PIERRE TEILHARD DE CHARDIN'S PERSONALIZING UNIVERSE

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PREFACE

The purpose of this paper is to expose the personalization motif in Teilhard's works. While involved in research on Teilhard, I noticed the lack of an English language article which traced and emphasized personalization. This missing emphasis stimulated me since Teilhard ends his The Phenomenon of Man stating that "the only universe capable of containing the human person is an irreversibly 'personalising' one." Personalization then must be central to his doctrine. This paper follows his mechanism of Complexity/Consciousness working on all material levels to show its culmination in effecting personalization.

I wish to acknolwdge the stimulating guidance and assistance of Father Brice J. Howard, O.S.B., my adviser and teacher. My gratitude is expressed to Mister Robert Joyce of Saint John's philosophy department, and to Sister Mariella Gable, O.S.B., of Saint Benedict's College for their helphful discussions on Teilhard. For closely reading this thesis, and for a patient and persistent demand for scholarly form, I express my appreciation to Professor Joseph Heininger. Further acknowledgement is due the staff of Saint John's University Library for permitting me extensive use of Teilhard's works.

Finally, my appreciation to my brother-in-law, Mister Francis J. Sofio who assisted me in the early formation of my first draft, and to my parents for their unfailing encouragement throughout these three years of Honors Program study.

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The Lord said to Abram, after Lot had separated them,

"Lift up your eyes and look from the place where you are, northward and southward and eastward and westward; for all the land which you see I will give to you and to your descendents forever."

Genesis 13: 14-16

CHAPTER I

INTRODUCTION

1. Life and Works

Marie-Joseph-Pierre Teilhard de Chardin was born on 1 May 1881, at Sarcentat, D'Orcines, near Clermont-Ferrand in south central France.[1] He was the fourth of the eleven children of Emmanuel and Victoire Teilhard de Chardin.[2] Emmanuel Teilhard de Chardin was a "gentleman farmer" who specialized in the history of his own province of Auvergne. He possessed a "strong cultural bent" and was a wide reader, especially in his "favorite subjects: farming, hunting, and racing." From their early years he directed his children's readings. They learned Latin before entering secondary school and were encouraged to "make natural history collections" of birds, insects, and stones.[3] Thus Pierre acquired a taste for natural history collections, and at an early age observed and worked with nature.

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[1] Claude Tresmontant, Pierre Teilhard de Chardin: His Thought (Baltimore, Maryland: Helicon Press, Inc., 1951), p. v.

[2] Nicolas Corte, Pierre Teilhard de Chardin: His Life and Spirit (New York: The Macmillian Company, 1960), p.1.

[3] Claude Cuenot, Teilhard de Chardin: a Biographical Study (Baltimore, Maryland: Helicon Press, Inc., 1965), p.2.

A youthful encounter with the perishability of matter, observed at the burning of a lock cut from his head, revealed to Teilhard the ephemeral and fleeting nature of matter. He found in his "genie of iron" a treasure "incorruptible and everlasting."[4] Even though iron also perished through rusting, it became, in all forms (keys, staples, nails, et al.), his childhood God.[5] This youthful worship of "God-Iron" matured into a kinship with the cosmos possessed by few men.

Teilhard's formal schooling began in 1892 at the secondary level of the Jesuit college of Notre Dame de Mongré at Villefrance-sur-Saône.[6] During his years here he became attracted to the Jesuit life, and on 20 March 1899, at seventeen years of age, he entered the Jesuit novitiate at Aix-en-Provence.[6]

While in philosophy at the Jesuit house on the English Isle of Jersey,[7] Teilhard developed an interest in science,

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[4]Cuenot, p. 5.

[5]Corte, p. 4.

[6]Tresmontant, p. v.

[7]The French Jesuits received their training in England because in 1901, with the lois d'exception, their activities were restricted. And in 1902, with the accession of Combes to the Premiership, anti-clericalism in France reached its zenith. As a result the French Jesuits left for England and the Channel Islands. Cuenot, p. 6.

especially geology. In 1905, after Jersey, he was assigned to teach chemistry and physics in Cairo. He returned, in 1908, to the French Jesuit house at Ore Place, Hastings (Sussex), England, for his theological training. The twenty-fourth of August 1911 marked his ordination into the priesthood.[8]

From 1912, Père Teilhard became increasingly involved with great men and Man. His scientific life began in 1912 when, sent to Paris to study paleontology, he met the noted scientist Marcellin Boule, then professor of paleontology at the Paris Museum.[9] Immediately, at Boule's Institute of Human Paleontology, he initiated a friendship with abbé Breuil, the later great figure in pre-historical studies.[10] These men, and an introduction to evolution through Bergson's Creative Evolution, converted Teilhard to a study of evolution.[11]

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[8] Tresmontant, p. vi.

[9] Pierre Marcellin Boule (1861 to 1942). French geologist, paleontologist, and physical anthropologist, and a specialist in fossil man, born in Montsalvy, France. He was the founder of the Institute of Human Paleontology in Paris, professor at the Musée Nationale d'Histoire Naturalle, and author of several scientific works, most notably Les Hommes fossils (Fossil Men, 1921). He received the Legion of Honour (commander), and edited the magazine, L'Anthropologie. Encyclopedia Britannica, Vol. IV, pp. 13-14. The New Century Cyclopedia of Names, (ed.) C. L. Barnhart; Vol. I (N.Y.: Appleton-Century-Crofts, Inc., 1954), p. 599.

[10] Cuenot, p. 17.

[11] Cuenot, p. 35.

By 1924 Teilhard was participating in World War I as a stretcher-bearer.[12] The war stimulated him, and gave balance to his seminal thoughts on man and man's meaning. For the war revealed the extremes of deterioration to which man can come, and the impact of evil on the lives of individual men. But his dedication to man did not flag; for when discharged on 10 March 1919, Teilhard was awarded the croix de guerre and the medaille militaire.[13]

The same year brought a degree in natural science from the Sorbonne, and in March, 1922, he received his doctorate from the University of Paris. For his doctoral defense of a thesis on Lower Eocene mammals, Teilhard received high academic praise from the thesis examiners.[14]

Until his death Père Teilhard developed his stature in the scientific world until he could be justly described as "one of the outstanding paleoanthropologists, Pleistocene geologists, and Cenozoic vertebrate paleontologists of our time."[15]

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[12] Tresmontant, p. vii.

[13] Tresmontant, p. vii.

[14] Cuenot, p. 30.

[15] H.L. Movius, "Obituary," American Anthropologist, LVIII (Fall, 1956), 147-150.

From 1923 Père Teilhard also became a world traveller. With interspersed periods in France Teilhard spent most of his time in China, with side trips to India, Southeast Asia, South America, and the United States.[16]

He first journeyed to Tientsin, China in 1923 with Father Emile Licent.[17] China became his land of scientific growth, and in 1928 Teilhard's field work culminated in the co-discovery of Sinanthropus pekinensis.[18] Besides the fossil riches she offered, China stimulated Teilhard's thoughts on man. Here was a country which offered a "voyage which was all in the past" to a "Pilgrim of the future."[19] China was a reference library for Teilhard's scientific analysis of man, and for his preparation of the science he called hyperphysics. But the Chinese soul was in Teilhard's eyes "turbid, vague, materialistic, down to earth and agnostic."[20] This was a lament, for China offered a view only for eyes looking back into time. Nevertheless, Teilhard's confidence in the future of man enabled him to

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[16] Tresmontant, p. vii.

[17] Cuenot, p. 44.

[18] Cuenot, p. 86.

[19] Corte, p. 28

[20] Cuenot, p. 54.

write:

> I have been convinced that the right thing for me to do...is to express and defend my conviction that we are progressing (because of Socio-technico-mental convergence) towards an ultra-human, and towards a higher center of that ultra-human.[21]

In 1938 he systematized these thoughts into his major work, The Phenomenon of Man.

This theory of evolution broadened and deepened with travel, especially in Africa where his observations reenforced his belief that man was moving ahead. The paleontological work in Africa confirmed this belief in "anthropodynamics."[22] Extensive travel, from 1932 to 1938, brought him from China to Burma, France, Batavia, and the United States.[23] During these visits he lectured, and observed, on evolution.

The Jesuit Order was cautious about the publication of Teilhard's works on evolution. They thought that he left little room "for 'special creation' or for divine grace." Therefore, they refused him an imprimatur[24] and explicitly

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[21] Cuenot, p. 233, quoting Teilhard's letter of 30 April 1952. The quotes in the body of the text by Teilhard are not introduced, but all others are.

[22] Cuenot, pp. 330-338.

[23] Cuenot, pp. 202-203.

[24] Martin Jarrett-Kerr, C.R., quoted in Corte, p. x.

told him not to write any more philosophy.[25] Martin Jarrett-Kerr, C.R., adds that,

> Moreover, he was not allowed to let his name go forward as a candidate for a Professorship in the Collège de France (one of the highest honors in that country: as a sort of reprisal he was elected a Member of the Institute (1950), as he had previously, in 1947 been made an officer of the Legion d'honneur). He was not allowed, from 1947 till the day of his death, to give public lectures in France: and 1954 was forbidden to travel from New York to attend an international paleontological congress in Paris, called by his friend Jean Piveteau.[26]

These censures culminated in a September, 1947, ecclesiastical monitum.[27] No controversy arose since Teilhard was "out of the way, in China," but, more precisely, because Teilhard obeyed, until his death, the wishes of his Mother, the Church.

Early in June of 1947 Teilhard suffered a myocardial infraction which held him fifteen days between life and death.[28] This attack, plus Rome's heated disapproval, affected his decision to travel to the United States and South Africa in the early fifties. He hoped "to ease the situation by retiring from the scene."[29] These last years

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[25] Cuenot, p. 246.

[26] Martin Jarrett-Kerr, C.R., Ibid.

[27] Monitum--an official or legal notice; specifically a formal notice from a bishop requiring that an ecclesiastical offense be amended.

[28] Cuenot, p. 262.

[29] Cuenot, p. 274.

were spent with the Wenner-Gren Foundation for Anthropological Research, an American foundation.[30]

Before his death Teilhard was honored as a Member of the Académie des Sciences; Director of Research for the Centre National de la Recherche Scientifique; Honorary Member of the New York Academy of Science; and Honorary Member of the Royal Anthropological Institute.[31]

Teilhard incorporated his evolutionary theory of hyperphysics in numerous papers, the major works being: The Phenomenon of Man (1955), L'apparition de l'homme (1956), The Divine Milieu (1957), The Future of Man (1959), L'énergie humaine (1962, Le groupe zoologique humain (1956).[32]

Pierre Teilhard de Chardin died on Easter Day, 10 April 1955. And in the Jesuit tradition he received a simple funeral and interment at the Order's novitiate, Saint Andrew-On-Hudson, Poughkepsie, New York.[33]

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[30] Tresmontant, p. vii.

[31] P. Garrod, "Obituary," Man, LV (1955), 70.

[32] Cuenot, p. 479. The dates of publication are those of the first French releases. Though these works were written in earlier years, most of Teilhard's papers were published posthumously.

[33] Tresmontant, p. vii.

This brief outline of seventy-four years cannot convey the intensity of life and love of mankind which possessed Teilhard. He was as Cuenot has called him

> a "son of Demeter" to whom earth itself, its shape and structure and stratification, was not only an experience to be enjoyed, but a neighborhood to be explored and a mystery to be investigated. Unlike many naturalists he had inherited a sense of relationship between the organism and its environment which has now become characteristic of medical and biological research. From the study of rocks to that of fossils and so to the records of evolution and of human origins had been his development during his boyhood in Auvergne and Jersey, his youth in Egypt and at Hastings, and his maturity in the Museum of Natural History in Paris.[34]

Teilhard's experience with nature and with man formulated itself into a world view which sees the cosmos evolving in time, space and matter: his hyperphysics.

2. A Theory of Hyperphysics

Teilhard's hyperphysics is a theory based on a scientific Ariadne's thread.[35] For from the first strands in his early relation with 'God-Iron', he grasped for the thread of a meaning for life. "All through his life he struggled to understand the human and religious meaning that lies behind

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[34] Charles E. Raven, Teilhard de Chardin: Scientist and Seer (New York: Harper and Row, Publishers, 1962), p. 49.

[35] Ariadne: King Minos's daughter, who gave Theseus the thread by which he found his way out of the Monotaur's labrynth. He took her with him, but later deserted her. Webster's New World-Dictionary (New York: The World Publishing Co., 1959), 79.

the advance of the sciences and particularly of biology."[36]

This Ariadne's thread was the law of recurrence, i.e., the law of Complexity/Consciousness, which links matter and spirit. Teilhard states that this "is not an a priori, geometric synthesis starting from some definition of being," but rather an experiential law of recurrence, verifiable on the phenomenal sphere, and which can be properly extrapolated to the totality of space and time. "Thus here is no abstract metaphysics but a realistic ultraphysics of union."[37] This new science is defined by James P. Reilly:

> In short, ultraphysics represents an all-embracive view of the phenomena of experience. It is a vigorous affirmation that man's scientific knowledge is not so dissimilar and segregated as it would first appear, or as many would have us believe. When seen in its totality, from the standpoint of ultraphysics, man's scientific knowledge points to a unity that the individual concern for unity, typical of Teilhard's thought, is a concern not only for the unity of knowledge of the phenomena, but also a concern for the unity of the phenomena themselves. For him, evolution furnishes the principle of unity that will resolve the problem of unity and multiplicity at the level of the phenomena.[38]

Teilhard rejects the old metaphysics and purposes that

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[36] F. Russo, Review of The Phenomenon of Man, America, CIII (April 30, 1960), 185-189.

