
Mathematical Philosophy and Evolution

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ABSTRACT: It is established that the claims of those who adhere to the concept of "sudden appearance" or "special creation" cannot be rejected on logical or scientific grounds by an institution that has occasion to discuss in any manner the origins of life.

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In the following paper, the terms spontaneous generation, biochemically or otherwise, and special or scientific creation usually refer to distinct concepts having certain common features. For the purposes of this article, these terms will be considered as synonymous since we are investigating the common feature exhibited by these distinct concepts. This common feature is the following: (1) The apparent sudden appearance of life from any source where life did not previously exist or the sudden appearance of entirely new life forms where other life forms exist. We include within this definition an additional component. (2) The rational and scientific existence of not directly observed but rationally describable processes or objects that could logically produce the events outlined in statement (1).

In what follows, it will be established that the claims of those who adhere to the concept of "sudden appearance" or "special creation" cannot be rejected on logical or scientific grounds by an institution that has occasion to discuss in any manner the origins of life.

The fact that any concept related to "sudden appearance" is rejected solely on logical grounds is specifically stated by the major proponent of continuous biochemical

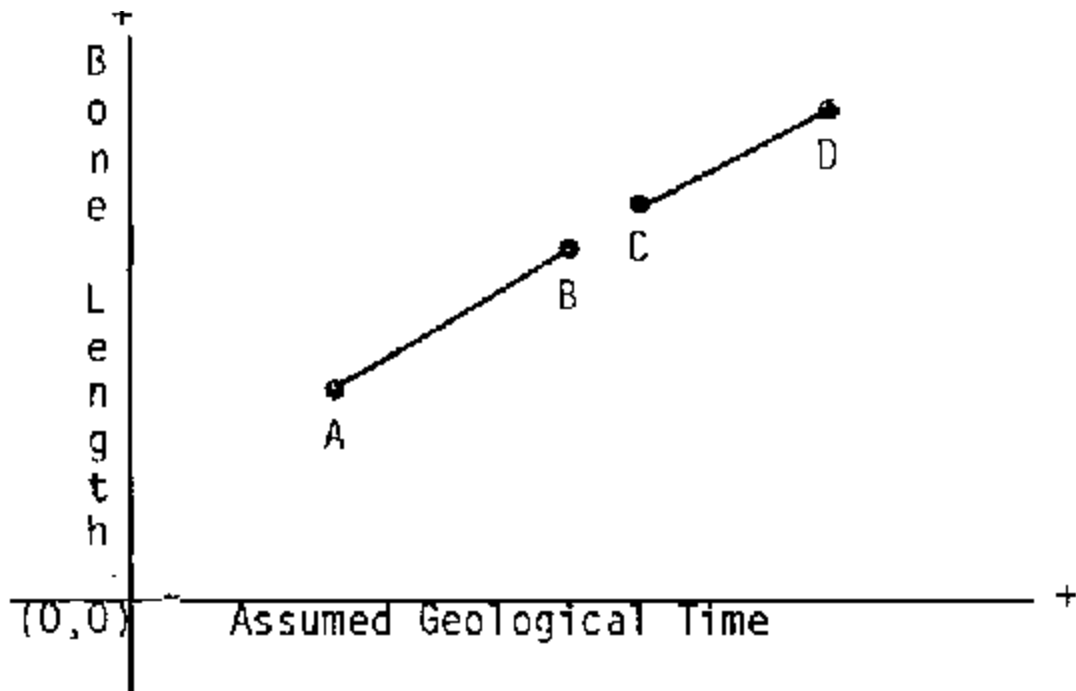
evolution. "Most, but not all, modern biologists and biochemists have abandoned any belief in spontaneous generation. This has come about through the general acceptance of the evolutionary viewpoint as expressed by Aleksandr Oparin." [1]

Oparin makes the following all conclusive statement: "Engels shows that a consistent materialistic philosophy can follow only a single path in the attempt to solve the problem of the origin of life. Life has neither arisen spontaneously nor has it existed eternally. It must have, therefore, resulted from a long evolution of matter, its origin merely one step in the course of its historical development." [2]

