Society Journal Publishing in the 21st Century

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SPARC Japan Seminar, July, 2010



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Why do Learned and Professional Societies Exist?

AIP was created for the purpose of "promoting the advancement and diffusion of the knowledge of physics and its application to human welfare."

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Outline

- 1. Society publishing
 - Same or Different?
 - Society publishing: Facts and Figures
 - The Future for Learned Societies
 - Priorities and Pressures
- 2. Open Access
- 3. Author rights



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About APS Home | About APS | Mission Statement Mission Statement Society Governance **Mission Statement** Society History The American Physical Society strives to: Support APS · Be the leading voice for physics and an authoritative source of physics **APS Jobs** information for the advancement of physics and the benefit of humanity Contact Us Collaborate with national scientific societies for the advancement of science. science education and the science community; Visit Us · Cooperate with international physics societies to promote physics, to support physicists worldwide and to foster international collaboration; · Have an active, engaged and diverse membership, and support the Adopted November 21, 2004

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Society Publishing: Same or Different?



Society Publishing: Same or Different?

Learned Society

- Mission driven
- Trustees, Council
- Large number of small / medium sized orgs
- Single subject focus
- Cautious, risk averse
- National
- Close to the community
- Served by volunteers

Commercial publisher

- Profit driven
- Executive Board
- Small number of very large companies
- Multi-subject
- Entrepreneurial
- International / global
- Professional staff
- Publishing expertise



What do Society Officers worry about?

What do Society Officers worry about?

- Members
- Mission
- Profile
- Money



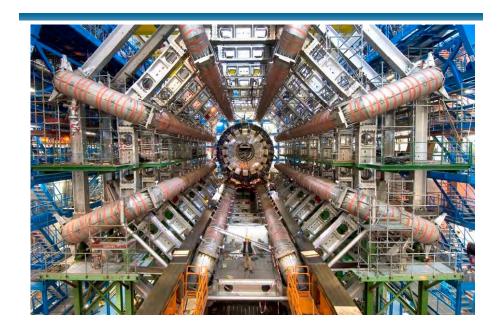
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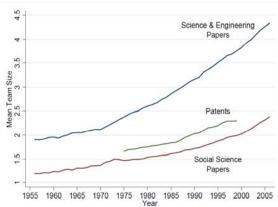
6,909 203,710





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Notes: For papers, the figure plots the mean number of authors per paper across 19 million journal articles indexed by the Institute of Scientific Information's Web of Science database. The Science and Engineering category pools articles from 171 different sub-fields while the Social Sciences category pools articles from 54 sub-fields, as indexed by the Web of Science. For patents, the figure plots the mean number of inventors listed in each patent, using the NBER patent database. For further details see Wuchty, Jones, and Uzzi (2007) and Jones (2009).

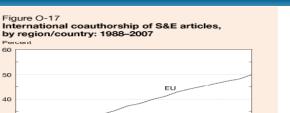
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Mapping the Journal Publishing Landscape

 Active scholarly journals in 2009¹ 	25,400
 Articles published in 2009² 	1.5m
 Journals in the Journal Citation 	9360
database ³ (6,400: Science edition; 1800 in Social Sciences edition; 1160 in Arts & Humanities edition)	
• STM journals accessible on-line in 2008 ⁴	96%
 Number of journal publishers (globally). Of which 73% are "non profits" publishing 2334 journals³ 	2000



50 40 1991 1993 1995 1997 1999 2001 2003 2005 2007

NOTES: See glossary for countries included in Asia-8. EU includes all 27 member states. Articles classified by year that they entered the database and assigned to region/country on basis of authors' institutional address(es). Each collaborating country or sector

SOURCES: Thomson Reuters, Science Citation Index and Social Sciences Citation Index, http://thomsonreuters.com/products_ services/science/; The Patent Board™; and National Science Foundation, Division of Science Resources Statistics, special tabulations.

