

## THE UNIVERSE IN TRANSCENDENTAL EVOLUTION

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### I.

HENRI BERGSON, in his *Creative Evolution* arrives at this cheerful conclusion: "The animal takes its stand on the plant, man bestrides animality, and the whole of humanity, in space and time, is one immense army galloping beside and before and behind each of us in an overwhelming charge able to beat down every resistance and clear the most formidable obstacles, perhaps even death."

Yes, not only the whole of humanity, but all other beings and things, animate and inanimate, organic and inorganic, individual and social, objective and subjective, are in a galloping charge, moving forward on a thousand fronts achieving ever new developments. The entire universe, physical, mental and spiritual, is in the process of unfolding, in the making, in the act of eternal creation, in the process of transcendental evolution in which all material continuities are the building-stones of spiritual continuity, holding in its unified plan and purpose the promise that man shall some day overcome his mean and mortal limitations and roam in happiness among the stars.

In the words of Nicodemus, "How can these things be?" To substantiate this liberal premise it will be necessary to get down to fundamentals.

### II.

All things are in the process of perpetual change; there is no such thing as a definite arrival at a time or place immune to change; nothing has yet been discovered to be at rest; Nirvana in final equilibration is an idle dream. Every particle of matter in the universe, from the infinitesimal electron to the gigantic sun, and the super system of the Milky Way, is in motion, changing position and form. The agencies of erosion are constantly at work remold-

ing the face of the earth, altering the mountains and valleys, and reshaping the islands and continents. Every blade of grass and every giant redwood, every creeping thing and every bird and marine monster swell the mighty chorus and add their note of harmony to the universal anthem of change.

By studying the effects of a long series of changes in any specific field a more or less definite trend in such changes will be observed. A nebula develops into a celestial system; an obscure bud unfolds into a beautiful flower; an egg gives forth an animal; a tribe develops into a nation. This trend or gradual unfolding of successive phases of growth, this process of spontaneous generation is called evolution.

Plant and animal life is here in great profusion because under the amorous wooing of the ardent sun life becomes a necessary corollary of cosmic development and evolves into the morphological and physiological characters which distinguish each specie and individual. No matter what origin is ascribed to man, or what species are introduced as his relatives, he is here in his present state of civilization, unlocking the secrets of nature, groping gradually toward more knowledge, more consciousness and more light, because he has evolved from lower forms, from primitive man, from barbarism and ignorance.

Many people have only a sort of monkey-notion of evolution. Because of a too literal interpretation of Charles Darwin's *Origin of Species* and his *Descent of Man*, the idea became current that man descended from the monkey and to some minds this idea eclipsed all the rest of evolution. But now that Dr. Henry Fairfield Osborn has come forward with the discovery that man did not pass through a stage of tree-life, but emerged a free-running, bipedal being on the high plateaus of Central Asia, it is hoped he has definitely "knocked the ape off the family tree," and the monkey-shine should come to an end, anti-evolution legislation included.

In certain circles the impression prevails that the doctrine of evolution had its beginning with Darwin and Spencer and ended with Huxley and Haeckel. As a matter of fact the theory of evolution is as old as European philosophy and is still in the ascendancy to-day. The basic idea of evolution was conceived by Thales, who lived about 600 B. C. This ancient philosopher held that water was the first principle, or universal substance, from which all

things developed, thus fathering the idea of the marine origin of life, adhered to to-day by many biologists.

But the first real naturalist and more or less scientific evolutionist was Aristotle. In his *Physics* and *Natural History of Animals*, are set forth remarkably accurate observations of nature, including both plants and animals. He discovered a hereditary chain, including about five hundred species of mammals, birds and fishes in the list, and extending from the lowest animals to the highest, man.

Though St. Augustine interpreted the "days" in the creation as given in "Genesis" to mean "long and indeterminable periods of time," thus showing a leaning toward the evolution idea, yet as a whole, neither Christian Platonism nor Scholasticism had much time for scientific research, and the theory of evolution lay dormant during the Middle Ages.

