Teilhard de Chardin and the dialogue between science and religion

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Abstract

We can find in Teilhard's writings many points of interest for the dialogue between science and religion. I have selected three of them in his conception about science, matter and human evolution. The first is his high esteem for science and its role in human history. Science for him represents the line along which evolution progresses at human level and prepares man to find the hidden profound meaning of the mystery of reality. This conception of science may serve as a good starting point in the science-religion dialogue, since it recognize a potentiality in science to be interpreted in religious terms. The second is his understanding of matter which surpasses all matter-spirit dualism. Matter for him has an internal dynamism which leads it to the spirit, through the process of cosmic evolution. The third is his conception of man (noosphere), progress along the line of increasing unity to finally converge into an Omega Point, where it finds its ultimate fulfillment.

Keywords: Science-religion dialogue, Teihard de Chardin, science, progress, matterspirit, complexity, evolution, convergence, consciousness, socialization, globalization.

Introduction

Pierre Teilhard de Chardin (1881-1955), Jesuit priest and paleontologist, developed along his scientific carrier an original system of thought which may be placed at the frontiers between science, philosophy, theology and mysticism. During his life the publication of his writings was barred by ecclesiastic authorities, but circulated in private copies among his friends. When Teilhard's writings began to be published, after his death in 1955, they produced an enormous impact and were rapidly translated into many languages. The publication of all his writings has been a slow process (Teilhard de Chardin, 1955-1976). In the original French, the first volume of Teilhard's works (I, *Le phénomène humain*) was published in 1955 and the last (XIII, *Le coeur de la matière*) in 1976. Other writings and letters were also published during this period. In this article references to his writings will be given to the French edition, by title of the essay in the original French and its translation, volume of the complete works and pages.

The early interest for Teilhard's ideas can be measured by the publication, between 1956 and 1980, of about 3000 books and articles in different countries. A very extensive bibliography about Teilhard can be found in Polgar (1990, III, 359-563).

Teilhard's thought has been the object of many studies which analyze its scientific, philosophical and theological aspects, among them Crespy (1961), de Lubac (1962) Rideau (1965) and Chauchard (1965). After 1980 the interest for Teilhard seems to have declined, but recently a certain revival can be detected. In the new dialogue between science and religion, which began about 1970, Teilhard is not often

mentioned. This may be explained by the preponderance of authors in this field from the Anglo-Saxon tradition, where Teilhard's ideas are less popular. However, we can find in his writings many points of interest for this dialogue. I have grouped some of them around his ideas about science, matter and human evolution. Because Teilhard assigns a particular meaning to some terms, some are given here also in the original French.

The religious aspects of science

The first point which may help in the dialogue between science and religion is Teilhard's high esteem for science and its role in human history. For him science is more than a body of knowledge; it is in his words, Le gran affaire du Monde (the great endeavor of the world), "a vital human function, as vital as nutrition and reproduction". He goes even further and proposes that we must believe in scientific research as the source, when followed with faith, of a unique human-Christian mysticism which may contribute to a true human unanimity. (Sur le valeur religieuse de la recherche (On the religious value of research), IX, 258-263). In a short essay written shortly before his death he left his last opinion about what sciences meant to him (Recherche, travail et adoration (Research, work and worship), IX, 281-289). In this essay, Teilhard insists on the fact that scientific research has become quantitatively and qualitatively the main form of human activity. Talking about the problems of young Jesuit students dedicated to science, he refers explicitly to the conflict between religion and science. He states that a solution of this problem requires a rethinking of the Christian message through the light of science, specially incorporating the ideas of cosmic evolution. He concludes advancing that the researchers of today can be considered as the avant-garde of a progressing society toward a new form of worship. Thus we can say that Teilhard sees science through a very optimistic angle as the motor of human progress. Moreover, science is not only a source of understanding about the universe, but it opens to more profound understandings of reality and has in itself a religious character.

