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Where is the Science?

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Science is used and misused this day in a great variety of ways, all of utmost relevance for human life and activity. The world policy found it good for science being employed to the military arts, and developed nations provide generously for this application of science. New, sophisticated, powerful weaponries are produced this day, as an application of the scientific achievements. It was also found benefic to put science at work for a more comfortable life, and highly-developed technologies, industry, manufacture, farming, agriculture, commerce, services, transport, communications are science-based this day. Education, culture, civilization, highly-qualified work force are produced this day on the basis of science. Everything that matters for the humans, namely wealth, fame and pleasures, is meant to be achieved to a larger and larger scale this day by using science. Science is viewed this day as an immensely benefic resource, whose role in society is to be tapped more and more to the greatest profit. In this respect, everybody speaks this day only of "technological transfer", "competitiveness", "innovation", "leadership", if not else at least "intellectual leadership" through science. Science is everywhere in our epoch "oriented", oriented toward military, warfare, technology, industry, economy, education, etc, etc. There is no more simply science this day, it is everywhere determined, oriented.

The scientists should feel good and flattered by such a great interest showed by society to their art and trade. Fact is that science provided much for society in time, through mechanical constructions, thermal machines, electricity, nuclear energy, materials, electronics, and it is natural for society to try to control, accelerate, harness all this process of profiting of the use and abuse of science.

Yet, nobody is satisfied with such a policy, all around the world. The taxpayers want more and more from the science, and the scientists are more and more incapable of responding to their high demands. The reason for such a failure resides in the inadequacy of this type of science policy.

Indeed, science is not funded, according to this policy, unless it does bring something relevant to society, *i.e.* something useful for military, industry, economy, education, etc. The scientific research, which is the way science advances through, is only meant this day for applications of science. Yet, all these outlets of the science are only its applications in various areas of activity and interest, they are not science, they are only its applications. The science policy this day makes a great confusion betwen science and its applications. Laying emphasis exclusively on the scientific applications we end to having no science anymore.

Science is a resource, like any others, and yet a bit special. Of course, scientific knowledge does not lower, or degrade, by repeated use, it is not wasted, dissipated by using it. Newton's law does not vanish by its being repeatedly used. But people who have scientific knowledge, or endeavour with maintaining at least, if not advancing, the science, *i.e.* what we call scientists, disappear,

if not properly cultivated. We have a lot of applications of the science, a serious endeavour for technological transfer, great expectations from using this science, but where is the science? We have not science anymore, by such a policy which provides exclusively for scientific applications, irrespective of how desirable and benefical they are.

A very deeply-rooted mistake is to think that scientists are in universities. This is profoundly wrong. In universities we have professors who teach science to young people. They need the scientific fuel for this teaching process from elsewhere. We cannot say reasonably that teachers in universities do at the same time both science and teaching, because they do then either half of each, or half of none. It is more appropriate to emphasize the exclusive educational task of the universities, and provide separately for scientists, in distinct laboratories, institutes, etc. The great advances in science and in its scientific applications were made by the former Soviet Union and the former USA in the last half of the past century precisely because these states cultivated distinctly the science and the scientists, and do not mix up the science with teaching or production.

Of course, these things are related, and it is desirable and profitable to cultivate such natural benefic relations. How are we going to strenghten the relations between universitaries, scientists, high-tech entrepreneurs? Simply, by doing precisely what we want: providing for close relationship between such people, encouraging their meetings, discussions, talks, cooperation, etc. The main cause of the difficulties and insatisfaction of this day with the "insuccess" of the science in society is precisely the vanishing relationship between scientists, "applicationists", entepreneurs, teachers. We need indeed urgently to provide for such close contacts, but we have to be very careful not to mix up the things: to keep the distinction between these socio-professional categories. It is a scientific fact almost that the distinctiveness and the variety bring force and motion, while the mixture increases only the ineffectiveness potential, and bring only a restful peace.

If we are going to cultivate, by our policies, the distinction between scientists, teachers, professors, "applicationists", enterpreneurs, to provide for close collaborative relationships between all them, keeping at the same time the distinction, and not to mistake science and scientific research for teaching or production, then we will be more scientific in our endeavours, and will be more fortunate in our expectations.

For we are yet pretty unscientific with respect to basic issues. For instance, this day we set for science the mission of reducing, or circumventing, the degradation of the environment, without noticing that every human activity degrades the environment. Indeed, even the mental processes degrade their environment, the brains in this case. Life is an organized process, whereby the entropy is diminished, therefore it is a great fluctuation, but at the same time we increase also the environmental entropy just by living, so that the increase is higher than the decrease, and the process goes to equilibrium. Of course, we will end with a more equilibrate world, where life is going to be extinct, because the fluctuations diminish near equlibrium. We would think of finding a solution for preserving life then, by creating artificially another similar fluctuation, with a great spending in energy. The inherent limitations of such an artificial process will then pose serious issues regarding how, who and how many are going to live that artificial life. This may be a serious problem for science and technology. Another one is the process of thinking, for many believe that we should think the thinking process in order to understand it. First, they assume erroneously that there exists a conscience, or a consciussness, *i.e.* a state or process of thinking the thinking, which is false. Anyone who thinks, and whenever anyone does it, is not conscius of what he or she is doing, there is no double thinking, the consciusness is identical with the thinking itself. Thinking is a natural process, associated with the complexity of the human brains, and do not think of thinking, because it is impossible, just do it. To think is just to be. Such sort of things we only learn through science, so, providing in our policies for cultivating properly the science will enhance by far our chances of responding to truly relevant questions.