

## AN INTRODUCTION TO CONTEMPORARY STUDIES ON THE REFERENCE OF RELIGION TO THE COSMOS

There hardly exists a more discussed problem than that of the relationships between cosmos (understood in the most general Kantian sense of cosmic space and man's spirit) and religion. From the moment man turned into a thinking being, asking the question: «what is in the sky?», he had at the same time gone through his first religious feelings, his faith in anything. Without defending dualistic or monistic positions but, following the ancient philosophers, we can say that, having in mind the close similarity in the physiological structure and functions and the almost identical cellular structure of the swine and man, the jocular, but not unimportant, question «what are the differences between these two living beings?» could have the classical answer that the swine had never been interested in things occurring in the sky, on the one hand, and that it had hardly suffered any particular religious feeling, on the other. The interrelationship between the sky and religions consists not only in the primitive materialistic explanation of sending God to places which are unapproachable to man - first to higher and higher peaks, then to the sky, and in the last century - to the indefinite cosmos... Whether it was Olympus, the seventh heaven or out of the gigantic shell of the accessible universe, God always remains a powerful force that is independent of man, His final location being the World which, upon will, could be physically taken as a boundless boiling cauldron of small and large, flaring of dying universe, while spiritually, every individual builds it in himself.

Philosophers with a long-lived atheism used the achievements of astronomy and other space sciences, as well as the penetration of mankind into space after the beginning of the space age in the year 1957 as a basis of a total denial of religion. The particular blame for this is attached to theologians who often linked religion with concrete scientific results. The tragic example of Catholicism and its astonishing, needless and primitive relationship with Ptolemy's geocentric system in the Middle Ages is probable the strongest one of this sort. Even now, however, we are witnessing some naive attempts at forming complexes of modern scientific knowledge which were to be in full or, at least, close harmony (understood as a non-conflict unity of diverse but corresponding to each other opposites) with religion. Such a complex of knowledge gave the idea and theory of the Big Bang which, if primitively understood, completely supports the creative divine origin and is opposite to the Aristotelian conception of the infinity of the world (not the universe, but the boundless multitude of universes) in time and space. Certainly, each detailed interpretation of philosophic consequences from the Big Bang (for example)<sup>1</sup>, from the other competing notions (for

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1. K. SERAFIMOV, M. SERAFIMOVA, Philosophical Consequences of the Big Bang, *Proceedings of the 5th International Symposium on Philosophy, Physics, Cosmos*, 1989, p. 163.



instance)<sup>2</sup>, etc., leads to explicit conclusions about the impossibility to deny or confirm religions from these contemporary scientific results. Without any reasons, many people confine the problem of cosmos and religion to the widely studied and interesting problem of links and interrelationships between science and religion. On the one hand from the point of view of science, the problems of cosmos are part of the complicated and contradictory dependence between religion and science. On the other, however, space problems are Kantian conception of cosmos, including also the spiritual and sensitive inner world of man, undoubtedly goes beyond the broadest object of modern science. This unconditioned fact could be estimated only if the scientific quests include the recently rejected internal enlightenments of a great influence on the faith, deontological values and numerous other processes, phenomena and parts of man's spiritual life which are difficult to be classified.

We therefore assume that the object «cosmos and religion» is more complex and wider than the standard understanding of «science and religion» which the reader, in turn, could find just for an example in notes 3,4,5,6 etc. Certainly, the two objects have much in common. In this respect, it is natural to put the foremost question - has religion the right of a comparative and equivalent presentation next to science and cosmos? It is obvious for everybody that this question is equivalent to the problem of God's reality and the associated various religions. The scope of answers is very broad. From Aristotle's harmonic ideas of the relationships «science and religion» transferred to the Marxist estimation of «empty tautologies» in such a nice form by Thomas Aquinas - this is the wide range of assessments of relationships between faith and knowledge. Without analyzing, proving or even only illustrating this complexity and diversity, here we offer only two examples of extreme attitude toward the question: do the two objects «cosmos and religion» have the right of equivalent discussion and are the relationships between them strong enough? In our opinion, the first primitive answer can be illustrated by<sup>8</sup> where we find a groundless statement that modern astronomical researchers theoretically prove the existence of God. The second example is in the activities of international space organizations. Their initiatives have never included in any form the object «cosmos and religion». Even the International Astronautical Federation and the International Astronautical Academy, engaged in analyzes of important problems of the impact of Space Age on global human psychology, culture, arts, literature and other intellectual activities, have not discussed the themes described here. It is all to the credit of the International Association «Cosmos and Philosophy» that this essential and interesting issue was made an object of discussions.