In order to understand Teilhard's position abut science we have to consider his view about human evolution as part of the total cosmic evolution. We will explain this shortly in next section, here we can anticipate that for him the universe is in a estate of cosmic evolution of which human evolution is an integral part. A central part of human evolution is precisely that formed by scientific work. Thus, science for him represents the line along which evolution progresses at human level. Since the main characteristic of Teilhard's view of evolution is its convergence toward its fulfillment in the Omega Point or God, as we will later see in greater detail, motion in this direction acquires a religious meaning. In such a convergent universe, science and scientific research has to be seen as cooperating to its consecration and consummation in God. In this sense, Teilhard will say that science, for its relation with the axis of convergence of the universe, acquires by itself a true mystical character. In a universe in which everything is directed finally to a convergence through the spirit, it must be recognized in science itself a profound meaning of sanctity and communion. In a true sense scientific work, which consists in developing, through knowledge, the conscience of the world, becomes a priestly operation. It consists in a contribution to the progress of a world which is finally oriented to God (La mystique de la science (The mystic of science), VI, 202). He takes a further step in the line of understanding the meaning of science, introducing from Christian faith the role of Christ in the converging universe. Teilhards identifies Jesus Christ as the Omega Point already present in the world. He discovers

that through his incarnation, the very pole of the convergence of the universe, which is Christ himself, is made present in the very heart of matter in order to attract and consummate the whole movement of evolution. For him, then, Christ is not a stranger in the world, but the very same center of its convergence. Toward him and for him, life and light of the world, through the human work and effort, the universal convergence of the spirit is fulfilled (*Science et Christ ou analyse et synthèse* (Science and Christ or analysis and synthesis) IX, 61). Teilhard's insistence in the demands of the converging universe for the presence of Christ may create some misunderstandings. By this he wants express the unity of the total liberty of the Incarnation with is quasi-necessity, since the world cannot achieve the convergence and unity toward which it tends without the mediation of the man-God. Thus Christ becomes central to the whole movement of evolution.

Teilhard's understanding of the role of both science and that assigned by Christian faith to Christ in the process of evolution is fundamental in his position about the religious character of science itself. In this sense, science is not only not opposed to religion, but in some way, a preparation for it. It prepares man to find the hidden profound meaning of the mystery of reality. For Teilhard this profound meaning is based on the convergence of the evolution toward God. Once it is accepted that our universe is a converging one toward the union with God, through the path of increasing consciousness, scientific work acquires by itself a religious sense. In a conference on the relations between science and religion, he distinguishes the way of science as that of analyses and that of religion as syntheses. Taking into account his image of the universe, it can be understood that for him: "Science with its analyses doesn't have to trouble us in our faith. It must, on the contrary help us to understand better, comprehend and appreciate God" (Science et Christ ou analyse et synthèse, (Science and Christ or analysis and synthesis) IX, 61). Talking about the conflicts between science and religion, he concludes that "after two centuries of passionate struggle neither science nor faith has succeeding in discrediting its adversary. On the contrary it becomes obvious that neither can develop normally without the other...Neither in its impetus nor in its achievements, science cannot go to its limits without becoming tinged of mysticism and charged with faith.... Religion and science are the two conjugated faces or phases of the same complete act of knowing" (Le phénomène humain (The phenomenon of man), I, 316-317). Precisely, "a science charged with faith" is the title of the chapter dedicated to Teilhard by Henderson (1986). In this chapter Henderson develops Teilhard's proposal of bringing together science and theology in a passionate search for God who is present in both. Introducing the Christian mystery of the incarnation of God through Christ in the universe, Teilhard goes even further and states: "In consequence it is vain and unjust to oppose science and Christ, or to separate them as two domains estranged one from the other. Science by itself cannot discover Christ, but Christ fulfills the desires which arise in our heart in the school of science" (Science et Christ ou analyse et synthèse, IX, 62).

