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**Open Access
and its place in
the new electronic publishing paradigm
Ian Johnson**



“ Open Access literature is digital, on-line, free of charge, and free of most copyright licensing restrictions”

Peter Suber,

Open Access Project Director,
Public Knowledge



OVERVIEW

- ✓ Pressure to publish
- ✓ Growth and changes in journal publishing
- ✓ Emerging alternatives
- ✓ Solutions for developing countries
- ✓ The Open Access movement
- ✓ Challenges for Open Access



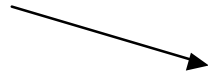
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PRESSURE TO PUBLISH

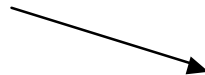
- ✓ Research, communication and development
- ✓ Research and scholarly communication
- ✓ Academic reward system

THE DEVELOPMENT COMMUNICATION CHAIN

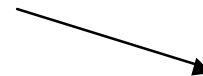
Creativity through ideas



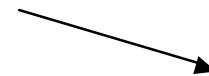
Research and publication



New products and services



Company success



Society benefits

RESEARCH AND SCHOLARLY COMMUNICATION

✓ Researchers seek

∅ Impact

∅ Recognition

∅ Prestige

∅ Honours

ACADEMIC REWARD SYSTEM

✓ Tenure

✓ Promotion

✗ Based on research and publication



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PRESSURE TO PUBLISH

- ✓ Research, communication and development
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- ✓ Academic reward system

GROWTH AND CHANGES IN JOURNAL PUBLISHING

- ✓ Global changes in society
- ✓ Growing output
- ✓ The audience for scholarly journals
- ✓ Emergence of electronic media
- ✓ Investment in electronic publishing
- ✓ New business models
- ✓ Consolidation in the journal publishing industry
- ✓ Concerns of researchers and librarians

GLOBAL CHANGES IN SOCIETY

- ✓ Growing global research community
- ✓ Changing perceptions of scientific research
 - ∅ UK, Germany, Japan, Russia, USA

GROWTH IN SCIENTIFIC PUBLISHING

- ✓ Scientific papers
 - ∅ 1870s - c800 pa papers in mathematics
 - ∅ 2000 - c50,000 pa papers in mathematics
- ✓ Scientific journals
 - ∅ 1800s - 90 journals published
 - ∅ 2000 - c16,000 journals published
- ✓ Scientific publishers
 - ∅ 1800s - Universities and societies
 - ∅ 2000 - Commercial companies

THE AUDIENCE FOR SCHOLARLY JOURNALS

✓ Journals an essential tool for research
but

- ∅ Increases in the number of titles, and
- ∅ Fixed or declining library budgets

resulted in

- ∅ Increases in prices
- ∅ Fewer sales
- ∅ Fewer readers
- ∅ Less read

EMERGENCE OF ELECTRONIC MEDIA

- ✓ 1960s – journals on CD-ROM
- ✓ 1970s – first electronic journals
- ✓ 1992 – first experiments by commercial journal publishers

INVESTMENT IN ELECTRONIC PUBLISHING

- ✓ Low distribution costs; High infrastructure costs

- ✓ Added value features
 - ∅ Cross file searching
 - ∅ e-tables of contents
 - ∅ Citation linking
- ✓ Digitising older material

NEW BUSINESS MODELS

✓ The 'big deal'

∅ A package of journal titles

- Publishers' unfamiliar with pricing concepts and customer care

∅ Cost per use decreases

- Libraries unfamiliar with cost benefit evaluation

CONSOLIDATION IN THE INDUSTRY

✓ Global market share of English-language scientific journals

28.2% - Reed Elsevier

14.1% - Springer Science (incl. Kluwer)

9.5% - Thomson ISI

7.5% - John Wiley/Blackwell Publishing

3.6% - Informa Taylor and Francis

3.6% - American Chemical Society

66.4%

CONCERNS OF THE RESEARCH COMMUNITY AND LIBRARIANS

- ✓ Libraries cannot purchase all titles required by researchers
- ✓ Researchers cannot easily access all publications in their field

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EMERGING ALTERNATIVES

- ✓ Consortia purchasing
- ✓ Open Archives
 - ∅ Open Archives Initiative
 - ∅ Open source software for e-publishing

