

AN INTERPRETATION OF TEILHARD AS REFLECTED IN RECENT LITERATURE

by *Alfred P. Stiernotte*

Marie-Joseph-Pierre Teilhard de Chardin, the distinguished paleontologist and philosopher of evolution whose philosophical and theological writings were not permitted publication by the Roman Catholic authorities during his lifetime, is now enjoying a popularity seldom before accorded to any scholar doing research on the advances of science and their bearing on religion. This is not the place to recount his life story, his scientific research in Africa and China, his association with the expedition which unearthed one of the most famous of human fossils, Peking Man, in 1928, his deep friendship with men of science, such as Julian Huxley and Theodosius Dobzhansky, who, while not accepting entirely his christological mysticism, paid high tribute to his powerful synthetic mind. All these details of Teilhard's lifework may be found by consulting Claude Cuénot's *Teilhard de Chardin: A Biographical Study*,¹ which contains no less than seventy-six pages of the most complete bibliography of the works of Teilhard. It would be impossible to list all the articles and works discussing the evolutionary synthesis of this outstanding modern scientific mystic, for their number is prodigious. In the words of Mircea Eliade:

At least one hundred volumes and many thousands of articles have been published all over the world, in less than ten years, discussing—in most cases sympathetically—Teilhard de Chardin's ideas. If we take into consideration the fact that not even the most popular philosopher of this generation, J. P. Sartre, attained such a massive response after twenty-five years of activity, we must acknowledge the *cultural* significance of Teilhard's success.²

Our purpose is more modest: to summarize a few of the original works of Teilhard as well as commentaries and admirers and critics in recent French and English literature.³ Certain basic studies, fundamental aspects, and controversial points will be briefly touched upon; first, from Roman Catholic sources; second, from Protestant

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sources; third, from scientific evaluations and criticisms. I shall begin by giving my own interpretation of the Teilhardian system in an attempt to stress the reason why it has appealed to eminent minds of differing philosophical and religious orientations.

THE TEILHARDIAN SYSTEM

Teilhard was of course known in Europe before he became a topic of scientific and religious discussion in the United States. Among his French writings may be mentioned *Le Phénomène Humain*, *L'Apparition de l'Homme*, *La Vision du Passé*, *Le Milieu Divin*, *L'Avenir de l'Homme*, *L'Energie Humaine*, *L'Activation de l'Energie Humaine*, and *Hymne de l'Univers*.⁴ For those who wish a quick pictorial survey of the man, his education, researches, travels, accomplishments, there is nothing more excellent than the *Teilhard de Chardin Album*, compiled and edited by Jeanne Mortier and Marie-Louis Auboux.⁵

It is not too much to say that publication of *The Phenomenon of Man* provided a sensation in Catholic, Protestant, and scientific circles. This was no half-baked, sentimental saccharine, supernatural reconciliation of science and religion. There was hard-headed realism in Teilhard's brave acceptance of the whole evolutionary process in a far deeper sense than had ever been done before by any philosopher of religion who remained wedded to Christianity. It is necessary to repeat Julian Huxley's warm appreciation at this point:

It was my privilege to have been a friend and correspondent of Père Teilhard for nearly ten years; and it is my privilege now to introduce this, his most notable work, to English-speaking readers. His influence on the world's thinking is bound to be important. Through his combination of wide scientific knowledge with deep religious feeling and a rigorous sense of values, he has forced theologians to view their ideas in the new perspective of evolution, and scientists to see the spiritual implications of their knowledge.⁶

Similarly, Dobzhansky, though he has written both critically and appreciatively of Teilhard, nevertheless states: "[Your] mystical 'orthogenesis' need not be incompatible with modern biological theory."⁷

And among theologians, the great name of Paul Tillich must be added among those realizing the tremendous significance of Teilhard: I happened to read Pierre Teilhard de Chardin's book, *The Phenomenon of Man*. It encouraged me greatly to know that an acknowledged scientist had developed ideas about the dimensions and processes of life so similar to my own. Although I cannot share his rather optimistic vision of the future, I am convinced by his description of the evolutionary processes in nature.⁸

As a matter of fact, the third volume of Tillich's *Systematic Theology*

contains thirty-five pages which are strictly in accord with the general evolutionary view of reality, and T. Dobzhansky rejoices at this adoption of process philosophy by Paul Tillich. A complete comparison of the philosophies of Teilhard and Tillich is beyond the scope of this article, however.

One could mention many authors favorable to Teilhard, but let us first give an impression of his impact. The number of societies devoted to the study of his works and thought is increasing in many European countries, and even Marxist scholars are interested in the general cosmic picture presented by Teilhard.⁹ The Pierre Teilhard de Chardin Association of Great Britain and Ireland publishes the *Teilhard Review*. The Winter, 1967-68, issue contains an important article by the distinguished scholar of comparative religion, R. C. Zaehner on "Teilhard and Eastern Religions." Says Zaehner: "'Convergence' perhaps sums up the whole vision of Teilhard de Chardin in all its ramifications, just as 'integration' sums up the whole psychology of Jung. If I were asked to sum up the religious attitude of the *Bhagavad-Gitā*, I would say that it was 'integration' leading to 'convergence.'" ¹⁰ Further delineation of the thought of Teilhard and Eastern religions is beyond the scope of this paper, and those who wish to do so will find their curiosity richly rewarded in R. C. Zaehner, *Matter and Spirit: Their Convergence in Eastern Religions, Marx, and Teilhard de Chardin*.¹¹

In the United States, Dr. Robert Francoeur, editor of *The World of Teilhard*¹² and author of *Perspectives in Evolution*¹³ and many articles on Teilhard, addressed a joint meeting of the St. Lawrence University School of Theology and the Newman Club, Canton, New York, the first example of this interesting ecumenical co-operation at this university, in 1964. Francoeur was also one of the leading spirits of the Teilhard Conference of 1964 held on August 17-24 at Fordham University and sponsored by the Human Energetics Research Institute, and the illuminating discussions are reported in *Proceedings of the Teilhard Conference 1964*.¹⁴ Francoeur established the American Teilhard de Chardin Association, Incorporated, which holds meetings in New York or in educational institutions in the states of New York or New Jersey for the further elucidation of aspects of Teilhard's theology, philosophy, and science. Among distinguished founding members of the Association may be mentioned Professor Theodosius Dobzhansky, who does not need to be introduced to readers of *Zygon*; Ruth Nanda Anshen, editor of the well-known *World Perspectives*

series of books;¹⁵ Professor Ewert H. Cousins, Department of Theology, Fordham University, who has discovered remarkable analogies between the cosmic philosophy of St. Bonaventure and Teilhard;¹⁶ and Professor Jean Houston, Department of Philosophy, Marymount College, Tarrytown, New York.

The continued interest in, and at times acrimonious discussions over, the process philosophy and theology of Teilhard, and the Christ mysticism which is integral to it, on the part of theologians, both Catholic and Protestant, philosophers of emergence, distinguished biologists, social reformers, and students of mysticism, surely indicates that we have here one of the rare synthetic minds of our age. He is difficult to understand and appreciate because one of the most significant academic shortcomings of our time is the trained mind of the specialist who does indeed know his own research but has not learned to leap over walls separating his from other specialties with the same agility as did Teilhard.

What, in fact, are the essential points of Teilhard's synthetic philosophy and vision? *First*, a materialism of levels informed by his law of complexity-consciousness. *Second*, a dynamic activity throughout the whole universe, which he has characterized by "cosmogogenesis," "anthropogenesis," "hominization," "noosphere," "cone of time," etc. A philosophy of layers of matter, each layer possessing its own qualitative level, and on the earth limited by the spherical form of the earth (it is really a geoid), has led Teilhard to describe these layers in terms of "lithosphere," "biosphere," and finally the layer of the mind, the "noosphere," formed by the mental capacities of men on the surface of the earth. The *third* aspect of Teilhard's thought is the cosmic culmination at the Omega point, which is nothing less than the radiation of divine altruistic love incarnated in Christ and permeating a regenerated humanity. This cosmic convergence, sustained by all the layers of matter which emerged in succession in the history of the universe and of this planet, is the process of "Christification."

At this point we might pause to make two remarks. First, that most theologians or philosophers would be content to elaborate one of these elements: (1) the materialism of levels; (2) the dynamic process which Bergson characterized as the "élan vital"; (3) the mysticism of the Christ. The peculiar audacity of Teilhard is that he has done all three by means of a new vocabulary which is bewildering to those who are accustomed to precise meanings historically attached to the terms of intellectual and religious discourse. What is this strange expression which recurs in the writings of Teilhard, "la matière amorisée," mat-

ter apparently having the capacity to embody and irradiate love? Surely there is a strange confusion of fundamental categories here! And yet, has not every great synthetic mind the right to create his own vocabulary? Did not Leibniz provide for "sleeping monads" and "waking monads" in his system, to the delight of every student of philosophy? Did not Spinoza and Alexander use the term "nisus" and invest it with cosmic grandeur? Did not Bergson elaborate his entire philosophy around such concepts as "the élan vital," "durée réelle," etc.? Did not Whitehead invent new terms, such as "appetition," "subjective aim," "superject," "primordial nature of God," "ingression," "eternal objects"?

Our second observation is, then, that Teilhard is justified in elaborating terms to indicate his synthetic world view in which the various sciences, the aspirations for world unity, the dynamic processes leading to increasing "reflection" (and for Teilhard "reflection" means the gradual comprehension of the whole cosmic process), and the mysticism of the Christ as the focal point of world reunion, are all inter-related.¹⁷ Those whom Berkeley called "the minute philosophers" did not understand the cosmic implications of philosophy, and there are modern minute philosophers, such as the logical positivists, the linguistic analysts, to whom Teilhard's whole effort will appear to be largely mystical and mystifying nonsense. Nevertheless, the philosophic enterprise is still animated by the vision of the One. Consider, for instance, the definition of philosophy given in one of the standard histories: "Philosophy in its widest and broadest sense has meant a reflective and reasoned attempt to infer the character and content of the universe, taken in its entirety and as a single whole from an observation and study of the data presented by all its aspects."¹⁸

This "reasoned and reflective attempt" is precisely what Teilhard has done, and "the single whole" for him was nothing less than the whole universe as the very immanence of God embodied in those layers of matter which so fascinated Teilhard and in which Christ as Omega point was being prepared and potentially present!

But what about the layers of matter? It is here that Teilhard's thought needs to be clarified by his fundamental assumption about the nature of reality.¹⁹ This is his law of complexification-consciousness, according to which every level of material organization is associated with a degree of consciousness. This suggests the double-aspect theory of the relation of body and mind as well as mind as a product of emergent evolution. But let us let Teilhard speak for himself:

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Let us postulate the principle that consciousness . . . is a universal property common to all the corpuscles constituting the Universe, but varying in proportion to the complexity of any particular molecule: which amounts to saying that the degree of psychism, the "within," of the different elements composing the world will be small or great, according to the place of the elements in the astronomically extended scale of complexities at present known to us. . . . After the cell, there is a definite radiation growing richer and more intense with the formation and gradual concentration of nervous system. And finally, at the extreme end of the human spectrum, comes the thinking incandescence of the human brain.²⁰

It is to be noted that this does not mean a panpsychism in which little souls animate subatomic particles, a conception so dear to vitalists. Teilhard's double-aspect theory in mind and matter is not to be read back into an esoteric mysticism in which the nuclear energies of the atom dissolve in some kind of psychism or psychic entity. The *materiality* of the universe—to be sure a materiality existing at various levels of organization, each correlated with the appropriate qualitative level of which the highest is the mind of man, and ultimately, the mind of the Christ—is never rejected by Teilhard. It is not a prop to prepare a more "spiritual," immaterial view of things. That is why in *Hymn of the Universe* Teilhard does not hesitate to link intimately the immanence of God and Christ within matter itself: "Blessed be you, universal matter, immeasurable time, boundless ether, triple abyss of stars and atoms and generations, you who by overflowing and dissolving our narrow standards of measurements reveal to us the dimension of God."²¹ Also, from the *Divine Milieu*: "Matter, you in whom I find both seduction and strength, you in whom I find blandishment and virility, you who can enrich and destroy, I surrender myself to your mighty layers, with faith in the heavenly influences which have sweetened and purified your waters. *The virtue of Christ has passed into you.*"²²

At this point the philosophical idealist, whether absolute or subjective, will demur. Is this not hopeless confusion? Imagine linking "the virtue of Christ" with levels of material organization! When "everyone knows" that a philosophy of matter, of substance, has been replaced by a philosophy of process, and process is nothing but the activity of an immaterial cosmic mind!²³

On the other hand, Teilhard's stress on layers of matter is not to be equated with a reductionist materialism or a mechanical materialism. The layers embody new patterns of organization which have emerged in time and are not reducible to merely physical and chemical actions,

though including them. Teilhard's thought is here consistent with a modern expression of an evolutionary materialism:

Modern materialism, as we understand it, asserts the following: the inorganic pattern of matter is prior to living, minded and purposive organisms, which arise gradually and only as a result of a complex of evolutionary development. With the advent of organic life, new, biological laws begin to operate. The principles of physics and chemistry necessarily apply, but are not by themselves sufficient to the biological level. Thus mechanism or the theory that physico-chemical explanation is adequate to all levels, is emphatically rejected. . . . Organized matter reveals integrative levels of organization characterized by distinctive laws.²⁴

This cosmic view of material levels, which are the condition for the actualization of life and the spirit, places Teilhard within modern process theology, which has an eminent representative in Archbishop William Temple. This is not the place to make a comparative study of William Temple and Teilhard de Chardin, and obviously Temple was not writing with Teilhard in mind. But in stating that "Christianity is the most materialist of all the great religions,"²⁵ Temple was addressing himself to a view of the universe as consisting of emerging levels of matter, and that is also Teilhard's conception. Teilhard is not thus the creator of fictitious theology but belongs to an important type of modern process theology which has representatives in several communions.

The first large element in Teilhard's philosophic system is a world view which is very similar to a materialism of levels. Teilhard thus goes beyond a neutral naturalism in which atoms, molecules, man, and God are part of Nature. The ascent of matter through radial energy, the force within matter driving it to ever higher syntheses until the mind of men and the mind of the Christ are reached through an incarnation which is also a cosmic culmination, places Teilhard within the general category of process philosophy and theology. Indeed, he stands at the left wing of this spectrum of thought precisely because even in his most imaginative expression of ecstasy, it is the God present in the layers of matter who elicits his fidelity, and it is the God culminating in a radiance of love throughout the universe, as revealed at the Omega point, who is the object of his deepest gratitude. This is his cosmic pattern of "la matière amorisée."

He thus rejects all dualistic conceptions of God and nature, spirit and matter, and by an intuition similar to that of Bergson, perceives the very activity of God within the life process. Implied in all this is

obviously a dynamic conception of God as precisely *not* external to nature, but as the very creative power of emergent evolution and requiring the universe to fulfil himself. A conception of God in which he is dissociated from the universe and dwells "upstairs" is a mythology which Teilhard rejects.²⁶

The second element in Teilhard's cosmic and religious synthesis is precisely this dynamic activity of the universe in a process of "cosmogensis" and "anthropogenesis" in which the noosphere, the sphere of humanity with all its trials and tribulations, eventually merges, through increasing technical efficiency, the interdependence of nations (economically, politically, culturally), and the attraction of the Omega point, into an increasing sense of mystical union in which individuals are not submerged into a divine essence but retain their individuality.

