

Perspectives



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Perspectives on life have also been explained chemically. This theoretical perspective was proposed in the twenty first century by a Russian biochemist known as A. I. Oparin. Apparently, he viewed life as a chemical process with origins from basic compounds, which underwent chemical reactions to form organisms' body building blocks. These building blocks it explains include compounds like amino acids, carbohydrates, proteins, fatty acids, lipids and glycerol. The reactions involved in the synthesis of the building blocks were catalyzed by heat, ultraviolet emissions and heat. Moreover, these reactions occurred in a two stage process: the hot dilute soup and the coacervates stage. The coacervate stage involved abiotic synthesis of large molecules from simple molecules on the earth surface while the stage of hot dilute soup, occurred in the seas. The final products of both stages were large colloidal aggregates which were formed via intermolecular interactions. Gradually over the years, these colloidal aggregates eventually transformed into macromolecules such as nucleic acids. These nucleic acids are the determinants of genetic codes and giant molecules like nuclear proteins. The relevance of this theory was tested and proved by experiments carried out by Miller and Urey. These two synthesized amino acids and carbohydrates from methane, ammonia and water vapor using electric charges for a period of one week. Apparently, ammonia, methane and water vapor are atmospheric components and synthesis of carbohydrates using them proves that biological processes can occur naturally (Schopf, Kudryavtsev, Agresti, Wdowiak-, 2002).

Some geologists like Graham Smith have advanced the clay hypothesis as a plausible illustration of the life. In his theory, he explains that complex

organic molecules like nucleoproteins replicated from a solution made of silica crystals. As a result of selective pressure, the clay crystals replicated to form complex organic molecules which are the building blocks of many organisms. Some scientists have postulated that life emerged from tidal processes, which concentrated grains of radioactive elements such as uranium on the primordial beaches. These tidal processes, they explained, generated building blocks such as proteins and sugars. To illustrate this, the scientists designed experiments which demonstrated how radioactive materials like monazite released phosphates and ammonia into sand crystals on the beach. In these experiments they also observed that some of the radioactive elements like actinides could yield organometallic complexes at high concentrations. These organometallic complexes were seen as catalysts which catalyzed various biological processes (Inwood-, 2003).

These theories have contributed to understanding of the historicity of life in that they have provided a linkage between the old theoretical models and the new ones. Some have blended the biblical perspective and evolution to give a clear outline of the origin of our lives as humans. Moreover, these theoretical perspectives have endowed us with the ability to predict future. This is because we can foretell the changes that will happen to us once we reach a specific age. Therefore, we can prepare to those changes. The old theoretical models also had some loopholes in that they failed to explain the origin of initial compounds used to synthesize the elementary molecules. New theories however have given in depth analysis and explained the origin of such compounds. Finally, these theories have cemented the fact that our

everyday lives are product of exceptionally simple compounds most of which are components of the earth's atmosphere or core.

In conclusion, it is evident that life is a product of many complex processes. These processes are continuous, and organisms of today' world will be different from the ones of tomorrow. They may either be more complex with unique capabilities or inferior with reduced abilities and brain capacities compared to the present day creature. Apparently, death is inevitable in that all living creature will have to face death at one point in his or her life. Therefore, we as humans should strive to appreciate life as it is because we only live once and every decision we make enormously contributes to our future.