[37] Tresmontant, p. 14.

[38] James P. Reilly, "A Student of the 'Phenomena'," The World of Teilhard ed. Robert Francoeur (Baltimore, Maryland: Helicon Press, Inc., 1961), p. 54.

essence be understood as genesis.[39] Essence understood as genesis is a result of his observational method which led him to re-define matter and spirit as matter-spirit.[40] All existents, from the micromolecule to reflective man, are seen, structurally, as co-extensive correlations of matter and spirit. Matter and spirit, in their basic unity, are further defined as energy. Robert Francoeur expresses this Teilhardian energy concept as

> Two forms of one and the same basic energy, radial energy (within) which includes every form of psychic energy or consciousness from the affinity of molecules to the love of human beings, and tangential (without) or physical energy. Radial energy is responsible for the synthesis produced by evolution in the course of time, the synthesis of electron, proton, and neutron into the atom, the synthesis of atoms into molecules, cells and organisms, and then the synthesis of individual human beings in the Omega. Tangential energy links an element with other elements of the same complexity and centreity while radial energy leads to an increase of complexity and centreity.[41]

This energy concept Teilhard derived from the evidence of biological evolution. Arthur J. Knodel comments:

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[39] J.E. Bruns, "God up ahead or up above?", Catholic World, CXCI (April, 1960), 26.

[40] Brainard Cheney, "Has Teilhard de Chardin really joined the within and the without of things?," Sewanee Review, LXXIII (Spring, 1965), 217-236.

[41] Robert Francoeur, "Evolution and 'Panpsychism' in Teilhard de Chardin, " American Benedictine Review, XII (June, 1961), 212.

> So much impressed was he by the ordering of data made possible by biological evolution that he began seeking ways to extend this configurative principle both backwards and forward: backward into pre-biological domains and forward into domains where biology is forced to assimilate psychology and human history. And that, of course, is how he came to regard evolution as the cosmic process par excellence with biological evolution as only one segment of that process.[42]

Energy, within cosmic evolution, brought Teilhard to investigate genesis in relation to man's physical and psychic make-up.

Teilhard found his thread originating in the inorganic world and it led him to the organic life. But this genesis was just commencing when man appeared, for he found modern man to be still a Neolithic man.[43] Modern man has not really freed himself from a sense of a static world or from a primitive view of biological evolution. This modern neolithic man does not realize genesis; but he must, for "in these confused and restless zones in which present blends with future in a world of upheaval, we stand face to face with all the grandeur, the unprecedented grandeur of the phenomenon of man."[44] And this phenomenon is that man is at the

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[42] Arthur J. Knodel, "A 'Gentile's View," The World of Teilhard ed. Robert Francoeur, p. 81.

[43] Pierre Teilhard de Chardin, The Phenomenon of Man (New York: Harper and Row, Publishers, 1959), p. 205. Hereafter referred to as: PTdeC, and the PM.

[44] PM, p. 274.

bottom, at the top, and at the center of the cosmos.[45] For an understanding of life, men must realize where they are in relation to all life.

Evolution is a process which demands a new terminology and an extended definition of old terms. Teilhard "regards evolution as a fourth dimension, the dimension of duration, a dimension of thought and a viewpoint which helps man understand the unique instantaneous creative act."[46] In its process evolution takes time, but time as measured in millions of years. Discussion in these terms takes a vocabulary of observation, e.g., of layers forming in time--geosphere, biosphere, noosphere; and a sense of becoming, again in evolutionary time, e.g., geogenesis, biogenesis, noogenesis and cosmogenesis. These terms are necessitated because Teilhard insisted that "at the outset on the fundamental point that (despite all contrary appearances and prejudice) to regard animate being, not as a fortuitous by-product, but as the characteristic and specific higher aim of the universal phenomenon of evolution."[47] In this view

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[45] PM, p. 281

[46] Robert Francoeur, "Teilhard de Chardin," Homiletics and Pastoral Review, LXI (October, 1960), 37.

[47] PTdeC, The Future of Man, trans. Norman Denny (New York: Harper and Row, Publishers, 1964), p. 216.

evolution is not "static dualism" but "directed evolution," e.g., of genesis.[48] Evolutionary genesis meant that evolution not only occurred but is occurring. Nature evolved from molecules to primate man. Now and in future time, primate man is still evolving but, most emphatically, primate man is the evolving shoot, the direct line of this continuing cosmic evolution. Thus "man only progresses by slowly elaborating from age to age the essence and the totality of a universe deposited within him."[49]

Teilhard does not drop his Ariadne's thread and flee into the present. For the thread has brought him from the cave of the past to the level of the present, and it remains taut into the future. Man's essence cannot be understood by an analysis of the past and the present, for Teilhard's thread led him to genesis, and genesis revealed to him the phenomenon of spirit-matter. His reflection on spirit-matter reveals the characteristics of evolution: unity, continuity, and irreversibility.

> The necessary condition which must be present so that humanity may consent to cooperate in the work of evolution is "for the world to be constructed in such a way that thought, which has evolutively issued from it, is warranted to judge itself irreversible in the essentialities of its conquest," **that is, that con-

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[48] PTdeC, "Le coeur de la matiere," (1950); quoted in Tresmontant, p. 57.

[49] PM, p. 180.

> sciousness which is the flower, as it was, of complexity in one way or another must escape the decomposition from which, all things considered, nothing can preserve the corporal and planetary stock which bears it. From the moment that it thinks of itself, evolution will no longer be able either to accept or to prolong itself unless it recognize itself as irreversible, that is to say immortal.[50]

This irreversibility validates his extrapolating to the concept of cosmogenesis, i.e., seeing man, the reflective animal, as progressing to a center of centers, an Omega Point.

Cosmogenesis is effected through the complexification of the tangential (without) energy, a complexification which brings the radial (within) energy to a state of reflexion.[51] At each stage of reflexion, the radial and tangential change states. The most noticeable of these changes of states are from the inorganic to the organic, and from the sentient to the reflective. At each stage, there is a perfecting of

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[50] PTdeC, **"La structure phylétique du group humain," p. 76; rest of quote is a paraphrase of "Le revondissement humain de l'évolution et ses conséquences, " Revue des questions scientifique (April, 1948), p. 178; quoted in Tresmontant, p. 43.

[51] Reflection is the power of conscious thought which distinguishes man from all other living creatures (the animal that not only knows but knows that it knows.) Reflexion: the species Man differs biologically from all other species in that, instead of spreading out fanwise, breaking into sub-species and falling eventually into stagnation, it coils inward upon itself and thus generates new (spiritual) energies and a new form of growth--a process of Reflexion which is part and parcel of the phenomenon of Reflection. PTdeC, The Future of Man, p. 9

centers, i.e., a more complete union between tangential and radial; thus the consequent higher nature of the newly evolved existent. Teilhard reflects: "Living forms...tend towards more advance organization and increasing psychic power, as though some law of gravity.... were continually drawing them in the same direction... (that is) evolutionary 'gravity'."[52]

It is evident to him that biological evolution is more markedly cosmic in nature; and that, though man has reached a near cessation of anatomical evolution, cosmic evolution continues (through man: the highest matter-spirit center) to evolve in the psychic, radial sphere. Furthermore the next level of genesis must be a center of centers where man will be perfectly centered. In that reflection reveals person, so this new center of centers must be a personal center. The goal for man, then, is personalization.

For Teilhard "the universe is a collector and conservator, not of mechanical energy, as we supposed, but of persons."[53] All of this stems from a common sense observation that

> What an absurd thing life is, on the surface.... So absurd that one is thrown back upon a stubborn and desparate faith in the reality and the survival of the Spirit. Otherwise--I mean, if there

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[52] Olivier Rabut, O.P., Teilhard de Chardin: A Critical Study (New York: Sheed and Ward, 1961), p. 16.

[53] PM, p. 272.

> is no such thing as Spirit--we would be imbeciles not to go on strike against all human effort.[54]

And so from a youthful reverence for the inorganic, Teilhard has grasped an insight into the nature of all life, and especially that of its leading shoot, man. His hyperphysics can be outlined as:

> Centreity
>
> 1) Fragmentary--"pre-centric," non-living Matter; not a true 'within' but a disposition for withinness.
>
> 2) Phyletic--development of phylum; transmission of centreity and within.
>
> 3) Self-centrism--development out of phyletic union of an ego.

The pre-living centers are constructed by addition; the phyletic by cellular multiplication; and the self-centric by emergence, of its own accord with Omega.[55] This observation results in three theorems:

> I. Life is not an epi-phenomenon in the material universe, but the central phenomenon of evolution.
>
> II. Human reflection is not an epi-phenomenon of the organic world, but the central plan of vitalization.
>
> III. Socialization is not an epi-phenomenon in the sphere of reflective life but the essential phenomenon of Hominization.[56]

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[54] Corte, p. 49, quoting Teilhard.

[55] PTdeC, "Centrology, An Essay Towards a Dialectic of Union," Oeuvres de Teilhard de Chardin (Éditions du Seuil), V, trans. Robert Francoeur, pp. 3-5.

[56] PTdeC, The Future of Man, p. 215.

As emergence progresses to emersion,[57] man, the personal, becomes more fully personalized through the cosmic process, and so more fully personalizes the cosmos.

This is the environment in which Teilhard finds the cosmos: a universe being personalized, and man personalizing. Here the aim is a presentation of Teilhard's hyperphysics with an exposition of personalization as its motif. A thorough analysis of Teilhard's thoughts would require volumes. Consequently, many points will be sketchily expressed. While no exploration of the theological aspect of Teilhard will be attempted, this is recognized as the segment of his synthesis which he considered the crown.[58] The personalization process will be exposed as seen culminating from the evolution of the molecule to man. This process is fulfilled in God-Omega, but the God-Omega will not be discussed except in its hyperphysical significance. The full breadth of this concept is developed in The Divine Milieu.

The following chapter will present the term, personalization, and then show how personalization is the natural result of cosmic evolution. Personalization will be seen coming forth from Teilhard's Complexity/Consciousness principle within a closed system of evolution. The term of this system is the Omega which is personal and personalizing.

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[57] PM, p. 308

[58] Paul de Lauwe, "Social Evolution and Human Aspirations," trans. Josephine Wtulick, American Catholic Sociological Review, XXIII (Winter, 1962), 307.

CHAPTER II

THE PROCESS OF PERSONALIZATION

1. Personalization Defined

The structure of Teilhard's evolutionary hyperphysics is unified by the process of personalization. His description of matter as matter-spirit, and as having a "within" and a "without" rests on the principle,[1] that what is present now was always here in some form. And with a sense of continuity what is here in evolution must have a future. This means, as E. R. Baltasar states, that

> In an evolving universe, to stay put is to die, permancy is falsehood; process is truth. The reason is that the domain of being and truth is the future, and the only way to attain the future is to be in time. To be outside time, then, is untruth; while to be in time is truth. Instead of assimilating time into substance and so destroying its reality, we should bring substance into time, making it process, and thus restore to time its reality.[2]

Teilhard does not see man as the term creature of evolution. A creature who, through reflective knowledge, determines his actions and controls his world with a perspective of "How shall I act since in less than one hundred years I shall die." Man knows and acts with perspicacity, realizing that he is in time. He is precedented in history. He presently acts reflectively and retrospectively. But he is evolving, he is

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[1] PM, p. 146

[2] E.R. Baltasar, "Teilhard de Chardin: A Philosophy of Procession," Continuum, II (Spring, 1964), 96.

evolution reflecting upon itself. Through his actions he is always in all time. The past is matter for reflecting on, the future is a dedication stimulating him for action.

In that evolution connotes process, and the continuance into the future, man's essence can be described as reflective genesis. His "I" is in process of birth.[3] Therefore, by a natural process, man is becoming more and knowing more. Baltasar observes that

> There are two levels in man: the level of the objective--nature; and the level of the subjective--personality. Personality is not for the sake of nature, but nature for the sake of personality.[4]

Man and nature are one in their goal of achieving full personalization.

Nature evolving strives to effect a creature whose physical make-up will ensure survival. Man is extremely adaptable, but anatomically vulnerable. Through his mental activity man has increased his adaptability and reduced his naked vulnerability. Nature has evolved man who has developed his personality to adapt to and advance nature. The nature evolving and man personalizing correlative extends from and through all time and space.

Man's personalization assumes cosmic proportion.[5] His

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[3] Baltasar, p. 97

[4] Ibid.

[5] Cuenot, p. 350. Cf. PM, p. 180.

degree of personality is a phenomenon which affects cosmic evolution. As a reflective center he knows his environment, but, moreover, he can affect his environment.

> We are not dealing with an immutably fixed focus but with a vortex which grows deeper as it sucks up fluid at the heart of which it was born. The ego persists by becoming ever more itself, in the measure in which it makes everything else itself. So man becomes a person in and through personalization.[6]

"Then when zoologically and psychologically speaking, man... is perceived in the cosmic integrity of his trajectory, (he) is still only at an embryonic stage--beyond which...the ultra-human already silhouettes itself."[7] Man is, in Teilhard's orthogenic perspective,[8] the "arrow pointing the way to the final unification of the world in terms of life."[9]

This cosmic personalization process is of the physical, not the metaphysical order. This process "represents certai general conditions which the totality of our experience must satisfy."[10] Furthermore, Teilhard sees that this personal-

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[6] PM, p. 172

[7] PTdeC, "Le coeur de la matière," 1950; quoted in Tresmontant, p. 38.

