



STATEMENT DC745

FAT CHANCE: The Failure of Evolution to Account for the Miracle of Life¹

by **Hank Hanegraaff**

Summary

No rational person looking at Leonardo da Vinci's Last Supper would suggest that this masterpiece came into being through blind chance. Incredibly, however, many blindly believe that chance operating through natural processes can account for the masterful precision and design of the universe in which we live. The eye, the egg, and the earth are but three examples of organized complexity that can not be accounted for apart from the existence of an omniscient designer. As the science of statistical probability demonstrates, forming even a protein molecule by random processes is not only improbable; it is indeed impossible.

One of the primary dilemmas of naturalistic evolutionary theory is that it forces scientists to conclude that the cosmos in all of its complexity was created by chance. As biologist Jacques Monod, a Nobel prize winner, puts it, "Chance *alone* is at the source of every innovation, of all creation in the biosphere. Pure chance, absolutely free but blind, [is] at the very root of the stupendous edifice of evolution" (emphasis in original).² Noted theologian R. C. Sproul explains, for the materialist chance is the "magic wand to make not only rabbits but entire universes appear out of nothing."³ Sproul also warns that "if chance exists in any size, shape, or form, God cannot exist. The two are mutually exclusive. If chance existed, it would destroy God's sovereignty. If God is not sovereign, he is not God. If he is not God, he simply *is* not. If chance is, God is not. If God is, chance is not" (emphasis in original).⁴

THE COMPLEXITY OF LIFE

Chance in this sense refers to that which happens without cause.⁵ Thus, chance implies the absence of both a design and a designer. Reflect for a moment on the absurdity of such a notion. Imagine suggesting that Christopher Wren had nothing whatsoever to do with the design of St. Paul's Cathedral in London. Imagine asserting that the majestic *Messiah* composed itself apart from Handel. Or imagine claiming that the *Last Supper* painted itself without Leonardo da Vinci.

Now consider an even more egregious and absurd assertion — that an eye, an egg, and the earth, each in its vast complexity, are merely functions of random chance.⁶ Ironically, Darwin himself found it hard to accept the notion that the eye could be the product of blind evolutionary chance, conceding that the intricacies of the human eye gave him "cold shudders."⁷

Eye

In his landmark publication, *The Origin of Species*, Darwin avowed, "To suppose that the eye, with all its inimitable contrivances for adjusting the focus to different distances, for admitting different amounts of light, and for the correction of spherical and chromatic aberration, could have been formed by natural selection, seems, I freely confess, absurd in the highest degree possible."⁸ He called this dilemma the problem of "organs of extreme perfection and complication."⁹

Consider for a moment the incredible complexity of the human eye. It consists of a ball with a lens on one side and a light sensitive retina made up of rods and cones inside the other. The lens itself has a sturdy protective covering called a cornea and sits over an iris designed to protect the eye from excessive light. The eye contains a fantastic watery substance that is replaced

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every four hours, while tear glands continuously flush the outside clean. In addition, an eyelid sweeps secretions over the cornea to keep it moist, and eyelashes protect it from dust.¹⁰

It is one thing to stretch credulity by suggesting that the complexities of the eye evolved by chance; it is quite another to surmise that the eye could have evolved in concert with myriad other coordinated functions. As a case in point, extraordinarily tuned muscles surround the eye for precision motility and shape the lens for the function of focus.¹¹

Additionally, consider the fact that as you read this article, a vast number of impulses are traveling from your eyes through millions of nerve fibers that transmit information to a complex “computer center” in the brain called the visual cortex. Linking the visual information from the eyes to motor centers in the brain is crucial in coordinating a vast number of bodily and mental functions that are part and parcel to the very process of daily living. Without the coordinated development of the eye and the brain in a synergistic fashion the isolated developments themselves become meaningless and counterproductive.¹²

