

**LOGOS, EVOLUTION, AND FINALITY IN
ANTHROPOLOGICAL RESEARCH - TOWARDS A
TRANSDISCIPLINARY SOLUTION**

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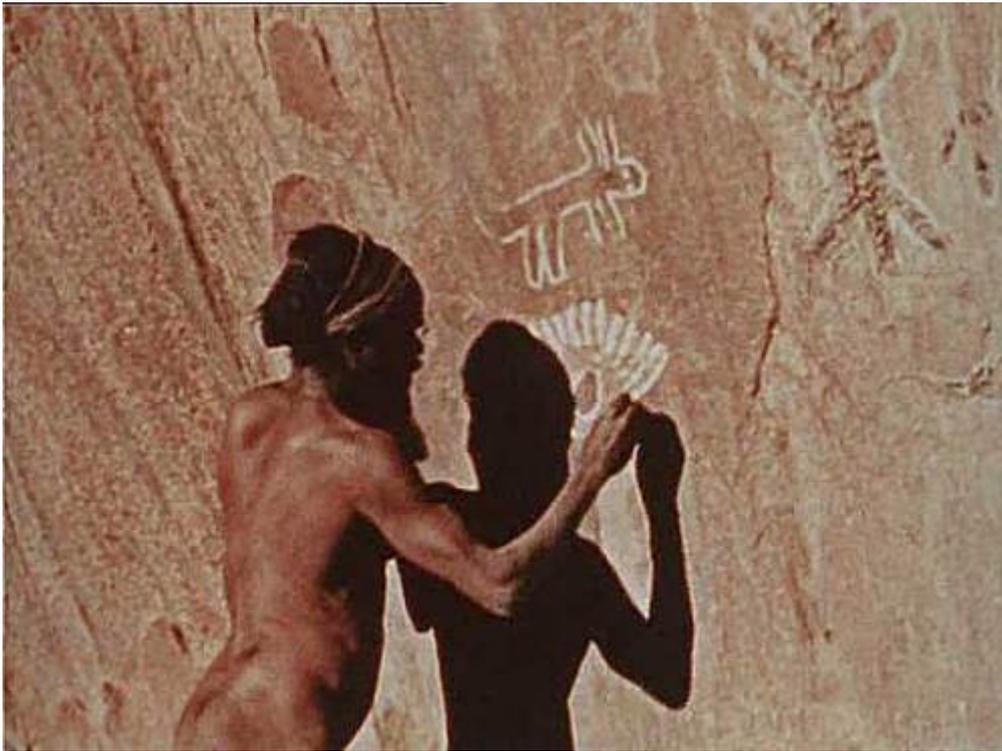
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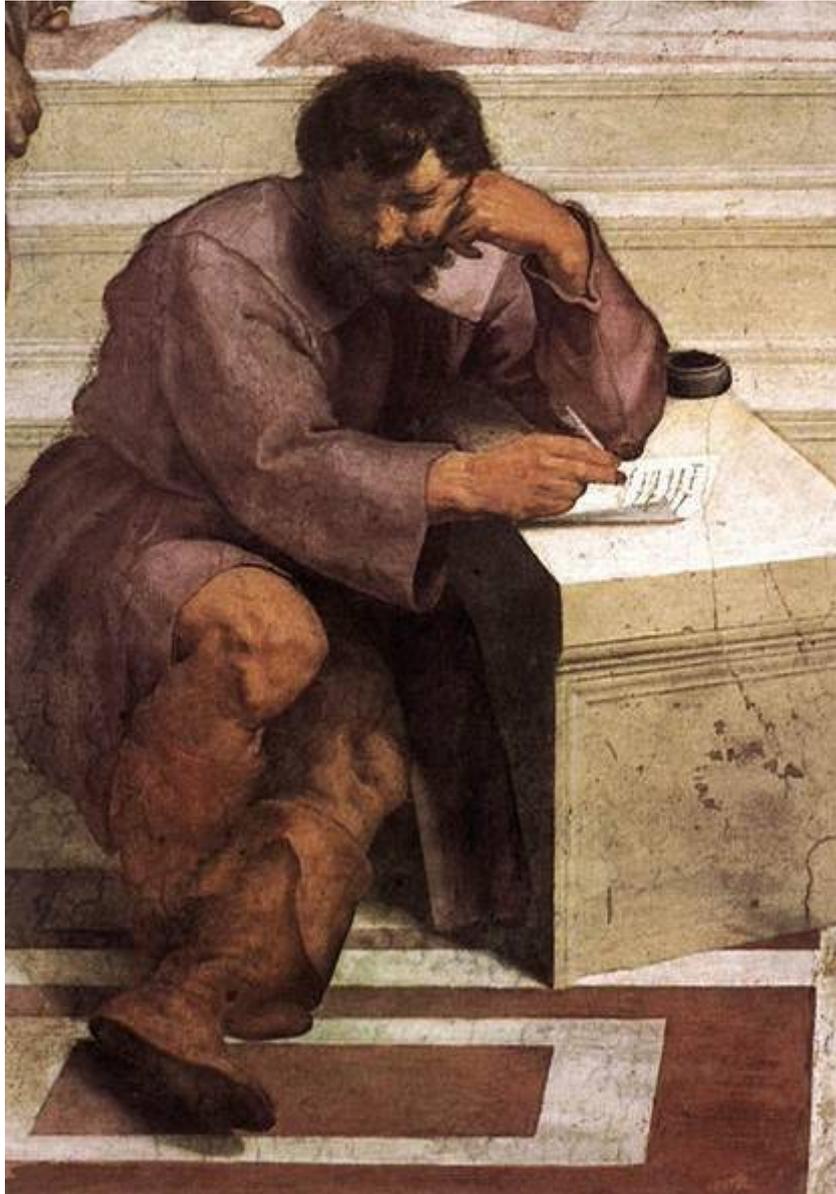
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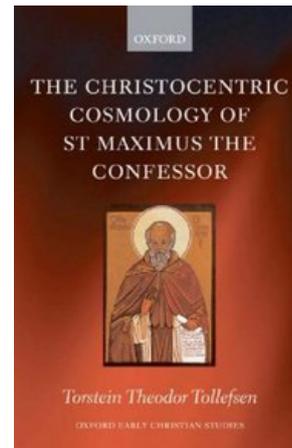
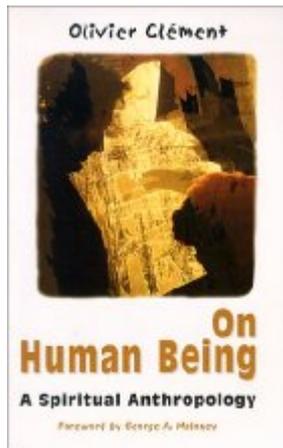
The links between evolution and theology from the perspective of the Orthodox Church



In memoriam Herakleitus of Ephesus and St Maximus the Confessor, theorists of movement as manifestation of the Logos.



Perhaps no other period in history spent more time and effort pondering **the question of human identity** than the modern era. To be sure, the problem was known in former periods too, but the theologians', poets', and philosophers' debates never had the dramatic urgency nor all the implications of the modern discussion, since **the emergence of the natural sciences was a radically new phenomenon in the history of culture**. The ensuing **crisis of modern man** was threefold, **affecting his conscience, values, and meaningfulness** alike. As a Christian Orthodox priest and representative of an ecclesiastical tradition – although I wouldn't presume to speak in the name of the Church – I think the very fact of **the modern crisis requires theology to enter into this debate**.



The argument that follows has five aims: (1) to summarize certain important aspects of the controversy between scientists and theologians regarding **the origin and nature of man**, and to shed light on some of the causes of this conflict; (2) **to distinguish between the results of scientific research and the ideologies called upon to interpret these results**, thereby questioning the legitimacy of the debate between creationism and evolutionism; (3) to present a few of the **problems of today's scientific anthropology**, as they appear from the perspective of the new cosmology; (4) to present some of **the main points of Orthodox anthropology**; and (5) to **suggest a solution to the conflict**.

1. The Anthropological Conflict and Its Causes



Modern culture is characterized by the conflict between theology and science, a manifestation of the **schism between the secular and the religious that defines modern civilization**. In practice, this means that **in the secular world today, science appears as the only possible**

knowledge, the only one, in the public's eye, entitled to the pretension of objectivity, **while religion occupies the modest place of a private and subjective option, without any relevance to the truth** [1]. Consequently, the scientific theory of human and the theological one hold different (and even occasionally antagonistic) positions, between which no foreseeable bridge seems to exist.

Although our discussion should extend to the larger cosmological domain, the basic features of the science vs. theology conflict are already obvious in the anthropological domain. **For scientists, the human phenomenon has nothing to do with any Logos or the history of the universe, appearing as a “strictly natural” occurrence**, not necessarily the best and most certainly a random product of evolution (as defined, for example, by Stephen Jay Gould's school). **From this point of view, the deciding factors are the chemical bases of life and the play of probabilities governing its evolution**, or, in other words, the genetic mechanism and the morphological phases of the evolution of our species.