From a historical point of view, a great number of proofs could be found about the interdependence between cosmos and God, and hence - this influences on science, spirit and religions. In spite of the complexity of his attitude toward the problem (a fact that reflects his

2. H. J. BLOME, J. HOELL, W. PRIESTER, *Neue Aspekte der Kosmologie*, Ed. Inst. für Astrophysik und extraterrestrische Forschung der Univ. Bonn, 1988.

3. *Science and Religion Shaping Man's Future*, Los Angeles, 1952.

4. M. AKBAR Ali, *Aspect of Science in Religions, A Comparative Study*, Print. By Roma Print. Works, Dhaka, 1987.

5. Abdu SALAM, *Ideals and Realities*, World Scient. Publ. Co., 1987.

6. *Philosophy and Sciences*, Proc. of the first Int. Symp. of Philosophy and Int. Disc. Res., Zacharo, 1986, Ed. Int. Centre of Philosophy and Int. D. Res., Athens, 1988.

7. E. A. MOUTSOPOULOS, *The Reality of Creation*, Ed. Paragon House, New York, 1989.

8. Ulf. HILDENBRAND, *The Universe Witnesses for God*, Ethos, Ed. Færderung, Christl. Publ., Bernek (Bulg. Edition), 1992, p. 8.



real diversity and intricacy), Aristotle acknowledges this relationship: «The world knowledge is a unity of the sky, the earth and the beings living on them, or a unity of gods, people and those who were born by them. The world knowledge is a deity from where the world order originates and is brought to completion». Similar are the assertions of Posidonius)<sup>9</sup>. Here we underline the practically identical interpretation of the sky, the earth and the beings existing on them by the unity of gods and people, i.e. the Kantian relationship between the heavenly world out of me and the spiritual world inside me was proved for the first time. After the ancient Greek philosophers, this was probably best expressed by Seneca (from a citation in)<sup>10</sup>: «The universe you see to cover the whole divine and human world forms a unity: we are members of a unified body».

Here we assume that the object of this study has existed for millennia, has numerous and contradictory interpretations and is worth studying exactly at present when the primitive interpretation of God excludes the possibility of locating Him neither on top of the temple, or anywhere in heaven, i.e. in cosmos, in the accessible universe, or in other universe in contacts or penetrating into our universe (universes of antimatter, anti-universes, etc.). Because we already know and have direct contacts with both the space above the clouds and the mythical divine «Twelfth plane». And, if we interpreted the concept of God primitively, we would be able to produce atheists most easily. Therefore, the purpose of the presently initiated international study is to find the truth, to obtain and optimally comparative and representative information and to analyze the profound relationships between cosmos and man's spiritual world which either generate or, vice versa, reflect God and religion. For, since the times of Klement of Alexandria, who used to say that there is no knowledge without faith and no faith without knowledge<sup>11</sup>: «Their total harmony needs the study of the whole range of man's knowledge»), till nowadays, when W. Heisenberg wrote: «The first mouthful of natural sciences makes the man an atheist, but on the bottom of the glass there is God always in its greatest possible complexity and depth.

The necessity of studying this problem is supported also by the opinions of distinguished scientists starting from Galilei and Copernicus to Bohr and Einstein. The great Isaac Newton wrote: «The magnificent structure and harmony of the universe could originate only according to the plan of omnipotent beings. This is and will remain my last knowledge». Kepler associated the universe directly to God and found the definition: «To study astronomy is to read God's thoughts». Furthermore, Kepler took as an epigraph of his famous book, «Harmony of the World», the ancient Diadochi saying in *Principal Foundations of Theology*: «Mathematics gives the greatest contribution to the study of nature by making it possible to see the orderly system of ideas constituting the universe... and present the simple elements building the heavens, acquiring in different parts the corresponding shapes in their whole harmonic and proportional unity». Here, as well as in Kepler's treatise, the creative divine origin is above suspicion and the structure of the universe is considered to be objective-oriented which is a proof of the closest unity between cosmos and religion.

