

EVOLUTION AND MOLECULAR BIOLOGY

(A Review of Some Recent French Publications Concerning Transformism in Relation to Biological Discoveries)

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*In this article the author comments on some of the latest French publications concerning the evolution theory and interactions with molecular biology. Georges Salet's important work, *Hasard et Certitude* is stressed as a challenge to *Hasard et Nécessité* written by the Nobel Prize laureate Jacques Monod. Georges Salet analyzes the problem of transformism from a mathematical viewpoint in light of studies made by Borel. Salet proves that the formation of new organs and/or new functions by a mere game of chance in living beings is mathematically impossible. The evolution theory cannot be supported from a scientific point of view, but is based on an atheistic prejudice.*

It should be obvious to everyone not influenced by artificial philosophies or atheistic prejudices, that the complex and wonderful structures of living beings could not have been the result of a game of chance. A watch or any machinery is built in view of a plan by an intelligent watchmaker or engineer who has prepared and made it. It is also evident that animals and plants are much more complicated and better adjusted than any machine ever built by man. It is paradoxical to think that plant and animal parts and functions, which are so exact and complicated, could be simple products of chance combination of some of the materials of the universe.

Denial of Common Sense Evidence

In the history of human thought, there have been and still are certain philosophers and scientists who deny the clearest common sense evidences to uphold artificial systems which they build in search of notoriety. There are philosophers who keep on thinking about life as a game of chance. But, this would be the same as asking that a blind Force without orientation produce everything existing in the Universe independently of any prepared and intelligent plan.

The most recent of these authors, Jacques Monod, is not a philosopher, but a scientist and a distinguished one at that, awarded a Nobel Prize. His main and perhaps only philosophy is a blind unfeeling faith in atheism. Jacques Monod of the Pasteur Institute of Paris, writes in his book, *Hasard et Nécessité*¹ about the relationship of the new molecular biology to a series of thoughts which essentially are only a repetition of the old ideals of Democritus and other materialistic philosophers. Monod says,

The elementary happenings which make up life and originate the evolution of living beings, are microscopical and accidental without any relation to the effects which could bring about its finalistic functioning. (Monod to change the vocabulary speaks of teleonomics.²)

But what professor Monod has forgotten in his book is that chance must be discussed according to certain laws, which are as exact and decisive as laws of chemistry and physics. The most modern chapters in physics can neither be conceived, nor studied without taking into account

the laws which govern fortuitous happenings. The analysis of the probabilities of events can be mathematically treated, especially those events in which there is a great number of unforeseen factors.

Probability and Biology

Such a mathematical study is made by the distinguished French scholar and mathematician Georges Salet in a recently published book.³

Salet admits, as a fact that there can be "mutation" processes which can bring forward changes, simplifications or the disappearance of organs and functions but which can never explain the appearance of new organs or bring about a "rising" evolution.

The Darwinist and Neo-Darwinist, Salet says, "explain that the observations we have made to date cover only a very short period of time, only some thousand years, which is a little thing if we compare them with the hundreds of millions of years of geological times."⁴ The problem is the calculation of the time needed for the biological evolution, and how we can study this question in a precise manner, because the mechanism of mutation is known by molecular scientists in a very exact fashion. Salet's conclusion in this matter is definitive; he says:

The length of geological time should be multiplied by 10 followed by some hundred or thousands of zeros to make possible the arising of a new organ, as small as it could be, by pure chance alone. The time lapse needs to be so great because, in just two words, if the number of elements in a functional structure enlarges in the form of an arithmetic progression then the time needed for this structure to arise by chance enlarges according to geometric progression.⁵

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In order to expound the thesis, Salet starts with some chapters in which he explains current developments in relation with the fundamental mechanism of cell life and reproduction. He analyzes the interactions between biological and molecular evolution, reaching the conclusion that even if recent advancements are taken into account there is still a mystery steadfastly surrounding life.