Everything seems terribly simple: we are the products of a long development of

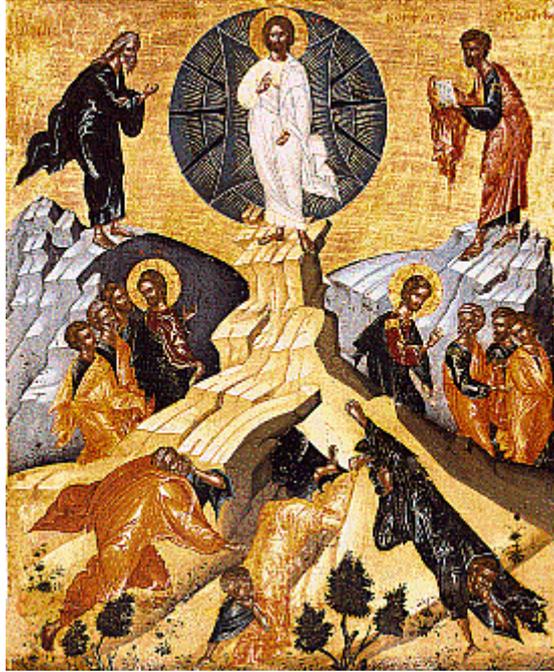


inanimate matter and then cellular life, resulting in natural selection. We have no reason to proudly claim some special status within the biological realm, and our lives, **whether we like it or not, have no higher meaning whatsoever.** Behind this conclusion that man's origin is of the humblest, there is the unstated premise that **man's existence is only and exclusively biological, that the corporeal is the only level of reality, and the “bodily” is the only mode of existence.** Therefore, any pretension that there might be a higher goal than the instinct of biological survival lacks all substance.

The above description might appear as somewhat of an oversimplification (if we open the specialized dictionaries of any number of sciences, we will find an equal number of diverging and often contradictory definitions of man). On the whole, however, it cannot be contested, especially by those anthropologists who refuse to take cultural/spiritual factors into account.



On the other side of the fence, **theologians**, wishing to reaffirm the divine plan of creation in general and of humanity in particular, present the origin of mankind by invoking the supernatural intervention of the divinity. For them, man is also an occurrence outside of the history of the universe (a point held in common, to some extent, with scientific anthropology), to which he is superior by the manner of his creation, rather than by his position or role in it. Even if up to man, things might have evolved the way sciences present them – a relatively recent concession in a controversy that dates since the beginnings of modern times –, the origin of man can only be explained by an act of God that has no equivalent in the history of universe. For theologians, the universe was either created all at once in its perfect state, and, within it, man placed above all creatures; or it developed gradually up to the point where man, unrelated to this gradual becoming, was created. Implicitly, man's existence unfolds on two different levels of reality, no matter what their names are; to lessen the difficulty of expressing them adequately, let's just say that man appears to be less a body and more a soul. Consequently, his existence appears to fulfill its purpose independently of nature, *i.e.* above and beyond the biological realm, or, in other terms, above and beyond the world, God's creation.



This description of the theological viewpoint would doubtlessly agree with all but the neo-patristic school, and my conviction is this time more justified than before, when I tried to sketch the scenario proposed by scientific anthropology.



What has just been described is clearly the conflict between **evolutionism (the theory of the natural evolution of the human species)** and **creationism (the theory of man's supernatural creation)**. The former describes an autonomous history of mankind, without theological dimension or finality, which takes place outside of any divine presence; the latter is an "extraterrestrial" explanation, so to speak, that refers man solely to God. However, this latter view does not sufficiently take into account **the tradition of the Bible and the Church Fathers**, where man is as akin to God as to the earth/the animal realm, as shall be shown later on.

Before turning to a more detailed analysis of these two conflicting positions, the sources of their division must be properly understood. This alone will provide a reliable identification of the ideological grounds that have obstructed and continue to obstruct the dialogue between theology and science.

If we start with the premise that scientific anthropology and theological anthropology are divided by the *naturalistic* option of the former versus the *super-naturalistic* vision of the latter, the next logical query is how does Western culture – where this division has occurred – understand the rapport between the natural and the supernatural.



"It's a new anti-depressant—instead of swallowing it, you throw it at anyone who appears to be having a good time."

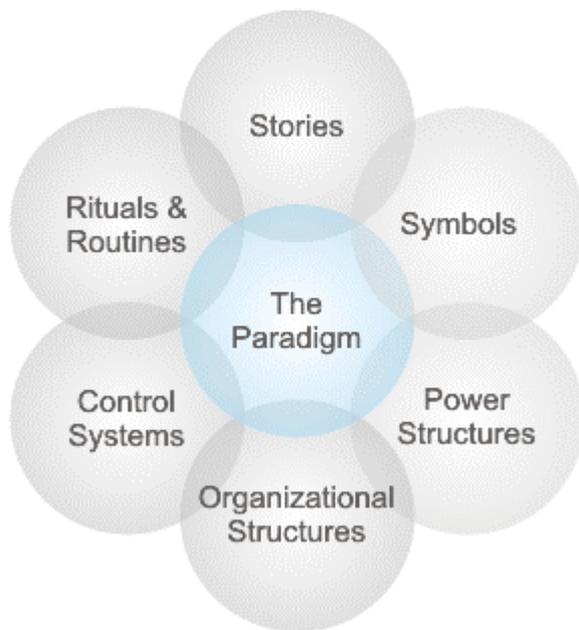
Since the beginning of the Middle Ages, Western thought has been dominated by an instinctive dualism, to use the phrase coined by Georges Duby, a dualism involving not only the distinction between the natural and the supernatural, but also the difficulty in joining the two. This is perfectly obvious in the

epistemological solution offered by Western theology, designating one sphere of competence for the **exercise of faith – that of the supernatural**, and another sphere of competence for the **exercise of reason – that of nature**. Of course, the scholastics did not imply that there was any opposition between these **two levels of reality and methods of investigation** [7]; the opposition appeared only in modern philosophy.

However, **modern sciences (which are a product of the modern spirit of division) were quick to seize upon the idea of a separation between these two domains and to take it one step further by denying faith all competence whatsoever**. As the new cosmology emerged and its view of an unfinished (non-centered and nonsensical) and homogenous (single-level) universe gained power, the domain of the supernatural was pushed outside of the field of vision of the empirical method employed to acquire and verify scientific data. Beginning with the modern age, it became possible to represent the universe and life without reference to God. **Eventually, modern thinking ceased to resort to the “divine hypothesis” altogether and tried to describe everything without even raising the question of a creator and provident God**. At the same time, it also excluded the notion that the cosmic and human reality should have any meaningful end.



Figure 1: The Cultural Web



An essential contribution to this view came from a new philosophy attempting to account for the new scientific model of the infinite universe. Alexandre Koyré mentions the profound crisis that occurred in European consciousness when the finite and multi-layered cosmic model that had been so familiar was brushed aside [10]. Within a universe conceived as void of any divine presence, and therefore of any **symbolic coherence, spiritual significance, or Logos**, in a world he could no longer judge on the basis of values – himself devoid of any perfection or finality –, man was suddenly at a loss before the cosmic immensity, seeing himself as a random apparition and a negligible quantity. There was no way he could exclude his species from the *naturalistic* explanation he had given to the surrounding reality, and ultimately he gave up the pretension of being defined by **culture (or in theological terms, grounded in spirit)**. **The anthropology that proceeded from this world vision was inevitably naturalistic and rejected the notion that the existence of mankind could have any special purpose.**

Of course, theology could not accept such an **atheistic and nihilistic vision** that denied man all finality. Unfortunately (with the notable exception of the neo-patristic school), theology didn't take any steps in the direction of a dialogue; that would have implied **reshaping its message in the new context**; instead, it preferred to stick to its age-old dress. Hence the conflict.

This succinct review has allowed us to see the path that led from the preeminence of the



supernatural in European culture to that of the natural. If we ignored it, we couldn't understand why most scientists today won't admit either to the necessity of bringing God into their discussions or to the possibility of **discerning a universal Logos**; nor could we understand why **theology is denied a place among the fields that study the human and cosmic reality**.

It is perhaps worth mentioning that this entire process was a product of the Western milieu. Modern sciences are not representative of the Oriental side of European culture, as the way of thinking that prevailed here was radically different from its Western counterpart. It is therefore safe to say that this way of thinking had nothing to do with the conflict between Western science and Western theology, since it was already situated outside the premises of this conflict. Even without the muffling effect of the Turkish domination, which arrested the birth of science and the development of modern civilization in Eastern Europe, a kind of implicit interpretation of reality seems to have functioned here. Defined by the possibility of integrating heterogeneous data into a coherent and unified vision, this hermeneutics prevented the apparition of a disagreement between theology and science.



Father John Meyendorff remarks that the Byzantine tradition recognizes the autonomy of science, since the world – as a dynamic nature that pursues its own course of growth and unfolding development – implies the possibility of objective scientific investigation by the human mind. **But, says the Father, this possibility does not also include the consideration of the world as a nature independent of God, void of Logos. All scientific knowledge that ignores the finality of creation (participation in God) will be dangerously one-sided [14].**



Orthodox theology should look carefully into the causes of the conflict and into its traditional hermeneutics, rather than defend any of the ideological positions of Western culture.

