SCIENCE
UNIVERSITY OF COPENHAGEN

The Social Responsibility of Scientists – A Pugwash Perspective

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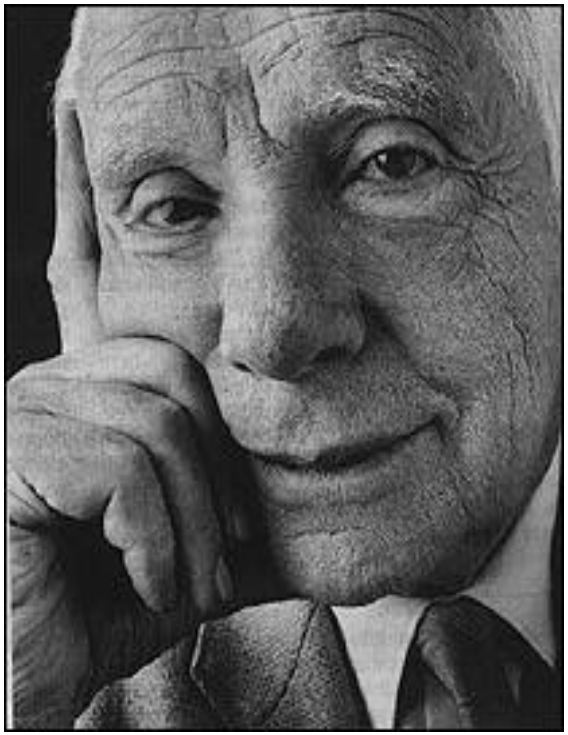
International Network of Engineers and Scientists for global responsibility

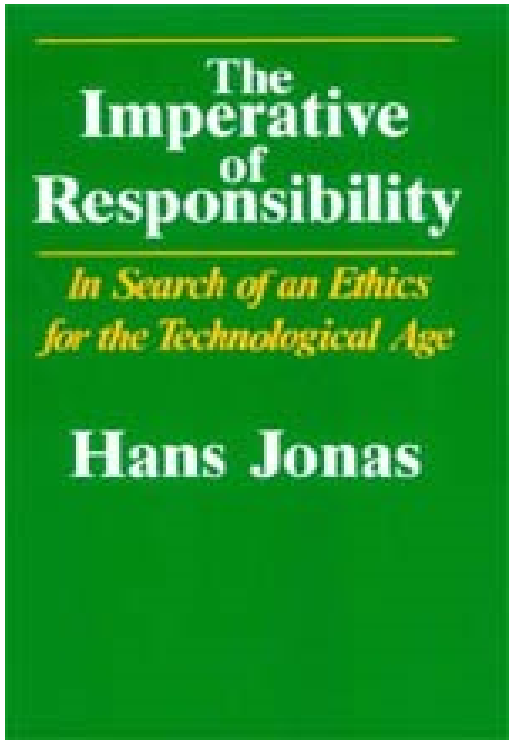
Russell-Einstein Manifesto (1955)

1. Modern Science can bring about enormous destruction
2. Scientists ought to take a stand on these issues
3. The future is open – also scientists can help to create a human world.



Rotblat 1908–2005

The imperative of responsibility



"Act so that the effects of your action are compatible with the permanence of genuine human life" …

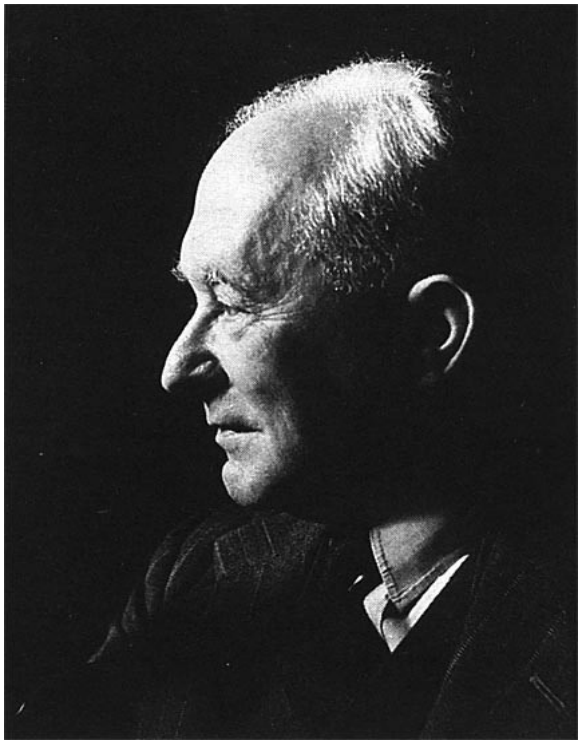
Never must i/ the existence or ii/ the essence of 'man' as a whole be made a stake in hazards of action.

Jonas (1903-1993).

