

CHAPTER 5

THE ORIGIN OF LIFE AND THE ORIGIN OF LIVING SPECIES (PLANTS AND ANIMALS)

Chapters 5 and 6 deal chiefly with the question whether God created life and all living species by His direct creative act or through powers given by Him to creatures.

Summary

- I. The origin of life: The teaching of the Church. What scientists say.
- II. The origin of living species (plants and animals):
 - A. The teaching of the Church on the origin of species. A Catholic may hold either permanentism or theistic evolution.
 - B. Difficulties with the general theory of evolution.
 - C. Evolution not proved scientifically but merely a hypothesis. If evolution has occurred, God is its Author.

I

The Teaching of the Church on the origin of life. The Church teaches that life, as well as every other form of activity, must be traced to God as its ultimate source, as the fount and well-spring of created being with all its modifications. But whether the first animate thing that appeared in the world received its life from Him by a direct creative act, or through the interplay of powers or properties *which He had already communicated to matter*—that is a question which she leaves open. She allows us the freedom to choose between these alternatives as scientific evidence may direct.

What scientists say. It was the ancient view, and the view of most scientists until recent centuries, that spontaneous generation, or the production of life from inanimate matter, did as a fact take place. It was thought that maggots and worms sprang forth spontaneously from putrefying flesh, and that the moist earth could generate mice and frogs. These examples were eventually disproved, but until the 19th century, the belief still persisted that bacteria could arise spontaneously. But in 1864, the devout Catholic scientist Louis Pasteur (1822-1895) published the results of his investigations, showing by a series of masterly experiments that in all the commonly alleged instances of spontaneous generation, life originated, not from dead matter, but from living germs. One of his experiments was the following: he procured a flask with a long neck curving downwards, and poured into it a liquid which, in ordinary circumstances, corrupts rapidly. He boiled the flask and its contents, so as to destroy any vestige of life that might have been present. His purpose in having the neck bent was to prevent germs floating in the air from falling in, and at the same time to allow the liquid in the flask any stimulus to the generation of life which, as some claimed, pure air might afford. He found that matter thus protected remained indefinitely without any manifestation of life. On the other hand, when the neck of the flask was broken off, so that germs could fall in, life quickly developed. The practical outcome of his experiments was aseptic surgery, the preserved food (canning) industries and the process of 'pasteurisation'.

Through Pasteur's work, the dictum, *omne vivens e cellula*, or "all life comes from a living cell", is now accepted as true by scientists. Some of them, however, while admitting that the process no longer occurs, still cling to the belief that it may have taken place in conditions that no longer exist. This, needless to observe, is a mere gratuitous assertion, against which the following considerations may be urged: (1) Scientists regard the laws of nature as invariable, and therefore as always producing the same effect in the same conditions. But the conditions which, according to scientists themselves, prevailed when life had its beginning on earth can be reproduced in our laboratories; yet no chemist has so far succeeded in making a living thing from dead matter. (2) The living cell, so complicated in its structure that it has been compared to a fully equipped battleship, could not have been built up except through the direct act of an intelligent being.

Many of those who cling to the idea of spontaneous generation are agnostics, and hence are unwilling to admit the clear evidence for God's existence that appears in the direct creation of life. Hence, they hold fast to the idea of spontaneous generation; but they fail to observe that spontaneous generation itself affords them no refuge from the truth which they are trying to evade, because, ultimately, it would have to be referred to the action of an Intelligent Creator.

If, in spite of difficulties which at present seem insurmountable, scientists succeed some day in making a living thing from non-living elements, our position as Catholics will not, as indicated in the preceding paragraph, be affected in the slightest degree. Some early Fathers, St Thomas and some of the great doctors of the Church had no difficulty whatsoever in holding spontaneous generation, since

they regarded it—as we would also, if it were ever proved—as *a process arising from powers implanted in matter by the Creator.*

II

A

The teaching of the Church on the origin of species. The Church, while teaching as of faith that God created the living things from which all existing plants and animals are descended, leaves us free to hold either the theory of permanentism or the theory of theistic evolution. According to the theory of permanentism, God by a direct act, or series of acts, created each species separately. According to the theory of theistic evolution, He caused some or all species to develop in course of time from one or more directly-created primitive stocks, or from inanimate matter.

