University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Faculty Publications, UNL Libraries | Libraries at University of Nebraska-Lincoln

1-1-2009

Hot Potato: Who Will End Up Paying for Open Access?

Sue Ann Gardner
University of Nebraska-Lincoln, sgardner2@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/libraryscience

Part of the Economics Commons, and the Library and Information Science Commons

Gardner, Sue Ann, "Hot Potato: Who Will End Up Paying for Open Access?" (2009). *Faculty Publications, UNL Libraries.* Paper 199.
http://digitalcommons.unl.edu/libraryscience/199

This Article is brought to you for free and open access by the Libraries at University of Nebraska-Lincoln at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Faculty Publications, UNL Libraries by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

IAMSLIC/EURASLIC Conference
September 27-October 1, 2009
Provinciaal Hof, Brugge, Belgium

Title: Hot Potato: Who Will End Up Paying for Open Access?

Author: Sue Ann Gardner, Scholarly Communications Librarian
Address: 302S Love Library, University of Nebraska-Lincoln, Lincoln, Nebraska, USA 68588-4100

Abstract: Open access to scholarly content is increasing, and will continue to do so. This phenomenon is driving the economics of publishing to change dramatically. The question is: what will the economics of open access look like when this correction settles into a sustainable model? I will cover some of the ideas that have recently been articulated by economists, information professionals and others regarding retooling the evolving publishing business model, and will present some proposed solutions to the problem of "who is going to pay for it?"

Keywords (LCSH-based): Open access publishing, Digital libraries, Electronic information resources, Economics

The economics of open access publishing are shifting continually. Scholarly publishing represents a special case in that the content-generators usually do not expect direct financial compensation for their work, while the publishers of the content expect to generate revenue beyond mere cost recovery.

Scholarly Communication Participants

Funders	Authors	Publishers	Aggregators	Libraries	Readers
Fund content generation	Create content	Format and disseminate peer-reviewed content	Aggregate publishers' content	Make content accessible to readers	Use content

It seems as though each entity in the chain of scholarly communication is reluctant to bear the burden of costs associated with providing content free of charge to readers. It's akin to the children's game hot potato, where each player strives not to be the one holding the "potato" at the end of a round. All involved parties have an economic concern with respect to open access:

- Some federal funding agencies have mandated that authors freely post content in light of taxpayer contribution to research; mandates invariably suffer from noncompliance of authors
- Authors are sometimes asked to pay page charges or open access fees, and they are at times required to openly post content whether they wish to or not
- Commercial publishers have concerns about the economic viability of open access in light of their need to continually generate revenue
- Aggregators must comply with a balkanized publishing environment, leading to generally high pricing of their products, and broadly limiting reader access
- Libraries pay to create repositories, and they pay publishers and aggregators to provide access to some online content
- Readers access some content via pay-per-view options.

These concerns are germane in a practical sense in that central and essential to the advancement of knowledge is unimpeded communication among researchers, and between researchers and their non-colleague readers, especially written forms of communication.

On the ideological side of the coin, some have advocated for the public's right to know, in light of taxpayer support of research through grant funding and payment of salaries for state and federal employees (Willinsky In press). The Scholarly Publishing and Academic Resources Coalition (SPARC) has founded the U.S.-based Alliance for Taxpayer Access, with the aim "to ensure that the published results of research funded with public dollars are made available to the … public, for free, online, as soon as possible" (Scholarly Publishing and Academic Resources Coalition 2004).

"Freeconomics" is a term floating around, based on the *New York Times* blog titled *Freakonomics*, and book by the same authors, which concerns the issue of access to free online content (Levitt *et al*. 2004; Iskold 2008). Is the Alliance advocating so-called "freeconomics," then, as Chris Anderson of *Wired* magazine has considered recently in a radical way? (Anderson 2008). In and of itself, as Anderson has discussed it, the issue of "free" is a false concept because the question really is: for whom does open access cost and for whom is it free? On the heels of that, it bears asking: is the answer to the above as it should be--is it economically sustainable? Also, among the players, who expects what sort of compensation? My answer begins: Especially if those contributing publishing

functions for the scholarly community do so not-for-profit, free online taxpayer access to publicly-funded research is certainly an attainable goal.

