

under 7

Darwinian Evolution, Intelligent Design, and the Theosophical View

Introduction

The U.S. National Academy of Sciences has stated that “creationism, intelligent design, and other claims of supernatural intervention in the origin of life or of species are not science because they are not testable by the methods of science.”

1) Current Scientific Theory of Evolution

Heredity: Through DNA (genes).

I. Sources of Variation:

a) Mutation

DNA sequences can change through random mutations, producing new alleles. If a mutation occurs within a gene, the new allele may affect the trait that the gene controls, altering the phenotype of the organism. However, while this simple correspondence between an allele and a trait works in some cases, most traits are more complex and are controlled by multiple interacting genes.

b) Sexual reproduction and recombination

The offspring of sexual organisms contain copies of their parents' chromosomes which, through the process of genetic recombination, can exchange DNA between two matching chromosomes.

c) Population genetics

Through changes in the frequencies of alleles within a population of interbreeding organisms.

II. Mechanisms for producing evolutionary change

a) Natural selection

Favors genes that improve capacity for survival and reproduction.

b) Genetic drift

Random change in the frequency of alleles, caused by the random sampling of a generation's genes during reproduction.

c) Gene flow

The exchange of genes between different populations, which are usually of the same species.

Darwin depicted evolution as a gradual, continuous change in species, forming the scientific “tree of life”. However that view is quickly falling apart since through DNA analysis scientists discovered that evolution is much more complex than we thought (See *New Scientists*, Jan. 2009, “Why Darwin was wrong about the tree of life”)

1a) Some problems with the Darwinian theory

i- “Chance is the driving force in evolution”

Mathematician N. Chandra Wickramasinghe, Prof. of Cardiff University College (UK) says that:

The synthesis of one enzyme from and homogeneous pool of aminoacids through random combination is of 1 in 10^{40000} (a cipher of 39999 zeros). A bacteria, the simplest organism, has several thousands of enzymes. Thus, the number of possible combinations exceeds the amount of observable atoms in the Universe. (*Evolution from Space*, 1983).

Sir Fred Hoyle says that the odds at arriving at the arrangement of the DNA by a series of accidents via natural selection and random mutations is similar to the odds against throwing five million consecutive sixes on a single die (*The Theosophist*, April 1982, 219). (Sylvia Cranston, *H.P.B.: The Extraordinary Life and Influence of Helena Blavatsky*, p. 438.)

ii- “The goal of evolution, if any, is physical survival.”

A fact in evolution is that it develops from the homogeneous to the heterogeneous, from simpler to more complex forms. Is survival the most important thing in evolution? The fact is that the more complex a form is, the more difficult to survive. Bacteria are far most successful in surviving than any other species. A global climate change in the planet would eradicate human species but not bacteria. It is said that cockroach and not any mammal would survive to an atomic catastrophe. If the “goal” of evolution were survival, complexity would not appear.

1b) Lamarck's theory of evolution

Lamarck (1744–1829) proposed that individual efforts during the lifetime of the organisms were the main mechanism driving species to adaptation, as they would acquire adaptive changes and pass them on to offspring. Lamarck incorporated two ideas into his theory of evolution, in his day considered to be generally true:

1. Use and disuse: Individuals lose characteristics they do not require (or use) and develop characteristics that are useful.
2. Inheritance of acquired traits: Individuals inherit the traits of their ancestors.

With the development of the modern *synthesis of the theory of evolution* and a lack of evidence for the heritability of acquired characteristics, Lamarckism largely fell from favor.

Recently, however, Lamarck's name has been creeping back into the scientific literature. The reason: an explosion in the field of epigenetics, the study of changes in genetic expression that are not linked to alterations in DNA sequences. Some of these epigenetic changes can be passed on to offspring in ways that appear to violate Mendelian genetics. And although these new findings do not support Lamarck's overall concept, they do raise the possibility that "epimutations," as they are called, could play a role in evolution . . . Epigenetic changes, which include the "silencing" of genes by such biochemical tricks as attaching methyl groups to segments of DNA so they will not be read by the cell's protein-making machinery, are involved in a host of processes, including gene regulation, development, and even cancer (*Science*, 15 October 1999, p. 481). Although these alterations in gene expression can clearly be passed from mother to daughter cells—for example, when a muscle cell divides into two or cancerous cells proliferate to form a tumor—they are normally "erased" when the germ cells, which give rise to the next generation, are formed.

