## Design Proof – JewishClarity.com – Rabbi Asher Resnick

The classical design argument is remarkably simple. There is complex design all around us demanding some source or explanation. As examples, consider the complexity of the human eye and the human brain:

- a. "As light enters your eye, about seven million cone-shaped color sensors automatically fine tune your color contrast and detail vision depending on the lighting conditions. Whenever there isn't enough light for an accurate color picture, the cone-shaped sensors sign off and about 127 million rod-shaped, ultra-sensitive black and white sensors switch on. Meanwhile, a computer in your optic nerve receives signals from those 127 million sensors, re-codes them and zaps them down a few hundred thousand nerve fibers leading to your brain at about one billion impulses per second. While all this is going on, the pupil is monitoring and maintaining the level of light within your eye, a stereo focusing system is maintaining maximum image sharpness and a sophisticated image-enhancer is clarifying tiny blurs in your vision caused by motion or darkness." (*The Eye of A Needle, pp. 155–157*)
- b. "An average human brain has about ten billion nerve cells. Each nerve cell sprouts between 10,000 and 100,000 fibers in order to contact other nerve cells in the brain. Taken together, the number of these connections is approximately one thousand million, million (that's one quadrillion mathematicians call it 10 to the 15th power; a 1 followed by 15 zeros)...

Despite all these connections, this forest of fibers is not a chaotic, random tangle, but actually a highly organized network where most fibers have specific communication functions and follow regular pathways through the brain. If only 1/100th of the brain's connections were specifically routed, that would still add up to more connections than in the Earth's entire communications network!" (*The Eye of A Needle, pp. 155–157*)

## Could it have happened by chance?

Prominent scientists have spoken about how unlikely it is that a specifically **random** process of development could explain the tremendous complexity of life:

- a. Nobel laureate Sir Fred Hoyle famously wrote "The chance that higher life forms might have emerged... is comparable to the chance that a tornado sweeping through a junkyard might assemble a Boeing 747 from the materials therein." Fred Hoyle (1983) *The Intelligent Universe*. p. 17, and Nature, 294 (1981), p.10.
- b. Professor Sir Ernest Chain, Nobel Prize-winning drug researcher, said, "To postulate that the development and survival of the fittest are entirely a consequence of **chance** mutations seems to me a hypothesis based on no evidence and irreconcilable with the facts. These classical evolutionary theories are a gross oversimplification of an immensely complex and intricate mass of facts, and it amazes me that they are swallowed so uncritically and readily..." Quoted in Francis Hitchings, *The Neck of the Giraffe: Where Darwin Went Wrong* (New York: Ticknor and Fields), pg. 82

And as difficult as it is to imagine a **random** process beginning with a single-celled amoeba and ending up with a human being, the distance between inert matter and that single-celled amoeba is enormously greater.

a. "The transition from molecules to a living cell is in the category of the "fantastic leap" which finds no comparison in any known process that takes place in the laboratory, or in any biological function which can be studied through the microscope. Any attempt to explain this problem can be no more than guesswork, from the data that we now possess is not sufficient to provide the

least basis for the assumption that living cells just suddenly "appeared" on our planet." – D.E. Green and R.F. Goldberger, "Molecular Insight into the Living Process", Academic Press, New York, pg. 406

- b. "This is true even of the simplest living forms: single-celled bacteria. They represent a quantum... leap from the lifeless chemicals that came before." Francis Hitchings, "*The Neck of the Giraffe*," Pan Books, London, pg. 64
- c. Sir Fred Hoyle wrote "Life as we know it is, among other things, dependent on at least 2000 different enzymes. How could the blind forces of the primal sea manage to put together the correct chemical elements to build enzymes?" (Fred Hoyle *The Intelligent Universe.*)

He also wrote – "The odds of obtaining [these] 2000 different enzymes randomly is only one part in 10 to the 40,000<sup>th</sup> power, an outrageously small probability..." – (F. Hoyle, C. Wickramasinghe, "Evolution from Space", Dent, London, pg. 24)

- d. Dr. Ilya Prigogine, the recipient of two different Nobel prizes in chemistry wrote "The statistical probability that organic structures and the most precisely harmonized reactions that typify living organisms would be generated **by accident** is zero." (*Physics Today*, Vol. 25, pg. 23)
- e. "All of this is impossible by virtue of the most basic laws of nature. The **spontaneous** generation of living cells contradicts the second law of thermodynamics [i.e., entropy]." (H.S. Lipson, Physicist Bulletin 31, p. 138)
- f. "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 had to have been satisfied to get it going." Francis Crick, *Life Itself*, Simon, and Schuster, New York, pg. 88

Independent of all this, the very existence of our universe, and its potential to support life, is also remarkably unlikely.

Eric Metaxax discussed this in a recent article in the Wall Street Journal (12/25/14), **Science Increasingly Makes the Case for G-d** — **The odds of life existing on another planet grow ever longer.** 

"As our knowledge of the universe has increased, it has become clear that there are numerous factors necessary for life. The number of potentially life-supporting planets, therefore, has decreased accordingly.

Peter Schenkel wrote in a 2006 piece for Skeptical Inquirer magazine: "In light of new findings and insights, it seems appropriate to put excessive euphoria to rest. . . We should quietly admit that the early estimates. . .may no longer be tenable."