In terms of the changing economics of scholarly publishing, some argue that the traditional delineation between participants is becoming antiquated. Particularly, both publishers and libraries are sometimes considered no longer to be valid entities (Yarney 2007; Sherman 2009). I would counter this first by agreeing that their roles are changing, but I would add quickly that they will remain viable because they add clear value to the communication process.

Computer owners may have the tools at hand to "publish" works, but in attempting to do so, they often create ephemeral products that do not have scholarly integrity or usability. Professional publishers offer many value-added services such as copy editing, typesetting and formatting, graphics layout, peer review administration, production and distribution, among others, that are not often adequately replicated by amateurs. The question is not whether publishers offer valuable services to authors, it is whether their economic goals are in line with the needs of the scholarly community.

Libraries are occasionally similarly dismissed as being inessential players in scholarly communication (Sherman 2009). People may have access to so much more online now, or be able to search catalogs readily, etc., but libraries remain repositories of resources selected specially for certain defined populations, they are gatekeepers to the Deep Web, and they offer other key services such as interlibrary loan, archiving, etc., that are central to robust research.

In the chain of scholarly communication, authors, of course, create content. Beyond their salaries and per diems, they do not often expect to be financially compensated for the content they produce. Their compensation is often intangible, including merely having readers, being cited, contributing to the body of knowledge of their subject, creating a legacy for themselves and having influence on the direction of thought on a topic, etc. Their compensation involves significance and impact more than dollars and cents. Conversely, commercial publishers' main concern is revenue generation, plain and simple. That they may desire a measure of impact on a discipline, it can be directly traced back to the need to remain economically viable in the market place. Vis-à-vis authors' vs. publishers' tacks, are these concerns diametrically opposed? Not necessarily.

When we talk about open access (OA), certain assumptions are made. Actually, there are varying levels of OA. Peter Suber (2007) (formerly of SPARC and currently of the Berkman Center for Internet & Society at Harvard University), and others, have talked about "green" OA and "gold" OA. Green open access refers to the publishers allowing authors to post a so-called

"author's version" of a paper to an institutional repository or to the author's personal Web site, but not the final published version. Gold open access refers to the publishers allowing (or sometimes *requiring*) the final, published version to be posted online, for free, in its final published form (Suber 2007). I will argue that anything less than so-called gold open access is not truly open access at all. Anything less is a form of grey literature creation which compromises the integrity of the scholarly communication process.

The final, published version is placed in the continuum of scholarship, it is placed temporally, it is consistently formatted and enumerated, it is indexed, and it is cataloged. Publishers that do not allow this definitive version to be made openly accessible are forcing repositories to post content that lies outside the collectively recognized continuum of scholarly discourse.

Is the posting of the final published versions of scholarly articles a threat to the economic viability of the publishers of a journal? I would argue: no, because the article will be posted separate from others in the run of the journal in a database of unrelated works that are generally collated by author affiliation, which all but guarantees placement among works of many disparate subjects and representing a great span of years. I would argue that disparate instances of articles from a journal run, across many repositories, are not a threat to the economic stability of a publisher. Even on a broad scale, where many hundreds of repositories include hundreds of thousands of papers, it does not compute that this would register as an economic threat to publishers, due to articles being disassociated from the journal run. Libraries, the bread and butter of a publisher's revenue, will continue to subscribe to journals whose articles their patrons use and request.

Some publishers recognize this, and acknowledge that exposure to a publication through availability of articles here and there in various repositories is a boon to them, that readers will be using the content through those repositories and will demand that their libraries carry journals whose works they read and cite.

