

# SECULAR AND CHRISTIAN IMAGES OF HUMAN PERSON

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## FOREWORD

The alternatives to Christian faith are usually centered around either philosophical-idealistic or scientific-realistic humanisms. In contemporary revolutionary society, however, as well as in theological circles dominated by a political, contextual and inductive theology, a new type of humanisation is professed and practised, which is too complicated to be objectively defined. The value of the human person is now rooted in his identity and solidarity with his participation in social revolution and resistance to ecological crisis. This either non-Christian or pro-Christian humanism nourished by an utopian hope, in most cases, accentuates the movement forward towards the coming age of authentic selfhood by overcoming a manifold self-alienation of human beings in modern society of consumption and social injustice. The human person can be grasped now only in his struggle for establishing freedom, justice and peace on a universal scale.

The subject of anthropology, already in the past central and complicated, becomes in our days for this additional reason more actual, interesting and imperative for contemporary systematic theology. The ideological-political activist replacing unconsciously by his revolutionary impetus his innate religious trends and the Christian pro-socialist revolutionary interpreting in a radical way the social message of the Bible converge in a new image of man within the framework of the Christian tradition challenging all of our theological concepts of the Imago Dei as unilaterally transcendental and therefore unrealistic. It is the paramount duty of Christian theology to face this challenge, which is to a great extent born in its own milieu, for the sake of elaborating a more authentic Christian anthropology taking into consideration the new signs of our times.

At the same time, scientific research, by overcoming its deterministic trends of the past as well as a mechanistic concept of Creation and its function, invites a new kind of approach to understand human being, which allows greater flexibility in scientific humanism and betrays a greater sensitivity (on account also of the ecological crisis) in face of the non-scientifically observable parts of human existence. Without pretending that modern science can or should adopt the category of mystery in its methodology—it would not be science any more—it can, however, become more easily today a participant in an interdisciplinary approach to anthropological problems with depth-psychology, anthropological philosophy and theology of the humanum.

These preliminary and introductory remarks prescribe the structure of my study. It is evident that we cannot deal directly with Christian anthropology as an isolated subject within systematic theology: I mean not simply with Christology, which is easily understandable, but with cosmology when it is conceived again not only as nature, but as a comprehensive reality of the whole created Cosmos. Secondly, we have to be seriously challenged by modern scientific and societal psychological humanisms, and then thirdly reexamine our concept of the *Imago Dei*. At the end, fourthly I would like to attempt a reinterpretation of the typical, central Orthodox concept of the theosis of human person (deification of man) as a contribution to anthropology on the part of the ancient Eastern tradition.

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## I

## ANTHROPOLOGY AND COSMOLOGY

## The inseparable link between man, nature and history

Anthropology is central for all Christian theologies, especially for the Eastern Orthodox tradition, because of the Logos theology, i.e. of the Incarnate Word of God, in Jesus, in a historical person. This centrality, due to the Christology of the Incarnate Word, makes some Orthodox theologians give priority to anthropology over abstract and theoretical theology<sup>1</sup>. Especially because of the incarnation and the operation of the Spirit, as Paraclete, comforting and fulfilling the whole Creation to its maximum highest possible end, set by God the Creator, the humanum of man is seen in his divine origin and purpose. In this way, the whole Creation is centered around the human being in process of transfiguration from humanity to divinity on the basis of the Incarnation of the Logos and the operation of the Spirit.

Consequently, man, in Eastern patristic thought, is regarded as «microcosmic»<sup>2</sup>. He is the link between God and the rest of the created world because all things have been created for him as the last and supreme creature, as the King on the earth<sup>3</sup>, and he has to act as such because of the commandment of God and in the light of the Incarnation of His Logos in the form of a man. In the Bible, to man are attributed all the characteristics of superiority and uniqueness over the whole created world, physical and animal, because Christ as a man becomes by the grace of God the pivot event in history. The human being becomes the centre of the universe which has no more value than the soul of one single human person.

This anthropocentricity belongs to the backbone of the new gos-

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1. Paul Evdokimov, in his book «Orthodoxie», Neuchâtel-Paris (Delachaux et Niesté) 1959, begins his presentation of Orthodoxy by Anthropology p. 57 ff.

2. Maximus the Confessor writes that «man is introduced at the end of all other creatures in Creation as the link between God and the whole Creation. (P.G. 91, 1305).

3. Gregory of Nazianzus uses the term «king» (P.G. 36, 612) for man in connection with the Creation.

pel of salvation as good news. It is far more radical than the ancient Greek concept of the centrality of man in nature because of his rational being and immortal soul or than the ancient oriental wisdom, because of the identity of man with the Supreme all embracing One and Whole. In Christianity the uniqueness of man is grounded in the fact of God «humanizing» in history, here and now in the form of a man. The qualification of the uniqueness of man is not expressed by reference to God's gift or man's similarity on the basis of man's reasonable nature. The Christian understanding of man's uniqueness is due to Christ's event in history par excellence. That is why Christian anthropocentricity in Creation is the authentic new message of the Christian faith and the most revolutionary event of history from within.

This human centrality in creation has also nothing to do with all kinds of evolutionary theories, suggesting that the human being occupies the highest climax due to his conceptual thought or orientation towards the future, because he is on the way towards the point  $\Omega$  of the Creation<sup>4</sup>. The Christian centrality of man is the entirely new event erupting into history as the one and unique explosion in the world's physical, biological and historical order. It is self-caused by «the other side» of nature and history.

That is why the effects of the Christian anthropocentricity are also radical and earth shaking. Nature has been desacralized from all latent religious mythologies and all magic, animistic or totemistic trends. Man is dealing with it now as superior and from a distance. His *techne* (craft) became a process towards technology. His mechanical power is now extended to increase his thinking operation by electronic machines. The revolution brought about by their Christian human centrality had, to a certain extent, an immediate effect together with other forces on man's behaviour vis-à-vis nature.

Dealing with anthropology today we have to face the problems arising out of this concept of uniqueness and centrality of man in the creation of God. The question is a double one, first, whether the authentic Christian understanding of the uniqueness of man implies such a superiority inside the Creation, especially vis-à-vis nature; and second how are we to conceive man as the center of creation without falling into a kind of egocentric anthropomonism exploiting nature to the maximum possible point, violating it by using natural resources

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4. Teilhard de Chardin, *Le Phénomène Humain*, Paris (Seuil) 1955.



and causing a total disorder in human relationships. It seems to me that without reexamining the notion of anthropocentricity and uniqueness we should not attempt any positive encounter between secular and Christian images of man today.

1. *Man, Nature, Cosmos, Ktisis and History as an unbroken continuum.*

When we speak of the necessary interdependence between anthropology and cosmology we have to think of the Cosmos as a comprehensive reality, the whole created world comprising geosphere as well as biosphere and noosphere. In other words, one has to distinguish between material elements of creation in the narrow sense of «nature» and the Order, which is the result of the summing up of all created things in a Whole of the total reality, representing the world system as *Universum*. *Cosmos* signifies the Whole and the Totality of the Creation (τὸ ὅλον and τὸ πᾶν)<sup>5</sup>.

Cosmology, in general, presupposes the notion of order, unity and beauty conceived as an intelligible, beautiful and harmonious universal all-embracing reality. The logos about the Cosmos in cosmology is not simply the use of human reason as an instrument for reflecting on nature and the material world. It represents more deeply an act of thinking on the unavoidable experience of man's inner relationship with the whole of created reality. Cosmology denotes solidarity with the overwhelming given reality without which human existence is unthinkable. Cosmology is the commentary of the deep, unbroken, inseparable interdependence of the created world and mankind within the One Universe.

Certainly, this kind of deeper and broader understanding of cosmology is due to the comprehensive aesthetic notion of Cosmos as «jewel» in ancient Greek philosophy according to which cosmology was directly linked with theology and the act of Creation by the Demiourgos, the wise Creator, God. That is why this kind of cosmology betrays pantheistic trends. The act of Creation of the Cosmos is of a transcendental nature. It is grasped, however, as the most immanent reality expressing the wisdom of God in nature. This is the heart of natural theology in classic philosophy, whence natural religion, the respect and honour given to nature and rational paganism are to be understood. An

5. Plato in *Politeia* 270b.; 273e, *Tim.* 28c, 30b; *Crat.* 412d. [Kittel, *Theologisches Wörterbuch zum Neuen Testament*, Band III; Stuttgart (Kohlhammer) 1938, p. 869-879].

ancient Temple and a statue of religious significance are at the same time by their beauty and absolute harmony a grateful answer to the beauty of Cosmos as a gift of God. It is also incarnation of His presence in nature, achieved by human rationality and art.

The word *physis* (nature) in this context cannot be used as a synonym of Cosmos in cosmology. Rightly, one has to speak of physiology in the sense that *physis* denotes something created and existing objectively and immediately grasped by senses and reason. Further, *physis*-nature refers to the inner, deeper quality of things, man and God. It is another term for denoting the unchanging *ousia* as the inner ontological qualitative structure of being beyond corruption and change. It is, therefore, both a term signifying created reality and its constitutive qualitative principle. We use it in both senses by speaking of «φύσις» as nature and as *physis*-nature of God, man and things.

Nature, however, is more and more understood within the limits of the «natural», i.e. what is distinctive from accidental, technical or artificial. It refers, mainly, to the created world without including humanity or the works, the objects produced by human action. It is perhaps, Christian faith which inspired in a latent and progressive way this kind of separation between Cosmos and *physis* and concretized nature within the limits of the created material reality, while the term continues to be used in philosophy and theology.

We can now understand why the Bible makes use of this term only either in this latter sense (II Pet. 1,4 ἵνα γένησθε θείας κοινωνοὶ φύσεως «You might be partakers of the divine nature») or in most of the cases in the sense of the «natural» being and character, «by birth» something rooted within man «by nature» (cf. Rom. 2,14 ὅταν γὰρ ἔθνη τὰ μὴ νόμον ἔχοντα φύσει τὰ τοῦ νόμου ποιεῖ «do by nature the things contained in the law») whence we have the idea of «natural» law and «natural» theology. Nowhere in the New Testament does the word «nature» refer to the whole of creation or to its non-human aspect. That, it seems, is «a Hellenic legacy in western Christian thought»<sup>6</sup>.

