

College Libraries and Open Access: Expanding access to scholarly literature without breaking your budget

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Show of hands...

“I have recently cancelled subscriptions to print journals and magazines.”

Reasons?

- Cost
- Students don't/won't use print journals
- Other...

PHILOSOPHICAL
TRANSACTIONS:
GIVING SOME
ACCOMPT
OF THE PRESENT
Undertakings, Studies, and Labours
OF THE
INGENIOUS
IN MANY
CONSIDERABLE PARTS
OF THE
WORLD

Vol I.
For *Anno 1665*, and *1666*.

In the *SAVOY*,
Printed by *T. N.* for *John Martyn* at the Bell, a little with-
out *Temple-Bar*, and *James Allestry* in *Duck-Lane*,
Printers to the *Royal Society*.

A brief history of modern
scholarly communication

- Francis Bacon (1561-1626), father of the modern scientific method, proposed a plan (in a work of fiction called *The New Atlantis*) for the founding of the learned society, where scientists would collect, organize, and **report among peers** new knowledge gained through experimental research.
- Shift in emphasis “from constructing comprehensive world-views and all-embracing philosophical edifices, to an emphasis on collecting the results of observations and experiments” (Kronick, 1976). This required a **shorter and speedier communications format**.
- *Journal de Sçavans*, privately funded, published (weekly), and edited by French lawyer Denis de Sallo. Recognized as the **first scholarly journal**. The first issue is dated Monday, January 5, 1665.

- The Royal Society of London is founded in 1660, and granted a royal charter in 1662. Although predating the era of the “professional” scientist, the Society committed itself to the establishment of truth through experimentation. The Society was also dedicated to the **free flow of information and encouraged communication**.

- *Philosophical Transactions*, funded and edited by Henry Oldenburg, becomes the official journal of the Royal Society. The first issue is dated Monday, March 6, 1665, with subsequent issues published on the first Monday of each month. Articles focused on **reporting of original research**, including experiments performed at Society meetings. It is the oldest continuously published scholarly journal.

- *Philosophical Transactions* helped to establish the **principles of scientific priority and peer review**.

- “The 18th century was still primarily an age of generalism in which every educated person felt responsible for the whole range of art, science, philosophy, in fact, the entire literature” (Kronick, 1976). However, by the end of the 18th century knowledge was beginning to fragment into **subject specializations**, and the number of journals began to increase.
- Houghton (1975) estimates that by the middle of the nineteenth century there were over 1,000 scientific and technical journals published worldwide, accompanied by the **increased specialization and professionalization** of the sciences.

- Heavy government and corporate investment in scientific research following World War II contributed to a dramatic increase in the number of scientists with papers seeking publication. **Society and university journals could not keep up with the demand. This is when commercial publishers were convinced to enter the market** (Ginsparg, 2002).
- In the 1950s-70s university libraries were **generously funded** to purchase journals. Commercial publishers realized they had a “cash cow” in the form of institutional subscriptions.
- Meadows (2000) tabulates the “quasi-exponential” growth in the number of journal titles from roughly 10,000 in 1951 to 71,000 in 1987. To cope with the volume of research requiring review, journal editors increasingly solicited peers within fields of specialization. **Peer review was endowed as a scholarly courtesy**. Reviewers were not typically paid for their service.

- The **promotion and tenure system** was increasingly tied to publication of research in peer reviewed journals and monographs—the proverbial “publish or perish.” Scholars sought to enhance their exposure (and reputations) by publishing in “high impact” journals.
- Commercial publishers leveraged “publish or perish” to bind scholars to contractual arrangements that led to the **signing away of their intellectual property rights (copyright)**, giving them “the right to sell, or rather rent, the work back to the researcher’s actual employer, through the serials budget of the university library” (Willinsky, 2006, 45).
- In 1986/87 the Association of Research Libraries (ARL) reported a single year increase of over 18% in serials expenditures. This precipitated what became known as the “**serials crisis,**” as libraries watched **the price of journals far outpace inflation** throughout the 1990s and into the present.

- Publisher power over scholars and libraries was tied to ingrained habits of a matured system, especially the fact that they controlled large sectors of the **primary distribution medium for scholarly communication—the print journal**.
- The journals buying spree of the 1950s-70s dried-up as college and university library budgets began to feel the pinch of successive cut-backs, beginning in the 1980s. Meanwhile, journal prices continued their dramatic increase. Still, **faculty, researchers, and scholars saw this largely as a library problem**. They continued to insist that access to **their journals** was essential.
- Before **any** change was possible, an alternative distribution medium with the same if not greater communication potential was needed.
- That alternative came in the form of the **Internet**.



A brief overview of Open Access

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- “The focus of the open access movement...is the **scholarly, peer-reviewed journal article**” (Morrison, 2009).
- Peter Suber (Earlham College) defines open access (OA) literature as **“digital, online, free of charge, and free of most copyright and licensing restrictions.”**
- The **“BBB definition of open access,”** a series of statements issued from international meetings in 2002-03 in Budapest, Berlin, and Bethesda clarified common terms and definitions to make scholarship freely available online.

- By “open access” to this literature, we mean its **free availability on the public internet**, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, **without financial, legal, or technical barriers** other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to **give authors control over the integrity of their work and the right to be properly acknowledged and cited**. (From the *Budapest Open Access Initiative* [February 14, 2002].)

Two basic approaches to open access

- Open access **journals** (gold)

The **journal** itself is open access, and articles become open access immediately as part of the process of publishing. Distinguished from hybrid journals with partial open access content, and toll journals that make back issues freely available after an embargo period. E.g., *PLoS Biology*

- Open access **archives** (green)

Copy of an **article** is placed in an archive, either by the author or publisher, for open access. E.g., *PubMed Central*

Benefits of Open Access

- For scholars

- Expanded and speedier access to research
 - Greater exposure and impact (citation rates)
 - Retain greater control over intellectual property
 - Fewer limits and greater versatility on use of media to communicate research (link to datasets; embed audio, video, etc.)

- For teachers and students

- Expanded access for teaching and learning
 - Less concern about use permissions and copyright/licensing violations

- For libraries

- Expanded access
 - Free; easier to manage (no subscriptions, licensing)

Challenges of Open Access

- Rethinking the journal

Articles increasingly disaggregated, students already don't think in terms of articles in discrete issues of a journal

- The need to educate faculty

"Can you trust something that's free?" concerns about peer review, research quality, and reputation; can't assume their understanding of OA (especially if they don't have to pay for library resources generally); getting them to let go of their "essential" journals to tap into a larger research ecosystem

- Indexing

No universal tool; still too many gaps and overlap in coverage



Just a few Open (and Free) Access journals, archives, and indexes



Click logo to visit site.



As it happens, next week is the first international Open Access Week!

“[A]n opportunity to broaden awareness and understanding of Open Access to research, including access policies from all types of research funders, within the international higher education community and the general public.”

Click graphic to visit website.

Works Cited

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Links to resources

[http://www.milligan.edu/library/
aca.summit.htm](http://www.milligan.edu/library/aca.summit.htm)