The Evolving Landscape of Scholarly Publishing

Kwan-Hoong Ng, PhD, DABMP
Editor, Biomedical Imaging and Intervention Journal

Professor, Department of Biomedical Imaging
University of Malaya
Malaysia
Evolution of Scholarly Publishing

Learned societies
~ 1660s

Commercial publishers
~ 1945

Electronic publishing
~ mid 1990s

Mega publishers
~ 2010s

Open Access
~ 2000
# Characteristics of Scholarly Publishing

<table>
<thead>
<tr>
<th>Option</th>
<th>Access</th>
<th>Timing</th>
<th>Peer-Reviewed</th>
<th>Responsibility for perpetual access</th>
<th>Business Model</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional print journals</td>
<td>Restricted</td>
<td>Delayed - until issue is published</td>
<td>Yes</td>
<td>Libraries</td>
<td>Subscription (pay to read)</td>
<td>Most commercial and non-profit publishers</td>
</tr>
<tr>
<td>Traditional online journals</td>
<td>Restricted</td>
<td>Delayed (usually) - until issue is published online</td>
<td>Yes</td>
<td>Varies (ranges from publisher to online archives to Libraries' web-server)</td>
<td>Subscription</td>
<td>Most commercial and non-profit publishers</td>
</tr>
<tr>
<td>Open Access online journals</td>
<td>Unrestricted</td>
<td>Immediate (usually) - when articles are accepted or editing is complete</td>
<td>Yes</td>
<td>Unknown</td>
<td>Author and/or author's institution pays (membership or article processing fees)</td>
<td><strong>BioMed Central, Public Library of Science</strong>, Oxford University Press, Springer (only by author's choice). See the <a href="https://dir.science.org/">Directory of Open Access Journals</a> for a complete list.</td>
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<tr>
<td>Institutional Repositories</td>
<td>Unrestricted</td>
<td>Immediate</td>
<td>Possible</td>
<td>Libraries (usually)</td>
<td>Institutional support</td>
<td><strong>UM's Digital Conservancy, MIT's DSpace</strong></td>
</tr>
<tr>
<td>Accommodates various content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working papers / pre-prints</td>
<td>Unrestricted</td>
<td>Immediate</td>
<td>Possible</td>
<td>Libraries (usually)</td>
<td>Institutional support</td>
<td><strong>UM's Digital Conservancy, MIT's DSpace</strong></td>
</tr>
<tr>
<td>Re-prints / post-prints</td>
<td>Unrestricted</td>
<td>Immediate</td>
<td>Yes</td>
<td>Libraries (usually)</td>
<td>Institutional support</td>
<td><strong>UM's Digital Conservancy, MIT's DSpace</strong></td>
</tr>
<tr>
<td>Primary source data</td>
<td>Unrestricted</td>
<td>Immediate</td>
<td>Possible</td>
<td>Libraries (usually)</td>
<td>Institutional support</td>
<td>None yet</td>
</tr>
</tbody>
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Adapted with permission from Characteristics of Scholarly Publishing Options, University of California Office of Scholarly Communication.
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<td>Other content (instructional materials, etc.)</td>
<td>Unrestricted</td>
<td>Immediate</td>
<td>Possible</td>
<td>Libraries (usually)</td>
<td>Institutional support</td>
<td>** UM's Digital Conservancy, MIT's DSpace **</td>
</tr>
<tr>
<td>Disciplinary repository</td>
<td>Unrestricted</td>
<td>Immediate when item is deposited</td>
<td>Yes for included postprints</td>
<td>Unknown</td>
<td>Institutional support</td>
<td>arXiv, Pubmed Central, CogPrints</td>
</tr>
<tr>
<td>Departmental and personal web sites</td>
<td>Unrestricted</td>
<td>Immediate when item is deposited</td>
<td>Can be quality filtered</td>
<td>Unknown</td>
<td>Institutional support (may be informal)</td>
<td>Many univ departments have separate web sites</td>
</tr>
</tbody>
</table>
Situation Today

- The more articles a publisher publishes, the more money it makes.