The New Testament also does not speak of δημιουργία, i.e. of creation in the sense of ancient Greek literature. Only in Hebr. 11,10 God is named δημιουργός (creator). The biblical text referring to the act of creation uses more dynamic and comprehensive terms like κτίσας

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6. Paulos Gregorios, *The Human Presence. An Orthodox view of Nature*, W.C.C. (Geneva) 1978, p. 21.

(I Cor. 11,9) or ποιήσας (Math. 19,4). or πλάσσειν (Rom. 9,20) signifying the particular care and personal involvement of God acting with a definite purpose in Creation. Replacing the word «nature» in all of the references to Creation, the Bible prefers the words «τὰ πάντα» (all things) together with the word κτίσις (creation)—Eph. 3,9: ἐν Θεῷ τῷ τὰ πάντα κτίσαντι. Especially, the link between these two terms is made when the Christological approach to creation is underlined, as we read in Colossians 1.16: ὅτι ἐν αὐτῷ ἐκτίσθη τὰ πάντα — τὰ πάντα δι' αὐτοῦ καὶ εἰς αὐτὸν ἔκτισται: «all things were created by and in him and for him and by him all things consist». «Created» and «consist» denote the absolute totality of Creation. Κτίζειν and τὰ πάντα unite both the universality of the Cosmos and the act of Creation in Christ as the highest meaningful and in the personal, trinitarian God originated maintained and destined Creation. Ktisis cannot be determined either by identifying it simply with nature, or with man, or with cosmos. It points more to the thorough, complete and all-renewing act of God creating, preserving and recreating τὰ πάντα by and in His incarnate Word and His Spirit. The Pauline verse II Cor. 5,17 gives us, in the most clear and condensed form, this new understanding of cosmos and nature in relationship with man as a holistic, total Creation in its dynamic aspect of being created and renewed by a continuous concern of God acting in Christ and uniting all things of Creation with man renewing him and all things together: εἴ τις ἐν Χριστῷ καινὴ κτίσις· τὰ ἀρχαῖα παρῆλθεν, ἰδοὺ γέγονε καινὰ τὰ πάντα («if any man be in Christ, a new creation; behold all things are become new»). It is a paraphrase when one translates by «is a new creature», because though more logical, this translation risks isolating man as the only new creation (the text does not offer this possibility directly). It also introduces a discontinuity with the second part of the verse, which clearly refers to the renewal of all things together with man.

The use of these particular terms, τὰ πάντα — καινὴ κτίσις in Christ has a paramount importance for understanding the unbroken relationship between anthropology and cosmology on the basis of the unbroken continuum and interdependence between man, nature and cosmos and the dynamic historical process within the whole creation. On this biblical basis anthropology cannot be conceived apart and in isolation from Christology and cosmology. Creation is linked inseparably with the mystery or renewal of all things and the salvation of man with the whole created reality. The text of Roman 8 makes a clear reference to this interdependence. The κτίσις in this text is earnestly ex-

pecting the manifestation of the sons of God and this ktisis also «shall be delivered from the bondage of corruption into the glorious liberty of God. For we know that the whole *κτίσις* groaneth and travaileth in pain together (with the sons of God) until now» (Rom. 8,19-22). Here in this text we are given by St. Paul the maximum possible expression of the relationship between Creation, as Nature and Cosmos, with man in the mystery of salvation. The whole Creation is symbolically described as a pregnant woman in pain before giving birth to a new man, i.e. the highest image ever used in expressing the inner coherence of created nature and man taken within the one saving act of God by Christ and in His Spirit, which makes intercessions for us with groanings, for us which have the first fruits of the Spirit (v. 23 and v. 26).

Anthropology implies, if conceived on this basis, a Christological and pneumatological approach to nature as Creation — *κτίσις* and cosmos. There is no possibility of studying man apart from a manifold creating act of God resulting in a multitude of created realities. These realities in Christ are constituted as one total-Whole with inner coherence and purpose, and they are subject to a continuous becoming and renewing act operated by the Spirit. By a Christological pneumatology of *κτίσις* anthropology becomes possible as the central theme of biblical systematic theology. This kind of connection as interdependence between anthropology and cosmology has important bearings in a more comprehensive understanding of man, nature and history as an unbroken God-given continuum. This is the specifically Christian element in the image of man when confronting all kinds of possible secular images, scientific, societal and ideological.

## 2. *Matter — Nature and Body — Soul: One κτίσις.*

The connection between anthropology and cosmology has immediate repercussions on our understanding of the interrelationships and the cohesion between the fundamental elements of Cosmos and their reciprocal role in manifesting, maintaining and perfecting the inner unity of Creation. We should not try to conceive man in Christian terms by an one-sided understanding of nature and cosmos as a corrupted, fallen objective reality of material (physical) creation. A careful study of the notion of *κτίσις*, as comprising both nature and saving act of God including man and all things created in heaven and on earth, must guard us from falling into different kinds of dualisms. It is the sinfulness of human beings that creates this dualism, and not the nature

of nature or the secularity of cosmos. In the Bible there is no reference to a fallen nature as *ktisis*, and cosmos has a dialectical sense either as a total reality of nature-man-history for which God has such a love that he gave His only begotten Son (John 3,16) or as a resisting evil power against His will (John 17,14), but in no way is this cosmos alienated from the intention and the plan of salvation: «I came not to judge the world, but to save the world» (12,47).

The Cosmos concept should not express the secular part of creation in revolt against God as an objective reality in which man is not participating and at which man looks as an observer from outside. The cosmic dimension is man's insight into the wholeness of creation. He is a part, the most significant, in God's creation, but never above or separated from it on account of his superiority. In this sense, he is microcosmic because he reveals the macrocosmos of the total purpose of Creation but always together with matter, nature and cosmos and thanks to this relationship. Man is the link, the mediator between natural and cosmic, matter and spirit, and we can add, facing possible scientific images, between static and dynamic, given and becoming, necessity and possibility, obligation and freedom<sup>7</sup>.

All dualistic concepts of man are overcome by this fundamental thesis. There is no split or opposition between matter and spirit, body and soul. The oneness in Creation as *ktisis* represents the ongoing process of final unification of all apparently opposed elements of Creation. Man is continually becoming the recapitulation of material, animal, spiritual, created and further creative elements of the one *ktisis* in himself. Man, as microcosmic, signifies not that human beings are beyond matter as pure spirits or reasonable beings, but as E. L. Mascall points out, «for we live in the borderland where matter is raised to the level of spirit and spirit immerses itself in matter»<sup>8</sup>. In the so-called spiritual man we appreciate the *conditio sine qua non* which is matter in the form of the body. There is a spiritual body and a bodily spiritual existence. Without this reciprocity man is not the creature of God, according to a consistent Christian anthropology.

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7. Maximus the Confessor: «Man is introduced as the last one into the Creation as a natural (*φυσικός*) link of the whole reality through his mediation of the extreme beings in himself, leading all greatly differentiated things into the oneness» (M.P.G. 91, 1305 B).

8. E. L. Mascall, *The Importance of Being Human*, London (Oxford University Press) 1959, p. 34.

Against all kinds of dualistic idealisms or monistic materialisms the Christian image of man will defend the absolute interdependence of matter and spirit in the one human existence as microcosmic of the question of qualitative priority between the two, for they are entirely and equally reciprocal in one and the same organism reflecting thus the origins, the foundation and the function of the whole cosmos. From one point of view matter appears to be the matrix of life, either as it is indicated by the words of Genesis 1,20 (life coming out of the waters) or in the story of the creation of man, Genesis 2,7 (God starting His creation by taking earth into his hands).

The microcosmic nature of man is mainly focussed on his bodily existence. Only Christian faith has accepted and consistently proclaimed body and soul as an inseparable unit with tremendous implications for appreciating matter in general as the fundamental element and bearer of life. In this created world nothing can exist without its basic material foundation. Matter is the matrix of animal life and the body is its highest expression as God's direct creation. That is why the body in spite of all kinds of abuses (spiritualistic - ascetic or hedonistic) is «the temple of the Holy Spirit, which is in you, which you have from God» (I Cor. 6,19). Against all idealistic beliefs of the immortality of the soul alone, we are reminded by the authentic biblical tradition that our resurrection is a bodily one. That is why, in biblical terms one does not speak of flesh as the inferior part of the human existence. After the incarnation the term flesh denotes the central event of faith, because «the Word was made flesh» (John 1,14). Flesh is the state of the «carnally minded» (Rom. 8,6) while this inferior part of man is denoted by the paradoxical expression «ψυχικὸς ἄνθρωπος» (I Cor. 2,14), «the psychic man», i.e. the bearer of the simple natural quality of soul is not spiritual element, namely it is not yet renewed by the Holy Spirit.

In Christian faith and praxis material creation is elevated as part of the one creation of God at the same level of appreciation and qualification with man and his bodily existence. Man as a Body is fundamentally a Christian basis of anthropology resulting from its inseparable link with cosmology. The body can never become a separated object if it is understood in its identity with the spiritual foundation of man. «I am a body», does not signify only an identity with my body either; but the phrase points out to the solidarity of man with nature as part of the whole created cosmos, comprising man, nature, matter and history.

### 3. *The Uniqueness of Man in Cosmos and in solidarity with Nature.*

Christian faith, therefore, cannot accept a concept or image of man which on the one hand does not recognize his uniqueness in Creation and on the other does not profess his solidarity with the created world, Nature, as well as with historical reality. This is not due to man's superiority, because he possesses reason or conceptual thought, or because he is the highest amongst the species of an evolutionary process, but because of the fundamental Christological approach to the mystery of Creation, Christ being the recapitulation of all created things and at the same time the Saviour in a cosmic dimension. It is only on this basis that we can discuss today anthropology and reexamine its attitude to the uniqueness of man in Creation.

The careful examination of this issue is necessary before we establish a point of contact with any kind of secular images of man. It is also very important because of the ongoing debate amongst Christian theologians and process philosophers on this issue, because it looks as if the uniqueness of man professed in traditional theological terms creates an uneasiness amongst secular anthropologists and Christian process philosophers because it risks separating man from his natural environment. This traditional approach becomes in their eyes responsible for serious deviations in Christianity due to its anthropological transcendentalism creating a gap between man and nature, and depriving man of a full appreciation of the ecological problem<sup>9</sup>.