Permanentism is so called because it says that the species existed *permanently*.

Theistic evolution is so called because it says that *God* is its cause (theistic = pertaining to belief in God).

Note. *The teaching of the Church on the question of evolution is quite simple, but is frequently misrepresented in books and magazines. At the same time, alleged scientific results, and mere theories, are submitted uncritically to the public as 'facts' and 'discoveries'. Hence the enormous confusion on the subject.*

Certain Protestant groups, in the past and today, have condemned the theory of evolution as such. The Catholic Church has never condemned the theory of evolution as such. She has condemned as contrary to faith the theory of materialist or atheistic evolution, which is another thing altogether.

*Atheistic evolution denies, or ignores, the existence of a Personal God, and claims that life in all its forms has developed under the operation of blind forces or causes. We have proved (pp.**.**) that this theory is opposed to reason. We now know that it is opposed to faith also.*

Permanentism or theistic evolution: the views of theologians. Many of the Fathers of the Church held the doctrine of permanentism, but St Augustine (354-430) favoured a theory which bears a resemblance to some aspects of theistic evolution. He held that each species of animals was created originally in a rudimentary state, and later on was given its perfect form. He does not tell us whether the development was gradual or instantaneous, but once the development was attained, the species remained fixed. He believed, apparently, that the species originated in something like a seed, which he calls the *ratio seminalis* (seminal reason),¹ a latent source of activity inserted by God into matter during the work of Creation.

The theory of theistic evolution is held by some modern Catholic writers. But as stated in the extreme form which derives all plants and animals from one and the same common origin, it is, so far, entirely unsupported by scientific evidence. But if, against all present probabilities, the theory should become an established truth, it would only serve to give us a more exalted idea of the power and wisdom of the Creator who so framed His laws as to draw a single particle of inert or primitive organic matter slowly upwards to higher and higher forms of life.

B

Difficulties with the general theory of evolution. There are some major difficulties with the theory of evolution, but they are not given wide publicity. A major cause of obscurity is the attitude of many evolutionists who, since they regard rejection of their theory as disloyalty to science, have created an atmosphere in which unbiased judgement has become difficult. In spite of this, some competent scientists have produced works demonstrating the inadequacies of any theory of evolution. Among more recent studies may be counted *The Intelligent Universe* by Fred Hoyle;² *Evolution: a Theory in Crisis* by Michael Denton;³

¹ Cf., e.g., *Commentary on Genesis*, Bk V, ch. v, 14; ch. xxii, 45.

² Michael Joseph Ltd., London 1983. Sir Fred, a man of no religion, founded the Cambridge Institute of Theoretical Astronomy.

³ Burnett Books, G.B.; Adler & Adler, U.S.A., 1986. The author is a medical doctor and scientist, of no religion.

Darwin on Trial by Phillip E. Johnson;⁴ *In the Beginning* by Walt Brown;⁵ *Darwin's Black Box: the Biochemical Challenge to Evolution* by Michael J. Behe;⁶ *The Design Inference* by William A. Dembski.⁷ Here we can only draw upon some of their many and developed arguments. To begin to judge Darwinism intelligently, we must first define our terms—something many scientists, untrained in philosophy and logic, do not do.

DEFINITIONS. The word “evolution” can mean a number of things:

1. Evolution of certain characteristics and diversities within species.
2. Evolution of the human body from some ape-like animal.
3. Evolution, by *natural* processes,⁸ of living cells from dead matter, of plants from living cells, of animals from plants, and finally of man from animals, as the explanation for the whole variety of living plants, animals and men, and fossils of extinct species of all three. This may be called the *general* theory of evolution.

*Look up Gerry Keane for definition of evolution re increasing complexity.

The *first* is an oft-observed phenomenon, often appealed to by evolutionists as a basis for their claims, but quite irrelevant to a proof of the second or third claims. All traditional Christians, who recognise Adam and Eve as the first parents of the human race, admit therefore that all the varieties of human races come from them. The admission of characteristics and variations developing *within* species is not contested by anyone, and is not the issue in a debate about evolution. This first meaning we can set aside as irrelevant, therefore, although we may have to refer to it when examples of it are adduced in an invalid attempt to prove evolution in the second or third sense.