Yet evidence is accumulating that sometimes the epimutations are not erased. This phenomenon has been spotted in plants, fruit flies, and yeast. And the first convincing case in mammals was reported in the November 1999 issue of *Nature Genetics* by biochemist Emma Whitelaw at the University of Sydney in Australia and co-workers in Scotland and the United States . . .

"Although it would be stretching it to regard epigenetic traits as adaptations comparable to Lamarck's view of how the giraffe acquired its long neck," comments Selker, "we do know that environmental factors, such as temperature, can influence epigenetic marks such as methylation." (*Was Lamarck Just a Little Bit Right?* Michael Balter, *Sci.* 2000 288: 37-39).

1c) *Wallace's theory of evolution*

Alfred Russel Wallace was a British naturalist, explorer, geographer, anthropologist and biologist. He is best known for independently proposing a theory of natural selection which prompted Charles Darwin to publish his own theory. He was one of the leading evolutionary thinkers of the 19th century and made a number of other contributions to the development of evolutionary theory besides being co-discoverer of natural selection.

Wallace was strongly attracted to unconventional ideas. His advocacy of Spiritualism and his belief in a non-material origin for the higher mental faculties of humans strained his relationship with the scientific establishment, especially with other early proponents of evolution. In addition to his scientific work, he was a social activist who was critical of what he considered to be an unjust social and economic system in 19th-century Britain. His interest in biogeography resulted in his being one of the first prominent scientists to raise concerns over the environmental impact of human activity.

In 1864, Wallace published a paper, "The Origin of Human Races and the Antiquity of Man Deduced from the Theory of 'Natural Selection'", applying the theory to humankind. Darwin had not yet publicly addressed the subject, although Thomas Huxley had in *Evidence as to Man's Place in Nature*.

He maintained that natural selection cannot account for mathematical, artistic, or musical genius, as well as metaphysical musings, and wit and humour. He eventually said that something in "the unseen universe of Spirit" had interceded at least three times in history. The first was the creation of life from inorganic matter. The second was the introduction of

consciousness in the higher animals. And the third was the generation of the higher mental faculties in mankind. He also believed that the *raison d'être* of the universe was the development of the human spirit. These views greatly disturbed Darwin, who argued that spiritual appeals were not necessary and that sexual selection could easily explain apparently non-adaptive mental phenomena. (Wikipedia)

1d) Non-gradual Evolution or the Punctuated Equilibrium

In 1972 Gould and Niles Eldredge—a paleontologist at the American Museum of Natural History—collaborated on a paper intended at the time merely to resolve a professional embarrassment for paleontologists: their inability to find the fossils of transitional forms between species, the so-called "missing links." Darwin, and most of those who followed him, believed that the work of evolution was slow, gradual and continuous and that a complete lineage of ancestors, shading imperceptibly one into the next, could in theory be reconstructed for all living animals. In practice, Darwin conceded, the fossil record was much too spotty to demonstrate those gradual changes, though he was confident that they would eventually turn up.

But a century of digging since then has only made their absence more glaring. Paleontologists have devoted whole careers to looking for examples of gradual transitions over time, and with a few exceptions they have failed. It was Eldredge and Gould's notion to call off the search and accept the evidence of the fossil record on its own terms. Rather than transforming gradually, most of the species in the world appear to have evolved relatively quickly (on the scale of geologic time) and to have persisted, virtually unchanged, for millions of years.

