

Science and Nuclear Weapons Where do we go from here?

by Joseph Rotblat

Abolition 2000 UK publishes an occasional series of papers on defense and disarmament issues in memory of Frank Blackaby. The fifth such Blackaby Paper, published in December 2004, was written by Joseph Rotblat, once a member of the Manhattan team that built the bomb and the only one to leave that team before the nuclear bombings of Hiroshima and Nagasaki occurred.

The paper has been deliberately timed to be available well in advance of the 2005 Review Conference on the Non-Proliferation Treaty, which is to be held in May 2005 in New York.

The paper has six chapters, and the first one, entitled *A Problem: the responsibility of science and scientists* is quote in here in full to make you want read more:

“Should scientists accept responsibility for the human and environmental consequences of their research? Those questions did not arise in the distant past, because there hardly were such consequences. Science had no role in the day-to-day life of people, or with a few exceptions, such as Archimedes and Leonardo da Vinci, in the security of states. Science was largely the pursuit of gentlemen of leisure.

The tremendous advances in pure science, particularly in physics, during the first part of the 20th century, and in biology, during the second half, have completely changed the relation between science and society. Science has become a dominant element in our lives. It has brought great improvements in the quality of life, but also grave perils: pollution of the environment, squandering of vital resources, increase in transmittable diseases, and above all, a threat to the very existence of the human species on this planet through the development of nuclear weapons.

Many thousands of scientists are still employed in Los Alamos or

Livermore in the USA, Chelyabinsk or Arzamas in Russia, and Aldermaston in the UK. These establishments do pure and applied research for specific purposes, purposes that I see as the negation of scientific pursuit: the development of new, or improvement of old weapons of mass destruction. Among these thousands there may be some scientists who are motivated by considerations of national security.

The vast majority, however, have no such motivation; in the past they were lured into this work by the siren call of rapid advancement and unlimited opportunity. Work in such laboratories is not only a terrible waste of scientific endeavour but a perversion of the noble calling of science. It should not be tolerated.

I would like to see endorsement of this by the scientific community. I will go further and suggest that the scientific community should demand the elimination of nuclear weapons and, in the first instance, request that the five acknowledged nuclear powers honour their obligations under the Nuclear Non-Proliferation Treaty.

The basic human value is life itself; the most important of human rights is the right to live. It is the duty of scientists to see to it that, through their work, life will not be put into peril, but will be made safe and its quality enhanced. The problem is how this is to be achieved.”

The other chapters deal with *The Past, The Present, The immediate future, The flawed doctrine of extended deterrence, and The longer term future*. The paper is rounded off with biographical details and a bibliography.

Joseph Rotblat, co-signer of the famous Russell-Einstein Manifesto of 1955 that contains the sentence “Remember your humanity, and forget the rest,” ends his article with an appeal for moral objections to nuclear weapons in order to create a nuclear weapon free world:

“The strongest argument for

creation of a nuclear-weapon-free world should be based upon the moral objections to nuclear weapons. The use of nuclear weapons, and even the threat of using them, is generally viewed as highly immoral; a moral stand is completely incompatible with readiness to push the nuclear button. If the United States and its allies are to lead a campaign based on moral principle, then they must renounce any use of weapons of mass destruction; and implement a policy of their total abolition to which all are committed legally.

A campaign for abolition based on moral principles will be seen as a fanciful dream by many. But the situation is grim; the way things are moving is bound to lead to catastrophe. If there is a way out, even if seemingly unrealistic, it is our duty to pursue it.

Arguments based on equity and morality may not cut ice with hardened politicians, but they can appeal to the common citizen.

If we can bring to the notice of the general public the grave dangers inherent in the continuation of current policies, while at the same time pointing out the long-term merits of policies based on equity and morality, we may succeed in putting the nuclear issue back on the agenda of public concern.

A colossal effort will be required, a sustained collective campaign by IPPNW, PSR, Pugwash, the International Network of Engineers and Scientists for Global Responsibility (INES), Abolition 2000, and many kindred organisations.

I hope that we shall all find the courage and the will to embark on this great task, to restore sanity in our policies, humanity in our actions, and a sense of belonging to the human race.”

Published by Abolition 2000 UK, Blackaby Paper No. 5, December 2004, 11 pages, £2.50. To order or download the PDF file, check <http://abolition2000uk.gn.apc.org/The%20Blackaby%20Papers.htm>.