



Towards Open Access

to Knowledge in Science and Humanities

An update on the Berlin Process

Campinas, 21 May 2004

*Theresa Velden
Executive Director*

*Heinz Nixdorf Center for Information Management
Max Planck Society*

Overview

Introduction

Open Access

- Motivation and Vision

The Berlin Declaration

Moving on

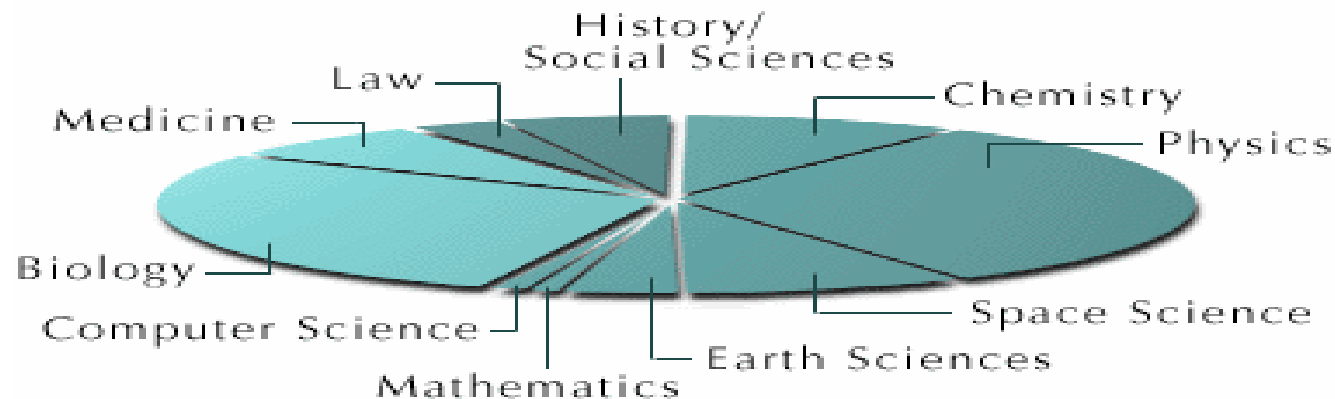
- Max Planck Society & Open Access
- The Berlin Process & a Roadmap

Conclusion



Max Planck Society for the Advancement of Science

- non profit research organization
- 80 Institutes (D, NL, I) dedicated to fundamental research
- 3500 researchers, ~ 12 000 incl. guests scientists & students
- multidisciplinary, wide range of research fields



- founded in 2001: Heinz Nixdorf Center for Information Management
 - Digital library, institutional repository, e-publishing developments



Heinz Nixdorf Center for Information Management in the Max Planck Society

First projects 2002/2003

- Max Planck Virtual Library <http://vlib.mpg.de>
- Institutional Repository <http://edoc.mpg.de>
- Pilot Projects with Primary Source Collections in Humanities
- Living Reviews Journal Family <http://www.livingreviews.org>
- Tools for ePublishing LaTeX authored documents (GNU GPL)
 - ePubTk <http://www.zim.mpg.de/projects/toolkit/>
 - Hermes <http://relativity.livingreviews.org/Software>

Focus in 2004 ff: **Open Access Development**



Why act now? New Opportunities

- Journal crisis is symptom for an outdated and inadequate system (organization, business model) of dissemination and scholarly communication in the era of Internet and emerging eScience
- Distributed work in Science and Humanities requires unlimited access to data and information (incl. Cultural heritage).
- Ascertained quality assessment due to immediate access to primary source information interconnected with interpretation and secondary information



