Summary Talk 2 "Reflections on the Creation Debate-IBF events galore"

CBF 31 May 2012 Russell Clark

The first talk indicated seven gaps in the scientific account concerning our origins. This talk looks specifically at Gap 3 "spontaneous generation of life on primitive earth.

I do not support any "god of the gaps" theology as the Bible shows God is involved in all aspects of His creation. Gaps in scientific knowledge are a challenge for atheists as the atheist must find mechanisms and causality so there can never be a need to look to a" higher intelligence" to explain stages. One important unbridgeable gap is fatal for an atheist.

The origin of life is bacterial and ancient. Prior to life forming on earth there were elements and chemical compounds. There is a need to explain how these chemicals turned into life as we observe and study it today. IBF=Improbable But Fortunate

1 Abiogenesis has produced a living cell (life formed from none-life/inorganic chemicals) Spontaneous generation of life has happened. It should not have. All the ingredients were not present; chemical bonding between macro- molecules is prevented in water; replication is a requirement from the first cell for life to be established; this requires a supply of DNA genes and proteins different from those involved in initial primitive life biochemistry; forming 500 specific proteins in one place in half a billion years, each protein requiring a specific order using any of 20 amino acids, selected from 300, is an IBF event

2 DNA and protein exist, despite their mutual inter-dependence for initial existence.

DNA/RNA and proteins exist but science cannot explain their simultaneous origins. No proteins, no DNA. No DNA, no proteins

3 A universal code is found on one macro-molecule that controls all living entities Despite some attempts at theories, and some fanciful hypotheses, there is total failure to explain how such a code could form.

4 The DNA code is stable in living cells but not in-vitro Stability occurs because of another protein mechanism. These are enzymes called **"proof -reading" enzymes**-special proteins that work on the DNA to correct the errors that happen continuously (mutations). No DNA, no protein. No protein, no DNA; No code, no protein. No protein polymerases, no code; No protein proof-reading enzymes, no stability of code; No stability of code, no continuation of life

5 Transfer RNA is an absurd but necessary molecule. It is a "frozen accident" in the words of Francis Crick. 1) tRNA had to be present for the first living cell to form and to function. tRNA is found in all living cells, from bacteria to us. It is universal. *No tRNA, no life, as no linkage of the code on DNA with specific protein manufacturing;, no protein, no tRNA, no tRNA, no protein* 2) There are 20 different specific tRNA's in all living cells, so there is one specific tRNA for each of the 20 amino acids that make up our proteins. Yet the joining section on the acceptor arm of each tRNA is the same construction and the terminal

sequence of nucleotides is identical for each tRNA. How is this specificity determined? It seems to have something to do with the cross arms, and another very specific protein enzyme that joins each specific amino acid to each specific tRNA. *How did this match develop in the first cell on planet earth?*3) The anticodon at the other end of the tRNA has a three letter code that specifies an exact amino acid., according to the code on page 7(d). It is easy to understand how the anticodon on the tRNA can now match the codon on mRNA, but how does this anticodon relate to the other end of the tRNA, so that a very different molecule, but a very specific molecule will join the acceptor arm? It is not understood.

Summary and Conclusion

1 The **Genesis** narrative indicates God has brought life into being through information transmission after light and water impacted on our planet. Adam is made from dust in Eden. This information can **accommodate the concept of abiosis**-life from inorganic compounds

. 2 The great domains of archibacteria and eubacteria can be studied today, and much is known of their biochemistry, mechanisms of reproduction and energy requirements. Research into minimal requirements for bacterial life indicates **a minimal number of specific protein enzymes** and a **minimal number of genes** must be present (around 500), enclosed in a cell membrane that allows permeability of nutrients.

3 **Simulation experiments** at attempts to produce basic building blocks for proteins and carbohydrates **have failed** to produce usable compounds, and water prevents lasting bonds preventing the formation of proteins and nucleic acids. Fatty acids cannot not be made abiotically this way, so cell membranes required by bacteria cannot form.

4 If a cell did form containing active biochemical reactions, it also **required mechanisms for division and multiplication**, otherwise the effort was wasted.

5 Proteins that are functional are of a size and specificity that cannot develop apart from DNA direction through a code. In turn, DNA cannot obtain a sufficient size without the aid of protein polymerase enzymes. Both must be present at the same time and same place. Separate development cannot happen.

.6 No testable mechanism exists to show **how any code can form on DNA** that gives direction for the formation of protein.

7 Both RNA and DNA are unstable in terms of maintaining a sequence of nucleotides, necessary to act as a stable code. There is an absolute necessity for the presence of **protein proof-reading enzymes** to be continuously active in association with DNA transcription and replication.

8 **Transfer RNA(tRNA**) must be present from the first living cell to transport specific amino acids attached to a receptor arm to the ribosome, and to link up with the code on mRNA using its specific matching anti-codon. There is no explanation for how this specificity based around the code can apply to the amino acid transported, nor how such an arrangement could develop spontaneously in the first living cell. *It is a complete mystery.*