
Shawn Martin, University of Pennsylvania

Introduction

In 1729 Jonathan Swift wrote A Modest Proposal which proposed (albeit sarcastically) that Irish peasants could solve their economic problems by selling their children to the rich. The point Swift was making, with an admittedly morbid sense of humor, was that Ireland was facing serious problems and that transformational change was needed. Similarly, the scholarly publishing and communication system is also in need of such changes in order to continue. To facilitate this change, it is important to reframe how we think about scholarly publishing. Disseminating scholarship is no longer a matter of simply publishing work in a print monograph or journal. Rather it is a matter of circulating scholarly works in a variety of forms both print and electronic, depending on the needs of individual scholars. It is not only possible to construct a new system utilizing the strengths of both print and electronic methods of dissemination, but it is also essential given the economic crisis all universities are facing.

Frequently the disruptions to the scholarly publishing system are attributed to electronic technologies. Though this is true to a degree, the reality is much more complicated. In current debates about “reforming scholarly communication” many observers have proposed new solutions such as facilitating open access, restructuring peer review, providing better e-publishing options, and changing procedures for academic tenure and promotion. Even though all of these are valid solutions to important issues, they also underline an important difficulty in discussions about scholarly publishing. Namely, that there are many interrelated problems in the current scholarly publishing system which often become conflated and confused. These problems could include, though are not limited to, the tenure and promotion system, open access publishing, and electronic publishing. Some people have proposed for instance that the way to change the tenure and promotion system is to create open access publications, or that the solution to supporting e-publishing is to restructure peer review. All of these issues are related, but proposing simple
solutions like “open access” as a remedy for tenure and promotion oversimplifies and conflates a much larger problem, and by conflating such issues, it becomes difficult to propose a reasonable solution.

It is hard to argue against the fact that the current system of disseminating scholarship, largely developed in the nineteenth century, needs to be reformed. From a scholar’s point of view, ideas cannot be freely distributed to colleagues, let alone the potential readers in other disciplines. From the perspective of scholarly societies, publishing forms the cornerstone of an economic model which in turn supports conferences, workshops, professional development, and other activities of the society; the falling revenues from publishing jeopardize societies’ ability to perform such activities. From a funder’s perspective (like the National Endowment for the Humanities), it would seem that immediate access to the scholarship they have supported is a benefit, especially when taxpayers have bankrolled the process. From a publishers’ point of view the cost of distributing scholarly work is higher than the demand that libraries and scholars can generally provide. This in turn means publishers either cannot make the profits needed to maintain the scholarly publishing system, or they need to substantially raise prices in order to get needed revenues. From a university administration’s point of view, it is economically unsustainable to pay a salary to a scholar for writing a book or an article, paying a publisher to buy that article back, and then paying a library to organize and distribute that article on campus, especially when in faster moving scientific fields, ideas become dated very quickly.

In short, transformation of the current methods of disseminating scholarship, particularly in the humanities (though not necessarily limited just to those disciplines) is needed, but the solution goes beyond simply creating open access or abolishing the current tenure and promotion system. What is in fact needed is to sort out the issues, to take a longer view of how scholarly publishing developed, to investigate the possibilities that new technologies offer, and perhaps to facilitate a new system beneficial to all parties (scholars, publishers, scholarly societies, and universities alike). Though the ideas and solutions discussed here may not constitute a universal answer to all of these problems, hopefully they
can begin a more meaningful discussion and move forward what is an important debate about the future of scholarly publishing and dissemination.

**How did we get here?**

Stewart Brand is known for his oft repeated mantra “Information wants to be free.” Nonetheless, it bears repeating the second half of that quotation in its entirety

> Information also wants to be expensive. Information wants to be free because it has become so cheap to distribute, copy, and recombine – too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, “intellectual property,” [and] the moral rightness of causal distribution because each round of new devices makes the tension worse, not better. (Brand 1987, 202).