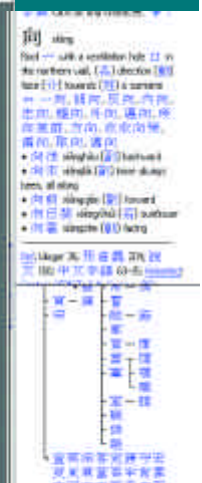
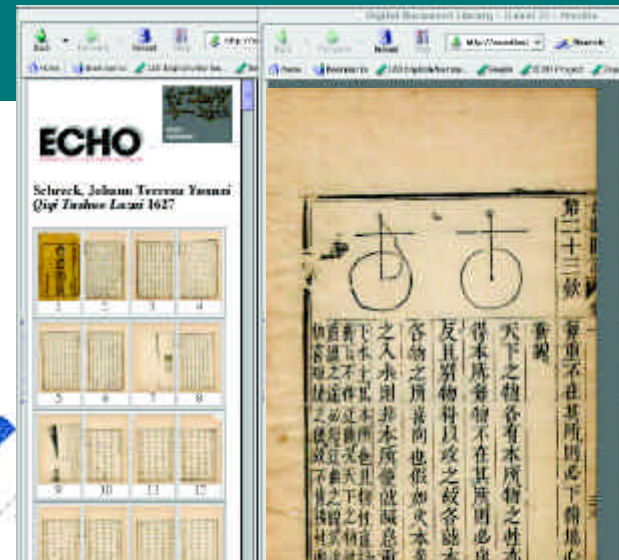
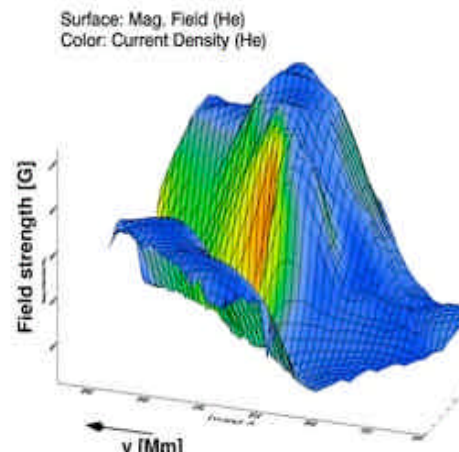
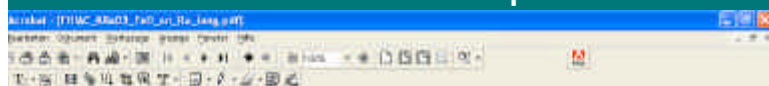
Why act now? New Opportunities

- Interactive scholarly communication and evaluation increase efficiency of knowledge generation
 - see e.g. Journal of Atmospheric Chemistry and Physics ACP
- Unrestricted access fosters emerging science at the crossings of traditional disciplines.
- Data mining (unrestricted access to data)
 - accelerated networking (people, ideas, experiments)
 - seeding for new ideas and projects
- Unrestricted access supports dialog between scholars and public/politics.



What we mean by Open Access

- Immediate unconditional electronic access to research results: data, objects and primary scientific literature (papers/books) of scholarly interest (incl. artifacts of cultural heritage)
- Standards (interfaces, formats) that support interoperability and integration in 3rd party services, discipline specific knowledge spaces etc.
- Suitable regulation of copyright/license agreement to ensure proper attribution to creator and open access dissemination - dedication to public
- No compromise on quality: transfer traditional elements, complement and improve by new approaches – transparent and community specific
- Based on sustainable, scalable and distributed infrastructure ensuring effective and persistent access



Rationale of the Berlin Movement for Open Access

Open access is the replacement for the conventional scholarly communication paradigm and not its 2nd class counterpart

- Open Access requires long-term commitment
- The transition will take a significant time and involve transformations in the traditional library/scientific information provision system
- Create awareness: Scientists, Politics, Public & promote paradigm of open access as universal for scholarly activities
- Build global network/alliance of research and funding organizations committed to Open Access
- Re-define role of Publishers - integrate publishers as service providers in competitive environment



The Berlin Declaration on Open Access to Knowledge in Science and Humanities

Conference 21-23 October 2003, Berlin,
initiated by Max Planck Society to address
lack of institutional commitment in open
access movement

Public Library of Science 2001, Budapest Open Access Initiative 2002,
Bethesda Statement 2003

→ major organizations of science and culture
declare their mission only half complete if the
information they produce is not made freely
available to society under the open access
principle.



