

Report of the EuroScience Open Forum 2004 session:

The social responsibility of scientific institutions¹

Stockholm City Conference Center
2004-08-26, 16:15-17:45, Norra Latin, Room 361

The session's first speaker was Prof. **Margaret A. Somerville**, Centre for Medicine, Ethics and Law, McGill University, Montreal, Quebec, Canada and first recipient of the Unesco Avicenna prize for Ethics in Science (2004), addressing the topic: "*Science, Society and the Human Spirit*".

Prof. Somerville discussed the role of ethics in regard to the social responsibility of scientific institutions. Ethics, she maintained, must be embedded in all aspects of science from the commencement of any scientific activity. The belief that the search for knowledge is value free (ethically neutral) is invalid. In deciding which research must not be pursued, because to do so would be unethical, the most difficult issues arise with "dual use" technologies (e.g., military and civilian uses), because we must choose between competing benefits and competing risks and harms. Moreover, there is disagreement about whether research can be unethical in itself (e.g., human embryo stem cell research) or only because harms and risks outweigh benefits, e.g. because of its potential for misuse (e.g., some counter-bio-terrorism research) or unknown risks (e.g., some nanotechnology research).

Ethical responsibilities exist at different levels: individual or micro; institutional or meso; societal or macro; and global or mega. These are cumulative, not alternative, responsibilities, they do not all have the same content. Likewise, all persons and institutions involved in science have ethical responsibilities.

To act ethically all participants in science must act in good conscience, but that is not sufficient to ensure that science is ethical. Rather, ethics research must be wedded to the scientific research to which it is relevant. "Ethics talk" (an ethics conversation or dialogue) is one way to engage in such research and must include the public. That opens up many challenges and responsibilities for scientists and scientific institutions, e.g., to engage in public discussion and to make research results open to public scrutiny. Ethical analysis is concerned with identifying the values that are in play, prioritizing values when they conflict and, the essence of doing ethics, being able to justify not honouring the values that are contravened.

Science is not territorially bounded; therefore, the search for the ethics to govern science is a major context in which we are searching for a shared ethics for a globalized world. The challenge is to create a "space" that can hold all of us, that we can all buy into. To do so, we must recognize the complexity of such an endeavour and the multiple, diverse, cumulative actions that we must engage in to realize our goal. There is no one single magic solution.

The second speaker was Dr. **Barbara Rhode** from the European Commission, DG Research, Directorate "science and society", Head of the unit "ethics and research" addressing the topic: "*Ethics in the European research area*".

Ethics in science today, she said, has become an important subject, which comprises quite a number of different tasks. Science is advancing rapidly and it is changing our lives profoundly. The moment new technologies are introduced it is too late to discuss them, they need to be

¹ Session's organisers: Lydie Koch Miramond, Kathinka Evers and John Finney; Report by Kathinka Evers

publicly debated at the moment when they are developed. There is a nearly a reverse correlation between the advancement and the spending of societies in science and technology and their trust in science. According to the World Value Study, societies with advanced "emancipative values" (favouring autonomy, tolerance, democracy and individual choice, rejecting hierarchical and authoritarian systems) develop less, or rather more conditioned, support for science and technology.

Funding institutions like the EC have a high responsibility to guarantee that the research they are undertaking is methodologically acceptable. Projects that receive EC funds under the Framework Programme undergo ethical reviews by expert panels checking whether the proposed research involves human subjects, human tissue, questions of data protection, genetic information, or animals. If so, they must check whether the project handles informed consent properly, the animal suffering is justified by the expected research results, and national legal approvals are given. Integrated projects should contain a work-package on ethical management and additional work-packages on the ethical, legal and social impact of the research (ELSA). If absent, these can be suggested by the expert panel.

The ethics workprogramme has three main lines:

1. *Deepening the understanding*, analysing new areas of research (nanotechnology, enhancement of human capacities, dual use of bioweapons, etc.) and positioning European ethics in a global context.
2. *Improving awareness of ethics* among researchers and institutions of codes of conduct, European training material in ethics, and national regulations.
3. *Networking* between existing national bodies and encouraging public dialogue. There are 2000 identified "local ethics committees in the European Research Area, and linguistic diversity makes dialogue difficult.

