such a nature that it cannot be bridged within the current conception of biology.⁷

Similar to the problem of probability in random selection is the problem of entropy. Entropy is a measure of heat loss or chemical

decomposition. The second law of thermodynamics states that matter tends to the state of maximum entropy in a closed system. Dr. L. S. Stebbing explains thermodynamic principles in the following way:

. . . since heat is energy of mechanical work, the transformation of work into heat, and the dissipation of heat is seen to be the change from a relatively orderly to a relatively disorderly state. Hence, entropy is regarded as a measure of the random element in the world: increase of entropy is increase of disorganization. A state of maximum-entropy would be a state of thermal equilibrium. . . . Thus the law of Clausius [the second law of thermodynamics] may be stated in the form: *The entropy of the system always tends to a maximum value.*⁸

We see from the above that not only is there a possibility of a reversal in a chemical synthetic reaction but that, in a closed system, there is a *tendency* toward reversal with chemical decomposition, not higher complexity, taking place. A reduction of entropy, or an increase in molecular complexity requires available energy. The greater the proposed complexity, the greater the requirement for available energy. An increase in *specific* molecular complexity requires both available energy and specific directional restraints. In connection with abiogenesis, Dr. Smith makes the following observation.

Today scientists have worked out at least some of the thermodynamics of the construction of viable proteins and nucleic acids from their building blocks. The thermodynamics of these synthetic reactions leading up to specifically sequenced proteins not only demand energy but also involve nonrandom, specific directional processes.⁹

Darwinian theory flies right in the face of thermodynamic principles with its proposal that greater complexity and specificity in viable proteins resulted from a random chaotic situation. Because a closed system excluding supernatural intelligence is proposed, Darwinians cannot satisfy energy requirements for the reduction of entropy and directional restraints which must take place if greater molecular complexity and specificity is to be reached. Some exogenous energy (to the closed system) must be supplied if specific directional complexity is to result.

It is evident from the above discussion that on the basis of experimental computer results and the theoretical principles of thermodynamics, the mechanism of random chemical reactions will not account for the complex and specific molecular development that leads up to the genesis of life from non-living molecules. For this reason we must admit that, at best, the Darwinian hypothesis concerning abiogenesis has serious difficulties such that the merits of the hypothesis must be compared and evaluated in terms of alternative positions.

If the Darwinian hypothesis is to be the preferred explanation of life's origins, it must at least provide a superior explanation than competitive positions. If we assume the scientific methods validity

(and Darwinian proponents say *they* do), we must opt for the hypothesis which best complies with the physical and chemical properties as we understand them today. In addition, the criteria of testability and simplicity should be used where possible. These criteria are commonly used and accepted in the scientific community as best able to explain observable phenomena.

To get a perspective on the relative merits of the evolutionary account of abiogenesis, the alternative that Dickson referred to as the "old theory of direct creation" will be re-submitted, examined, and evaluated. Many things have happened in the scientific community since 1913; the creation hypothesis must be re-evaluated and compared to the Darwinian proposal anew today. If we desire to be objective and "scientific" in our own views of the formation of the universe, we must opt for the superior position, the one that best explains the facts we know about life and the material world.

II. THE CREATIONIST HYPOTHESIS RE-EXAMINED

Many contemporary Darwinians are bending all their efforts to demonstrate that, if a reaction leading up to life can take place now, in laboratory reaction vessels, without supernatural aid, then proof positive has been offered that no supernatural agency was needed for abiogenesis. Although a true living cell has not been artificially produced to date, many of the complex macromolecules necessary for life have been so produced. Much progress has been made in the past few years to the point that scientists are confident that a cell will soon be synthetically produced. Dean H. Kenyon in his book, *Biochemical Predestination* exudes this confidence.

We must assume that it is possible to duplicate, at least to some extent, those processes in the laboratory. Implicit in this assumption is the requirement that no supernatural agency "entered nature" at the time of the origin, was crucial to it and then withdrew from history.¹⁰

Thus, according to many evolutionists any synthetic laboratory production of life, given presupposed conditions of the earth when life originally arose, is heralded as driving the last nail into God's and the creationists's coins. But is not the opposite the case? As Dr. Smith asserts:

For all the efforts of the scientific naturalists to prove their point by the above mentioned method only serve, in fact, to verify the correctness of the supernaturalist position. For, is it not true that the scientific materialists are, in their experiment, applying intelligence and thought to the ordering of matter? Under the influence of intelligence they are hoping to produce living matter from its nonliving base.¹¹

The importance of Smith's point is that the scientist's biologically-tied intelligence lowers entropy exogenously and adds specificity and direction to the flow of reactions in the experiment. This is exactly the creationist point of view concerning original abiogenesis. The creationist hypothesis as put forth in the Scriptures holds that

intelligence (God) brooded over non-living matter, the dust of the earth, which then became organized up to life. The creationist hypothesis can be expressed as an equation in the following way: intelligence (motor) + non-living matter (with its known inherent properties) = life. Time does not figure significantly in the creationist hypothesis, being relative to the reduction of entropy which in turn is regulated by the intensity of intelligence's energy expenditure in ordering the non-living matter. Given enough intelligence (or motor energy) life could be formed instantaneously and still not violate thermodynamic principles.

