

INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES

27th Session
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Opening Session

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Our scientific community watched in speechless horror, along with the rest of the planet, as hijacked civilian planes filled with passengers were crashed into skyscraper towers where tens of thousands of ordinary people were working. This is the reason for the choice of this year's topic: the Cultural Emergency.

Slaughter and massacres have been with us since the dawn of civilization, and witnesses and survivors always carry, ever after, a deep festering wound from having been involved in a horrible experience. We do not have to go back a thousand years to find dramatic examples of wanton manslaughter, all we have to do is look back at the last century. Then why is it that 9/11 had such an impact? September 11th is not "statistically" significant but it was the first time that billions could watch a large-scale massacre being perpetrated.

We are now faced with the Third Challenge. The two previous ones were perhaps easier to solve. We knew what we were basically facing: the Nuclear Holocaust in the eighties and, 10 years later, that of the risk of an Environmental Holocaust. No one had predicted the arrival of Terrorism except in Erice in 1996, during the 21st Session¹ of our International Seminar series.

Could Science contribute to understanding its roots, how to act and, first of all, what to do to overcome it? We should not forget the past: i.e. a few years ago when the world was ruled by two super-powers. Terrorism is the unexpected phase following the end of the bipolar world.

It was at the beginning of the eighties that Science at last decided to descend from its ivory towers to take part in the culture of our time with all its lucidity and determination. The future of the world was at stake. In their arsenals, the two

¹ See "High-Tech Terrorism as an Increasing Global Problem", Professor Karl Rebane, text annexed to Professor Rebane's current presentation.

superpowers (USA and USSR) had 60 thousand H-bombs and each of them had a destructive power 60 times higher than the one that destroyed Hiroshima. Ten thousand scientists of 115 nations signed The Erice Statement in which it was clearly stated that the armaments race was not the inevitable consequence of scientific progress but the evidence that political violence was spreading all over the world. The Erice Statement did not divide the world into good and bad but claimed for Science a source of good values, distinguishing it from the Use of Science (Technology). In this work of promoting Scientific Culture, Science found an ally of rare and exceptional value: John Paul II. Today, no one any longer confuses Science with bombs and Planetary Emergencies. In fact, the danger of the Nuclear Holocaust being overcome with the fall of the Berlin Wall, the Pope invited us to study the Planetary Emergencies carrying out the «*scientific voluntarism*», which is «*one of the noblest forms - says John Paul II - of love towards our fellows*».

Our response to the Second Challenge was to realise several dozens of pilot projects all over the world. One of which was related to the stopping of desertification. The pilot projects are listed in Figure 1. The results yielded by our pilot projects represent the only concrete proof, brought to the attention of governments, that the 53 Planetary Emergencies could be overcome. Here we need to reflect a moment on the fact that, in none of our plenary, restricted or specialised sessions had we ever considered that Terrorism could be one of the new planetary menaces. We had discussed the dangers related to cheap weaponry such as those of Mass Destruction (WMDs), the chemical and the bacteriological bombs.

No one could foresee what occurred on September 11th and the subsequent developments, giving rise to the Third Challenge for Science, which will be the topic of our discussions during this 27th Session of the Erice Seminars. We are in fact convinced that scientific unity leads first to economic unity and then to political unity, thus stopping all conflicts. As Europeans, we can only ponder at the two nearly successful “suicide attempts” of the First and Second World Wars, and the state of Europe with 50 years of peace behind us.

It was the European scientists themselves who implemented, right after the Second World War, the basis of an effective scientific collaboration between the nations, which had been at war for centuries. Where there is scientific unity, there is no room for disagreements and political fights.

The Third Challenge will reside in finding out scientific and technological common grounds of interest to all: the rich (North) and the poor (South). It is beyond dispute that the developing Countries (5 billion people) cannot and must not repeat our mistakes: our Civilization is in danger. The problems of “sustainable development” must be discussed and studied without any conflict, in an atmosphere of rigorous knowledge of the problems, mutual trust and effective collaboration. The roots of Terrorism must be understood thoroughly since the first enemy of humanity is emerging in all its clearness, and it is Ignorance.