The concept of cosmic activity, producing the forms of evolving life and man himself in an immense historical process in which time is taken seriously, brings Teilhard definitely into the class of philosophers and theologians who stress the dynamic immanence of God as peculiarly apparent in the evolution of life. Even such a non-theistic philosopher of evolution as Roy Wood Sellars may be mentioned in this group because he does present a philosophy of material levels with corresponding qualities.²⁷ Broadly speaking, the philosophers and theologians of emergence, or better called, process philosophy, are Henri Bergson, Samuel Alexander, C. Lloyd Morgan, Jan Christian Smuts, Roy Wood Sellars, Errol E. Harris, L. S. Thornton, W. Norman Pittenger, Sri Aurobindo.²⁸ The task of elaborating a critical comparison of their views with the Teilhardian system has been done only with a few of these—Henri Bergson and Sri Aurobindo. The others have not as yet been related to Teilhard.

A most complete study of Bergson and Teilhard de Chardin has been done by Madeleine Barthélemy-Madaule, *Bergson et Teilhard de Chardin*,²⁹ not yet translated into English. Briefly, the divergences between them is the greater part attributed to matter by Teilhard while Bergson emphasizes a radical opposition between matter and spirit; Teilhard is monistic while Bergson writes of two sources of morality and religion; Teilhard's philosophy is solidly based on a total material universe involved in real duration, while for Bergson duration has a psychological quality. We translate from Barthélemy-Madaule the following remarks to clarify the distinction which is expanded in great detail in this masterly doctoral dissertation:

The various Teilhardian theses structure the concept of matter. On the contrary, the analytical mind of Bergson considers evolution within a circumscribed department of life; the psychologism of Bergson perceives the duration of the universe through interior duration and does not assign specific properties to cosmic time; we do not have a direct apprehension of it. Thus, while he had a presentment of the universality of duration, Bergson was unable to realize the significance and structure of the duration of the universe.³⁰

Sri Aurobindo is the distinguished Hindu philosopher who, influenced by concepts of evolution derived from the West, made major reconstructions in Vedanta. For him, *maya* is no longer illusion, and Brahman manifests itself in the various layers of inorganic matter and organic life so dear to Teilhard. The cosmic view of the self-manifestation of Brahman in the material aspects of the universe in order that through an immense cosmic epoch they may find reunion in Brahman has some similarity to the outlook of Teilhard. Says Ernst Benz: "The chaotic symptoms of crisis in our time are connected with deep-reaching developments in the intellectual, political, and economic area. They make integration imperative. These symptoms are proof to him that a new stage of human evolution is imminent. Later on, Teilhard de Chardin was to argue in a similar way."³¹

Returning to Teilhard, one can affirm that his system involves a Presence at all levels, permeating the entire cosmos and driving it onward to an irradiation of this Presence as the glory of altruistic love at the Omega point. And this evolution is twofold, the organization of the Without of matter and the intensification of inner consciousness in the Within of things:

Since the stuff of the universe has an inner aspect at one point of itself, there is necessarily a *double aspect to its structure*, that is to say in every region of space and time—in the same way, for instance, as it is granular; *coextensive with their Without, there is a Within to things*. . . . The *within, consciousness and then spontaneity*—three expressions for the same thing.³²

This conception of the Within of things in the world stuff may seem peculiar to Teilhard, and it reminds us of the double-aspect theory of mind and matter. Is there any similar view elsewhere? Yes, in the writings of Durant Drake:

The substance of the world is called "matter" when we look at it from the outside. If we were on the inside of it, we should call it "psychic stuff," or "sentience." . . . Since physics can tell us nothing at all about the inner

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nature of what exists, we may be thankful if our awareness of our own inner life gives us some clue, however vague, to the inner nature of the world-stuff out of which we were born, and of whose very substance we are.³³

In Teilhard, there is a parallel evolution of the Without and the Within of the world itself in a continuous series admitting of no sharp break between inorganic matter, organic matter, and the mind of man, even the mind of the Christ. Since the body of the Christ, or to put it more bluntly, the matter of the Christ is continuous with the matter of the universe, the "body of Christ" is the whole material process of evolution without which Christ could not have emerged from the cosmos so as to reveal the Word "in whom all things subsist." For Teilhard, the incarnation is continuous with evolution and not an irruption from a supernatural realm into the natural. It is, rather, "the spiritual power of matter."³⁴ The continuity is emphasized in the following passage:

For christian humanism—faithful in this to the most firmly established theology of the Incarnation—there is no real independence or discordance but a logical subordination between the genesis of humanity in the world and the genesis of Christ, through his Church, in humanity. Inevitably the two processes are structurally linked together, the second needing the first as the material on which it rests in order to supervitalize it.³⁵

This is indeed a Christology of emergent evolution. We are a long way here from some types of Protestant theology in which such a Christology is unacceptable because of notions of divine interventions in the world of nature. However, one of the greatest of Catholic theologians, Karl Rahner, S.J., gives strong support to Teilhard's Christology:

It must also be underlined . . . that the statement of God's *Incarnation*—of his becoming *material*—is the most basic statement of Christology. . . . In Jesus, the Logos bears the matter just as much as the soul, and this matter is a part of the reality and the history of the cosmos. . . . The divine Logos himself both really creates and accepts this corporeality—which is a part of the world—as *his own reality*.³⁶

This is the second important element in Teilhard's system: a Christology of cosmic culmination from the evolving matter of a dynamic universe. Philosophers of emergent evolution are broadly in agreement on this point, although some do not stress a Christology as definitely implied in the process. For Samuel Alexander, the giants of the race point to a futuristic deity but are not themselves incarnations of the space-time nisus. For J. C. Smuts, the "holistic tendency of the universe" is not as completely integrated with the emergence of the Christ as it is in Teilhard. Obviously, a Christology of emergence is

the special contribution of Teilhard as a Christian thinker, resting on the broad pattern of cosmic creativity stressed by all process philosophers.

The third important element in Teilhard's system involves the Omega point, which represents the final culmination of the cosmic process in a pervasive mysticism of altruistic love, uniting all men in a reconciled humanity in which the glory of God as self-giving love irradiates all the levels of the universe up to the Christ. This consummation is quite in keeping with Teilhard's emphasis on the Within of matter meaning precisely the ever-expanding consciousness of man until at point Omega the mind of man is mystically conscious of the whole universe as dynamic process. As the universe is the embodiment of the divine Logos whose nature is self-giving love, this mystical awareness is at the same time a communion with God as self-giving love. In Teilhard's exalted mysticism of "the far-off divine event," the whole universe—with its energies, qualities, levels of organization, dynamism leading humanity to a final reconciliation of all tensions and conflicts—is the gift of God, is the divine initiative. It is God himself differentiating himself throughout the world and implanting himself in each separate thing, a process in which man's consciousness yearns for reunion with God through the vast cosmic evolutionary sweep of the world's history. The world process is a transformation from God to God, from God as point Alpha to God as point Omega—a very traditional idea in theology. But let us hear from Teilhard himself:

The only fashion in which we could correctly express the final state of a world undergoing physical concentration would be as a system whose unity coincides with a paroxysm of harmonized complexity. . . . By its structure, Omega, in its ultimate principle, can only be a *distinct Centre radiating at the core of a system of centres*; a grouping in which personalization of the All and personalizations of the elements reach their maximum, simultaneously and without merging, under the influence of a supremely autonomous focus of union.³⁷

One of the typical Teilhardian words, "paroxysm," is to be noted here as expressing a concentration of complex factors into a harmonious unity. Also to be emphasized is the ultimate communion of men in "a distinct Centre radiating at the core of a system of centres" so that the individuality of persons is preserved.

While this universal communion through a limitless increase in the

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Within of matter, which is the radial energy of evolution or the cosmic creativity of evolution, is by scientific extrapolation envisaged to reach the Omega point, Teilhard, because of his Pauline orientation at this juncture, is able to give a religious interpretation to his cosmic vision:

Christ, principle of universal vitality because sprung up as man among men, put himself in the position . . . to superanimate the general ascent of consciousness into which he inserted himself. . . . He aggregates to himself the total psychism of the earth. . . . Then, as St. Paul tells us, God *shall be all in all*. This is indeed a superior form of "pantheism" without trace of the poison of adulteration or annihilation: the expression of perfect unity.³⁸

Teilhard is thus able to integrate his cosmic vision of an ascending universe of complexity-consciousness with certain aspects of Pauline cosmic theology which are usually forgotten. The biblical culmination, "God shall be all in all," is also mentioned by Tillich in an important passage indicating that both Tillich and Teilhard agree on the "ultimate harmony of all souls with God," according to the familiar Universalist conception.³⁹

Teilhard's system is not to be understood merely as a scientific, intellectual, or philosophical world view; it implies also a new type of mysticism. This is the mysticism of process, not the old mysticism of static vision, but a new mysticism of communion with the universe in its total pattern of emergence from space-time to the levels of the inorganic, the organic, to the human, and finally to the Christ, who is nothing less than the pervasiveness of altruistic love in self-sacrifice as fully as it is possible to reveal love in a man of our species living under existential conditions but maintaining unbroken his sense of communion with God as love.

The mysticism of Teilhard is not far from the mysticism of *The Divine Comedy*, and there is at least one passage from Dante in which "the scattered leaves of all the universe" are fused in a divine unity: "O grace abounding, wherein I presumed to fix my look on the eternal light so long that I consumed my sight thereon! Within its depths I saw ingathered, bound by love in one volume, the scattered leaves of all the universe: substance and accidents and their relations, as though together fused, after such fashion that what I tell of is one simple flame."⁴⁰

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Such is the Teilhardian system, cosmology, process theology, process

mysticism which points to the reunion of humanity within the embrace of that altruistic love which radiates from the Omega point to be revealed more fully in the future, but is even now perceived by seers and mystics. And this cosmic and christological mysticism is articulated within the framework of levels of materiality, each level being intimately associated with a psychism which radiates most intensely at the culmination of the process.

How has Teilhard been interpreted in recent literature? It is beyond the limits of this article to provide an exhaustive survey of Teilhard's reception by Roman Catholics, Protestants, and men of science, but an attempt will be made to summarize the evaluation of Teilhard by each of these groups. The literature is so immense that important omissions may inadvertently be made.

What has been the response of the Catholic world? On the part of great theologians and philosophers, such as Maritain and Gilson, who have spent a lifetime refining and polishing their Thomistic systems,⁴¹ the response has been one of mild admiration mingled with puzzlement at the audacity of Teilhard in mingling scientific, philosophical, and theological categories. True, Teilhard did not elaborate a philosophical system in the detailed manner done by Leibniz, Samuel Alexander, or A. N. Whitehead. Nor did Teilhard in his epistemology discuss issues of direct realism or critical realism as they are dealt with, say, in Brand Blanshard, *The Nature of Thought*,⁴² or in the April, 1967, issue of the *Monist*. It is understandable that the meticulous interpreters of Thomism for the twentieth century, such as Maritain and Gilson, would not react with enthusiasm for a process theology, such as Teilhard's. James Collins, in "Maritain Asks Some Questions," assesses his slashing attack on current theological thinking, and it would appear that the leading Thomist favors a philosophy of being rather than becoming, which is obviously the fault of Teilhard: "As for Teilhard, he had a poetic intuition of the sacred worth of created nature. But the Teilhardians substitute evolutionary becoming for being and subordinate all metaphysical and religious questions to the panchristizing and pancosmicizing process."⁴³

Teilhard indicates his differences with Gilson and other representatives of an "immobilist" position in a letter he wrote on October 30, 1954, reporting on a symposium of scientists and humanists sponsored by Columbia University: "With Huxley and the majority of the scientists, I, of course, vigorously attacked the immobilist position taken

up, alas, by the more Christian-thinking members of the section, such as Gilson, Malik . . . Battaglia . . . and even Van Dusen."⁴⁴

The large volume on *Vatican II: An Interfaith Appraisal*,⁴⁵ the report of the International Theological Conference held at the University of Notre Dame, March 20–26, 1966, has only a few references to Teilhard,⁴⁶ calling attention to the fact that Teilhard's thought is entirely eschatological, and mentioning a recent work, *Maurice Blondel et Teilhard de Chardin: Correspondence Annotée*.⁴⁷ However, it may be unfair to expect a council devoted to the whole issue of Catholic renewal in the modern world to give major attention to Teilhard. After many years during which his theological and philosophical works were suppressed—a tragedy which he accepted with great humility and patience—he has come into his own. Most Catholic colleges and universities offer courses specifically on Teilhard de Chardin. Much attention was given to Teilhard and process philosophy during the Symposium on Person and Process at Marymount College, Tarrytown, New York, February 28–March 3, 1966. The success of Teilhard and his cosmic views will be measured to the degree that theologians, philosophers, men of science, are interested in a synthetic vision and program uniting the three fields. And that interest, in view of the fundamental drive of the human spirit for unity, is making itself felt in the voluminous literature on Teilhard both at the popular and scholarly levels.

At the popular level, one may mention John Kobler, "The Priest Who Haunts the Catholic World," *Look* magazine,⁴⁸ regarded by Dr. Francoeur as a good introduction; Timothy Jamison, "Chardin's Personalized Universe," *Insight*;⁴⁹ and "Teilhard de Chardin," *The Sacred Heart Messenger*;⁵⁰ Christopher F. Mooney, S.J., "The Risk in Teilhard's Thought," *Catholic Mind*;⁵¹ Jean-Pierre Cartier, "Un Visionnaire du Monde Moderne: Teilhard de Chardin," *Match*;⁵² Berthe Gavalda, "Le Sens du Péché et la Doctrine Teilhardienne," *Le Monde et la Vie*;⁵³ Gavalda, "Teilhard et le Retour du Christ," *Le Monde et la Vie*;⁵⁴ Robert T. Francoeur, "The Cosmic Christianity of Teilhard de Chardin," *Sign*;⁵⁵ Dietrich von Hildebrand, "Teilhard de Chardin: Towards a New Religion," *Triumph*;⁵⁶ von Hildebrand, "Teilhard's New Religion," *Triumph*.⁵⁷ This is just a partial list of articles appearing in non-philosophical journals.