Next, the notion of chance and natural laws is analyzed in light of some recent mathematical studies, stressing Borel's law⁶ which mark the limits of impossibility for exceptional events, and is very useful in studying the problems of supposed evolution in probabilistic terms. The principal question is the study of the possibility of appearance by mutations of a **new organ** during embryogenesis. The results show a perfectly clear boundary of natural selection which acts only in a negative fashion and is unable to work in a more positive way, such as producing the more complicated organs from some simpler ones, which clearly indicates the independence of great taxonomic groups in the zoological classification.⁷

The Problem of the Beginning of Life

The question of the origin of life is studied by Salet making use of the same probabilistic system used in the discussion of evolution. He criticizes the different theories which try to explain the origin of the first organisms by a supposed "molecular evolution" which has been said to produce "naked genes" as ancestors of actual cells.

The explanation of the beginning of life cannot be found by any means through pure chance, as chance is recognized today by most scientists, even some who declare themselves as materialists and atheists. But, in this last group there are scientists who, as a matter of principle, do not want to admit any kind of Divine intervention.

They say that life appeared in a third way such that living beings are said to be the result of a *natural law*, which although highly improbable today, would have been much more probable in the past. But, here we find ourselves, says Salet, involved in a real play on words, "To say, against probabilistic laws which govern the physical world that life has begun in the past by means of these natural laws is the same as saying nothing; this postulate may explain anything as the famous 'Sleeping virtue of opium' and this is not science."⁸

In order to explain the beginning of life by way of a mysterious abiogenetic law, we would have to imagine for matter itself an extraordinary "set of powers" even beyond what is understood of matter by physical chemists today. Thus one either finds himself pushed into creationism or

into some spiritualistic transformism. It is impossible to solve the following dilemma:

Either the beginning of life and its evolution are a game of chance, or they are out of reach of the most certain physical and chemical laws. The third way leads nowhere.

Science and Philosophy—Spiritualistic Transformism

Salet says:

The scientist can have several attitudes toward the problem of the origin of the species. The first one is to say that science in the strict meaning of the word, has neither given light nor can it give any solution to this problem. The scientist should then, lose interest in the problem and give it to the philosopher. This is a prudent attitude and there cannot be any criticism of those who take it.

The second is a stubborn attitude which consists of saying that everything can be explained by matter and related laws. It is affirmed, then in a very definite way that the problem of the beginning of life will be solved someday in the same way that the problem of biological activity has been solved today. This attitude seems nearer to faith, but closer to a materialistic faith, than to the spirit of science because it seems from biology's own advancement that a physical-chemical explanation of the origin of the species would be against material laws.

This attitude does not yield any results. It is because of it that the problem of the origin of species has not advanced in the last 150 years. One hundred and fifty years have already passed during which it has been said that the evolution of the species is a fact but, without giving real proofs of it and without even a principle of explaining it. During the last one hundred and fifty years of research that has been carried out along this line, there has been no discovery of anything. It is simply a repetition in different ways of what Darwin said in 1859. This lack of results is unforgivable in a day when molecular biology has really opened the veil covering the mystery of reproduction and heredity.

The third attitude (which is not necessarily the best) is one of the spiritualistic transformists. They recognize God's power but without changing natural laws, and this results in an attitude having the same deficiencies as the preceding one; or they imagine the action of a spirit or living soul in the phenomena of heredity, which happens to be a disguised return to Vitalism.

Finally, there is only one attitude which is possible as I have just shown: it consists in affirming that: Intelligence comes before life.

Many people will say, this is not science, it is philosophy. The only thing I am interested in is fact, and this conclusion comes out of an analysis and observation of the facts.⁹

Some of the important works of the famous French anti-evolutionist, Louis Vialleton, are reported. These detailed morphological and anatomical studies,¹⁰ though written before particularities of molecular biology were known, prove the improbability of biological evolution by means of morphological changes. These publications have never been challenged and should be better known.