Then Copernicus came and with one blow shattered forever the frail celestial shells of Ptolemy that had encompassed the heavens for nearly a thousand years. A static earth, the footstool of God, around which the sun and the planets revolved in great circumferences, was pried loose from its moorings and sent whirling through space. The earth became one of the planets, revolving on its own axis in its orbit around the sun; in fact, the earth became a minor satellite of a minor sun. The old order of the medieval world passed away and man commenced his long effort to rebuild with thought a new heaven and a new earth. Kepler and Galileo started where Copernicus left off, and then Giordano Bruno widened the scope of speculation by the conception that the so-called fixed stars are distant suns giving light to other systems of planets. The entire universe appeared in a new light inviting and inspiring the mind of man to new observations, to new discoveries and new knowledge.

Toward the end of the eighteenth century Laplace developed the Nebular hypothesis which held that the solar system was born of a whirling cloud of gaseous matter, which theory is now superseded by the Planetesimal hypothesis—meteoric material and cosmic dust evolving into systems by the process of accretion. Regardless of theories, however, the nebulae are there, celestial systems, new and old, are in the making, in the process of evolution. The universe, as it now exists, is the result of a long series of changes which are so far related to each other as form a series of growths analogous

to the evolving parts of growing organisms, such as traced in the evolution of plants and animals.

Leaving the evolution of the celestial systems for the time being we must go back to Bruno and record the fact that he recognized a physical relationship between man and various of the lower animals. This was only a step toward the transmutation of species among animals suggested by Buffon in 1750, which was followed by Lamarck's theory of the inheritance of acquired characters. Thus the foundations were gradually laid for the epoch-making achievements of Charles Darwin and Herbert Spencer, the two great apostles of the evolution theory.

The hypothesis of Darwin's *Origin of Species* is that different species originated in spontaneous variation and were propagated under the law of the survival of the fittest through natural selection and the struggle for existence. The true naturalist that he was, his theories were the outgrowth of observations based on many years of research and the widest reach of scientific knowledge. Though causing a storm of controversy at first, his doctrine blazed the trail for extensive researches by Huxley, Haeckel, Weismann, and many others. Though largely outgrown to-day, his theory served the purpose of directing scientific thought for years.

Herbert Spencer developed the philosophical side of the subject, extending the doctrine of descent to cover the subjective as well as the objective field. He defined evolution as a progress from the homogeneous to the heterogeneous, from general to special, from the simple to the complex elements of life. He held that this progress can be traced, not only in the multiplication of types and species among animals and plants, but that it holds good in the formation of worlds in space, in the origin and changes in languages and the arts, in the changes of human institutions, in religion, ethics and society.

While Spencer was acclaimed as the philosophic exponent of the spirit of his age, and then outlived the height of his own popularity, while his fame vanished almost as suddenly as it had come, this does not becloud the permanent influence he exerts on modern thought. At the close of the nineteenth century evolution as a principle was acknowledged by nearly all scientists and philosophers. It had become an established fact in nature—a valid induction from man's knowledge of natural order.

Nor has the first quarter of the twentieth century been lacking in

evolutionary development. Evolution is the science of growth and it is still growing. Darwinism is undergoing modifications, and in the forges of science and philosophy the principle of evolution is undergoing daily development; in fact it has been given a new interpretation by Henri Bergson's "Creative Evolution." According to Will Durant, "a distinguishing feature of John Dewey's philosophy is the undisguised completeness with which he accepts the evolution theory." Dr. Osborn, perhaps the greatest living paleontologist, is also a noted evolutionist. The theory of relativity holds eminently enshrined the name of Dr. Albert Einstein, and it may seem intrusive to class him as an evolutionist, but his relativistic doctrine can be sighted as a concrete example of new development in the evolution of the science of space.