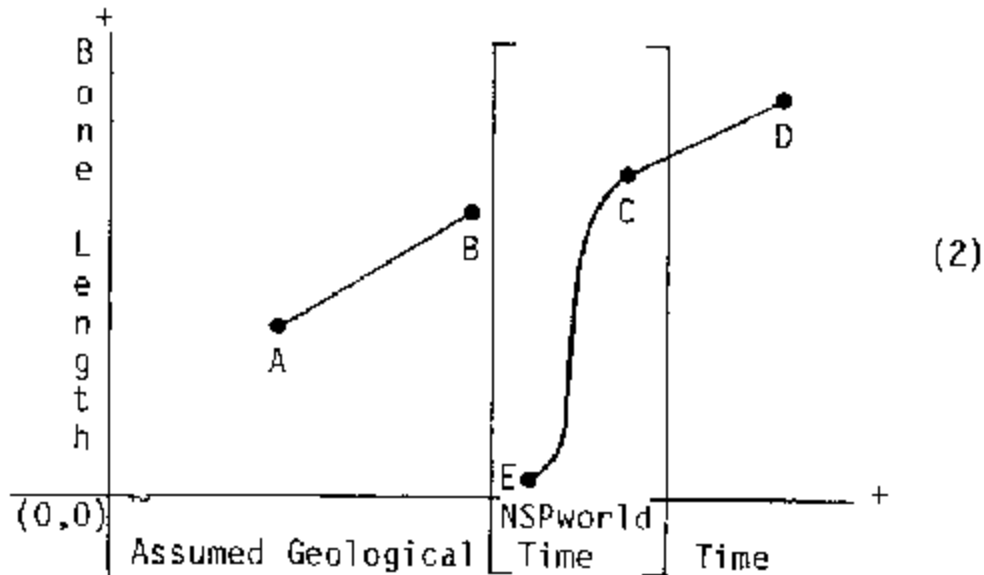
Indeed, the eminent Harlow Shapley stated in 1961 in the forward to Oparin's book "Life in the Universe" [3] that the sudden appearance of life forms is "irrational" [4]. Now Oparin's scientific philosophy is based upon the "consistent materialistic philosophy of Engels' as he has stated. Recently, using very powerful tools from the science of mathematical logic, it has been irrefutably established that Engels' materialistic philosophy is inconsistent [5]. Hence, all conclusions based upon Oparin's scientific philosophy must be logically rejected. Moreover, the view of any individual who adheres to Shapley's views that the sudden appearance of life forms is somehow "irrational" must also be logically rejected.

We now demonstrate in an unemotional, unbiased mathematical manner the true logical facts. These facts are not based upon the acceptance of any personal philosophy. They are mathematical facts. Figure 1 indicates what is termed an evolutionary change (i.e. a measure of changes in an assumed exact organism with respect to elapsed time [6]). In this example, the assumed evolutionary change is in the length of a bone that is assumed to be common for a given species with respect to the age of the geological strata in which the bone is found. The age is determined by methods that presuppose the concept of the universal uniformity of nature. This concept cannot be scientifically verified directly. Further, it presupposes that there is no possible intervention by any means whatsoever that can alter what we perceive, at present, to be the behavior of a natural system.

Notice that it is logically possible that such intervention could not be discovered scientifically since it could produce the exact same verified evidence. Hence, all such age determinations for the assumed distant past are based entirely upon unverifiable speculation.



This mathematical graph has an indicated gap. Moreover, as is well known, the line segments AB and CD also contain hundreds of small gaps that are not shown in the figure. It was discovered in 1981 [7] that all such graphs are based upon a hidden mathematical and possible physical background or substratum called the "nonstandard physical world." Further, it is possible to study, analyze and even mathematically observe what can occur rationally during the indicated gap period between the points B and C when viewed from the nonstandard physical world. When this is done figure 2 is obtained.



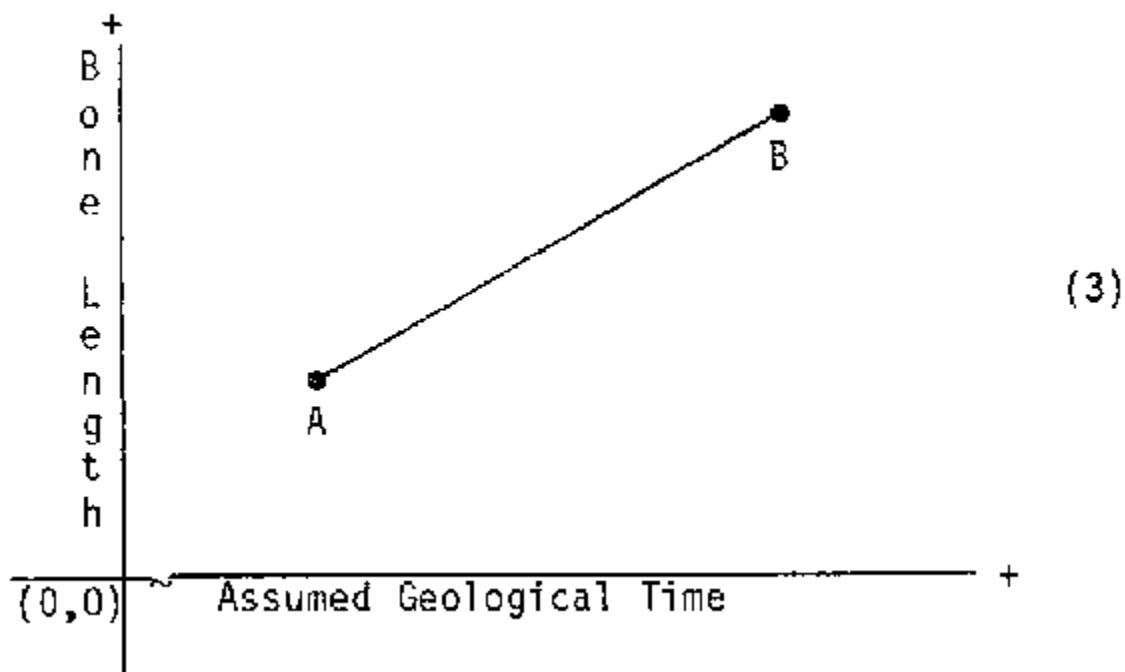
The curve EC that now appears within the gap is extremely smooth. The texture and smoothness of this curve is beyond anything that mankind can even approximate. The curve is "perfect" in every scientific sense of which I am aware. Indeed, it is more remarkable than anything that science has previously observed. This curve exists in the substratum - the nonstandard physical world. It is highly rational and regular in design and it has only recently been discovered.