This applies especially to process philosophers within Christian tradition who have the intention of acting as correctives against an excessive and unjustifiable anthropocentrism in Christian theology and praxis. For them, Christianity has to recover its full appreciation of matter, vegetable and animal life in Nature, by eliminating all unnecessary and defective transcendental concepts of God and man originating from idealistic philosophy which introduce a dualistic anthropology, resulting in a false understanding of the absolute superiority of man over Nature. In Christianity, for them, nature, as the physical world, is historicized, it is included when we say God acts in history, and therefore «natural processes are part of history»<sup>10</sup>. Like, man, all creatures in Nature have their freedom of choice and God cannot predetermine how they would develop in their evolutionary process, con-

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9. On this issue: «Anticipation», W.C.C., Geneva, March 1974.

10. Ibid. p. 21.

forming in this way their thought to the indeterminism of modern science and modern concepts of biological growth of organisms. «Things and animals have some being and value in themselves», and therefore «man is not only the creature who can interpret existence. He is the one who exemplifies the nature of reality and far from being the exception in creation he is the flower of a plant that is one with nature»<sup>11</sup>.

The important issue in this attitude of process philosophy is whether there is intrinsic value beyond man, and if so how to prevent Christianity from falling into the unjustified position that all subhuman beings and material objects are there only for serving man, because of his wrongly understood unique and central position in nature. In this view, feeling is the base of the subjective side of all things. All entities from electron to man embody feelings and therefore are of value and share in the freedom of development of the whole creation. This attitude represents an antithesis to materialism and mechanism and it defends the position that the universe and its parts are more like a life of an organism than a contrivance or a blunt insensitive material to be used and exploited by man. Certainly, the life of man is a better model of existence than the physicist's construct of the atom, but this appropriate acknowledgment of man's important position does not mean that he is the only creature which has intrinsic value; and that he can live in his superiority and uniqueness without taking any account of their abuse or of non-human nature<sup>12</sup>.

The consequence of this attitude is that non-human nature has a value and can overcome western dualistic rationalistic thought after Descartes and become more conformed to the Old Testament tradition of the value of the natural world and the New Testament pattern of relationship between God, man, and nature which excludes all kinds of devaluation of nature by reason of the anthropocentricity of the Bible. We badly need, following this attitude of process philosophers, an «ethic of nature, which will be the result of our attitude to nature's worth».

It is evident what is the very positive contribution of such an attitude to the relationship between anthropology and cosmology. Man cannot be conceived apart from Nature. What is more important and interesting, however, is the place of theology in the context of this philosophy of nature, because, God should be also and consistently conceived

11. Charles Birch and John B. Cobb, *ibid.* p. 33.

12. *Ibid.* p. 33.



in a far more dynamic relationship with material and animal creation than traditional Christian theology has professed under the influence of theistic rationalistic philosophies.

God, as the «maker of heaven and earth» is not acting like a man manufacturing our object, with which he has no relationship whatsoever after he has sold it (a carpenter and his table). Created matter plants and animals cannot exist without God's continuous sustaining activity; the one God extends to man's cells and molecules and not only to his spiritual being. If God as Creator remains apart continually in the process of sustaining all that exists, through what A. N. Whitehead has called «God's primordial nature». This is how creative activity is experienced by the entities of existence. God is not the passive off-stage observer but the experiencer of all created value. Not a sparrow falls to the ground without His knowing... This is what A. N. Whitehead calls «the consequent nature of God». It is the way God grows as the universe evolves, because His experience expands with his participation in all creation. The values that are realized in experience are saved in God's experience<sup>13</sup>.

This dynamic, almost pantheistic, approach to theology, this growing and becoming of God along with his creation, is necessary if we want to increase our respect of nature or attribute any value to any part of the creation, because we have to do it not for the sake of created animals and things but as a due thanksgiving and offering to God, who is not only a God who creates and gives but also who receives. Love implies this exchange of gifts and there is no love which either only gives or only receives. A defective Christian faith is also the one which is unable to inspire deep respect and high appreciation of nature as existing in God and of God as evolving in it as a process of creative act identical with His being. It is the most dangerous isolation of man if he in the basis of his superiority over nature in the name of God avoids or neglects conceiving himself in a continuum of created reality not radically separated from it. According always to process philosophy what seems to us the cruelties of nature — the savagery, the mindless destruction of storm and volcano, the diseases — are the accidents on a trial-and-error process, accidents which in the long course of time God moves to correct by exerting His less than compelling influence.

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13. Ibid. p. 34.

Of course, by this attitude the intrinsic value of nature is emphasized, the obligation of man to respect natural reality is defended, the absolute uniqueness of man on the basis of God's creation is relativized and finally natural evil is explained dialectically with God sharing in it<sup>14</sup>. But Christian theologians might express their doubts about the theological premises — or better conclusions — of such a philosophy of nature. Thomas Derr, for instance, remarks on this precise point: «the problem of evil is solved, then, but at the cost, of course, of God's capacity to overcome it — at the cost of the divine omnipotence»<sup>15</sup>. He thinks that the principal difference between process thought and Christianity is the former's concept of a limited God, one who is not any more omnipotent. It solves easily the problem of natural evil, by limiting God's capacity to act, ignoring at the same time the sinful nature of man and the need of salvation. We have to do here with a weakened God who is unable to inspire submission of man to His will. He is not a God to worship either. He is a God of becoming with and for the sake of the world<sup>16</sup>. It becomes also doubtful for T. Derr whether such theological premises for evaluating nature allow any real involvement of man in combatting social evil responsibly in the face of a living personal God.

This debate reveals some important issues regarding our main theme.

a. We have to admit that traditional Christian anthropology has overdone the uniqueness of man and caused a gap between human and a kind of «subhuman» creation.

b. It is to a certain extent possible that this attitude has devaluated nature and led to its unwise exploitation. It is true that anthropocentricity existed in ancient oriental wisdom, in classical Greek philosophy, in Judaism, but their attitude had not the same impact in separating man from nature.

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14. A. N. Whitehead is the principal teacher of this kind of theology, submitted to his dynamic concept of creation as a continuous recreating-itself process. He continually reverses the order between heaven and earth, giving priority to nature's ongoing inner movement of development. He writes amongst other things in this context: «What is done in the world is transformed into a reality in heaven, and the reality in heaven passes back into the world. By reason of this reciprocal relation, the love in the world passes into the love in heaven, and floods back again into the world. God is, in this sense, the great companion, the fellow-sufferer who understands». (*Process and Reality*, New York (Macmillan) 1929 p. 532).

15. «Anticipation», *ibid.* p. 22.

16. The critique of T. Derr on process theology is expanded in his book: *Ecology and Human Liberation*, Geneva (WCC) 1973.

c. The question is whether man and subhuman creatures have to have almost equal rights in order to have equal values («intrinsic»), without insisting on keeping different degrees between them, whether dualism between man and nature can do justice to the creation of God as a whole and finally and most important, whether God should be directly involved in the process of nature's development and growth by losing His transcendence vis-à-vis His creation for the sake of preserving the unbroken continuum of God, man and nature and overcoming a wrong Christian concept and praxis about the uniqueness of man.

It seems to me that this debate is an indication that Christian anthropology bears a certain responsibility because it has developed an one-sided, anthropomonistic system of thought, disregarding vital elements of biblical tradition concerning the inseparable link between man and nature, and the place of man as mediator between God and nature. It is also true that theistic tendencies in theology introduced, with the support of rationalistic Cartesian principles and the mechanistic concept of a self-governed universe, an unbridgeable gap between God and his Creation and left nature in the hands of man as material for achieving his welfare, prosperity and technical progress, devaluating thus animal and vegetable life as well as matter, which is for Christians part of God's creation revealing His continuous concern for it without discrimination.

It is true that in the patristic writings, this anthropomonistic concept of man is entirely absent. Both in the West and the East, patristic thought converges in the Christological foundation of the unity of creation. Metropolitan Paulos Gregorios Verghese reminds us of this basic patristic cosmology in view of the debate with process philosophers. Creation betrays an inner coherence, interdependence and complementarity. «Harmony», «sympnoia» (breathing together) «sympatheia» (suffering or struggling together in love and complementarity) are terms pointing to the inevitable link between God, man and nature as the one single and common Creation. The ascending path of evolution in Creation with man created by a special creative intervention binds all things together with man. Gregory of Nyssa believes in human interdependence with nature and «he thinks it important to see humanity in an integral relationship to the universe of things, plants and animals... while man does not derive the whole of his nature from the universe»<sup>17</sup>.

17. Paulos Gregorios, *The Human Presence. An Orthodox View of Nature*, W.C.C. (Geneva) 1978, p. 64.

If man is a mediator between God and Creation and in this sense also a microcosm of the relation between spirit and all material things as soul and body, then also matter, i.e. the rocks, the sea, the mud, the inferior materials and not only the beautiful flowers and the stars praised by a humanistic romanticism, have an intrinsic value. This value is not due to the fact that it is used by man, or that man is related to it. Matter is what it is because it is the fundamental element for life maintaining the coherence between Creator, man and Creation. It is this coherence that validates man and matter equally within the One Creation. The specific and most important event in man's creation, conceived through the incarnation, is that the Spirit penetrates matter and matter becomes what it has been from the foundation of the world, the unique matrix of life. The uniqueness of man as the image of God cannot be conceived without his material being. The physiological aspect of man's being and existence forbids us to speak of spirit and soul without the presupposition and basis of matter<sup>18</sup>.

In the Eastern theological tradition matter occupies this central place in creation on the basis of the Logos theology. Certainly, this concept of matter presupposes also the regenerating energy of the Spirit of God. Matter has a value only because it is penetrated by the Spirit in a personal way reminding us of the origin of the creation of the whole cosmos. Soul and body, spirit and matter are therefore equally subjects of transformation. Their value can only be jointly defended as one and whole organism of life always on the way to their recreation and transfiguration. It is this reality of the relation of Spirit and matter which makes Eastern Orthodoxy conceive of the cosmos together with man's transfiguration in Christ by the operation of the Spirit. In the Orthodox liturgical worship and its symbolic representation of the elevated cosmos in Christ one can detect this cosmic dimension clearly. Alongside and together with the memorial of Christ's incarnation, cross and resurrection, as one and inseparable event, the worshipping Church gathered in the power of the pentecostal event is celebrating around the Eucharist and through the material gifts of bread and wine the elevation of the whole cosmos together with man; and this makes salvation and transfiguration possible. Rightly, one can speak not of church worship, but of «cosmic liturgy» referring to the Eastern understanding of worship

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18. Gregory Palamas writes: «Based on the biblical physiology I should not speak of soul alone or of body alone, but of both together, what is meant by the phrase 'according to the image of God'» (P.G. 1361C).

and of man as microcosmic<sup>19</sup>. After the use of water for Baptism, the hymnology of the Epiphany liturgy, for instance, in the Eastern tradition is a hymn and praise of the elevated matter of creation as a whole. The river Jordan is the matrix of salvation and iconography represents it as filling the whole canopy of the created cosmos, Christ being implanted into its water like a pillar as the pivot of the whole creation. Baptism and Eucharist are the sacraments of salvation but also the signs and antitype-symbols of the union between man, nature and history as Cosmos. More precisely, using the words of Paul Evdokimov: «The word by which the eucharist was instituted, 'this is my body' designates the living body, the whole Christ conferring on every communicant a quickening consanguinity and corporality. In the same way, 'the word was made flesh' means that God assumed human nature in its entirety and in it, the whole cosmos. And the 'resurrection of the flesh' in the Creed confesses the reconstitution of the whole man, soul and body, and thus all flesh shall see the salvation of God 'all flesh' meaning the pleroma of nature»<sup>20</sup>.