[8] Orthogenic: "But my considered opinion is that the wor is essential and indispensable for singling out and affirmin the manifest property of living matter to form a system in which 'terms succeed each other experimentally, following th constantly increasing values of centro-complexity.'" PM, p.

[9] PM, p. 223.

[10] PTdeC, "Le rebondissement humain de l'évolution," p. 1 quoted in Tresmontant, p. 47.

ization[11] will result in a structure "richer and better organized...(which) will correspond to a more developed consciousness."[12] This new structure, the Omega Point, "will be the natural result of the natural causes."[13] That though the personal is increasing quantitatively and qualitatively in the cosmos,[14] Omega is not just the sum of the parts of the evolutionary process, but it is a new structure.[15]

Personalization has its pains of becoming: 1) it starts from plurality; 2) it progresses by differentiation; 3) it leads to metamorphoses.[16] This personalization then, is the creative difference in cosmogenesis.[17] For evolution's personalization not only creates and sustains spirit-matter, through the nature of the Complexity/Consciousness

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[11] PTdeC, "L'énergie humain"; quoted in Tresmontant, p. 56.

[12] PM, p. 60.

[13] Rabut, p. 215.

[14] PTdeC, "Centrology...," p. 10.

[15] PM, p. 110.

[16] PTdeC, "Sketch of a Personalistic Universe," Oeuvres de Teilhard de Chardin (Éditions du Seuil), III, trans. made under Teilhard's supervision. p. 18.

[17] PTdeC, "Centrology...," p. 9.

process, but it also draws, through the nature of Omega. Olivier Rabut notes that Teilhard believes in a "force of gravity" which activates the growth and succession of the phyla. Rabut is critical when he states that Teilhard "is inclined to relate this general tendency to a cosmic phenomena which he regards as its chief cause."[18]

From his observations Teilhard has seen, from an analysis of life in time, the natural description of matter as matter-spirit. And the further description of evolution as unfolding through a Complexity/Consciousness method. But he sees that "The only universe capable of containing the human person is an irreversibly 'personalizing' universe."[19] With foresight, the future must be an Omega Point. A personalizing point biologically evolved,[20] which draws, unites and fulfills life through love.[21] An attractive and personalizing love which reveals Omega as a Person.

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[18] Rabut, p. 26.

[19] PM, p. 290.

[20] PM, p. 265.

[21] PM, p. 263. Cf. The Future of Man, p. 119.

2. The Mechanism of Complexity/Consciousness

From his observational station Teilhard sees that all material levels manifest similarities from which he can formulate general principles. The basic principles he maintains are: 1)Nothing can appear that has not been prepared from all eternity; and 2)The universe is always at work perfecting itself.[22] After reflecting on these principles he accords "primacy...to the psychic and to thought in the stuff of the universe, and...(to) the 'biological' value...(of) the social fact around us."[23]

Synthesizing Teilhard sees that

> each element is not only coextensive with the totality of space, in the sense that the total stuff of the universe is at work in it, but it is coextensive with the history of the whole; if we look at its preparations and its prolongations, we see that it is coextensive with the whole of time.[24]

This relationship of matter (complexity) and spirit (centreity) is expressed metaphorically as an "ellipse on two conjugate foci: a focus of material organization and a focus of psychic centering--the two foci varying solidarily and in the same sense."[25] Matter, then, reveals itself as <u>in</u> a

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[22] Rabut, p. 29.

[23] <u>PM</u>, pp. 30 and 71.

[24] Rabut, p. 28.

[25] <u>PM</u>, pp. 60-61.

state of genesis. A genesis marked by critical phases of granulation and growth by complexity.[26]

Granulation is the characteristic atomicity and corpuscularity of matter. It is a common property of both the "within" and the "without".[27] These "energy-faces" of granules are affected proportionally by the Complexity/Consciousness process. Claude Tresmontant examines the nature of a complexity. He writes that

> Complexity is not simple aggregation. Complexity must be understood as that quality possessed by a being when that being is, firstly, formed by a greater number of elements, and in which, secondly, these elements are more closely organized among themselves.[28]

An example of simple aggregation is the arrangement on the Periodic chart. The total number of nuclei present do not form a complexity, they form a heterogeneity. "Complexity is an organized heterogeneity." Crystallization is an example of a simple summation of individual patterns. A true complexity is a consistent number of elements which constitute a unit (a "closed whole") with a determined radius, e.g., atoms, molecules, cells, metazoa, man.[29] This defini-

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[26] PM, p. 49.

[27] PM, p. 59.

[28] Tresmontant, p. 25

[29] PTdeC, "Le groupe zoologique humain"; quoted in Tresmontant, pp. 24-25.

tion is constant, and is characteristic of all energy levels including the mental and spiritual life of man in society.

Progression to higher levels of consciousness is effected through increasing complexity. A complexity which builds up such a hyper-intensity as to attenuate the phenomena at a point of convergence. This hyper-tension, as Robert Francoeur asserts,

> culminated in a critical point, a point where pre-life and its consciousness could finally break the limitations of matter. When the combined impetus of tangential and radial forces climaxed, certain elements on the surface of the earth leapt the critical threshold that separates life and non-life.[30] (Italics mine.)

This is the modus operandi of evolution expressed as the law of Complexity/Consciousness (law of recurrence). From which it is "abundantly clear that emergence in the course of evolution can only happen successively and with mechanical dependence on what precedes it."[31] A crucial distinction is defined between this physical interdependence and the individual autonomy of each new level reached.

> These multiple zones of the cosmos envelop without imitating each other in such a way that we cannot pass from one to another by a simple change of coeffecients. Here is no repetition on a different scale. The order and design do not appear except in the whole. The mesh of the universe is the universe

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[30]Robert Francoeur, The World of Teilhard, pp. 13-14.

[31]PM, p. 270.

itself.[32] (Italics mine.)

Consequently, Teilhard conceives of a cosmic evolution, not linear, but phyletic.[33] A phyla contains "large, natural, hierarchical groups,"[34] in which the evolving elements (e.g., genus, species) increase by complexity and progress through convergence. A meaningful identity occurs because a natural classification of matter according to its inner structure (true complexity) would reveal a succession by an "historical order of birth."[35] An historical order which is further exposed as continuing in the primates, and specifically through man, characterized by the increasing complexity of the nervous system. A system with its control center situated in the cranial region.

Teilhard terms this phenomenon the drift of cerebration. He observes that "the drift of Complexity/Consciousness (leading to the formation of corpuscles more and more anatomically complicated) is easily recognizable from the atomic formations onward, and it asserts itself in the

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[32] PM, p. 45

[33] Rabut, p. 27.

[34] PM, p. 113.

[35] Tresmontant, pp. 25-26.

molecular structures."[36] This phenomenon is clearly observed among the living organisms, where this "growing perfection and cephalization of the nervous system" gives us a "concrete and precise yardstick...to follow the absolute and useful variations of cosmic corpuscularity through the jungle of living forms."[37] Cerebration parallels biology's systematic classifications, regardless which animal group is being studied. Life is now seen as "rising higher in the direction of larger brains."[38]

Two principles result from the cerebration phenomenon:

1) The principal axis of cosmic involution (or of 'corpusculization') traverses the earth through the branch of the mammals.

2) The terrestrial axis of corpusculization traverses through the order of primates, more precisely, through the family of anthropoid.[39]

The impulse forward of Complexity/Consciousness, moving through and centered on man (due to cerebration) confirms

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[36] PTdeC, "La structure phylétique du groupe humain," Annales de paléontologie, 37 (1951); quoted in Tresmontant, pp. 34-35. Cerebration and Cephalization both connote the evolutive characteristic of increasing brain size, and the centering of nervous tissue in the brain. They are used interchangeably.

[37] Tresmontant, p. 35. Cf. Rabut, p. 235

[38] PTdeC, "Super-humanite," (1943); quoted in Tresmontant, p. 33. Cf. PM, pp. 145-146.

[39] PTdeC, "Le groupe zoologique humain"; quoted in Tresmontant, p. 34. Cf. F. Russo, Review of PM, in America, CIII (April 30, 1060), 185ff.

Teilhard's theory that cosmogenesis is a directed (orthogenic) cosmogenesis.[40] A directed process that has the pervading rhythm of personalization.[41] Here, on the strictly tangential level, is observed the evolution from molecules to the nervous system of man. Since the tangential has the correlative radial aspect of energy, it is observed that at this level of complexity that the radial characteristic becomes prominent.

The increase of consciousness is effected through the organic involution of the universe upon itself.[42] Not only does the molecule coil up upon itself, through complexity, but so does and must the planet.[43] Though man knows relatively little about the planets and their history, Teilhard sees that in cosmogenesis they are "vital points of the universe." "It is through them that the axis now passes, and it is upon them that the efforts of an evolution orientated principally towards fabrication of great molecules

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[40] PTdeC, "Réflexions sur l'ultra humain," (1950); quoted in Tresmontant, p. 21.

[41] PTdeC, "Centrology...," p. 17.

[42] Cyril Vollert, "Towards Omega: the vision of man," Theology Digest, VIII (Fall, 1960), 134.

[43] PM, p. 73.

henceforth concentrates.[44] The cosmos becomes a true complexity when it is realized that it has a center--earth's evolution.

In its groping for life,[45] nature has filled the earth with reflective centers. These centers are reaching a state of tension, since "1) the world is a globe and this forces 2) coalescence of the branches of humanity, so that we have only one human species. This results in a natural cohesion of humanity; it is yielding a great global unity."[46] This unity is a megasynthesis. A megasynthesis is a cosmic synthesis which encompasses all the structuring and arrangements during the course of evolution. It is cosmic since all the comsogenic tensions are concentrated on earth's evolution to evolve a reflective center, man. And man finds in this megasynthesis the milieu in and through which he can, in unity with all mankind, advance toward a spiritual renovation of the earth. Taking this cosmic, central evolution in perspective, Teilhard terms the mechanism, planetization.

This planetization is a factor of Complexity/Consciousness. This is the factor which gives meaning to the defini-

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[44] PTdeC, "Vie et planètes," p. 157; quoted in Tresmontant, p. 28.

[45] PM, p. 110.

[46] J.F. Ewing, "The Human Phenomenon," Theological Studies, XXII (March, 1961), 96.

tion of evolution as "creation expressed in time and space,"[47] for

> Planetization pressures a 'critical point' of Reflexion in the biological unit (which) becomes the critical point of Inflexion for the phyla, which in turn becomes the point of 'circumflexion'...for the whole sheaf of inward-folding phyla. Or one may take it in terms of psychic centration, phyletic intertwining, and planetary envelopment: two genetically associated occurences which taken together, give birth to the Noosphere.[48]

Once more, these "-flexions" of evolutionary movements proceed orthogenically[49], i.e., by controlled additivity. A controlled additivity results from the concentrated tensions of cosmogenesis, and it makes earth the main vehicle of radial complexity. These tensions are concentrated and attenuated in the evolution through man--anthropogenesis. Anthropogenesis is increasingly intensified by the coalescing and confining characteristic of planetization cited above.

Each advance in complexity is simultaneously a spiritual advance. For the "radial energy is goal seeking, purposive, directing, and organizaing; in short, it gives meaning to matter."[50] The principal movement is a "synthesis in the

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[47] PTdeC, "La place de l'homme dans l'univers," (1942); quoted in Tresmontant, p. 19.

[48] PTdeC, The Future of Man, p. 159.

[49] PM, pp. 108-109

[50] J. Edgar Bruns, "Cosmogenesis and Theology, "World of Teilhard, ed. R. Francoeur, p. 175.

course of which plurality is reduced to corpuscles of increasing complexity."[51] On the pre-reflective level radial advances are effected by tangential complexifications, never by their own complexifications. But when we realize that nature is now fixed and "fluid" only in the psychic realm,[52] then we must change "increasing complexity" to increasing consciousness.[53] The tangential complexification slows down when it reaches a true center. This is analogous to the stability achieved in the cosmos with its centering-activity relegated to earth. Now, the process of true centering is continued through radial complexification and the ultimate goal of personalization. This radial centering is marked by general characteristics.

Up to the Pliocene epoch, "the organized mass forming the biosphere...seemed to be led rather than leading in the terrestrial history of evolution."[54] But between the Pliocene and the human world which succeeded it, "there is not only a difference in degree but a change in order....

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[51] Tresmontant, p. 29

[52] PTdeC, The Future of Man, pp. 13-15

[53] PM, p. 59.

[54] PTdeC, "La structure phylétique du groupe humain," Annales de paléontologie, 37 (1951); quoted in Tresmontant, p. 40.

differentiates him from all other existents, for he is a rational animal and a homo faber.[59] Though other animals can imitate man's actions to an extent, evolution has selected him for continuation in the radial sphere.

In retrospect, we see, with Francoeur, that in the Tree of Life there are

> three main branches: the plant world, where consciousness has gone into a deep sleep in simple tropism; the insect world, with consciousness imprisoned in a shell of chitin; and the vertebrates, where consciousness blossoms into sense perceptions.[60]

Evolution now continues as anthropogenesis, a particular continuation (hominoid to man) of the biogenic impetus in cosmogenesis.[61]

Two anthropogenic principles are deduced from the universal law of Complexity/Consciousness: 1) Human organization is a continuation of morphological evolution; 2) it will culminate in a superorganism made up of individuals just as the individual is made up of cells.[62] The over-all picture must be kept in mind. As lower material levels reached a hyper-tension and a point of convergence, so will

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[59] Homo Faber: Term applied to the hominoid ancestors who made tools and used instruments.

[60] Francoeur, World of Teilhard, p. 17.

[61] Tresmontant, p. 36.

[62] Rabut, p. 99.

man. This time the effect is a radial centering characterized in man as personalization.