Recent research in genetics has discovered that DNA molecules (which make up genetic material) control a cell's metabolism, reproduction, and physical characteristics by a four-symbol code. This code is made up of specifically sequenced protein molecules. These sequenced molecules form a specific four-symbol code of at least three hundred "letters" in the simplest gene. Every DNA molecule has a highly complex code of "canned information" which directs the entire chemical activity of a cell. Eden points out that in light of recent computer experiments, "No currently existing formal language can tolerate random changes in the symbol sequences which express its sentences. Meaning is invariably destroyed. Any changes must be syntactically lawful ones."¹²

In the areas of human and computer language (whether a twenty-six letter alphabet or a binary alphabet) we know that coded language must be formed originally and changed constructively by intelligence (either human or artificial). Canned information always requires a programmer. In line with what we know about language and coded information, the creationist hypothesis argues that the code and information found on the DNA molecule points to a "programmer" in abiogenesis. How else are we to account for the fact of code in genetic material? Randomness, as Eden has pointed out, has always been found to be hostile to symbolic code orderings. We know that a program always has a programmer behind it, whenever we encounter any synthetic (not caused by nature) ordering, from automobiles to computer output data.

The problem with positing intelligence behind abiogenesis in the past had been that there was no empirical evidence that intelligence could exist without being linked to human physiology and thought. Today, however, intelligence has been shown to ride on wire, electricity and vacuum tubes just as easily as on biological nervous systems.

Thus an intellectual stumbling block which has long stood in the way of intellectuals and kept them from believing in a supreme intelligence has been removed in principle by progress in cybernetic science, since it has shown that intelligence is no longer bound to human biological substrates.¹³

Since we know that intelligence can ride on organic, inorganic and electrical substrates, there should be little difficulty in believing that it could ride on other systems, even extra-material and extra-electrical. This belief is momentous because by positing intelligence;

codes, order and reduction of entropy can be adequately accounted for in abiogenesis.

Realizing that human intelligence was obviously not around at abiogenesis, there are two possibilities to account for the seemingly apparent intelligence behind life's origin. The first is some extra-universal matter possessing intelligence and using it to shape matter into life. The second is an intelligence that does not ride on matter at all but, existing before any matter arose, called them into being and up to order, hence a supernatural creator. The first possibility only pushes the problem back to another universe containing life similar to ours, but of which we have no knowledge. How did *that* organic life come into being? Sooner or later we must come to a pre-existent supernatural intelligence to account adequately for the order and programming we observe in life.

The key advantage of the creationist hypothesis over against the Darwinian position is that it does not conflict with present day scientific theory. It takes into account thermodynamic demands by opening the system to available energy requirements necessary to account for the molecular complexity and specificity we observe in cellular chemistry. It provides an explanation as to the origin of genetic coding drawing analogically in an inductive fashion from human experience. Moreover, in theory, the hypothesis is open to testing if intelligence is someday used to create life artificially under laboratory conditions.

FOOTNOTES

1. Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom*, I (New York, D. Appleton and Co., 1913), p. 86.
2. Paul B. Weisz, *The Science of Biology* (New York: McGraw-Hill Book Co., 1959), p. 21.
3. Mark Eden, "Inadequacies of Neo-Darwinian Evolution as a Scientific Theory," in *Mathematical Challenges to the Neo-Darwinian Interpretation of Evolution*, ed. by Paul S. Moorhead and Martin M. Kaplan (Philadelphia: The Wistar Institute, 1967), p. 109.
4. Harold F. Blum, *Time's Arrow and Evolution* (Princeton, New Jersey: Princeton University Press, 1955), p. 178.
5. A. E. Wilder Smith, *The Creation of Life—A Cybernetic Approach to Evolution* (Wheaton, Illinois: Harold Shaw Publishers, 1970), p. 41.
6. *Ibid.*, p. 26.
7. Marcel P. Schützenberger, "Algorithms and the Neo-Darwinian Theory of Evolution," in *Mathematical Challenges to the Neo-Darwinian Interpretation of Evolution*, ed. by Paul S. Moorhead and Martin M. Kaplan (Philadelphia: The Wistar Institute, 1967), pp. 73-74.
8. L. S. Stebbing, *Philosophy and Physics* (New York: Dover Publications, 1958), pp. 256-57.
9. Smith, *The Creation of Life*, p. 53.
10. Dean H. Kenyon and M. V. Cole, *Biochemical Predestination* (New York: McGraw-Hill Book Co., 1969), p. 30.
11. Smith, *The Creation of Life*, pp. 25-26.
12. Eden, "Inadequacies of Neo-Darwinian Evolution as a Scientific Theory," p. 14.
13. Smith, *The Creation of Life*, p. 229.

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