The Flight from Science

Contributed by V.I. Postnikov
21 January 2014

It is not allowed that the sciences rule over life, no-one is sanctioned to exert violence over life... What I preach, is, consequently, to a certain extent, a revolt of life against science, or rather against its rule, not a destruction of science –- but to assign it to a proper place, so that it shall never leave it again. - Michail Bakunin (1814 – 1876)

Science remains an activity of "dedicated" people, with its own philosophy and hierarchy. The scientific world is not unlike a medieval order. The exclusive place of science is acknowledged not only by scientists, but many ”lay” people worldwide.

And rightly so, for its influence on society and environment is enormous. It is also true that the scientific community constitutes a sort of Vatican, with its "Pope," “Cardinals,” and “Novices.”

The trouble is that science has long lost the connection with reality, and is concerned mainly with its own problems (for example, is busy looking for extraterrestrial consciousness, or protecting us from meteorites or aliens). Which is worse, it tries to change the reality according to its own understanding of the urgency (biotechnology, nanotechnology, geoengineering). Everyone is well aware of the link between science and military inventions, having pushed the world to the brink.

In the former Soviet Union, science had acquired a special political and ideological status. Its strategic role, in strict accordance with Marxism, was defined as a means of raising the material well-being of people and military prowess. (The fact that the Soviet Union is no more testifies to these tasks' conflict). The original status of science -- even in tsarist Russia with an open-minded quest of nature -- had been lost. Science received full support from the socialist State and became technology-oriented. Overall, science turned into a sort of state ideology, having ousted religion, poetry, arts and other human activities.

In other countries, despite totally different political systems, the analogous processes had taken place, particularly in Nazi Germany, Britain, and the U.S.

At present, science continues to leave its deadening trail. Scientists who refuse to serve this Moloch are being ostracized and expelled from academic circles. They lose their positions and are forbidden to publish their works. At best, they are seen as eccentrics, not even dissidents.

My flight from science could intrigue the reader.

The beginning: my father, Ivan Matveevich Postnikov, got into science in the late 1920s after graduation from Leningrad Polytechnic. He was invited for post-graduate study by Prof. Michail Kostenko who introduced him to the topic of “shock generator” (the so-called Kapitsa-Kostenko generator) that was dedicated to experiments in atom splitting in Rutherford’s laboratory. Later, the work over the generator laid the ground of my father’s Ph.D. dissertation. His next stage was working on the electromagnetic gun in the late 1930s. This saved him from gulag. But the experiments on this new weapon had to be cancelled because, at that time, no autonomous energy source was available, as the gun had to carry

a long cable from a power station. The Katyusha jet-propelled rockets had outstripped my father's gun. As is well known, the "triumph of science" came later with the blast of two atomic bombs over Hiroshima and Nagasaki, with over 100,000 people killed instantly.

After barely surviving the German siege in Leningrad during 1941-42, my father was evacuated to Tashkent, and again with Prof. Kostenko began experiments on raising the output of hydro generators to boost the productive capacity of the interior. In 1943, he defended his DSc thesis on the overheating of synchronous machines. Despite the ongoing fierce battles, scientists did not stop working, as journals were issued and scientific degrees awarded.

After the war, by the order of the Ministry of Education, my father had been selected to prepare electrical engineers in Ukraine. He was appointed as the head of the electromechanical department in Kiev Polytechnic as well as the head of the energy generation department in the Academy of Sciences. Over several decades, his interests spanned from micromotors to magneto-hydro-generation to large electric systems' stability. In the last years, he wrote a poetry book, possibly doubting, if not renouncing, the winning march of technology.

In my youth, I had totally different plans. After reading Thor Heyerdahl's Kon-Tiki and seeing films by Jacques-Yves Cousteau, I began to rave about oceanology. (I'm still crazy about it.) However, Father insisted that I should go to Polytechnic. I was uninterested in the courses until the very last moment. Writing my graduate thesis, I was carried away by the theory of electromagnetic fields. Science opened its doors to me. I was going deeper and deeper into differential equations, and understood that it was an infinite universe that would consume all of me. It was as if you were going deeper into outer space, away from the Earth. And you forget about your friends and relatives, forget even about yourself, or what is good or bad. This passion becomes an insanity.

The sobering would come gradually. It was born out of "dissident" books I found in Father's library and from our talks. Poetry and philosophy became a powerful antidote to science. Besides, my work in Kiev Polytechnic, where I taught electromagnetics for more than 20 years, had gradually opened my eyes to the larger system.

I saw that the entire education system and science are supportive of the authoritarian state. The campaign against Andrei Sakharov unleashed by the state opened my eyes to the real situation in the country. After all, I had used his father's manual on physics!

The next decisive blow came from Chernobyl. The blast of the reactor ended my infatuation with science. It is hard to express all the bitterness and anger that I felt at that time. But the outcome had some positive effect -- I saw the light at the end of the tunnel. I revved up my search for dissident literature, critical of science and technology. To my delight, I found Tolstoy, and the greens whose ideas were about to trickle through the iron curtain. I greedily started to read and meditate. Yet my fears had not been understood and shared by colleagues, despite the Chernobyl disaster. And even today, I have very few concerned scientists around me.

I think that the demise of the Soviet Union, which happened at least partially due to the impossibility of controlling technology -- a genie released from the bottle -- further confirmed the rightness of my intuitive desire to flee from science. In 1994, I was invited to visit Bath University in England, Department of Electrical Engineering (where I might have stayed but didn't). I had already changed. In the university bookshop I came across Fritiof Capra's book The Turning Point. I remembered him well from the days of Tao of Physics. I couldn't get myself away from the book. It contained everything I had previously thought and experienced. The book had been written by a scientist with totally different life experience, in a totally different situation, but who came to the same conclusions. He was a dissident scientist, a kinship soul.

I started looking for publishers. No way. Capitalism was making great strides in the post-Soviet nation and nobody wanted serious stuff. Then I said to myself: I will seek, translate and publish books by myself. In 1995 I visited the America House Library in Kiev, and found a lot of like-minded authors: Roderick Nash (The Rights of Nature), Holmes Rolston III (Ecological Ethics), Steven Talbott (The Future Does Not Compute). It is there that, for the first time, I used the Internet that had led me eventually to Jacques Ellul, Ivan Illich, Howard Odum, William Catton, Jr., Jerry Mander, James Lovelock and many many others. I was not alone!

My next breakthrough came in 1999. I found the international Internet group of biocentrists, and made connection with David Orton, Arne Naess and the field of deep ecology. That was the apex of my search: at long last I found my life philosophy.

Today, the ideas of alternative science and deep ecology transcend the obsolete scientific paradigm and trickle into academic mainstream. Science that existed for 100-200 years as a dominant form of thinking, yields to a holistic worldview. Everything is interconnected. Science can no more be separated from ethics, ethics separated from nature, nature from poetry. What we are witnessing today is the rise of a long-forgotten Goethean science, and the revival of traditional cultures and knowledge. But all that is another science in which quality is more important than quantity, and life overrules technology.

Will Fukushima melt the hearts of other scientists?

* * * * *