Paleontologists and anatomists, embryologists and geneticists, scientists in every field, are studying, experimenting and comparing, not to determine whether evolution is a fact, but to discover what lessons the fact of evolution teaches—how evolution may be employed to advance the knowledge and progress of mankind.

In reality evolution is more than a theory, more than a principle, more than a dogma to be believed in—it is a process to be recognized; but whether recognized or not the process exists active and actual in eternal creation. The development of the evolution theory is but a history of man's awakening to the fact of evolution—a history of man's slow and gradual discovery of this perpetual process in eternal creation.

### III.

There is, however, another phase to the subject which has not been mentioned in the foregoing development of the evolution theory, and that is the phase of decay and dissolution—evolution in reverse. If change implies growth, it also implies decay; growth and decay go on at the same time in all living organisms, in all systems, objective or subjective. The flower that blossoms so beautifully soon withers and fades away. Man lives to conquer the forces of nature only to be subdued by the forces he conquers. Astronomy is a study of celestial systems in the making and in the unmaking; even the brightest suns will run their courses and fade like flowers. In a sense the penalty of death is written across the face of the universe.

To quote Will Durant on Herbert Spencer: "The earth will be a chaotic theatre of decay, a gloomy drama of energy in irreversible

degradation; and it will itself be resolved into the dust and nebula from which it came. The cycle of evolution and dissolution will be complete. The cycle will begin again, and endless times again; but always this will be the denouement."

However, Durant hastens to point out that this is merely speaking from the materialistic view point. Evolution received its development in a materialistic age and to a large extent was expressed in quantitative categories. Darwinism and materialism are so closely allied that they are regarded as synonymous terms. According to Albert Lange materialism is well founded only when it means mechanism, absolute negation of final causes; and, as Kant has demonstrated, the physical sciences, to which materialism is limited, cannot reach or explain the thing-in-itself, the absolute.

Materialism has its definite limits, and so have the physical sciences as such; but wisdom does not die with them, nor is all knowledge buried here in "irreversible degradation." Knowledge goes beyond the physical sciences; it runs out into the wide ocean of metaphysics.

Every physicist knows that no particle of matter can ever be destroyed, that matter is eternal. He knows that no physical energy can ever be dissipated, that energy is eternal. He knows that the atom is an aggregation of negatively charged particles of electricity, or electrons, which revolve at enormous rates around a central nucleus of protons carrying a positive charge—matter in ceaseless dynamic action. He knows too that light is nothing more or less than free electrons, always traveling at the highest velocity of which matter is capable of traveling. In short, matter of every form spells physical continuity, and the physical universe is not a gloomy drama of inertia and death, but an ever changing, ever evolving, everlasting firmament of power, teeming with vibrant action, development and life-matter spiritualized, as it were.

As a matter of fact, every atom has within it a concrete and positive proof of eternity, more positive than the positivism of Comte. All matter is eternal and is eternally in motion causing eternal changes. Death is destruction of form only, not of matter: matter remains and takes on new form. Dissolution is only a turn in the cycle of evolution, as necessary to it as the night is necessary to the day. The gloomy fatality of materialism, therefore, is dispelled by the knowledge of physical continuity, and by the knowledge that behind every physical science lurk the higher problems of

metaphysics. The tombs of materialism have been made empty; death and dissolution are transfigured into resurrection and life.

#### IV.

According to Bergson time is the essence of all reality. He says, "the past in its entirety is prolonged into the present and abides there actual and active . . . Duration is the continuous progress of the past which gnaws into the future and which swells as it advances." Thomas Browne holds a similar view when he says, "what to us is to come, to His Eternity is present, His whole duration being but one permanent point." Eternity is infinite, without beginning and without end. In eternity all things are in the present tense, in the active mood. Eternity, through the aeons of time man calls the past and the future, is precipitated into the present and "abides there actual and active." The universe is in the making in which all time is the present time. Evolution is the process by which the cycles of eternity roll and unfold in perpetual creation; the heavens reflect eternity's perpetual achievement. Worlds and suns may freeze and then melt again to be resolved into the dust and nebulae from which they came, but all matter is the eternal property of the active and perpetual cycle of evolution.