Undoubtedly, from the point of view of history, one of the most fundamental contributions to the issues discussed here are those of Th. Aquinas, I. Newton and A. Einstein. It should be noted that the apogee of mediaeval thought belongs to T. Aquinas and is expressed as a harmony between faith and knowledge. According to him, «knowledge is an area of obvious truths which can be proved, and faith is an area of non-obvious truths which cannot be

9. *Antologia miroboř filosofii*, Moskva, 1, 1969, p. 486.

10. *Dpebnerimskie misuiteli*, Kiev, 1958, p. 80.

11. G. AKBNISKII, *Summa Telogii* 2/11, Moskva, 1958.



proved. ...one and the same man can know something and believe in it.

In conclusion of this analysis we once more underline the danger of binding religion with particular scientific results. This is perfectly described in note 12 where the extremely temporal and dynamical character of scientific approximations to the truth and to the much more stable «eternal» character of the faith, the religious and deontological standards are analyzed. We therefore think that the spirit and principal directions of the conquest of space (taken in its entire depth and in the respective human spiritual dimensions) should be compared and correlated with religious faith, and not with the concrete and transient scientific results and their interpretations. This contradicts, for instance, with note 8 and with many other similar publications which offer direct and declarative relationship between, let us say, the gigantic dimensions of the accessible universe and the statement about its creative character. Thus, in note 13 we read: «The night sky has its own language and, without uttering a single word, it is able to strike people of all cultures and epochs». Yes, this seems to be true, but is not yet a religious argument. There is a much more romantic, impressive and exciting description of the night sky by Stephen Zweig in «Amok». But we, who are engaged in direct studies from the night and day sky airglow, know that this lovely, shower - like airglow comes from the natural optical emissions of the sky between 70 and 700 km above our heads - see for example notes 13, 14. Therefore, today's religion does not need primitive scientific apologists, but scientists who find real explanations and develop the religious principle jointly and nonconflicting with science.

Another big primitive error of the unfortunate advocates of a religion which puts them immediately into conflicts with space explorers and leads to incredible mistakes is the search for unsolved scientific and technical problems declared as inaccessible to scientists, discoverers and inventors which are arbitrarily and artificially worshipped. For instance, again in<sup>8</sup> we read: «In spite of the fact that nowadays man managed to impose himself as a master of almost all areas, it seems that he will be forever deprived of his power over a part of nature - the power over the distances in the universe». Methods for reaching gigantic distances were developed already in note 15. The Committee on Interstellar Flights of the International Astronautical Academy has already prepared an efficient strategy for attaining the Oort cloud and other stellar systems provided that, of course, several generations of people were born during the space travel. As an idea and scientific justification, this problem is solved at present - see for instance note 16.

Making no pretence to be exhaustive and highly accurate in the estimations, we think that the international scientific and philosophical community should now concentrate on the deontological effects of space conquests and their religious understanding. In this respect, contemporary religion generally keeps silent before the sinister picture of our space future shown by film figures and writers. We can say that no Christian virtues, for example, are depicted in these really not only fantastic but phantasmagoric ideas of the future. They are characterized with dominant armed collisions, wild hatred, degenerate extrapolations of the vilest relationships in present day society, pseudo - «machine» or quasi - «computer» dangers and similar stories which not only form perilous tendencies for the future, but also create

12. Cf. note 8.

13. K. SERAFIMOV, *Kosmitsiskie ucsegobaniya/b Bulrariï*, BAN, Sofia, 1979.

14. K. SERAFIMOV, M. GOGOSHEV, *Airglow and Ionosphere*, Ed. BAS (in print).

15. N. KALITZIN, *Die Relativistischen Raketen*, Ed. bulg. Acad. Sci., Sofia, 1969.

16. K. SERAFIMOV, B. KOMITOV, Generation of Artificial Jets as a Propulsion of Cometary Rides, *World Space Congress*, 28 Aug. - 6 Sept., Washington, 1992, Rep. IAA-92-0235, p. 74.



pessimism and desperation at present. One of the areas where religious figures and scientists must integrate effectively as soon as possible is namely the conscious and benevolent formation of a new conquering spirit of our civilization which is to help the purifying of mankind during the greatest resettlement, and not to transfer and further extend the earth's present social, psychological and other vices into space.

