

PHILOSOPHY, EVOLUTION, AND ECOLOGY

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MAN, THE NEWCOMER

The world is very old, and man is a newcomer in world history. Scientists, by means of radioactive dating and related technologies, are able to provide information on archaeological, geological and paleontological events and determine the ages of planetary surfaces, stars and the Milky Way galaxy. Scientists put the origin of the universe somewhere between 13 to 20 billion years. From this beginning, the earth is said to be 4.5 billion years old; the first life appeared 2 billion years ago; and the first man surfaced on the face of the earth a million years ago.¹ The world is very old, and man is very young.

If we are to compress cosmic history into a span of one calendar year, the earth would be born on September 14, proto-life would appear on September 25, and man would appear on December 31 at 10:30 P.M. Today would be the first second of New Year's Day.² Today is the age of widespread development of science and technology, emergence of a global culture, first steps in a spacecraft planetary exploration and the search for extra-terrestrial intelligence. Today is also characterized by the acquisition of the means for self-destruction of the human species and environmental degradation.

What is the future of man? What is the fate of planet earth? Will man senselessly destroy the ecosystems that support life in this planet? Or, will he be able to maintain a sustainable earth and eventually build a new humanity?

“SUFFERING EARTH”

The Big Bang theory remains to this day the most plausible scientific theory about the origin of the universe. Astronomical evidence makes it almost certain that it must have been an original mass of matter which exploded in the beginning due to some violent cosmic concurrence. The big original chunk split up into a huge number of astral fields which are being pushed further and further apart. In this process the loss of heat occurs. Astrophysicists say that a star's structure is tied up with its heat. Above certain intensity of heat, there are only atoms. Below that intensity simple molecular combinations begin to occur. With still lower temperatures one gets more and more complex combinations. Thus, cosmic history is a long period of “cooling off” and complexification.

“Mother Earth” is a minute particle of the Big Bang. Since its origin the earth has been a “suffering earth” for it has gone through geological formations, glacial periods, and cataclysms. Certainly the earth has witnessed, suffered, and survived countless volcanic eruptions even worse than Pinatubo. Through 4.5 billion years volcanic eruptions, earthquakes, floods, tidal waves, hurricanes, and all violent forces of nature have incessantly battered the earth.

These catastrophes, however, may be seen as pangs of birth. In time “Mother Earth” bore something “new” something “more” than crass matter, a “plus” in being: life was born on earth. Thus, the evolutionary thrust, of “getting-more” becomes evident.

The appearance of first life and its gradual development, like the origin of the cosmos, may theoretically remain fascinating phases of world history. However, the appearance of man as a continuing phase of the process poses various difficulties.

CAN SPIRIT COME FROM MATTER?

The possibility of spirit coming from matter becomes a problem already with the first appearance of life. The problem becomes acute

when we trace the origin of man. Where did man come from? Did it come from non-life (matter)? Is man, body and soul, also a product of the evolutionary process?

This very simplistic answer is that first life and first man came from God. But there is a principle admitted in philosophy and theology that a higher explanation (supernatural) may not be invoked when natural one suffices. "To invoke the extraordinary, the miraculous, in explaining the course of natural events is not good theology, nor is it good biology or cosmology. The theologian, as well as the scientist, is bound by an important axiom, *God works in an orderly fashion through natural causes*. As long as natural causes are available, the theologian, the philosopher and the scientist should seek them."³

This does not mean that God's creation is now made superfluous because a natural explanation is found. Natural explanation presupposes the leavening action of God's all-embracing causality. The explanation now of the origin of life and of man is creative evolution. God co-created this potentiality of spirit in matter, that is, the potentiality to life belongs to the very nature of matter.

Karl Rahner explains that if there was only crass matter in the beginning and that God works through the laws embedded in nature (matter), It follows that there must have been an essential ordination of matter to bloom into spirit. Matter then is nothing but a "solidified spirit" to be melted into spirit by God's action through evolutionary process. In fact, matter has some semblance of spirituality since it traces its origin to the spirit of God.

