



The Law of Biogenesis (life comes only from life) and Impossible Odds

THE STORY OF MANKIND'S ATTEMPTS TO ESCAPE THE OBVIOUS

Once Darwin, in 1859, advanced the idea (not really new, even then) that God was not needed to explain the diversity of life on Earth, the next question was 'Where did life come from, if not from God?' Darwin was too cautious to overtly promote the spontaneous origin of life in his *Origin of Species*. But this implication of his evolutionary theory was clearly understood by his followers, particularly Thomas Huxley. In 1870, Huxley, known as 'Darwin's bulldog' for his aggressive and successful efforts to promote Darwinism, boldly proclaimed the ability of life to come from non-life.

Again, this was not a new idea. Until very near that time, it was generally believed that life not only could come from non-living matter, but that this was occurring under our noses all the time. Ancient Greek philosophers had preached this error of 'spontaneous generation' and it had set in men's minds like concrete. One could see fish and frogs coming from pond slime, and flies from rotting meat. True, the fine cellular structure of living things was beginning to be widely observed through the microscope, but without the intricacies of modern biochemistry and molecular biology, cells just looked like tiny gooey blobs. So it was easy to believe that microscopic cellular life could spring up from non-living sludge. However, Louis Pasteur was in the very process of proving that spontaneous generation of cellular life was even more illusory than the flat earth. So Huxley had to change the name of the process, and push it into the remote past, in order to keep it credible. He changed the name to 'abiogenesis', cleverly evading the fact that it was no longer observable:

'...if it were given to me to look beyond the abyss of geologically recorded time to the still more remote period when the Earth was passing through physical and chemical conditions which I can no more see again than a man can recall his infancy, I should expect to be a witness of the evolution of living protoplasm from non-living matter.'

Huxley's overt intention was to oppose the teaching of the Bible on the origin of life. Genesis says clearly that God created space, matter and energy in the beginning, and that He made all living things in the first six days, to reproduce after their own kinds thereafter. The creation was finished after those six days, so we should not expect to see any more life starting from non-life.

However, current scientific literature continues on the path Huxley laid down, building on the Greek thought before him—that life arose in the past from a 'primordial soup', and evolved to its present state of complexity over billions of years.

There is much speculation about life arising in many places in the universe in an on-going fashion. But what does scientific observation and experiment tell us? We never see evidence for anything like a 'primordial soup', nor any life arising spontaneously. We only see living things reproducing 'after their own kinds' (with variation, even 'speciation' possible within each kind).

Nowadays most scientists and teachers take a somewhat 'schizophrenic' approach. They deny spontaneous generation, recognizing Pasteur's proofs against it. At the same time they say life arose spontaneously in the past, when we weren't around to observe or measure the process.

Christians are the ones usually accused of 'blind faith', and of refusing to face facts. How ironic that many sceptical scientists demand that God show Himself to their measuring instruments before they will believe, yet they accept the unproven, unscientific idea of 'abiogenesis' without a qualm!

To appreciate the immensity of this, consider the times around 1860. The microscopic world of the cell was just beginning to be understood. Single celled organisms had been recognized for some

time, but the fact that all living things are made of reproducing cells was just vaguely being recognized. The role of micro-organisms in causing disease was not yet understood. Their role in fermentation was just being elucidated, and was the subject of Pasteur's now-famous experiments.

As a Bible-believing creationist, Pasteur believed that life comes only from life. His well-established law concerns the observation that, left to themselves, matter plus chance plus the laws of physics and chemistry cannot produce living things. So far, there has not been a single observed exception to the Law of Biogenesis, so it truly stands as a scientific law. Nevertheless, billions of schoolchildren who are taught this law are also taught that 'once upon a time, perhaps in a galaxy far, far away', there was an exception, and possibly many more.

Thousands of experiments, and all the recently gained knowledge of molecular biology and genetics, have only served to strengthen the most fundamental law of biology, laid down by Virchow over a century ago: 'omni cellulae e cellulae' (all cells come from other cells), also known as the Law of Biogenesis. Life only comes from life. This was the law established by the Author of Life, Who is the Way, the Truth, and the Life-Jesus Christ.

By David Demick (Vol.23 No.1 Creation Magazine Feb2001)

ODDS AGAINST

Useful proteins come from amino-acids (the building blocks of life), but it has been impossible to demonstrate either the spontaneous generation or the evolution of this genetic machinery. Where does the atheist turn for help? In *Implications of Evolution*, G. A. Kerkut, of the Department of Physiology and Biochemistry at the University of Southampton, wrote, 'It is ... a matter of faith on the part of the biologist that biogenesis did occur and he can choose whatever method of biogenesis happens to suit him personally; the evidence for what did happen is not available.' Many hard-core evolutionists latch on to luck as the only avenue of escape from their dilemma, but many experts with no theistic flag to fly admit that the odds against are stupefying.

