**THE FUNDAMENTALS: A TESTIMONY TO THE TRUTH**

**VOLUME 4; CHAPTER 6. THE PASSING OF EVOLUTION**

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The word evolution is in itself innocent enough, and has a large range of legitimate use. The Bible, indeed, teaches a system of evolution. The world was not made in an instant, or even in one day (whatever period day may signify) but in six days. Throughout the whole process there was an orderly progress from lower to higher forms of matter and life. In short there is an established order in all the Creator's work. Even the Kingdom of Heaven is like a grain of mustard seed which being planted grew from the smallest beginnings to be a tree in which the fowls of heaven could take refuge. So everywhere there is "first the blade, then the ear, then the full corn in the ear."

But recently the word has come into much deserved disrepute by the injection into it of erroneous and harmful theological and philosophical implications. The widely current doctrine of evolution which we are now compelled to combat is one which practically eliminates God from the whole creative process and relegates mankind to the tender mercies of a mechanical universe the wheels of whose machinery are left to move on without any immediate Divine direction.

This doctrine of evolution received such an impulse from Darwinism and has been so often confounded with it that it is important at the outset to discriminate the two. Darwinism was not, in the mind of its author, a theory of universal evolution, and Darwin rarely used the word. The title of Darwin's great work was, "The Origin of Species by Means of Natural Selection." The problem which he set out to solve touched but a small part of the field of evolution. His proposition was simply that species may reasonably be supposed to be nothing more than enlarged or accentuated varieties, which all admit are descendants from a common ancestry. For example, there are a great many varieties of oak trees. But it is supposed by all botanists that these have originated from a common ancestor. Some chestnut trees, however, differ less from some oak trees than the extreme varieties of both do from each other. Nevertheless, the oak and the chestnut are reckoned not as varieties, but as different species. But the dividing line between them is so uncertain that it is impossible to define it in language; hence, some botanists have set up an independent species between the two, which they call "chestnut oak."

**WHAT IS A "SPECIES"?**

This, however, is but a single illustration of the great difficulty which scientific men have had in getting a satisfactory definition of species. That most generally accepted is "a collection of individual plants and animals which resemble each other so closely that they can reasonably be supposed to have descended from a common ancestor." It is easy to see, however, that this definition begs the whole question at issue. For we have no certain means of knowing how widely the progeny may in some cases differ from the parent; and we do not know but that resemblances may result from the action of other causes than that of parental connection. The definition is far from being one that would be accepted in the exact sciences.

It may be "reasonably supposed" that such small differences as separate species have resulted through variations of individuals descended from a common ancestry, yet it is a long leap to assert that, therefore, it may be reasonably supposed that all the differences between animals or between plants may have arisen in a similar manner.

A characteristic difference between the African elephant and the Indian elephant, for example, is that the African elephant has three toes on his hinder feet and the Indian has four. While, therefore, it may not be a great stretch of imagination to suppose that this difference has arisen by a natural process, without any outside intervention, it is an indefinitely larger stretch of the imagination to suppose that all the members of the general family to which they belong have originated in a like manner; for, this family, or order, includes not only the elephant, bit the rhinoceros, hippopotamus, tapir, wild boar and horse.

But many of Darwin's followers and expounders have gone to extreme lengths in their assertions, and have announced far more astonishing conclusions than these. Not only do they assert, with a positiveness of which Darwin was never guilty, that species have had a common origin through natural causes, but that all organic beings had been equally independent of supernatural forces. It is a small thing that the two species of elephant should have descended from a common stock. Nothing will satisfy them but to assert that the elephant, the lion, the bear, the mouse, the kangaroo, the whale, the shark, the shad, birds of every description - indeed, all forms of animal life, including the oyster and the snail - have arisen by strictly natural processes from some minute speck of life, which originated in far distant time.