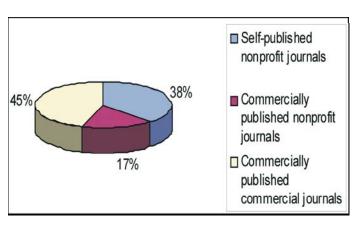
Science and Engineering Indicators 2010

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Split between non-profit and commercial journals



S. Morris, Learned Publishing 20, 299 (2007)

Facts and Figures

- Annual Revenues generated from English language STM journals at \$8b in 2008 up 6-7% from 2007³
- Broader STM publishing market worth \$16b³
- 55% of global STM revenues from USA, 30% from Europe, 10% from Asia/Pacific, 5% ROW³
- Journals publishing revenues in 2008 estimated at 68-75% of total revenue from library subs, 15-17% corporate subs, 4% advertising, 3% membership fees and personal subs, author-side payments 3%⁵
- 3-4% growth per annum in number of articles and journals published

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Society Publishers

- Over 97 percent of society publishers publish three or fewer journals, with almost 90 percent publishing just one title⁸
- ~ 10,000 societies that own at least one journal⁸
- Collectively own around 55% of the world's journals (~ 2/3rds self published)⁸
- Commercial publishers play a role in 62% of the world's journals owning 45%, contract publishing 17%8

Publishers

- The distribution of journals by publisher is highly skewed:
 - 95% or more publish only one or two journals
 - The top 100 publishers publish 67% of all journals
 - The top 10 publishers publish about 35% of all journals
 - In contrast, the Big Four

Elsevier	2000
Springer	2000
 Wiley-Blackwell 	1500
Taylor & Francis	1000+

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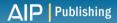
Factors from the Library Community

- Over half of all journals in 2008, were sold in bundles of 50 titles or more⁶
- 46% of librarians state that they would prefer to purchase from non-profit publishers (with 22% indicating a strong preference to do so)
- However, elsewhere in the same survey the profit status of the publisher was consistently considered to the least important factor when making purchase decisions
- The majority of responding librarians, 54%, have no preference to purchase from non-profit publishers

Ian Russell: ALPSP Survey of Librarians: Responding to the credit crunch – what now for librarians and libraries? (ALPSP, 2009)

"In an increasingly electronic environment, scale has become all-important, and scholarly societies have increasingly turned to outside partners for their journal publishing"

Roger C. Schonfeld & Ross Housewright Ithaka S+R Faculty Survey 2009: Key Strategic Insights for Libraries, Publishers, and Societies, April 7, 2010



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To Self Publish or Contract Publish? Factors to consider

- Financial risk and return
- Level of investments required (time, money, expertise)
- Ownership
- Trust
- Control
- Focus
- Influence ("small fish in a big pond")
- Brand / image
- Access to knowledgeable staff, innovation, global sales
- Benefit from economies of scale (marketing, sales, production, online hosting, etc.)
- Cultural fit
- Mission compatibility

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To Self Publish or Contract Publish?

- What observations do you have?
- What are your conclusions?
- What would you recommend to a society officer?

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But bear in mind...

"Despite several years of sustained efforts by publishers, scholarly societies, libraries, faculty members, and others to reform various aspects of the scholarly communications system, a fundamentally conservative set of faculty attitudes continues to impede systematic change"

Roger C. Schonfeld & Ross Housewright Ithaka S+R Faculty Survey 2009: Key Strategic Insights for Libraries, Publishers, and Societies, April 7, 2010

Pros and cons of Societies as publishers

Pros

- Close to subject
 - Know what's going on (often helping to shape it)
 - Subject expertise close to hand
 - Know movers and shakers
- Goodwill from community

Cons

- Restricted by subject
- Often small
 - No economies of scale
 - Few staff covering lots of different roles
 - Difficult to innovate or even stay up-to-date
- Can be conservative and slow to move
- Difficult to access investment funds?