Accustomed to the usual solution of keeping science and religion separated and with no interaction between them, Teilhard's proposal may seem unrealistic if not absurd. Is it not science in itself atheistic? How can it become in any way a path toward God? But even accepting their separation, science and religion cannot ignore each other and a fruitful dialogue between the two is necessary. Even proponents of the complete independence between the two, as Stephen Gould (1999, 221-222), himself a strong critic of Teilhard, agrees to a certain amount of dialogue. Theology cannot progress isolated from the continuous growth of the knowledge about the natural world that science keeps producing. Medieval theologians were already aware of the need in theology of a correct knowledge of the world. In the other hand science cannot cut itself out from the inspiration which comes from religion. Though a necessary autonomy is needed in each field, mutual interaction will benefit both. Maybe Teilhard goes a bit too far with his proposal of a continuity between the two, but his ideas surely show us a possible path through which we should dare to walk.

A new concept of matter

What has been called "scientific materialism" has been acknowledged as a source of confrontation between science and religion (Babour, 1990, 7-9). Scientific materialism is based on two assertions: matter (and energy) is the fundamental reality of the universe and science is the only valid knowledge. The first is a metaphysical and the second an epistemological assertion based on the first. Thus, the only reality is the material which is known through science. Materialism implies a reductionism, that is, all knowledge can be reduced to that of the most simple constituents of matter. In consequence, no other reality exists outside that of matter. This position rejects the consideration of any other reality as baseless spiritualism and animism. These ideas are very extended since as Babour says: "Because scientific materialism starts from scientific ideas, it carries considerable influence in an age that respect science". In the dialogue with this mentality Teilhard's understanding of matter may be very helpful. He begins with a rejection all matter-spirit dualism, and presents a concept of matter which integrates a spiritual dimension. He tries to understand the nature of matter, not from the point of view of its simplest particles (quarks and leptons) but from the evidence of consciousness in man. If man is a conscious material being, this quality of reflex consciousness, explicitly and clearly present in the human person, has for him to be present in all matter. This takes Teilhard to propose that there is an inside (dedans) of matter, besides its outside (dehors) which is the object of science (Le phénomène humain, I, 49-64). To this twofold character of matter correspond two types of energy; a tangential (tangentielle) energy which correspond to the physical energy, and a radial (radiale) energy which is responsible of the converging evolution of matter in the line of a greater complexity and greater consciousness. The radial energy is also called the spiritual energy, since he identifies spirituality and consciousness. This concept of matter and energy is a consequence of his vision of the continuity of the evolution of the universe from the elementary particles to man.

Matter for him has an internal dynamism which includes the spiritual and leads it to an ever increasing spiritual dimension. We observe that evolution proceeds along the line of greater complexity. To this increase in complexity correspond an increase in consciousness, which Teilhard identifies with a greater spirituality. As beings evolve from inert matter to life and consciousness, their spiritual dimension keeps increasing together with their complexity. For him consciousness, fully present in man, must also, in a primitive manner, exists in all material beings. Teilhards distinguishes seven grades or levels of matter according to its place in the convergence movement into the spirit. Thus he talks about formal and concrete matter at the lowest level and about universal, total and relative matter at a higher level and finally about liberated and resurrected matter. The two basic processes, toward matter and toward the spirit , (*matérialiation* and *spiritualisation*) are recognized to be strongly linked together like

the two faces of the same thing (Le noms de la matière (The names of matter), XII, 449-464). Behind this conception is what he calls the "spiritual power of matter" (La puissance spirituelle de la matière (The spiritual power of matter) XII, 467-478) which allows matter to become the matrix of the spirit. Thus for Teilhard matter itself has a dynamism which makes it to evolve to the spirit in man. In its final development, through the human spirit, matter itself finds its final accomplishment in the union with God. For Greek philosophers matter was considered as a hindrance to the spirit to be overcome. This was the source of the matter-spirit dualism present in much of western thought. Teilhard giving to matter the power to progress into the spirit overcomes this dualism. He ends his considerations about matter with a mystic "Hymn to matter" in which matter is saluted as the "divine milieu full of creative power, ocean agitated by the Spirit, clay kneaded and animated by the incarnated Word" (Le coeur de la matière (The heart of matter) XIII, 75-91). Thus, the proposal of matter as the only reality of the scientific materialism, as the seed of atheism, can be overcome by showing the inner dynamism of matter itself toward the spirit in the overall scheme of the converging evolution whose final end is God himself.