**ORIGIN OF LIFE**

It need not be said that such conclusions must rest upon very attenuated evidence, such as is not permitted to have weight in the ordinary affairs of life. But even this is only the beginning with thoroughgoing evolutionists. To be consistent they must not only have all species of animals or plants, but all animals and plants descending from a common origin, which they assert to be an almost formless protoplasm, which is supposed to have appeared in the earliest geological ages. Nor does this by any means bring them to their final goal, for to carry out their theory they must leap to the conclusion that life itself has originated, spontaneously, by a natural process, from inorganic matter.

But of this they have confessedly no scientific proof. For, so far as is yet known, life springs only from antecedent life. The first chapter of Genesis, to which reference has already been made, furnishes as perfect a definition of plant life as has ever been given. Plant life, which is the earliest form of living matter, is described "as that which has seed in itself" and "yields seed after his kind." A half century ago the theory of spontaneous generation had many supporters. It was believed that minute forms of plant life had sprung up from certain conditions of inorganic matter without the intervention of seeds or spores. Bottles of water, which were supposed to have been shut off from all access of living germs, were found, after standing a sufficient length of time, to swarm with minute living organisms.

But experiments showed that germs must have been in the water before it was set aside. For, on subjecting it to a higher degree of temperature, so as apparently to kill the germs, no life was ever developed in it. All positive basis for bridging the chasm between living matter and lifeless matter has thus been removed from the realm of science.

**THE MYSTERY OF FIRST BEGINNINGS**

This brings us to the important conclusion that the origin of life, and we may add of variations, is to finite mings an insoluble problem; and so Darwin regarded it. At the very outset of his speculation, he rested on the supposition that the Creator in the beginning breathed the forces of life into several forms of plants and animals, and at the same time endowed them with the marvelous capacity for variation which we know they possess.

This mysterious capacity for variation lies at the basis of his theory. If anything is to be evolved in an orderly manner from the resident forces of primordial matter it must first have been involved through the creative act of the Divine Being. But no one knows what causes variation in plants or animals. Like the wind it comes, but we know not whence it cometh or whither it goeth. Breeders and gardeners do not attempt to produce varieties directly. They simply observe the variations which occur, and select for propagation those which will best serve their purposes. They are well aware that variations which they perpetuate are not only mysterious in their origin, but superficial in their character.

In Darwinism the changing conditions of life, to which every individual is subjected, are made to take the place of the breeder and secure what is called natural selection. In this case, however, the peculiarities selected and preserved must always be positively advantageous to the life of the individuals preserved. But to be of advantage a variation must both be, considerable in amount, and correlated to other variations so that they shall not be antagonistic to one another. For example, if a deer were born with the capability of growing antlers so large that they would be a decided advantage to him in his struggle for existence, he must at the same time have a neck strong enough to support its weight, and other portions of his frame capable of bearing the increased strain. Otherwise his antlers would be the ruin of all his hopes instead of an advantage. It is impossible to conceive of this combination of advantageous variations without bringing in the hand and the designing mind of the Original Creator.

Of this, as of every other variety of evolution, it can be truly said in the words of one of the most distinguished physicists, Clerk Maxwell: "I have examined all that have come within my reach, and have found that everyone must have a God to make it work." By no stretch of legitimate reasoning can Darwinism be made to exclude design. Indeed, if it should be proved that species have developed from others of a lower order, as varieties are supposed to have done, it would strengthen rather than weaken the standard argument from design.

But the proof of Darwinism even is by no means altogether convincing, and its votaries are split up into as many warring sects as are the theologians. New schools of evolutionists arise as rapidly as do new schools of Biblical critics. Strangely enough the "Neo Darwinians" go back to the theory of Lamarck that variations are the result of effort and use on the part of the animal; whereas Darwin denied the inheritance of acquired characteristics; while Weissmann goes to the extreme of holding that natural selection must be carried back to the ultimate atoms of primordial matter, where he would set up his competitive struggle for existence. Romanes and Gulick, however, insist that specific variations often occur from "segregation," entirely independent of natural selection.