The early stages of anthropogenesis find reflective man as an individual, which means that he is not just an animate element and part of a phyla,[63] but an evolution within himself. Man is defined as evolution reflecting upon itself.[64]

From Neolithic times on there is a marked decrease in the influence of somatic factors and an increase in the influence of the psychic.[65] This evolutive condition characterizes the beginning, within anthropogenesis, of hominization.[66]

> Hominization can be accepted in the first place as the individual and instantaneous leap from instinct to thought, but it is also, in a wider sense, the progressive phyletic spiritualization in human civilization of all the forces contained in the animal world.[67]

This term must be seen in its logical sequence. As cosmogenesis concentrated its central genesis in earth's

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[63] PM, pp. 172-173.

[64] PTdeC, "La réflexion de l'énergie," p. 493; quoted in Tresmontant, p. 43.

[65] PM, p. 206.

[66] PM, p. 173.

[67] PM. p. 180

evolution, and evolution found its channel through the primates (anthropogenesis), so the initial emergence of reflection, of a true center, is termed hominization. Man has now become a someone: from a grain of matter, to a grain of life, to a grain of thought.[68] With the "grain of thought" the process within hominization of progressive centering is personalization.

Mankind seeks itself and grows.[69] Man reacts directly to his personalizing force[70] and "(he) realizes (himself) in the concrete moments of its historical existence." The individual, within the structural giveness of the situation, comprehends the "meaning or sense of the situation as his situation and exteriorizes himself in action of the spontaneity of his own being."[71] The individual realizing his spiritual power naturally drifts into association with those of his spiritual species.

Reflective man now has the power of synthesis and organization.[72] This power results and functions in a period

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[68] PM, p. 173.

[69] PM, p. 177.

[70] PM, p. 271.

[71] Richard M. Frank, "Social Evil and the Human Species," American Catholic Sociological Review, XXIII (Winter, 1962), 314.

[72] PM, p. 259.

of socialization.[73] Socialization is in continuity with the characteristic of association, which is manifest among lower forms, in reference to the process of Complexity/Consciousness.[74] There is explicitly manifest a natural drift towards complexity. Thus it is in a complexity that the individual elements can approach a hyper-intensity. This socialization, then, is more properly a natural hyper-physical result, for

> It would manifestly be an error to extend the curve of hominization in the direction of a state of diffusion. It is only by hyper-personalization that thought can extrapolate itself.[75]

To garner the conquests resulting from man's spiritual activity, the centers must associate and communicate with the other centers, i.e., personalization is the ensuing reward of person to person intercourse.

Progress is then equated with growth of consciousness, and growth of consciousness equals the effect of union. These equalities are manifest, not in individual man, but in collective man.[76] It is in and through socialization

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[73] PTdeC, The Future of Man, p. 38.

[74] PM, p. 107.

[75] PTdeC, The Future of Man, p. 258.

[76] PTdeC, The Future of Man, p. 69.

that mankind will reach the ultra-human.[77] The ultra-human will be a change of nature resulting from a change of state, and, again, the mechanism is Complexity/Consciousness.

A characteristic developing in man through increased socialization (both physically and mentally) is that man can no longer see himself "unrelated to life, nor life unrelated to the universe."[78] Since there is no limit ascribable to the growth of consciousness,[79] socialization offers the possibility of greater psychic growth through the effect of union. For, as Baltasar perceives,

> The end of being is fulness by a process of growth; but growth always presupposes 'ground,' and hence it is through union that the end of being is attained. The plant attains its end not by its own powers alone but more fundamentally through rootedness in its ground; the foetus attains its birth through vital union with its womb; the feminine attains fulness through union with the masculine; and the "I" attains full personality through the powers of the "Thou" cooperating in fruition. Being attains self-sufficiency only in union.[80]

Growth and union, in the light of continuity and the characteristics of Complexity/Consciousness, reveal that "there is an identical function for the element as for the

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[77] PTdeC, "Le coeur du problème," (1949)' quoted in Tresmontant, pp. 38-39.

[78] PM, p. 34.

[79] PM, p. 230.

[80] Baltasar, Continuum, II, 94.

sum of the elements brought together in a synthesis."[81] This exposes the fact that the effect of unionization and personalization take place not only through but also in Omega. Not only through but also in Omega. What does this phrase imply? Precisely, that as we come closer to realizing how and why man is the center of cosmogenesis, we realize that the rise to new levels is not only effected by Complexity/Consciousness, intensity and convergence, but that the rise is also drawn by a higher nature. The progress of growth and union throughout cosmogenesis not only evolves, orthogenically, a reflecting center to culminate in personalization, but personalization reveals that the process is drawn by "evolutionary gravity." This "evolutionary gravity" is the attraction of personalization as exhibited by Omega.

> Thus it would be mistaken to represent Omega to ourselves simply as a center born of the fusion of elements which it collects, or annihilating them in itself. By its structure Omega, in its ultimate principle, can only be a distinct center radiating at the core of a system of centers; a grouping in which personalization of the All and personalization of the elements reach their maximum, simultaneously and without merging, under the influence of a supremely autonomous focus of union.[82]

We should presently look at the problems personalization incurs and at the nature of Omega as discerned by Teilhard and expressed in light of the cosmic continuity.

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[81] PM, p. 260.

[82] PM, p. 262.

3. Hyperphysics and Personalization

As the opening pages of this chapter indicate, Teilhard's cosmic hyperphysics is unified when Omega is realized as personal and personalizing. However, though this personalizing process is going on, and will reach a natural end in Omega, there are still multiple conflicts (discontinuities, evil) on the individual personal level. Teilhard sees the conflicts, or discontinuities, as a consequent lack of future sight. Discontinuity in continuity are two phases (or more exactly two directions) of the same reality moving around us. Difficulty in realizing these as the necessary concomitant characteristics of any action results from an attempt to isolate either phase and abstract it, and then define and discuss it as a fixed notion, i.e., pure plurality or pure simplicity. "In the nature of things the one is inseparable from the other. And this for the good reason that one appears essentially as the consequent synthesis of the other."[83] This is the perennial conflict of the One and the Many. In Teilhard's hyperphysics this conflict takes the form of the Individual versus the Personal.

The first term in anthropogenesis is the <u>individual</u>, for Omega only draws directly the individual centers.[84]

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[83] PTdeC, "Esquisse d'un univers personnel," (1936); quoted in Tresmontant, p. 30

[84] PTdeC, "Centrology...," p. 11.

Hominization is the process within anthropogenesis in which the individual is personalized; but an important distinction in definition between an individual and a person must be remembered. The distinction recognized here is between the isolated individual who is outside union, and the personal individual, who is the result of union. For in the early history of man, with small societies and consequently small collectives, the effect of planetization and hominization were limited. The real evolution in personalization can only take place in a collective which is centered.

In keeping with the mechanisms of Complexity/Consciousness, for the individual to fulfill himself, for further complexity on lower levels, and for the release of consciousness on the higher, the collective is the essential environment. There is, as Cuenot notes, a

> priority of the collective over the individual, the collective being understood as a biological super-organization, allowing mutual consciousness of elementary individual consciousness. This is consciousness to the second power, a super-consciousness; for once the human threshold is crossed, consciousness continues to progress and grow.[85]

Concisely phrased this means: The isolated man no longer thinks and no longer grows. The personal individual "in his activity is a moment of the collective individualized."[86]

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[85]Cuenot, p. 234.

[86]Richard M. Frank, American Catholic Sociological Review, XXIII, 317.

This restates Teilhard's fundamental concept of union and uniting,[87] that is, "To be is to be united." (Esse est uniri).[88] Even in view of this necessity for growth, the free individual can refuse union. Though if he does, then he becomes a discontinuity.

Evolution's personalization occurs in the present since Omega is present.[89] This is a condition mentioned above, that the processes of evolution are immediate since there is not only the forward surge initiated by Complexity/Consciousness, but that Omega draws through "evolutionary gravity."

> Indeed, in order to satisfy its conditions of position and function, it is easy to see that Omega, such as our law of recurrence reveals it, must appear to our sight as everything at once: personal, individual, already partially active, and in part, also transcendent.[90]

Omega is personal in that it is the center of centers; individual in being a distinct center, but not separated; partially active in presently acting on us; and partly transcendent in being partially independent of the evolution

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[87] Cuenot, p. 39

[88] Cuenot, p. 253. Cf. Frank, American Catholic Sociological Review, p. 311.

[89] PM, p. 267.

[90] PTdeC, "Centrology...," p. 7.

which it crowns. But before we explore Omega we must explore the characteristics of the collective.

Man, if we momentarily isolate him from evolution, is seen as possessing an "axial value and a pre-eminent dignity,"[91] because he is the direct result of the orthogenic push of the cosmos through evolution. Man has been singled out to be the particle of matter which is personalized and which can, in turn, personalize the cosmos. In his struggle for self preservation man formed the multitude.[92] This multitude exposed man's dependency on his fellow man,[93] but as a multitude it was not a collective because it lacked organization or a center.[94]

The collective of itself does not effect psychism resulting from mere interconnections,[95] for it too must be centered and unified. This is properly speaking society (unified multiple) as opposed to collective (unorganized multitude.[96] Furthermore, the term unified multiple has

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[91] PM, p. 188.

[92] PM, p. 190.

[93] PTdeC, The Future of Man, pp. 193-194.

[94] Rabut, p. 45.

[95] Rabut, p. 46.

[96] PM, p. 61.

the characteristic of escaping the force of large numbers; and it has the ability to express itself in quality, i.e., its center, its interiority.[97] In a unified multiple the possibility of achieving fuller union, a real personalization, or a noospheric advance, can be effected through smaller numbers. Since they possess higher levels of centreity, a greater concentration and intensity accrues from fewer numbers.

Since growth and union and the anthropogenic personalization process are essentially within the phyla, the collective is still a natural and necessary state. For a phyla is 1) a collective body; 2) polymorphous and elastic; and 3) dynamic.[98] Man is the species whose actions affect the whole phyla,[99] since his personalization is the phyla's personalization. Therefore, we can see the necessity for the natural retention of the collective.

Teilhard maintains that the "grains of consciousness do not tend to lose their own lives and blend, but, on the contrary, they accentuate the depth and incommunicability of their egos."[100] The individual through the collective

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[97] PM, p. 61.

[98] PM, p. 114

[99] PTdeC, "La réflexion de l'énergie," p. 481; quoted in Tresmontant, p. 52.

[100] PM, p. 262.

is "formed and informed in the very core of his being,"[101] and he achieves fuller being by closer union.[102] The union is personalizing if the centers contact center to center and not otherwise.[103] The possibility for center to center contact is dependent upon the collective, and upon the interiority of each individual.

This 'intercentric nature' brings out the pulsebeat in personalization: the paradox--union differentiates.[104] The simultaneity of the two elements (differentiation and unity) is recognized as a condition of progress.[105] For to be is to-be-with; and being is always being-with-another.[106] The individual in process then must "be-with" in order to be truly in progress. To reach a level of centreity he must associate and open to other centers, or the orthogenic drive of genesis dies in his closed egoism. Only insofar as the

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[101] Frank, American Catholic Sociological Review, XXIII, 314.

[102] PM, p. 37. Cf. PTdeC, "Sketch of a Personalistic Universe," p. 5.

[103] PM, p. 263.

[104] PTdeC, "L'énergie humain"; quoted in Tresmontant, p. 55.

[105] Rabut, p. 205.

[106] Baltasar, Continuum, II, 91.

union grows does the individual grow,[107] and a growing (therefore true) union does not enslave or neutralize the individual, it super-personalizes him.[108]

A man can remain egoistic, but egoism is to confuse individuality with personality.[109] Since we noted that "no element could move and grow except with and by all the others with itself,"[110] we must come to another distinction. Ego-centreity is the centering of the individual upon himself and the opening of his center to union. Egoism is the denial of uniting and centering, it is an isolation of the center; thus limited, the individual center suffocates in its own closed ego. This reaffirms that "no object or substance in this union can be understood apart from the evolutionary unity of the universe in which it is situated and from which it takes its meaning and existence."[111]

A differentiating union can be achieved because every consciousness possesses the properties 1) of centering <u>everything</u> partially upon itself; 2) of being able to center

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[107] PTdeC, <u>Hymn of the Universe</u> (New York: Harper and Row, Publishers, 1965), p. 35.

[108] PTdeC, <u>The Future of Man</u>, p. 119.

[109] <u>PM</u>, p. 263.

[110] <u>PM</u>, p. 244.

[111] Baltasar, <u>Continuum</u>, II, 91.

itself upon itself constantly and increasingly; and 3) of being brought by this very super-centration into association with all the other centers surrounding it.[112] This "union differentiating" characteristic is most clearly observed from the union in the noosphere. The noosphere is the 'thinking layer' which is outside and above the biosphere.[113] Teilhard recognizes the noosphere as the effect of thought's birth on earth. This is the sphere which is growing constantly as radial advances and more perfect centerings are achieved, but the sphere which is presently not full. By its structure the noosphere "represents a whole that is not only closed but also centered."[114] The noosphere is closed in that it envelops the earth, but it is increasing, in time, as personalization approaches Omega. Men by participation in union can achieve fuller personality. Fuller personalities define the presence of the noosphere, and they reveal fuller definitions of man. In the noosphere homo sapiens can become homo progressivus, i.e., one to whom the "terrestrial future matters more than the present."[115]

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[112] PM, p. 259.

[113] PM, p. 182.

[114] PM, p. 259.

[115] PTdeC, The Future of Man, p. 137.