Among scholarly articles on Teilhard may be mentioned the sympathetic review of *The Phenomenon of Man* by F. J. Thonnard, "Philosophie Augustinienne et Phénomène Humain," *Revue des Sciences*

*Religieuses*⁵⁸ in which the author discovers that Teilhard's intuitive faith is centered in Augustinian theology, while his scientific approach reminds one of the views of Auguste Comte. The same journal contains a eulogy of Teilhard by Maurice Nédoncelle, "Un Prophète des Convergences Humaines,"⁵⁹ published shortly after Teilhard's death; and a critical article by Louis Bounoure, "La Cosmologie du P. Teilhard de Chardin devant la Biologie Expérimentale."⁶⁰ Among the first articles to introduce Teilhard to American readers may be mentioned Bruno de Solages, "Christianity and Evolution," *Cross Currents*;⁶¹ Pierre Teilhard de Chardin, "The Psychological Conditions of Human Unification," *Cross Currents*;⁶² Pierre Teilhard de Chardin, "Building the Earth," *Cross Currents*;⁶³ W. A. Wallace, "The Cosmology of Teilhard de Chardin," *New Scholasticism*,⁶⁴ in which he compares the views of Teilhard with those of Fred Hoyle "with his suggested process of continuous creation";⁶⁵ Michael Stock, "Scientific vs. Phenomenological Evolution: A Critique of Teilhard de Chardin," *New Scholasticism*,⁶⁶ reserves his judgment as to the inclusive meaning given to evolution by Teilhard: "To make of evolution the fundamental principle in whose light all the progress of the universe is explained from its primordial beginnings to its final consummation in the vision of God, seems rash and unjustifiable."⁶⁷

Among reviews of books by Teilhard or about Teilhard may be mentioned Charles Wilber's review of Robert T. Francoeur (ed.), *The World of Teilhard*,⁶⁸ in *Cross Currents*,⁶⁹ Michael Stock's reviews of Paul-Bernard Grenet, *Pierre Teilhard de Chardin ou le Philosophe malgré Lui*,⁷⁰ and Claude Cuénot, *Pierre Teilhard de Chardin, les Grandes Etapes de son Evolution*,⁷¹ in the *New Scholasticism*,⁷² Edward T. Gargan's review of Pierre Teilhard de Chardin, *Letters From a Traveller*,⁷³ in *Cross Currents*;⁷⁴ William Birmingham's review of Pierre Teilhard de Chardin, *Hymn of the Universe*,⁷⁵ in *Cross Currents*;⁷⁶ the summary of *The Phenomenon of Man* in *Masterpieces of Catholic Literature*,⁷⁷ which seems to have the key to the achievement of Teilhard:

Perhaps, the real "scandal" of Teilhard and *The Phenomenon of Man* lies in his attempt to achieve, in an evolutionary account, a solidly knit synthesis of the biological and spiritual worlds, two worlds which, despite the teachings of Christ, Paul, and many others in the Christian tradition, have continued to be regarded by Platonic-Cartesian dualism as isolated from each other.⁷⁸

One might venture the opinion that the ground was prepared for

the reception of Teilhard's ideas in the United States by Walter J. Ong, "Evolution and Cyclicism in Our Time," *Thought*,⁷⁹ in which he presents the cosmic view of evolving matter up to the Incarnation:

Matter is prepared for the human soul not merely by the body of a mother and a father; long before any human generation becomes even thinkable, it has to be organized by the evolution of the entire universe over a period of billions of years. For the material things around us, the inorganic matter and even more the organic matter from which we derive our nourishment, are not constitutive of the material universe in its primitive state. Primitive atomic matter must be elaborated by mighty cosmic forces which simultaneously distribute it into the galaxies and solar systems of today and give it the progressively higher and higher interior organization which produces the complex chemical forms with which we are surrounded and inside which we must live. . . . Against this backdrop the Incarnation took place. . . . A Christ projected by our imaginations, consciously or subconsciously, into any universe other than this real one is to that extent unreal.⁸⁰

Walter J. Ong is also editor of *Darwin's Vision and Christian Perspectives*,⁸¹ which contains many brilliant chapters favoring Teilhard.

Among other articles may be mentioned F. G. Elliott, S.J., "The World-Vision of Teilhard de Chardin," and Madeleine Barthélemy-Madaule, "Teilhard de Chardin, Neo-Marxism, Existentialism: A Confrontation," both articles in *International Philosophical Quarterly*.⁸² Dom Illtyd Trethowan, "Bergson and the Zeitgeist—I" the *Downside Review*, makes a comparison of Bergson and Teilhard and states: "The sort of world picture which he presented was essentially Bergson's."⁸³ The Jesuit quarterly, *Christus*, published letters to Teilhard from his friends, "Lettres inédites à un savant de ses amis,"⁸⁴ in which cosmic mysticism is ever present. Several scholarly Catholic journals have made known previously unpublished letters of Teilhard.

Joseph F. Donceel, S.J., in "Teilhard de Chardin: Scientist or Philosopher?" *International Philosophical Quarterly*, addresses himself to this contentious question and proposes a solution:

The whole quarrel between Teilhard and the majority of his fellow scientists may be pinpointed, in philosophical terms, as follows: scientists desire to confine themselves to the study of the phenomenal, efficient, or tangential level of causality, whereas Teilhard bids them include in their work the consideration of the noumenal, formal, or radial level of causality. I would like to show that both Teilhard and his opponents are right.⁸⁵

Just in what way both are right is developed fully in the article.

Other scholarly articles are: Cyril Vollert, S.J., "Toward Omega: The Vision of Man," *Theology Digest*,⁸⁶ Léopold Malevez, S.J., "The

Method of Teilhard and Phenomenology";⁸⁷ August Brunner, S.J., "Pierre Teilhard de Chardin: A Critique;"⁸⁸ Christopher F. Mooney, "Teilhard de Chardin and Christian Spirituality," *Thought*;⁸⁹ and Donald P. Gray, "Teilhard de Chardin's Vision of Love," *Thought*,⁹⁰ in which the author attempts to reconcile a supernatural phase of evolution with cosmogenesis:

A universal love, which is identical with charity, involves a specifically supernatural phase of evolution, a phase made possible through the divine and divinizing Christ-Omega. However, this insistence on a specifically supernatural elevation of cosmogenesis should not be allowed to obscure the creative influence of Omega at all stages of the evolutionary process, which depends upon him from beginning to end. It is simply that Omega acts at different phases of the movement and at different levels of being within that movement in different ways.⁹¹

No doubt further research would bring to light many more articles in American and European journals.

French and English works of Teilhard have already been mentioned.⁹² German translations of Teilhard's works as well as commentaries on Teilhard have been published by Walter-Verlag, Olten/Freiburg.⁹³ Turning now to a few works which examine critically the world view of Teilhard, one may mention the studies of Robert T. Francoeur, founder of the American Teilhard de Chardin Association: *The World of Teilhard*⁹⁴ and *Perspectives in Evolution*.⁹⁵ The latter work is particularly valuable in its interpretation of the Teilhardian view in terms of a dynamic Thomism after the manner of Karl Rahner and of creation in terms of evolution. Francoeur quotes his friend, Theodosius Dobzhansky, with emphatic approval: "Evolution is the method whereby Creation is accomplished."⁹⁶ And Francoeur continues: "If God creates always, if he works in and through the laws of nature and evolution, then he does not have to supplement by some special creation or intervention for the deficiency of lower causes in nature which he has established in an evolving universe."⁹⁷

This work is also extremely interesting for its discussion of new views of original sin in Catholic theology in which the evolutionary process is taken into account, and Karl Rahner's theology of death in which the end of human life is not considered as a separation of an immaterial soul from a material body but rather as a shift in the relation between the soul and prime matter. "Can death be considered as an opening up to matter rather than as a separation from it? . . . Instead of becoming *acosmic* at death, the soul may become *pancosmic* at the moment of death."⁹⁸

Such a pancosmic view of the soul as always in relation with prime matter, either as highly evolved in the human organism, or as dispersed throughout the entire universe, indicates what radical reconstructions are possible for a theology in which the activity of God is discovered precisely in the evolutionary levels of material organization.

Among the more lucid and sympathetic presentations may be mentioned Michael H. Murray, *The Thought of Teilhard de Chardin: An Introduction*,⁹⁹ which includes a valuable chapter on "Teilhard's Methodology" and relates Teilhard to traditional Christian doctrines. Another introduction giving a brief historical background of Darwinism is Joseph V. Kopp, *Teilhard de Chardin: A New Synthesis of Evolution*, in which the writer boldly affirms: "Above all, priests, teachers and all who help to form the minds of present-day youth, will have to study the import of Teilhard de Chardin's philosophy. Any evasion of this vital question in the future would be shirking responsibility."¹⁰⁰

Olivier Rabut, O.P., *Teilhard de Chardin: A Critical Study*,¹⁰¹ is, on the whole, a sympathetic treatment of Teilhard's cosmology, philosophy, and theology. However, the author objects to Teilhard's cosmic Christology in which the whole universe is regarded as the body of Christ: "When we speak of the cosmic Christ, this does not imply that the Incarnation extends throughout the universe. The Incarnation, correctly speaking, relates to the man Jesus, and to him alone. . . . Christ is *linked* with the cosmos, but the universe is not, and never will be, a vaster Incarnation of him."¹⁰²

Rabut's unwillingness to accept Teilhard's cosmic Christology is precisely what is disputed by Petro Bilaniuk, University of Toronto, St. Michael's College:

Teilhard's Christology is necessarily bound to the time-space continuum and its circumstances. . . . We may note the unity of the entire cosmos in Christ, the Christocentricity and Christoformity of all creation, which Teilhard sets forth in unheard-of strength, realism, and beauty. . . . This brings us to the realism, naturalism, and cosmological accent in Teilhard's theological thought. This is a feature which is being minimized by his friends in order to save him, and rejected outright by his enemies. However, a closer scrutiny of the situation reveals an underlying fear of all those people not to violate the divine transcendence by exaggerating the divine immanence in the world and its different parts. They think that by minimizing immanence they will preserve transcendence. However, is it not possible to say that immanence and transcendence complement each other on the part of the absolutely simple pure act of the subsisting existence itself, the ground of being, that is God?¹⁰³

Another useful introduction is Catherine Aller, *The Challenge of*

Teilhard de Chardin.¹⁰⁴ Critical and brief appreciations are also given in Neville Braybrooke, *Teilhard de Chardin: Pilgrim of the Future*,¹⁰⁵ and especially valuable in this symposium is Canon Charles E. Raven's comparison of Teilhard with the British philosophers of emergent evolution, Samuel Alexander, C. Lloyd Morgan, J. C. Smuts,¹⁰⁶ and A. S. Pringle-Pattison.

One of the most fruitful exponents of Teilhard, Henri de Lubac, S.J., author of *Teilhard de Chardin: The Man and His Meaning*,¹⁰⁷ makes many pertinent observations, especially relating to his spiritual development and his defense of Christianity. Especially to be noted are de Lubac's vindication of Teilhard's synthetic vision by reference to Cardinal Newman's *Idea of a University*¹⁰⁸ and the freedom of inquiry into many diverse fields which is the *raison d'être* of a university; also his view that Teilhard's approach is more existential than usually assumed and involves a personal witness to his profound faith in the cosmic Christ,¹⁰⁹ and his analysis of the arguments of Catholic opponents of Teilhard, such as Père Philippe de la Trinité, Henri Rambaud, Signor Bo, and Maryse Choisy, and the rebuttal of such arguments by Père Roger Leys, S.J., Pastor Georges Crespy, and Henri de Lubac.¹¹⁰ He makes a careful exposition of Teilhard's *Comment Je Crois*.¹¹¹ Written with the purpose of demonstrating what is traditional and what is novel in Teilhard is Henri de Lubac, *La Pensée Religieuse du Père Pierre Teilhard de Chardin*,¹¹² the English edition being *The Religion of Teilhard de Chardin*.¹¹³

Catholic opposition to Teilhard has centered on the work of Philippe de la Trinité, *Rome et Teilhard de Chardin*,¹¹⁴ valuable for its detailed presentation of the *Monitum* of the Holy Office of 1962 which did not place Teilhard's works on the *Index* but instructed the directors of religious institutions to "défendre les esprits, particulièrement ceux des jeunes, contre les dangers des ouvrages du P. Teilhard de Chardin et de ses disciples."¹¹⁵ The heart of Philippe de la Trinité's criticism of Teilhard lies precisely in his cosmic Christology: "Non, la cosmogenèse teilhardienne ne développe pas le dogme catholique de manière homogène ni légitime, elle le fausse, elle le gâche. Les eaux vives ne gardent plus leur pureté."¹¹⁶ To such an accusation, de Lubac replies: "One thing at any rate is clear, that he [Philippe de la Trinité] denies to the glorified humanity of Christ the cosmic role which a number of commentators, such as Père Ferdinand Prat, Père Joseph Huby and Père Benoit saw, as did Teilhard,

in St. Paul's statement: a role which some first-rate theologians of today still attribute to him."¹¹⁷

A proper understanding of a cosmic Christology associated with divine immanence, as contrasted to a Christology of divine irruption associated with divine transcendence, seems to be the dividing line separating those who favor Teilhard and those who do not.

Ignace Lepp, who has written many works on psychology, psychoanalysis, existentialism, and Marxism, in both French and German, adds his personal tribute and eulogy to the faith of Teilhard, who believed in both the love of God and the love of the world and thus avoided the pitfalls of Manicheism, in his survey of Teilhard's religious orientation, *Teilhard et la Foi des Hommes*.¹¹⁸

A rather negative appraisal of Teilhard in an older French work is Louis Cognet, *Le Père Teilhard de Chardin et la Pensée Contemporaine*,¹¹⁹ which brings out the usual charges against the great mystic: the lack of transcendence in his theology, an evolution toward reunion in Christ which is held to be achieved by purely natural means, and lack of consideration for the problems of evil and sin. Nicolas Corte, however, in his *Pierre Teilhard de Chardin: His Life and Spirit*,¹²⁰ gives a rapid survey of critics of Teilhard, and includes Cognet's real admiration for Teilhard's thought: "It is, however, a courageous attempt to think out the Christian problems again within the framework of contemporary mentality."¹²¹ Corte mentions voices supporting Teilhard, such as R. P. N. M. Wildiers, O.F.M., Claude Tresmontant, François-Albert Viallet, Albert Vandel, M. Jean Piveteau, and Claude Cuénot.