Nor do the champions of evolution have a very exalted estimate of each other's opinions. In a letter to Sir Joseph Hooker in 1866, referring to Spencer, Darwin wrote: "I feel rather mean when I read him: I could bear and rather enjoy feeling that he was twice as ingenious and clever as myself, but when I feel that he is about a dozen times my superior, even in the master art. of wriggling, I feel aggrieved. If he had trained himself to observe more, even at the expense, by a law of balancement, of some loss of thinking power, he would have been a wonderful man." ("Life and Letters," Vol. ii., p. 239.)

To account for heredity, Darwin, in his theory of "pangenesis," suggested that infinitesimal "gemmules" were thrown off from every part of the body or plant, and that they had "a mutual affinity for each other leading to their aggregation either into buds or into the sexual elements." But when he ventured the opinion that these were the same as Spencer's "vitalized molecules" in which dwelt an "intrinsic aptitude to aggregate into the forms" of the species, Spencer came out at once and said that it was no such thing. They were not at all alike. Darwin, in reply, said he was sorry for the mistake. But he had feared that as he did not know exactly what Spencer meant by his "vitalized molecules," a charge of plagiarism might be brought against him if he did not give Spencer due credit. But others seemed to find it as hard to understand what Darwin meant by his "gemmules" with their marvelous mutual "affinity" for each other, as he did what Spencer meant by "vitalized molecules." Bates wrote him that after reading the chapter twice he failed to understand it; and Sir H. Holland set it down as "very tough," while Hooker and Huxley thought the language was mere tautology, and both failed "to gain a distinct idea" from it. ("Letters of Darwin," Vol. ii., p. 262.)

Indeed, thoroughgoing evolution has no such universal acceptance as is frequently represented to be the case. Few naturalists are willing to project the theory beyond the narrow limits of their own province. Such naturalists as Asa Gray and Alfred Russel Wallace, who in a general way accepted the main propositions of Darwinism, both insisted that natural selection could attain its ends only as giving effect to the designs of the Creator. Agassiz, Owen, Mivart, Sir William Dawson, and Weissmann either rejected the hypothesis altogether or so modified it that it bore little resemblance to the original. Professor Shaler declared, shortly before his death, "that the Darwinian hypothesis is still unverified." Dr. Etheride of the British Museum says that "in all this great museum there is not a particle of evidence of transmutation of species." Professor Virchow of Berlin declared that "the attempt to find the transition from the animal to man has ended in total failure." The list could be extended indefinitely. Haeckel, indeed, had from his imagination supplied the missing link between man and the apes, calling it Pithecanthropus. While, a few years after, Du Bois discovered in recent volcanic deposits in Java a small incomplete skull in one place, and near by a diseased femur (thigh bone), and not far away two molar teeth. These were hailed as remains of the missing link, and it was forthwith dubbed Pithecanthropus Erectus. The skull was indeed small, being only two-thirds the size of that of the average man. But Professor Cope, one of our most competent comparative anatomists, concluded that as the "femur is that of a man, it is in no sense a connecting link." The erect form carries with it all the anatomical characteristics of a perfect man. ("Primary Factors," 1896, pt. 1, chap, vi.)

But the Darwinians themselves have made their full share of erroneous assumptions of facts, and of illogical conclusions. It will suffice for our present purpose to refer to a few of these.

Darwin himself made two great mistakes which in the eyes of discerning students vitiate his whole theory.

**1.** As to Geological Time. The establishment of Darwin's theory as he originally proposed it involved the existence of the earth in substantially its present condition for an indefinite, not to say infinite, period of time. In one of his calculations in the first edition of "Origin of Species," he arrived at the startling conclusion that 306,662,400 years is "a mere trifle" of geological time. It was not long, however, before his son, Sir George H. Darwin, demonstrated to the general satisfaction of physicists and astronomers that life could not have begun on earth more than 100 million years ago, and probably not more than 50 million; while Lord Kelvin would reduce the period to less than 30 million years, which Alfred Russel Wallace affirms is sufficient time for the deposition of all the geological strata. Evolutionists are now fighting hard and against great odds to be allowed 100 million years for the development of the present drama of life upon the earth.

