

POSSIBLE MODELS OF SCHOLARLY PUBLISHING AND LIBRARY ROLE

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Scholarly journal (print/electronic)

Registration
establishing the
intellectual
priority of
an idea,
concept, or
research

Certification
certifying the
quality of the
research
and/or
the validity of
the claimed
finding

Awareness
ensuring the
dissemination
and accessibility
of research,
providin a
means by which
researchers can
become aware
of new research

Archiving
preserving the
intellectual
heritage for
future use

Registration

Awareness

Certification

Archiving

NEW DISAGGREGATED MODEL OF SCHOLARLY COMMUNICATION¹⁾

Each future model will also have to ensure fulfillment of all four functions, but particular functions will be carried out by different instances: authors, academic institutions, professional societies, journals, eprint archives, librarians.

⁽¹⁾ Crow, R. (2002) *The Case for Institutional Repositories: A SPARC Position Paper* [Internet]. Washington, The Scholarly Publishing & Academic Resources Coalition. Available from: <http://www.arl.org/sparc/IR/IR_Final_Release_102.pdf> [Accessed 5 May, 2003]

INTEGRATED COMMUNICATION MODES

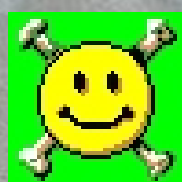
Scientific journals have been major means of scholarly communication throughout last three centuries. Disadvantages of (both printed and electronic) journals:

- expensiveness,
 - time-consuming editing and publishing process
 - delays of content delivery, i
 - inflexibility,
 - complicated mechanisms of acquisition, access and archiving.
- Dissatisfaction with current model: "serial crisis"

Emergence of Internet (and especially World Wide Web) has brought new possibilities for profound transformation of scientific communication process. New models are far more heterogeneous and flexible, and are taking full advantage of new online media. There are two main categories:

E-PRINT ARCHIVES

archiving peer reviewed literature or preprints (or both)
discipline based and institutional
centralised or distributed systems



ArXiv

appeared in 1991 as first preprint archive
discipline-based: major forum for dissemination of information in the field of theoretical physics
popularity of ArXiv has inspired development of numerous discipline based archives



CoRR
Computing
Research
Repository

CPS
Chemistry
Preprint
Server



Dspace
digital repository of
Massachusetts Institute
of Technology (MIT)
the latest and most
significant
example of institutional
archives

Caltech
Collection
of Open
Digital
Archives
(CODA)

CERN
Document
Server
(CDS)

Nottingham
e-Prints

- centralised digital
archive of life sciences journals
(no preprints)
- managed by the
National Center for
Biotechnology
Information
(NCBI)
at the U.S. National Library
of Medicine
(NLM)

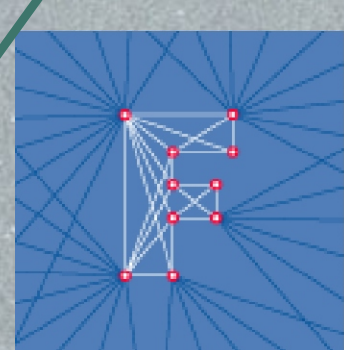


SPARC
Scholarly Publishing and
Academic Resources
Coalition
-creating new lower-cost
alternatives
to high-price journals



OAI
-develops and promotes interoperability standards that aim to facilitate the efficient dissemination of content (OAI-PMH Open Archives Initiative Protocol for Metadata Harvesting)
-enhances access to e-print archives as a means of increasing the availability of scholarly communication
-developing framework for distributed, interoperable network of eprint archives

BOAI
-aims to accelerate progress in the international effort to make research articles in all academic fields freely available on the internet
-supported by the Open Society Institute.
-to achieve open access to scholarly journal literature, two complementary strategies are recommend: self-archiving and a new generation of open-access journals



FIGARO
(two Dutch, Utrecht & Delft, and two German universities Oldenburg and Hamburg)
-initiative to set up an infrastructure for academic e-publishing in Europe
-investigates new business models for scholarly publishing and stimulate open access



BioMed Central

commercial publisher
of biomedical
literature
open (free) access
journals long-term
archiving is ensured
by PubMed Central
innovative business
plan: "author pays"
model



collaboration of non-
profit publishing
organisations
provides an
inexpensive
vehicle to convert
existing print
journals to electronic
form pricing
model based on
cost
recovery



promoting open-
access
publishing
in life sciences
and medicine
funding model
similar
to BMC

DOAJ
- Directory of
Open Access
Journals
- comprehensive
directory
of all quality
controlled
open-access
journals

LIBRARIANS

should raise the
awareness
of the academic community
regarding problems
and opportunities
in scholarly communication

LIBRARY

as promoters of open
access to scientific
information,
helping scientists to
regain control over
scientific publishing

LIBRARY

as technical and
professional
support to emerging
systems (records management,
metadata
creation, classification
schemes, preservation,
applying standards, etc.)

LIBRARY

Responsibility to store,
preserve and provide access
to digital scientific output,
of the "mother institution",
through institutional
archives

LIBRARIANS

(among others) need
to invent new and
better tools for
evaluating scientific
performance (existing tools
are hindering open access)