CONSORTIA PURCHASING

- ✓ Collective purchases to achieve larger discounts
 - ∅ State-wide (USA)
 - ∅ Library type – e.g. universities (NeSLI)
 - ∅ Country-wide linked to GDP (IDEALIBRARY, eIFL)
 - ∅ Aid agency services (HINARI, AGORA, OARE)

OPEN ARCHIVES MOVEMENT

- ✓ Documentation centres in 1960s
- ✓ 1991 : creation of the arXiv.org by Paul Ginsparg, physicist
- ✓ 1997 : creation by Stevan Harnad of the CogPrints archive
- ✓ 1999 - 2001 : creation of the Open Archive Initiative (OAI)
 - ∅ E-thesis repositories
 - ∅ Institutional Repositories

OPEN ARCHIVES INITIATIVE

- ✓ OAI aims to establish
 - “common standards whereby articles stored on compliant servers can form a global library allowing searching, data retrieval, cross-linking and stable long term archiving”
- ✓ Protocol for Metadata Harvesting

OPEN SOURCE SOFTWARE FOR e-PUBLISHING

- ✓ DSpace
- ✓ Eprints
- ✓ Open Journal Systems/SEER

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DEVELOPING COUNTRY JOURNALS AND OPEN ACCESS

- ✓ Challenges for researchers in developing countries (and others where English is not the indigenous language)
- ✓ Solutions



DEVELOPING COUNTRY JOURNALS

- ✓ Subsidised publication
 - ∅ No incentive for
 - Quality control
 - Distribution
- ✓ Limited visibility
- ✓ Linguistic isolation
 - ∅ Not included in indexing services
- ✓ Not authors' publication of choice

SOLUTIONS FOR DEVELOPING COUNTRIES?

✓ e-publishing

∅ Open Access

- SciELO, 1997
- CLACSO Digital Library, 1998
- AJOL, 1998

DEVELOPING COUNTRY JOURNALS AND OPEN ACCESS

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THE OPEN ACCESS MOVEMENT

- ✓ Open journal publishing
- ✓ Open access journal models
- ✓ Open archives models
- ✓ Growing endorsement of Open Access
 - ∅ Increasing action

OPEN JOURNAL PUBLISHING

- ✓ Independent e-journals
- ✓ Open Access journal publishers (e.g. BioMed Central)
- ✓ Aggregators (e.g. DOAJ, EZB)

OPEN ACCESS JOURNAL MODELS

- ✓ 'Gold' Open Access: a journal charges nothing to readers for access to the electronic versions of articles published in it
 - ∅ Journals are supported by
 - Voluntary activity
 - Start-up grants
 - Author payment per article
 - ∅ Institutional or consortial membership
 - ∅ Free access to those who cannot afford it
 - Commercial income
- ✓ Delayed Open Access

OPEN ARCHIVES MODELS

✓ Central or Institutional Repositories

∅ Pre-prints

∅ Post-prints

- 'Green' Open Access: a journal allows or encourages the simultaneous deposit of peer-reviewed published papers in publicly accessible online repositories
- Public Library of Science, open letter, February 2001

GROWING ENDORSEMENT OF OPEN ACCESS

- ✓ Budapest Open Access Initiative, February 2002
 - ∅ Recommended self-archiving
 - ∅ Encouraged open access journal publishing
- ✓ Bethesda Statement, April 2003
- ✓ Berlin Declaration, October 2003
- ✓ OECD Declaration, January 2004
- ✓ IFLA Statement, April 2004
- ✓ Scottish Declaration, October 2004
- ✓ Dichiarazione di Messina, November 2004
- ✓ EBLIDA Statement, April 2005

INCREASING ACTION

✓ Statements on depositing research papers

∅ National Institutes of Health, USA

∅ Wellcome Trust, UK

∅ UK Research Councils

✓ Growth of Institutional Repositories

THE OPEN ACCESS MOVEMENT

- ✓ **Open journal publishing**
- ✓ **Open access journal models**
- ✓ **Open archives models**
- ✓ **Growing endorsement of Open Access**
- ⊘ **Increasing action**

