

## Creation and evolution: the scientific state of affairs

In Christian circles, frequently the (hopeful) question is asked whether the natural sciences can provide arguments that support the creationist model. In answering this question it should first be noted that the creationist model (= the theory that God created the world) is not testable and therefore cannot be falsified, and therefore is not scientific: it is a faith. Subsequently, it is important to note that the faith in a creator is a *rational* faith, because in daily life, complex systems never arise and are maintained by random processes, but only thanks to the creativity and directed effort of a builder, engineer, programmer, or artist.

As for the theory of evolution, which states that living nature is the result of random processes, it should first be noted that populations of organisms continuously adapt by random processes to changing circumstances, and that evolution therefore exists. Subsequently, it must be noted that in daily life random processes change every order in the utmost disorder, sooner or later. This fundamental property of physical reality – which is captured in the laws of natural sciences – is at odds with the theory of evolution.

In the peer-reviewed article "*The Evolutionary Dynamics of Digital and Nucleotide Codes: A Mutation Protection Perspective*" [William DeJong and Hans Degens, Open Evolution Journal, 2011] the evolutionary dynamics of digital codes (computer programs) are compared with that of nucleotide codes (DNA). The article <http://bit.ly/1P37x9r> investigates how random processes of mutation and selection can adapt these codes to changing circumstances. Major findings are:

1. Digital codes and nucleotide codes are protected against change.
2. Living nature constantly adapts to changing conditions through the regulation of genes ('*gene-regulation*') and by recombination and selection of gene variants ('*alleles*'). But these mechanisms for change of the DNA neither produce new alleles, nor increase the length of the DNA, and work within the boundaries of the mutation protection of the DNA.
3. Growth of the length of the DNA through the accumulation of non-repairable, advantageous, code expanding, heritable mutations – as assumed by the theory of evolution – requires that the mutation protection is disabled or at least is dysfunctional. However, dysfunctional mutation protection is the cause of cancer and hereditary diseases, which reduce rather than enhance the ability of an organism to live and reproduce. Dysfunctional mutation protection is therefore a severe selective disadvantage.

From these findings it follows that the theory of evolution needs to be articulated more accurately. A distinction should be made between: (a) *micro-evolution* as the result of gene-regulation or recombination and selection of gene variants, in which the length of the DNA does not grow and (b) *macro-evolution*, wherein the DNA length increases due to dysfunctional mutation protection. Consequences of such a distinction is that, for example, the change in the beaks of finches, in which the DNA is not growing, no longer can be used as evidence that the DNA of a bacterium can grow to the 3 billion characters of the human DNA.

How living nature evolves and continuously adapts by random processes to changing conditions within the boundaries of the mutation protection, is clear. But the answer to the question how living nature has originated and how the DNA of a bacterium can grow into that of a man, is problematic because the mechanism presumed by (macro) evolutionary theory leads to severe selective disadvantage (see point 3 above). It seems that science cannot provide (yet) a valid, testable explanation for the origin of DNA and its protection against mutations. But outside of science, everyone is free to assert that a mechanism that leads to cancer and hereditary diseases, can change the DNA of a bacterium into that of a human. Such an assertion, however, is a belief that – contrary to the belief that DNA has been produced by a creator – is not rational but irrational.