

INTEROFFICE

To: Mr. Brian Knowles
Mr. Art Ferdig

Date: August 9, 1974

Department:

Subject: "The Origin of Life" Reprint Article

From: Bob MacDonald

Analysis of "The Origin of Life" Article

Bob MacDonald

This article is completely out of date and everything after the heading "The First Fossil Remains" needs to be totally rewritten. The title is inconsistent with the content of the article in today's thinking. The title implies the origin of the first unicellular life, while the article concerns the origin of animal life.

The article tries to prove that all life had its origin at the time abundant animal life appeared in the Cambrian; this, however, has been proven to be untrue.

Much investigation has been done on the pre-Cambrian since the article was originally written. The pre-Cambrian has been found to be teeming with simple plant life (algae and bacteria) of many types. If we can believe the absolute dating methods (and I have no reason to doubt them), the earliest fossil algae dates from 3.1 billion years (compare this to the $\frac{1}{2}$ billion-year age of the Cambrian), and indirect evidence indicates some forms of life existed 3.76 billion years ago. According to the fossil record, simple plant life was in existence for over 2 billion years before animal life was created.

The fossil record not only shows plant life before the Cambrian but also impressions made by worm-like animals as old as one billion years in the pre-Cambrian of the Grand Canyon. The late pre-Cambrian Ediacaran fauna of Australia and Africa contains simple arthropods and jellyfish as well. The pre-Cambrian record shows a changing biota and ecosystem, as does the rest of the geologic record.

We can no longer say that life began "suddenly" in the Cambrian. But we can say that abundant animal life without evidence of previous ancestors appeared "suddenly" at or near the beginning of the Cambrian, showing their creation by God. Likewise, at many levels in the geologic column, fossils of new organisms indicate new life forms have been created without predecessors. We need to get away from our old concept of a unique time when all pre-Adamic life was created. The fossil record shows that creation of new forms took place at many different times.

Our writers must also recognize another process that helped shape the fossil record -- that of variation in created units. The record shows many instances of continuous variations in life forms. These variations are limited in scope, however, and do not lead to new kinds.

The article contains a number of our former misconceptions about geology. It questions the geologic succession of strata and the dating of strata by fossils. It also implies that catastrophism is the mechanism by which the fossil-bearing strata are deposited.

The article incorrectly implies that the simple to complex series in "faunal succession" was assumed on the basis of evolution and is not an actual series. I have dealt with these questions in my memo of February 22, 1973. In this memo I showed that faunal succession is generally a valid concept based on observation and not on evolution. Also, I explained that the fossil record is primarily a record of life, not a record of death, as we formerly thought.

The article "The Origin of Life" correctly points out that the complex Cambrian trilobites appeared without ancestors -- proving creation, not evolution, but it is incorrect in implying that this disproves the simple to complex series in faunal succession. The creation of the trilobites and other animals at the beginning of the Cambrian is merely an exception to a general trend.

In my opinion the article should be killed. Anyone with a rudimentary knowledge of the subject would see the fallacies in it immediately, brand us as ignorant, and discount the rest of what we say. Perhaps the majority of our readers would accept it, but what would it do to their faith if they should later find the article to be wrong?

The subject material has good potential for an article, but it should be entitled "Creation or Evolution?" or something to that effect. One could include many instances in the fossil record of the sudden appearance of new life forms without ancestors.

The title "The Origin of Life" could be used with another article showing that the first cell couldn't have evolved from lifeless chemicals, but must have been created. I would be happy to supply material on both subjects and will help out in any way I can.

The problems with "The Origin of Life" article are reflected in our other articles on geology and evolution. The authors have been basically unqualified to write on the subjects. Reading a few science books does not qualify one to write on a scientific subject, as some have thought. It takes years to develop the kind of expertise required to write with accuracy and credibility. Also, when writing on evolution, our writers have attacked old concepts that are no longer generally held. For example, we attack Darwinian evolution, not realizing that modern evolutionary concepts have been modified. We attack strict Lyellian uniformitarianism, blissfully ignorant of the fact that today no one believes this. Modern geologists recognize that catastrophism (short of worldwide catastrophies) as well as slow processes have produced the geologic record.

In addition we have been prone to quoting old references that do not reflect modern thinking and have, on occasion, even been guilty of quoting out of context.

One last point: As an organization we have had a notorious lack of communication. Writers do not always check with the experts that are in the field in which they are writing. Apparently, they feared that only controversy would result. But do we want to continue to sit in ^{isolate} wrong towers clinging to wrong concepts, or do we really seek the truth? Hopefully the latter. Recent signs have been encouraging that we are at least recognizing the need for open communication.