In *Darwin’s Black Box*, biochemist Michael Behe points out that what happens when a photon of light hits a human eye was beyond nineteenth-century science. Thus, to Darwin, vision was an unopened black box.¹³ In the twentieth century, however, the black box of vision has been opened, and it is no longer enough to consider the anatomical structure of the eye. We now know that “each of the anatomical steps and structures that Darwin thought were so simple actually involves staggeringly complicated biochemical processes” that demand explanation.¹⁴

Behe goes on to demonstrate that one cannot explain the origin of vision without first accounting for the origin of the enormously complex system of molecular mechanisms that make it work.¹⁵ Phillip Johnson, author of *Defeating Darwinism by Opening Minds*, has aptly summarized Darwin’s dilemma regarding the eye: “Evolutionary biologists have been able to pretend to know how complex biological systems originated only because they treated them as black boxes. Now that biochemists have opened the black boxes and seen what is inside, they know the Darwinian theory is just a story, not a scientific explanation.”¹⁶

Egg

In *Darwin’s Black Box*, Behe further notes that there are black boxes within black boxes. As science advances, more and more of these black boxes are being opened, revealing an “unanticipated Lilliputian world” of enormous complexity that has pushed the theory of evolution beyond the breaking point.¹⁷ Evolution cannot account for the astonishingly complex synchronization process needed for, say, the shell of a developing egg to form from the calcium that is stored inside the bones of a bird’s body.¹⁸ This shell not only provides a protective covering for the egg but also provides a source of calcium for the developing embryo and a membrane through which it can breathe.¹⁹

Furthermore, evolution cannot account for the complex synchronization process needed to produce life from a single fertilized human egg. “The tapestry of life begins with a single thread.”²⁰ Through a process of incredible precision, a microscopic egg in one human being is fertilized by a sperm cell from another. This process not only marks the beginning of a new life but also marks the genetic future of that life.²¹ A single fertilized egg (zygote), the size of a pinhead, contains chemical instructions that would fill more than 500,000 printed pages.²² The genetic information contained in this “encyclopedia” determines the potential physical aspect of the developing human from height to hair color. In time, the fertilized egg divides into the 30 trillion cells that make up the human body, including 12 billion brain cells, which form over 120 trillion connections.²³

In Darwin’s day, a human egg was thought to be quite simple — for all practical purposes, little more than a microscopic blob of gelatin. Today we know that a fertilized egg is among the most organized, complex structures in the universe. In an age of scientific enlightenment, it is incredible to think that people are willing to maintain that something so vastly complex arose by chance. As Dr. James Coppedge, an expert on the science of statistical probability, puts it, “Chance requires ten billion tries on the average in order to count to ten.”²⁴

In an experiment using 10 similar coins numbered one through 10, chance will succeed on the average only once in 10 billion attempts to get the number one followed in order by all the rest. Coppedge explains that if a person could draw and record one coin every five seconds day and night, it would still take over 1,500 years for chance, on average, to succeed just once in counting to 10.²⁵ He goes on to demonstrate the difference intelligence makes by documenting that a *child* can do in minutes what *chance* would take a millennium to do. “Chance doesn’t have a chance when compared to the intelligent purpose of even a child.”²⁶ Even more revealing is the fact that a child playing with the party game *Scrabble* can easily spell the phrase, “the theory of evolution,” while chance requires five million times the assumed age of the earth to accomplish the same feat.²⁷

Earth

Like an egg or an eye, the earth is a masterpiece of precision and design that could not have come into existence by chance. Astronaut Guy Gardner, who has seen the earth from the perspective of the moon, points out that “the more we learn and see about our universe the more we come to realize that the most ideally suited place for life within the entire solar system is the planet we call home.”²⁸ King David said it best:

The heavens declare the glory of God;
the skies proclaim the work of his hands.
Day after day they pour forth speech;
night after night they display knowledge.
There is no speech or language
where their voice is not heard.
Their voice goes out into all the earth,
their words to the ends of the world. (Ps. 19:1-4)