The basic ideas in notes 21, 22 about the deontological effects of the space age correlating with the religious feelings are not well grounded and elaborated. These themes are analyzed in detail from the point of view of space deontology in notes 23, 24 but, even there, the problems of the new changes in the religious moral standards caused by the space age are not treated. Therefore, as a whole, the relationships between space deontology and religion remain a rewarding subject of future studies.

The above-mentioned union between religion and scientists is more and more needed for the progress of the civilization living on the earth. We need most than ever more moral virtues and humane relationships because in the overpopulated planet our relations with nature, as well as those between us, become prevailing. The influences of the modern ideas of global space ecology on our religious perceptions are also strong.

However, the problem of the relationships between man's attitude toward nature and, in particular, toward space environment, and the corresponding religious impact, is very controversial and has its own independent importance<sup>17</sup>. Of course, we can by no means agree with the fact that Islam was therefore better religion than the Jewish-Christian religions<sup>18-20</sup>. The ideas of a more serious scientific justification of Islam than of other religions in their cosmic reality are also acceptable, as well - see note 4 and some aspects of notes 12, 22.

The real interdependence between cosmos and religious feelings has shown an interesting transition from the ancient classical interpretation to the present-day religious reflection of astronomical and space researches and the dissettling of our civilization. Aristotle says that God is an intellect that is not different from its act of contemplation. Then follows the transition to sensitive reality, to the motion and, hence, to the will whose essence is the intellect. Since the intellect is a unity, it forms the real essence of the universe. In the relatively new publication<sup>25</sup>, for example, such a thesis is developed by using another terminology - God is absent but the being and its motion exist.

Probably, one of the best examples of the active and constructive character of the interrelations of our ideas of cosmos and religion can be found in the Russian cosmism<sup>28</sup>. As it has been shown in our studies<sup>29</sup> the Russian cosmism preserves and develops the Aristotelian cosmism, conveying over the ages the best of ancient Greek, Byzantine and Bulgarian

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17. L. WHITE, *The Historical Roots of Our Ecological Crisis, Ecology and Religion in History*, Ed. D. & E. Spring, 1974.

18. *Knowledge for What*, Islamabad, 1982.

19. S. H. NASR, *Man and Nature*, London, 1976.

20. Π.Ι. ΒΑΒΑΕΣ, *Kurbanaf*, *Ecologia i Islam*, part 2, Kajan, 1990, p. 57.

21. *The Deontology of the Conquest of Space*, Academie Du Royaume du Maroc, Casablanca, 1984.

22. *The Impact of Space Exploration on Mankind*, Pontificae Academiae Scientiarum Scripta Varia, Vaticana, 1986.

23. K. SERAFIMOV. M. SERAFIMOVA, *Osmobk na kosmitseskata deontologuiya*, Bad, 1987.

24. IDEM, The Basis of Space Deontology, *Filosofska Misal*, 43, No 11, 1987, p. 32.

25. M. MARKAKIS, *Kosmos e realomost*, part 1, Kajan, 1990, 52.



philosophical and scientific schools. The impact of Russian cosmism on the generation and development of space age and its future plans is immense.

Without being exhaustive, in conclusion we should say that the renovation of classical studies on the relationships between our ideas of cosmos and religion should start structurally, go through logical and ontological analyses and include studies of physicochemical generators of the sensitive world of man and of this world itself, as well.

The still unaccessible (or, probably, nonexistent?!) extraterrestrial civilizations and the possible relations with them through God is an unsolved problem. Anyway, the five-century-old experience of the conquest of the New World certainly shows that the touch with other civilizations does not destruct but, on the contrary, enriches and helps the development of religions. Despite that there is no direct analysis of such contacts and their significance to religion is available, it follows from some philosophical consequences from studies of extraterrestrial civilizations<sup>26,27</sup> that this will be a renovating factor of our conceptions of God. However, the extraterrestrial birth of several subsequent generations - on Mars, on the Moon or elsewhere - will result in the renewal of mankind and the decisive modernization of our religious senses, ideas and standards.