This liturgical elevation of the cosmos signifies that all of our enterprises with the created things of nature is a sharing in this ongoing recreation and transformation of cosmos. Science is performing a God-given function. In the eyes of a Christian a scientist is consciously, if he is a believer, and unconsciously, if not, offering a para-eucharistic act by his work in the service of humanity; the God-given material is given back to Him fulfilling its purpose as part of the created cosmos in process of transfiguration. A scientist represents a secular priestly function and offers a continuous reasonable sacrifice and praise to the Creator of the cosmos and on behalf of man as microcosmic mediator between Him and all created subhuman beings and things. It is on this basis that anthropology is inseparably linked with cosmology. It is in this way that a Christian can appreciate appropriately matter and nature with their very important implications for our dialogue between Christian and scientific images of man.

Unfortunately, this right approach to the value of nature and matter remained a liturgical symbolism and vision. Both in the West

19. As Hans-Urs von Balthasar is doing in his book: «Liturgie Cosmique». Paris (Aubier-Montaigne) 1947 and Lars Thurnberg: «Microcosm and Mediator. The Theological Anthropology of Maximus the Confessor». Lund (Gleerup) 1965.

20. P. Evdokimov: «Nature», in: Scottish Journal of Theology, Vol. 18. No. 1 (March 1965), p. 9 (quoted by Paulos Gregorios, op. cit., p. 88).

and in the East there was no immediate effect on the understanding in this positive way of subhuman material creation. Though the explanation of the precise reasons which have caused the inefficiency of this authentic biblical-Christological approach to nature is not entirely possible, we can attempt to investigate some of the probable causes<sup>21</sup>.

First, the blunt materialism connected with atheism might be regarded as the origin of the Christian's hesitation to evaluate matter. The automatic genesis of life, the exploitation of the evolutionary theories of species, the wrong conclusions of the incorruptability of matter have led theology to defend the «spiritual» foundations of creation in an exaggerated way at the expense of its material nature. Together with this attitude one should investigate the role played by rationalistic philosophy and by one-sided, partial interpretation of Plato and Aristotle as dualistic philosophers.

Second, an overemphasis on the value of the monastic ideal, contemplative life and meditation have dominated Christians expecting the second coming of Christ. A false eschatology has greatly affected the facticity and historicity of faith and accentuated the liturgical vision of the end of time in full glory against the material nature of the cosmos in corruption and sin. The monks rightly point to this final end of history and validate the manifold ascesis, which in the East especially has been wrongly connected with an unjustified position of the pneumatic-spiritual against the material nature of the cosmos.

Third, a kind of anti-fleshly mind, connected with the ascesis as the central moral principle of Christian life, nourished by the fear of falling into mortal sexual sins has greatly contributed to devaluating matter as connected with the inferior if not sinful part of creation. The threat of «pansexualism» in modern times has further strengthened this position and inspired a spiritualistic ethics as a noble struggle against

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21. Similar positive theological attitudes to nature and creation are to be found in the West, expressed in less symbolic-liturgical language than in the East but converging in the same basic appreciation of matter and nature. For instance M. O. Chen u in his book *Nature, Man and Society* writes: «The discovery of nature: we are not now concerned merely with the feeling for nature which poets of the time evinced here and there in fashionable allegorical constructions... Rather our concern is with the realization which laid upon these men of the twelfth century... (when) they reflected that they were themselves caught up within the framework of nature, were themselves also bits of this cosmos they were ready to master» (*Nature, Man and Society in the Twelfth Century*. Selected, edited and translated by J. Taylor and L. Little, Chicago and London (Chicago Univ. Press) 1957, p. 4-5).

the low, «dirty» and animal trends which violently assault the human body and require satisfaction.

Perhaps, along these lines one can look for some of the causes of the failure to draw the implications of the Christological interpretation of nature regarding the value of matter. Anyway, we have to admit that there cannot be a dialogue with secular images of man if this separation of anthropology and cosmology in Christian theology is not repudiated. Christian faith has all the presuppositions to enable it to remain a dynamic factor of progress as well as a realistic partner of dialogue within a secularised world, because of its Christological cosmology. It is not an abstract and rationalistic natural theology which inspires the intrinsic value of created subhuman beings and matter, but the faith that all things are created and recapitulated in Christ. And this makes all the difference with all other possible theories about nature and matter of a traditional natural theology.

This Christological approach to nature does not allow any kind of false interpretation of man's God-given right to the domination of nature. It is not a right of stewardship that man is given either. Man cannot be named simply «steward» of nature in order to avoid the idea of domination. «Steward» is also too ambiguous and presumptuous. Nor is it sufficient to say that man is a «guest» in nature so that he will not behave as an owner or master of it. None of these expressions, which up to a certain extent try to place man in a new responsible way at the center of creation setting limitations of his power, are the appropriate terms to be used in this connection, because, though they try to save man from his excessive egocentricity over against nature, these terms might introduce another type of distance and another kind of self-alienation from nature and in cosmos. «Steward» and «guest» can become indications of another kind of emancipation of man within the cosmos reserving for him the right to manipulate or to exploit nature. In this sense there is no hope of appreciating man's full and responsible involvement and of taking appropriate action against ecological threat.

What is necessary to be proclaimed on the basis of a consistent Christology of nature is the co-naturality of man, his inner, deep and inevitable co-existence, or better, I dare to say, identity with matter. It is only in this way that we have to overcome in theology all kinds of dualistic trends introducing an inappropriate separation and superiority of man over nature under the pretext of man's uniqueness in creation based on a partial biblical notion of anthropocentricity. The pro-



cess philosophers and theologians can help us to focus this centrality of man according to a Christian theology of nature against anthropomomistic trends, reminding Christian anthropology of its inevitable and imperative association with a consistent biblical Christology of nature.

It becomes more and more evident, today, that every unreflected act of man in using and abusing nature becomes a latent motif of slow but sure suicide of human life on this earth. Pollution of nature or unlimited absorption of energy predicts with accuracy man's disappearance from this earth. The environmental problem and the energy condition prescribe the frame for human survival in the near future<sup>22</sup>. Human egoistic superiority over nature equals human self annihilation. Between aesthetic humanistic romanticism and materialistic utilitarianism a new Christian consciousness of indentity of man with nature in the one Creation of God in Christ must develop. This can be done only if anthropology is inseparably conceived along with cosmology.

It is only in this way that an authentic Christian image of man can enter into dialogue with secular anthropologies to support them in their effort to reflect on the quality of life and the value of the human person in an age of technology and false, one-sided economic growth. It is only in this way that the Christian visions about man and nature in a Christological sense can become dynamic factors in the historical process and not remain simple symbolic references or mystical liturgical experience. Above all and finally it is only in this way that Christian anthropology can appreciate nature historicized, i.e. as Cosmos bearing the marks of world history, in which man is not the sole Creator but also and principally one of the dynamic agents and participants in Creation, as Cosmos and nature have also a history of their own apart from human presence, not only before the creation of man in the remote future. But they have now with man a history parallel to human history, which has an intrinsic value in itself.

It is this kind of cosmic historicity of subhumans and material nature which is decisive in conceiving human personality in relationship to the facticity of historical process as a whole. Only in this case one can appreciate and evaluate science and technology and their effects in the formation of human personality. Especially, it is only out of this world's historicity that a Christian image of man should be care-

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22. See on this issue: Jeremy Rifkin, *Entropy, a new World View*. New York (The Viking Press) 1980.



fully constructed, correcting traditional one-sided principles of Christian anthropology isolated from the actual historical process and expressed in esoteric language.

Science, psychology and social and political struggle for a worldwide human community of freedom and justice are indispensable parts of a consistent Christian anthropology which takes seriously into consideration the history of nature represented and studied by scientific research and its historical predicament as it is grasped in the struggle for liberation and transformation of the structures of injustice on a worldwide scale. Anthropology and Cosmology in complementary and reciprocal relationship of interdependence signify that a Christian image of the human person cannot be conceived out of a neutral self-sufficient transcendental position. On the other side all ideological concepts of humanity derived from science, psychology, society or politics should raise unavoidably the ontological question of human being and of the quality of human life, in an age of crisis caused by a false autonomy either of Christian anthropology or scientific cosmology.

## II

SCIENTIFIC APPROACHES TO THE HUMAN PERSON  
and their challenge to Christian anthropological visions

The interpenetration of anthropology and cosmology on the basis of a genuine Christology of nature has a direct positive bearing on the dialogue between secular understanding and Christian images of the human person. Certainly, science, psychology and political ideology rightly want to possess the whole of nature, of man, and society as their own field of research and action. But the main issue is this wholeness, i.e. how one understands and serves it best. It is the right of science to investigate all things thoroughly towards achieving the fuller knowledge possible, while the interpenetration of anthropology and cosmology proves this legitimate effort to be ultimately inaccessible. It is not the notion of mystery, very popular in theological circles, especially in the East, which makes this enterprise futile. It is not the dimension of the sacred in cosmos and man either which proves science to be limited only to one part of the cosmic reality. It is more the nature of created things and the historical predicament in the cosmos, which makes scientific research and concepts of man relative in connection with a possible holistic knowledge of them. The further authentic science develops, the more this missing dimension of holism referring to man's image becomes evident, especially when anthropology and cosmology are interpenetrated fields of scientific research. If Christian anthropology has to be corrected and saved from its anthropomonism, because of the notion of the absolute uniqueness of man in creation, similarly scientific cosmology has to be complemented by anthropology in order to enlarge its research field and ultimate reference.

