

THE TRIUMPHS AND FAILURES OF REASON FOR MAN'S UNDERSTANDING OF NATURE

ZULFIKAR MOINUDDIN AHMED

I am a devotee of the inscrutable mysteries of Nature, a mystic, really in a way. I am not your Immanuel Kant-like man who puts his trust in Reason to bring vast understanding regarding all of existence. I consider Reason to be quite valuable, and do not consider Reason to be part of Human Nature. Reason is iffy. One day it gives insight, and another day it makes one duller than the doorknob and the laughter of the gods fill the heavens and Zulf does not like those moments. Yes, I refer to myself in the third person quite often. I have adoration for the mysteries of Nature, and consider it a great fortune when some thing is elucidated by efforts of Reason. I am wise and consider those things where Reason will actually produce enlightenment to be rather small. Human Nature evolved for things other than being able to know the inner secrets of Nature. I know that some among us like the idea that we will unravel the mysteries of Nature, and when we do these sorts of things, that's nice, but I am rather skeptical that all things can be understood by us. Besides life is short, and we would rather just live a little rather than continuously pretending that we will unravel all sorts of secrets that we don't need.

On the theory of abiogenesis that I have been working on recently, here I am actually quite clear that Reason will triumph. Probability theory is mature enough that in this case, since Planck and others gave us a good radiation law for the sun, a bit of simple consideration of probabilistic type will give us abundance of organic molecules to explain abiogenesis. I am confident that the explanation is right, that the main driving factors are vastness of oceans and sunlight, vast times, and density of carbon in ocean waters. In fact, probability theory shows itself here as the natural tool. Life on Earth at the molecular level needed abundance of structures, sampling of all of them perhaps, before some of them simply had replication and other capabilities, and the ocean is the key anyway.

So *here* Reason and probability theory and so on will actually produce a good scientific explanation for genesis of life on Earth. And that is good. We're not exactly *entitled* to this clarity of understanding. We are human beings; we like explanations like various powerful deities and aliens came and did various magics and voila life arose from nothingness. See, that's the sort of beings we actually are. We love these sorts of stories. My story of abiogenesis is drab, boring, and is the right explanation, but no one likes this inefficiency. And here is *my own* success with Reason, a theory that is so clear that it will form the basis of thousand generations of children learning it at a young age. To all of these children I have my sincerest apologies. It's true, my explanation of how life arose on Earth first is correct, but don't be discouraged. There is much more to the future of life than the sun beating down on the oceans day after day and producing an abundance of organic

molecules and then out of this total lack of intelligence replication produced much more vibrant situation after billions of years.

What makes this drab explanation – which is totally reasonable and sensible – tolerable is that all this was the past of the world. Life is more interesting, and the future is not going to be like that again. Otherwise, the first billion or so years on Earth were miserably dull. Now things are not so bad. There is San Francisco, there is New York, there are books to read, there is beautiful poetry, and beautiful women in all parts of the world. But things were pretty boring during abiogenesis.

1. WHAT MEANING IS TO BE FOUND HERE?

We are Human Beings, and we cannot exist without meaning in our lives individually or collectively. What meaning is in the Genesis of Life on Earth by the natural process I describe? It is a culmination of explanation powers. Our ability to Reason about vast things by probability theory has developed to the point where we can model and explain processes involving vast oceans and vast energies and vast amounts of time and probabilities over molecular structures, and we have DNA, RNA, proteins sequenced since the 1950s, etc. and so we can resolve this problem with tools and concepts of Reason that are mature. Now we have some understanding of Genesis of Life on Earth without mysticism. There is no purpose in the origins of life in this account, and that will bother us; indeed it will bother us a great deal because it is our Nature to seek purpose so that our existence is in some continuum of the universe. We must find that purpose somewhere else. The Genesis of Life on Earth had been the work of overflowing abundance of energy, of vast volumes of water, and vast expanses of time and delicate balance of frequency distribution of photons of the sun. There is here no more mystery than anything else at all. The interesting thing is that the reasoning will work in many other planets in the universe, and the basic life will be identical to Earth in the beginning. There is no mystery here any more. This is a statistical phenomena, purely a statistical phenomena where vast amounts of molecules formed and some were living.

2. WHERE THE MYSTERY GOES

Eternal Recurrence is true in the universe in detail, exactly. And there is a vast purely electromagnetic fourth spatial dimension, so there are real mysteries, but it's not in abiogenesis proper. There is now no mystery here.