From this unambitious presentation, we can draw some conclusions intended for the International Association «Cosmos and Philosophy». First of all, the initiative of studying the relationships between the ideas of cosmos and religion deserves congratulations. Modern space achievements should be correlated with the social changes and the impact of both of them on the spirit of man. Now, when the changes in education, culture, literature, global human psychology and other areas influenced by the space age are widely discussed, the modernization of religion under the impact of the space conquest is of great importance. On the other hand, it is necessary to set aims for the development of religious standards and their influence on mankind that is penetrating into space, needing more than even benevolent motives for their activities and sensitive limits of their good existence.

In this reference, the relations of the International Association «Cosmos and Philosophy» with other space, philosophic and religious organizations are extremely essential. And, having expressed our respect to the exceptional role of ancient Greek cosmism, transferred to modern times through the Orthodox religion, we should point out the rational idea of a search for these relations, above all, with the Oecumenical Patriarchy and with the organizers of the events reported in notes 21, 22 whose subjects of scientific analysis are close to these, described here.

In conclusion, we should like to express our belief that the first initiative - the Round Table Discussion «Cosmos and Religion» at the Fourth International Conference «Cosmos and Philosophy» (Stara Zagora, October, 1992) - will mark the successful beginning of numerous initiatives in this interesting area.

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25. M. MARKAKIS, *Kosmos ...*, part 1, Kajan, 1990, p. 52.

26. A. Z. URSUL, *Tsilobitsistbo, jimlia vseilenaya*, Misl, Moskva, 1577.

27. B. B. RUBTSOF, A.D. URSUL, *Problema vnezemix tsibilizatsii*, Kichinef, 1987.

28. Ruskii kozmizm u noosfere, *J3d, filosofchestvo CCCR*, Moskva, 1989.

29. K. SERAFIMOV, *Kosmos u humanizm, J3d Napodna Kultura*, sp. 15, 7 apr. 1989, p. 1.



**ΕΙΣΑΓΩΓΗ ΣΤΙΣ ΣΥΓΧΡΟΝΕΣ ΕΡΕΥΝΕΣ ΩΣ ΠΡΟΣ ΤΙΣ ΑΝΑΦΟΡΕΣ  
ΤΗΣ ΘΡΗΣΚΕΙΑΣ ΣΤΟΝ ΚΟΣΜΟ**

**Π ε ρ ί λ η ψ η**

Στήν παρούσα μελέτη γίνεται φανερό ότι τα προβλήματα «κόσμος και θρησκεία» είναι ευρύτερα και βαθύτερα από εκείνα της «φιλοσοφίας και κόσμου». Συνάγεται το συμπέρασμα ότι οι θρησκευτικές έννοιες δεν πρέπει να συνδέονται ειδικά με τα επιστημονικά δεδομένα, αποτελέσματα και θεωρίες. Η αλληλοεξάρτηση των ιδεών για τον κόσμο, και ειδικά για το σύμπαν και τις θρησκευτικές έννοιες και συναισθήματα, αποδεικνύεται από ιστορική σκοπιά. Η ανάγκη να εξευρεθεί μια σύγχρονη αντιμετώπιση του προβλήματος είναι απόλυτα δικαιολογημένη. Δίδεται έμφαση στο γεγονός ότι τώρα το κύριο μέρος του προβλήματος συνίσταται στις σχέσεις μεταξύ κοσμικών επιρροών - σε δεοντολογικά δεδομένα - και θρησκείας. Ποικίλες κατευθύνσεις και πολυάριθμες οργανωσιακές ενέργειες οδηγούνται προς τη Διεθνή Ένωση «Κόσμος και Φιλοσοφία» για τη μελέτη αυτών των προβλημάτων.

Μτφρ. Α. ΑΡΑΒΑΝΤΙΝΟΥ-ΜΠΟΥΡΛΟΓΙΑΝΝΗ