Norbert Hugédé, in *Le Cas Teilhard de Chardin*,¹²² presents the most forthright attack on Teilhard, much more critical than that of Philippe de la Trinité, on the grounds that Teilhard is a pantheist, that he underestimates Evil and Sin, that he has misinterpreted the Pauline cosmic Christ, and that he fails to understand the significance of the Cross. On this last point it is significant to quote:

Le Christ exposé sur le bois, porte un poids certes, mais non plus celui du péché: c'est le poids de l'Evolution universelle, de cet immense et douloureux effort cosmique, la souffrance même de la terre qui cache "la force ascensionnelle du monde." . . . Chez Teilhard de Chardin, la Croix a cessé d'être cette folie divine qui confond la sagesse des sages, mais elle devient, et cela dans la ligne du plus ancien gnosticisme, la forme supérieure de la Sagesse du Monde. . . . On sent très bien . . . que le Christ de Teilhard aurait pu se passer de la crucifixion.¹²³

Against this accusation, it is only fair to quote from Teilhard's letter

of Good Friday, 1955, shortly before his death: "The crucified God, who, through His crucifixion, is the most powerful spiritual force behind 'ultra-hominisation' since He is the most sustaining and only redeeming force. . . . This is my faith."¹²⁴ It would seem that much criticism of Teilhard has to do with the old debate between faith and reason, revelation and science, as is attested by Henri de Lubac:

To take issue with Teilhard, to find oneself adopting the position that the Revealed of the divine revelation and the Ultimate of rational knowledge are not one and the same, but are irreparably distinct—just as catastrophic as if we considered ourselves pledged to believe that the God of philosophy (neither we nor Teilhard use Pascal's term "the God of philosophers and servants") were actually distinct from the "God of Jesus Christ."¹²⁵

Among the most profound discussions of Teilhard's views in short compass is found in Claude Tresmontant, *Pierre Teilhard de Chardin: His Thought*,¹²⁶ and this work is particularly valuable for defending Teilhard from the charges so often made against him (by Hugédé, just discussed, for instance) that he has overlooked the Cross. Tresmontant replies:

Far from forgetting the mystery of the Cross, as certain people have charged, Teilhard's originality is that he sees the mystery of the Cross operating everywhere in creation. This was his constant position from his first to his last writings. "While marking a higher stage in the gratuitousness of the divine operation, are not creation, the Incarnation and Redemption each so many acts indissolubly linked in the apparition of participated being?"¹²⁷

Equally profound as is Tresmontant's analysis, though not so favorable to Teilhard, is Piet Smulders, S.J., *The Design of Teilhard de Chardin*,¹²⁸ in which may be found an important chapter on "Evolution and Original Sin" where the asperities of the original doctrine connected with monogenism are rectified. Smulders, writing largely from a traditional background, emphasizes more than other commentators the three motifs of the Teilhardian spirituality: the Incarnation, the Church, and the Eucharist.

Giving an excellent study of Teilhard's scientific investigations rather than his theological opinions is the Abbé Grenet's work, *Teilhard de Chardin: The Man and His Theories*,¹²⁹ in which is found that remarkable statement of Teilhard, indicating his courage and invincible faith in spite of the denial of publication: "At present it hardly matters to me whether I am printed or not. What I see is infinitely greater than all inertia and all obstacles" (September, 1934).¹³⁰

Paul Chauchard, in *Man and Cosmos: Scientific Phenomenology in*

Teilhard de Chardin,¹³¹ writes from the point of view of a specialist in cerebral mechanisms and neurophysiology to support Teilhard's notion of the "Within" of matter and of expanding consciousness, as well as relating Teilhard to a dynamic Thomism as informed by Sertillanges.¹³² He finds "the real meaning of Teilhard's work" in "finding the secret of the world at the heart of the world, in an immanence revealing itself as transcendent. *It is a matter of resacralizing a profane world by giving even the profane its own sacred character.*"¹³³

Such a stress on the sacredness of the world reminds one of Tillich's remarks about "the sacral power in things," and one could venture the opinion that "the sacred time" and "the sacred space" of the cosmos so well delineated by Mircea Eliade in all his writings are precisely the lines of progressive advance of Teilhard's complexification-consciousness in the total emergence of life, as dimly apprehended by the primitive consciousness. This is a subject worthy of further exploration. In fact, Eliade has vindicated the real significance of Teilhard in his emphasis on the sacredness of the cosmos: "When Teilhard speaks of the penetration of the galaxies by the cosmic Logos, even the most fantastic exaltation of the bodhisattvas seems modest and unimaginative by comparison—because for Teilhard the galaxies in which Christ will be preached millions of years hence are *real*, are living matter."¹³⁴ Eliade, who in most of his works had deplored the desacralization of nature by modern man, has found in Teilhard the prophet of resacralization:

We can now understand the reason for Teilhard's immense popularity: he is not only setting up a bridge between science and Christianity; he is not only presenting an optimistic view of cosmic and human evolution and insisting particularly on the exceptional value of the human mode of being in the universe; *he is also revealing the ultimate sacrality of nature and of life.*¹³⁵

Another work of Paul Chauchard is his little book of eulogy on Teilhard's personal mysticism, *Teilhard de Chardin on Love and Suffering*,¹³⁶ and the final chapter, "Teilhard Crucified," testifies to the fact that Teilhard did not disregard the Cross: "Was Teilhard an optimist who ignored the cross? To think so would take insensitivity or masochism, for he was crucified all his life for having wanted to be an apostle of the Church in the modern world."¹³⁷

The French work edited by Claude Cuénot, *Teilhard de Chardin et la Pensée Catholique*,¹³⁸ is based on a colloquium held in Venice, organized by Pax Romana, the International Movement of Catholic Intellectuals, June 9–11, 1962, and the discussions held by authors pre-

viously mentioned, such as Henri de Lubac, the Abbé Grenet, Paul Chaunchard, R. P. Wildiers, O.F.M., and many others, are most enlightening on the crucial points of Teilhard's christological synthesis.

A moot question has to do with the creation of the soul in the context of Teilhard's vast cosmic dynamism. This is discussed in minute historical detail in the scholarly work of Robert North, S.J., S.S.D., *Teilhard and the Creation of the Soul*, with an Introduction by Karl Rahner, S.J.¹³⁹ The final sentence of the book gives the key to this erudite study: "It is important to have recognized at its true nobility the procedure by which God wished his immediate and creative role in the emergence of the human soul to be intimately linked with the material and vital universe."¹⁴⁰ Particularly interesting in this work is the discussion of Teilhard's relation to existentialism.¹⁴¹

Christopher F. Mooney, S.J., in *Teilhard de Chardin and the Mystery of Christ*,¹⁴² traces meticulously with copious notes the development of Teilhard's thought on the grand motifs of evolution, Incarnation, and the Church and the Parousia, indicating the dates on which he made more precise formulations. To those who claim that Teilhard's thought is vitiated by nineteenth-century optimism, Mooney stresses Teilhard's awareness of the existential crisis of meaninglessness in modern man and his intense search for an issue resolving this crisis through his cosmic Christology. Mooney presents the problem of evolution and divine grace:

Such a conception of the relationship between natural and supernatural does not, it should be noted, involve the risk of minimizing the gratuity of grace. . . . A certain freedom must be granted in this area, since the whole problem of how grace perfects nature, as well as the best way of understanding the fact of its gratuity, are questions which at present are still theologically very much open.¹⁴³

Other writings on Teilhard by Mooney are: "The Body of Christ in the Writings of Teilhard de Chardin," *Theological Studies*,¹⁴⁴ and "Teilhard de Chardin and the Christological Problem," *Harvard Theological Review*.¹⁴⁵

Eulalio R. Baltazar addresses himself to the crucial problem of the relation between nature and grace in *Teilhard and the Supernatural*,¹⁴⁶ for he regards the efforts of Henri de Lubac, Claude Tresmontant, and Christopher F. Mooney as incomplete in this respect. Baltazar has the merit of placing with great precision the problem between traditional Christians and Teilhardian Christians:

If evolution is a natural process which tends towards Christ, then it would seem that this natural process is able to attain Christ-Omega as supernatural

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by its own natural powers. But this view seems to contradict the irrevocable and express teaching of the Church that the supernatural is gratuitous, hence unattainable by the natural powers of man or by the evolutionary process. Christ cannot be the fruit of the evolutionary process.¹⁴⁷

In order to solve this question which lies at the root of all theological controversies about Teilhard, Baltazar examines "The History of the Problem of the Supernatural" and finds the scholastic formulation unsatisfactory for the following reasons:

The scholastic formulation is unable to explain how the supernatural is the highest perfection of man, for it cannot show that it is at the very core and center of his being, constitutive of his nature, and the goal towards which his nature is intrinsically ordained. It is unable to resolve the tension in the modern Christian whose new awareness is that time is redemptive, creative, positive, for this formulation tells him that value is in the extra-temporal, transphenomenal, metaphysical, metempirical. And finally, it is unable to meet the needs of naturalism and secularism, because it is unable to present the truths about the supernatural in a meaningful and significant way, or in a way that is harmonious with the other truths of Christian faith.¹⁴⁸

Baltazar's solution is to reconstruct Christian theology strictly within the orientation and world view of process philosophy, involving an operational definition of process, the conversion of the notion of substance into the notion of process, transition from existence as self-containedness to existence as union, and conversion of the dynamism of being from act and potency to the dynamism of love.¹⁴⁹

Strongly critical of the Aristotelian-Thomistic context, Baltazar explains at length that the ordination of the universe and of the creature to grace in no sense denies the gratuity of grace, for he places the supernatural at the very center of nature: "The only way to cope with modern naturalism and secularism is, therefore, to situate the supernatural at the very heart and center of nature."¹⁵⁰

Baltazar is emphatic about the need of a new christological formulation, and his elucidation pays tribute to Paul Tillich for sharing his rejection of a supernatural framework, for Tillich does not have a single line in support of "supranaturalism" in his writings. A few quotations indicate the radical transformation of static into process categories which make the whole approach of Teilhard more relevant to the dimension of an immanent Cosmic Creativity than was done by even such excellent studies as found in the works of Tresmontant, de Lubac, and Christopher Mooney: "Christ and the order of grace as supernatural convey the impression that they are extrinsic to the

world, that they come from without and are grafted on to the world as the principal and central reality."¹⁵¹ Again: "The traditional preference for the term 'supernatural,' while safeguarding the transcendence of Christian truths, has ignored the other aspects of their immanence, pertinence and centrality to the world. . . . For this reason, Tillich's whole effort was to present Christianity as an ecstatic naturalism."¹⁵²

Baltazar's chief argument is summarized as follows:

Our contention is that creation, or the whole evolutionary process is not purely cosmological but soteriological. The incarnation and the whole of Christianity did not come out of the blue and bounce into a cosmological and natural order. Creation itself is already Christian, redemptive, covenanted. Hence Christ is of the essence of the universe and therefore the universe cannot be thought of apart from him.¹⁵³

We may raise the question, however, as to the advisability of retaining the term "supernatural," since it has led to such misunderstandings of Christianity as have been searchingly examined by Baltazar, as well as to its problematic place in the world of cosmic order increasingly discovered by men of science. Tillich has discarded it, and Leslie Dewart, in his provocative work, *The Future of Belief*, has questioned its value in the contemporary world:

The Christian concept of God may develop in the direction of shedding its supernatural character. . . . In recent times, as philosophy has diverged more and more from its Greek presuppositions, and as nature and essence have ceased to be understood as intelligible necessities, the concept of the supernatural has lost its usefulness for Christian theism. . . . The distinction between the natural and the supernatural becomes a mere play on words, irrelevant to reality. In the alternative view grace continues to be what Christian belief always held it was, but nature ceases in every way to be opposed to grace: it is naturally apt to receive grace, because that is how it was in fact created. . . . It would not be inexact to say that Christian speculation and Christian everyday experience are becoming naturalistic and secular.¹⁵⁴

Leslie Dewart refers specifically to Teilhard when he strongly suggests that his scientific and Christian vision must be placed within a new philosophical foundation: "The present moment in the history of the Church offers to the Catholic intellect the task of providing a rigorous philosophical foundation for such Christian visions as that which was inspired in Teilhard de Chardin by scientific experience."¹⁵⁵

It is not too much to say that Dewart and Baltazar and process philosophers in general have begun the task of providing the Cath-

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olic mind—and every other mind for that matter—with this new philosophical foundation.

This re-assessment of the place of matter and nature in a spiritual philosophy is also brilliantly done in R. C. Zaehner, *Matter and Spirit: Their Convergence in Eastern Religions, Marx, and Teilhard de Chardin*,¹⁵⁶ who finds some analogies between Teilhard and Marxian views without, however, reducing Teilhard to a Marxist pure and simple:

The service Teilhard de Chardin has rendered to Christianity is that he has shown how the Christian Church can be regarded as the logical fruit of evolution itself. He has explained Christianity in Marxist, because evolutionary, terms: he fulfills and perfects and baptizes the insights of Marx and Engels, and brings the heart of Christ into a heartless world.¹⁵⁷

Among more personal testimonials of Teilhard the man and mystic may be mentioned his *Letters from Egypt, 1905–1908*¹⁵⁸ and *Letters from Paris, 1912–1914*.¹⁵⁹ Helmut de Terra, in *Memories of Teilhard de Chardin*, gives a vivid picture of Teilhard engaged in arduous anthropological research in China and Burma, and expresses the quality of his genius: "The true genius is a human phenomenon whose structure, like a mosaic, creates a harmonious picture out of the most antithetical components. It has its own domain and its own laws, which must be respected."¹⁶⁰ George B. Barbour, *In the Field with Teilhard de Chardin*,¹⁶¹ gives details of Teilhard's expeditions in China and South Africa. N. M. Wildiers, in *Teilhard de Chardin*,¹⁶² emphasizes his task as the exponent of a Christian Neo-Humanism. Henri de Lubac, S.J., in his little work, *Teilhard Missionnaire et Apologiste*,¹⁶³ clarifies the attributes of the Omega point and suggests that Teilhard's cosmic philosophy involves an initial union with the All, a separation of individual existents from the All, and a final reunion of all existents in the body of Christ. An introductory symposium, *Pour Comprendre Teilhard*,¹⁶⁴ is by Paul Misraki, Bernard Leger, Tanneguy de Quénétain, and André Monestier. Claude Soucy, in *Pensée Logique et Pensée Politique chez Teilhard de Chardin*,¹⁶⁵ relates Teilhard to Hegel.

The most complete study of Teilhard's life and thought, with careful and exhaustive discussions of the periods of his research and the growth of his scientific and theological concepts, is found in Claude Cuénot, *Teilhard de Chardin: A Biographical Study*,¹⁶⁶ a comprehensive work including an extensive Bibliography of the works of Teilhard from page 409 to page 484. It is fitting to conclude this brief

survey of Catholic interpretations of Teilhard by mentioning the tribute from an eminent present-day French philosopher, Merleau-Ponty: "In Père Teilhard we meet a sensitiveness to truth that is extremely rare in (and outside) the Church, which always gives the impression of considering, before making any statement, whether it will be expedient, or prudent, or whether it may give offence."¹⁶⁷

Turning now to Protestant appreciations of the thought of Teilhard, it is obvious that we can expect agreement on a large scale on the part of those theologians moved by a similar cosmic Christology. First among them is Canon Charles E. Raven, long a foremost student of science and religion in the Church of England. Speaking of his own spiritual development in his Gifford Lectures, he affirms his faith in a cosmic Christology similar to that of Teilhard:

He has become increasingly sure of the continuity of biological and historical studies, that the story of evolution is in series with that of humanity, and that, if the whole record down to and including Christ is accepted as covering a single process, it discloses a remarkable coherence and can be interpreted consistently in terms of what St. Paul declared to be its end, "the manifestation of the sons of God."¹⁶⁸

It is not surprising, therefore, that the best Anglican interpretation of Teilhard is found in Canon Raven's *Teilhard de Chardin: Scientist and Seer*,¹⁶⁹ in which he recalls other British philosophers and theologians of emergent evolution, such as Lionel Thornton, John Oman, William Temple, Conwy Lloyd Morgan, Field Marshal Smuts, H. G. Collingwood, Samuel Alexander, and Alfred North Whitehead.¹⁷⁰ Raven is particularly good at expounding the similarities and analogies among these authors of evolutionary doctrines and Teilhard—a field which is barely explored. Equally relevant is Raven's exposition of the relation between Teilhard and St. Paul in the latter's emphasis on the creation groaning and travailing to produce the sons of God. Raven himself had often used this Pauline conception of a cosmic Christ unifying in himself the sons of men as the goal of the cosmic process. In the chapter entitled, "Teilhard and His Critics," Raven replies to the attacks of Abbé Cognet, G. Bosio, and Olivier Rabut, and praises the efforts of Claude Tresmontant, the French Catholic theologian to whom we have already referred, and Joseph Needham, the eminent British biologist, for their appreciative understanding of Teilhard. Raven's book is the best discussion of Teilhard from a liberal Anglican position, that of process theology.