We need to open the doors of our scientific laboratories to the best intellectual energies without ideological, political, or racial barriers.

Scientific, medical and technological problems must be addressed inside an international collaboration in order to determine if Science can contribute to the solutions required by the Third Challenge.

After believing, throughout the twentieth century, that we had finally entered the age of enlightenment, our whole planet suddenly realised that it was sick. A sickness of the soul that our doctors cannot cure. Nor can our politicians reassure us with a spectrum of attitudes going from extreme posturing to total apathy. A sickness that our community identified, 20 years ago, as the Cultural Planetary Emergency.

Since 1986, the World Federation of Scientists has confronted – as mentioned above – many Planetary Emergencies and has proved, by conducting pilot-projects, that they could be mitigated or eradicated, provided there is a political will. In terms of our fight against the Cultural Emergency, we have been trying to educate the media on the difference between Science and Technology, and the necessity for objective and measured reporting of scientific and technological discoveries. Up to now, little has been done since the solutions were, and still are, in the hands of non-scientists.

We have to ask ourselves how we can avoid a Cultural Holocaust if we don't come up quickly with concrete proposals. The Cultural Emergency, unlike other Emergencies, is entirely fuelled by mankind. It has now proved to all that it could devour our civilisation if left unattended. We believe that the time has come for us to play a significant role in the mitigation of the Cultural Emergency.

For those of you who participate in our Meetings for the first time, and who might think we are “poets and dreamers”, let me tell you why we believe we can contribute to the solution of what has become the most important of all Planetary Emergencies. We are the largest international “no strings attached” scientific community of volunteers. We can call on thousands of scientists the world over, who all achieved the highest responsibility in advanced research activities, covering all fields of Science and Technology. Let me recall that 22 years of activity in project implementation and the results, shown on Figure 1, represent our best source of self confidence.

Sometimes, through some of our members, our conclusions and recommendations have been heeded at the highest political levels. This was the case during the Nuclear War Seminars, prior to the ratification of the Salt II Treaty, with the Erice Statement which stimulated a series of actions from Deng Xiao Ping, Mikhail Gorbachev, Olaf Palme, Sandro Pertini, Ronald Reagan, Pierre Trudeau and John Paul II.

Scientists are, by definition and by training, rational in their approach to a problem and used to solving complex and involved issues. By reviewing and analysing the problems at hand, with the help of eminent specialists in the relevant domains, we can arrive at certain conclusions and propose solutions, which can then be disseminated throughout our community, worldwide. During this Seminar, participants will be able to discuss conflicting views with a wide selection of factions, both officially during the debates and unofficially outside the lecture halls.

During the first days of the Seminar, some of our very eminent colleagues in various disciplines will describe the conflict situations, point out the determining factors and try to unravel the intricacy of measures and countermeasures. On the third day, we will split up into four Groups: while most of us continue hearing reports on other Emergencies in this very Hall. The following three Working Groups will convene elsewhere:

Society and Structures – Group A – chaired by William Shea, on:

“Culture – Ideology – Human Rights – Freedom & Democracy”

Society and Structures – Group B – chaired by K.C. Sivaramakrishnan, on:

“Economy – National and Regional Geopolitical Issues”

Confrontations & Countermeasures – chaired by R.A. Mason, on:

“Present and Future Confrontations – Preventive and Defensive Countermeasures”.

The Working Groups will deliberate for a full day and each is expected to produce a written summary, synthesising the main issues of its Emergency subtopics and their probable consequences. The summary should contain a series of proposed recommendations for their mitigation, through actions to be undertaken by the international scientific community in general and the World Federation of Scientists in particular.

On 23 August, during the Debate and Conclusion Session, each group representative will present his report to the General Assembly, following which, we hope to be in a position to draft a proposal for concrete steps to be taken by the scientific community worldwide.