The *second* is a historical and scientific question, as well as a religious one. The Church so far has not ruled it out as contrary to the teaching in the Book of Genesis. (We deal with this meaning of evolution in the next chapter).

The *third* meaning includes the second, and is a gigantic claim, yet to be proved, not least of all because the first element of it, namely, life emerging from dead matter, has neither been observed within nature nor achieved by science. (We deal with this meaning of evolution in this chapter and in *Apologetics*, Ch. 1). The second and third meanings involve a substantial *transformation* of one thing into another.

The name and theory of *evolution* became famous with the publication of *The Origin of Species* in 1859 by English scientist Charles Darwin (1809-1882). He followed that work up with *The Descent of Man* in 1871.

The alleged causes of evolution. Evolution, in the third sense, was supposed by Darwin to have by two aspects:

- (1) survival of the fittest, also called natural selection.
- (2) transformation of species, i.e., from one species into another. Supposing that life arose from dead matter, this would then explain how basic cells evolved into the whole range of the plant world, animal kingdom and human race. Darwin called this, “descent with modification”.

Replies. In answer to (1) survival of the fittest: the famous explanation turns out to be a tautology. (Some scientists who believe in evolution have openly admitted this).⁹ Who are the fittest? Answer: those that survive. What does this explain? Nothing: it is merely the observation that, in particular regions, certain species predominate and others are scarce or extinct—something for which reasons need to be found. It asserts that, *within* biological species, fluctuations occur of certain characteristics of certain animals. It does *not* mean that one species became another, that reptiles became birds, for example. It means merely the observation of the occurrence of evolution in the *first* sense given above.

⁴ Regnery Gateway, Washington D.C., 1991. The author is a law professor at the University of California, Berkeley. See website: arn.org

⁵ Center for Scientific Creation, Phoenix, U.S.A., 1995. Pp.1-17, 37-58 deal with evolution. The author is a mechanical engineer.

⁶ The Free Press, New York 1996. The author is an Associate Professor of Biochemistry at Lehigh University, Pennsylvania.

⁷ Cambridge University Press 1998. Dembski, a mathematician and philosopher, is also the editor of *Uncommon Dissent: [15] Intellectuals Who Find Darwinism Unconvincing*, ISI Books, Wilmington 2004.

⁸ i.e., without divine intervention

⁹ Cf. P.E. Johnson, *Darwin on Trial*, Regnery Gateway, Washington D.C., 1991, p.20.

“Natural selection merely preserves or destroys something that already exists.”¹⁰ It explains nothing about how the species came to exist, and does not explain how the supposed modifications occurred.

In answer to (2) transformations into new species:

(a) *No verification.* Not a single instance has been proved: every claim, when analysed, can be shown to be merely evidence that Y came after X, or is very much like X, and is therefore descended from X. This is begging the question; it is not a proof. Extinction of species is observed frequently; production or appearance of new species, never.

(b) *Limits of mutations.* Every attempt to provoke evolutionary change of species has failed: the mutations effected by breeding experiments either never go beyond the basic design of the creature, disappear in later generations, are quite useless, cause harm, render the new form sterile, or produce monsters that cannot survive. Mutations have only been observed to occur *within* species (evolution is verified only in the first sense). No mutation has ever produced new species, new organs, greater complexity, more viability, or major changes. Fruit flies are the most common animals used in breeding experiments, yet “Fruit flies refuse to become anything but fruit flies under any circumstances yet devised.”¹¹

(c) *Distances between species.* The isolation and distinctness of different types of organisms, the existence of clear discontinuities in nature, self-evident even to the non-scientist, is inexplicable if there are meant to be gradual changes and definite steps linking one species to the next.