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Another theologian in this convergence of Catholic and Anglican theology is W. Norman Pittenger, who wrote persuasively on "A Contemporary Trend in North American Theology; Process-Thought and Christian Faith," *Religion in Life*,¹⁷¹ and mentioned Teilhard along with Daniel Day Williams, Charles Hartshorne, and A. N. Whitehead.¹⁷² An enhanced appreciation of Teilhard's cosmic Christology will be found in Pittenger, *The Word Incarnate*,¹⁷³ in which he presents a historical survey of Christologies; and in the chapter, "Towards a Restatement," he makes his central affirmations, which are very close to those of Teilhard:

Evolution is therefore a name for a richly varied movement which in spiritual regard is divine revelation from start to finish. Through the Word (the *Logos*) God informs every grade and level of being; but he is not identified with the universe, which is created and derivative. And he is never exhausted therein, but present and active in widely differing degrees of intensity and significance.¹⁷⁴

In his conception of evolution as "divine revelation from start to finish," the problem raised by Eulalio R. Baltazar as to whether the universe manifests evolution by its own natural powers, or just at what point gratuitous grace is to be invoked, is overcome.¹⁷⁵ And Pittenger's Christology, in which Christ is an "emergent in a special sense," can readily be seen to be of the same character as Teilhard's and can help us to visualize how God can be present throughout the universe and yet be concentrated in the Christ:

Now if Christ . . . releases into the human world a new stream of divine energy, creates new channels for God's power to reach men, makes possible to them a new relationship to deity which is experienced as an actual fact, he may properly be proclaimed as an "emergent" in a special sense, as the adequate vehicle of God in man. The diffused activity of deity in and for the human race is concentrated at this point as a burning-glass concentrates the sun's rays and by that intensification renders them immensely more effective and powerful.¹⁷⁶

While there exists an undeniable convergence of thought between Teilhard's cosmic, evolutionary Christology and that of the great Anglican philosopher-theologians, such as Lionel Thornton, Canon Charles Raven, and N. Norman Pittenger, a convergence which deserves scholarly exploration, it remains true that Protestant thought has not given the wide acclaim to Teilhard's works and system that has been received from most of the interpreters so far discussed. Numerous have been the criticisms that Teilhard has forgotten sin, that he is unduly optimistic, that his philosophical, evolutionary theology is

precisely what a theology cannot be, especially since the Barthians and the Brunnerians have been hostile to any philosophical approach to theology. Or else the charge is made that he has forgotten divine transcendence for his absorption into a monistic system. Peter C. Hodgson makes some of these criticisms in his review¹⁷⁷ of three books about Teilhard already mentioned in this article: *The Thought of Teilhard de Chardin*, by Michael H. Murray; *Proceedings of the Teilhard Conference, 1964*, edited by Robert J. O'Connell; and *Teilhard de Chardin and the Mystery of Christ*, by Christopher F. Mooney, S.J. He does concede, however, that the thought of Teilhard is likely to grow in the next decade for the following reasons: (1) Recent developments in Catholic theology cannot be understood without reference to Teilhard; (2) the recognition by Protestants that eschatology, which is a leitmotif in influential Protestant circles, is also at the center of Teilhard's thought; (3) the contribution of Teilhard "to the encounter between theology and natural science, the possibilities of which have by no means been exhausted."¹⁷⁸

Another Anglican supporter of Teilhard is Eric Mascall, although he admits that at times Teilhard's theological language needs precision. But Dr. Mascall is not confused by the Point Omega as is Peter C. Hodgson, and he acknowledges that Teilhard, in keeping with recent scientific thought—that of Harlow Shapley, for instance—conceived the possibility of several planets having developed intelligent life and the merging "of a number of Noospheres."¹⁷⁹ Mascall also rectifies the error of those who imply that Teilhard's Point Omega is some sort of spiritual totalitarianism:

Furthermore Teilhard insists that Point Omega is not just the last term in the series of man's successive states of development; it is distinct from it and transcends it. Thus the final destiny of the human race is not a Hindu loss of individuality by immersion in deity, nor a Buddhist nirvana, but—though this is left to be inferred rather than explicitly stated—it is what the Christian tradition would describe as the vision of God in the Communion of Saints.¹⁸⁰

Mascall has thus an entirely different interpretation of point Omega and the progress of humanity leading to it from that of Ernst Benz: "He represents collectivization and socialization as the inevitable and inescapable tendency of the present phase of evolution, thus from the outset paralyzing resistance against the totalitarian elements of evolution."¹⁸¹ Benz also warns against the danger involved in the love of the God of evolution: "The danger to which the love of the God of evolution is exposed is that, through it, the love of man, the love of

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the neighbor will be lost. . . . In the *amorisation* of evolution, *love* will be *extinguished*.”¹⁸²

Mascal, however, is far more generous to the idea of evolution than is Ernst Benz:

It is perhaps well at this point to emphasize that there is nothing in all this that contradicts the hope in a glorious destiny for the human race which we find in the writings of scientific humanists such as Sir Julian Huxley and Dr. [C. H.] Waddington. With the appearance, in the course of evolution, of the self-conscious rational being man, evolution itself can set out upon a new and vastly accelerated course. . . . The Christian Faith does not deny this hope, but fills it with substance and gives some grounds for supposing that it can be realized.¹⁸³

Mascall also defends Teilhard's cosmic Christology in which Christ gathers the whole process and history of God's creation, and declares that this "Christogenesis" was already developed by St. Irenaeus, and by St. John and St. Paul. Mascall also makes the very significant point, by quoting from Russian Orthodox theologians Paul Evdokimov, Dr. Nicholas Arseniew, and Vladimir Lossky, to the effect that "In the Eastern Orthodox Church the sense that the whole of the material order is in principle transfigured and transformed through the taking of a material body by God the Son is one of the most striking features of the Liturgy and of theology; the Feast of the Transfiguration of Christ is seen as the feast of the transfiguration of the whole of the physical world."¹⁸⁴

Likewise, Michael Novak calls attention to "the cosmic notion of the Christ": "The Eastern church—manifestly in Berdyaev and Dostoevsky and indirectly through its influence upon Teilhard de Chardin—has kept this cosmic notion of the Christ more adequately than the Western church."¹⁸⁵

A Scottish theologian, much more restrained in his evaluation of Teilhard than his English confrère Canon Raven, is John Macquarrie, who declares that Teilhard has said nothing new and that Samuel Alexander and Lionel Thornton had said it before him. Macquarrie curiously does not mention Pittenger and Raven, and thinks that *The Phenomenon of Man* will have as ephemeral a vogue as had Ernst Haeckel's *The Riddle of the Universe* sixty years earlier. Macquarrie draws close parallels between Teilhard and Samuel Alexander's futuristic deity:

This God is found (like Alexander's) at the end of the evolutionary process, not at its beginning. He is the *terminus ad quem* of all things, not their

terminus a quo, the goal of the universe, not its Creator. This indeed seems to be implied in Teilhard's association of God with Omega rather than Alpha. Such a God, moreover, will be complete and perfect only in the future. He is a God who is "on his way," so to speak, not a God of eternal static perfection.¹⁸⁶

In this comparison, however, Macquarrie overlooks the all-important doctrine of Teilhard with respect to cosmic Christification and that Alexander completely ignores Christology and personality.¹⁸⁷ Macquarrie does not give full weight to Teilhard's achievement, already signaled by Mircea Eliade, the resacralization of the whole universe, which is something much more than a mere naturalism of emergence. Also, Macquarrie thinks that Teilhard has overlooked the existential dimension in Christianity; "I doubt if Teilhard makes the existential dimension of Christian thought clear. . . . He may claim, however, to be showing us that we live in a kind of universe in which it is not unreasonable to make Christ and the love which he manifests matters of ultimate concern. This may seem a modest result, but it is not important."¹⁸⁸ However, he overlooks the fact that Teilhard's whole life was an existential commitment to a quite Catholic mystical Christianity.

There is thus a convergence between recent Catholic theology, oriented as in the case of Karl Rahner, to Teilhard; Angelican theology, as represented by Thornton, Raven, Pittenger, Mascal; and Eastern Orthodox theology with its doctrines of "holy matter" and the transformation of the material order which is part of the divine Sophia, the Holy Wisdom of God. It cannot be denied, however, that there are Protestant reactions against Teilhard de Chardin, some expressed moderately, some expressed vigorously. Among the latter may be found C. Van Til, *Evolution and Christ*, who, from an extremely conservative Protestant position, condemns both Teilhard and neo-orthodox Protestants:

The true primacy of God and of his Christ cannot be found in the way that Père Teilhard de Chardin seeks for it. His Christ is but a vague ideal of the would-be autonomous man. The same holds true of the God and of the Christ of neo-orthodox Protestantism. The I-thou dimension is lost in correlativity to the I-it dimension unless both dimensions are made subject to the self-attesting Christ of Scripture.¹⁸⁹

Neo-orthodox Protestant scholars would probably not agree with C. van Til's facile association of them with Teilhard. Usually the Protestant mind criticizes Teilhard for his lack of a doctrine of sin:

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If we apply theological criteria to Teilhard's system, one problem which emerges immediately is the lack of a doctrine of sin. The word and the idea seldom if ever appear on his pages. In this respect his vision stands in sharpest contrast to great theological systems, Catholic and Protestant, of the present age. It is this element also which enables Teilhard to maintain hope in the future of man. One adds that from the viewpoint of either traditional Christian theology or man's contemporary, historical predicament, Teilhard hopes too easily.¹⁹⁰

This recovery of the sense of sin is one of the hallmarks of neo-orthodoxy. However, the doctrine of sin may well have become an obsession, as Canon Raven suggests:

Reports of the World Council of Churches, lectures in theological colleges, sermons and addresses to all sorts and conditions of men have been in the last twenty years directed almost exclusively to the recovery of a sense of sin. It has been difficult not to feel that for the Churches of to-day faith, hope and charity have been replaced by fear, despair and denunciation.¹⁹¹

And Canon Raven champions Teilhard's cosmic evolution as a direct reply to the current theology of sin:

Teilhard's full-scale interpretation of cosmic evolution in terms of the universal Christ disposes at once of the versions of creation and fall which depose God from his world and assign to man the power to frustrate God's purpose, and to Satan the role of Lord of the Earth. With his vision . . . the old dualisms of matter and mind, body and spirit, God and devil are plainly transcended.¹⁹²

Another charge that Teilhard has overlooked sin is made by another Anglican who apparently does not share Raven's position. This is Decius Wade Safford who, in an otherwise eulogistic article on Teilhard, affirms: "Teilhard never quite faces the fact of sin and greed, which, whatever their source, are organically rooted in our human nature. Nor does he make room for the doctrines of the Wrath of God or of Antichrist, both of which require consideration in any total vision which purports to be Christian, and which can be expounded organically, I believe."¹⁹³

Against this peculiar view that a Christian total vision requires a doctrine of the Antichrist, we quote from another Anglican who places Teilhard's cosmic fulfilment in a more traditional setting:

The process by which the divine milieu comes into being is the work of Christ. It is a work of divinisation, of exaltation, of humanisation, of sanctification, of transfiguration. Here Teilhard is close to the traditional view that the Incarnation took place for the perfecting of humanity, rather than for the remedy of humanity, for the *homo assumptus* rather than the *homo resumptus*. We could quote Athanasius, "He has become man that he might deify us in

himself," or Irenaeus, Augustine, Leo, Anselm, or Aquinas on this point. The movement of the process of nature is toward union; the movement of theology is no less directly towards union in the vision of God and the life of the Trinity.¹⁹⁴

Furthermore, it is significant that recent Catholic theology presents new perspectives on sin. Robert T. Francoeur, who has done so much to popularize Teilhard in *Perspectives in Evolution*, devotes a whole chapter to "The Original Sin," mentioning the new Catholic insights on this issue in view of an evolutionary universe, insights provided by H. Brentjens, P. Schoonenberg, and P. Smulders. Francoeur replies to those who see the human drama strictly in terms of the fall and the cross: 'Such a dichotomy between the fall and the cross is, in truth, a historical optical illusion: both sin and grace were present at the first moment of man's existence in a dialogue which continues down to the present moment. God's plan for salvation through Jesus Christ dominates the whole history of mankind. Sin never reigned unconditionally in the world.'¹⁹⁵

The approach of Teilhard to sin and redemption as emphasizing victory over evil is well brought out by Robert L. Faricy, S.J., *Teilhard de Chardin's Theology of the Christian in the World*: "His theological reflection emphasizes the constructive side of the Redemption, the victory over the forces of evil, and it allows more room than most past theology for man's place in the redemptive process, more room for active as well as for passive human participation in the redemption of the world."¹⁹⁶

One could go on discussing the whole problem of sin and redemption as presented in traditional Christian thought and in Teilhard, but the issue seems to be deeper than that; it is an issue between two types of Christian mentality which have had a long history. This situation is defined by Cuénot:

There are, as it were, two poles in Christian thought, between which a tension reigns and a dialogue unfolds. One of them is Jansenism, the Pascalian vision of a personal and direct relation between the soul and the divine absolute . . . a vision allied with a certain pessimism and initiating a dramatically personal colloquium. In this view, history matters little. The cosmic dimension is neglected because the world and history are something unessential, or rather an obstacle, an absolutely opaque reality wherein reigns the silence that terrified Pascal. Père Teilhard's thought is a very conscious negation of Jansenistic thought. . . . Briefly, in order to find the divine, we must not by-pass the cosmos but pass through it. And in this, Teilhard stands at the end of a long tradition which has left witnesses throughout Christian thought.¹⁹⁷

While it could be argued that these two poles in Christian thought represent a Catholic and Protestant orientation, this would be an oversimplification, for Teilhard's cosmic Christology has been both supported and criticized by scholars of both communions.

Let us now turn to the appreciations and criticisms of men of science, especially within the context of process philosophy.