It has been said that Francis Crick 'understands the nature of living substances as well as any man living', yet when he calculated the probability of the spontaneous origin of even a simple protein sequence of just 200 amino-acids (far simpler than a single DNA molecule), he arrived at a figure of one out of approximately 10^{260} (10 with 260 noughts after it). It is universally held that one chance in 10^{15} is considered to be 'a virtual impossibility', it is hardly surprising that Crick came to this conclusion: 'An honest man, armed with all the knowledge available to us now, could only state that in some sense the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have to be satisfied to get it going.' As a committed atheist, 'almost a miracle' was as close as he could get to acknowledging the possibility of divine creation, but it was his conviction that it was impossible for life to arise spontaneously here on earth that made him turn to the exotic notion of panspermia (life from space) as an alternative explanation.

Fred Hoyle, who could hardly be labelled a creationist, dismissed spontaneous generation in typically down-to-earth terms: 'Anyone with even a nodding acquaintance with the Rubik cube will concede the near impossibility of a solution being obtained by a blind person moving the cube faces at random. Now imagine 10^{50} blind persons (standing shoulder to shoulder, these would more than fill our entire planetary system) each with a scrambled Rubik cube and try to conceive of the chance of them all simultaneously arriving at the solved form. You then have the chance of arriving by random shuffling (random variation) of just one of the many biopolymers on which life depends. The notion that not only the biopolymers but the operating programme of a living cell could be arrived at by chance in a primordial soup here on earth is evidently nonsense of a high order'

In *Evolution from Space*, Hoyle and Wickramasinghe wrote that the odds against the spark of life igniting accidentally were one in $10^{40,000}$, and then explained how those who rely on biogenesis to kick-start their evolutionary model try to get around it: 'The tactic is to argue that although chance of arriving at the biochemical system of life as we know it is admitted to be utterly minuscule, there is in nature such an enormous number other chemical systems which could also support life that any old planet like the Earth would inevitably arrive sooner or later at one or another them. This argument is the veriest nonsense, and if it is to be imbibed at all it must be swallowed with a jorum of strong ale.'

Interviewed for the Daily Express, Wickramasinghe said that one chance in $10^{40,000}$ 'is such an imponderable that I am 100 per cent certain that life could not have started spontaneously on earth' He went on to illustrate the odds involved: 'For life to have been a chemical accident on earth is like looking for a particular grain of sand on all the beaches in all planets of the universe - and finding it.' Significantly, he told the newspaper that the conclusion to which his mathematical calculations had driven him came as 'quite a shock', as from his earliest training as a scientist he

was 'strongly brainwashed to believe that science cannot be consistent with any kind of deliberate creation. Now he had come to realize that 'The probability of life originating at random is so utterly minuscule as to make it absurd,' and that 'The only logical answer to life is creation - and not accidental random shuffling.' Elsewhere Wickramasinghe was equally emphatic: 'Living systems could not have been generated by random processes, within a finite time-scale, in a finite universe.'

Speaking on the BBC Radio programme Science Today later that year, Hoyle gave his often-quoted illustration of the same point: 'There is no way in which starting from a system without information, in a chaotic condition, one is going to produce that enormous degree of organization. If you imagine a whirlwind sweeping through a junkyard, what is the chance that all the pieces of metal that it stirs up will smash themselves together and produce a brand new Boeing 747? That is the kind of situation that is supposed for the origin of life on earth, and I think that the two cases are just as absurd.' Hoyle's critics would argue that a whirlwind might indeed result in the joining together of two pieces of material, and that over an immense period of time a vast number of whirlwinds might result in a fully equipped aircraft. However, this misses the point that what is required to bring even a simple organic molecule into being is equivalent to a single whirlwind producing the complete aircraft in one fell swoop.

Vying with Hoyle's comment as the most-quoted statement on the subject is something written by the Princeton professor Edward Conklin. In a contribution to the January 1963 edition of Reader's Digest he stated, 'The probability of life originating by accident is comparable to the probability of the unabridged dictionary resulting from an explosion in a printing shop.' The fact of the matter is that nobody has calculated the probability of a random search finding, in even the largest estimate of the finite time available, the sorts of complex systems that we find throughout nature. As Michael Denton says, 'It is surely a little premature to claim that random processes could have assembled mosquitoes and elephants when we still have to determine the actual probability of the discovery by chance of one single functional protein molecule!'

John Blanchard