Let's take a few minutes to explore the miracles that demonstrate life on earth, which a benevolent Creator designed and which could not be directed by blind chance. First, consider plain old tap water. The solid state of most substances is denser than their liquid state, but the opposite is true for H₂O, which explains why ice floats rather than sinks. If water were like virtually any other liquid, it would freeze from the bottom up rather than from the top down, killing aquatic life, destroying the oxygen supply, and making earth uninhabitable.²⁹ Furthermore, ocean tides, which are caused by the gravitational pull of the moon, play a crucial role in our survival. If the moon were significantly larger, thereby increasing its gravitational pull, devastating tidal waves would submerge large areas of land. If the moon were smaller, tidal motion would cease and the oceans would stagnate and die.³⁰ Finally, consider the ideal temperatures on planet earth — not duplicated on any other known planet in the universe. If we were closer to the sun, we would fry. If we were farther away, we would freeze.³¹

From the tap water to the tides and temperatures that we so easily take for granted, the earth is an unparalleled planetary masterpiece. Like Handel's *Messiah* or da Vinci's *Last Supper*, it should never be carelessly devalued as the result of blind evolutionary processes. Yet, tragically, in an age of high technology and supposed scientific enlightenment, many are doing just that. Consider the following introduction to “The Miracle of Life,” an Emmy-award-winning PBS NOVA broadcast on evolution:

Four and a half billion years ago, the young planet Earth was a mass of cosmic dust and particles. It was almost completely engulfed by the shallow primordial seas. Powerful winds gathered *random molecules* from the atmosphere. Some were deposited in the seas. Tides and currents swept the *molecules* together. And somewhere in this ancient ocean the miracle of life began....*The first organized form of primitive life was a tiny protozoan* [a one-celled animal]. Millions of protozoa populated the ancient seas. These early organisms were completely self-sufficient in their sea-water world. *They moved about their aquatic environment feeding on bacteria and other organisms*....From these one-celled organisms evolved all life on earth. (emphases added)³²

CHANCE DOESN'T HAVE A CHANCE

The real miracle of life is how so many people could stand for such nonsense in the twentieth century. First, how could the protozoa be the first form of primitive life if there were already organisms such as bacteria in existence? Molecular biology has demonstrated empirically that bacteria are incredibly complex. In the words of Michael Denton, “Although the tiniest bacterial cells are incredibly small, weighing less than 10-12 gms, each is in effect a veritable micro-miniaturized factory containing thousands of exquisitely designed pieces of intricate molecular machinery, made up altogether of one hundred thousand million atoms, far more complicated than any machine built by man and absolutely without parallel in the non-living world.”³³

Furthermore, far from being primitive, the protozoa that were thought to be simple in Darwin's day have been shown by science to be enormously complex. Molecular biology has demonstrated that there is no such thing as a “primitive” cell. To quote Denton again, “No living system can be thought of as being primitive or ancestral with respect to any other system, nor is there the slightest empirical hint of an evolutionary sequence among all the incredibly diverse cells on earth.”³⁴ Finally, as Coppedge documents, giving evolutionists every possible concession, postulating a primordial sea with every single component necessary, and speeding up the rate of bonding a trillion times: “The probability of a single protein³⁵ molecule being arranged by chance is 1 in 10¹⁶¹ using all atoms on earth and allowing all the time since the world began....For a minimum set of the required 239 protein molecules for the smallest theoretical life, the probability is 1 in 10^{119,879}. It would take 10^{119,841} years on the average to get a set of such proteins. That is 10^{119,831} times the assumed age of the earth and is a figure with 119, 831 zeroes.”³⁶

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To provide a perspective on how enormous a one followed by a hundred and sixty one zeros is, Coppedge uses the illustration of an amoeba (a microscopic one-celled animal) that sets out to move the entire universe (including every person, the earth, the solar system, the Milky Way galaxy, millions of other galaxies, etc.) over the width of one universe, atom by atom, at the slowest possible speed. (The universe is 30 billion light-years in diameter — to calculate the number of miles multiply 30 billion by 5.9 trillion.) The amoeba is going to move one angstrom unit (the width of a hydrogen atom — the smallest known atom) every 15 billion years (the supposed age of the universe). Obviously the amoeba would have to move zillions of times before the naked eye could detect that it had moved at all.