From Teilhard point of view the nature of matter known by science is in itself incomplete, since it cannot explain its evolution toward greater complexity and consciousness, which finds its full expression in man. But he does not introduce a dualistic principle to explain consciousness, on the contrary he puts in matter itself the power to evolve into it. For Teilhard consciousness is in fact a dimension of matter, which is linked to its complexity. As matter becomes more and more complex greater degrees of consciousness appear. Consciousness constitutes what we may call the spiritual dimension. Matter and spirit are, then, not two opposite reality but dimensions of the same reality. This conception of matter-spirit reality cannot be understood without Teilhard's idea of a convergent universe toward greater consciousness or spiritual dimension, attracted by the super-conscious and super-spiritual Omega Point. All the potentialities of matter depend finally on the complete dynamic structure of reality which can only achieve its final completion in the union with the Omega Point.

The human convergence

The third aspect in Teilhard's thought which may help in the dialogue between science and religion is his conception of human evolution. Cosmic evolution is considered as an intrinsic dynamic nature of the universe which unfolds from the simple material particles, through the living beings (biosphere), to the conscious dimension of man (noosphere), along the line of increasing complexity and interiority or spirituality. For him evolution does not stop at the human consciousness, but it must proceed further through human evolution to finally converge into an Omega Point, where it will find its ultimate fulfillment. This Omega Point must be personal and is identified with God. This convergence, an essential point in Teilhard's thought, is realized at the level of the noosphere, that is, through the human evolution, by a unifying movement, attracted by the personal, transcendent and divine Omega Point (*Le phénomène humain*", I, 286-303).

This last stage of cosmic evolution will take place through what Teilhard calls the "human collectivation" (*la collectivation humaine*) or "socialization". What he means by this was the subject of many of his essays, some of them collected in volume V, under the title *L'avenir de l'homme* (The future of man). In these essays he recognizes

that his idea of the noosphere and its spiritual evolution has been hard to accept. This evolution is linked with his conception of progress. Progress marks the way of human evolution, which can finally tend towards a convergent unity or to a divergent plurality. An stage in this process is the creation of a unified science and a common goal accepted by all. In order to avoid to fall in a divergent plurality, these two elements present in progress, however, are not sufficient for a convergent motion. A common attraction is needed by a "some one" a personalized center of attraction which through the force of love accomplishes the final unification of all consciences (Réflexion sur le progrès (Reflection on progress) V, 85-106). This is a difficult point. Teilhard is aware that man is free and progress at human level is not an automatic movement. There are many roads along which man can take his way. Teilhard reduces them to two "evolution of plurality" and "evolution of unity". The first leads to divergence where the elements tend to oppose each other moved by what he calls a "mystic of separation". This tendency may be seen in the growth of particularisms and nationalisms, which seek satisfaction in a progress of a group against the others. This for Teilhard is to introduce, in the evolution at the conscious level, an element of desegregation and death. The only alternative is, then, through a universal socialization to arrive to a true unification. This is what he calls the "great option"; (La grande option (The great option), V, 57-80);

The modern phenomenon of globalization, imperfect as it still is, can be seen as corresponding to this convergent movement of the noosphere. Teilhard sees this process as a phenomenon irresistible both a the planetary and cosmic level. He describes this process with a first phase which may considered as forced which must be followed by a free one. (Un grand événement qui se dessine: la planétisation Humain (A great event which is appearing: the human planetization, V, 159-175). The force behind this process, which must be realized in freedom, cannot be other than love. This may seem strange, but Teihard uses this word in a very general meaning of mutual internal affinity (affinité mutuelle interne). Thus love is at the human level a continuation of what he has called the "radial" energy, that is, the energy that has been the driving force of evolution, since the synthesis of inanimate matter. At the human level, that is for persons, love is the only force that can achieve unity without negating individuality (L'énergie humain (The human energy) VI, 180-192). In his own words: "Only a union realized for love and in love has physically the property not only to differentiate, but to personalize the elements that it organizes". His conception of the human evolution is, then, a dynamical one tending toward unity through the impetus of love. The influence of the natural sciences does not allow for other approach, since they show a dynamic universe in evolution. Social sciences show us also a progressing motion of humanity, which tends to some kind of unity.