Homo progressivus is aware of Omega and of the personalization of union. His union with other centers is achieved through their mutual union with and in Omega. He does not lose his individuality, because Omega is an autonomous reality. Moreover, "since there is neither fusion nor dissolution of elementary persons,"(Omega) must necessarily be distinct from them, that is, it must have its own personality."[116]

Omega must have a personality because

> common sense is right. It is impossible to give oneself to anonymous number. But if the universe ahead of us assumes a face and a heart, and so to speak personifies itself, then in the atmosphere created by this focus the elemental attraction will immediately blossom.

Omega is spiritual, since it attracts spiritual beings; it is eternal following from evolution's implied exigency for perpetuity as the very condition of its own movement.[118] Furthermore, to reach its own psychic spiritual fulfillment evolution must be dissociated from the earth.[119] Omega is

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[116] PTdeC, "L'énergie humaine"; quoted in Tresmontant, pp. 60-61.

[117] PM, p. 267.

[118] F. G. Elliot, "The World Vision of Teilhard de Chardin," International Philosophical Quarterly, I (December, 1961), 641.

[119] PM, p. 273.

this point of dissociation,[120] and is therefore outside of time. Omega, then, reveals only "half of itself. While being the last of its series, it is also outside All series."[121] The omegan attributes can be summed up as: autonomy, actuality, irreversibility, and transcendence.[122] The released omegan radial energy is love. Love as the final complexity of radial energy can be realized as arising continually through genesis. The love which binds men binds the universe.

Though love is the radial energy of Omega, Teilhard sees that man does not necessarily love,[123] that he does not necessarily desire union. This can result from a lack of seeing an unlimited horizon for man,[124] or in reaction to seeing the "future of man" an individual may isolate himself.[125] But generally isolation results when a man has

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[120] PM, p. 270.

[121] Ibid.

[122] Ibid.

[123] PTdeC, The Future of Man, p. 283.

[124] PTdeC, "Comment je crois," (1934); quoted in Tresmontant, p. 48.

[125] PM, p. 237.

not given due place to the person, and to the forces of personalization.[126] Characteristically, men are "hostile or at least closed to one another."[127] Giving too much weight to this discontinuity results in the anthill mentality. This occurs when man, seeing the tyranny of instinct and of depersonalization in lower forms of socialization (ants, bees), fears socialization.[128] But this lower form of socialization lacks a growing center, it is a purely functional socialization (i.e., for construction, defense, or propagation). These lower forms of socialization are really just highly functionalized unorganized multitudes. They incur a functional death which man can escape because "thanks to the universal framework or support provided by thought,"[129] he is given free rein over the forces of confluence.

Teilhard feels the world's vigor, yet he sees that "it struggles and strangles."[130] He has faith in man, in the world, in the immortality of the spiritual and in the ex-

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[126] PM, pp. 256-257.

[127] PM, p. 256.

[128] PM, pp. 155-156.

[129] PM, p. 242.

[130] Cuenot, p. 79.

panding personality of the world.[131] This faith is in logical accord with the law of Complexity/Consciousness working in the noosphere. Cuenot sees this faith in man as arising from his view on life:

> Life, as he noted, has a social aspect; living beings have a tendency to associate; indeed, among the insects life has become the captive of socialized instincts. For man, collective activity alone holds forth the promise of self-transcendence, according to the law of Complexity/Consciousness, by which every heightening of complexity is proportional to higher consciousness. The development of an increasingly complex social life, as necessitated by the demands of scientific research and an advancing technology, and by the drawing together of populations through advances in transportation and communication--this whole development opens to the Noosphere immense vistas of progress.[132]

For once the cosmos has "vitalized" itself, it can move only forward, not backwards.[133] "The Noosphere can function only by releasing more and more spiritual energy with an ever higher potential."[134] The noosphere contains the pervading currents of cosmogenesis, i.e., the effects of higher energy levels consequent to Complexity/Consciousness. Though men can egotistically refuse to advance and seek personalization, the natural forces are, in time, more predominant.

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[131] Cuenot, p. 209.

[132] Cuenot, p. 237.

[133] PTdeC, "L'énergie humain," (1937); quoted in Tresmontant, pp. 44-45.

[134] PTdeC, The Future of Man, p. 172.

Though in time personalization will naturally terminate and fulfill itself, there is the "danger of collectivist solutions, if they are not at the same time personalistic."[135] If mankind succeeds in becoming organized collectively, then the make-up of the collective organism would be matched by a higher consciousness. Again, this collectivity must be a true society--a unified multiple. As mentioned at the end of the First Chapter, "human socialization is not an epi-phenomenon, but an authentic extension of hominization and thus of human evolution. Human socialization, in fact, is man's hope of achieving that ultra-human condition...."[136] This requires of the individual an understanding of evolution's process and its strict demands for progress--a union which differentiates.

Unification is effected and productive only if the persons participate consciously and actively.[137] The world must be organized into societies of cosmopolitanized individuals. They must aim at achieving personalization so that mankind will advance. This ultimately demands a world-wide organism (a cosmic society) to initiate a world-wide spirit-

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[135] De Lauwe, American Catholic Sociological Review, XXIII, 301.

[136] Cuenot, p. 234.

[137] De Lauwe, American Catholic Sociological Review, XXIII, 301.

uality (a cosmic centering).[138]

Surveying the phenomenon of man from Teilhard's viewpoint, we see that the "social phenomenon is the culmination and not the attenuation of the biological phenomenon."[139] More existentially, we see that man is more than "the rational animal." To properly evaluate noospheric man we must further define him as essentially, Man-Social, and the consequents: Man-Mental, and Man-Spiritual.[140]

Man-Social knows that his planet has shrunk through the "modern inventions of travel and communications, the radio, the TV, jet planes," and that consequently the "layers of the Noosphere are bound together in an ever tighter mesh." His world is one of intercontinental blocks.[141] Man-Social is truly cosmo-politan; and so is his spirit. Jean Danielou reflects on the characteristics of noospheric energy and says that

> Corresponding to this is a new soul, open to the world dimensions, building tommorrow's civilization. We are no longer restricted to a country, a community, a locality. Man must measure his life according to the

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[138] PTdeC, The Future of Man, p. 194.

[139] PM, p. 222.

[140] These three terms are mine. They derive from a reflection on man in the noosphere and they are in accord with the effects of a higher complexification and integration of tangential and radial energy.

[141] Francoeur, World of Teilhard, pp. 20-21.

dimensions of humanity...a common soul comes into being.[142]

This convergence towards "greater and greater socialization" is to be taken spiritually because, knowing that anatomical evolution has virtually ceased, we must look for a more intense union among men. The world is on its way to becoming one--politically, technologically, and spiritually. The individual will find his true being in a real and organic union with his fellow men.[143]

Noospheric man has a potential for development of the human spirit transcending that of any past man.[144] In view of the omegan characteristics, the structure of evolution demands the indestructibility of the spirit. This spirit "demands the personal immortality of spirits...the universe cannot continue the process except by achieving a new synthesis...the birth of a community of Spirits."[145] Omega is the autonomous, transcendent person, the center of centers, which can fully personalize man, and in effect give

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[142] Jean Danielou, "Timelessness of Teilhard, "Philosophy Today, VI (Fall, 1962), 222.

[143] D. Wade Safford, "Teilhard and the Phenomenon of Man," Religion in Life, XXX (Summer, 1961), 352-353.

[144] Frank, American Catholic Sociological Review, XXIII, 321.

[145] Bruno de Solages, "Christianity and Evil," trans. Harry Blair, Cross Currents, I-II (Summer, 1951), 33.

full meaning to Man-Social, Man-Mental, and Man-Spiritual. the environment of Omega is a true society. This environment gives real birth and complete meaning to humanity. It is the milieu in which radial energy is expressed as full and encompassing love.

This new spirit rids itself of the poison of egoism through love--which love is the noospheric energy.[146] But, before discussing love, we can see the immediate, necessary deduction from Man-Social to Man-Mental.

> With homo spaiens, under the cloak of socialization, the axial vitalizing of matter sets foot upon a new stage. No longer is it a question of just one individual reflecting upon himself, but of millions of human reflections which seek and strengthen each other.[147]

Each individual's knowledge is in proportion to his centerness. Knowledge is one of his many radial qualities which are broadened and deepened by inter-centric intercourse. Each center can be fulfilled by this release of his reflective powers. Knowledge is increased by contact with this aspect of other's centerness. Furthermore, as J. F. Ewing writes,

> 'The spirit of the earth' embodies a mankind which is an organic super-aggregation of souls. a correlative of mankind is knowledge--knowledge for itself and knowledge for power to be sure, but knowledge necessarily organized by values. But this creation of the

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[146] PTdeC, The Future of Man, p. 134.

[147] PTdeC, "Le structure phylétique du groupe humain," Annales de paléontologie, 37 (1951); quoted in Tresmontant, p. 53.

> spirit of the earth involves unanimity on the part of mankind. A new domain of psychical expansion is needed....[148]

A cosmic love enables the individual to understand others and to know himself. This is knowledge transmitted not only academically but most pointedly, personally and therefore humanly. The individual realizes the need for a cosmopolitan knowledge and this is achieved by opening his center (personality) to the thoughts and spirits of all centers, present and past. This intercentric contact evolves the Man-Spiritual.

In view of these new definitions of man as cosmopolitantly social, mental, and spiritual as the ends of biological (hyperphysical) evolution, we must time and again recognize the power of the individual to refuse union, and his rights to refuse, though this is suicide. The effect of union-differentiating can only be achieved willingly, not coercively. Each individual person must commit and dedicate himself to the future of man.[149]

Teilhard believes that, disregarding what may seem immediate, insurmountable obstacles (e.g., world war, racism) mankind will in time reach Omega.[150] This process is imbued

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[148] Ewing, Theological Studies, XXII, 97.

[149] Cuenot, p. 299.

[150] Concerning racism and evil, confer: PM, p. 238, and Rabut, p. 149.

with and perpetuated by love.

> Never before, perhaps, did I perceive so clearly the possible meaning of the deep evolution of my internal life: the dark purple of the universal matter, first passing for me into the gold of spirit, then into the white incandescence of Personality, then finally (and this is the present stage) into the immaterial (or rather supernatural) ardour of Love.[151]

This love is natural. "In its remote analogical varieties, as in the molecule, it is so rudimentary as to be imperceptible."[152] Teilhard finds it in the expressions of higher instincts: parental and herding tendencies. In men it is their deepest source of power and is the sole force that can unite them in such a way as to complete and fulfill them. It is naturally at the Omega Point that we discover this personalizing force, which is also of a personal nature.

Omega, then, is a loving someone.[153] In light of Man-Social, Man-Mental, and Man-Spiritual, we realize that

> if men on earth, all over the earth, are ever to love one another, it is not enough for them to recognize in one another the elements of a single <u>something</u>; they must also, by developing a 'planetary' consciousness, become aware of the fact that without loss of their individual identities they are becoming a single <u>somebody</u>. For there is no total love...save that which is

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[151] Cuenot, p. 211, quoting Teilhard's letter of 27 June 1937.

[152] Vollert, <u>Theology Digest</u>, VIII, 135. Cf., <u>PM</u>, p. 264, Francoeur, <u>World of Teilhard</u>, p. 22.

[153] Francoeur, <u>World of Teilhard</u>, p. 22.

and of the personal.[154]

Teilhard sees this evolution to the personal Omega as the most revolutionary movement in man's history. For it is a revolution activated by a desire for love, and seeking a cosmic peace. This is a love and a peace for the individual seeking and achieving personalization, and for the universe in that the term of the revolution is a personal Omega who personalizes, loves, and establishes peace. Teilhard's views "furnish a prospect where past, present, and future meet in an atmosphere of material progress and progressive love."[155] This love is a development of the present, rudimentary human love which Teilhard describes as "Earth-sense"--a sense which believes in this unity of man, in love as the basic force of evolution, and of the Omega, as being a person.[156]

A man's capacity for love is limited by his dependency on a source. Human love can approach the critical point of perfect personalization and love, but the "crossing of the threshold" can only be accomplished by the attractive powers of personal Omega.[157] Teilhard states that

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[154] PTdeC, Hymn of the Universe, p. 89.

[155] Cuenot, p. 221.

[156] Cuenot, p. 112.

[157] Danielou, Philosophy Today, VI, 215.

> it appears to me that the generative principle of its unification is finally to be sought not in the sole contemplation of a single Truth or in the sole desire for a single Thing, but in the common attraction exercised by a single Being.[158]

Teilhard's hyperphysics has revealed that "the cosmos, and man himself, find full attainment of their being at the precise moment when they open completely to God-Omega.[159]

This hyperphysical sight comprehends man as integral man, as the subject of an integral science,[160] an experimental science studying man, body and soul, in his cosmic extension.[161] This hyperphysics imparts "to man a sense of his own importance and responsibility; each of us has a task to perform in promoting future unity."[162]

This new science of hyperphysics and its consequent re-definition of man place a challenge before mankind. It places the future of man as a serious subject for everyone's consideration. An inherent sense of progress gives man hope, and reveals his kinship, materially and spiritually, to his fellow man, the cosmos, and God-Omega.

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[158] PTdeC, The Future of Man, p. 75.

[159] Rabut, p. 213.

[160] Danielou, Philosophy Today, VI, 215.

[161] PM, p. 289.

[162] Vollert, Theology Digest, VIII, 135.