Pugwash Conferences on Science and World Affairs

1. Scientific community
   - Academic &
   - Social Responsibilities
2. Prevent misuse of science
   - Nuclear peril
     - WMD
     - Regional conflicts
     - Space security
     - Non-military threats
     - Social responsibility

Max Born (1882 – 1970)



Affect the members of the scientific community by asking them to endorse a moral imperative

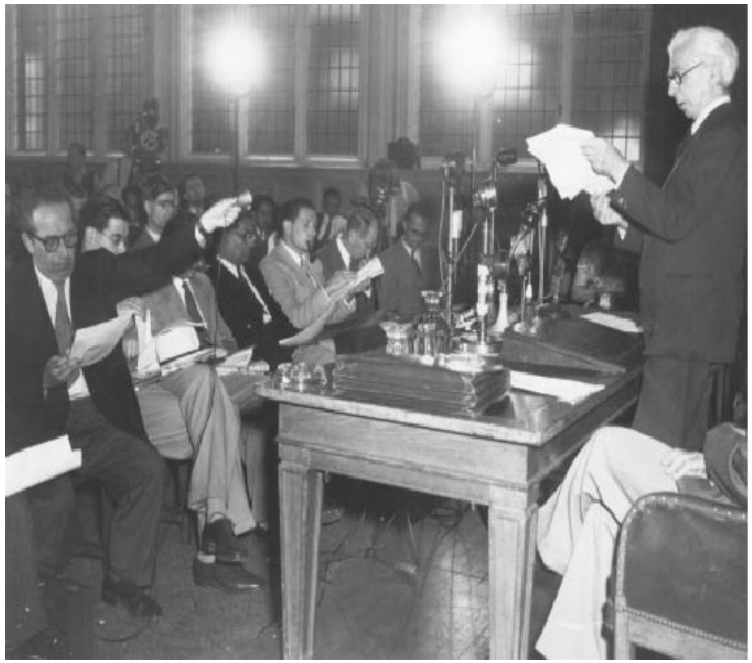
(… *to try to arouse the conscience of our colleagues*, p. 9)

Frédéric Joliot-Curie (1900 – 58)

A big conference must be organised (…)

to assess objectively the effects of nuclear weapons, the magnitude of the threat facing mankind in the event of their use, and the effect of continued testing of these weapons, p. 10.

Bertrand Russell (1872 – 1970)



Use the press to educate the public

Ask governments to sign a declaration

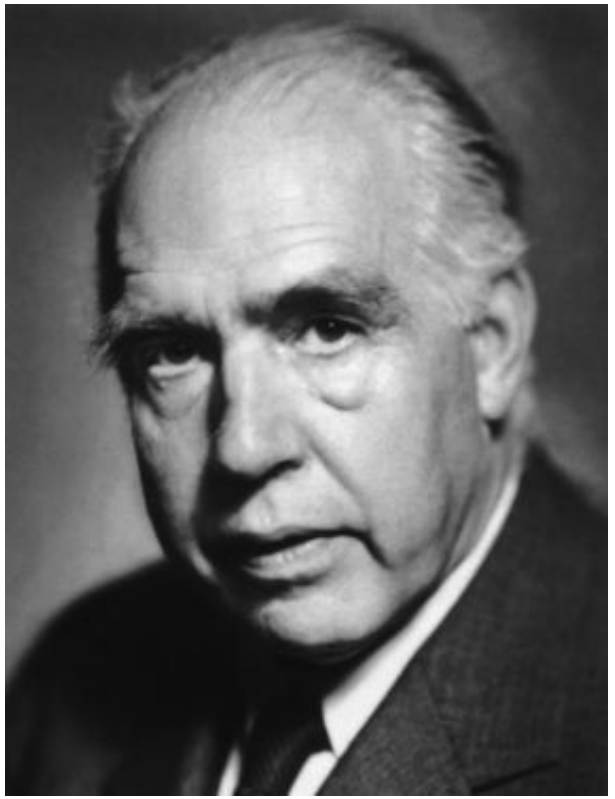
- Approach every neutral power: *I think Switzerland most likely to agree at first,* p. 9
- *Russell then outlined the contact he had recently with Prime Minister Jawaharlal Nehru* [of India], p. 14.

Niels Bohr (1885 – 1962)

Try to control and influence International law.

He would have believed that "anything of this sort of Russell's proposal should come really from the United Nations, p. 16.

Bohr's open letter to UN, June 9, 1950.



Teaching Ethics to Science and Engineering students

How to prevent misuse of Robotics

1. Formulate a moral imperative that scientists and engineers are asked to endorse
2. Organise conferences where the effects of robotics are objectively outlined. (Does robotics pose a threat to Humanity?)
3. Influence national governments to take action and abstain from certain uses
4. Influence UN to take action: Towards an international treaty regarding robotics?
5. Develop teaching material to be used in the ethical training of science and engineering students

Social Responsibility of Scientists

Knowledge and understanding of technical problems bring responsibility:

2. Technical advice and assistance for solving the incidental problems that may emerge.
3. Warn of dangers that may arise from current discoveries.
4. Take a global view in the interest of mankind.

Michael Atiyah (b. 1929)

Roboethics on the Pugwash agenda? Prime criteria

1. The topic should be an emerging issue, i.e. that is largely uncharted in public awareness and still offers scope for remedial action;

2. The topic should comprise a real or potential security challenge, i.e. be a threat to sustainable peace;

3. It should pose analytical and ethical challenges to current conventional wisdoms, and therefore require a way of thinking fitted to the new circumstances.