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The Future is... ... Competitive Collaboration

- Not collaboration for the sake of it
- Smaller societies
 - Essential collaboration to ensure survival and growth of key revenue generators and the ability of the society to serve its members
- Larger societies
 - Effective competition with large commercial players in exploring new/existing markets with competitive new/existing products to serve societies' mission

Society Publishing: Pressures and Priorities

- Size / scale of society and its publishing operation
- Subject
- Mission
- Governance
- Financial resources / Commercial pressures
- Science is changing...
- Publishing is entering a disrupted age...
- Scientists want information and knowledge...
 - We send them articles...
- How to create a global presence?
- Pooling resources compete and / or collaborate?
- Investment in new technologies, the price of innovation

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- 2. Björk, B., Roos, A. and Lauri, M. (2009) Scientific journal publishing: yearly volume and open access availability
- 3. Ware, M., Mabe, M., The STM Report (2009)
- 4. Cox, J & Cox, L Scholarly Publishing Practice Survey 2008 (ALPSP)
- RIN (2008) Activities, costs and funding flows in the scholarly communications system in the UK
- Van Orsdel, L. C., and Born, K. (2009 15 April 2009) Reality Bites: Periodicals Price Survey 2009, Library Journal
- Cox, L. (2009) Consortium Purchasing Directory 4th Edition (Frontline Global Marketing Services)
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- 10. National Science Indicators: 2010. National Science Board Jan 2010

What are European and US Learned Societies doing about Open Access?

- Open access is the idea of making original research articles freely accessible on the web
- Consider open access in terms of <u>what</u> is made open, <u>when</u> it is made open, and <u>how</u> it is made open

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Open Access: "Gold"

- Gold OA refers to paid-for publication of an article in an online, typically peer reviewed, journal
- Gold OA is an alternative business model
- Researchers, institutions or funding agencies pay a publisher an "article processing charge" (APC)
- The formal peer review process is the same as for paid access journals
- Meaning neither the reader / user nor their institution pays to access online content
- Publishing costs are (usually) paid for by the producers.
 - Authors, their institutions or funding agencies
- Important to distinguish open access from public access

Main types of open access in current use

- Full open access ("Gold" route)
 - The journal makes the final published article available immediately on publication. Uses an Article Processing Charges (APC) typically paid by the author, their institution or funding agency
- Delayed open access
 - As above but the article is made available following a delay after publication
- Self archiving ("Green" route)
 - A version of the manuscript is made available (typically on an authors web page, institutional repository or subject repository). No business model

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Open Access: "Green"

- Green refers to researchers self-archiving their manuscripts on the web
- Manuscripts are typically placed in an online repository:
 - Personal, institutional, subject repository
- Green OA is independent of any of the researcher's formal publishing activities
- There is little way to monetize green OA and little uptake although most publishers allow self archiving
- Publishers and journals allowing author self archiving were colour-coded green by Project ROMEO

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The real world is more complex!

- Publishers can run OA and non-OA journals simultaneously
- Some OA journals (and even OA publishers) will make primary research articles OA whilst charging for reviews, editorials
- Individual journals may be pure (100%) OA, or "hybrid" OA
 - A paid subscription journal agrees to make individual articles freely available on payment of an APC, while the other papers are available to subscribers only
- Submission charges
 - These are very rare in the current landscape

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Trends in Article Processing Charges

- Public Library of Science
 - Raised its charge \$1500 to \$2200-2850
- BioMedCentral
 - Raised its charge from \$500 to between \$1050 and \$1995
- Fees for full and optional open access journals now mostly fall in the wide range:
 - \$1000-3000 per article
- Most if not all open access journals waive charges for authors from developing countries

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Article Processing Charges

- APC's are also known as publication fees, distinct from page charges
- Price reflects the journal's prestige
- "Born OA" publishers typically charge:
 - \$500 to \$2,500 per article
- Established publishers tend to charge higher fees:
 - \$1,500 to \$4,000 per article

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"Born OA" publishers to watch

- Hindawi Publishing Corporation
 - Founded in 1997, specializes in engineering
 - Publishes over 150 open access peer reviewed journals
 - Based in Cairo
- BioMedCentral
 - Founded in London (2000)
 - Profitable in 2007, acquired by Springer (2008)
 - World's largest OA publisher with 200 titles
- Public Library of Science
 - Not for profit created in 2000
 - Flagship journals: PLoS Biology, PLoS Medicine
 - Community journals
 - PLoS One

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OA initiatives from Traditional Publishers

- Springer "Open Choice"
 - Open access option for all Springer titles
 - OA-friendly licensing terms
 - Hybrid bundle deals
 - One fee paid by an institution covers both access to it's journal content and APC's for Open Choice
- Oxford University Press
 - 90 of its 230 journals are hybrid OA ("Oxford Open" initiative)
 - 5 are fully OA