Allowing authors to freely post the final published version of scholarly articles is not just good business sense, it is also imperative to the proper flow of scholarly communication. In scholarly communication, citations are everything. Providing mere links to articles, unless that is truly the correct citation for a digital-only item, is entirely inadequate. Servers change, links go dead, people perpetuate mistypings, linkbot programs give inconsistent results, and access to scholarly works is compromised. When an article is published in a run of a journal, to repeat, many relevant assignations occur:

- The content is placed temporally

- The content is placed in the continuum of scholarship
- The content is consistently formatted
- The content is enumerated such that scholars can cite the definitive work, and not a possible manuscript variant
- The citation is indexed in subject databases
- The journal in which the paper appears is cataloged, ensuring uniformity of title, uniformity of subject assignment, etc.

There is at least one instance of a scholarly publishing economic model that is both financially sustainable as well as serves the interests of the scholarly community. When it was founded 75 years ago, the precursor publication to *Comparative Parasitology* (*CP*, 2000-, v. 67- http://go.unl.edu/dxn) was published by the Helminthological Society of Washington (HelmSoc) as its *Proceedings* (1934-1989, v. 1-56) and later as its *Journal* (1990-1999, v. 57-66) (Helminthological Society of Washington 2009).

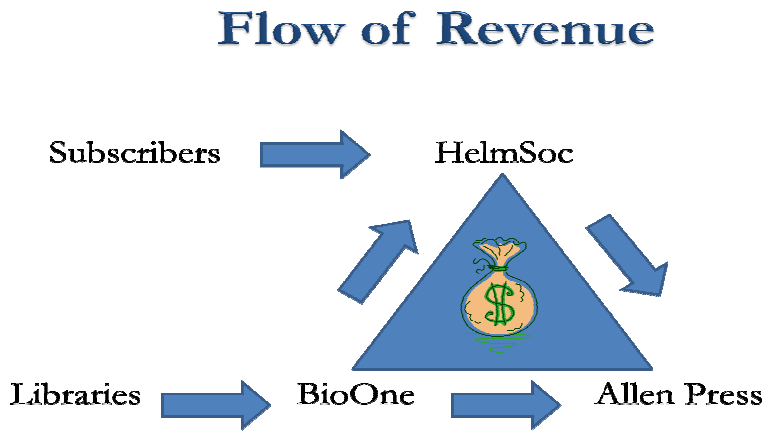
In the 1990s, HelmSoc contracted with Allen Press to assist the society in publishing the *Journal*, but only in a limited capacity. HelmSoc retained the role of *publisher*, ensuring that authors would retain all rights to the published content, while Allen Press was hired to print and distribute the *Journal*, as well as to keep circulation and bookkeeping records. Allen Press was not hired to perform certain key activities, therefore, HelmSoc arranged with a few of the members of the society to conduct some of the most expensive publishing functions, including text editing, graphics editing and peer-review administration. *CP* editorial board member Rich Clopton (2009) of Peru State University in Peru, Nebraska, who does the graphics editing for the journal, explained that the society members who volunteer to perform these services for *CP* spend approximately two to three weeks per year on them.

Comparative Parasitology costs $65 per year for both individuals and libraries, so it rarely gets cut during budget downturns in libraries. Clopton (2009) explained that this pricing is deliberate in that the society wants its members and others to subscribe to and use the journal; *CP* is not meant to be a profit-generating venture for HelmSoc.

In the past several years, Allen Press partnered with BioOne, which describes itself as "a not-for-profit collaborative created to address inequities in STM [*i.e.* scientific, technical and medical] publishing" (BioOne 2009). Through this arrangement, Allen Press agreed to receive a flat fee from BioOne for each article appearing in certain journals, including *Comparative Parasitology*. Every time a reader downloads a paper from *CP* via BioOne, BioOne gives HelmSoc (as

publisher of *CP*) a royalty fee. Libraries pay BioOne a fee each year to access articles aggregated by BioOne. This arrangement results in HelmSoc, Allen Press and BioOne each generating revenue, and libraries and readers paying reasonable fees for access to articles (Clopton 2009).