Matter, in its whole nature and being, is traced back to the creative act of God who is termed a "spirit". And however much it is implied by stressing the creation of matter that is reality does not simple emanate (as in pantheism) from the nature of God. (This is equally denied in regard to created spirit as well), and so is not an exteriorization or piece of God's reality, nevertheless the origin and what springs from it, even if this is created, cannot simply be completely heterogeneous and disparate. This is all the less possible as what has this material character is created by God essentially for the

sake of the spirit and as oriented towards it. Even from the point of view of purpose and finality, matter cannot simply stand side by side with spirit incommensurable with it.⁴

Matter, philosophically speaking, is essentially limited. Nevertheless, this limit can be lifted by God in the evolutionary unfolding. In this precisely consists the so – called “spirituality of matter”, i.e., that it can be liberated from its negativity. In this process of liberation, God remains the absolute transcendent Ground.

“STRUGGLE FOR EXISTENCE”

Charles Darwin (1809-1882) in *The Origin of Species* (1859), *The Descent of Man* (1871), advocated the general tendency of “getting–more” in plants and animals. Survival of the fittest or natural selection describes the struggle for existence among various species. Due to geometrical rate of increase of all organic beings, a severe struggle for life is inevitable. This “battle for life” involves the severest competition which “leads to the improvement of each creature in relation to its organic and inorganic conditions of life... an advance in organization.”⁵ At the same time, natural selection means extinction.

The “law of the jungle” is the law of Nature. Since the appearance of first life, the earth’s history has been that of variation, divergence, extinction of poorer species and emergence. “This preservation of favorable individual differences and variations, and the destruction of those which are injurious, I have called Natural Selection, or the survival of the Fittest.”⁶ The evolutionary thrust of “getting – more” goes on in spite of extinction of countless species.

Today, man intervenes in natural selection through his effort to preserve vanishing species. These humanly preserved species, however, remain specimens or living monuments of the environmental conditions. Human intervention or artificial selection, in the effort to improve breeds of plants and animals, involves the principle of preservation and extinction. The “wag-wag” and raminad”, for example, have given way to C4, IR 8, IR 20, IR 36; or the “self-supporting” chicken and pigs have been displaced in the marketplaces by mass-produced and financially satisfying ones.

The Darwin-issue, which today is not dead, is raised by creationists who fear the displacement of God. Creationists, who interpret the Bible literally, cannot reconcile creation with evolution. But Darwin never displaced God. He rather saw the greatness of God in ordaining matter to develop and bloom into spirit. The concluding paragraph of *The Origin of Species* reveals Darwin's over-all evolutionary thought:

It is interesting to contemplate a tangled bank clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting around, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so complex a manner, have all been produced by laws acting around us. These laws, taken in the largest sense, being Growth and Reproduction; Inheritance which is almost implied by reproduction; Variability from the indirect and direct action of the conditions of life and from the use and disuse: a Ratio of Increase so high as to lead to a Struggle for Life, and as a consequence to Natural Selection, entailing Divergence of Character and the Extinction of the less-improved forms. Thus, from the war of nature from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly flows. There is a grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that whilst this planet has gone cycling on according to the fixed law of gravity from so simple a beginning endless forms most beautiful and most wonderful have been and are being evolved.⁷

Indeed, the grandeur and beauty of God is seen when he “makes things themselves.” Thomas Aquinas himself pointed out that it was a wiser and more perfect way for God to govern through the instrumentality of natural causes; that God manifests his perfection of providence by working through his creation and its natural laws to

produce effects that would otherwise have to come by miraculous intervention upon nature.⁸

NEW LEVEL OF REFLECTION

Can we extend the evolution of life to the human species? Man poses a special difficulty because he is not only a living being but also a being composed of body and soul. Even if we admit of evolution of living beings, can we also admit of human evolution? If so, what about the “immediately created” human soul? What happens to man’s spiritual nature?

The animal is endowed with some kind of knowledge, namely, with a consciousness of things around it. Before man, this was a perfection achieved by the evolutionary thrust. But this power continued its irresistible advance. A step higher was taken: self-reflection. What was in the animal level a things-around-itself-consciousness. Man began to include himself as the object of thought. Man not only knows things around but his own self becomes present to himself. Reflection overflowed from things around him but his own self becomes present to himself. Reflection overflowed from things around him to his own self.