The Berlin Declaration

- "The Internet has fundamentally changed the practical and economic realities of distributing scientific knowledge and cultural heritage. For the first time ever, the Internet now offers the chance to constitute a global and interactive representation of human knowledge, including cultural heritage and the guarantee of worldwide access."
- "In order to realize the vision of a global and accessible representation of knowledge, the future Web has to be sustainable, interactive, and transparent. Content and software tools must be openly accessible and compatible."



The Berlin Declaration

- "The author grants to all users a free, irrevocable, worldwide right of access, and license to copy use, distribute, transmit [...] the work publicly and to make and distribute derivative works."
- "A complete version of the work [...] is deposited in at least one online repository [...] 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, interoperability, and long-term archiving."



Signatories of the Berlin Declaration

- Max Planck Society
- German Research Foundation
- Fraunhofer Society
- Leibniz Association
- Helmholtz Association
- Deutscher Wissenschaftsrat
- Association of Universities and other Higher Education Institutions in Germany
- Centre National de la Recherche Scientifique (CNRS)
- Institut National de la Santé et de la Recherche Médicale (INSERM)
- Berlin-Brandenburg Academy of Sciences and Humanities
- Staatliche Kunstsammlungen Dresden
- Deutscher Bibliotheksverband
- Deutsche Initiative für Netzwerkinformation (DINI)
- National Hellenic Research Foundation
- Fund for Scientific Research - Flanders
- Minister of Education Cultura y Deportes Gobierno de Canarias
- FWF Austrian Science Fund
- Norwegian Institute of Palaeography and Historical Philology
- Istituto e Museo di Storia della Scienza Florence
- Central European University Budapest
- Indian National Science Academy
- Academia Europaea
- Open Society Institute (OSI)
- SPARC, SPARC Europe
- ...

**To date 40
organizations have
signed the
Declaration.**

21 May 2004

II Symposio Int. Bibliotecas Digitale,
Campinas



MAX-PLANCK-GESellschaft

Signatories of the Berlin Declaration

12 May 2004

- CERN – European High Energy Physics Laboratory (200 member institutions)
- University Pavia, Italy

Next week, 24 May 2004

- Chinese Academy of Science

Official signing ceremony on 30th anniversary of cooperation of Max Planck Society with Chinese Academy

Invitation to join:

Governments, universities, research institutions, funding agencies, foundations, libraries, museums, archives, learned societies and professional associations, please contact:

Prof. Dr. Peter Gruss
President of the Max Planck Society, Munich, Germany
URL: www.zim.mpg.de/openaccess-berlin/
e-mail: praesident@gv.mpg.de

21 May 2004

II Symposio Int. Bibliotecas Digitale,
Campinas



MAX-PLANCK-GESellschaft

Max Planck Society & Open Access

Organizational Measures

- Steering Committee at highest executive level
- Open Access Policy Coordinator
 - Institutional Publishing Policy
 - Building alliance with Berlin signatories
 - Negotiations with publishers on open access license and policy
- Institutional Membership BioMedCentral
 - Further institutional memberships to open access media under consideration
- Dedication of substantial funds in mid-term planning of organization



Max Planck Society & Open Access Legal Framework

- Open Access License
 - Collaboration with **iCommons** Initiative (www.creativecommons.org) to develop license model to back up institutional archiving of research output in Max Planck eDoc Server <http://edoc.mpg.de>
- Organizational framework
 - clearing house (at headquarters)
 - distributed, local administration (80 Institutes)
 - comprehensive information and briefing of authors and staff, provision of form/letter templates for communication with publishers