Bernard Towers, university lecturer in anatomy, Cambridge University, England, produced a little introductory work on Teilhard summarizing the familiar themes, *Teilhard de Chardin*.¹⁹⁸

Theodosius Dobzhansky's high regard for Teilhard has already been mentioned, and he suggests that his "orthogenesis" does not call for the usual objections from biologists:

My reading of his fascinating book *The Phenomenon of Man* . . . convinces me that he used the word "orthogenesis" not in the technical biological, but in a philosophical and mystical sense. He argues that the evolution of the living world so far has been on the whole progressive, an affirmation to which almost nobody will take exception. . . . His mystical "orthogenesis" need not be incompatible with modern biological theory.¹⁹⁹

Another scientific appreciation for Teilhard is found in the review of *The Phenomenon of Man* by Joseph Needham, a review underscored by Canon Raven:

Broadly speaking, *The Phenomenon of Man* is the most recent, and by no means the least interesting of the long line of masterworks of the organic evolutionary naturalists. But it is written by one who understood supernaturalism from the inside. Expressed in a style hardly less poetical than philosophical, it eloquently restates the scientific view of the world. But it adds something new, its courageous speculation about the future emergence of higher social and noetic organisms, the world mind-heart, the apotheosis of humanity.²⁰⁰

George Gaylord Simpson, in *This View of Life*, the chapter on "Evolutionary Theology: The New Mysticism," discusses Pierre Leconte du Noüy, Edmond W. Sinnott, and Teilhard; and Teilhard comes out best in spite of Simpson's critical analysis. Simpson objects particularly to the term "radial energy," which draws the evolutionary process to ever greater complexity, and he is quite blunt: "Alas! That is no better than double talk, from the statements that *something* defined as spiritual is nevertheless assumed to be physical onward through the whole discussion."²⁰¹ But is not Simpson here succumbing to dualistic assumptions that because evolution implies increasing material organization it cannot possibly have spiritual implica-

tions? Where else would Simpson ever find the spiritual, unless he is quite willing to be classified among the most unscientific supernaturalists? Recent trends in theology emphasize the levels of materiality which are necessary for the divine, immanent, and emergent action. For instance, Tillich affirms matter: "There is no Spirituality which is based on the negation of matter, because God as creator is equally near the material and the Spiritual. Matter belongs to the good creation, and its humanist affirmation does not contradict Spirituality."²⁰²

Recent Catholic studies on the philosophy of evolution reject, as does Simpson, any addition from an external force, but stress the inner unfolding of matter: "We must try to see evolution not as a development in which something is constantly added from without to the preceding phase, but as an inner unfolding to which matter is oriented from the very beginning."²⁰³ Simpson, however, prefers to remain within an attitude of unrelieved agnosticism, though he admits that "all of us want," in the words of Joseph Needham, "to ask why living beings should exist and should act as they do. Clearly the scientific method can tell us nothing about that. They are what they are because the properties of force and matter are what they are, and at that point scientific thought has to hand the problem over to philosophical and religious thought."²⁰⁴

Sir Julian Huxley, however, is not content to remain in a purely agnostic attitude, for he states: "The most important subject for the evolutionist is the nature and direction of the developmental process itself, and here the more developed gives the significant clue both to the actualities of the past and the possibilities of the future."²⁰⁵

Simpson is much closer to the general process philosophy of which Teilhard is an important exponent when, in the *American Scholar* for Summer, 1967, he calls attention to the "Crisis in Biology" and argues for that hierarchy of levels and complexification over against the defenders of a "molecular biology" who would reduce these levels to the non-biological: "It is ridiculous to base a philosophy of science or a concept of scientific explanation wholly on the nonbiological levels of the hierarchy and then attempt to apply it to the actually biological level without modification."²⁰⁶

Theodosius Dobzhansky, in *The Biology of Ultimate Concern*, devotes a long chapter on "The Teilhardian Synthesis,"²⁰⁷ in which he pays tribute to the insights of the great scientific mystic. He disagrees with Simpson's negative judgment:

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It is . . . unfair to describe Teilhard's views as "mystical Christianity ostensibly derived from evolutionary principles" (Simpson 1965). The idea that Christianity can be derived from evolutionary principles, or from any other scientific findings, would have seemed monstrous to Teilhard. What he tried to do was something entirely different, namely to create a coherent *Weltanschauung*, including his mystical Christianity as well as his scientific knowledge.²⁰⁸

Dobzhansky makes the important point that evolution must not be understood as a mere matter of chance, and thereby corrects popular views of natural selection:

In evolution, chance is bridled in by an antichance agency, which is natural selection responding to environmental challenges. Let us be reminded that natural selection does not act as a sieve, but as a much more sophisticated regulating and guiding device. What is most remarkable is that the "guidance" does not amount to a rigid determinism. Especially in the evolution of higher organisms there are discernible elements of creativity and freedom.²⁰⁹

While stating that evolution has not found everything, Dobzhansky favors Teilhard's aphorism: "Evolution is 'pervading everything so as to try everything and trying everything so as to find everything.'"²¹⁰

In order to be fairly complete in mentioning the critics of Teilhard, one must refer to that most negative evaluation of *The Phenomenon of Man* by P. B. Medawar in *Mind*.²¹¹ The last paragraph gives the reader an idea of the "objectivity" of the reviewer: "I have read and studied *The Phenomenon of Man* with real distress, even with despair. Instead of wringing our hands over the Human Predicament, we should attend to those parts of it which are wholly remediable, above all the gullibility which makes it possible for people to be taken in by such a bag of tricks as this."²¹² But what precisely are the adverse comments of Medawar? First of all, the style of Teilhard: "Teilhard has . . . resorted to the use of that tipsy, euphoric prose-poetry which is one of the more tiresome manifestations of the French spirit."²¹³ Dobzhansky, however, is of the opinion that this mixture of science and poetry may very well be useful: "Teilhard has addressed himself to those unwilling to tolerate ideological schizophrenia. Those who are looking for an esthetically as well as rationally satisfying synthesis, instead of an intellectual life divided into isolated compartments, can find in Teilhard a help and an inspiration."²¹⁴ Medawar also objects to the neologisms of Teilhard, such as "noosphere," "hominization," "complexification," but one may suggest, as we did in an early part of this paper, that an original thinker has the right to coin new words to concretize this thought. It has

been done by many men of science and philosophers. As to "complexification," Errol E. Harris defends Teilhard:

Yet at least this may be said in his defence, that there is clear scientific evidence of a hierarchy of complex forms as well as of some sort of tendency in physical nature, not only to produce them, but to do so in a series of increasing intricacy and elaboration. That there is in nature a rising scale of levels of integration is no new doctrine. It has been propounded, and not without justification, by Joseph Needham, J. B. S. Haldane and Sir Julian Huxley, all hard-headed scientists.²¹⁵

When discussing Huxley's commendation of Teilhard, Medawar again reveals that remarkable "objectivity" which is the pride of science: "Huxley contrives to enrage all parties."²¹⁶

While Medawar objects strongly to Teilhard's radial and tangential energies, he concedes: "Thus Teilhard's radial, spiritual or psychic energy may be equated to 'information' or 'information content' in the sense that has been made reasonably precise by modern communications engineers."²¹⁷

Medawar also criticized Teilhard for suggesting that evolution has a direction toward cerebralization, but Harris again comes to the assistance of Teilhard:

In criticizing Teilhard for asserting that evolution is directional towards "cerebralization," Medawar has pillored this idea as a "fatuous argument" and seems to regard the process of "becoming brainier" with scorn, as if it were something contemptible. That in itself is an evaluation and obviously a perverse one. But whether or not "brainyness" is a desirable characteristic (and one somehow suspects that Professor Medawar would not be gratified by any suggestion that he lacked it), the available evidence of the course of evolution leaves no doubt that brain capacity has been on the increase since the emergence of animal life.²¹⁸

In short, Medawar condemns *The Phenomenon of Man* for being "anti-scientific in temper," for its "unintelligible style," for declaring that "Man is in a sorry state," and for the fact that it was introduced to the English-speaking world by Julian Huxley.²¹⁹ The third charge—to the effect that man is the victim of a "fundamental anguish of being"—is strange, since Teilhard has been criticized for precisely the opposite reason, his fundamental optimism as to man.

Canon Raven, however, does not even attempt to reply to Medawar:

In view of the record of Teilhard's life, character and integrity set out in this book, comment on this assault upon him is unnecessary. Its language can hardly be paralleled since the pontifical heresy-huntings of the fifth century. Let me recommend to Dr. Medawar the writings of St. Epiphanius. The high-

priests of scientism are following a bad example—but the saint though equally vituperative was a better critic.²²⁰

Another defender of Teilhard is Ian G. Barbour, who acknowledges the endorsements of Julian Huxley, C. H. Waddington, and Theodosius Dobzhansky, and finds value in that Teilhard avoids one of the major conflicts between science and religion by rejecting divine interventions to explain gaps in the scientific account, and he vindicates the metaphysics of process in which he associates Teilhard with Alfred North Whitehead and Bergson, and, contrary to the neo-orthodox, Barbour states: "This view is consistent with the biblical outlook concerning the unity of man as a total being and the importance of man in the universe."²²¹

Stephen Toulmin, in "On Teilhard de Chardin, *Commentary*,"²²² correctly regards the Teilhard system as a type of natural theology: "Teilhard's *Phenomenon* is one further attempt in a long series to re-establish a place for natural theology within the new, evolutionary view of nature."²²³ Toulmin, however, derives his own orientation from the skepticism of Hume, who had little respect for natural theology, and, accordingly, he regards all types of natural theology, including Teilhard's, as involving risks "in philosophical wish-fulfillment."²²⁴

It is becoming increasingly clear that Teilhard is not merely a poet or a mystic uttering liturgical phrases in deep ecstasy in his moments of solitude in China or in Africa but that his intellectual enterprise cannot be understood apart from the revival of natural theology in process metaphysics. And there seems to be a future to this process philosophy, however much the word "metaphysics" may be in bad odor just now:

It may be predicted that when the time comes, as it will, in which the perennial problems of metaphysics once again are recognized as real problems which demand real answers, the "philosophy of organism," or "emergent evolution," or of "process," will be the line which will have most attraction for thoughtful men—provided they escape the temptation to succumb to the sheer and irrational transcendentalism of the "neo-orthodox!"²²⁵

This pronouncement by W. Norman Pittenger seems to have been in a sense already realized in the organization of the Society for the Study of Process Philosophies in 1966, and a number of papers were read on the topic of "Teilhard as a Philosopher" at the meeting of the Society held in conjunction with the annual meeting of the Metaphysical Society in America, Purdue University, March 17–18,

1967. Particularly relevant was the paper by Father Ernan McMullin of Notre Dame University in which he traced the historical relation of Teilhard's world view to Royce, Bergson, Peirce, and Harris. He dealt with the problem of "tangential energy" and "radial energy" and attempted to fit Teilhard into the position of a philosopher of idealism. He was not entirely satisfied that this can be done, and found a place for Teilhard as "Christian philosopher." In our opinion, Father McMullin does not give sufficient weight to a third position between mechanism and idealism. This is emergent evolution, or the philosophy of emergent levels of matter, what Teilhard was fond of calling the "layers of matter" in which even the Christ was potentially imbedded. It is the hierarchy of dynamic Being in terms of levels of matter. Teilhard, however, did not merely adopt this evolutionary philosophy as an intellectually acceptable cosmic framework for his thought. He profoundly felt it inwardly in a new mysticism—the mysticism of Process. This mystical intuition was appreciated by Dobzhansky, and this paper may be fittingly concluded with the eminent biologist's testimony to Teilhard's greatness: "It is evidently the inspiration of a mystic, not a process of inference from scientific data, that lifts Teilhard to the heights of his eschatological vision. Yet he remains a consistent evolutionist throughout. The point which he stresses again and again is that man is not to be a passive witness but a participant in the evolutionary process."²⁸

NOTES

1. Baltimore: Helicon Press, 1965.
2. Mircea Eliade, "Cultural Fashions and the History of Religions," in Joseph M. Kitagawa, Mircea Eliade, and Charles H. Long (eds.), *The History of Religions; Essays in Divinity, Vol. I* (Chicago and London: University of Chicago Press, 1967), p. 32.
3. I cannot claim sufficient competence in German to call attention to the considerable literature on Teilhard in that language, although I shall refer to a few works.
4. *Le Phénomène Humain* (Paris: Seuil, 1955); *L'Apparition de l'Homme* (Paris: Seuil, 1956); *La Vision du Passé* (Paris: Seuil, 1957); *Le Milieu Divin. Essai de Vie Intérieure* (Paris: Seuil, 1957); *L'Avenir de l'Homme* (Paris: Seuil, 1959); *L'Energie Humaine* (Paris: Seuil, 1962); *L'Activation de l'Energie* (Paris: Seuil, 1963); *Hymne de l'Univers* (Paris: Seuil, 1961). American editions soon appeared published by Harper & Row, New York and Evanston: *The Phenomenon of Man* (1959); *The Divine Milieu* (1960); *The Future of Man* (1964); *Hymn of the Universe* (1965); *The Appearance of Man* (1966). Michael H. Murray, *The Thought of Teilhard de Chardin: An Introduction* (New York: Seabury Press, 1966) pp. 171-72, lists the following works of Teilhard in French, some of them not yet translated: *Le Groupe Zoologique Humain* (Paris: Ajoin, 1956); *Lettres de Voyage de 1923 à 1955* (Paris: Grasset, 1961), English translation, *Letters from a Traveller* (New York: Harper &

Row, 1962); *La Genèse d'une Pensée, Lettres de 1914 à 1919* (Paris: Grasset, 1961). Murray also lists unpublished writings: "Comment Je Crois" (1934); "Esquisse d'un Univers Personnel" (1936); "Super-Humanité, Super-Christ, Super-Charité" (1943); "Comment Je Vois" (1948); "Le Christique" (1955). For a more complete listing of the works of Teilhard and philosophical and theological discussions of his ideas, see *A Basic Teilhard Bibliography, 1955-April 1968*, edited by Romano S. Almagno, O.P.M., Librarian, American Teilhard de Chardin Association, Inc., 157 East 72d Street, New York, New York 10021, and available for \$1.00

5. New York: Harper & Row, 1967.

6. Teilhard de Chardin, *The Phenomenon of Man*, p. 26.

7. Theodosius Dobzhansky, *Heredity and the Nature of Man* (New York: Harcourt, Brace & World, 1964), p. 152. See also Theodosius Dobzhansky, *The Biology of Ultimate Concern* (New York: New American Library, 1967), chap. vi, "The Teilhardian Synthesis," pp. 108-37, for a sympathetic evaluation of Teilhard. See Ralph Wendell Burhoe's review of this work by Dobzhansky and his comments on Teilhard in *Zygon*, II (September, 1967), 290-300.

8. Paul Tillich, *Systematic Theology* (Chicago: University of Chicago Press, 1963), III, 5.

9. See Roger Garaudy, *From Anathema to Dialogue* (New York: Herder & Herder, 1966), pp. 48-54, for references to Teilhard. For another Marxist appreciation of Teilhard, see Joseph Needham's review of *The Phenomenon of Man*, in the *New Statesman*, LVIII (November 7, 1959), 632-33.

10. *Teilhard Review*, II, No. 2 (Winter, 1967-68), 48.