That seemingly innocent proposition was the wedge that helped break open the ruling scientific consensus about evolution. If Eldredge and Gould's theory of "punctuated equilibrium" is correct, we are forced to revise our views about natural selection, the keystone of Darwin's thinking . . . Here was a way to lift some of the burden of natural selection from individuals. Members of the same species appear to compete within a range of values fixed when the species originated; their life-and-death struggle takes on less significance, because it produces very little evolutionary change. Instead, by mechanisms not yet understood, new species appear to split off at random from existing ones . . . For all the excitement it has generated, punctuated equilibrium still smacks of heresy to many scientists. It does not explain what many regard as the crucial point: how and why a new species springs up. (*Enigmas of Evolution* by Jerry Adler and John Carey)

2) Intelligent Design and Creationism

Intelligent design proponents argue that naturalistic explanations fail to explain certain phenomena and that supernatural explanations provide a very simple and intuitive explanation for the origins of life and the universe. Advocates of intelligent design argue that this is a scientific theory, and seek to fundamentally redefine science to accept supernatural explanations.

In the famous Wedge Document ¹ it is said:

We are building on this momentum, broadening the wedge with a positive scientific alternative to materialistic scientific theories, which has come to be called the theory of intelligent design. Design theory promises to reverse the stifling dominance of the materialist worldview, and to replace it with a science consonant with Christian and theistic convictions.

Proponents of this theory say that evidence exists in the forms of *irreducible complexity* and *specified complexity* that cannot be explained by natural processes.

2a) *Irreducible complexity*

This is one of the main arguments of this theory, and was originally defined by Behe as:

A single system which is composed of several interacting parts that contribute to the basic function, and where the removal of any one of the parts causes the system to effectively cease functioning. (Darwin's Black Box p39 in the 2006 edition)

Supporters of intelligent design use this term to refer to biological systems and organs that they believe could not have come about by any series of small changes. They argue that anything less than the complete form of such a system or organ would not work at all, or would in fact be a detriment to the organism, and would therefore never survive the process of natural selection. Although they accept that some complex systems and organs can be explained by evolution, they claim that organs and biological features which are irreducibly complex cannot be explained by current models. These examples are said to demonstrate that modern biological forms could not have evolved naturally.

2b) *Specified complexity*

This is the second argument defined by Dembski, who states that when something exhibits specified complexity (i.e., is both complex and "specified", simultaneously), one can infer that it was produced by an intelligent cause (i.e., that it was designed) rather than being the result of natural processes. He provides the following examples: "A single letter of the alphabet is specified without being complex. A long sentence of random letters is complex without being specified. A Shakespearean sonnet is both complex and specified" Dembski defines complex specified information (CSI) as anything with a less than 1 in 10^{150} chance of occurring by (natural) chance.

¹ The Wedge strategy is a political and social action plan authored by the Discovery Institute, the hub of the intelligent design movement.

3) Evolution according to the Occult Science

3a) No supernatural intervention

A miracle is supposed to mean some operation which is supernatural, whereas there is really nothing above or beyond NATURE and Nature's laws. (Blavatsky, *Key to Theosophy*, Section 14)

Natural are the *only* phenomena Theosophists accept, and . . . *their* object is precisely to put down every element of superstition or belief in the miraculous or the supernatural. (Blavatsky, *Collected Writings* 3, p. 111)

Let it be remembered that theosophically and esoterically every "miracle"—from the biblical to the theumaturgic—is simply a phenomenon, but that no phenomenon is ever a miracle, *i.e.*, something supernatural or outside of the laws of nature, as all such are impossibilities in nature. (Blavatsky, *Theosophical Glossary*, "Phenomenon")

3b) A Guiding Intelligence

Nature works slowly but incessantly towards the realisation of this object: the evolution of conscious life out of inert material. (Koot Hoomi, *Mahatma Letters*, p. 471).