A consensus report with 25 recommendations on genetic testing, developed by people representing NGOs, industry, academia, *et.al.*, has been published and translated into 19 languages. There is a continued discussion of this report on the web.

Europeans are also responsible for their research that is carried out in developing countries. The EC is helping to build up ethics committees in developing countries. When reflecting upon European ethical values it is important not to be inward looking on European traditions only. European researchers have to enter into a worldwide debate on ethical standards. In the field of ethics in research, human rights are further developing. There is no final position yet on the use of embryos in research, or on cloning, or on merging material from different species; nor on nanotechnologies, data protection in research, the enhancement of human beings, etc. We have to actively deepen our common understanding of what is allowed and what cannot be accepted. Please see also our call for research proposals: <http://www.cordis.lu/science-society/calls.htm>

The third presentation was given by Prof. **Gérard Toulouse**, Laboratoire de Physique Théorique, École Normale Supérieure, Paris, France: "*Science and war, science and peace: the role of science*".

Prof. Toulouse's main message was that scientific institutions should, from now on, consider the promotion and defence of international law, and support for the principles of the United Nations system, as one of their legitimate missions. (cf. EuroScience News 24, Summer 2003). In order to adjust to present world challenges, scientists should have the honesty:
- to admit the emergence of a threatening military-industrial-scientific complex,
- and to provide remedies against the risks.
In his presentation, Gérard Toulouse reviewed a few landmark steps within the scientific community, notably:

1. The Nobel Declaration (December 2001) entitled *The next hundred years*, which opens by stating: "The most profound danger to world peace in the coming years will stem not from the irrational acts of states or individuals but from the legitimate demands of the world's dispossessed." The Declaration warns of the manifest injustice of the world's present organisation, bidding us "to move toward the wider degree of social justice that alone gives hope of peace". (...) we urge all governments to commit to these goals which constitute steps on the way to the replacement of war by law".
Cf. <http://www.sciencemag.org/feature/data/nobel.shl>

2. The Statement of the World Scientific Academies (May 2000) likewise calls for social justice, poverty reduction, equitable access and use of knowledge, and other important human values, ending by a pledge: "We, as Academies of Science, pledge our cooperation in these efforts".

On the topic of a scientific pledge, or oath, Sir Arnold Wolfendale, then president (1999) of the European Physical Society offers a compact formulation: "I will not, knowingly, carry out research which is to the detriment of humanity. If, in the event, research to which I have contributed is used, in my view, to the detriment of [humanity] then I shall work actively to combat its development."

This last requirement is of utmost importance: the notion of *continuing responsibility*. Within science, there is a "right to error in good faith", but that does not mean a free license (under the blessing of a glorious uncertainty of the scientific method). There is no good faith without scruples and a readiness to pay a price in the service of truth. Numerous scientists have paid heavy prices for telling the truth, for example: Andreï Sakharov (two decades of harassment), Mordechai Vanunu (18 years of imprisonment, including 11 years in solitary confinement) and David Kelly (supreme sacrifice of his life). Their cases differ under many aspects but they have one remarkable thing in common: systematic persecutions from the ruling powers started after talks with journalists. Scientific institutions should provide protection for the courageous individuals who proffer disturbing truths, protecting them against persecution and unbearable penalties.

The brief discussion following the three presentations touched upon various themes: whether Euroscience should not follow the Pugwash-movement in condemning the war against Iraq; whether it would be interesting in doing an in-depth historic analysis of ethical aspects on scientific discoveries in the 20th century; the necessity not to let ethics become merely an external relations-affair, but one that essentially involves consciousness, and personal awareness. An important comment was made by a young person who recently finished her PhD: students, she said, follow courses in ethics and are well aware of ethical guidelines and norms. However, the supervisors, and other seniors often prevent their applications. So these are really the ones one should aim to influence rather than the students.

It was concluded that it is the responsibility of scientific institutions to develop mechanisms fit to handle ethical distress. One commentator appreciated the important work that has been carried out by the EC in the past three years.