11. New York: Harper & Row, 1963.

12. Baltimore: Helicon Press, 1961.

13. Baltimore: Helicon Press, 1965.

14. New York: Human Energetics Research Institute, 1965.

15. New York: Harper & Row and New American Library.

16. See Ewert H. Cousins, "Christ and the Cosmos," *Cord* (April, 1966); "The Evolving Cosmos: Teilhard de Chardin and Bonaventure," *Cord* (May, 1966).

17. A French lexicon enumerating terms characteristic of Teilhard is Claude Cuénot, *Lexique Teilhard de Chardin* (Paris: Seuil, 1963). An English translation is urgently required. Other listings of Teilhardian words may be found in the following French works: Norbert Hugédé, *Le Cas Teilhard de Chardin* (Paris: Librairie Feschbacher, 1966), pp. 199-204; George Magloire and Hubert Cuypers, *Présence de Pierre Teilhard* (Paris: Éditions Universitaires, 1961), pp. 213-22; Emile Rideau, *La Pensée du Père Teilhard de Chardin* (Paris: Seuil, 1964), pp. 576-92. The English edition, *The Thought of Teilhard de Chardin* (New York: Harper & Row, 1967) unfortunately omits the vocabulary

18. B. A. G. Fuller and S. M. McMurrin, *A History of Ancient and Medieval Philosophy* (New York: Holt, Rinehart & Winston, 1955), p. 1.

19. Note Tillich's conviction that any metaphysical approach to reality, whether of the Scholastics, or of James, or Whitehead, or Schleiermacher, or Wieman, or the idealists or naturalists, rests on a "mystical a priori": "In both the empirical and metaphysical approaches, as well as in the much more numerous cases of their mixture, it can be observed that the a priori which directs the induction and the deduction is a type of mystical experience. . . . The theological concepts of both idealists and naturalists are rooted in a 'mystical a priori,' an awareness of something that transcends the cleavage between subject and object" (Paul Tillich, *Systematic Theology* [Chicago: University of Chicago Press, 1951], I, 9). Teilhard's mystical a priori is his law of complexification-consciousness designating a dynamic, underlying reality beyond subject and object.

20. Teilhard de Chardin, *The Future of Man*, pp. 120, 150-51.

21. Teilhard de Chardin, *Hymn of the Universe*, pp. 68-69. It is to be noted that

Professor Henri Peyre, Chairman Emeritus, Department of French, Yale University, who has lectured on Teilhard on many occasions, regards *Hymn of the Universe* as "the greatest mystical book of the twentieth century." This is his considered opinion given in an address to the Alliance Française, "Teilhard de Chardin: Religion, Science et Poésie" (New Haven, Conn.: March 16, 1965).

22. Teilhard de Chardin, *The Divine Milieu*, p. 87.

23. A philosophy of process is sometimes described as a philosophy of function. Similarly, Teilhard's outlook may appear to be "operational" in its categories and not substantial. However, the strong emphasis on the layers of matter in Teilhard would seem to preclude his philosophy from being merely "operational." While a comparison of Tillich and Teilhard is beyond the scope of this study, Tillich's warning to philosophers of function needs to be kept in mind when evaluating the Teilhardian system: "The problem of substance is not avoided by philosophers of function or process, because questions about that which *has* functions or about that which *is* in process cannot be silenced. . . . Substance as a category is effective in any encounter of mind and reality; it is present whenever one speaks of something" (Tillich, *op. cit.*, I, 197).

24. Roy Wood Sellars, V. J. McGill, and Marvin Farber, *Philosophy for The Future: The Quest of Modern Materialism* (New York: Macmillan Co., 1949), p. vi.

25. The relevant quotation from William Temple which will enable us to appreciate Teilhard is: "For as far as it is true that matter is the necessary condition for the actuality of life and this also of spirit, so also is it true that, in our experience at least, spirit arises within and as part of an organism which is also material, and expresses its spirituality, not by ignoring matter but by controlling it. . . . It may safely be said that one ground for the hope of Christianity that it may make good its claim to be the true faith lies in the fact that it is the most avowedly materialist of all the great religions. . . . By the very nature of its central doctrine ["The Word was made flesh"] Christianity is committed to a belief in the ultimate significance of the historical process, and in the reality of matter and its place in the divine scheme" (William Temple, *Nature, Man and God* [London: Macmillan & Co., 1953], pp. 477, 478).

26. Again we shall better understand Teilhard's doctrine of divine activity within the material levels of the universe if we keep in mind a similar orientation in Tillich: "God is eternally creative . . . through himself he creates the world and through the world himself. There is no divine nature which could be abstracted from his eternal creativity" (Paul Tillich, *Systematic Theology* [Chicago: University of Chicago Press, 1957], II, 147).

27. While the "Death of God" theologians have done their worst, along with the help of Harvey Cox, to denigrate metaphysical pursuits, let us draw strength from Sellars' affirmation: "I am an unashamed ontologist and a convinced believer in the ontological reach of science. And this in spite of pragmatist, Viennese positivist, or religious personalist. If empirical knowledge is not knowledge of what exists, then it is not knowledge" (Roy Wood Sellars, *The Philosophy of Physical Realism* [New York: Macmillan Co., 1932], p. vii).

28. Henri Bergson, *Creative Evolution* (New York: Henry Holt & Co., 1911); Samuel Alexander, *Space, Time, and Deity* (New York: Macmillan Co., 1920); C. Lloyd Morgan, *Emergent Evolution* (New York: Henry Holt & Co., 1923); Jan Christian Smuts, *Holism and Evolution* (New York: Macmillan Co., 1926); Roy Wood Sellars, *The Philosophy of Physical Realism* (see n. 27 above); Errol E. Harris, *Revelation through Reason* (New Haven, Conn.: Yale University Press, 1958), and *The Foundations of Metaphysics in Science* (New York: Humanities Press, 1965); L. S. Thornton, *The Incarnate Lord* (New York: Longmans, Green & Co., 1928); W. Norman Pittenger, *The Word Incarnate* (New York: Harper & Bros., 1959); Sri Aurobindo, *The Life Divine* (Pondicherry: Sri Aurobindo Ashram, 1960). Whitehead is not included in

this list, since his position with respect to emergent evolution is ambiguous, as suggested by Errol E. Harris: "The scale of forms is never emphasized by Whitehead and the relation of successive concrescent occasions to the ultimate realization of potentialities in the 'Consequent Nature of God' is never made clear" (*The Foundations of Metaphysics in Science*, p. 468). Teilhard's evolution depends on the immanent Within of matter. Whitehead's depends on the ingression of eternal objects from some Platonic realm. He is not strictly a philosopher of emergent evolution.

29. Madeleine Barthélemy-Madaule, *Bergson et Teilhard de Chardin* (Paris: Seuil, 1963).

30. *Ibid.*, p. 241: "Les différentes thèses teilhardiennes structurent la conception de la matière. Au contraire, l'esprit analytique de Bergson considère l'évolution dans le département bien circonscrit de la vie; le psychologisme de Bergson voit la durée de l'univers à travers la durée intérieure et n'accuse point de propriétés spécifiques du temps cosmique; nous n'en avons point l'appréhension directe. Aussi, tout en pressentant l'universalisation de la durée, Bergson n'a pu saisir la portée et la structure de la durée de l'univers."

31. Ernst Benz, *Evolution and Christian Hope: Man's Concept of the Future from the Early Fathers to Teilhard de Chardin* (Garden City, N.Y.: Anchor Books, 1968), pp. 192-93. See also Ernst Benz, "Teilhard de Chardin und Sri Aurobindo," in Helmut de Terra (ed.), *Perspektiven Teilhard de Chardins* (München: Verlag C. H. Beck, 1966), pp. 80-123.

32. Teilhard de Chardin, *The Phenomenon of Man* (New York: Harper Torchbooks, 1961), pp. 56-57.

33. Durant Drake, *Invitation to Philosophy* (New York: Houghton Mifflin Co., 1933), pp. 382-83.

34. Teilhard de Chardin, *Hymn of the Universe*, p. 88.

35. *Ibid.*, p. 86.

36. Karl Rahner, "Christology within an Evolutionary View of the World," *Theological Investigations* (Baltimore: Helicon Press, 1966), V, 176-77.

37. *The Phenomenon of Man* (1959 ed.), p. 262.

38. *Ibid.*, p. 294. The moot question as to whether Teilhard in *The Phenomenon of Man* has given us merely a scientific description or has introduced a metaphysical point of view is answered in the passage in which he admits that, when we turn toward the summit of evolution, we inevitably engage in a religious quest: "When, in the universe in movement to which we have just awakened, we look at the temporal and spatial series diverging and amplifying themselves around and behind us like the laminae of a cone, we are perhaps engaging in pure science. But when we turn towards the summit, towards the totality and the future, we cannot help engaging in religion" (*ibid.*, p. 284).

39. "Fulfilment is universal. . . . No person is separated from other persons and from the whole of reality in such a way that he could be saved apart from the salvation of everyone and everything. One can be saved only within the Kingdom of God which comprises the universe. But the Kingdom of God is also the place where there is complete transparency of everything for the divine to shine through it. In his fulfilled kingdom, God is everything for everything" (Tillich, *op. cit.*, I, 147). While it is beyond the scope of this article to undertake a complete comparison of Tillich and Teilhard, nevertheless Tillich's cosmic theology is to be underscored for, to him as to Teilhard, the Kingdom of God "comprises the universe." It is that stage of final development when the "essentialization of all things" is reached and the divine unity shines through all objects and persons and through the whole evolutionary process as a vast transformation of potentiality into actuality. Tillich and Teilhard are very close in their cosmic theology of human fulfilment. They both imply a mysticism of process, articulated by Teilhard through his law of com-

plexification-consciousness, and by Tillich through the drive to the essentialization of all things in the polarities of being.

40. Anton C. Pegis (ed.), *The Wisdom of Catholicism* (New York: Modern Library, 1949), p. 412.

41. For varieties of Thomistic interpretations, see Helen James John, S.N.D., *The Thomist Spectrum* (New York: Fordham University Press, 1966).

42. London: George Allen & Unwin, 1948.

43. James Collins, in *America*, CXVIII, No. 2 (January 13, 1968), 32.

44. Teilhard de Chardin, *Letters from a Traveller*, p. 354. Teilhard's comment on Van Dusen is interesting as an indication of his opposition to Barthian theology: "I was greatly taken by Van Dusen, in spite of some traces of Barthian pessimism, and I expect our paths will cross again" (*ibid.*).

45. John H. Miller (ed.), *Vatican II: An Interfaith Appraisal* (Notre Dame and London: University of Notre Dame Press, 1966).

46. *Ibid.*, pp. 182-83, 320-31.

47. Paris: Beauchesne, 1966. Also, English translation, Henri de Lubac, S.J. (ed.), *Pierre Teilhard de Chardin and Maurice Blondel Correspondence* (New York: Herder & Herder, 1967). It is interesting to note that Maurice Blondel, French Catholic philosopher whose thought is being revived at this time, as far back as 1919 wrote the following memorandum on Teilhard's Christology: "I share the ideas and the feelings of Père Teilhard de Chardin in face of the Christological problem. Faced by the horizons widened by the natural and human sciences, one cannot, without betraying Catholicism, rest satisfied with mediocre explanations and with limited views which make Christ into an historical accident, which isolate him from the cosmos like an extrinsic episode, and which seem to make him into an intruder or an exile, *dépaysé* in the crushing and hostile immensity of the universe" (Maurice Blondel, *The Letter of Apologetics and History and Dogma* [New York: Holt, Rinehart & Winston, 1964], p. 50).

48. October 12, 1963.

49. Winter, 1967.

50. October, 1966.

51. February, 1966.

52. May 29, 1965.

53. September, 1966.

54. October, 1966.

55. February, 1967.

56. May, 1967.

57. July, 1967.

58. XXXI, 275-89.

59. XXXI, 293-98.

60. XXXI, 290-92.

61. I (Summer, 1951), 26-37.

62. III (February, 1952), 1-5.

63. IX (Fall, 1959), 315-30.

64. XXXVI (July, 1962), 353-67.

65. *Ibid.*, p. 366.

66. XXXVI (July, 1962), 368-80.

67. *Ibid.*, p. 378.

68. See n. 12 above.

69. XII (Winter, 1962), 115-18.

70. Paris: Bauchesne, 1960.

71. Paris: Librairie Plon, 1958.

72. XXXVI (April, 1962), 254-57.

73. See n. 4 above.

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74. XIII (Summer, 1963), 383-85.
75. See n. 4 above.
76. XV (Spring, 1965), 252-55.
77. Frank M. Magill (ed.), *Masterpieces of Catholic Literature* (New York: Harper & Row, 1965), pp. 1017-21.
78. *Ibid.*, p. 1021.
79. Winter, 1959-60.
80. *Ibid.*, pp. 563, 567-68.
81. New York: Macmillan Co., 1960.
82. December, 1961. Teilhard had little sympathy for existentialism: "The difference between Teilhard and his existentialist opponents was the difference between one who could perceive, in spite of disconcerting appearances, a sense and a direction in life, and those who could only see its incoherence and absurdity; between those for whom the world was broken and those for whom it was merely cracked" (Robert Speaight, *The Life of Teilhard de Chardin* [New York and Evanston: Harper & Row, 1967], p. 292).
83. April, 1967, p. 143. On the contrary, I would be inclined to say that Bergson regarded matter as an obstacle to the development of spirit, while Teilhard regards matter and its complexification as the necessary cosmic preparation for the emergence of spirit. Teilhard is closer to Alexander and to Smuts than he is to Bergson.
84. April, 1967. Note the following from Teilhard's letters dating to the period 1922-24: "Mais recueillez tous les plus magnifiques attributs du Divin (Immensité, Immanence, irrésistible Puissance, Unité . . .) qu'a pu vous découvrir la contemplation passionnée de la Matière et de la Vie.—Donnez à tout cela la chaleur, la consistance, la lumière, l'hyper-personnalité du grand Christ-universel (ou Verbe) de saint Paul, saint Jean, et de tant de Pères" (p. 258). "Gather together, however, the most magnificent attributes of the divine (immensity, immanence, almighty power, unity . . .) which have been discovered by the passionate contemplation of Matter and of Life.—Give to all this the warmth, the coherence, the light, the hyper-personality of the great universal Christ (or Word) of Saint Paul, Saint John, and so many of the Fathers" (my translation).
85. IV (1965), 249.
86. VIII (Autumn, 1960), 133-36.
87. *Ibid.*, pp. 137-42.
88. *Ibid.*, pp. 143-47.
89. XLII (Autumn, 1967), 383-402.
90. XLII (Winter, 1967), 519-42.
91. *Ibid.*, pp. 541-42.
92. See n. 4 above. Other works of Teilhard are: *Cahiers de Pierre Teilhard de Chardin* (Paris: Seuil, 1958); *Lettres à Léontine Zanta* (Paris: Desclée de Brouwer, 1965); *Science et Christ* (Paris: Seuil, 1965); *Ecrits du temps de la Guerre* (Paris: Grasset, 1965); *Lettres d'Hastings et de Paris* (Paris: Aubier, 1966); *Réflexions sur le Bonheur* (Paris: Seuil, 1960); *Je m'explique* (Paris, 1966). These have not yet been translated into English.
93. See *Teilhard's Werke bei Walter* (Walter-Verlag, 1966). I am indebted for this information to Dr. Joanna Sahlin, professor of world literature, University of Connecticut.
94. See n. 12 above.
95. See n. 13 above.
96. Theodosius Dobzhansky, *The Biological Basis of Human Freedom* (New York: Columbia University Press, 1957), p. 124, as quoted by Robert T. Francoeur in *Perspectives in Evolution*, p. 261.
97. Francoeur, *ibid.*, p. 264.
98. *Ibid.*, p. 269.