2. Creationism vs. Evolutionism or Research and Ideology



As mentioned above, the two conceptions about man belonging to science and theology respectively have

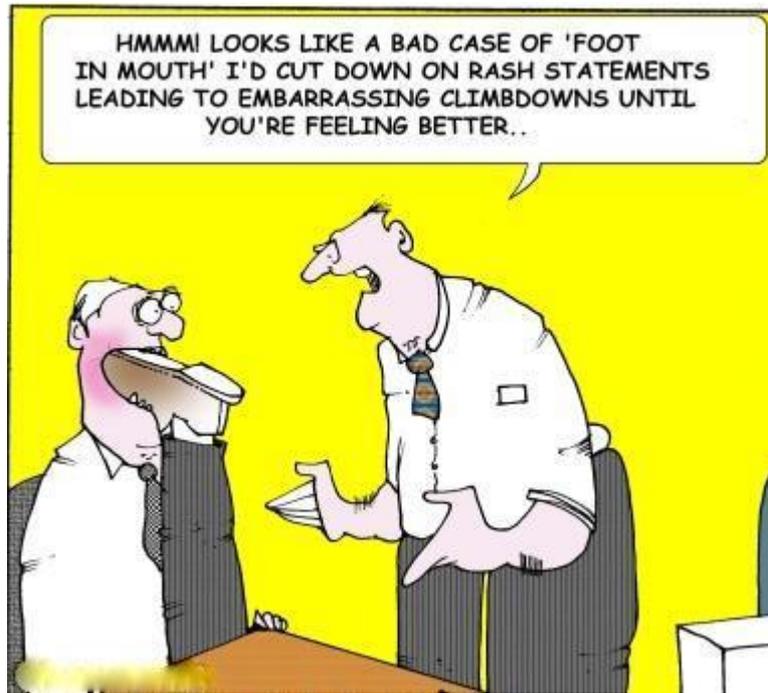
come to diverge **when shaped as evolutionism and creationism. It must be emphasized that both evolutionism and creationism, when examined without bias, reveal themselves as ideologies that feed parasitically on science and theology, respectively, and should be denounced as such.** There is no dissension between scientific and theological anthropology, but only between two simple-minded and **one-sided interpretations of the anthropological datum**, both of which were produced by the Western way of thinking: **the naturalistic interpretation, in the case of evolutionism, and the super-naturalistic interpretation, in the case of creationism.**



From the **Christ-centered perspective which is the key to the Orthodox tradition** as well as the principle outside of which no solution can be accepted as ecclesiastical, both of these ideologies are different versions of the same error, the *monergism*, a heresy officially rejected by the Church at the Sixth Ecumenical Synod.



Thus the creationist supernaturalism is a type of theological monergism, claiming that **only the God-head is active in Christ and in the universe**, while the evolutionist naturalism represents a version of anthropological monergism (only the “god” Nature is **active in Christ, in man, in life and in the cosmos**). Orthodox theology refuses any either-or answer to the question of humanity’s becoming/evolution (however modern science may describe this) that attributes it exclusively either to natural causes (*natura pura*) or to supernatural causes (*sola gratia*). Both interpretations are equally stricken by **one-sidedness and extremism**.



The dogmatic decision of the Sixth Ecumenical Synod, based on the vision of St Maximus the Confessor, implicitly covers these modern extensions of the same intellectual error.

Overanxious to assert God's omnipotence, the creationist ideology produced the axiom of a human being created perfect from the very beginning by a supernatural act without equivalent in the history of the universe. Some of today's Orthodox theologians adhere to this view by reading the Bible *ad litteram* – at least this is what they claim to be doing, although **the letter of a prophetic text is essentially a metaphor that cannot be taken at face value and without a subtle sense of discernment.** They also bring in to bear the patristic texts of the very first Christian centuries, stripped of all contexts and presented as containing generally valid answers to all questions (the patristic fundamentalism denounced by Metropolitan John Zizioulas; [21]).



Sadly, a man of high spiritual stature, Father Seraphim Rose (Orthodox Christian of American descent), committed the same error when, caught in the middle of this controversy, he tried to reject the evolutionist ideology by using a literal reading of the Church Fathers – alien to their spirit and to that of contemporary (neo)patristic theology – as argument in favor of creationist ideas [18].

All such arguments fail by extending the validity of the Church Fathers' judgments from the general human problems they addressed to the specific problems of an age that was neither theirs nor a possible concern for them. While many Fathers did have the prophetic gift, none used it to condemn cultural paradigms that didn't exist in his time. Consequently, in the Fathers' writings nobody can find either the acceptance or the rejection *ante factum* of the modern idea that the universe is in constant movement or that man's be-coming is a process of evolution that has taken thousands upon thousands of years to complete. **What can be found in the Fathers, of course, is the formal rejection of any representation of reality that should leave God out.**



As a rule, **most supporters of the creationist ideology are Protestants whose goal is to turn the Bible into a scientific book which, taken literally, would offer a science that would be “much more objective” than the secular one and purely divine in origin.** In the creationists’ opinion, God, being omnipotent, should not have needed much time (measured by whom?) to create the universe and mankind; accordingly, the world is much younger than scientists claim. Stephen Jay Gould [8] presents the sad case of Henry Gosse, a British contemporary of Darwin, who argued that God had “faked” the geological strata in order to make it appear as though the world had had a very long history when in fact it was only a few thousand years old...

Forgetting that from the very beginning God works through *kenosis*, accommodating the



lesser possibilities of the creation he loves, some felt that the perspective of a long history of the world dimmed the glory of God, while that of a short history intensified it. Misguided by this prejudice, many theologians wasted time and energy trying to reject a science that lacked all sense of reverence. Meanwhile in the opposing camp, as Father Seraphim Rose aptly points out, nihilistic and atheistic ideologies were at work behind the outer mask of science.

However, any literal reading of the Holy Text is completely outside the Philokalic canon of the Orthodox tradition. The internal coherence of the Bible taken both in itself and in conjunction with the tradition of the Church signals the key importance of the spiritual understanding of the Scripture, which defines the Philokalic norm and corresponds to the Christ-centeredness of the Church.



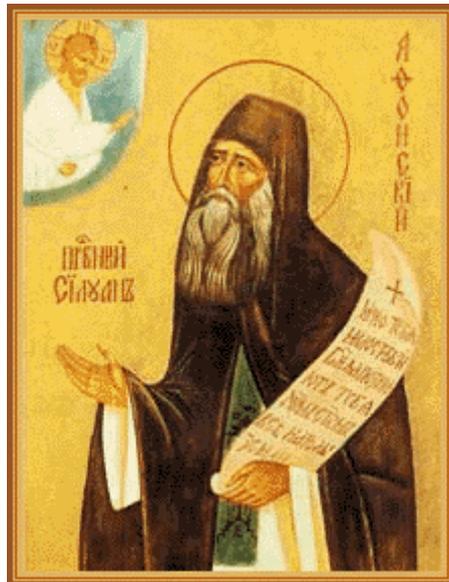
This interpretation is not concerned with the technology of creation, whatever it may be,



and seeks only to underscore **the spiritual dimension of the Biblical message along with its existential implications: the rebirth of man within Christ.**

This basic tenet remains the same even in the works of the most “literal” Fathers, such as the Antiocheians. St John Chrysostome, for instance, draws his audience’s attention to the fact that Moses wasn’t addressing spiritually advanced people, and therefore had to cloak his thought in the language of “corporeal” minds (cf. Homilies to Genesis, 2, 2).

In this view, the historical facts are profoundly revalued and become the outward signs of spiritual realities and of existential domain (see the Great Canon of St Andrew of Crete, enjoining us to understand history in the spirit of St Paul’s words in the second letter to Timothy 3, 16). Their very historicity – “scientifically” verified in most cases – becomes a mere pretext.

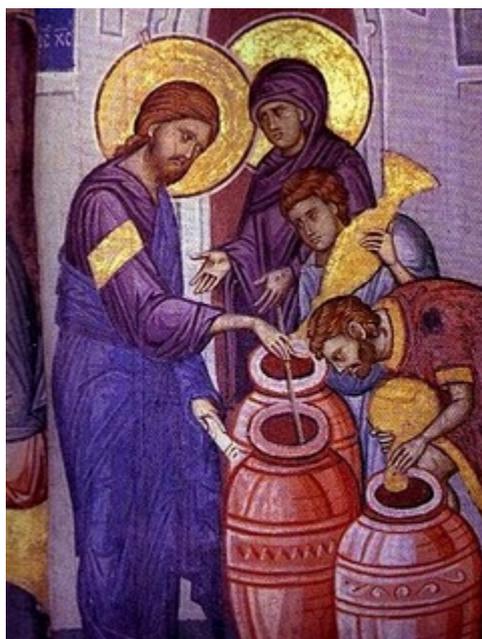


This revaluation suggests that there is an important distance between the Bible of the Church and the biblical documentation researched by the literalists. **The literal reading of the Scripture is so alien to the Orthodox Church that in the liturgy of St John Chrysostome,**

before the reading of the Gospel, the priest prays for the opening of our intellectual eyes, so that we can understand its message, and in the second prayer for the faithful, he prays for increase in the “spiritual understanding” of all participants to the eucharistic assembly.