CHALLENGES IN OPEN ACCESS PUBLISHING

- ✓ Discipline specific differences
- ✓ Production costs
- ✓ Sustainability
- ✓ Author participation
- ✓ Special issues for Institutional Repositories

DISCIPLINE SPECIFIC DIFFERENCES

- ✓ Rapid publication
- ✓ Retrospective coverage

PRODUCTION COSTS

- ✓ Editorial work
 - ∅ Acquiring papers
 - ∅ Preparation for publication

- ✓ Indexing by search engines
 - ∅ Metadata provision

- ✓ Citation linking
- ✓ Web citation preservation

- ✓ Marketing and promotion
 - ∅ Table of Contents service
 - ∅ Aggregators and/or commercial publishers



SUSTAINABILITY

- ✓ Scalability of the concept
- ✓ Commitment
 - ∅ Regularity of publication
 - ∅ Archiving and preservation
- ✓ Evaluation

AUTHOR PARTICIPATION

- ✓ Visibility, access and impact
- ✓ Quality control and peer review
- ✓ Impact evaluation
 - ∅ Developments in citation analysis services
- ✓ Linguistic issues

INSTITUTIONAL REPOSITORIES

✓ Additional issues

- ∅ Research reports or journal papers?
- ∅ Mandatory or voluntary deposit?
- ∅ Publishers' attitudes to deposit and contracts with authors
- ∅ Branding

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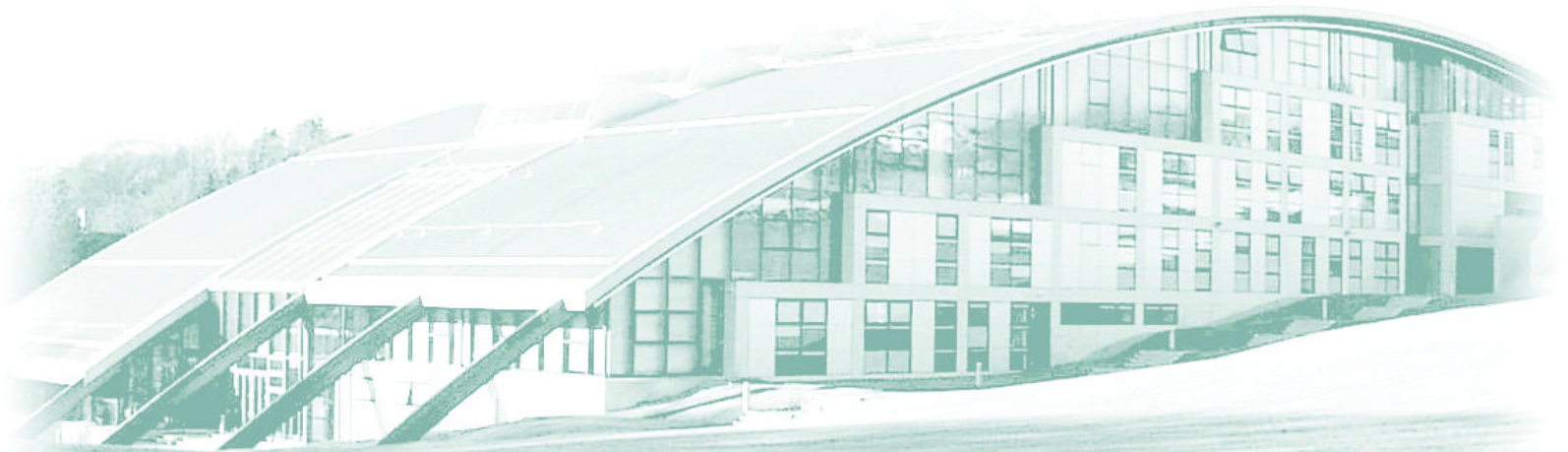


FINAL SUMMARY

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Thank you for your attention
Questions?
Comments?

ADDITIONAL MATERIAL

- ✓ Definitions of Open Access
- ✓ Open Access organisations and services
- ✓ Important statements about Open Access
- ✓ Information sources about e-publishing and Open Access
- ✓ Open Access journals and e-print archives in Librarianship and Information Sciences