At this rate the amoeba travels 30 billion light years and puts an atom down one universe over. It then travels back at the same rate of speed and takes another atom from your body and moves it one universe over. Once it has moved you over, it moves over the next person until it has moved over all five billion or so people on planet earth. It then moves over all the houses and cars, the solar system, the Milky Way galaxy, and the millions of other galaxies that exist in the known universe.

In the time that it took to do all that, we would not get remotely close to forming one protein molecule by random chance.³⁷ If, however, a protein molecule is eventually formed by chance, forming the second one would be infinitely more difficult. As you can see, the science of statistical probability demonstrates conclusively that forming a protein molecule by random processes is not merely improbable but impossible. And forming a living cell is beyond illustration. As King David poignantly put it, “The fool says in his heart, ‘There is no God’” (Ps. 14:1).

Finally, it should be noted that philosophical naturalism — the world view undergirding evolutionism — can provide only three explanations for the existence of the universe in which we live. One: *The universe is merely an illusion*. This notion carries little weight in an age of scientific enlightenment. As has been aptly put, “Even the full-blown solipsist looks both ways before crossing the street.” Two: *The universe sprang from nothing*. This proposition flies in the face of both the law of cause and effect and the law of energy conservation. It has been well said, there simply are no free lunches. The conditions that hold true in this universe prevent any possibility of matter springing out of nothing.³⁸ Three: *The universe eternally existed*. This hypothesis is devastated by the law of entropy that predicates that a universe which has eternally existed would have died an “eternity ago” of a heat-loss death.³⁹

There is, however, one other possibility. It is found in the first chapter of the first book of the Bible: *In the beginning God created the heavens and the earth*. In an age of empirical science, as in any age, nothing could be more certain, clear, or correct.

NOTES

¹This article is taken from Hank Hanegraaff’s forthcoming book, *The FACE* (Word Publishing), which uses the acronym F-A-C-E to reveal the farce of evolution (the “C” in FACE represents Chance).

²Jacques Monod, *Chance and Necessity* (New York: Vintage Books, 1972), 112–13, as quoted in John Ankerberg and John Weldon, *Darwin’s Leap of Faith* (Eugene, OR: Harvest House, 1998), 21.

³R. C. Sproul, *Not a Chance: The Myth of Chance in Modern Science and Cosmology* (Grand Rapids: Baker Books, 1994), 9.

⁴*Ibid.*, 3.

⁵Chance as an ontological entity does not exist. So, when it is appealed to as an agency of cause, it is utterly impotent and meaningless. This sense of chance as a causal agency is what one gropes for in order to assert that universes appear out of nothing. On the other hand, chance can quite usefully refer to formal mathematical probabilities, not at all signifying something that happens without a cause. In common parlance, when we say something has happened by chance, we don’t mean that the event had no cause, but that the actual cause is unknown to us. (See Sproul.)

⁶Perhaps we should be generous and give evolutionists the benefit of the doubt at this point by assuming that when they refer to chance they do not mean an ontological causal agency (referring to the illogical notion of uncaused effects). Instead, we can assume that chance is used as the formal term for mathematical probabilities. The evolutionist presupposes the existence of the material universe with its attending properties and suggests that atoms randomly bumping into one another produce (cause) living things. As we will see, life cannot be accounted for in this way either.

⁷James F. Coppedge, *Evolution: Possible or Impossible?* (Northridge, CA: Probability Research in Molecular Biology, 1993), 218.

⁸Charles Darwin, *The Origin of Species by Means of Natural Selection*, chap. 6, “Difficulties of the Theory,” sect. “Organs of Extreme Perfection and Complication,” in Robert Maynard Hutchins, ed., *Great Books of the Western World*, vol. 49, Darwin (Chicago: Encyclopedia Britannica, 1952), 85.

⁹*Ibid.* Of course, Darwin’s life work intended to show that all biological organisms, with their attending “organs of extreme perfection and complication,” were indeed formed through natural selection.