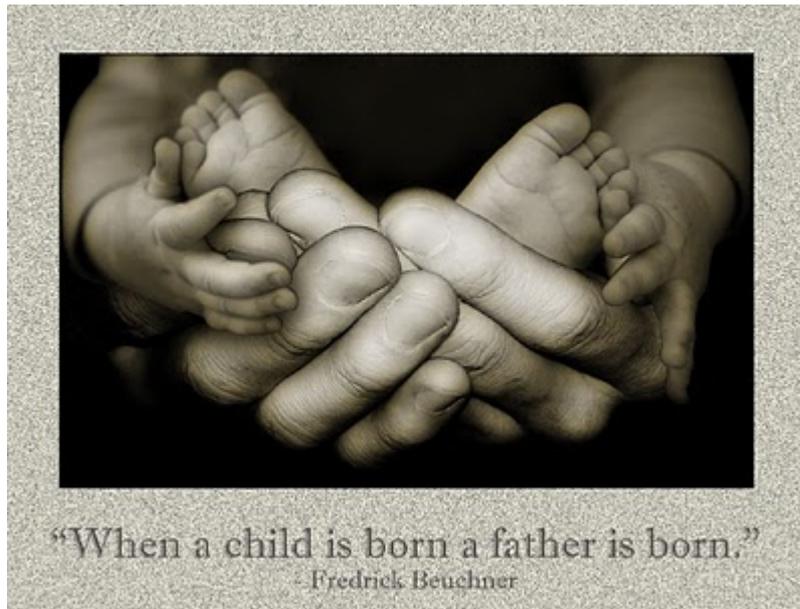


It would be superfluous to insist on the creationist theory, be it scientific or not. Only one more thing should be said: this ideology, despite its meritorious effort to make room for God in modern man’s mind, brings nothing but discredit upon the Scripture and the Church Fathers, by omitting the spirit in favor of the letter, to put it in St Paul’s terms. Obviously, **there can be no confusion between *Creation*, as the theological definition of man’s origin and his existence within God’s plan and his presence, and *creationism*, as an ideology that ignores the dynamics of life (designed after all by the divine Logos) and instead tries to pin God down to a mythological creative technology.**



The authentic position of Church tradition with respect to the sciences is best represented by voices such as that of St Basil the Great, who upbraided the philosophers of his time not only for the diversity of their mutually contradictory models, but also, and mainly, for their ignorance of the **Logos, of the “rational cause” of all things**. While affirming that **it was the philosophers’ job to argue with one another about the best representation of reality, the saint showed that theology did not have to defend any one representation, but only the principle that everything that is, is for an “rational cause”, the Logos**. When theology wishes to safeguard its nature but chooses to combat the vanity of evolutionism with the arguments of creationist “science”, it adopts a stance that is forever parallel to the tradition of the saints.





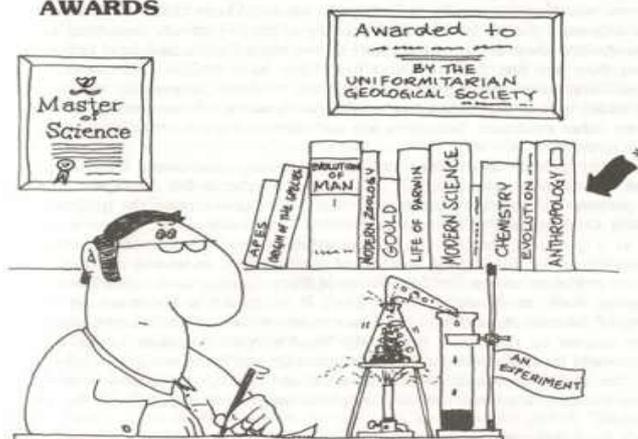
In turn, the evolutionist ideology had its starting point in a philosophical position Ioan Petru Culianu called anti-metaphysical nihilism, and its goal was to offer an exclusively **naturalistic and materialistic explanation of reality**. In this view, all intervention of the divine cause in the development of our species is thoroughly denied, as is, by way of consequence, all possibility of a theological and teleological interpretation of reality. Carried away, unfortunately, by animadversion, anthropologists cannot distinguish anymore between research and their philosophical convictions, which compel them to present the results of their re-search in the shape of atheism and nihilism. Case in point: Richard Dawkins pokes fun at the “divine hypothesis” (as Stephen Hawking does in the cosmological domain) and speaks of a “river of genes” springing from an Eden “far more certain” than the Biblical one and flowing through all of humanity, but insists that all that means is the survival of the genetic deposit. Moreover, Dawkins thinks that science can function outside of any interpretation, a *naïveté* that would make Karl Popper roar with laughter. Based on this conviction, he rejects the realm of meanings as well as the cultural relativism that tends to put the equal sign between science and myth, all in the name of techno-science [5].



In general, there prevails a defiant attitude among anthropologists, who for the most part do not accept any theological interpretation, although they accept, for subjective reasons, a variety of other interpretations. Imprisoned by the mental reflexes of their positivistic training, they prefer those interpretations that avoid mentioning any cultural factors (which always complicate things by raising moral and axiological questions) and give pre-eminence to the biochemical explanations (“chemistry, pure chemistry”) of evolution [11].

AN EXAMPLE OF A REAL SCIENTIST !

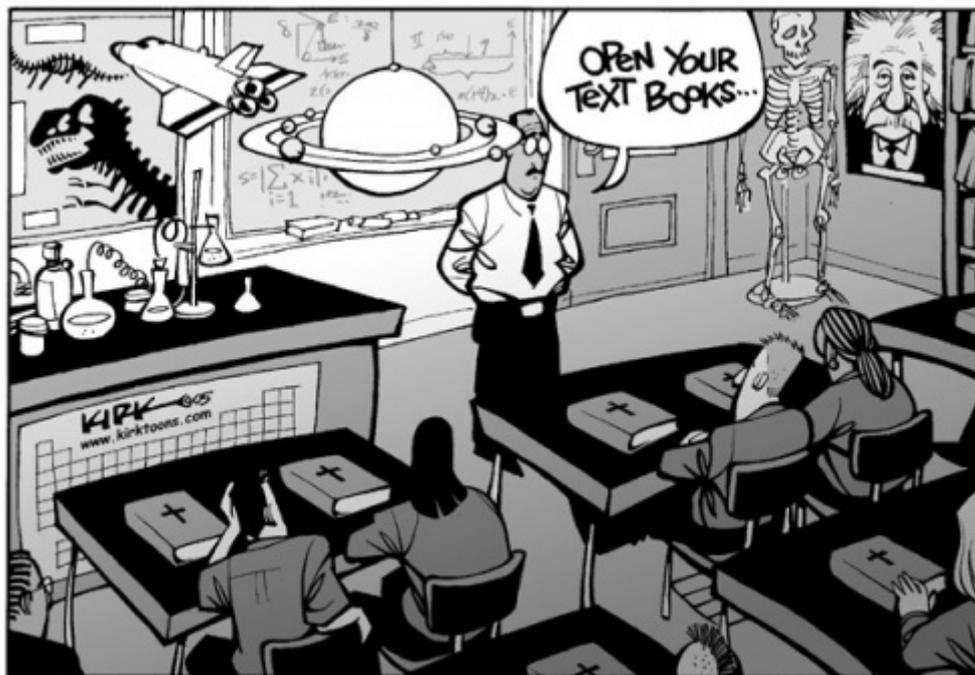
• NOTE BOOKS AND AWARDS



4 TRUTHS ABOUT SCIENTISTS:

1. He is **BIASED** (look at his books).
2. He is **NOT OBJECTIVE** !
3. He is **HUMAN** !
4. He seldom wears a **WHITE COAT** !

The **creationist supernaturalism** presents all there is as God's handiwork; it overlooks the facts (as presented by modern science) and seems unaware of the need to evaluate nature's movement from a genuinely theological standpoint, as if this movement were unrelated to God. In turn, the **evolutionist naturalism** refuses to discern any **Logos or pre-ordained plan** (although it does sometimes suggest a *post hoc* finalism), as well as any divine presence in the universe, deriving its structures from irrational causes, *i.e.* the natural miracle of chance and an immanent, autonomous causality. However, to use St Paul's terms, God is the One who "giveth to all life, and breath, and all things" (Acts 17, 25).



Just as creationism discredits **the Bible**, atheistic evolutionism discredits the **scientific fact of evolution**, by arrogantly overruling the possibility of any **dialogue with the theological interpretation of this fact**. In this case too, a **sharp distinction** needs to be drawn between *evolution*, as proven scientific fact – even if its mechanism isn't elucidated yet – and current cultural paradigm according to which the universe is constantly moving,

changing, and becoming, and *evolutionism*, as an atheistic and nihilistic interpretation of this history.



All this leads to the conclusion that theology has no serious reason (or arguments) to reject the scientific description of our species' history, in so far as this description remains open to interpretation. Conversely, science has no reason to keep to the simplistic position of an atheistic ideology without objective relevance. Both science and theology must openly denounce the risks involved in embracing the parasitical ideologies that prey upon them.