The universe is seen to be under laws that express thought and plan which certainly are not the thought and plan of man. Who is the author of these laws, of this thought and plan? Professor Compton and Professor Heisenberg, two modern scientists, answer, "a Directive Intelligence;" Voltaire says, "a Workman infinitely able;" and Spencer replies in absolute certainty, "the Infinite and Eternal Energy." We may add to these answers a Supreme Consciousness, an Infinite Will, Creative Energy, Etc., and we have expressed only attributes of the one Supreme Being, the one answer, God. God conceived the thought and plan of the universe and wrote the laws into the book of nature; the method of his eternal creation is the process of evolution. He is not only the creator and invariable sustaining order of the universe, but his plan includes a purpose, a direction, a process of development toward an ever higher order, toward a spiritual transcendency—eternal creation with a meaning. This process is best expressed as the universe in transcendental evolution.

Contemplating the stellar universe, the silent orderly procession of the worlds, the music of the spheres, the eternal harmony of the heavens, Kepler exclaimed, "O God, I read thy thoughts after

thee!" Humanity is a part of nature, the best part, the only part of creation that can read God's thoughts after him. It will, therefore, be necessary to give special consideration to man's sphere in the process of transcendental evolution.

In "Genesis" it is recorded that "the Lord God formed man of the dust of the ground." From all that is known this process of creation may well have included the whole long line of ascent from amoeba to man as set forth in the science of evolution. The conception that man has risen from a low and humble form of life, that he has slowly overcome the brute by force of mind and reason, by the exaltation of the spiritual over the physical, certainly fits in with the entire process of transcendental evolution. It is a noble conception of the method and purpose of the Directive Intelligence, and provides for further development, for continued creation.

Though we may never agree as to the route by which man came here, we do know when he arrived here—when he looked up and said, God. It was then that God "breathed into his nostrils the breath of life; and man became a living soul." An animal does not perceive thought, does not perceive plan, does not perceive God. A creature that can grasp the thought of God, can think God, is more than a physical creature. He is intellectually united and has a conscious relation to God. He is eternal like God is eternal.

John Fisk says: "The more thoroughly we comprehend the process of evolution by which things have come to be what they are, the more we are likely to feel that to deny the everlasting persistence of the spiritual element in man is to rob the whole process of its meaning. . . . According to Mr. Spencer, the divine energy which is manifested throughout the knowable universe is the same energy that wells up in us as consciousness. Speaking for myself, I can see no insuperable difficulty in the notion that at some period in the evolution of humanity this divine spark may have acquired sufficient concentration and steadiness to survive the wreck of material forces, and endure forever. Such a crowning wonder seems to me no more than the fit climax to a creative work that has been ineffably beautiful and marvellous in all its myriad stages."

Recognizing that all matter, all physical forces, all mental energies are eternal, then who will deny this "fit climax" to the creative work of evolution—the soul, the self-conscious, I related to the imperishable and everlasting Consciousness, and with him imperishable and everlasting.

Dr. H. D. Curtis, director of the Alleghany Observatory, is quoted as saying: "What we crudely call the spirit of man makes new compounds, plays with the laws of chemical action, guides the forces of the atom, changes the face of the earth, gives life to new form and takes it away from millions of animals and plants." Man makes the wilderness blossom like a rose; he makes the fields yield rich harvests in endless varieties; he lays low the forests and plants new ones; he directs the production of domestic animals and develops them in endless varieties of breeds; he harnesses the force of electricity, makes it run factories, railroad trains and automobiles, and makes it light the world and facilitate communication by telegraph, telephone and radio; in short, man is a co-creative force, a redirected force, "a center of creative evolution," as Bergson puts it. Man is a sum of contingency, a portion of the Supreme Consciousness entering into the world, a certain quantity of creative energy of possible action. In a small way, each human being is a subagency of the Directive Intelligence carrying out the supreme plan in the eternal process of evolution, a co-creator with God.