And it works the same way in universities:

- The more articles an academic publishes, the better his or her chances at promotion, tenure, salary increases, and …

- The higher is the university ranking
A ‘good’ journal is one that prides itself on a high impact factor & high rejection rate. Similarly, ‘good’ research is research with rigour, which cites and is cited by other articles in other ‘good’ journals, in which it is extremely difficult to get published, because it prides itself on high impact factor …
There are two results of this circular situation:

1. It creates an introspective, even closed, environment, where ‘insiders’ are communicating with, writing for and citing ‘other insiders, in which it’s difficult for new and disruptive (new) ideas to break through.

2. The process of submission and publication becomes extremely slow.
Adapted: Scientific Publishing: From vanity to strategy
Subscription model/ Open access
Supply-oriented, Publisher-centred

Vs.

Demand-oriented, Research-centred
e-Science
Open access tells us about:

- method of dissemination
- whether we can reuse the information
- whether the article is archived
Open access does NOT tell us about:

- The scope of the journal
- The quality of the journal
- The language of the journal
- The review process of the journal
- The reputation of the journal
Mega Publishers
Scientific Research Publishing (SCIRP: http://www.scirp.org) is an academic publisher of open access journals. It also publishes academic books and conference proceedings. SCIRP currently has more than 200 journals in the areas of science, technology, and medicine.

Recently Published Papers »

- An Enhanced Bulk-Driven Folded-Cascode Amplifier in 0.18 µm CMOS Technology
  Arash Ahmadpour, Pooya Torkzadeh Downloads: 15

- Dynamic and Leakage Power Estimation in Register Files Using Neural Networks
  Assim A. Sagahyroon, Jamal A. Abdalla Downloads: 11

- Effect of Temperature & Supply Voltage Variation on Stability of 9T SRAM Cell at 45 nm Technology for Various Process Generations

- An Efficient Approach to Monitor the Optical Power in Multimode Fiber Optic Links
  L. T. Dinh, D. N. Tran
  Jurnal of Diabetes Mellitus
  JDM
A major STM journal publisher of 116 online and print journals, 230 plus open access journals, and related print/online book series, Bentham Science answers the information needs of the pharmaceutical, biomedical and medical research community.

Leading journals include **Current Pharmaceutical Design** (Impact Factor 3.87) and **Current Medicinal Chemistry** (Impact Factor 4.859, the top journal in its field endorsed by several Nobel Laureates). Other high profile journals include **Current Topics in Medicinal Chemistry** (Impact Factor 4.174), **Current Metabolism** (Impact Factor 5.113), **Current Drug Targets** (Impact Factor 3.553), **Current Molecular Medicine** (Impact Factor 4.476) and **Current Cancer Drug Targets** (Impact Factor 4.327).

Bentham Science Publishers are publishing more than 230 plus peer-reviewed open access journals, under the banner of "BENTHAM OPEN". These free-to-view online journals cover all major disciplines of science, technology, and medicine, please [click here](#)
List of Publishers

Beall’s List of Predatory Open-Access Publishers

This is a list of questionable, scholarly open-access publishers. I recommend that scholars not do any business with these publishers, including submitting articles, serving as editors or on editorial boards, or advertising with them. Also, articles published in these publishers’ journals should be given extra scrutiny in the process of evaluation for tenure and promotion.

- A M Publishers
- Academe Research Journals
- Academic and Business Research Institute
- Academic Journals
- Academic Journals, Inc.
- Academic Journals Online (AJO)
- Academic Research Publishing Agency
- Academy & Industry Research Collaboration Center (AIRCC)
Predatory, open-access publishers

- *Unprofessionally* exploit the *author-pays model* of open-access publishing (Gold OA) for their own profit.
- *spam* professional email lists
- largely *soliciting article* submissions for the clear purpose of gaining additional income.
- Operating essentially as vanity presses, have a *high article acceptance rate*, with a false-front or non-existent peer review process.
Predatory, open-access publishers

- They *add little value to scholarship*, pay little attention to digital preservation, and operate using fly-by-night, unsustainable business models.
Submit your article for a decision within 14 days, or receive a full waiver

Dear Dr. Ng,

QScience Connect the interdisciplinary, open access journal covering ALL FIELDS, offers researchers a 14-day time-to-first decision on all submissions to the journal. If we do not return the referee reports and first editorial decision within 14 days of submission, we will grant you a full waiver on the article processing charge. QScience Connect welcomes submissions from ALL fields and will publish those manuscripts which meet the simple criteria of being conducted in the appropriate manner, with conclusions concurrent with results (where appropriate). We do not set a threshold of perceived importance for the papers that it publishes; rather, QScience Connect will publish all papers that are judged to be technically valid and original. We believe this is an ideal model for online publishing as all papers based on correct methods and valid findings will be afforded a home in a peer-reviewed journal. This includes interdisciplinary work that, traditionally, may have fallen between the aims and scopes of two journals.