99. See n. 4 above.
100. Glen Rock, N.J.: Paulist Press, 1964, p. 69. A German translation of this work was published under the title *Entstehung und Zukunft des Menschen* (Luzern: Rex-Verlag, 1961).
101. New York: Sheed & Ward, 1961.
102. *Ibid.*, pp. 189-90.
103. Petro Bilaniuk, "The Christology of Teilhard de Chardin," in Robert J. O'Connell, S.J. (ed.), *Proceedings of the Teilhard Conference 1964* (New York: Human Energetics Institute, Fordham University, 1965), pp. 113-15. The whole volume is extremely informative.
104. New York: Exposition Press, 1967.
105. New York: Seabury Press, 1964.
106. Note the connection between Smuts and Teilhard: "It was at the instance of Field Marshal Smuts that Teilhard received the invitation . . . to join Breuil in South Africa during the July of 1947" (Robert Speaight, *op. cit.*, pp. 276-77.)
107. New York: Hawthorn Books, 1965. This work was published by Burns & Oates, London, 1965, under the title *The Faith of Teilhard de Chardin*, which is a translation of *La Prière du Père Teilhard de Chardin* (Paris: Librairie Arthème Fayard, 1964).
108. De Lubac, *Teilhard de Chardin: The Man and His Meaning*, pp. 109-10.
109. *Ibid.*, p. 144.
110. *Ibid.*, pp. 197-203.
111. *Ibid.*, pp. 186 ff., 197-203.
112. Paris: Aubier, 1962.
113. New York: Desclée Co., 1967.
114. Paris: Librairie Arthème Fayard, 1964.
115. *Ibid.*, p. 9. My translation: "To defend minds, particularly those of the young, against the dangers in the works of P. Teilhard and of his disciples."
116. *Ibid.*, pp. 125-26. My translation: "No, the Teilhardian cosmo-anthropo-christogenesis does not develop Catholic dogma in a homogeneous and legitimate way. It perverts it, it warps it. Spring waters no longer preserve their purity." However, it is important to note that Philippe de la Trinité's work is not a complete condemnation, for on pages 26n and 27n, he praises Teilhard's sincerity: "La droiture et la noblesse des intentions de Teilhard sent hors de cause" (p. 27n). "The upright character and the nobility of intention of Teilhard are beyond question" (my translation). Also, with respect to the law of complexification-consciousness, Philippe de la Trinité writes: "Du point de vue de la phénoménologie scientifique, là encore pas l'ombre d'une difficulté, bien au contraire: la vue est grandiose et ontologiquement assimilable et féconde" (p. 26n). "From the point of view of scientific phenomenology, there again there is not the shadow of a difficulty; quite the contrary: it is a grandiose view, fruitful and ontologically assimilable" (my translation). Philippe de la Trinité, then, in spite of his reservations about the cosmic Christ, finds the law of complexification-consciousness not only an operational description but a law having ontological roots.
117. Henri de Lubac, *Teilhard de Chardin: The Man and His Meaning*, p. 53. "St. Paul's statement," to which de Lubac refers, is the Pauline basis for the cosmic Christ found in Colossians 1:16: "For by him were all things created, that are in heaven, and that are in earth, visible and invisible. . . . All things were created by him and for him."
118. Paris: Editions Universitaires, 1963. A German edition of this work is *Die Neue Erde* (Olten and Freiburg im Breisgau: Walter-Verlag, 1962). The German edition has a much shorter Introduction than the French, though it contains a brief comparison of Pascal and Teilhard, absent in the French.
119. Paris: Flammarion, 1952.

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120. New York: Macmillan Co., 1960.
121. Quoted by Corte, *ibid.*, p. 94.
122. *Op. cit.* (see n. 17 above).
123. *Ibid.*, pp. 161-62. "The Christ, exposed on the Cross, certainly bears a burden, but no longer that of sin: it is the burden of universal evolution, of this immense and painful cosmic effort, the suffering of the earth itself which hides 'the ascending force of the world.' . . . With Teilhard de Chardin, the Cross has ceased to be the divine folly which confounds the wisdom of the wise, but it becomes, in the direct line of the most ancient Gnosticism, the superior form of the wisdom of the world. . . . One feels very well that the Christ of Teilhard could have dispensed with the crucifixion" (my translation).
124. Henri de Lubac, *Pierre Teilhard de Chardin and Maurice Blondel Correspondence*, p. 174.
125. *Ibid.*, p. 130.
126. Baltimore: Helicon Press, 1959. The French edition is *Introduction à la pensée de Teilhard de Chardin* (Paris: Seuil, 1956).
127. *Ibid.* (English ed.), p. 98. Tresmontant is here quoting from Teilhard, "L'âme du monde" (1918).
128. Westminster, Md.: Newman Press, 1967.
129. London: Souvenir Press, 1965. This is a translation from the Paris edition published by Pierre Seghers in 1961.
130. *Ibid.* (English ed.), p. 30.
131. New York: Herder & Herder, 1965. This is a translation from the French: *L'Être humain selon Teilhard de Chardin* (Paris: J. Gabalda et Cie, 1959).
132. *Ibid.* (English ed.), p. 133.
133. *Ibid.*, p. 170.
134. Mircea Eliade in Kitagawa *et al.*, *op. cit.* (see n. 2 above), p. 33.
135. *Ibid.*, p. 34.
136. New York: Paulist Press, 1966.
137. *Ibid.*, p. 77.
138. Paris: Seuil, 1965.
139. Milwaukee: Bruce Publishing Co., 1967.
140. *Ibid.*, p. 295.
141. *Ibid.*, pp. 274-77.
142. New York: Harper & Row, 1966.
143. *Ibid.*, p. 201.
144. XXV (1964), 576-610.
145. LVIII (1965), 91-126.
146. Baltimore and Dublin: Helicon Press, 1966.
147. *Ibid.*, p. 27.
148. *Ibid.*, p. 71.
149. *Ibid.*, chapter on "The Basic Category of Process Established," pp. 91-139.
150. *Ibid.*, p. 22.
151. *Ibid.*, p. 318.
152. *Ibid.*, p. 319.
153. *Ibid.*, p. 320.
154. Leslie Dewart, *The Future of Belief* (New York: Herder & Herder, 1966), pp. 206, 209-11.
155. *Ibid.*, p. 46.
156. Zaehner, *op. cit.* (see n. 11 above).
157. *Ibid.*, p. 186. Such views represent a distinct advance over those expressed in J. Franklin Ewing, S.J., "The Present Catholic Attitude towards Evolution," *Anthropological Quarterly* (October, 1956), pp. 123-39.
158. Preface by Henri de Lubac (New York: Herder & Herder, 1965).

159. New York: Herder & Herder, 1967.
160. Tr. by J. Maxwell Brownjohn (New York and Evanston: Harper & Row, 1964), p. 112.
161. New York: Herder & Herder, 1965. Professor Barbour showed a film of his expeditions with Teilhard at the annual meeting of the American Teilhard Association, April 27, 1968.
162. Paris: Éditions Universitaires, 1960.
163. Toulouse: Éditions Prière et Vie, 1966.
164. Paris: Lettres Modernes, 1962.
165. Paris: Presses Universitaires de France, 1967.
166. *Op. cit.* (see n. 1 above).
167. *Ibid.*, pp. 392-93.
168. *Science and Religion* (Cambridge: Cambridge University Press, 1953), p. 16.
169. New York and Evanston: Harper & Row, 1962.
170. *Ibid.*, pp. 21-22.
171. XXXIV (Autumn, 1965), 500-510.
172. Our reservations as to the inclusion of Whitehead in this group will be found in n. 28 above.
173. New York: Harper & Bros., 1959.
174. *Ibid.*, p. 166.
175. See n. 147 above.
176. Pittenger, *The Word Incarnate*, p. 167. Pittenger's most recent work in process theology is *Reconceptions in Christian Thinking 1817-1967* (New York: Seabury Press, 1968). See chap. ii, "Christian Faith and Scientific Thought," pp. 27-50, in which he sketches the familiar British philosophers of emergent evolution, and mentions, but does not discuss, Teilhard de Chardin, on pp. 47 and 70. He is much more willing to include Whitehead than we are among process philosophers.
177. *Religion in Life* (Autumn, 1966), pp. 617-21.
178. *Ibid.*, p. 617.
179. *The Phenomenon of Man*, pp. 261 ff.
180. E. L. Mascall, *The Christian Universe* (New York: Morehouse-Barlow Co., 1966), pp. 93-94.
181. Ernst Benz, *Evolution and Christian Hope: Man's Concept of the Future from the Early Fathers to Teilhard de Chardin* (see n. 31 above), p. 233.
182. *Ibid.*, p. 240.
183. Mascall, *op. cit.*, p. 97.
184. *Ibid.*, p. 95.
185. Michael Novak, "The New Relativism in American Theology," in Donald R. Cutler (ed.), *The Religious Situation: 1968* (Boston: Beacon Press, 1968), p. 221.
186. John Macquarrie, "The Natural Theology of Teilhard de Chardin," *Studies in Christian Existentialism* (Philadelphia: Westminster Press, 1965), p. 168. Macquarrie deplores doctrines of God involved in the evolution of the universe, which he caricatures as a God "who is on his way," and he appears to prefer "a God of eternal static perfection." Yet, is not Tillich close to Teilhard when he affirms: "God is eternally creative . . . through himself he creates the world and through the world himself. There is no divine nature which could be abstracted from his eternal creativity" (*Systematic Theology*, II, 147)?
187. For elaboration of these deficiencies of Alexander, see Alfred P. Stiernotte, *God and Space-Time* (New York: Philosophical Library, 1954).
188. Macquarrie, *op. cit.*, p. 193.
189. Nutley, N.J.: Presbyterian and Reformed Publishing Co., 1966, p. 44.
190. John A. Hutchison, review of *The Future of Man*, in *Religion in Life*, XXXVI (Spring, 1965), 300.
191. Raven, *Teilhard de Chardin: Scientist and Seer*, pp. 176-77.

192. *Ibid.*, p. 177.
193. Decius Wade Safford, "Teilhard de Chardin: A Vision of the Past and of the Future," *Anglican Theological Review*, XLVI (1964), 291.
194. William Whitla, "Sin and Redemption in Whitehead and Teilhard de Chardin," *Anglican Theological Review*, XLVII (1965), 93.
195. P. 228 (see n. 13 above). Note the new interpretation of "original sin" now being made by some Roman Catholic theologians and by Paul Tillich. Tillich stresses a positive evaluation of man by theology in the task of producing a realistic doctrine of man: "It may well be that such a task demands the definite removal from the theological vocabulary of terms like 'original sin' or 'hereditary sin' and their replacement by a description of the interpenetration of the moral and the tragic elements in the human situation" (Tillich, *Systematic Theology*, II, 39). See also *Christ and Original Sin* by Peter de Rosa (Milwaukee: Bruce Publishing Co., 1967). The author addresses himself to the question: "Does science suggest a new way of *presenting* the Church's teaching on original sin which is more accommodated to the modern mentality?" (p. 108).
196. New York: Sheed & Ward, 1967, p. 140; see also chap. v, "The victory over Evil," pp. 139-72.
197. Etienne Borne, quoted by Cuénot, *Teilhard de Chardin*, pp. 397-98. These two poles of the Christian consciousness are again suggested in: "Lately there are again signs of appreciation for the critical clarifications as well as positive analogies that emerge for Christian faith, cosmologically, for instance, from the work of Whitehead and Teilhard de Chardin. . . . From Barth and Bultmann one learned that cosmology and historiography can produce neither the God nor the Christ of faith. But it is also sensed today that Christian faith inescapably implies constructive relations with the scientific understanding of the world and history" (A. Durwood Foster, Jr., in W. R. Farmer, C. F. D. Moule, and R. R. Niebuhr [eds.], *Christian History and Interpretation: Studies Presented to John Knox* [Cambridge: Cambridge University Press, 1967], pp. 68-69).
198. Richmond Va.: John Knox Press, 1966.
199. *Heredity and the Nature of Man* (see n. 7 above), pp. 151-52.
200. Needham, *op. cit.* (see n. 9 above), p. 633.
201. New York: Harcourt, Brace & World, 1964, p. 228.
202. Paul Tillich, *Systematic Theology*, III, 210.
203. Andrew G. van Melsen, *Evolution and Philosophy* (Pittsburgh: Duquesne University Press, 1965), pp. 120-21.
204. Needham, quoted by Simpson, *op. cit.*, p. 233.
205. T. H. Huxley and Julian Huxley, *Touchstone for Ethics* (New York and London: Harper & Bros., 1947), p. 137 n.
206. P. 368.
207. *Op. cit.* (see n. 7 above), pp. 108-37.
208. *Ibid.*, pp. 114-15.
209. *Ibid.*, p. 126.
210. *Ibid.*, p. 127.
211. LXX (January, 1961), 99-106.
212. *Ibid.*, p. 106.
213. *Ibid.*, p. 99.
214. Dobzhansky, *The Biology of Ultimate Concern*, p. 115.
215. Harris, *The Foundations of Metaphysics in Science* (see n. 28 above), p. 150.
216. Medawar, *op. cit.*, p. 106.
217. *Ibid.*, p. 103.
218. Harris, *The Foundations of Metaphysics in Science*, p. 258.
219. Medawar, *op. cit.*, p. 105.
220. Raven, *Teilhard de Chardin: Scientist and Seer*, p. 214 n.

221. "The Significance of Teilhard," *Christian Century* (August 30, 1967), p. 1099. See also Ian G. Barbour, *Issues in Science and Religion* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966), pp. 399-408, for an exposition of Teilhard and of reactions to his world philosophy. Barbour stresses the theory of levels in Teilhard and relates him to the familiar philosophers of emergent evolution, such as Whitehead and S. Alexander. Barbour's conclusion is obvious: "We would submit that his writing should rather be viewed as a *synthesis of scientific ideas with religious ideas derived primarily from historical revelation and religious experience*" (p. 407). One needs to add that this is not a loose mixture of ideas but the placing of historical religious revelation within the larger framework of the world process.

222. *Commentary*, XXXIX (March, 1965), 50-55.

223. *Ibid.*, p. 55.

224. *Ibid.*, p. 55.

225. W. Norman Pittenger, *The Word Incarnate*, p. 153.

226. Dobzhansky, *The Biology of Ultimate Concern*, p. 137.