As always, no pessimistic words will deter Teilhard's faith man. Even if his method has gone astray, and others must correct him,[163] he asserts that "Man is irreplaceable. Therefore, however improbable it might seem, he must reach the goal, not necessarily, doubtless, but infallibly."[164]

Teilhard's faith in man and his optimistic expressions make personalization seem easy. For no matter how many discontinuities are presently apparent, Omega will be reached naturally in consequence to the nature of the universe. Laziness must be avoided. Surely, for Teilhard, Omega wil be reached, but one is denying life to himself and to others if he does not have an actual faith in man. One must be a true center--a humanitarian and a God-Omega orientated person.

The personalization process has been exposed as the motif in Teilhard's thought. As with all of Teilhard's processes it has been presented as a general term, with a timeless application, immediately affecting the individual and the cosmos, and in turn effected by them.

Before presenting a critique of Teilhard's insights, it will be useful to consider the positive and negative criticisms which the scholarly community has leveled at his thought.

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[163] PM, p. 290.

[164] PM, p. 276.

CHAPTER III

THE CRITICS

The books and articles on Teilhard de Chardin, in general, present the outlines of his thought, then they proceed to criticize his method, his meaning for science, his extrapolation, and his faith in man's future. There has not been an explicit criticism in English language periodicals on his concept of personalization. Among his critics there are few who take a middle position for he has elicited either strong acceptance or rejection among those who have addressed themselves to a study of his work. Some have, however, accepted him with reservation, neither outrightly accepting nor rejecting him, a position that seems most warranted.[1]

1. Negative Criticism

The first general criticism usually made is an attemp to label Teilhard. Professionals in their respective fields shy away from entertaining him as totally within their discipline. Theologians, philosophers, poets, scientists and dialecticians point a finger at each others

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[1] The following presentation of the negative critics will express the views of the following men: Olivier Rabut, O.P.; P. Medera; Michael Polyani; G. G. Simpson; Paulinus Forsthoefel; Fr. Bosio; Nicolas Corte; Richard Balek; and Louis Cognet. Brainard Cheney, Sewanee Review, LXXIII, 220-221. Cf. Corte, p. 88.

discipline and say "Not in mine! But in your scope!"[2] Not knowing where exactly to put Teilhard, they are together on such matters as extrapolation.

What they refuse to accept is the implied assumption for Teilhard's extrapolation--that within cosmogenesis there is homogeneity. This means that the "future will always be homogenous with that which preceded it,"[3] and that the nature and direction of genesis as presently discerned can be used validly to project into the future. Anyone maintaining this idea of homogeneity would be branded by the negative critics as presumptuously asserting that he knows evolution;[4] knows evolution not only as a theoretical, coherent process, but knows the "missing-links," the precise mechanisms which prove evolution is a fact. It is evolution as a fact which the dissenters deny vehemently. The acceptance of evolution as fact results, in their thinking, from a discreet theological interpolation.[5] Evolution is seen as homogeneous because it is not only biological but (and hyperphysics is tainted by this) apocalyptic. From this general

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[2] R. Nogar, "Editorial," Dominicana, XLV (Fall, 1960), 244-249.

[3] Rabut, p. 100.

[4] Rabut, p. 228.

[5] Rabut, p. 242.

basis they criticize the constituent parts of his process.

Teilhard's belief in the systematic rise of Complexity/Consciousness, of the cosmic nature of evolution, and of the orthogenic evolution of man[6] are attacked from various angles. W. A. Wallace criticizes these concepts as "rejecting a priori the law of conservation of matter and the second law of thermodynamics."[7] Again, in general, these beliefs are described as "too personal," "non-scientific," "an untenable spiritual assumption."[8] For example, Nicolas Corte states that

> When we read such an affirmation we rub our eyes, we are startled, and we say: 'But surely he is extrapolating.' The postulate he offers us is unverifiable. The proofs he tries to give of it are themselves only baseless assertions.... It seems that critics, whether sympathetic or hostile, will agree here to refuse to follow Père Teilhard in his audacious conjecture. His 'extrapolation, under the name 'panpsychism,' will be layed at his door. It comes neither from science nor from philosophic method, but simply, one might say, from a poetic imagination.[9]

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[6] These three beliefs are criticized in Rabut, pp. 239, 37, and 102.

[7] W. A. Wallace, "The Cosmogony of Teilhard," New Scholasticism, XXXVI (July, 1962), 353-367.

[8] A. Brunner, "Pierre Teilhard de Chardin: a critique," Theology Digest, VIII (Fall, 1960), 143-147. Cf. Michael Stock, "Scientific versus phenomenological evolution," New Scholasticism, XXXVI (July, 1962), 295-303. Leopold Malevez, "The Method of Teilhard and Phenomenology," Theology Digest, VII (Fall, 1960), 138. Rabut, p. 229.

[9] Corte, p. 61.

The criticisms of the "within" and of the Complexity/Consciousness principle are similarly worded, e.g., that "the 'inwardness' of things, the radial energy of arrangement--concepts which for Teilhard are fundamental themes--are not truly scientific notions at all."[10] Nor can these concepts be philosophically acceptable since they are developed according to laws of material evolution."[11] The strong tone of these criticisms reveals a seeming prejudice and ire at an inability to classify Teilhard or to comprehend his thought. A more powerful criticism comes from a man who is in sympathy with Teilhard's vision but who can attack more deftly and particularly, Olivier Rabut.

Rabut's criticism builds up throughout his work and is in essence that "the rise of complexity is a phenomena that cannot be denied," but that it applies only to a small quantity of matter and not to the cosmos.[12] To talk of a "within" and of Complexity/Consciousness is, for him, too metaphysical and exaggerated.[13]

He further criticizes Teilhard's underevaluation of

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[10] Russo, America, CIII, 185-189.

[11] J. L. Russell, "Teilhard de Chardin: The Phenomenon of Man," Heythrop Journal, I (October, 1960), 271-284.

[12] Rabut, p. 30 and pp. 54-55.

[13] Rabut, p. 36 and p. 59.

entropy and anti-chance,[14] and of an overevaluation on an "absolute direction of advances towards the values of increasing consciousness."[15] Rabut states that "we do not know enough about the nature of 'evolutionary gravity' to know whither it is tending by its direct effect,"[16] and that evolution can evolve towards the improbable, "but it can never tend systematically towards consciousness."[17] Rabut believes that science can account for evolution without a main force, that is, through the "statistical law of accumulation."[18] He is pro-Teilhardian but "with reservations." This means that he accepts the need for a world view with the scope of Teilhard's, but he rejects the way Teilhard employs his mechanisms.

In weighing the values and implications of his future for man in socialization, a few, but strong dissenters think that Teilhard loses the person in the collective.[19] Frank S. Meyer holds that

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[14]Rabut, p. 64f, and p. 30.

[15]Rabut, pp. 50-53.

[16]Rabut, p. 36 and p. 50.

[17]Rabut, p. 55.

[18]Rabut, p. 72.

[19]Malevez, Theology Digest, VII, 140.

> Philosophically, however, Teilhard's thesis would seem to me to be directed squarely against the concept of the integrity of the human person, which is the foundation of Western Civilization.[20]

In this vein, the dissenters see him losing the individual and personhood in a confusion of theological and cosmological mystic phrases. Not only is man lost but so is God absorbed into a spiritual evolutionary point. Continuing in this vein, Meyer asserts that biological evolution raised to a philosophic level destroys the meaning of the individual, since man is then seen as a mere cell of the species.[21] Furthermore, in Omega "God, Man, and the whole of existence are fused in a featureless unity much more akin to Brahma or Nirvana than to anything in Classical, Hebrew, or Western Christian thought."[22] These feelings stem from the belief that Omega would be akin to a Marxist classless society, where a union differentiating does not function but a union-dissolving, dissolving the individual personality, exists.

The validity of Teilhard's pre-existent Omega,[23] and

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[20]Frank S. Meyer, "Teilhard de Chardin: the attack on Man," National Review, XVII (July 13, 1965), 596.

[21]Ibid.

[22]Ibid.

[23]Rabut, p. 109, and p. 128.

the harmony of the cosmic with the spiritual life is challenged.[24] So also is the validity of the jump from the brain to the existence of a collective organization,[25] and of love as necessarily the culmination of a progressive psychic series.[26] The critics are consistent in refusing to grant to Teilhard a homogenetiy--a coherence, yes, but not the ability to forecast from past and present facts. The observation of the mechanism of Complexity/Consciousness working in lower material levels does not support future extrapolation. The complexification of atom to molecule is analogous to the complexification of man to cosmic society, but analogy does not define homoegeneity. The spiritual may be correlative with the physical on all material levels, but does this mean that man's noble expression of love is necessarily the highest radial manifestation? Love is man's expression, but is it nature's highest, and most encompassing, psychic complexification? These critics see shadows of a concordism.

In a world which is "tainted," such theories may be delusions, i.e., an attempt to reconcile cosmic forces

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[24]Rabut, p. 150, and p. 179.

[25]Rabut, p. 104.

[26]Rabut, p. 41.

and the human situation.[27] The world of spiritual evolution has its own laws,[28] and Teilhard's Complexity/Consciousness only applies to reality if we read "anthropomorphic significance into reality."[29] The dissenters not only see shadows of concordism, they claim to see Teilhard's bogie-man, an inter-disciplinary student, a self-styled Prometheus.

A few quotes are in order from the anti-Teilhardians who, when they think of Teilhard, cry, "Hemlock!" Thomas Molnar is an example of this type when he writes in, "To the Anthill with Love":

> In other words the anthill is inevitable; but by adding to it large doses of "consummated human thought," "love," and "super-morality", mankind in year Omega may find itself at the Apex of the evolutionary course, united with a just emerging Super-Christ.
>
> These lubrications appeal to all those, who, in good faith, are scared of the Anthill and its leader, Big Brother, and to all those who, in bad faith, promote collectivization and folksy slosh about everybody being a nice guy. ...Teilhard's totalitarianism is of the most intolerable kind.[30]

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[27]Rabut, pp. 226-227.

[28]Rabut, p. 180f.

[29]Rabut, p. 237.

[30]Thomas Molnar, "To the Anthill with Love," National Review, XVI (December 1, 1964), 1073-1074.

In the same tone, some lament the "sudden rage for him," and explain Teilhard as "striv(ing) to insert abiding principles into this trivial kaleidoscope of an intellectual fad...." The claim that Teilhard has created "a new story, too, as new as the beatnik minister in California who calls Christ "Daddy-o," as new as Norman Vincent Peale's hygenic platitudes...I say its syrup and to hell with it."[31] These criticisms stand by their own phraseology, but they do show that Teilhard's views stimulate the reader. Some are stimulated to attempt a constructive understanding of his views. These are the positive, pro-Teilhardian critics.[32]

2. Positive Criticism

The positive approach to Teilhard is to accept his observations and see how his views correlate to a practical situation.[33] In their discussions the supporters too point

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[31]"Editorial," National Review, XII (December 3, 1960).

[32]The generally positive critics are: Claude Tresmontant, Charles Raven, Julian Huxley, Karl Stern, J. M. Dorsey, James Foy, R. Wildiers, O.F.M., Francois-Albert Viallet, Albert Vandel and Claude Cuenot. Brainard Cheney, Sewanee Review, LXXIII (Spring, 1965), 220-221. Corte, p. 88.

[33]The pro-Teilhardians have been actively attempting to relate his views to present realities. To these ends Fordham University, N.Y., instituted an Human Energetics Research Institute (1964-) to study Teilhard, and several authors have used him as their basis to examine perennial problems.

up the mechanisms which need refinement and analysis, but they are eager to work within the framework of this great man. These men would agree with Teilhard's self-description: "I am neither a philosopher nor a theologian, but a student of the 'phenomena,' a physicist in the old Greek sense."[34] They accept Teilhard as a scientist in his realm of hyperphysics. They avoid labelling him, and especially arguing over "what he is not."

A reply to an editorial in the Jesuit-edited America, voiced a general query which many pro-Teilhardians would ask: "Those who have spent years examining Teilhard's thoughts have gradually come to question what certain writers mean by calling him an "amateur" in philosophy, theology, and sacred scripture."[35] These positive critics deny that he appeals to philosophy or theology.[36] They likewise call his thought "a grandiloquent appeal to dispel the closed-mindedness of our current scientific view of the world, to reformulate our fundamental notions concerning

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[34]PTdeC, "Nouvelles Lettres de voyage," (January 1, 1951); quoted in Tresmontant, p. 16.

[35]"Editorial," America, CXI (November 9, 1963), 542.

[36]Gustave Weigel, "The Phenomenon of Pierre Teilhard de Chardin," Natural Law Forum, (Notre Dame University Law School), VI (1961), 134-142.

the nature of the universe."[37] They would approve a statement by Cyril Vollert that:

> Most of the attack aimed at Teilhard de Chardin betray a failure to grasp his basic point of view. He undertakes to study man, not from every angle, but only as seen from the outside. ...To the philosopher and the theologian he leaves vast areas of study which can be pursued only with the methods pertinent to philosophy and theology.[38]

The need for a hyperphysics, for an analysis of life from many angles put into a synthesis which the nature of man itself demands, is totally accepted.

Several scientists note the inadequacy of modern science "to exhaustively present the whole of natural happenings by means of a single, strictly determined system of symbols."[39] They credit Teilhard for "using as a foundation the incomplete set of scientific facts" which is available (e.g., thermodynamics, evolution) and the views which are acceptable to other members of the scientific community (e.g., the theory of organisms, the non-materiality of human values).[40] They see his theories

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[37]Balek, World of Teilhard, ed. R. Francoeur, p. 93.

[38]Vollert, Theology Digest, VIII, 133.

[39]Ernst Cassirer, quoted in World of Teilhard, ed. R. Francoeur, p. 95.

