




COUNCIL OF EUROPE CONFERENCE ON PUBLIC
RESPONSIBILITY FOR HIGHER EDUCATION AND RESEARCH

Strasbourg, 23 and 24 September 2004

**Public Responsibility
for
Research
and
Access to Research Results**



Prof. Jaak Aaviksoo
Tartu University, ESTONIA



Knowledge and Know-how

- Knowledge:

2 times 2 is 4

The Earth circulates around the Sun

$E=mc^2$

Quantum teleportation

Public Good

- Know-how:

Wheel

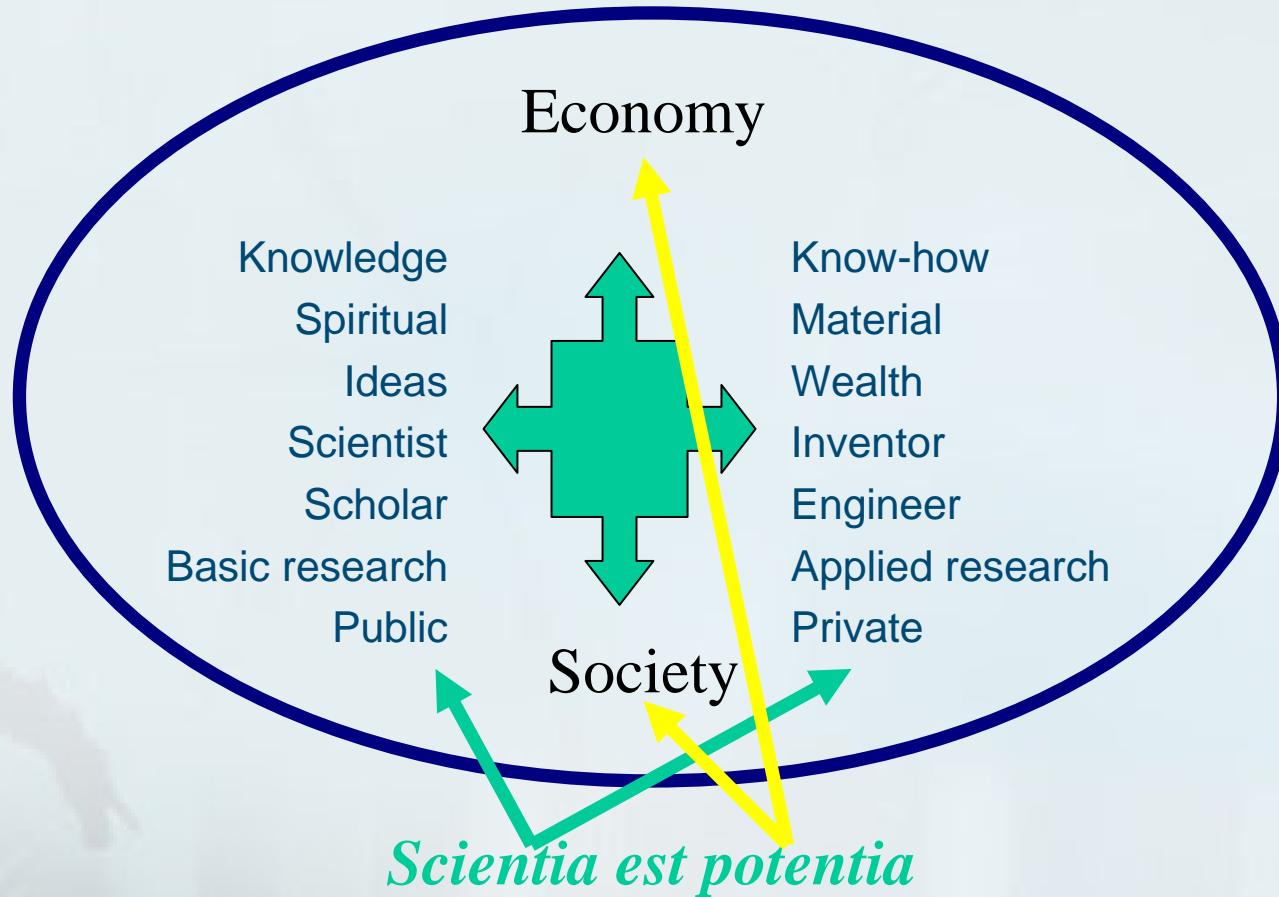
Gun-powder

Transistor

AIDS vaccine

Private Good

The Knowledge Society





Conceptual Progress

The Enlightenment

Napoleon

von Humboldt


Vannevar Bush

Lisbon ? Strategy



Reconsidering and Balancing Public and Private Interests, Rights and Responsibilities

It is the first and most important public
responsibility to make the above happen

The background features a light blue, semi-transparent image of a classical building with columns and a person in a white lab coat. The person is in the lower-left foreground, looking towards the right. The building's facade is visible in the background, with a prominent column on the left side.

Public Responsibility for Research (research, science and scholarship)



Economic Arguments

The Knowledge component of research output has strong features of public good

Consequently:

Research needs to be supported from public resources since market-driven economy, left alone, under-invests in research

if we look for maximum economic efficiency.



