## **Science and Religion**

The civilized world entered in the  $20^{th}$  century with the conviction that the science has an unlimited capacity to reduce everything, even the religion, to chemistry, physics and finally to the movements of electrons and atoms, which can be, mainly controlled and predicted by mathematical equations. Best case scenario, only a few areas still not explained and which decrease gradually in number, have been reserved to God. Now, at the beginning of  $21^{st}$  century, we found out with difficulty that the science and the rational arguments are not remedies for any inconvenience, that the application without judgment of science and technology may even threaten the existence of the world.

It was hoped, that now at the beginning of the millennium, the new understanding of authentic physics and Christian theology may provide a solid basis for the interactions between them without the complex sophistication and the clerical intolerance from the past. This involves a shifting from conviction in the technical solutions to a moral approach and truly spiritual. The science, if it is correctly interpreted, does not offer a basis for morals and ethics. It is, by its nature, amoral. The people make and use science, which must offer from other resources, the values and the standards after which the morality and the ethics have to be judged.

As Howson noted (M. Howson, A catholic Scientist, Physics, Leeds), no one has any difficulty to accept literally the knowledge and the dogma of his/hers religion. There is no problem to be a religious person and a scientist: the science and the religion are totally different ways to see the reality and are not in conflict. It is the same thing as in music which depends on the applied acoustics but it comprises much more, or as in the esthetics of a painting which is much more than the chemistry of the painting. The conflicts cannot be avoided when the scientists try to preach philosophy, morals and other "scientism", while the organized churches insist upon the dogmatization of some natural events without spiritual relevancy. No one could claim that he/she has divine wisdom and universal knowledge. Both are just projections of a complex and confused world in two independent reference systems which are fixed and limited by the anatomy of the human brain. The absolute truth cannot be found in only one system, but stays, in a way, between them.

A great physicist, Sir Nevil Mott, Nobel Prize winner for Physics in 1977, took care a lot of the relationship between science and religion. He was a friend of the Romanian professor Acad. Dr. Doc. Radu Grigorovici. Mott wrote two books about the dichotomy Science-Religion: Christianity without miracles and Can scientists believe? (Ed. James & James, London 1990). His reflections are of overwhelming importance both for the scientists and for the philosophers and the probationers of religion.

The physicists know well that many natural events (for instance the behavior of very small particles and of luminous waves) may be satisfactorily described in terms of two theoretical models which do not superpose. They do not become schizophrenic and they do not get insomnia because they do not know the nature of electrons and photons.

The self-consistent models of physics are powerful and they have a practical utility because they strictly limit themselves to natural reproducible events, which can be put in connection, by deterministic conclusions or mathematical formulae, with other facts which have already been proven by many critical experiments realized in controlled conditions. All human aspects are excluded, so physics is and must be amoral. The religion has the additional task to consider the conscience of human beings, their social behavior, the moral and ethical problems as well as all the other supernatural phenomena, which cannot be investigated by reproducible experiments or mathematical logic. The metaphysics and the natural philosophy represent a new approach, which has as purpose to unify the two extreme positions of science and technology by pure reasoning, in a great and universal model of the world.

The dualisms spirit-matter, soul-body, conviction-reasoning or God-World appear in a form or another in all religions of the world. The dualism seems to be powerfully fixed in the anatomy of the human brain: two hemispheres with enough different functions weakly connected only by a filamentous "cable" named "corpus callosum". For psychoanalytic purposes C. G. Yung assigns religion, conviction, emotion, poetry to the right hemisphere and the science, the facts, the reasoning, the prose to the left hemisphere.

The interface between brain and mind can be described by the relationship between "dendrites" and "pshychons" (mental elements). Because the interaction works with molecular displacements in the limit of Heisenberg principle, it is not characterized by determinism and may be done responsible for the supernatural influences, as for instance "the free arbiter". Another speculative statement says that at the highest level of the mental world may exist only pshychons organized in a great psychic unit which represent the "ego" or the "soul". This one may survive the death of the brain and may lead further the psychic memory.

The dual structure of the human brain: mind and personality, not only imposes to ourselves as individuals, the fate to wear two hats: the scientific one and the religious one, but it also separates our cultural world in a scientific and religious approach which cannot be brought to harmony in an intelligible vision of the world.

From the historical point of view, the development of science and religion follows parallel ways. At the beginning, there is always the unexpected observations, new ideas or revelations, which emerge in the creative mind of a person. They are afterwards communicated and verified regarding their conformity and utility, in the contemporary societies. In the end, they are materialized as natural laws, religious dogma, ethic and esthetic rules.

Who expressed the Christian doctrine? In what social condition did it emerge? What interests does it serve and to whom? There is a tendency to demythologize the religion. Similar to the religion demythologization is the de-sacralization of modern science, which, recognizing the limitations of science, it resists to the old tendency to formulate deterministic explanations for everything or for every phenomenon. Thus, the deterministic laws of the physics are based on statistical probabilities mediated by a great

number of accidental events at atomic level. In Heisenberg formulation of the quantum theory, the energy of an atomic process is, as a rule, uncertain and may be defined only with a strictly defined precision.

All aspects of the uncertainty in modern physics may be interpreted as a progress of science towards the border between natural and supernatural. This means that we (or God!) can use, in fact, the disorder at a certain level in order to produce regularities needed to express the purpose at a higher level of aggregation.

The miracles, which contradict all laws of nature, represent the central controversy between religion and physics. Sir Nevil Mott accepts that it is a real miracle only the human conscience, which could never be explained either by physics or by psychology. In this would consist the miracle of the action of God. The belief in an incomprehensible and unknowable God, who is outside us, became necessary because without Him life would seem "a story told by an idiot".

The religions, which do not agree with the laws of physics are considered by the illustrious scientist Sir Nevil Mott as distillations of our ancestors' wisdom regarding moral and human situations which come out of the scientific model. They must be taken figuratively and not ad literam. Their relative truth changes the significance from one person to the other, from one country to the other, in contrast with the absolute truth of the laws of physics which is determining for the scientists.

The same Nevil Mott affirms that the attitude of the scientists to the religion seems to be influenced more by education and by the social and cultural environment than by an impulse which comes from the scientific understanding of things. Mott declared: "I believe in God because I want to, in order to give sense to my life!"