The flow of revenue looks like this:



Employing another alternative model, *Library Philosophy and Practice* (*LPP*; http://go.unl.edu/x3n) is also a very low-cost scholarly publishing venture (Bolin *et al*. 1999). Founded in 1999 by Mary Bolin and Gail Eckwright of the University of Idaho Libraries, from its inception has been an online-only, peer-reviewed library science publication. It is widely indexed and is accessible for free via three online servers. Bolin (now of the University of Nebraska-Lincoln) and Eckwright perform all editorial functions, relying on a volunteer editorial board to conduct peer review. The cost to produce the journal involves the pro-rated salaries of the two managing editors and the small amount of overhead required for use of university computer equipment (Bolin 2009).

As the economics of scholarly publishing evolve, it appears that sustainable financial models will continue to emerge. This is a challenge that the academic community should continue to meet head on. The future of scholarly discourse is at stake.

References*

Alexander, Adrian and Marilu Goodyear. 2000. The development of BioOne: changing the role of research libraries in scholarly communication. *Journal of Electronic Publishing* 5(3) (Mar. 2000). http://go.unl.edu/emq

Anderson, Chris. 2008. Free! Why $0.00 is the future of business. *Wired Magazine* 16.03 (Feb. 28, 2008). http://go.unl.edu/gab

BioOne. 2009. Organizational mission. http://go.unl.edu/8dv

Bolin, Mary K. 2009. Personal communication (Aug. 2009).

Bolin, Mary K. and Gail Z. Eckwright (eds.). 1999- *Library Philosophy and Practice*. http://go.unl.edu/x3n

Clopton, Richard. 2009. Personal communication (Sep. 2009).

Helminthological Society of Washington. 2009- Home page. http://go.unl.edu/wjn

Iskold, Alex. 2008. Beware of freeconomics. *ReadWriteWeb* (Feb. 26, 2008). http://go.unl.edu/du6

Levitt, Steven D., Stephen L. Dubner, et al. 2004- Opinion--Freakonomics: The Hidden Side of Everything. *New York Times*, 2004- http://go.unl.edu/cns

Scholarly Publishing and Academic Resources Coalition. 2004- Alliance for Taxpayer Access. http://go.unl.edu/5n6

Sherman, Will. 2009. 33 reasons why libraries and librarians are still extremely important. *DegreeTutor*. http://go.unl.edu/eg5

Suber, Peter. 2007. Open access overview: focusing on open access to peer-reviewed research articles and their preprints. http://go.unl.edu/tzv

Willinsky, John. In press. Rethinking what's *public* in the university's public mission. *In*: C. Calhoun and D. Rhoten (eds.). *Knowledge Matters: The Public Mission of Research Universities*. New York: Columbia University Press. (manuscript version: http://go.unl.edu/n24)

Yarney, Gavin. 2007. Time to end the slavery of traditional publishing. *PLoS: Public Library of Science* (Feb. 18, 2007). http://go.unl.edu/vdg

Further Reading*
These articles were not used directly to support the content of the paper, but are excellent sources of additional information on this topic.

Bernius, Steffen, Mattias Hanauske, Wolfgang König, Berndt Dugall. 2009. Open access models and their implications for the players on the scientific publishing market. *Economic Access & Policy* 39(1): 103-115. http://go.unl.edu/xgf

Branin, Joseph J. and Mary Case. 1998. Reforming scholarly publishing in the sciences: a librarian perspective. *Notices of the American Mathematical Society* 45(4): 475-486 (Apr. 1998). http://go.unl.edu/qhi

Brown, Laura, Rebecca Griffiths, Matthew Rascoff and Kevin Guthrie. 2007. University publishing in a digital age. *Ithaka Report* (July 26, 2007). 67 p. http://go.unl.edu/xhv

Cavalieri, Piero, Michael Keren, Giovanni B. Ramello and Vittorio Valli. 2009. Publishing an E-journal on a shoestring: is it a sustainable project? *Economic Access & Policy* 39(1): 89-101. http://go.unl.edu/jxc

