

Linguistics: Finding Immaterial Properties of Life

A collection and discussion of quotes from researchers

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Perhaps one of the most serious challenges to evolutionary theory comes from the arena of linguistics. Scientists are beginning to see life as a linguistics-based process in which the DNA contained within each cell is based on a genetic language. In turn, this language contains huge amounts of information, more than would be contained in a library of one thousand volumes. This amount of information is not a total for the entire organism—there is this much information in each cell! Therefore, any explanation of life must explain the origin of this information. Dr. John Baumgardner, well-known geophysicist at Los Alamos National Laboratory, states,

"Language involves a symbolic code, a vocabulary, and a set of grammatical rules to relay or record thought. Many of us spend most of our waking hours generating, processing, or disseminating linguistic data. Seldom do we reflect on the fact that language structures are clear manifestations of non-material reality."

"This conclusion may be reached by observing the linguistic information itself is independent of its material carrier. The meaning or message does not depend on whether it is represented as sound waves in the air or as ink patterns on paper or as alignment of magnetic domains on a floppy disk or as voltage patterns in a transistor network. The message that a person has won the \$100,000,000 lottery is the same whether that person receives the information by someone speaking at his door or by telephone or by mail or on television or over the Internet."

"Indeed Einstein pointed to the nature and origin of symbolic information as one of the profound questions about the world as we know it. He could identify no means by which matter could bestow meaning to symbols. The clear implication is that symbolic information, or language, represents a category of reality distinct from matter and energy."¹

In other words, language relies fundamentally upon an abstract association between the symbol (consisting of the arrangement of atoms within the matter) and the object, idea, or sound that is implied. This association, and hence the information, is totally non-physical, as one can demonstrate by changing substrates, without changing the information that is stored there. Information theorist Hubert Yockey also recognizes the non-physical character of messages:

"the meaning, if any, of words, that is, a sequence of letters, is arbitrary. It is determined by the natural language and is not a property of the letters or their arrangement ... For example, "O singe fort!" has no meaning as a sentence in English, although each is an English word, yet in German it means, "O sing on!" and in French it means "O strong monkey". Like all messages, the life message is non-material but has an information content measurable in bits and bytes"²

The genetic code is just such a "sequence of letters" which carries inherent meaning and information distinct from the physical properties of its molecules. Dean Overman also recognizes that the genetic code has some non-physical properties:

"[t]he information contained in the genetic code, like all information or messages, is not made of matter ... The meaning is not a property of the arrangement of the symbols or alphabet of the code. The message or meaning in the genetic code is non-material and cannot be reduced to a physical or chemical property."³

Overman goes on to point out that "[m]aterialism does not explain the meaning in the code"³. So the genetic code contains information which clearly exists, but is distinct

from matter or energy, and defies a materialist explanation. The existence of this non-physical property is a serious stumbling block to the naturalistic assumption that all that exists is matter and energy.

So how does all of this relate to Intelligent Design? The presence of non-material information not only implies a super-physical realm, but also a super-physical intelligence. Without this super-physical intelligence, the information in the code would have no meaning, no context, and even no existence. **The very existence of the code can only be explained through a pre-existing intelligence who put it there.**

Some might argue that the high level of information in the genetic code could be generated without a guiding intelligence through chance and physical laws that govern the behavior of matter. However, while laws can create information, they create a recognizable pattern of low-level information not found in the molecules of biology:

"A law produces regular, predictable patterns ... Biologist originally hoped to find a general law of assembly for proteins. And how did they expect to discern the effects of a law? They looked for regularities, patterns. It was when geneticists failed to find an overall pattern that they realized that they were dealing with something not produced by natural law.

The same reasoning applies to DNA. If we were to find regular, repeating patterns, that would constitute evidence of an underlying law. But a repeating pattern encodes little information. Computer buffs sometimes like to create wrapping paper by commanding the computer to print "Happy Birthday!" again and again until the page is filled. The result is a repeating pattern that conveys very little information; the entire page conveys no more information than the first two words.

If the origin of the DNA sequence were a material force, such as chemical bonding forces, then we would get something analogous to computer-generated wrapping paper."⁴

Origin of life theories must consider the origin of this abstract, non-material information. In every human experience, information always arises from a mind or intelligence. Information does not just "happen" by chance, random processes-and it could not conceivably arise from purely random physical interactions. For these interactions have no means of forming the abstract connections between a symbol (such as the letter "a") and its meaning (the sound we make whenever we read aloud the letter "a"). The genetic code is a prime example of this sort of arrangement, since a certain sequence of genetic letters (consisting of the chemical letters Adenine, Thymine, Guanine, and Cytosine) correspond with a specific protein, or cellular machine. Hence, each sequence of genetic letters is a genetic "word" that corresponds directly to its protein, or the meaning of that word. This correspondence is exactly analogous to the correspondence found in language structures; indeed, even the term "translation" is used to describe the conversion of DNA information into protein.

Because the symbol/meaning association at the heart of language is purely non-physical, there is no way that a purely physical interaction can create it. Information and language always arise from a mind that is not locked into the physical realm, and is able to step outside physical constraints into the world of ideas to form the abstract associations needed for a language structure to exist. Baumgardner goes on to note,

"The implications are immediate for the issue of evolution. The evolutionary assumption that the exceedingly complex linguistic structures which comprise the construction blueprints and operating manuals for all the complicated chemical nanomachinery and sophisticated feedback control mechanisms in even the simplest living organism simply must have a materialistic explanation is fundamentally wrong. But how then does one account for symbolic language as the crucial ingredient from which all living organisms develop and function and manifest such amazing capabilities? The answer should be obvious-an intelligent Creator is unmistakably required."¹

Clearly, if our paradigm for investigation excludes the existence of this Creator from

the start, it is going to be insufficient to explain the nature of reality. And this is the case with naturalism, the philosophy guiding the current scientific paradigm.

References Cited:

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4. Pearcey, Nancy R., and Charles B. Thaxton. "The Soul of Science" Wheaton Il.: Crossway, 1994.