In reality, science has not and cannot have anthropology in the sense of ethology, philosophy and theology. Perhaps, introspective psychology is closer to anthropological issues than other applied system of knowledge. It is true, indeed, that scientific researches are, in principle, by their methodology, deprived of their probable extension to anthropology. This is understandable and to a certain extent welcome on the part of anthropological sciences. But at the same time, one has to recognize that scientific research by its conclusions can exercise a

direct influence on the anthropological sciences. Especially, at times of advanced secularisation its repercussions are immediate in conceiving the human person, its origin, essence and destination. In some cases, the impact on anthropology is decisive when there is no systematic reference to it on the part of science, psychology and political ideology. Their concern for human applied knowledge, composition of matter, function of physical laws, the molecular constitution of the human body and its effects on psychic functions, the study of conscious and subconscious life and finally the relationship between economy, society and man as well as the reasons given for the struggle for a just and sustainable world community become basic introductory principles towards an unsystematically written anthropology. It has convincing power and direct bearing for conceiving an unwritten popular image of the human person with an immediate practical, ethical application.

The encounter between scientific-secular and Christian images of man should take this difference seriously into consideration. The wish from the Christian point of view, however, should be always expressed that sciences, in view of this encounter, might think also anthropologically, by trying to reflect on their missing dimension of anthropology when they interpret nature. Because, most of the misunderstanding and onesidedness, or polemic attitude against traditional Christian expression of man's nature have been caused by a popularized vulgarisation of great scientific theories, like the evolution of species. The practical application of easily generalised scientific conclusions against traditional images of man in many cases are due to the absence of concern for real anthropology in a deeper and holistic dimension on the part of the initiators of scientific theories.

It must, therefore, be clarified that a genuine encounter between secular and Christian images of man can be effected only if these limitations are acknowledged on both sides and Christian anthropologists are ready to take into their interests cosmology and scientists converge also towards anthropology. Unless this reciprocal movement is there, the debate will be without point of contact and will remain two parallel monologues. We have to be conscious, however, that at this moment we have still very few examples of such converging attitudes and we are not yet, among the great majority on both sides, fully aware of our lack of holistic trends in anthropology. Theology is unable to construct a genuine cosmology, and science is reluctant to develop a consistent application of scientific research in holistic anthropology. Perhaps, here in this issue we touch one of the most delicate issues in anthropology. Upon

this issue the debate about the quality of human life depends especially in so-called Christian world, which bears a major responsibility for the progressive separation of man from nature. This separation is against the authentic interpretation of man from nature. This separation is against the authentic interpretation of the biblical message regarding the wholeness of Creation as cosmos and ktisis. It is this attitude, to a certain extent, which made science operate in an autonomous field of knowledge and action, based on human aspirations for domination over nature and for serving human welfare and progress.

1. *Determinism-mechanism in science and evolutionary humanism.*

The first problem one has to face following the assertion of the relationships between anthropology and cosmology, in other words, the concept of man within the cosmos, is the relationship between «scientific humanism» and a humane science. For many scientists «it is today less urgent that the humanities should become imbued with the values of science than that science should become alert to the values of humanity»<sup>1</sup>. After a period of a partial investigation of man, due to the exact, rationalistic method of scientific objectivity, modern science has moved to a more integral vision of the human person, due to this liberation from a deterministic and mechanical conception of reality.

Certainly, science in its new contemporary trends also remains faithful to its fundamental principles of research: immanence, proposition and proof enjoying universal acceptance on the basis of logic and experience. Science looks for interpreting new laws derived from its observation of nature in its immediate grasp. It reflects on the common experience in such a way that it displays recognizable patterns. A simple, first contact with objective reality causes a confusion which might become an order after a scientific system of explanation is proposed. For science, knowledge derives always from definite experience of reality. Alongside scientific precise definitions science produces a series of models of nature, which «act out only the consequences of the limited and partial mechanisms which we have put into them... This is the inductive method, by which we first look for laws and then judge them to be confirmed if their consequences go on fitting the observed facts»<sup>2</sup>.

1. Floyd W. Matson. *The Broken Image. Man, Science and Society*, New York (Anchor Books - G. Braziller) 1964, p. V.

2. J. Bronowski, *Science is human*. In «*The Humanist Frame*» ed. by J. Huxley, London (G. Allen and Unwin Ltd.) 1961, p. 89.

These principles and definitions make out of scientific approach a self-determined field of knowledge and action without necessary reference to debates about essence, substance, feeling, human aspirations. One can or should be a scientist only by limiting oneself within the boundaries of rationality, facticity and observation of things. It is out of these principles that the mechanistic interpretation of nature is introduced with the corresponding image of the universe as a huge machine. «The giant machine was not only causal and determinate; it was objective in the sense that no human act or intervention qualified its behaviour»<sup>3</sup>.

The subjective rationalistic operation and the objective mechanistic concept of nature have easily resulted in the mechanisation of the whole of life and man. With the presupposition of the Cartesian certainty of human reason against doubt and the proof of rationality as condition for understanding human existence, science, by its consistent objectivity related to this well-structured mental operation in connection with reality, extended its conclusion beyond its limits in the areas of theology and anthropology. Descartes and Newton joined in reverence in front of a *Deus ex Machina* and of man operating mechanically. Causality and determinism in nature had a reductionist effect in other areas beyond strictly scientific sets of limits which are clearly defined by the strict application of scientific methodology. Perhaps, science itself is not directly responsible because this extension becomes unavoidable as a psychological reaction in the face of persuasive scientific conclusions of reality.

If science operates with such accuracy and by convincing logical and mathematical proofs illustrated by applications in daily life in continuous technical progress, its principles become parts of human consciousness and beliefs, and affect all realms of intellectual and spiritual life. Man and his ontological affirmation is the most evident and immediate area falling under the influence of such scientific approaches. The abstract notion of humanity, though it is no object of scientific research, can also become the object of scientific determinism; if it is true that «all that matters is matter» and that the function of matter can be explained by the law of causality and gravity, this means imposing «a

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3. Robert Oppenheimer, *Science and the Common Understanding*, New York (Simon and Schuster) 1954, p. 13-14 (quoted by F. Matson, *ibid.*, p. 3).

mathematical finality on history and biology and geology and mining and spinning»<sup>4</sup>.

The so-called scientific revolution of the 18th century meant that «from the principles of the secular sciences to the foundations of religious revelation, from metaphysics to matters of taste... from the scholastic disputes of theologians to matters of commerce, from natural law to the arbitrary laws of the nations... everything has been discussed, analysed or at least mentioned»<sup>5</sup>. All the notions of reality, including man as part of it are reduced to a well structured motion of particles or molecules and all kinds of emotions and psychical reactions of man are interpreted by quantitative size and the relationship of mechanical laws determined by speed. Arithmetic dominating not only physics, but also psychic reactions, will prove applied psychology to operate like anatomy and physiology in the human body as a complex molecular organism, which explains cognitive, volitional and sentimental operation of consciousness. Floyd Matson appropriately makes the remark: «man had disappeared from the world as subject in order to reappear as object. Mind itself was dissolved into particles in motion by the neutralizing solvent of the new physics»<sup>6</sup> and reminds us of the assertion of La Mettrie: «that man is a machine and that there is only one substance, differently modified, in the whole world. What will all the weak reeds of divinity, metaphysics and nonsense of the schools avail against this firm and solid oak?»<sup>7</sup>.

The radically mechanized metaphysics in the philosophy of extreme Cartesian tendencies, married with the descriptive and analytic but absolutely consistent positivist thought in physics have been strangely combined with the Darwinian evolutionary theory in their massive attack against all kinds of substance research in man. Without any appropriate reasonable motif, a generalized anti-humane system of values has been developed perhaps under the psychologically imposed necessity to negate transcendence, metaphysics and any survival of faith in a special intervention of a creating power from outside. When we study this curious alliance and some hasty enthusiastic pronounce-

4. J. Bronowski, *The Common Sense of Science*, Cambridge (Harvard Univ. Press) 1955, p. 46.

5. D'Allembert, *Elements de Philosophie*, quoted in Cassirer, *Philosophy of the Enlightenment*, p. 46-47, quoted by F. Matson, *ibid.*, p. 12.

6. Floyd Matson, *ibid.*, p. 13.

7. La Mettrie, *L'Homme Machine*, quoted in Joseph Needham, in: *Science, Religion and Reality*, New York (Araziller) 1955, p. 236.

ments on the entire sufficiency of explanations in physics and biology by some of the adherents of this mechanistic outlook of man and nature, we experience a strange dissatisfaction, especially because we are given such a crippled, one-sided and partial image of creation and man. In the same way as traditional transcendental theistic philosophical anthropology and theology had neglected the natural and material reality of the cosmos in dealing with humanity and spoke of man from an ivory tower, so from another angle science refused to allow space to man to move as a distinctive creature and spoke of him as a particle of a machine and as an organism of developing animal life. The great achievements of science in its first bold steps have betrayed a certain kind of non-scientific inflexibility and a deep intellectual weakness.

The right evolutionary theory mixed up with mechanistic philosophy and physics missed the total vision of humanum and reduced human being to a process from mammalian to psychosocial organisation prescribed strictly by natural physical laws of selection and biological transformation. Man is not only made of the same matter and operated by the same energy as all the rest of the cosmos, but, for all his distinctiveness, he is linked by generic continuity with all the other living inhabitants of his planet. Man is an animal thinking mechanically, with an acquired bigger brain-stuff, automatically reacting to his natural environment and creating fantasies beyond it about himself, his origins, his destiny. Evolutionary scientists still in the 20th century do not hesitate to negate all kinds of transcendence for the sake of this mechanistic explanation. Julian Huxley writes that «evolutionary man can no longer take refuge from his loneliness by creeping for shelter into the arms of a divinized father — a figure whom he has himself created — nor escape from the responsibility of making decisions by sheltering under the umbrella of Divine Authority, nor absolve himself from the hard task of meeting his present problems and planning his future by relying on the will of an omniscient but unfortunately inscrutable Providence»<sup>8</sup>.