Max Planck Society & Open Access

Attraction of Creative Common License

- philosophy of open access
 - facilitate usage and impact
 - focus on creator rights
 - transparent, easy to use
- internet based
 - integration in documents
 - human, lawyer and machine readable version
- International
 - **iCommons** – express philosophy in specific legal terms of a countries law system
 - Release of 1st European version of CC license on 11 June in Berlin

The screenshot shows the 'Choose a License' page from the Creative Commons website, viewed in a Mozilla browser window. The page has a green header with the Creative Commons logo and navigation links: home, learn more, get content, discuss, technology, and choose license. A search bar is on the right. The main content area is titled 'Choose License' and contains a series of questions with radio button options. The questions are: 'Require attribution?' (Yes/No), 'Allow commercial uses of your work?' (Yes/No), 'Allow modifications of your work?' (Yes/No, Yes as long as others share alike/No), and 'Jurisdiction of your license?' (Generic dropdown). There is also a section 'Tell us the format of your work:' with an 'Other' dropdown. At the bottom, there is a 'Select a License' button. On the left side of the page, there is a sidebar with four steps: 'step 1 choose license' (active), 'step 2 review choice', 'step 3 mark content', and 'step 4 publicize'. Below the steps, there is a section 'Or Choose:' with five options: 'Public Domain', 'Sampling', 'Founder's Copyright', 'CC-GNU GPL', and 'CC-GNU LGPL'.

Max Planck Society & Open Access

Open Access Advocacy

- Creation of awareness of political players
 - Inclusion of open access platform as pilot project in national eScience initiative (BMBF)
 - To set favorable boundary conditions for the copyright challenge (BMJ)
- Promote Berlin Declaration and Open Access
 - Talks at international conferences (WSIS/Geneva, Bielefeld, Campinas, Beijing, St. Petersburg...)
 - Brochure: Towards a Web of Science and Culture available from <http://echo.mpiwg-berlin.mpg.de>



Max Planck Society & Open Access

Sustainable Technical Infrastructure

- Open Access Platform
 - Open access to organization's research output
 - Technical and conceptual framework, sustainable, modular, extensible, persistent access, pilot collections & applications
 - Seed money: Ministry for Education and Research (BMBF), 2004-2009 (~15 FTE)
 - Nucleus for national eScience platform; integrated with German Grid-initiative
 - Strategic partnership for long-term operation and development with national service center
 - Open for re-use (open source software or as hosted service)



Max Planck Society & Open Access

Practical Innovations

- Living Reviews Journal Family (3)
- ePublishing Tools
- Hermes (LaTeX 2 MathML) (EU, MOWGLI)
- Living Einstein/Physics Project (2005 – Einstein Jahr)
- European Cultural Heritage Online (EU, ECHO)



The Berlin Process

- Signing the Berlin Declaration is only the beginning
- Continuous, open but focussed process of Berlin Signatories
- Regular, 6-monthly meetings of Berlin Signatories
 - 1st follow-up at CERN, 12/13 May 2004 → 1st Roadmap Proposal
- Status reports, roadmap review, alliances for specific issues
- Join by signing the Berlin Declaration for Open Access to Knowledge in the Sciences and Humanities



www.zim.mpg.de/openaccess-cern/

www.zim.mpg.de/openaccess-berlin/berlindeclaration.html



The Roadmap to Open Access

Status 13 May 2004

- **Activity Areas**
 - education and awareness
 - legal issues
 - sustainable technical infrastructure
 - facilitate retrieval
 - address business models
- **Institutional Immediate Measures**
 - enforce open-access publishing policy on all levels of organization
 - install steering committee at top executive level
 - create organizational competence center
 - assign open access policy coordinator
 - ensure long-term funding and guarantee long-term operation



Conclusions

To move from the traditional scholarly communication and publishing system to Open Access as a global, new paradigm which

- *exploits connectivity and interactivity of Web*
- *enhances rather than reduces quality assessment*
 - *ensures persistency*

requires long-term commitment and readiness to share and collaborate by a global alliance of research institutions.

Join in !