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Examples of Gold OA Journals from Learned Societies

Title	Publisher	Launc h	IF (2009)	Articles (2009)	Fee
New Journal of Physics	IOP	1997	3.312	806	\$1100
Optics Express	OSA	1997	3.278	2548	\$925 (6 or fewer pages) \$1585 (7-15 pages)
Atmospheric Chemistry & Physics	Copernicus / EGU	2001	4.881	600	EU 1000 (for 10 page article)

Learned Societies and OA

Many societies offer full / optional open access

Society	Scheme	Charge (US\$)
American Institute of Physics	Author Select	1500-1800
American Physical Society	Free to Read	975-1300
Royal Society	EXiS Open Choice	2380
ACS	Author Choice	1000-3000
RSC	Open Science	1000-2500 UK pounds

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Open access via author self archiving (Green OA)

- Author deposits the article in an open repository
 - An institutional repository
 - A subject-based repository
 - arXiv in physics
 - PubMed Central in biomedicine
 - RePEc in economics
- No independent business model

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Institutional Repositories (IRs)

- An online database for collecting and preserving in digital form – the intellectual output of an institution
- Objectives
 - To provide open access to institutional research output
 - To store and preserve other digital assets
 - Also serves as a "showcase
- Number of IRs is growing rapidly
 - 1045 IRs listed on Registry of Open Access Repositories
 - 1650 listings on OpenDOAR service
- Number of articles deposited is growing much more slowly

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Subject-based repositories

arXiv

- Established in 1991, Los Alamos National Lab
- Hosted at Cornell University Library
- Focus on high energy physics
- Expanded to some (but not all) other areas of physics, mathematics, computer science, quantitative biology
- Currently holds 612,000 eprints

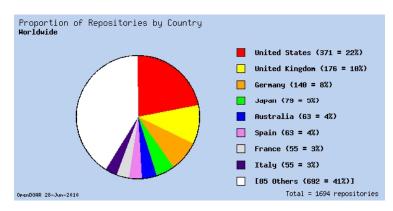
PubMed Central (PMC)

- Project of the US NIH
- **Builds on PubMed**
 - The bibliographic database that includes Medline
- Designated repository for researchers funded by NIH and other biomedical research funders
- PMC also has the manuscripts from authors for archiving in support of NIH mandate

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IRs by country



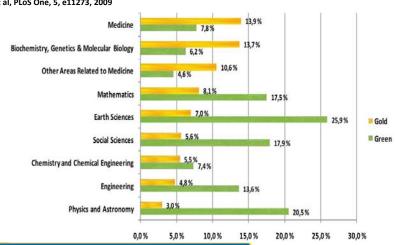
Source: OpenDOAR

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The Extent of OA

Open Access to the Scientific Journal Literature: Situation 2009 Bjork et al, PLoS One, 5, e11273, 2009



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Author Rights

Transfer of copyright by authors

	2003	2005	2008
Percentage of publishers requiring copyright transfer	83%	61%	53%

Transfer of copyright by publishing sector

	Not for profit	Commercial
Transfer copyright	56.9%	42.2%
License to publish	17.5%	24.4%
Request copyright, will accept license	20.4%	22.2%
No written agreement	5.1%	11.1%

Scholarly Publishing Practice, 2008. ALPSP

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Publishers policies on self archiving

- 30% allow archiving of both authors original and accepted manuscript
- 21% allow archiving of accepted manuscript
- 11% allow archiving of author's original manuscript
- 38% do not formally support self archiving

Creative Commons

- Sometimes used by open access publishers
- Author retains copyright
- Creative Commons license allow use and re-use of the article
- The license imposes conditions, such as:
 - Attribution of the author
 - Non-commercial use
- Note: OA under a traditional copyright regime is also possible and common

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Recommendations

- Use a "wide-angle" lens to keep the big picture in focus
- Every research community is different
 - Get close to your community
 - Know the emerging trends and how researchers value your content
- Review how open access might have a role to play in relation to your other business models
- Keep an international perspective
- Understand when it might be best to partner and collaborate
- Review your copyright policy and any copyright agreements with authors

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Thank you

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