It is a mathematical fact that the forces that could produce such a "gap filling curve" could not have come from any "observable source." The gap filling curve can be mathematically characterized as what can be produced by non-observable events.

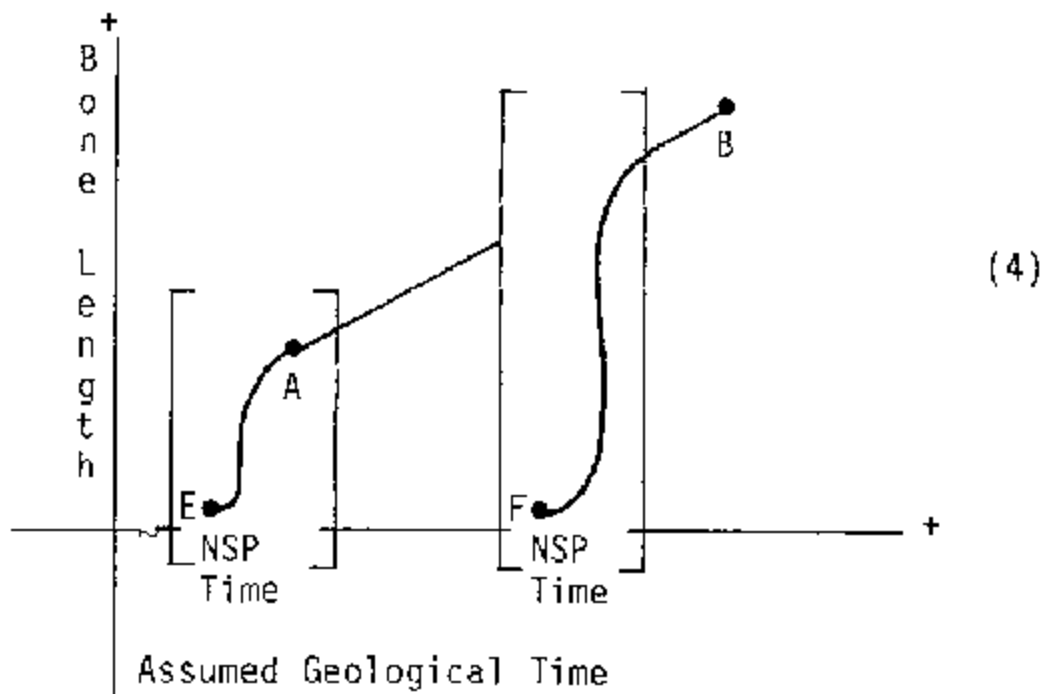
In particle physics and elsewhere, many objects are theoretically investigated and assumed, by the realists, to exist within the natural world even though they are not directly observable. Some individuals only believe that certain "particles" exist and are the fundamental building blocks of the natural world due to the mathematically predicted effects these unseen and assumed "particles" would have upon observable objects. That is to say that the predicted effects that they would produce are with respect to macrophysical objects such as gages and pointers. It cannot be determined whether or not such fundamental particles exist in the real world, or whether or not there is "something," yet more fundamental, existing within the nonstandard physical world that has in reality produced the macrophysical behavior observed within the laboratory. The exact some

philosophy of science relative to indirect verification can be applied to the "forces" or objects that might produce the gap filling curve. [After this original paper was written, it was theoretically discovered that there could exist subparticles within the nonstandard physical world that could be such objects.] As will be further demonstrated, the influence that this curve has upon biological events is to give the "appearance" of a sudden generation of life or the sudden appearance of new life forms. Please note carefully that the gap filling curve clearly indicates that the assumed bone measurements that yield the segment AB are not related to the bone measurements that produced the segment CD.