No one has the right or can dispute a purely scientific biological theory with sufficient proofs, if they exist. But what is questionable is the advance to a totalitarian conclusion that «the only field still remaining outside the range of scientific system is that of the so-called paranormal phenomena like telepathy» thus facilitating the creation of

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8. Julian Huxley, *The Humanist Frame*, London (George Allen) 1961 p. 19.

a sole authentic scientific religion based on this mechanistic evolutionary vision of man without reference to any kind of salvation or higher destiny or a Creator. All these constitute «a regrettable dogmatism»<sup>9</sup>, which with the belief in an omnipotent, omniscient and benevolent God leads to a frustrating dilemma at the very heart of our approach to reality and introduces an inseparable split into the universe, and prevents us from grasping its real unity. All religious or even questions about the ontological being of man, his destiny, his deeper emotional trends beyond natural and mechanical existence are psychosocial organs of evolving man. There is but a simple revolutionary and evolutionary humanism against all traditional images of man. This humanism is rooted in absolute faith in the self-guided selection towards perfection in nature, by man and for man alone. This evolutionary progress is nourished by the fact that by scientific knowledge, many phenomena which once appeared wholly mysterious can now be described or explained in rationally intelligible or naturalistic terms.

Certainly, even the most radical mechanistic evolutionist is ready to assert that science cannot abolish the mystery of existence in general. Having removed the obscuring veil of mystery, science will persist in questioning and wondering: what is life, what is mind and its relationship with all kinds of images it creates out of the observation of nature? But this self-humbling attitude does not affect the progressive investigation of reality by means of pure observation and research. The hope is that applied scientific knowledge is on the way to achieve more and more clarity. Santayana has come close to the central idea of evolutionary humanism: «there is only one world, the natural world, and only one truth about it; but this world has a spiritual life in it, which looks not to another world but to the beauty and perfection that this world suggests, approaches and misses»<sup>10</sup>. From this position a realistic hopeful vision of the future is created. Man is not regarded in his static being, which has been designed once for all by God. He is fully in transformation forward, inspiring confidence in the future. For evolutionary humanists of all kinds here at this point lies the most striking difference with Christian anthropologists. For J. Bronowski this humanism implies that there would one day be different an even better human beings than ourselves<sup>11</sup>.

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9. Ibid., p. 38-39.

10. Quoted by Julian Huxley, *ibid.*, p. 48.

11. J. Bronowski, *Science is human*, *ibid.*, p. 93.



## 2. *Psychosocial models as images of man.*

It is remarkable how one of the most anthropological sciences, psychology, has been permeated by this mechanistic outlook in science during a later period of modern history, especially when determinism and causality are shaken by new scientific researches. It is astonishing how in our days a counter-revolution in psychology has joined mechanical patterns of scientific investigation of the 18th century. In this sense, it joins also contemporary global affirmation of the pure objectivity of society enjoying full qualitative priority over the particular human subject and its freedom.

It looks as if psychology and sociology realised later than the natural science their independence from philosophy. In order to justify and accentuate this emancipation they entirely refused all kinds of conceptual theoretical systems of thought regarding man and adopted the purely objectivisation of his psychic operations. This psychology refused all introspective investigation because of its lack in objectivity without which an applied scientific knowledge cannot exist. Psychology in contrast to concern with consciousness and introspection, or with experiment and observation of psychic reactions in the three fields of the soul — cognitive, volitional and emotional — now follows the data given objectively by the behaviour of the individual. Disregarding hereditary psychic facts, it occupies itself with the example of the exclusive mechanistic method of science and the data collected by observation of the behaviour of each subject. This attitude is accompanied by the same optimistic view of evolutionary humanism as in the past. John B. Watson expresses it clearly on the part of behaviourists of all times: «Give me the baby and my world to bring it up in and I'll make it crawl and walk. I'll make it climb and use its hands in constructing buildings of stone or wood; I'll make it a thief, a gunman... The possibility of shaping in any direction is almost endless...»<sup>12</sup>.

Certainly, this is another image of human person manipulated by scientific objectivity. The human person risks becoming empty of deeper, inner qualities, because only external, objectifiable data can afford a sure ground of scientific investigation. Man has, in reality, his authentic model and the means to conform to it outside his psychic and conscious structure. Introspective examination proves to be a vanity and an illusory operation. Psychology through this radical behaviour-

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12. Quoted by Floyd Matson, *ibid.*, p. 30.

ism, refusing the dimension of depth for the sake of pure objectivity in the service of scientific methodology, offers another image of man depending upon processes outside his conscious self-determination and existential condition and decision. «Objective» can easily mean and become here functional and mechanistic. It is a self-alienating process in which the image is supplied by objective models suggested or imposed on him from outside, as convincing, realistic, psychically healthy images to be massively realized on the model of industrial mechanical production. Introspection, self-examination and concentration, meditation and recollection are regarded as means irrelevant to psychological scientific appreciation of man's inner life. The value of the human person consists in repeating the objective model by consciously behaving according to it.

Together with this kind of objectivisation in psychology through behaviourism, sociology also as a new science and for the sake of achieving precise scientific knowledge enjoying objectivity has emphasized in an almost radical way the pure objectivity of the social phenomenon. From the early times of sociology, by Auguste Comte and Herbert Spencer the evolution of society has been proclaimed as moving from the religious and mythical through the rational and metaphysical to the positive and industrial stage or from a primitive mono-molecular to a modern poly-molecular status. Studying society, as the new, rising event in the modern scientific world, one has to apply pure scientific methods. Therefore, the social phenomenon has to be accepted by the sociologist as objectively as the natural phenomenon is by the scientist in natural sciences. No wonder that progressively, due also to the creation of big urban and industrial centers, this objectivity has been adopted as the criterion of defining man as simply part of an objective societal whole, governed by its own rules and norms. Against any religious, philosophic and humanistic anthropocentricity a new collective, mechanical, self-evident and autonomous concentration upon society has been introduced into all spheres of science, anthropology, economy and political ideology.

Again, man, as a distinctive human person with his existential choices, struggling to assert his freedom as one of the highest qualities of his being, has withdrawn to a secondary, inferior position of simple participation in this global, anonymous and massive new reality of «society». Inside this collective, machine-like objective reality, truths and values are created and spread out in a convincing obligatory way.

Society possesses a qualitatively different nature of knowledge, morals and normative principles of life. It enjoys full priority and autonomy over the subjective human individual person, whose qualification depends now upon his ability to share, to contribute and to follow what is happening sociologically and objectively. Technical rationalization, methodical planning, evolutionary biological and intellectual progress, as well as pure objectivity grasped by scientific observation have replaced, little by little, ontological affirmation of human being. Freedom became a readiness of the human person to submit to external, anonymous, social principles and events.

As in behaviourist psychology, sociology now will proclaim the conformity and adaptation of the individual as a human person and existence to group models, standards and norms. The objectively and collectively valid principles, the generally accepted fashion and mode will gain priority over the existential, the ontological, the subjective and exceptional characteristics of the deeper essence of man as a person. Functional rationality, behaviourism, objectivity as a unique rule of scientific investigation of reality, engineering and management for the sake of maximum possible production have succeeded on the basis of reason in offending the freedom of human being. The individual has been degraded to the role of a particle of a gigantic personal organism with an inner mechanical order in the form of modern industrial society. This is the sole ground, source and generator of progress, a demythologising reality and a fountain of all goods securing prosperity and healthy state of mind against all kinds of «fantasies» and «illusions» of transcendence and metaphysical beliefs.

This scientific trend towards concentration on society modified the focus of the center of values from its anthropocentricity to an anonymous collective «external» center of power. Man unconsciously becomes neutral towards values and weak in his free choices. Everything happens by necessity and chance. The concern for order and discipline for the sake of the common good and the bureaucratic administration will gradually replace free ethical decision, experience of inner personal struggle for the sake of meditation, reflection and spirituality. Man has happily abandoned himself to the secure forces of protection and order from outside his troubled inner self. Many problems will be thus resolved, many deficiencies of economic and social structures will be corrected, an improvement of public health will be secured, easier communications on a world scale will be developed, but at the same time, paral-

lel to this progress, a progressive emptiness of self from deeper cultural, aesthetic and ethical values will gradually occur. The proprietor of values is now the anonymous society and its dominating function<sup>13</sup>.

In the same direction of development the final step towards pure objectivity has been realised in social and economic systems in sociology professing the value of collective interests over subjective aspirations towards free choice for the sake of strict social order and justice. Political ideologies will determine the value of the human person simply and uniquely by man's sharing in the common effort to increase the general welfare in economic life. This radical application of objectivity in sociology will interpret the history of culture, traditional ethics and religion as an illusory life-product of economic relationships or as their superstructure. The personality of man is calculated and qualified only by his work as a basic factor of economic growth and by his contribution, in this way, to the welfare of the whole society.

On the other hand, also, in the non-ideologically socialized countries, professing and supporting individual human rights, declaring that science can be rightly developed only within a democratic state, it is the freedom of science, it is the illogical production of all kinds of goods, it is the greedy consumption, it is the unlimited economic growth which define the human person. Progress has become synonymous with the welfare state and cultural values have been subordinated to the manifold application of technology for the sake of economic expansion and security. Technocracy dominates in planning social life and computerized systems efficiently relate conflicts of interest between groups. The human person is losing his identity and consciousness as a qualified being with a distinctive origin and a higher destination. Technology makes man lose his immediate contact with surrounding nature, because it helps him to dominate it and utilise it from a distance through a highly devised system of applied knowledge. Technology makes man look at himself in a different way, at a distance from his existential problem. Mastering nature in this way, he risks becoming too weak to master himself. Losing his inwardness and spontaneity, he is to achieve

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13. Margaret A. Boden: «Examples of schizophrenia, as well as the bewildering variety of psychological malfunctions associated with amnesia or with damage to the speech-area of the brain, thus indicate the subtle complexities of the computational basis of normal «free behaviour». (Human Values in a Mechanistic Universe. In «Human Values». Edited by G. Vesey, The Harvester Press, Sussex 1978, p. 153).

individual satisfaction by an extroverted movement. Human intelligence must serve a pre-determined accurate system, comprising the best of man's scientific achievement with the highest range of efficiency as its proof.

It is well known that for this reason all kinds of scientists and philosophers following thinkers like Søren Kierkegaard, have in the past criticized scientism, systematization, radical rationality and superficial optimistic forecasts of the future and more do so at the present moment. This attack comes from all parts of anthropological sciences as well as from all kinds of political ideologies and represents a general dissatisfaction especially regarding the image of the human person as being threatened in its own basic constitution<sup>14</sup>. We have to confess that there is a kind of fatalism in this criticism in the face of an irreversible process of depersonalisation and irresistible mechanisation of life.

