

THE TWO NATURES OF DNA: CONCEPTLESS CODE AND CONCEPTUAL ALIVENESS

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ABSTRACT

This paper postulates that DNA has two natures: one physicochemical that follows a conceptless coded program and another of conceptual aliveness that gives logical meaning to organisms. There are six traits that define life: metabolism, responsiveness, movement, growth, differentiation and reproduction. There is no direct evidence of life ever arising by natural processes alone, because randomness destroys the code of the DNA molecule. All complex systems are the result of deliberate intelligent design (code) and aliveness with the conditions of irreducible complexity and mutual requirement. It is concluded that DNA is both biochemically active with a conceptless coded program and conceptually alive that gives logical meaning to perceptual organisms. This implies that these two traits originated from a "living" Creator Who placed them on the DNA molecules of each living cell of each organism.

INTRODUCTION

Can matter and laws of chemistry and physics explain the origin of life in living organisms? The hypothesis of this paper is that the components that originally gave life to living organisms are the attributes of conceptless biochemical codes and conceptual aliveness which must come from a living, spiritual Creator (theologos) and not from lifeless chemicals following only natural physicochemical laws.

LIFE DEFINED

All living organisms carry on certain functions that set them apart from nonliving organisms. Tortora [4, pp.5-7] lists the six traits that determine life in living organisms: metabolism, responsiveness, movement, growth, differentiation and reproduction. Any one unit of life may not necessarily demonstrate all these properties at once. Wilder Smith [5, p.89] explains: "a mule is certainly alive, but it cannot reproduce. A castrate cannot reproduce either, but it is certainly alive." In order to be considered alive, an organism must have some of these traits functioning off and on during a given period of time. I would like to add two other characteristics to the list of life attributes: 1) a genetic mechanism such as DNA or RNA which codes information and directs biochemical development and 2) specific viable protein sequences that give complex chemicals a programmed functional impact.

NO EVIDENCE OF NATURAL NEOBIOGENESIS

Evolutionary theory claims that life as we know it on earth was produced completely by natural processes, i.e., the normal reactions of physicochemical forces. This view is sometimes referred to as "biological reductionism," i.e., that all phenomena of life are governed by nothing but the mathematically precise laws of physics and chemistry. However, no experimental evidence has ever demonstrated that lifeless chemicals following physicochemical laws have spontaneously generated any living organisms.

Sir Fred Hoyle, the distinguished astronomer, has stated: "as biochemists discover more and more about the awesome complexity of life, it is apparent that its chances of originating by accident are so minute

that they can be completely ruled out. Life cannot have arisen by chance" [2, pp. 11-12].

The main reason that non-living units cannot generate life by just leaving matter alone under the right conditions is that random physicochemical laws (chaos) destroy any organization into a coded program. This is because code sequences and randomness are incompatible. Wilder Smith stated: "Randomness destroys code, and putting a code onto a randomly arranged thread of biomonomers will destroy the randomness" [5, p. 69].

Morton stated: "In order for any protein to be made, its amino acid sequence must be coded into the DNA template. If the code were totally dependent upon chemical and physical laws, as the mechanistic theory of evolution demands, then the amino acid sequence for proteins would have to be a random distribution. It is an erroneous assumption to think that matter can go from a state of inorganic, disorderly arrangement to a state of organic, orderly arrangement to make up a DNA code. Scientists are inescapably faced with the intractable problem of trying to code for sense instead of nonsense by a purely random process" [3, pp. 1-2]. Scientists have used enzymes and parts of DNA in a futile attempt to proclaim evolutionary development of life, but the by-product organic substances that have been made in the lab lack many of the qualities of life and are not living.

ALIVENESS AND THE LAW OF BIOGENESIS

Aliveness is defined as the state of organisms demonstrating the traits of life and functionally existing in the world. This aliveness in already living organisms causes and passes on this living condition to new living organisms. This is the universally accepted law of biogenesis: only living organisms can reproduce new living organisms after their kind. No one has ever observed a violation of the law of biogenesis.

LAW OF COMPLEX SYSTEMS

Every complex system/machine in the world whose origin we observe had its beginning in the will and planning of one or more intelligent living beings (human logos). Universal human experience clearly teaches that all complex systems owe their development and existence to acts of creation by intelligent living beings, and these beings (human logos) are always outside of, superior to and transcendent to their material, functional creations. Conversely, all human controlled empirical science demonstrates that random physicochemical processes (chaos) have never generated anything remotely resembling a complex system/machine, not even something as simple as a pin or paper clip. This principle is called the law of complex systems: the parts of all complex systems do not accidentally come together and function precisely but are the result of deliberate intelligent design and action (code) that causes precise functioning.

Corollary A of this law of complex systems is the property of irreducible complexity. This corollary states that all complex systems/machines consist of a number of exact parts which must be placed in the right place and sequence for the system/machine to work correctly. If one part is missing or in the wrong place the system/machine does not function. Did you ever overhaul the carburetor of your automobile and put all the parts together and had one part left out? You automatically knew that the carburetor would not work so you took it apart again and put all the parts including the left out one back in the right place and sequence. Behe explained irreducible complexity as: "Irreducible complexity is like a mousetrap which has a number of parts, and all the parts must be present before it can work....Nobody come across a mousetrap and wonders whether it was designed or not" [1, p.7].

Corollary B to the law of complex systems/machines is that all complex systems/machines are susceptible to wear and tear and gradual decay which is predicted in the Bible (Genesis 3:17 and Romans 8:21,22) and observed by us as the increase in entropy from the second law of thermodynamics. Therefore, all complex systems/machines are best explained as the result of deliberate intelligent planning (code) and construction.