Suppose the assumed biological record, among others, produced a graph as indicated in figure 3. Could we then logically reject the "sudden appearance" concept?



The answer to the above question is a resounding NO. As previously mentioned, the indicated line segments contain hundreds of small non-indicated gaps. We can mathematically enlarge each and every one of these small gaps and observe what can logically occur between them. What we find are the exact same continuous curves in the substratum as indicated in figure 2, and these curves have the same properties as described previously. A few examples of this enlarging process are indicated in figure 4. Please notice the curve beginning at E, especially.



Our examples use the length of bones as a primary measurement. Many scientists claim to know that the discovered bone fragments used to obtain these graphs are from the same species and, indeed, the same but evolutionally changing biological object. How is this assumption justified? Numerous other observations and measurements are performed upon the same bone fragments as well as on the geological strata in which they are found. However, the above analysis that is applied to bone fragment length also applies to these other measurements and observations. What this means is that we can have no real scientific knowledge of whether or not these fragments are, indeed, those of the same evolutionary biological object.

Relative to the influences that these substratum "forces" or objects could have upon various distinct biological events, consider the following analogy. Set up a motion picture camera to photograph the construction of a jigsaw puzzle. First, for just a few seconds, photograph an empty portion of a table top on which the puzzle pieces are gathered. Stop the camera and then slowly and smoothly move the first biological puzzle piece into that empty portion of the table. Now photograph the same portion of the table top for a few more seconds. Call this scenario "How Life Began."

Now process the film and project the result. Of course, what you observe is the "sudden appearance" of the puzzle piece. What you do not observe is the careful, smooth, and regular processes within the nonstandard physical world that generated this one puzzle piece. Notice that this is represented by the curve EA of figure 4.

Suppose that you started with two separated puzzle pieces that are also separated from the remaining puzzle pieces located on the table top. The two do not interlock. Again use the motion picture camera and photograph, just for a few seconds, only that portion of the table top where the two separated pieces are located. Now stop the camera and carefully and smoothly move a third puzzle piece so that it interlocks with one of the two original puzzle pieces, which means it must be the correct piece, but it will not interlock with the other remaining biological puzzle piece. Now photograph the same portion of the table top for a few more seconds. Once again call this scenario "How Human Life Began." When you process the film and project it, you again will observe the "sudden appearance" of the missing but not transitional piece of the biological puzzle. Again you would not observe how this puzzle piece was generated by nonstandard physical world processes. The adjoining of this additional puzzle piece to one that was already present is represented by curve EC of figure 2.

The mathematical model predicts these effects from simple processes observed within the natural world. None of these nonstandard physical world processes are postulated. The model, so to speak, predicts that various "forces" have rationally, within the substratum, moved various distinct biological puzzle pieces into their respective places in a highly regular and smooth manner. Although it is not necessary, if one wishes, one can assume that these "movements" take place during "time" periods that are always shorter than any that may be needed in order to make natural world human or machine observations. They are also shorter than any "time" intervals needed to predict behavior using any of our quantum theories. Thus the mathematical model predicts that a human or machine will only be capable of observing the sudden appearance of each biological event. One can say that the mathematical model predicts an instantaneous manifestation produced by these substratum "forces or objects." Please notice that a type of "sudden appearance" concept is accepted by many scientists. This is especially true for those that accept a noncyclic Big Bang cosmology, and it is always true for those scientists who work in modern quantum theory with its suddenly appearing virtual particles.

Finally, is it possible that this mathematical substratum does not represent and yield the logical and rational patterns we observe within our local natural world? The answer to this question is also NO for the substratum which lies behind these graphs is the exact same substratum the generates all of the mathematically obtained conclusions for almost all of modern science [8].

In summary, those evolutionists who adhere to the philosophy of Oparin erroneously assume that there is only one general type of model for evolution that is acceptable scientifically. In direct contradiction of the modern canons of the scientific method, these evolutionists even go so far as to modify the existing evidence in order to force it to conform to this one type of model. As this research demonstrates, such unscientific procedures must be logically rejected. On the other hand, accepting or rejecting a "sudden appearance" concept can only be accomplished through personal study, contemplation and reflection in order to determine which model is the most appropriate for an individual's belief system.

Scientists often attempt to force an individual to accept a specific model for philosophical reasons and, indeed, to accept a model that does not contradict their philosophy. They employ various techniques, such as intimidation by the application of the "authority syndrome" or by not allowing these other models to be presented within the public domain, in order to accomplish their goals. The truth is that if various models utilizing scientific languages and procedures predict the exact same observed events, then it is not possible for science to determine which of these models is the "correct model."