As factors continue to be discovered, the odds turn against any planet in the universe supporting life, including this one. Probability says that even we shouldn't be here.

Today there are more than 200 known parameters necessary for a planet to support life — every single one of which must be perfectly met, or the whole thing falls apart. The odds against life in the universe are simply astonishing.

What can account for it? Can every one of those many parameters have been perfect by accident? At what point is it fair to admit that science suggests we cannot be the result of random forces?

There's more. The fine-tuning necessary for life to exist on a planet is nothing compared with the fine-tuning required for the universe to exist at all. For example, astrophysicists now know that the values of the four fundamental forces — gravity, the electromagnetic force, and the "strong" and "weak" nuclear forces — were determined less than one-millionth of a second after the big bang. Alter any one value and the universe could not exist. For instance, if the ratio between the nuclear strong force and the electromagnetic force had been off by the tiniest fraction of the tiniest fraction — by even one part in 100,000,000,000,000,000 — then no stars could have ever formed at all.

Multiply that single parameter by all the other necessary conditions, and the odds against the universe existing are so astronomical that the notion it all "just happened" defies common sense. It would be like tossing a coin and having it come up heads 10 quintillion times in a row.

Fred Hoyle, the astronomer who coined the term "big bang," said that his atheism was "greatly shaken" at these developments. He later wrote that "a common-sense interpretation of the facts suggests that a super-intellect has monkeyed with the physics, as well as with chemistry and biology. . . The numbers one calculates from the facts seem to me so overwhelming as to put this conclusion almost beyond question."

Theoretical physicist Paul Davies has said that "the appearance of design is overwhelming," and Oxford professor Dr. John Lennox has said "the more we get to know about our universe, the more the hypothesis that there is a Creator . . . gains in credibility as the best explanation of why we are here."

## What is Scientism?

Scientism (a type of "faith" in science that ends up sounding quite religious) may explain the reluctance of many scientists to accept the powerful simplicity of the Design argument.

- a. "The reasonable view was to believe in spontaneous generation; the only alternative, to believe in a single, primary act of supernatural creation. There is no third position. For this reason, many scientists a century ago chose to regard the belief in spontaneous generation as a "philosophical **necessity**." It is a symptom of the philosophical poverty of our time that this necessity is no longer appreciated.
- "One has only to contemplate the magnitude of this task to concede that the **spontaneous generation of a living organism is impossible**. Yet here we are as a result, **I believe in spontaneous generation**." (George Wald, "The Origin of Life," *Scientific American*)
- b. Professor Harold C. Urey, University of California, Nobel Prize in Chemistry, said: "All of us who study the origin of life find that the more we look into it, the more we feel it is too complex to have evolved anywhere...And yet we all believe as an **article of faith** that life evolved from dead matter on this planet. It is just that its complexity is so great that it is hard for us to imagine that it did." Christian Science Monitor
- c. "Have Astronomers Found G-d?" (Condensed from *New York Times Magazine*, Robert Jastrow, 1978)

"When an astronomer writes about G-d, his colleagues may assume he is either over the hill or going bonkers. In my case, it should be understood from the start that I am an agnostic in religious matters. However, I am fascinated by strange developments going on in astronomy — partly because of their religious implications and partly because of the peculiar reactions of some of my colleagues.

Einstein was disturbed by the idea of a universe that blows up because it implied that the world had a beginning. In a letter to de Sitter, Einstein wrote, "This circumstance [of an expanding universe] irritates me."

This is a curiously emotional language for a discussion of some mathematical formulas. I suppose that the idea of a beginning in time annoyed Einstein because of its theological implications. He had well-defined feelings about G-d, but not as the Creator. For Einstein, the existence of G-d was proved by the laws of nature; that is, the fact that there was order in the universe, and that man could discover it.

Theologians generally are delighted with the proof that the universe had a beginning, but astronomers are curiously upset. Their reactions provide an interesting demonstration of the response of the scientific mind — supposedly a very objective mind — when evidence uncovered by science itself leads to a conflict with the **articles of faith** in our profession. A few years ago in a British Broadcasting Corporation film on cosmology, astronomer Philip Morrison of M.I.T. said, "I would like to reject the big-bang theory, but I have to face the facts."

This reaction and similar responses by other astronomers have an odd ring of feeling and emotion. They come from the heart, whereas you would expect such judgments to come from the brain. Why?

I think part of the answer is that scientists cannot bear the thought of a natural phenomenon that cannot be explained. There is a kind of religion in science; it is the religion of a person who believes that every event in the universe can be explained in a rational way as the product of some previous event. This faith is violated by the discovery that the world had a beginning under conditions in which the known laws of physics are not valid, and as a product of forces, we cannot discover. When that happens, the scientist has lost control. He reacts by ignoring the implications, or by trivializing and calling it the big bang as if the universe were a firecracker."

## Conclusion:

One that denies the necessity of some independent force behind the process of creation has to explain three basic issues:

- a. The existence itself of our universe and its potential to support life.
- b. How the inert matter within our universe became transformed into simple life.
- c. How the simple life on our planet become transformed into much more complex life.

Judaism refers to this independent force behind the process of creation as G-d.