Take the 14-day test here: www.edmgr.com/connect
Submit your article for a decision within 14 days, or receive a full waiver
From: [Redacted]
Sent: 12 June 2012 10:43
To: [Redacted]
Subject: Invitation to submit a commissioned Spotlight Article for ISRN Oceanography

Dear [Redacted],

My name is [Redacted] and I am an Editorial Developer for the International Scholarly Research Network. I am writing to you because we are in the process of commissioning a number of Spotlight Articles to be published in 2012 in ISRN Oceanography, and I would like to know whether you would potentially be interested in writing one of these Spotlight Articles.
One important feature of Spotlight Articles is that they must be single author manuscripts, and we only solicit a handful of these articles per year from leading researchers in each field. In recognition of the effort that is required in order to put such an article together, we provide an honorarium of $1,000 upon the completion of a Spotlight Article. In addition, the article will be published on an Open Access basis, meaning that it will be made freely available to all interested readers and the author of an article will retain the copyright of their work.
Table 1. Differences significant (*) traceability between Ethanol and FAEE after administration of 20% ethanol acutely

<table>
<thead>
<tr>
<th></th>
<th>Ethanol 6hours</th>
<th>Ethanol 24hours</th>
<th>FAEE 24hours</th>
<th>pValue</th>
</tr>
</thead>
<tbody>
<tr>
<td>20%</td>
<td>3.00</td>
<td>1.20</td>
<td>1.80</td>
<td>2.40</td>
</tr>
</tbody>
</table>

Figure 3. Calibration curve of myristate with ethyl hexanoate as standard internal

\[ y = 0.059x \]

\[ R^2 = 0.9938 \]
Crisis looming

• Publishing frenzy: over-publishing, uncontrolled proliferation of journal articles, mostly of low quality.
• Mainly motivated by simplistic methods to evaluate faculty productivity by universities.
• Scholars are unable to keep up with research in their fields, as their searches mostly result in low-quality research.
• The race to “publish or perish” may have an adverse effect on academic publishing as a whole.
How Libraries Can Help in Disseminating Access to Scholarly Publications

1. Manage training on print/online access and retrieval techniques.
2. Resource sharing through networking and collaboration with librarians, editors and publishers.
3. Ensure that access to publications available in the library website are reliable.
4. Preserve scholarly publications by archiving and indexing.
Asia Pacific Medical Journal Articles Central Archives (APAMED Central)
altmetrics: a manifesto

NO ONE CAN READ EVERYTHING. We rely on filters to make sense of the scholarly literature, but the narrow, traditional filters are being swamped. However, the growth of new, online scholarly tools allows us to make new filters; these altmetrics reflect the broad, rapid impact of scholarship in this burgeoning ecosystem. We call for more tools and research based on altmetrics.

As the volume of academic literature explodes, scholars rely on filters to select the most relevant and significant sources from the rest. Unfortunately, scholarship’s three main filters for importance are failing:

- Peer-review has served scholarship well, but is beginning to show its age. It is slow, encourages conventionality, and fails to hold reviewers accountable. Moreover, given that most papers are eventually published open access,

http://altmetrics.org/manifesto/

Priem et al
Impact

Usage
downloads
views

Peer-review
expert opinion

Citations

Alt-metrics
storage
links
bookmarks
conversations

http://altmetrics.org/manifesto/ Priem et al
A Glimpse of the Future

• Scientific communication and research will not be the same anymore.
• The Internet and information technology are already impacting on the research landscape, scholarly publishing, research policy and funding, dissemination of knowledge, and the progress of science as a whole.
• Social media will alter the landscape.