'Nature', the physical evolutionary Power, could never evolved intelligence unaided—she can only create 'senseless forms'. (Blavatsky, *The Secret Doctrine* I, p. 181)

The whole Kosmos is guided, controlled, and animated by almost endless series of Hierarchies of sentient Beings, each having a mission to perform . . . They vary infinitely in their respective degrees of consciousness and intelligence (Blavatsky, *The Secret Doctrine* I, pp. 274-5)

There is but one indivisible and absolute Omniscience and Intelligence in the Universe. But the first differentiation of its *reflection* in the manifested World is purely Spiritual, and the Beings generated in it are not endowed with a consciousness that has any relation to the one we conceive of. They can have no human consciousness or Intelligence before they have acquired such, personally and individually. This may be a mystery, yet it is a fact, in Esoteric philosophy, and a very apparent one too. (Blavatsky, *The Secret Doctrine* I, p. 277)

The "Germ" of the Universe [differentiates] into the septenary hierarchy of conscious Divine Powers, who are the active manifestations of the One Supreme Energy. They are the framers, shapers, and ultimately the creators of all the manifested Universe, in the only sense in which the name "Creator" is intelligible; they inform and guide it; they are the intelligent Beings who adjust and control evolution, embodying in themselves those manifestations of the ONE LAW, which we know as "The Laws of Nature." (Blavatsky, *The Secret Doctrine* I, pp. 21-22)

[The universal forces] are dual in their character; being composed of (a) the irrational *brute energy*, inherent in matter, and (b) the intelligent soul or cosmic consciousness which directs and guides that energy . . . That process is not always perfect; and, however many proofs it may exhibit of a guiding intelligence behind the veil, it still shows gaps and flaws, and even results very often in evident failures. (Blavatsky, *The Secret Doctrine* I, p. 280)

For, it is those terrestrial spirits of Nature, who form the aggregated Nature; which, if it fails occasionally in its design, is neither to be considered blind, nor to be taxed with the failure; since, belonging to a differentiated sum of qualities and attributes, it is in virtue of that alone conditioned and imperfect. (Blavatsky, *The Secret Doctrine* II, pp. 732-3)

3c) *Evolution at different levels*

We repeat what we have said in *Isis Unveiled*: “. . . all things had their origin in spirit—evolution having originally begun from above and proceeding downwards, instead of the reverse, as taught in the Darwinian theory. In other words, there has been a gradual materialization of forms until a fixed ultimate of debasement is reached.” (Blavatsky, *The Secret Doctrine* II, p. 190)

That germ will become the spiritual potency in the physical cell that guides the development of the embryo, and which is the cause of the hereditary transmission of faculties and all the inherent qualities in man. The Darwinian theory, however, of the transmission of acquired faculties, is neither taught nor accepted in Occultism. Evolution, in it, proceeds on quite other lines; the physical, according to esoteric teaching, evolving gradually from the spiritual, mental, and psychic. This inner soul of the physical cell—this “spiritual plasm” that dominates the germinal plasm—is the key that must open one day the gates of the terra incognita of the Biologist, now called the dark mystery of Embryology. (Blavatsky, *The Secret Doctrine* I, p. 219)

As to Natural Selection itself, the utmost misconception prevails among many present-day thinkers who tacitly accept the conclusions of Darwinism. It is, for instance, a mere device of rhetoric to credit “Natural Selection” with the power of *originating* species. “Natural Selection” is no Entity; but a convenient phrase for describing the mode in which the survival of the fit and the elimination of the unfit among organisms is brought about in the struggle for existence. Every group of organisms tends to multiply beyond the means of subsistence; the constant battle for life—the “struggle to obtain enough to eat and to escape being eaten” added to the environmental conditions—necessitating a perpetual weeding out of the unfit. The *élite* of any stock thus sorted out, propagate the species and transmit their organic characteristics to their descendants. All useful variations are thus perpetuated, and a progressive improvement is effected. But Natural Selection, in the writer’s humble opinion, “Selection, *as a Power*,” is in reality a pure myth; especially when resorted to as an explanation of the origin of species. It is merely a representative term expressive of the manner in which “useful variations” are stereotyped when produced. Of itself, “it” *can produce nothing*, and only operates on the rough material presented to “it.” The real question at issue is: what CAUSE—combined with other secondary causes—produces the “variations”