¹⁰Eye description adapted from Gordon Rattray Taylor, *The Great Evolution Mystery* (New York: Harper & Row, 1983), 101–2.

¹¹See *ibid.*, 98–103.

¹²See Coppedge, 218–20; Michael Denton, *Evolution: A Theory in Crisis* (Bethesda, MD: Adler & Adler, 1985), 332–33.

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- ¹³Michael J. Behe, *Darwin's Black Box: The Biochemical Challenge to Evolution* (New York: The Free Press, 1996), 18. "Black box" is Behe's term for a device that accomplishes a purpose but whose inner workings remain mysterious. For the average person, computers are a good example of a black box (p. 6).
- ¹⁴*Ibid.*, 22 (see 15–22).
- ¹⁵In *ibid.*, 18–21, Behe describes the biochemistry of vision.
- ¹⁶Phillip E. Johnson, *Defeating Darwinism by Opening Minds* (Downers Grove, IL: InterVarsity Press, 1997), 77.
- ¹⁷Behe, 8–9.
- ¹⁸Coppedge, 216, citing T. G. Taylor, "How an Eggshell Is Made," *Scientific American*, 19 March 1970, 89–94.
- ¹⁹Christopher Perrins, *Birds: Their Life, Their Ways, Their World* (Pleasantville, NY: Reader's Digest Association, 1979), 118–19.
- ²⁰*The Wonders of God's Creation: Human Life*, vol. 3 (Chicago: Moody Institute of Science, 1993); videotape.
- ²¹*Ibid.*
- ²²A. E. Wilder-Smith, *The Natural Sciences Know Nothing of Evolution* (Costa Mesa, CA: T. W. F. T. Publishers, 1981), 82.
- ²³A. E. Wilder-Smith, *The Origin of Life*, vol. 3 (Gilbert, AZ: Eden Communications, 1983); videotape.
- ²⁴Coppedge, 50–51.
- ²⁵*Ibid.*, 51.
- ²⁶*Ibid.*, 53.
- ²⁷*Ibid.*, 52. Coppedge explains the problem of trying to produce such a phrase by chance. The phrase, "the theory of evolution," contains 23 ordered letters and spaces. Thus, we need to randomly pick in an ordered sequence 23 specific objects out of a set of 26 letters of the alphabet and one "space." That means for the first "t" in our phrase there is a one out of 27 chance of drawing it. The same holds for all the other letters in our phrase – each has a one in 27 chance of being drawn at any given time. But since we need the letters and spaces to come in a sequential order, we must multiply their separate probabilities. Since there are 23 letters and spaces to pick, and each has an individual probability of one out of 27, we must multiply 27 by itself 23 times (i.e., 27²³), which means we would expect to succeed in spelling our phrase by chance only one time in over eight hundred million trillion trillion draws. Now, suppose we use a super computer to produce a billion draws per second. At this incredible rate we could expect to find only one successful spelling of our phrase in 26,000,000,000,000 years. This number of years is five million times as long as natural science estimates the earth to have existed. (Adapted from Coppedge, 52.) If chance is so unproductive at producing such a simple phrase as "the theory of evolution," it is just inconceivable to think that chance could have produced something as organized and complex as a single cell, let alone the unfathomable, organized complexity of the human brain.
- ²⁸*The Wonders of God's Creation: Planet Earth*, vol. 1 (Chicago: Moody Institute of Science, 1993); videotape.
- ²⁹*Ibid.*
- ³⁰*Ibid.*
- ³¹*Ibid.* See also Scott M. Huse, *The Collapse of Evolution*, 2d. ed. (Grand Rapids: Baker, 1993), 71. Huse lists numerous other sensitive design parameters. See also J. P. Moreland, ed., *Creation Hypothesis* (Downers Grove, IL: InterVarsity Press, 1994), 160–69.
- ³²NOVA, "The Miracle of Life," photographed by Lennart Nilsson (Boston: WGBH Educational Foundation, 1986 [Swedish Television Corp., 1982]); videotape. For a brief discussion, see Johnson, 123.
- ³³Denton, 250.
- ³⁴*Ibid.*
- ³⁵Coppedge writes, "All known life on the earth consists largely of these giant molecules. 'The chemical basis of all life,' says the *Encyclopedia Britannica*, 'is protein in a watery medium.'" Coppedge goes on to point out that the hemoglobin molecule, the most important protein molecule in blood, has 574 amino acid links and 10,000 atoms. In addition, there are some 280,000 hemoglobin molecules per red blood cell. Insulin is the smallest molecule qualifying as a protein. Even it, however, has fifty-one amino acid links in two chains — one with twenty-one and the other with thirty amino acids. The two chains are joined together by sulfur bridges. The length of the average protein in the smallest known living thing is at least 400 amino acid links, containing more than 7,000 atoms. (Adapted from Coppedge, 98–102.)
- ³⁶Coppedge, 110, 114.
- ³⁷Discussion adapted from Coppedge, 119–24. Evolutionists sometimes make the accusation that this type of argumentation does not correctly represent the evolutionary paradigm. The more sophisticated evolutionists admit that the notion that chance alone is responsible for life is at best far-fetched. They suggest that rather than chance acting unilaterally, natural selection or some other unintelligent nonrandom mechanism was involved in the process. Perhaps beneficial molecular change effects are accumulated over time while natural selection weeds out negative mutations. For one thing, it should be noted that there is no evidence that suggests information in the genetic code is increased in this manner. Nor are there any known physical laws that can be invoked to account for the extremely high information content of genetic material. Furthermore, it is simply a logical fallacy to say that an accumulation of beneficial changes will produce an improved overall design — those individual changes must also harmonize together in order to improve the overall design. Finally, those capable of scaling the evolutionary language barrier realize that this is little more than using the phrase "natural selection" while pouring the meaning of intelligent design into the words. (See Nancy

