



EUROPEAN RESEARCH NETWORK

Science – Religion Interaction in the 21st Century

INTRODUCTION

We have the privilege these days to witness rapid developments in Science. From Sub-Atomic Physics to Cosmology, from Information and Computer Technology to Biotechnology, standard theories and expectations recede and novel ideas and conceptions emerge. The Universe appears now to be radically different from the classical one, developed during the 19th century. The new Universe is an evolving cosmos, embodying the elements of complexity, uncertainty and diversity. The human being, considered in the past as a privileged observer, becomes an integral part of this ever-changing landscape. Biology decodes the most important functions of the human organism and the history of Homo sapiens is linked to the overall history of Creation.

Under these conditions, questions that could be ignored earlier now become unavoidable. These are questions related to the meaning of the universe, the values of our activities, our intention and the teleological implications of the overall evolution. The encounter of Science, Philosophy, Theology, is not anymore a question of preference or choice, but a necessity for an integrated comprehension of the Cosmos and Anthropos. We used to believe that Science progresses by analyzing and explaining available experimental data. However, Science itself is changing and may advance further by addressing metaphysical issues related to basic assumptions underlying the foundations of Science. Each existing scientific theory may be considered as a sign indicating new realities and allowing the formulation of new questions. The Science-Theology interaction will greatly help and reflect about this change of attitude. The same interaction will also bring about new light in theological issues. Traditional Theology refers to fixed dogmas, but the theological truths admit always a multiplicity of interpretations. Thus, we may hope for an enriched Theology, which, inspired by the Uncreated, sheds light on Creation.

Classical Science was born and grown, 300 years ago, under the auspices of the Cartesian principles. A new conception of nature is introduced and the traditional ties between nature and man are loosened. The Cartesian subject is defined and limited in its cognitive action, the «cogito», and it is the sole source of knowledge and authority. Matter appears inert and it is characterized only by its extension in space (*res extensa*). The Aristotelian categories of *ουσία* (substance) and *ποιότητα* (quality) are considered as non-scientific and only quantity is important, leading to an intense mathematization of the scientific language. The analysis is concentrated on the concepts, without wondering how they are connected to the real. Nature itself is devoid of any meaning and Ockham's razor cuts off anything considered metaphysical or redundant.

Twentieth century Science defies this paradigm. Special Relativity of Einstein unified space and time into a continuum and the same event is described in different ways by different observers, thus obtaining a multiplicity of languages. In General Theory of Relativity the space-time continuum acquires a dynamical character and the «relativity» aspect is even more accentuated. Scientific language appears as an "energy", or in other terms as a locus of the encounter of the external reality and the specific observer. A decisive blow to the classical view is brought by Quantum Mechanics. In Quantum Mechanics a new logic emerges, quantum logic, based on triadic relationships. The localization of matter is also lost. The quantum particle is actually everywhere and the prime feature of Cartesian matter, "res extensa", is destroyed. Heisenberg's uncertainty principle brings closer the observer and the observed, the subject and the object. Modern Mathematics also provides new insights, regarding the nature and the range of analytical thinking. Cantor's study of the infinity has shown that there is a hierarchy of infinities. Gödel's theorem has shown that we cannot separate mathematics from metamathematics. In every formal language we may encounter undecidable statements. The true statements exceed in number the proven statements and the continent of truth cannot be explored using only the analytical method.

Modern Science implies a new metaphysics. Key elements of the new metaphysics is the preponderance of becoming over being, the stratification of reality and knowledge into levels, the replacement of dualisms by triadic relationships, the creation of languages which accept the antinomy and incorporate apophatism. The Science of the 21st century, freed from the constraints of a narrow rationalism, may become a privileged discussant of Religion. Within Christian Theology, we find an integrated comprehension, providing valuable insights, notably:

- a unified picture of nature and anthropos, both being parts of the Creation and intimately connected. For Maximos the Confessor anthropos is a micro-cosmos and cosmos is a macro-anthropos
- hierarchy levels and a unification process bringing closer the sensible and the intelligible
- a real unity between the knower and the known, the subject and the object. At the end of the knowing process, knowledge becomes love (*η γνώσις αγάπη γίνεται*) as St. Gregory of Nyssa says
- an extensive use of triadic relationships. We may mention the definition of Truth by f. Florensky: “Truth is the contemplation of Oneself through Another in a Third. The Truth is therefore one essence with three hypostases.”
- the antinomial nature of the truth and the use of apophatism in order to approach the ineffable
- an eschatological dimension. Our present knowledge is incomplete and the ultimate truth will be found in the *έσχατα* (at the very end). “For now we see through a glass, darkly; but then face-to-face” (1 Cor. 13:12). Or, "the things of the Old Testament are shadow, the things of the New Testament are image, but truth is the state of the world to come" (Saint Maximos the Confessor)
- a deep and profound understanding of the human person (*πρόσωπον*), permitting a thorough analysis of the issues raised by modern Biotechnology

We plan to focus our research activities on three main subjects. These privileged subjects encourage the interaction between Science and Theology, the analytic and non-analytic, the profane and sacred. We feel confident that our collective knowledge and scholarship would allow us to bring innovative contributions on highly important issues, and demonstrate the usefulness and effectiveness of an approach, where scientific and theological apodictic methods are jointly employed.

Our aim also is to increase social awareness of Science-Religion issues, to raise, present and study issues of general concern, to help in developing a new attitude towards the Science-Religion relationship. We plan therefore to organise public conferences on a variety of issues.