In this context, Teilhard introduces the role of the Christian faith as a force which works in the same direction as the human convergence. For him Christianity has to become the religion of the future (*la religion del'avenir*) by discovering what he calls the "Human Sense" (*Sens Humain*), which he recognizes that is really implicit in it. The human sense is the drive of all men toward a unified achievement, and for a Christian this achievement is fulfilled by the union of all in Christ. Thus, he adds that "the light of Christ is not eclipsed by the shining of the ideas of future, research and progress, but it occupies the center which sustains its fire". He concludes that only Christ is the only one who can save the human aspirations of our time (*Le sense humain* (The human sense), XI, 21-44).

In the epilogue of his fundamental work (*Le phénomène humain*, I) entitled "The Christian phenomenon (*Le phénomène chrétien*), Teilhard ventures a Christian interpretation of the whole cosmic evolution in which the Omega Point is identified with the figure of Christ. The universe, then, through the convergence of humanity tends really to a unity which can only be achieved in the union with Christ. Christ is the presence of the Omega point in the human history, attracting human progress toward himself, and thus helping it to its achievement. In this interpretation, the cosmogenesis of evolution becomes truly a Christogenesis, as he identifies the pole of the evolution with the incarnated Christ. The unity of men and through them of all the universe with Christ is what he calls the "total" or "universal" Christ. This idea is more fully expanded in his last essay, "*Le Christique*" (XIII, 93-117), written in March 1955 a few days before his death.

We have mentioned that the modern phenomenon of globalization may be interpreted as a sign, weak as it may be, of the human convergence postulated by Teilhard. This sign can be seen also in various other phenomena such as the increase in world communications, rapid global transportation, concern for international affairs and strengthening of the role of the United Nations. However, modern times are witness also to many divergent motions of violence, wars and the modern phenomenon of terrorism. One may ask if there is a reasonable hope for Teilhard's optimistic view. It is a matter of weighting the evidences at hand, though we are still too far away to see clear signs of human convergence. We must not forget that Teilhard developed his vision during the time of two world wars and the tragic divisions present during the cold war. We need some of his optimism to be able to see, through the many dark signs, the light which seems to shine as a hope for the future of mankind.

Conclusions

Accustomed to the usual solution of keeping science and religion separated and with no interaction between them, Teilhard's proposals may seem unrealistic. But science and religion cannot ignore each other and a fruitful dialogue between the two is necessary. Religion, or better theology, cannot progress isolated from the continuous growth of the knowledge about the natural world, which science keeps producing, and science cannot cut itself out from the inspiration, which comes from religion. In the present dialogue of science and religion, the thought of Teilhard de Chardin may offer us some helpful insights. We have looked into three aspects: the importance he gives to science as the main human endeavor which has in itself a religious character, his open concept of matter which includes the spiritual dimension and the convergence of the evolutionary process through the unity of mankind. Though he addresses his vision to all men of good will and takes its foundation from what science tells us of our evolving universe, he makes a synthesis with the religious thought. God is present for him in the horizon of both science and religion, indicating that a convergence of the two must exists. Teilhard insists in the need of accepting the evolutionary image of the universe presented by modern science in the religious thinking. This will imply serious changes in some religious conceptions, but they are necessary in order to keep open the dialogue between science and religion. As we have seen, two of these, proposed by Teilhard, are the acceptance of a new concept of matter which includes the spiritual dimension and the convergent evolution at the human level through a process of unification. The latter

opens also a fruitful dialogue with Christian faith about the role of Christ in an evolutionary universe.

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