The difference between 306,662,400 years, regarded as "a mere trifle," and 24,000,000, or even 100,000,000 years, as constituting the whole sum, is tremendous. For, it necessitates a rapidity in the development of species which must be regarded as by leaps and bounds, and so would well accord with the theory of creation by special Divine intervention.

If a critic of Darwinism had made so egregious an error as this which Darwin introduced into the very foundation of his theory, he would have been the subject of an immense amount of ridicule. The only excuse which Darwin could make was that at the time no one knew any better. But that excuse shows the folly of building such an enormous theory upon an unknown foundation.

**2.** As to the Minuteness of Beneficial Variations. The unlimited geological time required by Darwin's original theory is closely bound up with his view of the minuteness of the steps through which progress has been made. The words which he constantly uses when speaking of variations are "slight," "small," "extremely gradual," "insensible gradations." But early in the discussion it was shown by Mivart that "minute incipient variations in any special direction" would be valueless; since, to be of advantage in any case, they must be considerable in amount. And furthermore, in order to be of permanent advantage, a variation of one organ must be accompanied with numerous other variations in other parts of the organism.

The absurdity in supposing the acquisition of advantageous qualities by chance variations is shown in the pertinent illustration adduced by Herbert Spencer from the anatomy of the cat. To give the cat power of leaping to any advantageous height, there must be a simultaneous variation in all the bones, sinews, and muscles of the hinder extremities; and, at the same time, to save the cat from disaster when it descends from an elevation, there must be variation of a totally different character in all the bones and tendons and muscles of the fore limbs. To learn the character of these changes, one has but to "contrast the markedly bent hind limbs of a cat with its almost straight fore limbs, or contrast the silence of the upward spring on to the table with the thud which the fore paws make as it jumps off the table." So numerous are the simultaneous changes necessary to secure any advantage here, that the probabilities against their arising fortuitously run up into billions, if not into infinity; so that they are outside of any rational recognition.

**THE ORIGIN OF MAN**

The failure of evolution to account for man is conspicuous. Early in the Darwinian discussion, Alfred Russel Wallace, Darwin's most distinguished co-worker, instanced various physical peculiarities in man which could not have originated through natural selection alone, but which necessitated the interference of a superior directing power.

Among these are:

**(a)** the absence in man of any natural protective covering. The nakedness of man which exposes him to the inclemency of the weather could never in itself have been an advantage which natural selection could take hold of. It could have been of use only when his intelligence was so developed that he could construct tools for skinning animals and for weaving and sewing garments. And that practically involves all essential human attributes.

**(b)** The size of the human brain. Man's brain is out of all proportion to the mental needs of the highest of the animal creation below him. Without man's intelligence such a brain would be an incumbrance rather than an advantage. The weight of the largest brain of a gorilla is considerably less than half that of the average man, and only one third that of the best developed of the human race.

**(c)** This increase in the size of the brain is connected also with a number of other special adaptations of the bodily frame to the wants of the human mind. For example, the thumb of the hind limb of the ape becomes a big toe in man, which is a most important member for a being which would walk in an upright position, but a disadvantage to one who walks on all fours. The fore limbs of the ape are shortened into the arms of a man, thus adapting them to his upright position and to the various uses which are advantageous in that position. Furthermore, to make it possible to maintain the erect position of man there has to be a special construction of the ball and socket joints in the hip bones and in the adjustment of all the vertebra of the back and neck. All these would be disadvantageous to an ape-like creature devoid of man's intelligence.

**(d)** Man's intellectual capacity belongs to a different order from that of the lower animals. Naturalists do indeed classify men and apes together in the same genus anatomically. But to denote the human species they add the word "sapiens." That is, they must regard his intelligence as a specific characteristic. The lower animals do indeed have many common instincts with man, and in many cases their instincts are far superior to those of man. But in his reasoning powers man is apparently separated from the lower animals, one and all, by an impassable gulf.