While many biologists will not admit it, they recognize that animals are real physico-chemical machines intelligently constructed. Salet uses the term "machinicism" to express this tendency. This "machinicism" presupposes the existence of harmony among a set of laws—better, a family of coherent laws—that govern the structure and working of the organisms.

This concept has been explained by Pierre Loyer in a recent book¹¹ in which he studies some philosophical problems in biology. The conclusions of Loyer are like those of Salet: the need of the intervention of an intelligent Cause to organize the interaction of the laws for the production of precise biological mechanisms.

Biologists who are not obstinate in their prejudices are obliged to recognize that transformism is really not a scientific theory, but a philosophical one based on the principle that creation is impossible. Jean Rostand (a French evolutionist, sincere and logical in his prejudices) says,

The theory of evolution gives no answer to the important problem of the origin of life and presents only fallacious solutions to the problem of the nature of evolutive transformations. . . . We are *condemned* to believe in evolution, but we wait always for a suggestion concerning the motives of transformations . . . perhaps we are now in a worse position than in 1859 because we have searched for one century and we have the impression that the different hypotheses are now exhausted. Presently, nature appears to be more steady, more firm and more refractory to changes than we thought before we had made a clear distinction between hereditary variability and acquired characteristics. . . . The world supposed by transformation is a phantasmagoric, surrealistic world . . . and often we forget this when we speak upon the history of life and upon the changes in the horse feet or elephant molars.

Personally, I believe that this phantasmagoria has existed before the calm and stable reality that we now observe in the na-

ture. I believe firmly, because I have not found any other means by which mammals are derivated from lizards, lizards from fishes, but, when I affirm this, I know myself that it is an indigestible tremendous idea and I prefer to leave the origin of such scandalous transformations in vagueness and I do not intend to add a decisive interpretation to their improbability.¹²

Evolution, Science and Childhood Diseases?

Recent discoveries of molecular biology may be used to restate the biological problems in a more precise way than before. The discontinuities of the structures of the genotype are really in a position diametrically opposed to that desired by evolutionists and the transformists hypothesis becomes more and more indefensible.

This is so because evolutionism is a simplistic idea, almost an infantile idea. Evolutionists pretend to explain the complex and wonderful world of living beings by a nebulous universal principle of "blind progress." It is similar to the Proust hypothesis of the origin of the chemical elements which supposed that the different kinds of atoms are simply condensations of hydrogen.

Simple hypotheses are frequently harmful in science when they are not forsaken at the opportune moment; they can become real "infantile diseases." The evolutionary theory is one of these "diseases," because it is the corruption of philosophical prejudices regarding a pure scientific question.

Scientists refer to observation, experimentation, and verification of measurements, free discussion and finally hesitation on conclusions out of their reach. Science is not philosophy, metaphysics, or theology, all of which are removed from the domain of science.

Biological evolution, as a purely scientific hypothesis, should have been a purely objective problem, but, unhappily it has been turned into a problem charged with emotion. Evolution has been turned by many people into a way to remove God from creation, or at least to give Him a secondary and indefinite role in which God would have worked in the beginning only.

The evolutionistic myth has been used to derive man from animals, destroying the idea of original sin, the need for redemption and all Christian economy because the fundamental notions of good and bad are lost in a loose notion of animal atavism.

Finally, the Christian idea of soul salvation and eternal life is changed in hope of a "happy superman," who will not know either illness, or death as a result of mutations which will bring advancement to his nature.

Evolution, the key idea of neopaganism and deChristianization, should be studied in one domain only: science. That is the reason why creationists should happily receive these latest publications which reveal the inconsistency between logic and scientific data on the one hand and evolution theory on the other.