**Logic: another thing that
penguins aren't very good at.**



Speaking of their conflict in his essay entitled “Science and Religion”, Einstein noted that one of its main sources was their trespassing into each other’s legitimate domains. Both science and theology made illegitimate claims: the former claimed that its oversimplified explanation of reality was the only acceptable interpretation, while the latter claimed that it had the right to describe the concrete reality of things. **Science should stick to investigating and describing the world, leaving the task of interpreting its findings to theology, which can put them in their proper place within the larger perspective of the divine revelation**[1]. When properly understood, far from being the antagonists that haunt modern consciousness, “Religion and Science are the conjugated faces or phases of the same total intellectual act”, as Father Teilhard de Chardin remarked [20]. [Roman-Catholic theologians adopt the same prevailing attitude, acknowledging the autonomy of scientific research but reserving the right to interpret its results by traditional criteria; see 17]. **In a transdisciplinary view, science and theology are two complementary approaches to reality.**

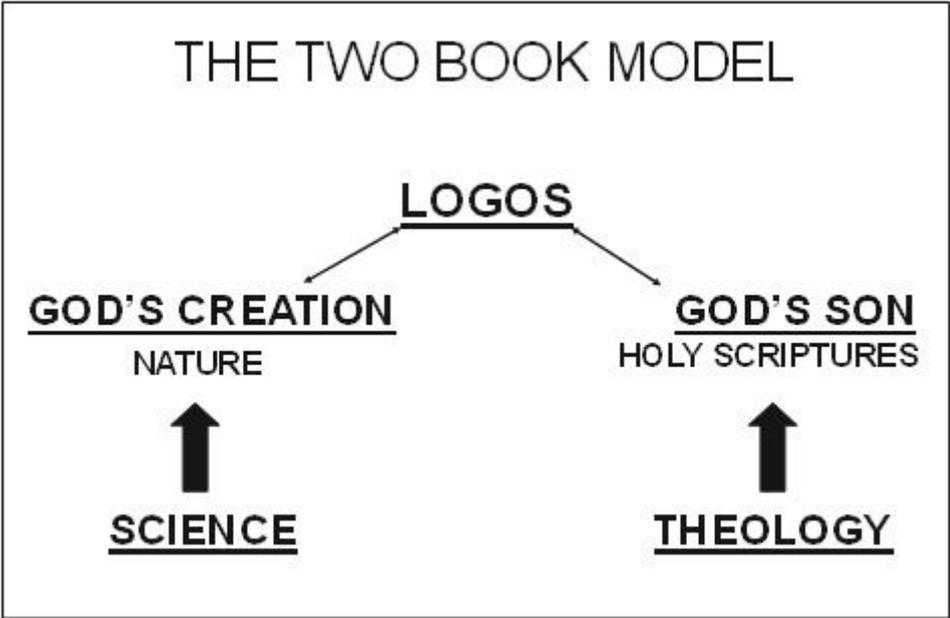


Fig. 1 The Two Book Model

Anticipating a little, let us point out that **the solution proposed by the neo-patristic theology consists in understanding the correct relationship between the two domains. Science is not synonymous with positivistic naturalism or scientism, just as theology is not the same as the medieval dualistic supernaturalism. In essence, there is no *a priori* contradiction between Logos and evolution, between creation and becoming. The**

alternative to this destructive modern conflict is the view (alas, uncommon among non-theologians, even if they are members of the Church) of a God who manifests his omnipotence by kenosis (hence the emphasis placed on the creation through Logos), by accommodating the inner dynamics and the actual possibilities of the universe, which moves theologically by nature, according to the divine plan.



3. The New Cosmology and the Long-Awaited Revolution of Scientific Anthropology

Physicist Henry Stapp says that classical, mechanist physics, whose postulates were soon embraced by the humanities, too, did not offer a superior view of man. **With the emergence of the new cosmology (involving both the anthropic and the teleological direction), the human phenomenon could be viewed in a new light.**



The

representation of an **expanding universe** that has continued to grow for the past 15 billion years (according to the latest estimates) opens up the domain of cosmic and biological history. The formation of the first elementary particles, the apparition of life, and that of the human brain (corresponding to the three *bara* of the Hebrew Genesis, *i.e.* three divine acts that effected the universe, life, and conscience) allows, for Hubert Reeves, to understand the history of the universe as resting on two premises: that the universe is not eternal and that it is “transparent to the future”. In this context, believes J. P. Lonchamp, two questions arise: (1) Have the movement of the universe got a sense? (2) If yes, what is it? [12].

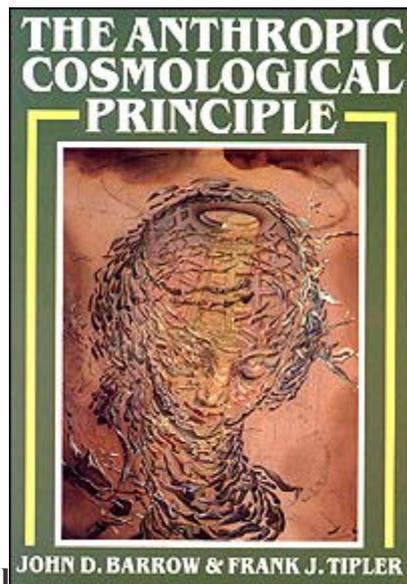
As it formulates these questions, science has clearly left behind its former, strictly descriptive and openly anti-metaphysical, preoccupations, and adopts a philosophical attitude (in the Ancient Greek sense of the word) toward reality.

Lonchamp believes that today's science can no longer avoid answering in the affirmative to the first question. **From the quantum chaos of the first moments of the universe to the apparition of man, the process has been one of *complexification croissante*.** In turn, Alfred Kastler states that the physical and chemical unity of the universe provides the backdrop to a biological unity that must be understood as its finality or purpose, no matter how shocking this may sound to some scientists. **Since every organ of a living being performs a function and serves a purpose, how could science legitimately refuse to discuss the perspective of a cosmic finality?** Kastler asked [9].



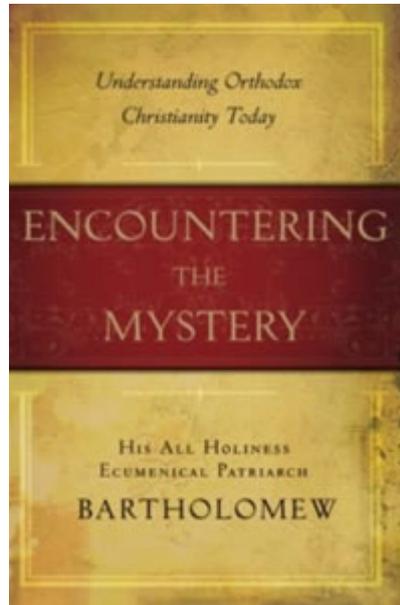
As for the second question (as regarding the sense of the movement), many scientists refuse to tackle it because, they claim, it is a metaphysical problem, therefore outside the jurisdiction of quantitative science. However, this is but a pretext that conceals in every case a subjective option without any scientific backing.

For today's physicists, the universe is an "idea" transposed into physical matter, an



informational structure rendered concrete by a sum of potentialities that tends to become enacted. If, as suggested by Heisenberg's quantum ontology, the actualizing factor is the presence of man, a new representation of reality is urgently needed – or at least so goes the argument of **the anthropic principle**, laid out by the new cosmology. **As marker of a new mentality, this principle attempts to bring back together the cosmic and human domains, so sharply divided in modern times, and could be a tool for a subtler approach to reality, leaving room for recognition of the divine intention and presence in some of its formulations** [4]. The philosophical and theological implications of the principle's different expressions – although its supporters claim that its grounds are purely scientific – suggest that there might be after all such a thing as **a universal goal**, where mankind and the sphere of moral values occupy a prominent, if not essential, place.

These implications are plain to see in Barrow and Tipler's finalist expression of the principle (*Final Anthropic Principle*). According to them, if **the human spirit was called into existence**, it must also endure forever, regardless of the final shape of the universe [2]. Although it is an affirmation that belongs to physics – thus without any explicit moral content – the finalist principle is organically related to the moral domain. Since it formally asserts the immortality of the intelligent being, which is a carrier of moral values, it implicitly asserts the continuity of those values, which of course would be impossible in **a lifeless, mindless universe**. Seen from this angle, **the finalist principle implies a universe that is destined to improvement, a universe of immortality and eternal life**.



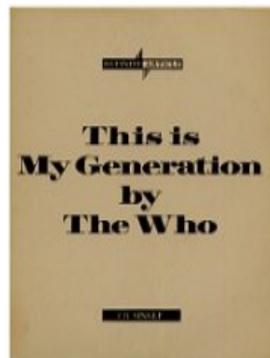
Today, physicists are no longer reluctant to talk about a universal design as well as a Designer, with or without reference to the anthropic principle. Such a worldview should have its repercussions in anthropology, since we cannot talk pertinently about mankind outside of the universe.