R. Pearcey, "DNA: The Message in the Message," *First Things*, June–July 1996, 13–14; and David Berlinski, "The Deniable Darwin," *Commentary*, June 1996, 19–29.)

³⁸Besides the preponderance of empirical evidence that indicates that something does not come from nothing, the simple laws of logic require that nothing cannot produce anything — for nothing is not anything. It is a violation of the law of noncontradiction, which says that A is not non-A, to say that nothing can produce something. Since nothing is not anything, the thing said to be produced would have had to either create itself, or it would be an effect without a cause. If it created itself, it would have to exist prior to its existence in order to do the creating, which means it both exists and does not exist in the same way and in the same respect, which of course is a violation of the law of noncontradiction. But if nothing caused it, it is then said to be an effect without a cause. Not only is this impossible by definition (since the definition of an effect involves a cause), but also it is impossible conceptually. In other words, it is absurd to say that nothing causes something because we cannot conceive of how nothing (that which does not exist in any sense whatsoever) can do anything at all, since it would have to exist in order to do anything, let alone create. Now, it is possible for something to exist without being an effect, but in order for something to exist and not be an effect, it must be eternal (i.e., something that did not come into being, but always existed). God is such a being. But this fact in no way helps the case for an uncaused effect. Either way, it violates the most basic laws of logic to say that something comes from nothing. If the laws of logic can be violated, then reason and communication are absolutely meaningless. (See Sproul.)

³⁹Since the laws of thermodynamics remain unquestioned, we know the total amount of energy available to do work in the universe is not self-replenishing but is running out. (We can assume that the total available energy in the universe is finite, since current cosmological models suggest this state of affairs.) Furthermore, we see that work is still being accomplished in the universe at this moment, which means we have not yet exhausted our finite supply of available energy. Since the universe in this respect is running downhill, and there is only a finite supply of available energy, then the amount of time the universe has to exhaust all its available energy is finite. But if the universe eternally existed, then an infinite amount of time has already passed. Infinite time would have consumed our universe's finite energy in the infinite past — there would not be enough energy left in the finite time available to our universe to last through an infinite past. Since we are still here, the universe could not have had an eternal past. Therefore, the universe had a beginning.