Educational Arguments

Right to education, including research education in universities, is a basic human right and it calls for free access to the bulk of human knowledge and experience

Consequently:

There is a public responsibility to make research and its results accessible to the educational community

If we want to act in a responsible way towards our children



National Security Arguments

It is proven that research may bring about results that may be used to threaten public and private security by terrorist and other means

Consequently:

There is a public responsibility to be informed about and further to avoid, as far as possible, the potentially adverse uses of research results be they public, proprietary or of overseas origin

If we want to safeguard national security.



Ethical Arguments

It is generally accepted that there are areas of research that may result in outcomes that threaten our integrity as human beings

Consequently:

There is a public responsibility to safeguard us from ethically unacceptable research and, even more importantly and controversially, to ensure that this research by potentially alien forces remains behind our own frontiers

If we want to safeguard our human integrity and national security at the same time.



“Scientific” Arguments

Science, in order to be able to fulfill its mission and deliver reliable and credible output, needs to be open to public scrutiny, be maximally independent of any external interests, exercise critical thinking and enjoy autonomy

Consequently:

There is a public responsibility to safeguard these principles by appropriate means and, if necessary, legislate to balance proprietary, public and researcher interests

if we want to maintain the public credibility of science in the service of the truth.

The background of the slide features a light blue, semi-transparent image of a classical building with columns and a person in a white lab coat. The person is positioned in the lower-left corner, facing right. The building's facade is visible in the upper-left and lower-right areas. The overall aesthetic is clean and professional, with a focus on the central text.

Public Responsibility for Access to Research Results



Access to Public Research Results

- Public research ends up in (freely accessible) publications
- The problem is this “freedom”
 - that has financial barriers
 - alienates researchers from their results and thus inhibits further research

The proposed solution is the concept of ‘Open Access Publishing’



Initiatives

- One of the first efforts was undertaken by the Scholarly Publishing and Academic Resources Coalition SPARC®, launched in 1998, who's „agenda focuses on enhancing broad and cost-effective access to peer-reviewed scholarship“.
- In February 2002 the Budapest Open Access Initiative was signed and by to today it has collected 3718 signatories.
- In June 2003 the Bethesda Statement on Open Access Publishing was signed
- In October 2003 the Max-Planck Society initiated the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities.



Berlin Declaration

Open access contributions must satisfy two conditions:

- 1. The author(s) and right holder(s) of such contributions **grant(s) to all users a free, irrevocable, worldwide, right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works**, in any digital medium for any responsible purpose, subject to proper attribution of authorship (community standards, will continue to provide the mechanism for enforcement of proper attribution and responsible use of the published work, as they do now), as well as the right to make small numbers of printed copies for their personal use.
- 2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in an appropriate standard electronic format is deposited (and thus published) in at least one online repository using suitable technical standards (such as the Open Archive definitions) that is supported and maintained by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable open access, unrestricted distribution, inter operability, and long-term archiving.”



Access to Proprietary Research Results

- The solution so far has been “patents”.
- Most stakeholders believe that patents have had a positive impact on both economic and intellectual development but:

There still is the most fundamental question: „Does the patent system favour more research and a more efficient use of the research results in the society at large?“

At present there is no evidence based answer to this question and so different arguments are produced both pro and contra of the patent institution.



US National Academies: „A Patent System for the 21st Century“

„We do not know if the benefits of more and stronger patents extend very far beyond a few manufacturing industries such as pharmaceuticals, chemicals, and medical devices. It is even less clear that patents induce additional research and development investment in the service industries and service functions of the manufacturing economy.“



OECD Committee for Scientific and Technological Policy at Ministerial Level: the Final Communiqué

„Patenting has accelerated rapidly in the past decade, with the number of patent applications filed in Europe, Japan and the United States increasing by 40% between 1992 and 2002, from 600 000 to 850 000 per year. The effects of such patenting on incentives to innovate, on the diffusion of scientific and technical knowledge and on competition remain unclear and vary across industry sectors and technological fields.”





Anti IP movement

- B.Martin, Against intellectual property^[ii] and references therein).
- A similar appeal has been made by “Scientists for Global Responsibility” at the meeting “Knowledge – Common Heritage, Not Private Property”^[iii].
- ^[ii] <http://www.uow.edu.au/arts/sts/bmartin/pubs/95psa.html>
- ^[iii] <http://www.sgr.org.uk/SciencePolicy/Knowledge10Nov.html>



Universities – a Public Responsibility

There are several responsibilities that the public sector should carry out in the public interest of economic and social progress

- In addition to the legal and executive mechanisms in the public disposal, the public universities shall be seen as the instruments to implement the public responsibilities concerning the responsibilities with respect to research
- An important instrument to advance the public responsibility is to initiate public debate on these issues involving different stakeholders and, last but not least, the students into this debate.



The Questions:

- What are the most critical areas of public responsibility we think we should pay attention to?
- Can we be sure that science is still in the public control?
- Are national efforts sufficient to face some of the challenges of public responsibility? What might be the supranational (European) mechanisms?
- Shall we support the initiatives of “Open Access Publishing”?
- What action shall be taken to develop the present (European) patent system to respond to the public responsibilities