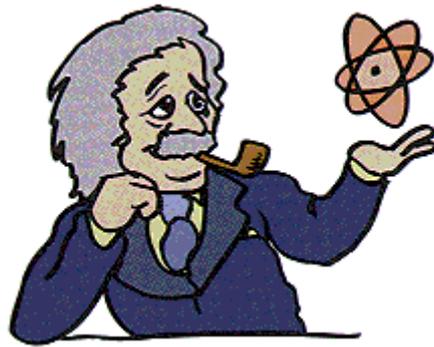
Basarab Nicolescu believes that the apparition of humanity on Earth was one stage in the unfolding history of the universe, just as the birth of the universe was one stage in the unfolding history of mankind [16]. This view is compatible with the Biblical one, as the succession metaphor of “days”/stages of creation suggests a *logos* and a *telos* of the entire organization of the world: the earth and the waters (*i.e.* the mineral realm) are activated in view of supporting the living (the vegetal and the animal realms); biology then becomes a basis for the event of the human conscience, all things unfolding as if every given level were a required condition for the fulfillment of the next one, every step containing in concentrated form all that would proceed and succeed from it.



Unfortunately, the new cosmology has so far remained without echo in the fields of biology and anthropology. **Biologists seem oddly anachronistic, arrested by the “classic” division between science and philosophy/theology. Consequently, anthropology has remained unilateral (man is chemistry) and nihilistic (man’s only glory: his ability to discover the nonsense of his existence).** Following in Dawkins’ footsteps, Stephen Jay Gould shows that the evolution of life has absolutely no point and is merely a sequence of appearing and disappearing species. Hence, the metaphor of the tree of life, *i.e.* the common philogeny of all species so dear to classical Darwinism, is completely meaningless.



These are the facts, says Gould, regardless of our pretensions of being superior: **There is no inner logic of the living matter requiring it to lead to human intel-ligence. Mankind appeared only yesterday on a tiny twig of the tree of evo-lution; life’s meaning cannot possibly be to have prepared our coming.**



The above quote is a perfect example of that intellectual trespassing sanctioned by Einstein (science should describe, religion should interpret). Gould interprets what he thinks he sees by resorting to the facile solution of the *random selection*, but **refuses to accept the existence of a project rendering all selections possible as well as of a finality rendering them intelligible**. It's an example that can serve as a reminder that **scientists are not driven by reason alone, but by emotional and subjective motives, too**.

4. The Divine Project, Evolution and the Principle of Synergy



As we have seen, **the atheistic interpretations of mankind's evolution are dictated by subjective options and lack all scientific bases**. They should not cause theology to reject *in toto* the idea of mankind's historical becoming, an idea which is embraced nowadays by the entire scientific community and influences most people's lives. All that is required is the

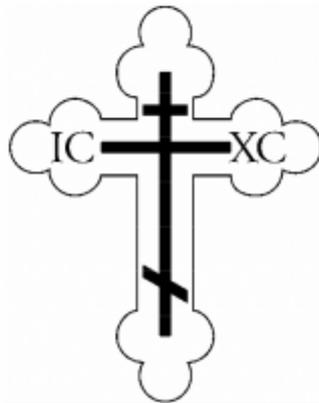
operation of the necessary distinctions (many of which are still beyond what science can discern) and a correct interpretation of this historical becoming.



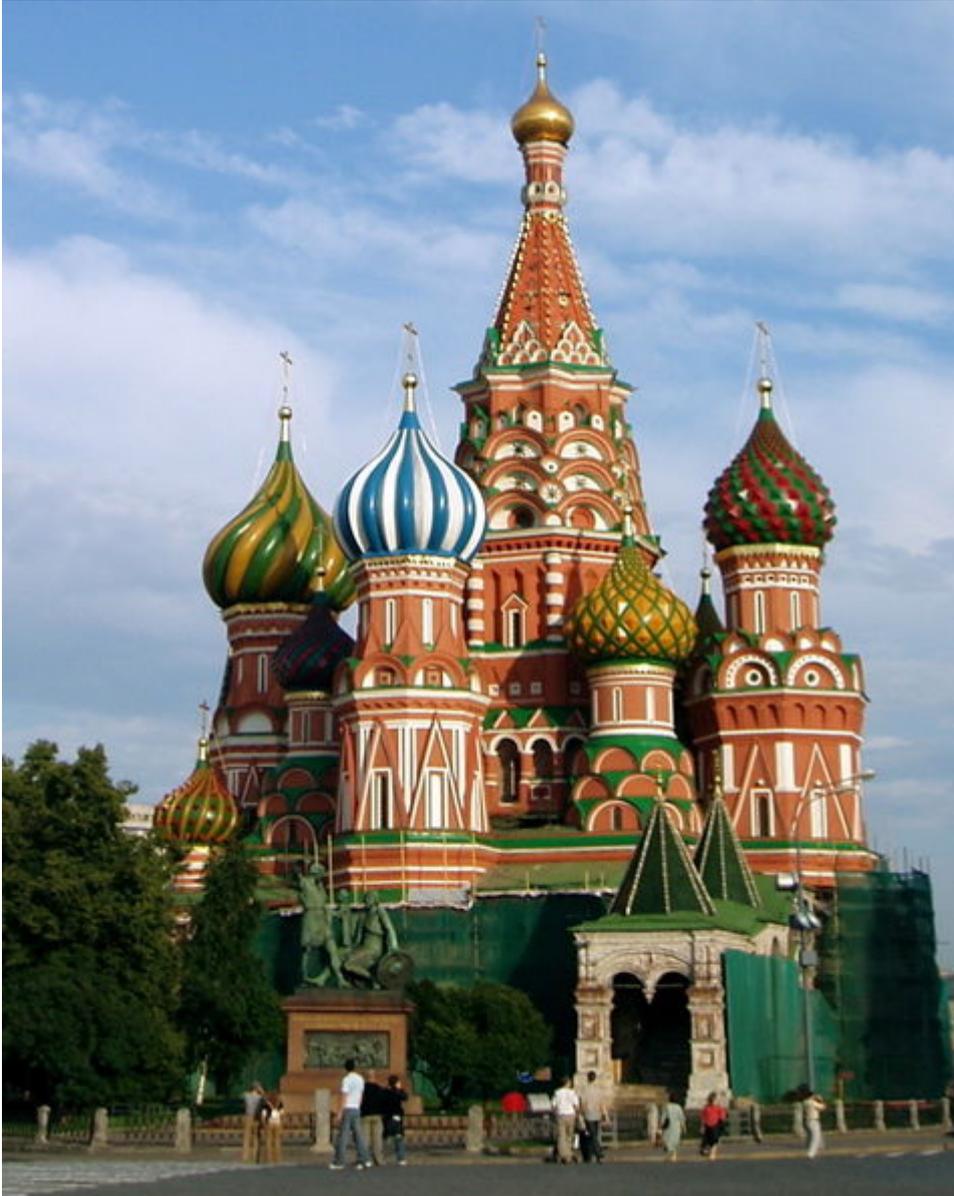
A correct theological response to the results of scientific anthropological research involves their reinterpretation in the light of the Logos, rather than a flat denial of their existence (although theology must contest the legitimacy of their nihilistic interpretation). The Fathers of the Byzantine tradition did no less when they translated the theological message of the genesis of mankind from the mythological language of the Semitic culture into the rationalistic terms of the Hellenistic culture.

HEXAEMERON

(The Six Days)



by our Father among the Saints,
Basil the Great,
Archbishop of Caesarea in Cappadocia



From a traditional and ecclesiastic perspective, the Bible is not intended as a scientific textbook, but as a theological and teleological account, an evaluation of the world and of man from and into the perspective of God (Christ calls himself Alpha and Omega), a definition of what the creation is and ought to be vis-à-vis the Creator. **Therefore the metaphors used in the Book of Genesis must be read as expressions of an exemplary history, providing us with a theological key to the mystery of human existence, and not at all as scientific data describing the actual making of the universe, life, and man.** Read in this key, as in the Philokalic (monastic) literature, the symbolic account of how man was made out of clay and given life through the breath of God (Gen 2, 7) points to the transfiguring moment experienced by a man who made the conscious experience of God's presence. St Gregory Palamas states that this metaphor cannot be taken as a description of a technology of

creation[2]. The other version (Gen 1, 27), at its turn, is only a general description of human being, which must be seen at two levels – the ikonic/theological (*imago Dei*) and the biologic (male and female) –, states St Gregory of Nyssa[3].