in the organisms themselves. Many of these secondary causes are purely physical, climatic, dietary, etc., etc. Very well. But beyond the secondary aspects of organic evolution, a deeper principle has to be sought for. The materialist's "spontaneous variations," and "accidental divergencies" are self-contradictory terms in a universe of "Matter, Force and NECESSITY." Mere variability of type, apart from the supervisory presence of a quasi-intelligent impulse, is powerless to account for the stupendous complexities and marvels of the human body for instance. The insufficiency of the Darwinists' mechanical theory has been exposed at length by Dr. Von Hartmann among other purely negative thinkers. It is an abuse of the reader's intelligence to write, as does Hæckel, of *blind* indifferent cells, "arranging themselves into organs." The esoteric solution of the origin of animal species is given elsewhere.

Those purely *secondary* causes of differentiation, grouped under the head of sexual selection, natural selection, climate, isolation, etc., etc., mislead the Western Evolutionist and offer no real explanation whatever of the "whence" of the "ancestral types" which served as the *starting point* for physical development. The truth is that the differentiating "causes" known to modern science only come into operation after the *physicalization of the primeval animal root-types out of the astral*. Darwinism only meets Evolution at its midway point—that is to say when astral evolution has given place to the play of the ordinary physical forces with which our present senses acquaint us. But even here the Darwinian Theory, even with the "expansions" recently attempted, is inadequate to meet the facts of the case. The underlying physiological variation in species—one to which all other laws are subordinate and secondary—is a sub-conscious intelligence pervading matter, ultimately traceable to a REFLECTION of the Divine and Dhyan-Chohanik wisdom. A not altogether dissimilar conclusion has been arrived at by so well known a thinker as Ed. von Hartmann, who, despairing of the efficacy of *unaided* Natural Selection, regards evolution as intelligently guided by the UNCONSCIOUS (the Cosmic Logos of Occultism). But the latter acts only mediately through FOHAT, or Dhyan-Chohanik energy, and not quite in the direct manner which the great pessimist describes. (Blavatsky, *The Secret Doctrine* II, pp. 648-9)

Thus physical nature, when left to herself in the creation of animal and man, is shown to have failed. She can produce the first two and the lower animal kingdoms, but when it comes to the turn of man, spiritual, independent and intelligent powers are required for his creation, besides the "coats of skin" and the "Breath of animal Life." (Blavatsky, *The Secret Doctrine* II, p. 56)

Now the evolution of the *external* form or body round the *astral* is produced by the terrestrial forces, just as in the case of the lower kingdoms; but the evolution of the internal or real MAN is purely spiritual. It is now no more a passage of the impersonal Monad through many and various forms of matter—endowed at best with instinct and consciousness on quite a different plane—as in the case of external evolution, but a journey of the "pilgrim-soul" through various *states* of *not only matter* but Self-consciousness and self-perception, or of *perception* from apperception. (Blavatsky, *The Secret Doctrine* II, p. 175)

3d) Diverse ancestry of human beings

As regards the evolution of mankind, the Secret Doctrine postulates . . . the simultaneous evolution of seven human groups on seven different portions of our globe. (Blavatsky, *The Secret Doctrine* II, p. 1)

Competing theories on the origins of anatomically modern humans claim that either humans originated from a single point in Africa and migrated across the world (known as the Eve theory), or different populations independently evolved from homo erectus to homo sapiens in different areas.

In a University of Michigan study published in the Jan. 12, 2001 issue of *Science* done by U-M anthropologist Milford H. Wolpoff maintains that genetic evidence for the Eve theory has always been unclear because different genes support different theories: mitochondrial genes support the Eve theory while nuclear genes support the development of an older, worldwide species of human ancestors.

Wolpoff said they asked the question in a different way by directly addressing the fossils. A comparison of actual human fossils—early modern and archaic fossil skulls from around the world—provides compelling evidence that the Eve theory is the wrong explanation. Instead, the findings support the theory of multi-regional evolution.

However, the debate continues since later studies published in *Nature*, 19 July 2007, led by scholars at Cambridge and Anglia Ruskin Universities support the Eve theory.