If... it is the fact of being ‘reflective’ which constitute the strictly ‘intelligent’ being, can we seriously doubt that intelligent is the evolutionary lot proper to man and to man only/ if not, can we, under the influence of some false modesty, hesitate to admit that man’s possession of it constitutes a radical advance on all forms of life that have gone before him? Admittedly the animal knows. But it *cannot know that it knows*: that is quite certain. If it could, it would long ago have multiplied its inventions and develop a system of internal constructions that could not have escaped our observation.⁹

Man’s self-reflection became a specifically new coating on the earth’s surface. Biosphere became noosphere. Teilhard de Chardin (1881-1955) says that evolution is nothing but an “ascent” towards consciousness. Consciousness is the substance and heart of life in the evolutionary process.

The threshold of reflection followed the divergence-convergence law. Pre-human life first proliferated, compressed, then specified. Specification was again followed by another multiplication, compression and emergence. When the ceiling of specification was broken, self-reflection arose. What was formerly used by evolution for development of species is now stepped up for the formation of the noosphere's coating.

After the expansion of the human species (quantitative improvement) followed its compression (qualitative improvement). When expansion reached its saturation point, civilization and culture began to emerge. The evolutionary energy operating before in proliferation is now used for qualitative improvement.

A break had to be found by the within of human species. This outlet is civilization and culture. This is nothing but case of a folding back of the evolutionary process. "...[T]he formation of tribes, nations, and finally of the modern state, is simply a prolongation (with the assistance of a number of supplementary factors) of the mechanism which produced animal species..."¹⁰

TOWARDS GREATER FREEDOM

Evolution is nature's irresistible thrust which begins with lifeless matter winding its way upwards through plants and animals and finally erupting itself in the appearance of man as the leading shoot. In man the evolutionary thrust has taken a new turn. It has spilled outside man and has become manipulable. Evolution is now under man's control, freedom. How fast this is accelerated depends on man's use of his freedom.

In evolution of animals, nature had to supply wings for birds, fins for fishes, etc. In a sense, they are at the mercy of nature. They had to wait until the nature provided them with these organs; likewise, they had to depend on nature. His developed psychic power (science and technology) took over nature's job. Man now determines when and how fast he flies and swims. Man does not have to wait for Mother Nature; he rather manipulates his cars, planes, ships, etc.; this gives him more freedom. He does not have to be airborne all the time, as the bird does; or be submerge in water all the time, as the fish does.

“Since man and in man, simple evolution tends gradually to mutate into auto-(self) evolution.”¹¹

We customarily say “Mother Nature” has provided eagles, bats, etc. with strong sensory powers. Thus, these are natural contrasted to artificial implying man-made things like airplanes and computers. Who, then, provided man with tremendous capacity to create these inventions? The answer depends on what view one has on man. If man is considered “apart from nature” then these phenomena are artificial; but if man considered in his dynamic dimension as an organic continuation of nature then these would be something natural in the sense that they are products of the same evolutionary thrust. It is the same “Mother Nature” that has given man the hunger and capacity to invent.¹²

In the pre-human level, the evolutionary push uniting atoms into molecules, molecules into cells, and cells into organisms, was evident. Evolution’s leap forward was consistently a leap for higher complexification and unity. Man’s evolution is no exception to this. Endowed with self-reflection and freedom the human cells are on the way to a still greater unity. But this unity will not be accomplished anymore “blindly” (determinism of biological evolution) but “freely” This movement towards unity in freedom is Love. Love makes one, and whoever promotes this unity in freedom promotes love.

SURVIVAL OF THE FITTEST OR SUSTAINABLE DEVELOPMENT?

Charles Darwin and Teilhard de Chardin, foremost advocates of evolution, are optimistic of the future. Speaking for the species, Darwin concludes:

Hence we may look with some confidence to a secure length. And as natural selection works solely by and for good of each being, all corporeal and mental endowments will tend to progress towards perfection.¹³

On his part, Chardin writes,

If indeed and almost limitless field of action lies open to us in the future, what our moral dispositions shall be, as we contemplate this march ahead? I can think of two, which

may be summarized in six words: *a great hope held in common*.¹⁴

Such optimism, however, easily becomes doubtful as we now observe man's misuse of his freedom. Even in his knowledge and technology man has continuously become a threat to himself and to the earth that sustains him.

Following the law of natural selection, man will survive. But his survival will be based on the "law of the jungle" wherein the rich, the powerful, and the mighty will reign. It is a "battle for life" where no moral issue will be at stake. Only the Nietzschean supermen who are "beyond good and evil" will thrive. The fittest will control nature in terms of monopoly and manipulation. Mother Earth will further suffer from ecologically destructive patterns of development.