It seems to me, however, that the problem is too complicated to be faced only by this radical criticism. The threats against the individuality and the inherent worth of man are definitely there. But we have to admit that science in our technological age cannot be massively negated as depersonalising. It is true that technology can cause all these negative effects on human personality, but it is also true that technology is «a way of humanizing the world of matter in time and space»<sup>15</sup>, and reshapes the terrific potentialities of humanity. Certainly, it can manipulate human beings, but it can also, always in the service of humanity, reshape human life and social structures and favour positive developments in all areas of application of knowledge in all realms of science, in genetics, in medicine as well as in agriculture, and in food-production.

Finally, the most interesting thing is that technologically applied science penetrates all realms of life changing social conditions and creating new life styles for the individual. And this is a direct challenge to all kinds of anthropologies, which are not willing simply to join the ongoing criticism, but which are ready to accept this challenge and rethink their concept of the human person today. It is necessary, though, to

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14. Against the domination of man by society as an impersonal machine people from all different systems of thought, ideologies, philosophies and anthropologies have raised their criticism. The most representative in this context is definitely Herbert Marcuse with his book: «The One Dimensional Man».

15. Paulos Gregorios, *The Human Presence*, p. 89.

understand fully this kind of challenge at this moment by trying to follow the new trends in the self-appreciation of scientific research and work. The science of today abandons more and more the deterministic and mechanistic framework of the past described above. This change creates a new possibility of dialogue with Christian anthropology about the quality of the human person.

### *3. The Overcoming of Mechanistic Determinism in Science and the new challenge in Christian anthropology*

Though it is not yet fully appreciated and appropriately applied in the realm of philosophy of nature and history, science has definitely abandoned the mechanistic understanding of natural phenomena and their interrelationships. A. Einstein has written that «the great change was brought about by Faraday, Maxwell and Herz as a matter of fact half unconsciously and against their will»<sup>16</sup>. Maxwell introduced the electromagnetic theory and put in question the whole Newtonian mechanistic system. Further, thermodynamics with its reliance upon probability refuted any idea of determinacy and certainty. Matter has been replaced by fields of force for interpreting electricity and by «the study of the inner workings of nature passed from the engineer scientist to the mathematician in the theory of relativity»<sup>17</sup>, and these absolutes of space and time have been deprived of their independence and form a four-dimensional continuum of space-time. Instead of matter we must speak of energy as the basic foundation of science. «The stable foundations of physics have broken up... The old foundations of scientific thought are becoming unintelligible. Time, space, matter, material, ether, electricity, mechanism, organism, configuration, structure, pattern, function, all require reinterpretation. What is the sense of talking about a mechanical explanation when you do not know what you mean by mechanics?»<sup>18</sup> Energy, it is supposed but in discontinuous packets or quanta; this «quanta theory» has affected an entire outlook on the physical world and has shaken the foundations of the classical mechanistic physics. «All the laws of nature that are usually classed as fundamental

16. Albert Einstein, *Out of my Later Years*, New York (Philosophical Library) 1950, p. 101 (quoted by F. Matson, *ibid.*, p. 287).

17. J. Jeans, *The Mysterious Universe*, p. 119 (quoted by F. Matson, *ibid.*, p. 290).

18. A. N. Whitehead, *Science and the Modern World*, pp. 17-18 (quoted by F. Matson, *ibid.*, p. 290).

can be foreseen wholly from epistemological considerations. They correspond to a priori knowledge, and are therefore wholly subjective»<sup>19</sup>. James Jeans does not hesitate to make the remark: «Today there is a wide measure of agreement which on the physical side of science approaches almost to unanimity, that the stream of knowledge is heading towards a non-mechanical reality; the universe begins to look more like a great thought than like a great machine. Mind no longer appears as an accidental intruder into the realm of matter, we are beginning to suspect that we ought rather to hail it as the creator and governor of the realm of matter»<sup>20</sup>. Determinism has given up in face of the laws of chance and Heisenberg's principle of uncertainty and complementarity opposing causality and sure predicability in classical physics.

This counter-revolution in modern physics bridged the gap between nature as a gigantic prefabricated machine and man as a calculating spectator from a distance. The act of pure objective observation, presented as exact objectivity in scientific mechanistic vision and method, includes unavoidably the act of participation. Floyd Matson writes: «Man and preeminently scientific man—was only a mechanically-minded spectator at the grand performance of nature... The principal lesson derived by quantum physicists from the discoveries of the past half-century is one which is addressed directly to this venerable ideal. In the famous figure of Bohr, it is simply that man is at once an actor and a spectator in the drama of existence»<sup>21</sup>. Scientific observation means observation, interaction, participation, mutual contribution on both sides. Objectivity now means «complementarity», man as observer sharing in the observed object of nature composing a coherent whole with it<sup>22</sup>. Instead of the mechanistic exclusiveness of classical physics we are invited now to admit the strange development of inclusiveness of the scientific mind and the world of objects under observation.

This reciprocity in scientific enterprise has tremendous repercussions on science and humanity. The mechanistic view in science is not only anti-nature but also anti-human, because it fails to capture what

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19. A. Einstein, *The Philosophy of Physical Science*, p. 57 (quoted by F. Matson, *ibid.*, p. 121).

20. J. Jeans, *The Mysterious Universe*, p. 181.

21. F. Matson, *ibid.*, p. 127.

22. Robert H. Brown writes: «Modern physics has demonstrated for all to see the importance of complementarity in human understanding» (In: *Faith and Science in an Unjust World*, Vol. 1. Geneva (W.C.C.) 1980, p. 40).



matters most about the human in its mechanical images». Charles Birch further remarks on this point: «a universe that produces humans cannot be known apart from this fact. It is a humiverse. We only begin to know what is by what it becomes. We do not start with electrons and atoms and build a universe. We start with humanity and interpret the rest in terms of this starting point... to bring the human into the picture is to bring in mind and consciousness and purpose, sensations of red and blue, bitter and sweet, suffering and joy»<sup>23</sup>.

Against mechanism science accepts now participation and complementarity between human thinking and objective nature. The result is twofold: first, new categories like insight, intuition, sensitivity, consciousness are included in the epistemological presuppositions of scientific research with the intention of including the whole of man as cognitive, volitional and emotional, while nature is more and more regarded as an organism (and not as the great machine) with exceptional reactions, unforeseen developments and rationally unpredictable changes; and second, and most important, that the category of «mystery» belongs to the fundamental principles of scientific work, because «scientific knowledge is based on abstractions which we choose to make from a more complex, essentially mysterious reality, though it is true that science does remove minor mysteries, such as the mechanism of heredity, but in doing so it shows us where the mysteries really are»<sup>24</sup>. Certainly science deals with the mystery in a specific way, through reason which excludes emotional, mystical, and psychological reaction which one finds directly expressed in religious knowledge or in artistic contemplation and creation through aesthetic values. But together with the notion of complementarity and participation the category of mystery endows modern science not only with more flexibility in dealing with the objective world but, principally, it gives a total vision of reality and an inclusive rational operation with tremendous significance for creating a more comprehensive image of the human person.

Especially, the notion of mystery in this new scientific context means that reality, in the end, remains rationally unknown. In other words, it is beyond the control of man's power. The more human knowledge penetrates reality, the more its mysterious basic structures be-

23. Charles Birch, *Nature, Humanity and God in Ecological Perspective*. In «Faith and Science in an Unjust World». Vol. 1. Geneva (W.C.C.) 1980 p. 65 and 69.

24. Robert H. Brown, *ibid.*, p. 39-40.



come evident and persuasive. Harold K. Schilling emphasizes this paramount basic truth in today's science which «evokes endless wonder and awe». It should not be understood as an emotional reaction but «the evidence for this lies in the depths of the interior of matter and energy and in the character of life, mind and spirit; in the quality and extent of nature's systematic interrelationships and interdependencies; in its lawfulness and randomness; its dynamism and evolutionary holistic creativity; its transmutability, and remediality; its limitlessness and openness to the future, in the structure and depths of space-time; in the infinite variety of its qualities, in its drives toward the social wholes we call communities and in still other fundamental features»<sup>25</sup>.

This paragraph describes perfectly the inter-penetration of the two formerly distant fields (reason and reality) in the deterministic and mechanistic science of classical physics. Now there is but one whole reality in full interaction on the basis of the category of «mystery», which is equally animating both, reason and reality. The perpetual experience of this fundamental truth in a post-scientific era which we are slowly but surely entering makes scientists share in existential categories which are parallel categories of knowledge towards a holistic science. Nature and reason are not simply object or subjective qualities causing to the subject aesthetic admiration, or romantic feelings but «anxious perplexity and profound concern or even traumatic anguish»<sup>26</sup>.

Science in this new context becomes a humane and passionate operation and scientific knowledge, an existential and experiential process. The knowing subject becomes alternatively the known object. Objective knowledge includes with reason the areas of will and sentiment. Epistemology has to deal with the nature of knowledge as relationship. Its function depends on an exchange of logical with experiential, psychic and sensual categories. After the period of the isolation of reason as the unique and supreme element of knowing in classical physics — which was perhaps necessary in the first steps of physical sciences, psychology and sociology — we now return to appreciate the all-inclusive nature of knowledge accepting the interaction between pure cognitive with existential categories. It is evident that the scientist is unconsciously involved in humane problems and creates a new sensitivity and a new consciousness vis-a-vis nature and himself. The question

25. Harold K. Schilling, *The New Consciousness in Science and Religion*, London (SCM Press) 1973, p. 30-31.

26. *Ibid.*, p. 32.

about the image of the human person is raised as a para-scientific concern of primary importance in a new way, allowing a more comprehensive vision of human nature and its origin and purpose as a more open question. Anyway, scientific knowledge becomes more and more conscious that it cannot manipulate nature without paying the price of loss of human dignity. Human existence also should not be manipulated by any objective system of thought, structures of society or totalitarian ideologies.

This counter-revolution in science against deterministic mechanism, rationalism and pure objectivity has occurred with more disturbing effects in the realm of psychology. If uncertainty, mystery, the inaccessible, perplexity has to accompany a fully scientific work and raise the question of knowledge in a new humane dimension, then it is psychology diametrically opposed to behaviourism and objective observation which has to be recognized as the most important area of scientific revolution for the sake of the human person. Against the threats of mechanism and empiricism Depth Psychology focussed its research deep into the subject. Against conceptual psychology it turns back to the self-analysis of man's deepest unconscious violent forces, not only to behaviour but first to the Behavior.