[40]Balek, World of Teilhard, ed. R. Francoeur, p. 96.

as "not...a contrived harmony, but as a quest for coherence and unity that was at the same time cognizant of the diversity which was attendant upon the advance of knowledge."[41]

Teilhard's efforts are considered attempts to synthesize and integrate "all reality: material, biological, psychological, sociological and religious."[42] They hold that he remains in the phenomenal level, and to criticize him on a theological or metaphysical level is to misunderstand him.[43] It is recognized that "every study made from a scientific point of view, dealing not with a part but with the whole of reality, must necessarily take on a philosophic air, but this does not in itself make it a work of metaphysics or theology."[44] Moreover, his science, "paleontology becomes because of the breadth of its conclusions a truly philosophic science."[45] Furthermore, if we accept Teilhard's hyperphysics, we can agree with

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[41]Tresmontant, pp. 3-4.

[42]Tresmontant, p. vii and p. 70. Cf. Catherine Aller, The Challenge of Pierre Teilhard de Chardin (New York: Exposition Press, 1964), p. 13.

[43]Tresmontant, pp. 9,15,47 and 79. Cf. Cuenot, p. 121.

[44]Bruno de Solages, Cross Currents, I-II, 30.

[45]Bruno de Solages, Ibid., 27.

him and have a "science which learns the total lesson of its discoveries. Physics may be described as the 'systematic understanding of the whole of nature,' including thought."[46] Here, again, the pro-Teilhardians accept his thought because they too can, through hyperphysics, observe the material and spiritual characteristics of man, and study him as a whole.

When analyzing his works, Richard Balek takes Teilhard, not as asking: "How does dull mechanical matter give rise to this entity I call consciousness"; but as asking: "What must be the nature of matter in order for it to be able to give rise to consciousness?"[47] Teilhard is an "observer engagé, watching a process unfold,"[48] and formulating his law of Complexity/Consciousness from a "purely phenomenological point of view."[49]

With Teilhard, abbè Breuil sees a necessity for an "inward side, which is psychic" and linked with, but not derived, by an exponential conversion factor, from chemical and organic elements.[50] Others follow Teilhard's ex-

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[46]Rabut, p. 4.

[47]Balek, World of Teilhard, ed. R. Francoeur, p. 93.

[48]Corte, pp. xiv-xv, and p. 87.

[49]Vollert, Theology Digest, VIII, 264.

[50]Abbè Henri Breuil, quoted in Corte, p. 87.

position of natural classification (following Complexity/Consciousness) which expresses--"and all modern taxonomy bears testimony to this--the manner in which they have been successively formed in the course of cosmic duration."[51] This observed coherence and continuity in matter formation cannot be rejected out of hand because the mind of man is unique. They believe that this doctrine of the uniqueness of mind is even more reason to study our psychic manifestations.

Teilhard's sense of continuity between the animal and human worlds is severely attacked from all quarters. But if evolution is to work smoothly, consciousness in some shape must have been present at the very origin of many things.[52] Complexity/Consciousness has led and leads to new spheres which are a "once-and-for-all event."[53] Material levels are reached by a process in which continuity and discontinuity are "indissolubly complementary to one another."[54] The Complexity/Consciousness mechanism and its continuity and discontinuity" can be verified in

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[51]PTdeC, "Le groupe zoologique humain"; quoted in Tresmontant, p. 26.

[52]Balek, World of Teilhard, ed. R. Francoeur, p. 157.

[53]Weigel, World of Teilhard, ed. R. Francoeur, p. 159.

[54]Russo, America, CIII, 185-189.

every being and every reality, including science itself. It is therefore rational to suppose that it has always been the same in the past and will be the same under our noses as we advance into the future."[55] Then, as Bruno de Solages remarks,

> you can see what a magnificent coherence the whole scheme of things takes when you come to accept this viewpoint. You can also see how evolution, thus considered, appears not materialistic but essentially spiritualistic, not pantheistic, but theistic, not deterministic but directed by God, not immanent but requiring the transcendental....[56]

Here is a vision which is compatible with the various desires of man for a knowledge of himself, God, and the universe. In short, this view is compatible with the goals of personalization.

Raymond H. Potvin finds these theories pertinent for contemporary science because

> (they are) anchored in three major trends of our age. (They are) based on the study of phenomena, in the perceptible; (they) incorporate in (their) very essence the element of time and duration; and (they) stress the collective aspect of man's aspirations.[57]

Teilhard handles matter with respect--a respect which is basic to the American experience. The experience charac-

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[55]Henri Breuil quoted in Corte, pp. 85-87. Cf. Rabut, p. 30.

[56]Solages, Cross Currents, I-II, 35.

[57]Raymond H. Potvin, "Teilhard de Chardin and Sociology," American Catholic Sociological Review, XXIII (Winter, 1962), 291-292.

terized by the conviction "that the world of matter, of people, of events, of cultural and scientific progress, is important and that, indeed, human growth depends very much on active involvement in all these things."[58]

In order for evolution to fulfill its process, a desirable future must be disclosed,[59] and man must not be considered as a " 'sport', a dead (because not evolving) branch sticking out sideways from the main evolutionary trunk."[60] Man does receive dignity and have a future through socialization. A socialization in which Teilhard hoped man would find self-realization.[61] Sociologists recognize Teilhard's imperfect knowledge "of economic styles, of notions of groups, of social structure, of class, of studies of psychopathology,"[62] but they respect his intuitions. They admit that his views have caused them to re-examine the "relationships between nature and culture, the person and society, and the different

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[58]R. J. Roth, "The Importance of Matter," America, CIX (December 21, 1961), 792-794.

[59]Tresmontant, p. 46.

[60]Martin Jarrett-Kerr quoted in Corte, p. xiii.

[61]Cuenot, p. 80.

[62]De Lauwe, American Catholic Sociological Review, XXIII, 308.

questions of perspective."[63]

In contrast to the "anthill" labels, his extension of Complexity/Consciousness must lead to the next level "of a genuine community of persons, reconciling collectivity with respect for the individual."[64] This level is accompanied by a growth of love, a view stemming from his whole theory. Because "love is the only force which makes things one without destroying them, love might harmonize the totalitarian tendencies of human society on the one hand and the realization of personality on the other."[65]

Teilhard does not deny evil, but only collectivization can surmount the discontinuities and bring mankind, through increasing interiority, to God-Omega.[66] Maurice Pontet realizes that Teilhard assumes this position because

> He was aware that the interplay of individual freedom, particularly freedom used in an evil manner, always entails the risk of compromising and, in the last analysis, destroyiing everything. He admitted, as a hypothesis, that man in complete possession of the means to do so could apt for evil, and, with full consciousness of what he was doing, blow up the entire planet. This was a hypothesis representing a theoretical possibility in which,

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[63] De Lauwe, Ibid., 294.

[64] Corte, preface.

[65] Cuenot, p. 216.

[66] Cuenot, p. 252.

> however, he could not bring himself to put any credence.[67]

This was his firm, persistent belief in the coherence, homogeneity, and orthogenic nature of the evolution he had observed. The progress was, and is, ensured since evolution always produces a particle of matter which survives, and in this way there will eventually be a union which differentiates.

A critic examining Dostoievski's Brothers Karamozov, B. F. Skinner's Walden II, and Teilhard's Phenomenon of Man, found that only Teilhard saves man, the individual, by activating him within the collective by love. This is effected by union differentiating, and through the respect given the individual when seeing him as the creature evolving into a spiritual being.[68] This comparison does well to justify those who assert that "those who think they see in this view pantheism, totalitarianism, immanistic naturalism, do not understand its profound inspiration."[69] This inspiration is not depressed by the immediate ends of fascism, communism, nor other disruptive factors of

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[67]Maurice Pontet, "Evolution According to Teilhard," Thought, XXXVI (Summer, 1961), 167-189.

[68]Joseph Collignon, "Christian Dilemna," Saturday Review, XLVII (June 27, 1964), 14-16.

[69]Solages, Cross Currents, I-II, 35.

our age. Teilhard saw and thought in much larger periods of time, where the evils of today are "no more than a slight disturbance in the general movement toward a unified mankind."[70]

As for the critics mentioned, they would agree on one of Francoeur's comments:

> Few writings in the past hundred years have provoked as wide a variety of judgments.... His Phenomenon of Man has been hailed by some reputable scholars as the most important book of the century, while others have dismissed it as pure charlatanism. Some Catholics are convinced of its outright heresy; others regard it as a truly masterful vindication of the spiritual in a materialistic world.[71]

Despite these many balancing criticisms it is necessary still to comment upon Teilhard's theory, especially his theory of personalization.

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[70]Hilda Graef, Mystics of Our Time (New York: Doubleday and Company, Inc., 1962), p. 232.

[71]Robert Francoeur, "For Teilhard, no flight from Time," Catholic World, CXCIII (September, 1961), 367-373.

CHAPTER IV

CONCLUSION

1. A Reflection and Evaluation On Teilhard's Cosmic View

In the preceding chapters Teilhard's theories have been examined to see if there is a coherent and homogeneous motif in evolution. The mechanism of Complexity/Consciousness has been seen operating on all material levels. This process is effected by the overall pressures of cosmogenesis, and occurs most markedly in anthropogenesis, i.e., personalization. As with all the cosmogenic processes which operate on different levels, they relate analgously and not by a simple exponential conversion factor. Observation is now possible to show how these and the personalization phenomenon occur since "we occupy a position in nature at which the convergent lines are not only visual but structural."[1]

While no refutation of the critics mentioned is intended, research, investigation and presentation of any part of Teilhard's thought cannot help but provoke comment. Certainly the approach to his thought taken here is not that of a scientist. On this level he is a master. However, most certainly Louis Cognet's statement

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[1] PM, p. 32.

that, "as a thinker he belongs to us,"[2] can be supported. For reflection on Teilhard's cosmic view has aroused thoughts and created controversy within numerous disciplines. In short, Teilhard's views invite critical and constructive interpretations.

Teilhard's science is not strictly scientific because he maintains: a) that spiritual energy does exist--which is tantamount to an anti-mechanistic stand; b) that via some evolutionary process this spiritual energy, working within and through matter, gives rise to life and consciousness.[3]

Teilhard maintains that science must culminate in his hyperphysics, and that this science will take a synthetic view of man, as body and soul; and of the universe, as matter and spirit.[4] All the disciplines must converge to study all phenomena in a total cosmic setting.[5] For in spite of the great advances which have been made in knowledge, some fundamental gaps still remain: matter,

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[2]Louis Cognet quoted in Corte, p. 90.

[3]Balek, World of Teilhard, ed. R. Francoeur, p. 94.

[4]Human Energetics Research Institute, Proceedings of Teilhard Conference (Fordham University, New York, 1964), p. 16.

[5]Corte, p. 21. PM, pp. 30,44, 243 and 289.

life and mind still remain utterly disparate phenomena. Refined concepts of all three are needed. With the acceptance of evolution as a fact and the origin of life structure from the inorganic, these necessities must mean a complete revolution in our idea of matter.[6]

It does not necessarily follow that science for Teilhard must be concerned with causality or finality.[7] The concern is with the search for mechanisms which will give coherence and homogeneity to cosmogenesis.[8] This means research, not to find an abstract structure to impose on the cosmos, but to expose the natural rhythm of the cosmos. To deny the worthwhileness of such a search is to cling steadfast to a suicidal egoism, to claim that the cosmos is chaotic in its essential discontinuity, and to see our present continuities as mere man-made concordisms.

Teilhard sees the matter and spirit characteristics of man, and he claims to observe a homogeneity and coherence in their relationship. Being a scientist he asks, "How?" Then from personal desire he asks himself, "Why?" How does evolution occur, how is man personalized?

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[6]J. C. Smuts quoted in World of Teilhard, ed. R. Francoeur, p. 94.

[7]PTdeC, "Sketch of a Personalistic Universe," 20.

[8]Human Energetics Research Institute, p. 13.

And then why? The why is certainly outside the realm of science but it is definitely meaningful to him as a man. This is especially true when he sees that radial energy manifests itself on man's level as spirit. A hyper-physicist must be more open to religion and faith than a strictly empirical scientist. Teilhard must delve deeper into his science since it culminates in a definite, real, existential relationship to the evolution of the spiritual. Religion and science are brought closer together in hyper-physics, since this is the characteristic effect of the link between radial and tangential energy. But they do remain distinct disciplines. Their relationship is co-herent and homogeneous but not exponentially convertible. To approach these queries Teilhard must start with the hows. In doing so he discovers how--process. The cosmos is continually becoming--the cosmos is in genesis.

The vehicle of process is evolution, and since process is a becoming man has a past, present and future. This is genesis in time. Time is a variable handled by science, but evolutionary time's scope stretches from the formation of the first atom to the noosphere.[9] This cosmo-genesis-time concept demands a new vocabulary.

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[9] PM, p. 85.

To express his views on the cosmos, time, genesis, man and evolution Teilhard uses neologisms.[10] For his synthesis demands that the past, present and future be related. Though he speaks in terms of familiar concepts, e.g., evolution, group formation, molecular bonding; these are placed in a perspective which extends the meaning of the present terminology. Evolution is seen as part of cosmogenesis, group formation as linked (through Complexity/Consciousness and socialization) to molecular bonding, and so forth. This synthesizing necessitates some interpolation which frequently results in new terms. The same is required in extrapolation to new concepts. The use of neologisms is slightly poetic because the concepts expressed need definitive words which, because of the concept's newness, cannot be fully grasped at present.

