

3. The origins of life.

The insoluble problem facing evolutionists today is the origin of life. The main hypothesis is that life came as a result of joining some inorganic elements together. It is possible that some organic molecules can be generated under laboratory conditions by using electrical discharges over a liquid containing a high concentration of the right components such methane, ammonia and hydrogen. This experiment was done more than 60 years ago and despite being repeated endless times never resulted in any living matter.

The primordial soup theory was abandoned and we now have widely accepted new hypotheses such as the RNA World. The problem is that now we have learned that life is much more complex than we ever imagined. Therefore there is no hypothesis for the mechanism of transition from some RNA strands to living organisms.

One major problem facing various hypotheses for the origins of life is the explanation of how a large amount of information was generated in the first living organisms. First we have to know the minimum number of genes needed by a living cell. Such work was performed in the Venter Institute in the USA. They removed the original genes from a bacterium and replaced them with synthetic genes. They reduced the number of genes to 473 and the bacterium still functioned. This is a very important discovery, because we know for sure that a living organism needs these genes and these genes had been present at the very beginning of life on Earth.

We have to remember that these genes would have to be generated by joining non living molecules *before* they formed a living organism. So the processes of natural selection could not take place because non living cells cannot reproduce.

We now realize that living cells require a large amount of information. The simplest cell having, for example, 500 genes, stores information the equivalent to about 60 pages of English text. This information must have been in the cell before life started. How was so much information generated? No one has produced any hypotheses so far. This problem is not mentioned by scientists working on the origins of life.

To produce a single gene using random processes would take an incredibly long period of time. To demonstrate the problems with random generation we can look at a gene which codes for one protein having 300 amino acids. Since proteins are built

from 20 amino acids, 20 steps are needed to select one correct amino acid using the random selection process. To select two correct amino acids, $20 \times 20 = 20^2$ steps are required. For three amino acids we need 20^3 steps and so on. Therefore, to obtain the code for 300 amino acids in the correct position we would need 20^{300} steps. This means that in practice we would have to make 20^{300} different DNA strands to be 100 percent sure that we have the right code for the protein. It is difficult to comprehend how large this number is. It is a 1 followed by 390 zeros. If we assume that it takes one second to create a new DNA strand, there is not enough time from the Big Bang to generate even one gene.