Definitely, S. Freud began his work as a typical adherent to classical scientism. He applied deterministic methods in explaining the Sub-conscious or Unconscious. The interpretation of the function of libido is almost mechanistic. Repression, transformation, sublimation create the determined pattern of the unavoidable function of libido and the interpretation of dreams follows this scheme faithfully. But, in reality, Freud's invention of the Sub-conscious signifies the end of scientism and objectivism. Now, everything has to be studied through the self and subjective, inner unconscious psychic events. Introspective psychology will defeat the easy «Gestalt»-psychology of empiricism and behaviour. Human existence is bi-polar in its constitution and function: a violent struggle between the life-bearing eros for creativity and the self-annihilating pathos of death. Man is an incurably guilty person linked, with all preceding generations by the assassination of the «Ur-Vater». All social relationships can become a source of neurosis, because of the sick «devotion» (Widmung) which makes the ego centrifugal seeking for a sick identity with the masses or with another person. No action of the human person represents what it really is. Man is participating in a continuous carnival in order to avoid his individual neurosis.

Though deterministic, the Unconscious seems to be a level of activity which is complementary and compensatory to our ordinary conscious life<sup>27</sup>. By this affirmation the deterministic and mechanistic method defeats mechanism. Man appears in his authentic continuous struggle with and against himself, full of anxiety and uncertainty. Introspection as self-examination will reveal the chaotic, dark basis of human existence killing all kinds of self-sufficiency, autonomy and superficial optimism regarding an anthropocentric future. All scientific evolutionary humanisms become phantasies of neurotic nature, false consolations, amongst others, for a momentary escape from our tragic psychic situation.

That is why this first psychoanalytical radicalism will be followed and complemented by a more comprehensive scientific approach. The analytical psychology of C.G. Jung on the same basis will introduce the bi-polarity of the collective-subjective subconscious and will accept the struggle as a continuous effort of the subject to find the equilibrium between the two in a continuous tension. Man is never alone and never one-dimensional, but animus and anima, extroverted and introverted, between good and evil, archetypal and experiential, instinctive and reflective, energetic and passive. Psychic health depends on the balance between opposing but complementary un-conscious and conscious trends around the axonic system, where the pivot-axis is the archetype of God. The purpose of life is the self-identity with this archetype: God becoming man. The Self («Selbst») is the final purpose of life as it is grasped through the analytic psychological introspective method.

Starting from these presuppositions, Jung does not hesitate to describe «conscience», this unifying functional center of ego into which all impressions of the subject are referred for receiving their logical affirmation and evaluation, as a complicated and undetermined, undefinable process composed of two levels (Stockwerken). The one, as the basic, includes a certain psychic event, the other represents a kind of superstructure. The psychological interpretation of conscience must be accepted as a permanent coalition-clash (Kollision)<sup>28</sup>. The famous «self-consciousness» (Selbstbewusstsein) becomes here the most uncertain process of basic complementarity in psychic life. Jung professes a rad-

27. G. Stephens Spinks, *Psychology and Religion*, London (Methuen) 1963, p. 52.

28. Carl Gustave Jung, *Das Gewissen in psychologischer Sicht*. In: «Das Gewissen», Zürich (Rascher Verlag) 1958, p. 185.

ical bi-polarity within the most crucial operation of a human being. Conscience has a static, permanent substratum (what we usually call *vox Dei*) and a flexible, unstable, uncertain element which causes a perpetual change, uneasiness and insecurity in all of our so-called conscious decisions. «Conscience» is, in the end, a continuous self-questioning between two antithetical forces that the subject tries to balance and to reconcile. The «Self» is in itself a relationship, a communal event. Its wholeness is the purpose of self-consciousness. One can say that introspection in this way, though a strictly individual act, is, in reality a communal experience. On the same basis, the so-called individual psychology of A. Adler will teach that only the relationship with the Thou of the other person saves us from the neurosis of the inferiority complex. «The Self» is created in connection with a partner and the ego in the realization of its relationship with the environment and the important participants in this environment<sup>29</sup>.

This bi-polarity and reciprocal complementarity is also confirmed by contemporary biology's abandonment of its mechanistic and deterministic past. As in individual and analytic psychology, hereditary givenness will be matched by the activity of planning for the future and the continuous effort of the Self to overcome it and become a process of recreation without being able to arrive at a final stage of self-sufficiency. The biologist Jakob Johan von Uexküll has found that, basically, a human being has molecules of «receptive» and «effective» nature, which organize all energies of life as a polarised movement biologically and psychologically. Every unconscious biological movement is a movement of relationship. «In this way the essence of life is no reflex-machine. It possesses from the beginning in its essential structure the movement towards inside and outside as an inseparable fundamental element of its Being»<sup>30</sup>.

This survey of changes in the contemporary sciences, it is clear, has a particular bearing on the debate about the nature of the human person. Because, science, though it remains rational and objective and impersonal, based on observation and experiment, is no longer tempted by optimistic self-sufficiency and assurance about its possibility to understand fully both matter and spirit. There is a tendency towards

29. Gaetano Benedetti, Introspektion, Subjektivität und Freiheit in der Sicht der Naturwissenschaft. In «Sich selbst erkennen», (Hrsgg.) T. Wagner-Simon, G. Benedetti, Göttingen (Vandenhoeck u. Ruprecht) 1982, p. 236-238.

30. Hans Mislin, Jakob Johann von Uexküll (1864-1944). In «Psychologie des 20. Jahrhunderts», Band VI, Zürich (Kindler) 1978, p. 46.

self-criticism and humbleness amongst the best scientists today. R. K. Merton qualifies scientists as a community governed by four imperatives—universalism, communalism, disinterestedness and organized scepticism<sup>31</sup>, expressing the new scientific consciousness at this moment. Certainly, not all scientists feel this way. Science, relativising its absoluteness and exclusiveness, will continue to work the same security. Its credibility is not at stake and it is neither our wish nor our expectation to call them in question.

The interesting point for our particular theme is that science in change raises the problem of encounter with change as a norm of reality. Alvin Toffler makes the appropriate remark speaking about change and the future. This, in itself, places a new demand on the nervous system. «The people of the past adapting to comparatively stable environments, maintained longer-lasting ties with their own inner conceptions of the-way-things-are... New discoveries, new technologies, new social arrangements in the external world erupt into our lives in the increased turnover rates—shorter and shorter relational durations. They force a faster and faster pace of daily life. They demand a new level of adaptability. And they set the stage for that potentiality devastating social illness-future shock»<sup>32</sup>.

The positive element of this new self-affirmation of science, in its ambiguity, uncertainty and pessimism, accentuated by the ecological problem, and the ethical responsibility of the scientist in being obliged to serve all kinds of unjust societies and war preparations, is the fact that makes scientific man become more and more conscious that there is a need for a self-identity of the human person. Science has caused a new sensitivity of man in face of the need to confront the issue of his responsibility frankly and honestly. «The epic of modern science is a story at once of tremendous achievement, loneliness and terror»<sup>33</sup>. Human persons caught up in this new scientific era of ours have to reflect more seriously about themselves and reconsider their deeper identity threatened by forces of alienation as never before. Science is humanizing in this sense, i.e. by creating the sense of uncertainty, confusion and pessimism it forces man into a position of self-criticism, self-questioning.

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31. R. K. Merton, *The Sociology of Science*, Chicago (Univ. Press) 1973. Quoted in: «Faith and Science in an Unjust World», Geneva (W.C.C.) 1980, p. 31.

32. Alvin Toffler, *Future Shock*, London (Pan Books) 1971, 169-170.

33. Loren Eiseley, *The Unexpected Universe*, New York (Harcourt) 1969, p. 4 (quoted by Enrico Cantore, *Scientific Man*, New York (ISH Publications) 1977, p. 411).

Science, of course, in itself is something good and most necessary for humankind. There is no doubt about it. However, the more scientific humanism develops, the more a new self-identity is required beyond science. Scientific humanism can never overcome its limitation (rationalistic and technical) and its ethical ambiguity. Man is tempted to relax in its scientific functionalism. Here lies the great challenge of science in today's world: the radicalisation of the problem and the necessity for modern man to find his own identity beyond science.

The defeat of determinism and mechanism and the double sense of mystery as wonder and awe imply an urgent need for deeper humanisation in order that scientific man may overcome pessimism and loneliness. Enrico Cantore rightly describes the challenge of science in anthropology when he writes: «for, truly if man living in the scientific age does not determinately strive after self-humanization, he is bound to effectively dehumanize himself»<sup>34</sup>.

This self-humanization is the new self-consciousness of human person seeking anew the quality of life. The current model of man challenged by contemporary science is the realization that he is a broken self in a broken world, full of uncertainty, injustice and necessity. Quality of life means both a truer measure of development and liberation, and the total repudiation of technology serving repression and economic self-interests. Quality of life means a whole man in the whole world in inseparable responsible unity through man's concern for inner coherence of mind and energy and the historical predicament.

Of course self-humanization requires a process of reference and a model to be referred to. The challenge of science imposes an introspective reflection towards recovering a distinctive selfhood. Science itself cannot create such a model and cannot even afford the point of reference. It seems to me that the question of the quality of life in the process of self-humanization, as a response to the challenge of science in the realm of contemporary anthropology, is the question about the real being of the human person. The challenge of science cannot be faced without ontology, certainly through the inductive and contextual, and not through the deductive and abstract method. But without this final reference of Being there is no possibility of dealing with the scientific challenge, though science will always remain neutral in face of the necessity of raising this question. It is absolutely necessary, for this rea-

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34. Enrico Cantore, *ibid*, p. 413.

son, to conceive the ontological question about man's nature through existential categories and living realities encountered in experience. An existential ontology is not only possible but imperative in the realm of anthropology since science unified knowledge, mystery, mind and energy with anxious perplexity and «traumatic anguish».

Finally, the challenge of science in anthropology is more directly addressed to Christian theologians. The pessimistic and tragic questioning of man's existence requires a Christian response. Theology is not ready to accept this challenge. Our traditional anthropology risks appearing as outdated on the whole. Our models are static and our ontological affirmations too theoretical to meet the challenge. Christian theology is always tested in dealing with man outside Christian faith, while this should be regarded as one of the most important and necessary chapters of Christian faith, action and knowledge. Our concepts of the Imago Dei are once more challenged by a science which reopens the discussion by its openness to the categories of mystery and tragic in the scientific enterprise of our days.

*(To be continued)*