THE PROBLEM OF MUTUAL REQUIREMENT

Evolutionary theory claims that a new functional part of a system occurred by random mutation and thus resulted in a selective advantage for the system. This was followed over long periods of time by more and more fortunate accidents until all the necessary parts were in place and functioning precisely to make a machine. But the great problem in the human cell is that DNA, which supposedly evolved slowly and upward, must have protein in order to exist and likewise protein must have DNA. They both must be there fully developed in order to have the other one to function. This is the condition of mutual requirement for precise functioning.

Evolutionists would like us to believe that a piston rod would develop by a fortunate accident and will make an engine function a little bit, then a cam shaft would develop and naturally connect to the piston rod and make the engine run a little better. Then a drive shaft with a belt would naturally develop and hook up with the cam shaft, piston, and....we have a precisely running automobile combustion engine. Of course, both auto mechanics and drivers know that all the parts of an engine must all be fully developed and in the right place at the same time for the engine to function. If this condition of mutual requirement of parts of a machine at the same time in the real world is absolutely necessary, wouldn't it be also true of all organisms, unicellular up through the human body? Doesn't this imply that both DNA and proteins of all organisms suddenly developed (were created) at the same time? The observed condition of mutual requirement demands this.

THE TWO NATURES OF DNA AND PROTEINS

DNA and functional protein molecules are both physicochemical and non-physicochemical in essence. DNA/functional protein has a physicochemical structure of conceptless information (code) and a non-physicochemical component of conceptual information. The written words of this paper are the conceptless, physicochemical information and the meanings of the words are the concept-filled purposeful information that spring from the organized physicochemical code. We know that the concepts that give meaning, action and purpose to our daily living springs from what we understand as words with conceptual meanings that are organized into logical, coherent, integrated meanings. It is these meanings that give us our concept of intelligence. This gives the two natures of DNA their power to effect reasoning, learning and self-improvement and allows us to learn from past experience. Could purposeful concepts naturally develop from inorganic matter following only physicochemical laws? Wilder Smith answered this question: "inorganic matter contains none of the code and language concepts on the basis of which the DNA molecule functions" [6, p. 3].

Information for "conceptual aliveness" must have originated from a living spiritual Creator to ride on the physical DNA molecular code much like this writer intelligently assigns logical meanings to the words you are reading. This DNA is both biochemical and "alive." This conceptual aliveness must have originated in the mind of the living Creator (Theologos) (Genesis 1:11-13; 20-31). Parents propagate their biochemical physical traits through genetic laws to their offspring while the living Creator (Theologos) adds the "conceptual aliveness" to each individual. Codes, languages and conceptual aliveness do not ever arise naturally by chance and selection over long periods of time. Conceptual aliveness must be derived from a living Creator. Alternative models, improbable intelligent accidents and exobiogenesis (life evolved elsewhere in the universe and was carried to earth), do not resolve the problem of the occurrence of non-physical conceptual information. The major problem with explaining the origin of life by exobiogenesis is that it shifts the problem to another location where all unanswered questions are impossible to answer [7, p. 364]. Of course, an unsurmountable objection to exobiogenesis is that there is no direct or indirect evidence that any form of exobiogenesis has ever occurred.

Table I summarizes the steps to postulating that DNA has two natures that originated from a "living" Creator.

TABLE I. STEPS TO POSTULATING THAT DNA HAS TWO NATURES

| Category | |
|---------------------------------------|---|
| Definition of Life | Organisms that have metabolism, responsiveness, movement, growth, differentiation and reproduction. |
| Proposed additional Requirements Life | 1) genetic mechanism (DNA, RNA) that codes information and directs biochemical development; 2) specific viable protein sequences that cause a programmed impact. |
| Evidence of Natural Neobiogenesis | None |
| Compatibility of Chance and Code | Totally Incompatible: chance destroys code and code destroys chance. |
| Development of Life in the Laboratory | Never: all organic by-products lack many qualities of life and are not living. |

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| Law of Biogenesis | Has never been violated. |
| Law of Complex Systems | The parts of all complex systems do not accidentally come together and function precisely but are the result of deliberate intelligent design and action (code) that causes precise functioning. |
| Corollary of Irreducible Complexity | All parts of a complex system must be in the right place and sequence in order to work correctly. |
| Corollary of Wear and Tear (Decay) | All complex systems increase in entropy (Genesis 3:17 and Romans 8:21,22). |
| Condition of Mutual Requirement | DNA must have protein to exist, and protein must have DNA to exist. Both would have to originate exactly at the same time in order for each to function. |
| DNA has Two Natures | 1) Physical biochemical conceptless code; 2) Non-physical conceptual aliveness that gives meanings to language. |
| Improbable intelligent accidents and exobiogenesis | Do not solve problem of physical conceptless code and non-physical conceptual information and meaning. |
| Conclusion | Both the physical biochemical conceptless code and the non-physical conceptual aliveness originated from a "living" Creator Who placed it on the DNA molecules of each living cell. |

CONCLUSION

Since life is the most complex system of processes we observe in our world, it is reasonable to conclude that purposeful conceptual information originated not in lifeless physicochemical matter/energy processes, but originated in the mind and by the power of a "living" Creator (Theologos) and is passed on to the DNA molecules and functional proteins giving conceptual meaning to the actions of each living cell and individual. DNA has two natures: one physicochemical that biochemically follows its coded program and another of conceptual "aliveness" that gives it logical meaning to perceptual organisms (animals and humans). DNA is both biochemically alive and conceptually alive. An unbiased observer would have great difficulty denying the rationality of inferring that conceptless biochemical code and conceptual aliveness originated from a "living" Creator Who placed it on the DNA molecules of each living organism.

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