References

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²*Ibid.*, p. 135.
³Salet, G. 1973. *Hasard et certitude. Le Transformisme devant la biologie actuelle*. Editions scientifiques Saint-Edme. Paris.
⁴*Ibid.*, p. IX.
⁵*Ibid.*, p. X.
⁶Borel, E. 1943. *Les probabilités et la vie*. Presses Uni-

versitaires de France. Paris; and 1950. *Probabilités et Certitude*. Presses Universitaires de France. Paris.

- ⁷Holroyd, H. B. 1972. *Creation Research Society Quarterly*, 9(1):5-13. In this article, Dr. Holroyd gets to the same results using the same kind of mathematical reasoning. He concludes that Darwinism is absurd either from a physical or from a mathematical view. See also an article of Howe and Davis, 1971. *C. R. S. Quarterly*, 8(1):30-43.
⁸Salet, G. *Op. cit.*, p. 327.
⁹*Ibid.*, p. 331.
¹⁰Vialleton, L. 1911. *Morphologie des Vertébrés*. O. Doin. Paris; 1924. *Membres et ceintures des Vertébrés supérieures—Critique du transformisme*. O. Doin. Paris. 710 pp.; and 1929. *L'origine des êtres vivants—L'illusion transformiste*. Paris. 395 pp.
¹¹Loyer, P. 1971. *Du Cosmos à Dieu*. Nouvelles éditions latines. Paris.
¹²Rostand. 1972. Cited by G. Salet (*Loc cit.*, p. 419) *Figaro Littéraire* no. 574.

"THE KING IS NAKED"

(Reflections on H. B. Holroyd's criticism of Darwin's theory of evolution)

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When some definitely biased and one-sided outlook is being hurled upon a young mind, there are three possible ways of reaction to it: (a) become indoctrinated, (b) revolt against it, or (c) withdraw into a protective shell of total indifference. This third attitude was the one that I had most frequently adopted to protect my mind against the official "ex-cathedra" preached ideology.

There are however instances when even the most neutral and placid minds revolt. For me such a moment came when I was being taught Darwin's theory of evolution. Yes, I thought that survival of the fittest might be correct, but then amoebas are not worse equipped to live and survive on this earth than man and higher mammals. Why would there not be just a great variety of amoebas, bacterias, viruses, etc.?

This very reasonable question might cast some serious doubts upon the usefulness of Darwin's theory to explain *all* about the origin of man. However, the major thesis that the development of life could result in an interplay of two blind factors: chance variations and natural selection, is not refuted.

Nevertheless the article¹ in question, written by a physicist, seems to contain such a refutation, to have Darwin's theory of evolution—at least in its original version—completely destroyed. I use the word "seems" purposely. For the argument that Dr. Holroyd uses against Darwin is incredibly simple. So simple that in spite of its logical coherence one is tempted to become

suspicious about it and keep asking; if it is so obvious, why could not the scientists have said it earlier?

Well, there are some very good reasons explaining this fact. Darwin's theory was published when the statistical methods of reasoning had not yet been firmly introduced even into physics. In the period that followed, biologists, generally speaking, had very little knowledge of physics or mathematics. One can perhaps also say that physicists and mathematicians tend to be rather narrow minded and few take interest in general matters, outside their specialty.

All this being true however one cannot forget the major psychological factor: courage. To oppose deeply ingrained superstitions and beliefs, to be alone against all the scientific community, to risk one's career and prestige, requires either total innocency and unawareness or a great intellectual and moral courage. A child could say, "the king is naked," out of inborn simplicity and straightforwardness, but when a scientist does it, we cannot hesitate in attributing him with full merit for the act.

Dr. Holroyd's direct argument against Darwin's mechanistic theory of development of life is based on the impossibility of realizing the full trial-and-error (in Darwin's language: chance variation and natural selection) processes of which man—or other complex forms of life—would be an outcome. The interval of time that has elapsed since the formation of the earth is too short for trying even a small fraction of the total number of configurations and structures which could be made up of groups of all molecules contained in more complex living organisms.

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