



Two Roads, One Destination: The Interaction of Self Archiving and Open Access Journals

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Scholarly Publishing & Academic Resources Coalition

- Formed in 2002 following the success of SPARC (launched in 1998 by the US Association of Research Libraries)
- Encourages partnership between libraries, academics, societies and responsible publishers
- Currently focused on STM, but coverage expanding
- Has over 70 members and is growing
- By acting together the members can influence the future of scholarly publishing



A Road Map – The Budapest Open Access Initiative

Two complementary strategies:

- **Self-Archiving:** Scholars should be able to deposit their refereed journal articles in open electronic archives which conform to **Open Archives Initiative** standards
- **Open-Access Journals:** Journals will not charge subscriptions or fees for online access. Instead, they should look to other sources to fund peer-review and publication (e.g., publication charges)



The Four Functions of a Journal

REGISTRATION Establishing intellectual priority	CERTIFICATION Certifying the quality/validity of the research	AWARENESS Assuring accessibility of research	ARCHIVING Preserving research for future use
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The Four Functions of a Journal



Institutional
Repositories



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The Four Functions of a Journal

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Open Access
Journals



Utopia!

- All research material freely available in a world-wide network of fully-searchable repositories
- Peer-reviewed papers receive quality stamp from journals, financed by authors not readers
- All peer-review papers are freely available to anybody with internet access



The Roads to Utopia

Repositories Alone?

- Practical:
 - No peer review! Peer review gives Authors validation of their work and Readers a quality filter
 - Open Access Journals would provide peer review services for a sub-set of the material in the Institutional Repositories
- Sociological:
 - Many fear that repositories will ‘undermine’ journals (especially society journals)



The Roads to Utopia

Open Access Journals Alone?

- Practical:
 - Archiving issue – unanswered, but institutions responsible for their own archives gives some security
 - Repositories are about more than just peer-reviewed papers
- Sociological:
 - Change is slow – it takes time to launch new open access journals or convert subscription-based journals



Milestones on the journey – What has happened since OAI-2

- General Open Access Climate
- Open Access Journals
- Growing evidence of the power of open access

- (Other speakers have covered developments in repositories!)



Milestones on the journey – General Open Access Climate

Political Interest:

- UK Science and Technology Committee Inquiry into Scientific Publishing
 - SPARC Europe recommends that UK funding bodies should:
 - Make it a condition of grant that authors retain copyright in their papers.
 - Require that authors deposit a copy of their final, peer-reviewed paper in a suitable, fully-searchable, freely accessible internet repository or archive.
 - Should provide as part of research grants monies to allow payment of charges for publication in Open Access journals.



Milestones on the journey – General Open Access Climate

Political Interest:

- Sabo – ‘Public Access to Science’ Act
- Organisation for Economic Co-operation and Development’s ‘Declaration on Access to Research Data from Public Funding’ - ‘...*an optimum international exchange of data, information and knowledge contributes decisively to the advancement of scientific research and innovation*’ and ‘...*open access will maximise the value derived from public investment in data collection efforts.*’



Milestones on the journey – General Open Access Climate

Funding Body Interest:

- Howard Hughes in US
- Wellcome Trust in UK
- Berlin Declaration in Support of Open Access

Germany: Fraunhofer Society, Wissenschaftsrat, HRK, Max Planck Society, Leibniz Association, Helmholtz Association, German Research Foundation, Deutscher Bibliotheksverband

France: CNRS, INSERM

Austria: FWF Der Wissenschaftsfonds

Belgium: Fonds voor Wetenschappelijk Onderzoek - Vlaanderen)

Greece: National Hellenic Research Foundation



Milestones on the journey – Open Access Journals

- Lund Directory of Open Access Journals (<http://www.doaj.org/>) – over 730 peer-reviewed open access journals
- *BioMed Central* (published 4000+ papers)
- Two new journals from the Public Library of Science - *PLoS Biology* (launched October 2003) and *PLoS Medicine* (due for launch Autumn 2004)
- Membership schemes



Milestones on the journey – Open Access Journals

Making the transition

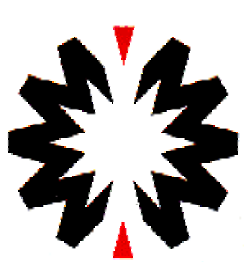
- Give Authors the choice:
 - If they pay a publication charge the paper is made open access on publication.
 - If they do not pay the publication charge the paper is only made available to subscribers.
- Over time, as proportion of authors who pay increases subscription prices can fall
- Eventually, entire journal is open access

<http://www.sparceurope.org/Open%20Access/From%20Here%20to%20There.doc>



Milestones on the journey – Open Access Journals

- A number of ‘traditional’ publishers are transforming their closed access journals into open access journals:
 - Oxford University Press
 - Company of Biologists
 - American Physiological Society
 - Florida Entomological Society
 - Entomological Society of America
 - Infotrieve



Milestones on the Journey

The Power of Open Access – Self Archiving

- For 72% of papers published in the *Astrophysical Journal* free versions of the paper are available (mainly through ArXiv)
- These 72% of papers are, on average, cited **twice** as often as the remaining 28% that do not have free versions.

Self-archiving gives authors an advantage, even for journals where ‘everybody already has access’!

Figures from Greg Schwarz



Milestones on the Journey

The Power of Open Access – Journals

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- The average number of downloads for articles in ScienceDirect over the past year was **28**
- Over the same period the average number of downloads for articles in BioMedCentral was **2,500**
- And **1000** for the *New Journal of Physics*

Open Access gives

- **89 times** as much usage in biomedicine, and
 - **35 times** as much usage in physics
- as closed, subscription-based access!

Figures from Peter Suber



What Next?

Moral argument has been won!

Increasing momentum for change

- Authors – benefits of open access becoming apparent
- Editors and Editorial Boards - awareness of their power and responsibilities
- Libraries - hosts for institutional repositories
- Libraries – increasing resistance to the old models
- Publishers and Societies – some are beginning to see open access as an opportunity
- Funding bodies – importance of dissemination
- Politicians - awareness of scholarly communication issues



The Destination!

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“The public good [made] possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds. ”

Budapest Open Access Initiative, Feb. 14, 2002

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