(d) *Lack of evidence in fossils.* The fossil record to date has such huge gaps, i.e., there are no huge numbers of extinct transitional or intermediate forms which the theory demands must be there. On the contrary, very few even alleged intermediate forms have been found, and all of these are contested.¹² The intense search for fossils and the study of them since Darwin’s time has produced three conclusions, all difficult to reconcile with evolution: (i) stasis, i.e., stability: fixed forms of life, keeping to stable patterns and not showing directional change or significant change; (ii) sudden appearance, i.e., species appear fully formed and complex when they are discovered; (iii) sudden disappearance, rather than gradual obsolescence when confronted by the development of new forms: there appear to have been a series of mass extinctions in the history of the earth—so extensive in fact, that far more species have perished than survived.¹³

Strictly speaking, the study of fossils never reveals anything more than a succession of types. It does not and can not show one type evolving into another. In other words, it presents facts without an explanation. Evolution, on the other hand, is an attempted explanation of facts, and must be judged as such.

(e) *Modern biology shows that gradual improvement by evolution is impossible.* Some biochemical systems are *irreducibly* complex. An *irreducibly* complex system is one that is made up of several inter-dependent parts, linked in such a way that the absence of any one part means that the whole system ceases to function. For example, a mouse-trap—composed of a base, metal hammer, spring, sensitive catch, holding bar—if it is missing one part, cannot catch mice. The eye, similarly, is a useless organ until *all* its parts are in place, and not only must all its parts be there, but the entire corresponding parts of the brain that receive and process the data from the eye must also all be in place. No gradual process of natural selection could have formed and refined an irreducibly complex system in a step-by-step fashion, because it does not work unless all its parts are already present. While some structures within nature and man might be explained by natural selection, the *irreducibly* complex systems (such as the systems which control vision, photosynthesis, blood clotting, immunity, and cellular transport) could not have evolved, but must have been designed by an Intelligent Designer who intervened to create those systems or to cause them to arise at a set time.¹⁴ Darwin himself wrote, “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.”¹⁵ To this we may add: the development of the eye in pairs, and the necessary corresponding parts of the brain for the reception and analysis of what the eyes see, are further proof that chance or blind forces are incapable of forming such a complex organ as the eye and the even more complex mechanism of the brain, without which the eye would be a useless organ. Despite his comment, Darwin proceeded to uphold natural selection as an explanation of the eye. But as Isaac Newton asked, “Was the eye contrived without skill in optics, and

¹⁰ Idem, p.31

¹¹ F. Hitching, *The Neck of the Giraffe: Where Darwin Went Wrong*, Ticknor and Fields, New Haven, Connecticut 1982, p.61

¹² W. Brown, *In the Beginning*, pp.45-50, gives 47 quotes from scientists attesting that transitional forms have not been found.

¹³ Johnson, pp.50, 56-7, 170-1

¹⁴ Cf. M. Behe, *Darwin’s Black Box*.

¹⁵ *The Origin of Species*, The Modern Library, N.Y., Ch. VI, p.133

the ear without knowledge of sounds?”¹⁶ Design in fulfilment of a function is the unmistakable and undeniable mark of the Intelligent Designer.

Other alleged causes of evolution. The sheer lack of fossil and biological evidence for evolution as explained by Darwin led some scientists to formulate theories about evolution that ran contrary to the former explanations. Instead of supposing gradual changes over millions of years, these scientists postulated “saltations” (big leaps), by which a new type of organism would suddenly appear in a single generation. Darwin himself said that if such evolution occurred, his theory was finished, since a saltation is equivalent to a miracle.¹⁷ Without invoking divine intervention, science cannot explain how a living creature, an intricate assembly of interrelated parts, could generate by chance, or blind forces, a new organism with a new and more complex assembly of different interrelated parts. Saltation means, for instance, that a snake’s egg could hatch and a bird emerge.¹⁸ The evolutionary ‘theory’ of saltation is, therefore, not even worthy of being called a theory, but is merely a supposition to escape a difficulty. A more recent modification of saltation, called “punctuated equilibrium”, has been proposed: it is another hypothesis which explains nothing, but hides the lack of evidence behind an impressive pseudo-scientific term.¹⁹

C

Evolution not proved scientifically but merely a hypothesis.