According to Bergson, "for a conscious being, to exist is to change, to change is to mature, to mature is to go on creating one's self endlessly." Day by day man is renewed in body, mind, and spirit, constantly rising on stepping stones of his dead self to better and higher things. Over each buried hope a resurrected hope arises. From tombs of doubt and darkness man rises daily into realms where the spirit of life weaves the fabric of a higher and higher destiny. In the consciousness of his divine vision he has made all graves empty, with the stone rolled away where hope and love lay buried once in doubt, and from which they have arisen to sit upon the throne of eternal aspiration. History is replete with conflicts stern and bitter, but for each Gethsemane there is a Mount of Transfiguration. Man weaves no longer a spotted life of shreds and patches, but lives in the aspiration of universal unity. He is growing in depth of reality toward the actualization of ideals and in spirit enters more and more fully into the Universal Spirit, merging his consciousness with the consciousness of God. Day by day he is transfigured by the eternal process of transcendental evolution.

The exaltation of the spiritual over the physical nature of man is not limited to individual evolution only, but spells social evolution as well. It indicates a growth toward a greater social ideal;

it means a social system transfigured by love and mutual service. It is for the community, for its business life, its political life, what it is for the individual man and woman. It means all humanity evolving toward a common brotherhood growing gradually in the spirit of helpfulness and good will; it means a world growing richer and more beautiful with the life and love of God. It is what Christ had in mind when he taught his disciples to pray for the coming of the Kingdom.

For the individual and for society transcendental evolution means eternal attaining toward the spiritual, toward the Divine Nature. It bids fair to overcome all obstacles and usher in the millennium when death shall be no more, when man shall turn a thousand years into a day and eternity into a permanent point of duration, when man shall roam among celestial spheres and enjoy the splendors of the universe.

#### V.

It will be perceived on reflection that the entire process of evolution is pregnant with a unified order and purpose, planned, guided and directed by a Creative Intelligence, who is more than the material with which he creates, in whose hands the universe is but so much raw material in the construction of a sublime masterpiece, a divine system, spiritually approaching the Master Builder, himself. Through the entire process of evolution there runs a current of spiritual exaltation over the material, as in the case of man, mind directs the body and spirit directs the mind. To designate the process as Transcendental Evolution, therefore, is to recognize the fact that all material continuities are the building-stones of spiritual continuity, that an unseen hand, a spiritual force, directs the entire process of creation toward an ever higher destiny.

However, the Goliath of materialism is not to be slain by the David of spiritualism, but guided and directed by him: the two are brothers and one takes up the work of the other. Too long man has been thinking in terms of combat, in terms of opposing forces, one seeking to destroy the other. Too long man has been deaf to the music and harmony produced by a unified universe in which harmony is king and contradiction is an outlaw. Too long man has been unmindful of the cosmic order and its unified plan and purpose that permits of no contradiction.

In view of existing conflicts and bloodshed, clashing of ideas

and confusing controversies on every hand, man may seem far from the goal of universal understanding and order; but through the accumulation of truth gathered from ten thousand fields of research, and stored in the wisdom of the ages; through the eternal process of transcendental evolution, human beings shall some day survive the night of doubt and discord, shall some day overcome all obstacles and shall stand as children of the dawn looking hopefully forward toward a grander day, toward a fuller realization of the eternal harmony toward which all creation is advancing.

A study of human progress proves that man has traveled some distance, and the past holds the promise to the future that this rising current shall yet rise more swiftly, that man will continue to grow in knowledge and wisdom and in consciousness continue to approach the Universal Consciousness until he overcomes even death, and attuned to eternal harmony, encompasses the stars as pleasure islands.