Romanes, after collecting the manifestations of intelligent reasoning from every known species of the lower animals, found that they only equalled, altogether, the intelligence of a child 15 months old. He could find no such boundless outlook of intelligence in the lower animals as there is in man. As anyone can see, it would be absurd to try to teach an elephant geology, an eagle astronomy, or a dog theology. Yet there is no race of human beings but has capacity to comprehend these sciences.

Again, man is sometimes, and not improperly, defined as a "tool using animal." No animal ever uses, much less makes, a tool. But the lowest races of men show great ingenuity in making tools, while even the rudest flint implement bears indubitable evidence of a power to adapt means to ends which places its maker in a category by himself.

Again, man is sometimes, and properly, defined as a "fire using animal." No animal ever makes a fire. Monkeys do indeed gather round a fire when it is made. But the making of one is utterly beyond their capacity. Man, however, even in his lowest stages knows how to make fire at his will. So great is this accomplishment, that it is no wonder the Greeks looked upon it as a direct gift from heaven.

Again, man may properly be described as a "speaking animal." No other animal uses articulate language. But man not only uses it in speech but in writing. How absurd it would be to try to teach a learned pig to translate and understand the cuneiform inscriptions unearthed from the deserted mounds of Babylonia.

Finally, man may properly be described as a "religious animal" but who would ever think of improving the nature of the lower animals by delivering sermons in their presence or distributing Bibles among them? Yet, the Bible - a Book composed of every species of literature, containing the highest flights of poetry and eloquence ever written, and presenting the sublimest conceptions of God and of the future life ever entertained - has been translated into every language under heaven, and has found in those languages the appropriate figures of speech for effectually presenting its ideas.

**THE CUMULATIVE ARGUMENT**

Now, all these peculiarities both in the body and the mind of man, to have been advantageous, must have taken place simultaneously and at the same time have been considerable in amount. To suppose all this to occur without the intervention of the Supreme Designing Mind is to commit logical "hara-kiri." Such chance combinations are beyond all possibility of rational belief.

It is fair to add, however, that Darwin never supposed that man was descended from any species of existing apes; but he always spoke of our supposed ancestor as "ape-like," a form, from which the apes were supposed to have varied in one direction as far as man had in another. All efforts, however, to find traces of such connecting links as this theory supposes have failed. The Neanderthal skull was, according to Huxley, capacious enough to hold the brain of a philosopher. The Pithecanthropus Erectus of Du Bois had, as already remarked, the erect form of a man; in fact, was a man. The skeletons of prehistoric man so far as yet unearthed, differ no more from present races of men than existing races and individuals differ from each other.

In short, everything points to the unity of the human race, and to the fact that, while built on the general pattern of the higher animals associated with him in the later geological ages, he differs from them in so many all-important particulars, that it is necessary to suppose that he came into existence as the Bible represents, by the special creation of a single pair, from whom all the varieties of the race have sprung.

It is important to observe, furthermore, in this connection, that the progress of the human race has not been uniformly upward. In fact the degeneration of races has been more conspicuous than their advancement; while the advancement has chiefly been through the influence of outside forces. The early art of Babylonia and Egypt was better than the later. The religious conceptions of the first dynasties of Egypt were higher than those of the last. All the later forms of civilization shine principally by borrowed light. Our own age excels, indeed, in material advancement. But for art and literature we fall far below the past, and for our best religion we still go back to the Psalm Singers and Prophets of Judaea, and to the words of Him who spake "as never man spake.'' Democracy has no guides whom it dares trust implicitly. We have much reason to fear that those we are following are blind guides leading on to an end which it is not pleasant to contemplate, and from which we can be delivered only by the coming of the Son of Man.