NO SCIENTIFIC PROOF OF EVOLUTION. Evolution may be a fact, but there is as yet no scientific proof of it. A scientific proof will be forthcoming only when some incontestable law of nature has been discovered, which can be tested by experiment, and which will account for all the transformations alleged by evolutionists. While there may be evidence for the modification of living things within many of the smaller groups, there is no evidence as to how any of the greater groups originated. Mutations *within* species have been observed; mutations that transform one plant or animal into a *different* species have not been observed. When geologists tell us of the changes that have taken place on the surface of the earth, they ascribe them to the law of gravitation and other well-known and unquestioned physical laws which, they justifiably assert, must have been working in the past as they are working today. But evolutionists so far have failed to discover any verifiable laws governing the development of species. Had they succeeded, the animated controversy over the causes of evolution would be at an end. Many biologists believe that evolution has occurred, but they do not agree on its mechanism. Some argue for continual gradual changes; others, on the contrary, argue for large changes in relatively short periods. Pope John Paul II referred to this plurality when he said, “And, to tell the truth, rather than *the* theory of evolution, we should speak of theories of evolution.”²⁰ The various versions of naturalistic evolution do have one thing in common: their adherence to philosophical materialism and their dislike for divine creation.

The differences among biologists as to the cause of evolution become intelligible when we consider the extraordinary complexity of the subject of their investigations: they are working on the fringe of a greater mystery than that which confronts the student of inanimate physics, namely, the mystery of life.

EVOLUTION, MERELY A HYPOTHESIS. A working hypothesis is a tentative or provisional supposition. In physical science, a hypothesis is indispensable for progress: it stimulates inquiry by raising a number of questions that call for an answer, and it enables the investigator to arrange and classify what would otherwise be a mere assemblage of disjointed observations. Evolution as a hypothesis led to new lines of investigation, and helped push out the frontiers of knowledge. On the other hand, when held to *against* the evidence, it has stifled the presentation of contrary evidence and held back scientific progress. Popular scientific writer Stephen Jay Gould epitomises the irrational dogmatism of evolutionists when he writes, “Our continuing struggle to understand how evolution happens (‘the theory of evolution’) does not cast our documentation of its occurrence—the ‘fact of evolution’) into doubt.”²¹ The phrase “documentation of its occurrence” is pure bluff: scientists have

¹⁶ *Opticks* (1704) McGraw-Hill, N.Y. 1931, pp.369-70

¹⁷ P.E. Johnson, *op. cit.*, p.33

¹⁸ Proposed by some scientists: cf. Johnson, p.40.

¹⁹ See also S.L. Jaki OSB, *The Savior of Science*, Scottish Academic Press, Edinburgh 1990, Chs. 4 & 6.

²⁰ Message to the Pontifical Academy of Sciences, 1996

²¹ Quoted in S. Jaki, *op. cit.*, pp.250-1.

theorised but have not *documented* a single example of one species becoming another. To rephrase Gould's type of argumentation in legal terms, this is equivalent to saying, "Sir, we *know* you are guilty of committing the crime. We *cannot* explain how you did it, we have no evidence of your movements at the time, but we have no one else to blame, and therefore we *must* find you guilty and sentence you. Our continuing struggle (for lack of documented evidence) to understand how you did it, does not cast doubt upon the 'documented' fact that you did it (for we never relied upon the evidence to come to our conclusion)."

IF EVOLUTION HAS OCCURRED, IT IS THE WORK OF GOD. As was shown in *Apologetics*, Ch. 1, every creature, whether animate or inanimate, is dependent on God at every instant for its existence and its activity. It therefore follows that, if we assume evolution as a theory, we must assert that God is its author. It must have been He who gave the living thing its capacity to vary, and so ordered its surroundings, and all the influences affecting it, as to make it develop precisely as it did. If evolution did occur, divine intervention would have been necessary for: (a) creation itself of the first matter from which the whole universe is composed; (b) the appearance of basic life; (c) the elevation of vital organisms to plant level; (d) the elevation of plants to animal level; (e) the elevation of an animal body to be fit for animation by a human soul; (f) the creation of the soul of the first man, something which could never arise from sub-human life, since it is spiritual.