This is also the interpretation adopted by the neo-patristic theology, whose representatives



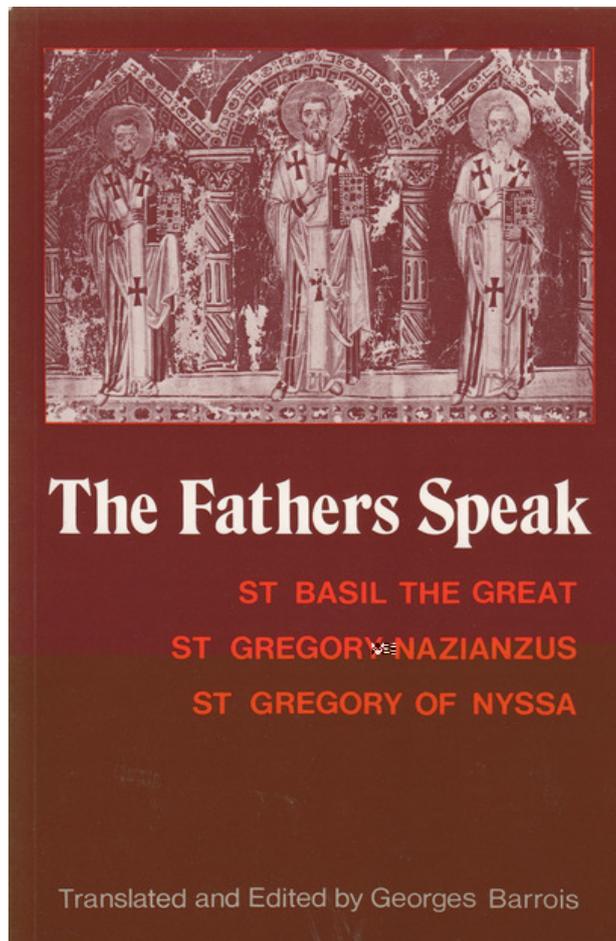
were not misled into

uselessly and counterproductively defending the scientific frame-work of the Ancient world, wherein the Holy Fathers formulated the ecclesiastic vision of man. The mystical reading of the Scripture's letter gave the neo-patristic theologians a great degree of freedom in handling the scientific knowledge of our time in order to express the same divinely revealed message, clothed at first in the Hebrew dress of the Scripture and there-after in the Hellenistic garb of the Father's commentaries. Eastern Christian theology thus avoided painful episodes of the sort of Galileo's trial, which scarred the Western conscience and led to the profound crisis of its passage from the ancient pattern to the modern one. As Vladimir Lossky points out, theology does not have to defend any particular philosophy or science, but only its own spiritual message, no matter what clothes it might have to put on in any given context [13].

An example of this kind of interpretation (which has the leeway to accommodate any other description of the material world) would be Father Dumitru Stăniloae's view – in the tradition of St Maximus the Confessor's vision of the Logos as diversified into the *logoi* (reasons) of

all things, branching out into the informing structure of all creation – , that “a certain evolution of the animals could be explained by the potential existence of some new species within the old ones” [19]. The Western authors of an Orthodox catechism also state that

“God did not create man from *nothing*, but from *earth* and all that is contained there. This means that, in order to achieve the creation of man, God used all of nature and all of its evolution – without leaving out the ape or the fish, which are also part of the earth – because **man is the achievement of God’s creation, and in him we find all of it summarized.** Moreover, God quickened man by giving him of His own living breath, of His own Spirit. God’s presence within man – which illuminates mankind and brings the light of His Face to shine upon it – is what distinguishes the human state from the state of being an ape or any other creature”. [6]



This passage which demonstrates the wish to establish a dialogue with the new context and freedom from the ancient one is not at all un-usual in the Orthodox tradition. Already in the IVth century, St Gregory of Nyssa spoke of “the earth of our bodies”, showing that man was

related both to God and to the animal world. Similarly, **Panayotis Nellas points out that there is no divergence between the patristic accounts and the most serious conclusions of anthropological research; for the patristic conception of the origin of man, the theory of evolution is not a problem.** [15]

Deification in Christ

Orthodox Perspectives on
the Nature of the Human Person



Panayotis Nellas

Even if mankind underwent an evolution (should we give credence to science, a credence liberally accorded, as we have seen, by the neo-patristic theology), the fact shouldn't bewilder the Orthodox conscience, accustomed as it is to the Fathers' constant reference to the **movement and synergy**. Actually, **the principle of synergy** is the only Orthodox response to the Western dilemma *sola gratia – natura pura*, having the added benefit that it clarifies some of the foggier mechanisms of the birth and development of life, as seen by today's science. **The fact of an evolution/becoming can be explained, according to neo-patristic theology, by the principle of synergy, planned by the divine Logos before the universe existed.** In essence, this means that **humanity, life, and the world are what they are because of the simultaneous operation of two sorts of causes. They cannot be explained either by exclusively supernatural causes or by exclusively natural ones.** The principle of synergy also means that the ideological premises of the conflict between evolutionism and creationism (the division between the natural and the supernatural) are rejected from the very beginning.



Mankind's *logos* (reason of being) could very well have been activated gradually, according to God's wisdom and in his presence, through a series of morphological mutations, which are revelations of the divine project's content. Given the length of its path, which according to the latest estimates took several million years, humanity (possibly) realized and manifested its identity step by step, which concords with the **weakness of the earth** we once were and still are (in the Orthodox tradition, **the ascetic struggle is not with the body, but rather with the earthly within us...**).

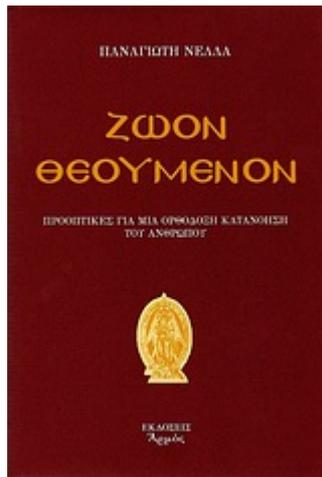


In the conception of St Maximus, the universe and any part of it, including man, have a *λογος του ειναι* (tou einai), a reason to be that constitutes the definition and sense of that being, determines it to be what it is, and makes its contemplation possible. Existing before time, the reason to be is the model/paradigm of that being but not the being itself, although it is not separated from it.

The reason to be is a divine intention (which is the way God acts) that takes concrete shape in a dynamic model; it is an informational structure that lies at the being's core, determining its modalities and indicating the sense of its movement. Strictly speaking, the reason to be is a sum of possibilities concerning the being's structure, modality, and sense; it is the state of potentiality or possibility (*δυναμικος*). A being can be all that is inscribed in its *λογος φυσικος*; its possibilities are rendered concrete in the manner of its being (*τροπος υπαρξεως*) or its physical/natural movement (*κινησις φυσικη*). Its directed becoming or natural movement leads to the activation and complete fulfilment of the being's possibilities (*energeia*), to its perfect state and shape, a process that takes place by the wisdom and in the presence of the organising Logos.

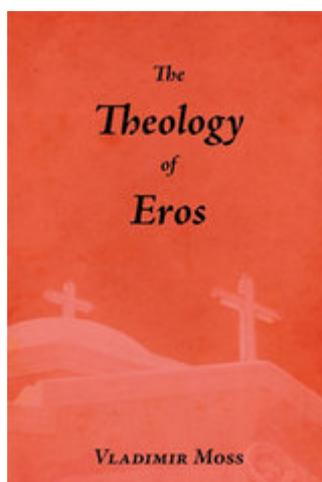


Two things are especially important here. First, this becoming is effected neither exclusively *from above* nor exclusively *from below*. Unlike creationist supernaturalism, St Maximus talks about a being's real possibility of moving and changing (even morphologically), thanks to its own structural and existential aspiration. Unlike evolutionist naturalism, he says that **no physical movement is ever autonomous, but constantly grounded in the divine act that supports it, without which nothing could be what it is.** Secondly, **on its guided way to the ultimate form, an individual being just as the being of the whole universe must suffer certain morphological changes, distension or dispersion (διαστολη) and contraction or composition (συστολη).**

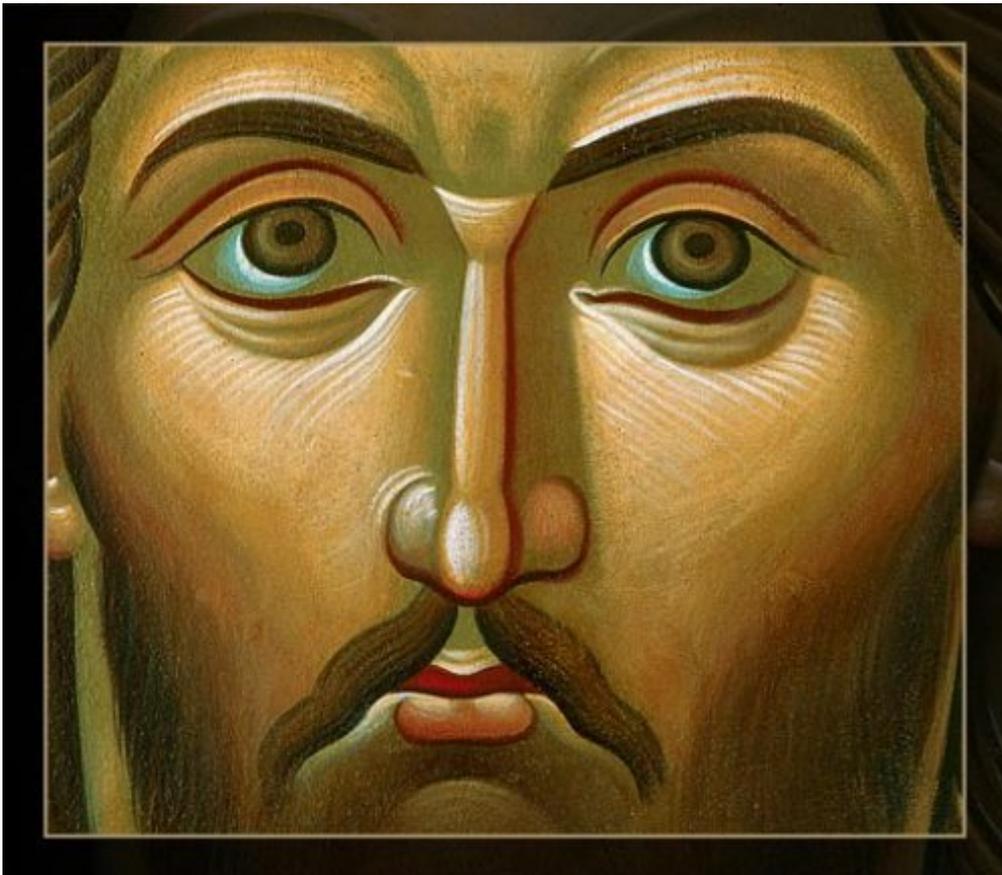


These ideas could be used to defuse the creationism vs. evolutionism debate, by pointing out that the reality of morphological changes doesn't exclude, but presupposes a logos directing this course of action[4].