Natural selection in the human species is characterized by greed and selfishness of a few. Thus, in the name of local, national, or world economy and development, more people will be impoverished, exploited, oppressed, and even literally exterminated.

Is there hope that man will eventually select himself in the full and responsible use of his freedom? Is there hope of an emergence of a new humanity wherein the good for all is "held in common" by government officials, economic and political leaders? Is there hope that natural resources be sustained and equally benefitted not only by the present generation but also by generations to come?

Teilhard de Chardin believes that rational thought is on the way to becoming more and more profound and the best thoughts of our best men will become more universal, more public property. This will result in more global concern for social justice and equity, more bridges built, more sophisticated communications system, more convenient transportations, etc. This in turn will accomplish a greater world-consciousness and unity. Leading to world peace perhaps? It all depends on how man will make use of his freedom.

Today's agenda must be that of a "sustainable development," i.e., the monumental task of reorienting all levels and forms of economy and development so that these take into account the need to keep ecosystems health.

As a guiding principle, sustainable development posits that economic activity of any kind must not be allowed to take place at the expense of future generations. Stated more positively, an ecologically sustainable society would pass on to its children a planet whose life-support systems and resource base are as well endowed as those that we received from our ancestors. Thus sustainable development is a means of achieving some rough form of inter-generational equity so lacking in our current paradigm.¹⁵

MAN, THE CARETAKER

The world is very old, and man is very young. As a son respects and takes care of an aging mother, so must man preserve and save the earth. Human freedom must now take over from natural selection. The vision and realization of a new humanity devoid of greed and selfishness depends on how man relates himself to Mother Earth. If incest is abhorred, so is destruction of the earth. Environmental abuse leads to genocide for it cuts off life-support systems.

Environmental concern is local, national, and global in nature. On the global level, nations must enter into environmental diplomacy side by side with socio-economic and political concerns. Before it is too late, nations must start building a framework for a just and sustainable global system. "The prediction that the global population will rise from five to ten billion over the next 40 years sets the deadline for significant change in human patterns of reproduction and consumption."¹⁶ Certainly, economic activity will increase during this short span of time. Thus, environmentalists get alarmed that the earth's ecosystems will not be able to sustain the additional burden if we do not substantially reorient our technology and development. The June 1992 Earth Summit in Brazil is a significant initial step towards saving the earth.

Local communities around the world, in the meantime, must not wait for international treaties to be handed down. International agreements take time to mature. Community efforts are more effective and immediate. After all, international agreements will be

eventually enforced at the local levels. So we can now take good care of Mother Earth by preserving biological diversity, combating deforestation, preventing soil erosion, protecting fragile coastal areas, conserving fresh water, regulating the manufacture and disposal of toxic chemicals, and other similar responsibilities of a caretaker.

ENDNOTES

¹ Raymund J. Nogar, *The Wisdom of Evolution* (Garden City, New York: Doubleday & Company 1963), 57-58.

² Carl Sagan, "A Cosmic Calendar" *Reader's Digest* (October 1979): 46-47.

³ Nogar, *Wisdom of Evolution*, 70.

⁴ Karl Rahner, *Hominisation* (New York: Herder & Herder, 1965), 55.

⁵ Charles Darwin, "The Origin of Species" in *The Great Books of the Western World*, Vol. 49. Encyclopedia Britannica, 63.

⁶ *Ibid.*, 40.

⁷ *Ibid.*, 243.

⁸ *Summa Theologica* I, Q22, a3; Q103, a6.

⁹ Teilhard de Chardin, *The Phenomenon of Man* (New York: Harper & Row), 165-166.

¹⁰ Teilhard de Chardin, *Man's Place in Nature* (New York: Harper & Row), 87

¹¹ Teilhard de Chardin, *The Vision of the Past* (New York: Harper & Row), 254

¹² *Ibid.*, 57.

¹³ Darwin, *Origin of Species*, 243

¹⁴ Teilhard de Chardin, *The Future of Man* (New York: Harper & Row), 72.

¹⁵ Steve Lerner, "Earth Summit," *Commonweal* (1991), X.

¹⁶ *Ibid.*