Teilhard's neologisms are broad in scope, conveying the immensity of the past, the complexity of the present, and the necessities of the future. Scientific language is too exact and unambiguous <u>about</u> reality, while the poetic can <u>communicate</u> reality.[11] This is Teilhard's

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[10]Neologism--a new word or a new meaning for an established word. The use of new words or of new meanings for established words. <u>Webster's New World Dictionary, College Edition</u>, p. 984.

[11]PTdeC, <u>Hymn of the Universe</u>, p. 9.

dilemna. He sees facts, but he recognizes his imprecise perception, and he wants to remain as close to the facts as possible. Therefore his extrapolations demand a language which will be familar to the scientist, but poetic enough to make the scientist ask himself the same "how" Teilhard asked.

Extrapolation is not a new scientific tool. But its use ordinarily places the user in the realm of philosophy of science, or else outside science. For our present purposes we must accept Teilhard's method if we are to examine his cosmogenesis, but this necessitates a few preliminary observations. When a scientist interpolates, say in the realm of nuclear physics, he believes that he can construct a working model without actually seeing or understanding the process. This is common in the discussion of electron shells, light theories, and astronomy theories. This interpolation is necessary, but its employment seems to indicate a subtle acceptance of a coherence and homogeneity in the universe. Certainly, extrapolation seems fantastic because its scale is immense, but one must be wary of those scientist who scoff at this possibility of coherence and homogeneity.

Teilhard's hyperphysics and its observational method, the conclusion to the law of Complexity/Consciousness, and to the rise of evolution, follow logically from his basic purely empirical scientific view. A spiritual character-

istic is manifest and it must be linked with the material parts of evolution,[12] i.e., anatomical, chemical, genetic and the other physical sciences. Science examines evolution from all these latter processes. But, as always, the whole is greater than the sum of its parts. There is the unity factor which is found on the molecular level when two hydrogen atoms form a hydrogen molecule, when millions of cells form an organ, when organs form a system, and when men form society. This unity force is found, analogously, working with different complexity on all material levels. It must be noted that unity is achieved among hydrogen atoms and men, but that the force is not identical. Nevertheless, from an observer's station, the levels reveal the same phenomenal characteristics, e.g., advance by Complexity/Consciousness, convergence and change of state.

This persistent unity characteristic must be properly understood. Teilhard states that each material level stands autonomously, that is, he does not express an exponential conversion factor between the levels. What he describes is the repeating mechanism of Complexity/Consciousness. This principle is found operative in bringing the elemental forms on each level to increased complexity and higher interiority on that level, i.e., to a point of convergence. At this intense, converging point there is a level rise because evolution pushes forward through matter, by chance experiment,

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[12] PM, p. 176.

and grasps at a new mode for survival.[13] In its many chance attempts, evolution establishes a continuity, an orthogenic drive via Complexity/Consciousness. This is especially noticeable on the human level in the rise of personalization.

Evolution equals the rise of consciousness, and the rise of consciousness equals the effect of union,[14] but how this conversion is achieved is not known. What is observed is that "what was at first a happy accident or means of survival, is promptly transformed and used as an instrument of progress and conquest."[15] In cosmogenesis we see the selection of evolution through Complexity/Consciousness and the drive for the spiritual via man.

Complexity/Consciousness as stated by Teilhard needs exploration and refinement. Though from his general observational station he can employ it to express his encompassing view of genesis in time, Teilhard must be believed when he says that there is room for other views, and for others to correct him.

To regress a step, and a concept, so as to examine the "within" and the "without." The "without" of the carbon

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[13] PM, p. 149n.

[14] PM, p. 243.

[15] PM, p. 104.

molecule changes nature when it becomes a constituent of an organ. If carbon is isolated from the organ, it can be identified by all the characteristics of a pure carbon molecule. But then, when isolated, we cannot talk of this carbon as the organ's carbon. This is the same with the "within" in its particularized form in matter. The "within" of the molecule is not equal to consciousness. But as the "within" is complexified and advances to a higher quality it becomes a "consciousness." Note, again, that there is no exponential which will effect the conglomeration of millions of molecules into a molecule of consciousness. The poetic image here of a "molecule of consciousness" must be used to relate the analogous mechanisms of Complexity/Consciousness on different levels.

Teilhard does not want to introduce a new "vital force" into the universe. He does not want to establish a new idealism based on the monadic Energy. He does see a unity in the world, evolving from molecule to man. Within this unified evolution two different forces--matter and spirit, happening to come together and to work according to Complexity/Consciousness are not different. There is matter-spirit, a single energy seeking its manifestation. Teilhard describes how this evolution proceeds, and where it will go--the Omega Point.

He extrapolates to the Omega because anatomical evolution is at a virtual standstill,[16] and he realizes that, as

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[16] PM, p. 277.

evolution continues,[17] the genesis is with the spiritual.[18] The spiritual retains and advances the coherency, continuity, and orthogenic drive of evolution.

Man's mind has systematized the universe obtaining for him a limited control of its processes. What eludes man are his intangible, spiritual values. Science cannot encompass the mind's expressions of love, adoration, honor, freedom and other intangibles. Psychology studies the mind but generally it seeks an understanding from an analysis of constituents, without synthesizing back to the unity.

This reductionism implies a belief in a type of concordism, i.e., that the universe and evolution manifest themselves totally in materiality.[19] The universe is not a material concordism, spirit is not matter. The efforts of Logical Positivism to establish a criterion for truth based solely on material evidence has procured them a subhuman world. The spiritual world of emotions and aesthetics are granted meaning (by some) but denied cognitional significance. This narrow stagnation should be avoided.

Just as no single mass accumulation will, ipso facto, effect a level change, i.e., a vessel containing the con-

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[17] PM, p. 218.

[18] PM, p. 220.

[19] PM, p. 247.

stituents of a tissue do not necessarily form a tissue; so, an agglomeration of minds does not necessarily form a spirit nor a noospheric advance.

Teilhard realizes the discontinuities in cosmogenesis.[20] and he experiences some despair at the reality of egoism. He states, "Taken individually, each human will can repudiate the task of ascending higher towards union."[21] Egoism relegates man to extremely slow progress. Teilhard observes that egoism is overcome and new noospheric advances are made. Thus he wrote at the first explosion of the atom bomb that hundreds and thousands of minds formed one brain for research. The consequent atomic power opened to mankind the door to the future.[22] A marked, historical advance into the noosphere had occurred.

The noosphere and Omega are naturally necessary, as the next levels of evolution. Teilhard is undaunted by the discontinuities and the individual's egoism. His faith in the future of man is backed up by nature as he sees it. Either the whole construct of evolution is true or else the universe is meaningless. After Teilhard finds the universe meaningful, he turns for a glimpse of this "personal extra-

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[20] PM, p. 29.

[21] PM, p. 275.

[22] PTdeC, The Future of Man, p. 145.

human energy."[23] He looks at collective man.

Man, in his desire for individuality and personality, grouped socially for the benefits of knowledge and research. He sought to understand himself, and, while giving up some egoistic egocentreity, has dedicated himself to the exposing of his full meaning as a creature with a body and soul. Society, as a consequence, in bringing man to community has differentiated him.

An individual, isolated element is, on the human level, an individual, non-personal, egotistic, practically non-meaningful particle. Analogously, on the lower material levels, particles are spoken of as being in pure state, and then referred to as being in constituency. In consequence to the nature effected by a radial, reflective union, the personal particle can never be meaningfully spoken of as isolated. Social man gives up certain liberties to exercize the freedoms of law. In education, he removes prejudice from his mind to explore a more precise and meaningful theory. His individual spirit is broadened to encompass an identity with a nation and with a religious belief, exercized freely with others. By uniting with others, some egoism is lost, but, in effect, true egocentreity, true personhood is achieved.

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[23] PM, p. 292.

Egocentreity is enlarged in scope since it is more perfectly centered. The individual can identify with and associate with more spiritual centers. This is an atmosphere of openness and love. Even so, there is the "modern disquiet," the fear elicited by a confrontation with space-time and with metamorphosis.[24] An individual desiring personalization fears the false starts of collectivization, e.g., fascism, nazism, communism and the "anthill."[25] To effect a union differentiating within a collective calls for a true democracy. The individual must freely govern his actions. It is a totalitarianism which is egoistic. A democracy is ego-centered.

Teilhard ~~sees~~ a model for the future based on the spiritual advances accrued in the freely associated societies of historical man. To progress, man must view the whole of his history and of his knowledge.[26] Personalization can only be effected by persons dedicated to differentiating in union,[27] and the concepts of

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[24]PM, p. 225.

[25]PTdeC, "Sketch of a Personalistic Universe," 14-15.

[26]Raven, pp. 198-199.

[27]PM, p. 242.

Man-Social, Man-Mental and Man-Spiritual are constituents of and the results of the evolving of a cosmo-polis which is cosmopolitan. This social complexification (cosmopolitanization) effects a consciousness, a cosmo-spirit. Teilhard would say that men have attained a true "cosmic sense."[28] Such a sense knows that union differentiates, "that nothing, absolutely nothing...can arrest the progress of social man towards ever greater interdependence and cohesion."[29]

Man-Social, with his correlatives Man-Mental[30] and Man-Spiritual,[31] will evolve, but always totally dependent upon the individual's desire for personalization. Moreover, Teilhard sees that man will reach Omega not only through his own desires, but also through the attraction which the critical Omega Point manifests.[32]

This characteristic of the Omega Point is a critical point in Teilhard's writings. Does Omega draw or does energy evolve? In examining this question we must avoid

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[28]PTdeC, "Sketch of a Personalistic Universe," 16.

[29]PTdeC, The Future of Man, p. 228.

[30]PM, p. 178.

[31]PM, p. 224.

[32]PM, pp. 305-306.

classifying the poetical language as non-realistic, for the definition of Omega is that of a point of convergence which closes evolution while being itself autonomous. Omega is transcendental and person. Being a personal transcendental, Omega is real, but our limited language necessitates the breadth of a poetical tone.

Omega fulfills evolution by totally personaliziing it, yet it transcends the process through its autonomy. This is to describe Omega as necessary for the completion of cosmogenesis, but not necessarily the consequence of the cosmogenic processes. Omega is not contingent, in that it may or may not occur from cosmogenic forces, but its rise will occur infallibly. This is so because Omega is already present and working.

Omega gives meaning to cosmogenesis because evolution gives rise to the personal, and, unless we accept the personal as a freak of nature, the term of the process demands a point which can personalize.[33] The omegan attributes (as mentioned in Chapter II) are: autonomy, actuality, irreversibility and transcendence. These characteristics bring the individual personality to a realization of greater being.[34] This greater being

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[33]PTdeC, Hymn of the Universe, p. 136.

[34]PTdeC, Ibid., p. 109.

is a perfect person[35] and is properly positioned at the term of center-genesis.[36]

The Omega is the point of encompassing socialization, full knowledge, and complete spirituality. In view of personalization and the omegan characteristic, the Omega is seen as being God-Omega.

God-Omega is the Alpha of all existence and draws existence to Himself. What must be emphatically realized is that God-Omega allows the cosmos to evolve and become through its own processes and mechanism--cosmogenesis and Complexity/Consciousness. From our observational station we can only discern the how--the mechanism of cosmogenesis. The God-Omega Point is seen as arising, not necessarily but infallibly. It is beyond Teilhard's scope to explain the cause of God-Omega.

God-Omega is an extrapolation arising from the coherent and homogeneous nature of the levels of evolution. To fulfill man's noospheric desire for Man-Social, Man-Mental and Man-Spiritual evolution can only terminate in a person who fulfills man's own individual desire--universal love.[37] For complete personalization, only a

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[35]PTdeC, "Sketch of a Personalistic Universe," 15-16.

[36]PTdeC, "Centrology...," 10.

[37]PM, p. 266.

"real and present center," a "supremely attractive,"[38] person can give meaning to cosmogenesis and to the advent of man.

Teilhard believes that these steps to cosmic meaning are open to science, and only a pessimist can deny this cosmic vison. A pessimism occurs if one applies an individual's egoistic ends to cosmic ends.[39] To effect a convergence and a noospheric advance modern man must become "fully conscious of the new powers that have been unleashed."[40] He must dedicate himself to the organization of research, to concentration of research upon man, and to the study of science and religion.[41] This is a call for the science of Human Energetics, which takes into its scope all problems of energy, physical and spiritual.[42]

Only when the obligations of society to man and man to society are practiced will a science of Human Energetics

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[38] PM, pp. 268-269.

[39] PM, p. 275.

[40] PM, p. 279.

[41] PM, p. 278.

[42] PM, pp. 282-283.

and its ensuing peace be realized.[43] Such obligations are in summary:

1) The absolute duty of the individual to develop his own personality.

2) The relative right of the individual to be placed in circumstances as favorable as possible to his personal development.

3) The absolute right of the individual within the social organism, not to be deformed by external coercion but inwardly super-organized, that is to say, in conformity with his personal endowments and aspirations.[44]

The future opens to an individual two possibilities: the promise of success and the gloom of failure. Within the view of Teilhard one can find hope and faith. The possibility of failure is present as long as egoism and apathy remain dominant in an individual's life. If the overall view is to be tenable, then only our individual dedication to personalization can give truth to his views.

Having reflected on Teilhard's words, one realizes that he "will never be the same person again."[45] Moreover, he finds the cosmos a place not only to be lived in but lived for. Teilhard's call is for a cosmo-

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[43] PM, p. 288.

[44] PTdeC, The Future of Man, pp. 194-195.

[45] Catherine Aller, p. 10.

humanitarianism, and for an openness to God-Omega. The horizons he opened, and opens, are of a kind that men have never before dreamed possible. What Teilhard has not seen is left for his followers to find.

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