Clarke, Roger. 2007. The cost profiles of alternative approaches to journal publishing. *First Monday* 12(12). 48 p. http://go.unl.edu/2xq

Conley, John P. and Myrna Wooders. 2009. But what have you done for me lately? Commercial publishing, scholarly communication, and open-access. *Economic Access & Policy* 39(1): 71-87. http://go.unl.edu/uhf

Crow, Raym. 2006. Publishing cooperatives: an alternative for non-profit publishers. *First Monday* 11(9). 14 p. http://go.unl.edu/f2u

Gabbert, Bill. 2009. Public access to taxpayer-funded wildfire research. *Wildfire Today* (Aug. 2, 2009). http://go.unl.edu/4pq

Gabbert, Bill. 2009. New study: climate influences AND drying of fuels are most significant. *Wildfire Today* (July 2, 2009). http://go.unl.edu/4pq

Jeffery, Keith G. 2006. Open access: an introduction. *Ercim News* 64 (Jan. 2006). http://go.unl.edu/pt7

Krichel, Thomas and Christian Zimmerman. 2009. The economics of open bibliographic data provision. *Economic Access & Policy* 39(1): 143-152. http://go.unl.edu/e9w

Levitt, Steven D. and Stephen J. Dubner. 2006. *Freakonomics: A Rogue Economist Explores the Hidden Side of Everything* (rev. & exp.). Morrow, 2006. 320 p.

Odlyzko, Andrew. 1999. Competition and Cooperation: Libraries and Publishers in the Transition to Electronic Scholarly Journals. *The Journal of Electronic Publishing* 4(4) (May 1999). http://go.unl.edu/tta

Pyati, Ajit. 2007. A critical theory of open access: libraries and electronic publishing. *First Monday* 12(10). 11 p. http://go.unl.edu/m4k

Royster, Paul. 2007. UNL Digital Commons: an introduction. http://go.unl.edu/wdm

Shirky, Clay. 2003. Fame vs. fortune: micropayments and free content. *Clay Shirky's Writings About the Internet* (Sep. 5, 2003). http://go.unl.edu/cqe

Solomon, David J. 2006. Strategies for developing sustainable open access scholarly journals. *First Monday* 11(6). 9 p. http://go.unl.edu/mmd

Spruijt, Herman P. 2009. Digital library futures: pressures on the publisher-librarian relation in the era of digital change. *IFLA Conference Proceedings*, Milan (Aug. 25, 2009). http://go.unl.edu/dki

Tanner, Simon. 2004. Economic factors of managing digital content and establishing digital libraries. *Journal of Digital Information* 4(2). 2 p. http://go.unl.edu/epw

Velterop, Janet. 2006. The golden route to open access. *ERCIM News* 64 (Jan. 2006). http://go.unl.edu/yj2

Ware, Mark and Michael Mabe. 2009. *The STM Report: An Overview of Scientific and Scholarly Journal Publishing*. Oxford, UK: International Association of Scientific, Technical and Medical Publishers (Sep. 2009). http://go.unl.edu/887

Willinsky, John. 2004. Scholarly associations and the economic viability of open access publishing. *Journal of Digital Information* 4(2). 9 p. http://go.unl.edu/c3z

Willinsky, John, Sally Murray, Claire Kendall and Anita Palepu. 2007. Doing medical journals differently: open medicine, open access, and academic freedom. *Canadian Journal of Communication* 32: 595-612. http://go.unl.edu/itf

Willinsky, John. 2009. The stratified economics of open access. *Economic Access & Policy* 39(1): 53-70. http://go.unl.edu/wed

Zimmerman, Christian. 2009. The economics of open access publishing. *Economic Access & Policy* 39(1): 49-52. http://go.unl.edu/f2a

* All sites viewed, and all links shortened at http://go.unl.edu, November 10-17, 2009.