**CONCLUSION**

The title of this paper is perhaps a misnomer. For, doubtless, the passing of the present phase of evolution is not final. Theories of evolution have chased each other off the field in rapid succession for thousands of years. Evolution is not a new thing in philosophy, and such is the frailty of human nature that it is not likely to disappear suddenly from among men. The craze of the last half century is little more than the recrudesence of a philosophy which has divided the opinion of men from the earliest ages. In both the Egyptian and the East Indian mythology, the world and all things in it were evolved from an egg; and so in the Polynesian myths. But the Polynesians had to have a bird to lay the egg, and the Egyptians and the Brahmans had to have some sort of a deity to create theirs. The Greek philosophers struggled with the problem without coming to any more satisfactory conclusion. Aniximander, like Professor Huxley, traced everything back to an "infinity" which gradually worked itself into a sort of pristine "mud" (something like Huxley's exploded "bathybius"), out of which everything else evolved; while Thales of Miletus tried to think of water as the mother of everything, and Aneximenes practically deified the air. Diogenes imagined a "mind stuff" (something like Weissmann's "biophores," Darwin's "gemmules possessed with affinity for each other," and Spencer's "vitalized molecules") which acted as if it had intelligence; while Heraclitus thought that fire was the only element pure enough to produce the soul of man. These speculations culminated in the great poem of Lucretius entitled, Dc Rerum Natura, written shortly before the beginning of the Christian era. His atomic theory was something like that which prevails at the present time among physicists. Amid the unceasing motion of these atoms there somehow appeared, according to him, the orderly forms and the living processes of nature.

Modern evolutionary speculations have not made much real progress over those of the ancients. As already remarked, they are, in their bolder forms atheistic; while in their milder forms they are "deistic" - admitting, indeed, the agency of God at the beginning, but nowhere else. The attempt, however, to give the doctrine standing through Darwin's theory of the Origin of Species by Means of Natural Selection has not been successful; for at best, that theory can enlarge but little our comprehension of the adequacy of resident forces to produce and conserve variations of species, and cannot in the least degree banish the idea of design from the process.

It is, therefore, impossible to get any such proof of evolution as shall seriously modify our conception of Christianity. The mechanism of the universe is so complicated that no man can say that it is closed to Divine interference. Especially is this seen to be the case since we know that the free will of man does pierce the joints of nature's harness and interfere with its order to a limited extent. Man, by cultivation, makes fruits and flowers grow where otherwise weeds would cover the ground. Man makes ten thousand combinations of natural forces which would not occur without his agency. The regular course of nature is interfered with every time a savage chips a flint implement or builds a canoe, or by friction makes a fire. We cannot banish God from the universe without first stultifying ourselves and reducing man's free will to the level of a mere mechanical force. But man is more than that; and this everyone knows.

Furthermore, a great mistake is made when the dicta of specialists in scientific investigation are accepted in religious matters as of any particular value. Indeed, the concentration of specialists on narrow lines of investigation really unfits them for duly weighing religious evidence.

Spiritual things are not to be discovered by material instruments nor detected by the material senses. Physical science cannot penetrate to the origin of anything, but must content itself to deal with processes already begun. Profound mystery hangs over the birth of every human soul. Who can tell when it becomes a free personality, reflecting the image of its Creator? Is the soul, as well as the body, begotten by the parent? This question has divided theologians from the time of Augustine to the present day.

The worst foes of Christianity are not physicists but metaphysicians. Hume is more dangerous than Darwin; the agnosticism of Hamilton and Mansel is harder to meet than that of Tyndall and Huxley; the fatalism of the philosophers is more to be dreaded than the materialism of any scientific men. The sophistries of the Socratic philosophy touching the freedom of the will are more subtile than those of the Spencerian school. Christianity, being a religion of fact and history, is a free-born son in the family of the inductive sciences, and is not specially hampered by the paradoxes inevitably connected with all attempts to give expression to ultimate conceptions of truth. The field is now as free as it has ever been to those who are content to act upon such positive evidence of the truth of Christianity as the Creator has been pleased to afford them. The evidence for evolution, even in its milder form, does not begin to be as strong as that for the revelation of God in the Bible.