Just because it isn't a supernatural act – in the scholastic sense of a *Deus ex machina* that suspends natural order – **evolution doesn't have to be Godless**. And, **since God is always and everywhere involved, through the energies of his presence, according to the plan that he himself has originated, it is an evolution with a scope, τέλος**. The reason why **theology insists on God's plan regarding man (“let us make man in our image, after our likeness”) and his involvement at every step of man's genesis (“and breathed into his nostrils the breath of life”)** is precisely in order to reveal the finality of human existence. Every effort to describe the origin (the divine plan) and the beginning (the concrete event) of humanity is useless if it misses the reverse angle of humanity's end.



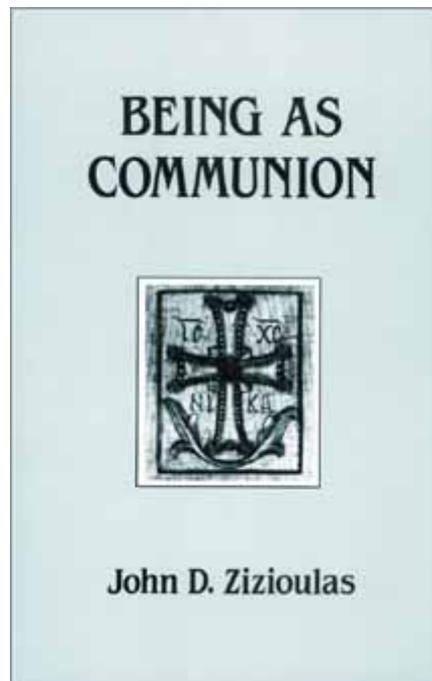
Science cannot have anything pertinent to say about the origin, since **the mystery of man lies in his archetype and not in nature**, but only (at most) about the beginning and the history of mankind. Similarly, theology cannot have anything to say either about this beginning or about the path mankind has crossed to arrive at its present form, but only about the path's originating in the plan of the divine Logos and the principle of synergy. However, both views are severely one-sided if they fail to take into account the final aim of this path, the reality of *homo viator*, called upon to become God-like – **the animal called to become God**, as St Basil the Great put it.



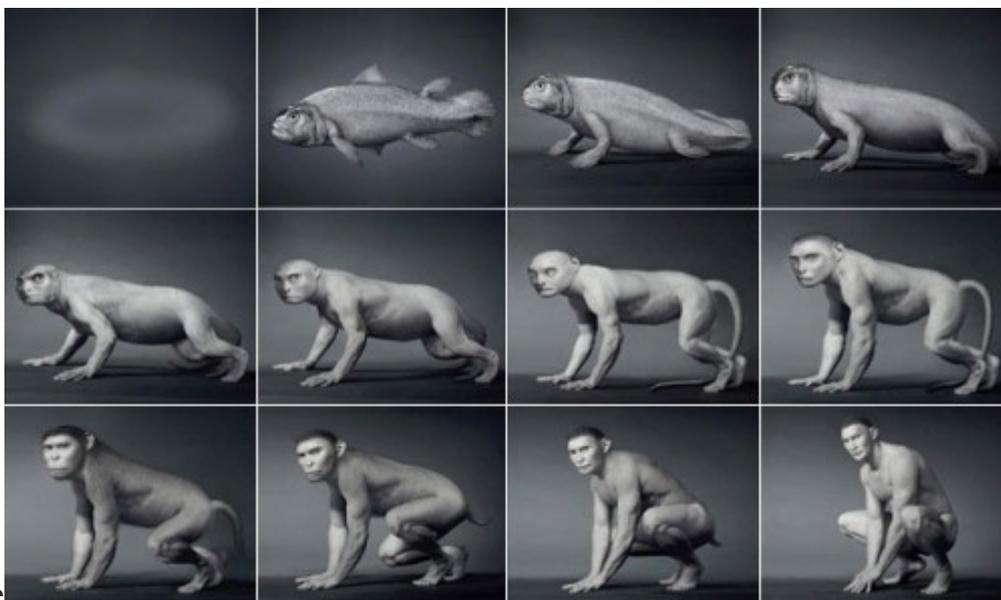
5. Transcending the Conflict

The modern conflict between science and theology, in fact between evolutionism and creationism, appears to be the history of a misunderstanding. Since, for the Fathers, humanity must be evaluated on at least two levels, the ikonic and the biological one, both scientists and theologians are wrong to consider that only one side (theirs) possesses the entire truth. Both sides may have valid points of view, but this does not mean that either one is

complete. A kindred of both animals and God, man is both what scientists and what theologians say he is.



For instance, **nobody can seriously reject the scientific fact of mankind's evolution (excepting**

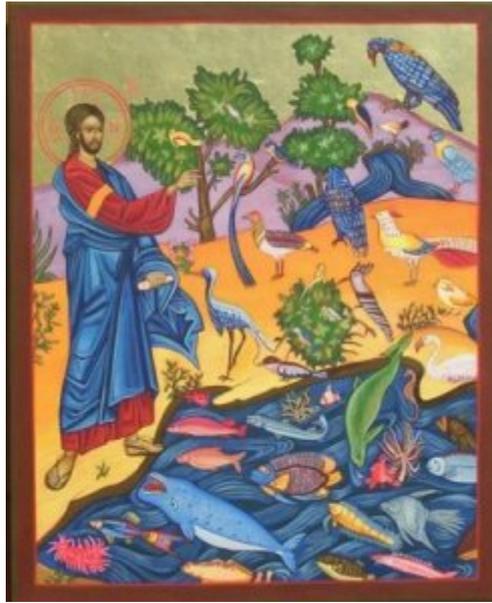


science itself), just as nobody can seriously claim that this history is dictated by irrational causes. The interpretation of mankind's evolution as a natural selection – when the term “natural” is always taken to mean independent of God (a Pelagian error revived in the modern era by Cardinal Bellarmin's concept of *natura pura*) – is not a scientific claim, but an ideological

slogan. At their turn, fearful that the image of an omnipotent God might be damaged if they accepted that **man was a descendant of the entire life history**, theologians protest that our species was created directly by divine intervention, *i.e.* by supernatural causes, outside of the order of earthly life (which was created and provided for indirectly, through natural laws, according to a much-contested Romanian Orthodox theological handbook). Although this view is one-sided and equally stained by an ideological option, it cannot be rejected completely, in so far as it testifies to the active involvement of God and of intelligible causes, expressions of the Logos, in the processes of life.



In the debate over natural *vs.* supernatural causes, the obviously sticky point is the problem of mankind's *beginning*. By focusing their attention on this problem exclusively, both sides have committed an error; instead, we should recognize that at this time, we can't discuss this problem pertinently. If we accept that (1) the universe is simultaneously expanding and becoming increasingly complex, and (2) human history is a part of this movement, then we must also accept (3) that there might well be a sense to all this. **In the terms of St Maximus, the origin and the beginning become intelligible only when seen from the end (εν τω τελει).**



At this point, the patristic theory of Logos could become the frame of reference so urgently needed today for the comprehension of the situation: **evolution occurs through selection, of course, but it is not just natural selection, which would be against the principle of synergy. Selections are possible because, beyond environmental challenges and the survival of the species, before the universe began, the divine Logos drew the plan of a creation that would evolve – in and through the cosmic Christ (Col 1, 15-18) and the man who has become Christ-like (Rm 8, 19-23) – toward super-organization and transfiguration, in communion with God.**



Selections are possible because of the Logos and within it. This means that we should concentrate on the final aim of our evolution. Only in this area can an encounter between science and theology occur, an encounter that has long been required by **man's sense-seeking mind.**



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[1] From an Orthodox Christian point of view, Einstein’s sentence, although acceptable, is insufficiently qualified: there are levels of reality beyond the reach of what science can seize through its particular methods, and within those **levels there are facts no less positive for being utterly non-quantifiable (e.g. the mystic state of contemplating the divine uncreated light)**.

[2] Cf. *On the divine and deifying participation*, 13 (in the Romanian *Philokalia*, vol. 7, Bucharest, 1977).

[3] Cf. *On the structure of man*, 4, 16 and 18 (in ‘Părinți și scriitori bisericești’/Fathers and Christian writers collection, vol. 30, Bucharest, 1998) [see also 3].

[4] Cf. St Maximus Confessor, *Ambiguorum liber*, PG 91, 1080B, 1081AB; *Quaestiones ad Thalassium*, PG 90, 272AB; *Capita theologica*, 1,3, PG 90, 1084AB.