



WAAS Retrospective: Why WAAS?

Augusto Forti

Vice President, International Institute for Opera & Poetry;
Fellow, World Academy of Art & Science

Abstract

In this short article, the author traces the sociological origins of WAAS and traces briefly the history of the scientists' nuclear abolition movement, which was a main reason for the founding of the Academy. A lot remains to be done by the world community to address the multifaceted problems we face today. WAAS has been playing a crucial role in this process.

In the sixties of the past century, I was a young scientist full of hope in a new world. Now I am a senior scientist with less hope in a better world. Not concerning the existence of a virus, as a scientist I am sure that we will stop it, but for the diffusion of social pandemics. Conflicts and wars are all over the planet; racial, religious, and national confrontations and inequalities have boomed. The gap between those who have and those who do not have is widening and so on. In this difficult situation WAAS with its human and intercultural potential can help.

But allow me to take a step back in time to remember the origins of WAAS and the reasons that led to its establishment.

In the fifties and sixties, when the world had just emerged from the devastation of the two world wars and the deadly consequences of scientific discoveries, the major issue was first of all to rebuild a scientific community (to this end the International Council of Scientific Unions was instrumental) and secondly, to reconsider the role of science within society itself.

These concerns were at the origin of the Russell-Einstein Manifesto and led to the birth of the Pugwash Movement. A pamphlet by Lord Charles Percy Snow, published in 1955 on the 'two cultures', showed how war had led to the dilapidation of unity and the need to contribute to rebuilding the unity of "culture" with all its facets, with an open and inclusive dialogue and towards an equitable and peaceful idea of progress. This is the specificity of our Academy, in which science and humanities together face the new world's evolutionary problems, promoting dialogue with the new generations through various universities and creating a World University.

Perhaps, the best way to evoke deeper motivation now is to remember events in those rather dramatic years from the '20s to '50s and '60s, and briefly tell the story of one of the founding members of WAAS: Robert Oppenheimer.

The scientific community emerged from 1945 eager to reestablish its international connections, its cultural independence and its ethical responsibility.

Before the war, we could witness an exceptional group of scientists—many physicists, many Nobel prize winners, all working together within a friendly community in a new field of physics: quantum mechanics.

“WAAS has succeeded in establishing various permanent contacts and joint programmes with the United Nations and its agencies together with many other international NGOs and strived to monitor and overcome some of the global problems we face today.”

At the end of the twenties, in Germany, at the University of Göttingen, Oppenheimer was working on the new physics participating in the seminars of Born, together with Heisenberg, Fermi, Dirac, Hahn, Pauli, Teller and other scientists. With three great sponsors: Einstein, Bohr and Plank.

The golden era of this group of scientists, involved in “relativity” and quantum physics, ended suddenly in 1933 with the rise of Adolf Hitler in the very same Germany that had seen the birth of the new physics. Ideology overtook rationality. Jewish scientists were excluded from all German universities and a German physicist and Nobel Prize winner, Johannes Stark, close to Hitler, was defining the relativity theory as Jewish physics, and thus discarding it as false and dangerous.

The Second World War was getting nearer...

In 1938, the “nuclear fission” technique discovered by Otto Hahn and his team, opened the door to the atomic bomb.

This was the origin of the split in the community of atomic scientists. What had been an extraordinary community of science, broke up. Heisenberg, Oppenheimer’s colleague, would become the director of Hitler’s bomb project whilst Oppenheimer, with the help of many European physicists, including Fermi, would make the atomic bomb in the US. “Little boy” (the nickname of the first bomb), would later end up being dropped on Hiroshima on 6th August 1945 and the second atomic bomb on Nagasaki. Both killed 200,000 people and marked the end of the war in the Pacific, whilst in Europe the war had already ended, with millions dead.

Oppenheimer’s embarrassment became apparent when at the first blast of the experimental bomb in the desert of Alamogordo, he exclaimed: ‘The war is over!’ to which, General Leslie Groves, responsible for the Manhattan project, responded: “No, well, we’ll need a couple more.”

In 1945, following the devastating conflict, everything needed to be rebuilt, from roads to houses, to scientists’ souls, some of which had fallen into “the trap of ideology”. Following

the war's distortions, there was a need to engage in a deep reflection on the role of science. (see atomic armament, the tragic story of Soviet genetics and Lysenko...).

At the end of the war, Oppenheimer, as Einstein and many other scientists, attempted to oppose nuclear rearmament and the construction of hydrogen bomb. Oppenheimer was excluded from any duties related to the atomic research for armament and placed under investigation for communist affiliations. Nevertheless, he continued his scientific career in the most prestigious universities and never gave up his civic engagement with the issues of atomic disarmament and world peace. In the 1960s, he became one of the most active founders of WAAS, in which he foresaw the possibility to establish a permanent dialogue, a forum for science and other disciplines in order to better stand up to the multidimensional facets of contemporary problems.

The Cold War is no longer there, but the world is full of conflicts. "Uncertainty", as foreseen by Monod, Prigogine, Heisenberg, just to quote a few, reigns as a sovereign. A lot remains to be done by the international community starting from the UN Reformation. WAAS has succeeded in establishing various permanent contacts and joint programmes with the United Nations and its agencies together with many other international NGOs and strived to monitor and overcome some of the global problems we face today. WAAS is an important forum and help for the world, which is becoming no less chaotic and governable, than it used to be.

Author Contact Information

Email: augusto_forti@hotmail.com