Interestingly, Brand was not the first to write about this tension. On the one hand it is very easy to make information available to others (who might profit from it) through the internet or even through print. On the other hand information (particularly scientific and scholarly information) requires a great deal of work, verification, and review by many people. Therefore, it is extremely expensive to produce information and extremely easy to reproduce and utilize the same information. As early as the eighteenth century, Benjamin Franklin, discussing a pamphlet regarding his recently invented stove, once said “as we enjoy great advantages from the inventions of others, we should be glad of an opportunity to serve others by any invention of ours; and this we should do freely and generously.” (Franklin under “Autobiography”) Moreover, he said this despite the fact that a man in England patented his idea and profited from it to which he responded “this is not the only instance of patents taken out for my inventions by others, tho' not always with the same success, which I never contested, as having no desire of profiting by patents myself, and hating disputes.”(Franklin under “Autobiography”) Along the same lines, Thomas Jefferson is famous for saying in slightly more philosophical terms

> He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should
freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density in any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation. Inventions then cannot, in nature, be a subject of property. (Jefferson, under Letter to Isaac McPherson Brand, Franklin and Jefferson are all pointing out an inherent tension in ideas, that in order to advance knowledge, it is essential that ideas be freely available. Yet, at the same time knowledge can bring financial profit and in some ways that potential for profit must be utilized in order to sustain and create more knowledge.

A system that no doubt all of these authors would understand is the practice of scholarly societies printing circulars to update their members on current news in the field. In fact, the Journal des Scavans and the Philosophical Transactions of the Royal Society first published in 1664/5 served exactly this purpose. Members of the society would update their colleagues on what they were doing; those fellow practitioners could then build on that work, experiment themselves, and in turn update the society. In the nineteenth century, with the proliferation of professional scholarly societies and hence the increased needs to print such journals, commercial publishers like Springer (founded in 1842) filled a need to create economies of scale. Rather than hundreds of scholarly societies each supporting their own publishing infrastructure, societies could outsource that work to commercial publishers who would then take care of printing and distribution costs. Yet, these publishers had a different motive from scholars (profit) and many universities felt that there was a need to create entities that would publish works which might not have a large enough audience to interest commercial publishers. Hence university presses like Cornell University Press (the first university press, founded in 1869) filled that void. With subsidies from their institutions, university presses could distribute scholarship that had great scholarly value, though not enough economic value to warrant distribution in the commercial marketplace (a good general overview of historical trends in publishing is available in Richard Abel and Lyman Newlin, eds. Scholarly
Thus, at the dawn of the twentieth century, a rather complex ecosystem had evolved in scholarly publishing. Scholars, employed by universities, though more strongly affiliated with scholarly societies, produced work which they would submit either to their society journal (often outsourced to a commercial publisher), or, depending on marketability, to a university press. The primary audience for such works was other scholars employed by universities. Therefore, academic libraries became one of the biggest markets for scholarly journals and books since they could re-distribute to a large number of scholars.

Complicating this picture even more was the importation (largely from German institutions) of a professional model for university professors. This professionalization scheme rested on tenure and promotion that was determined by publication in peer reviewed journals which in turn assured that other scholars in one’s field could verify the quality of the work produced. Additionally in the twentieth century, government and private foundations began to fund research for particular purposes and relied on the peer review system to validate their research results. This is in essence the system that still exists in the twenty-first century. As early as 1959, however, the American Council of Learned Societies recognized that this structure was beginning to break down and concluded that:

> Our survey of scholarly publishing points to three main conclusions. The first, and in some ways the most important, is the fact that scholarly publication is not and cannot realistically be expected to become self supporting. . . the second of our conclusions, that at the present time in most humanities and social sciences the uncomplicated scholarly manuscript of good quality can usually count upon early publication at no expense to its author. . . . Our third conclusion is equally significant: certain kinds of scholarly manuscripts present unusual difficulties to publishers and therefore run extra hazards in competing for available funds. (Welter 1959, 66).
Where are we now?

To a degree, many of the American Council of Learned Societies’ conclusions are still valid. Nonetheless, there have been additional developments. First, profit making commercial publishers have in many cases taken over society publishers, yet despite that, they have had difficulty making their scholarly monographs and articles self supporting profit driven ventures. As a result, publishers have had to merge in order to create economies of scale large enough that academic publishing is profitable. Currently only a handful of publishers control the vast majority of scholarly content. At the same time, the number of specialties within academic fields has increased, and therefore the number of journals supporting those fields has also increased. Finally, and perhaps most importantly, higher education has been continually cut back financially which has created a dual problem. First, the primary market for scholarly books, libraries, has been unable to keep up with the proliferation of content. Second, competition for a limited number of tenured professorships has increased the need for junior faculty to publish. It is ironic that economic problems have stretched the system in two opposing directions at the same time: commercial publishers are raising prices in order to make profits and buyers (like libraries) are cutting back on the amount they are buying. It is only a matter of time before this unsustainable course of events breaks the system (The “crisis in scholarly publishing is well documented, perhaps the most detailed and referenced analysis is available at Peter Roberts “Scholarly Publishing, Peer Review, and the Internet” First Monday, Vol. 4, Issue 4, http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/661/576).

Before sounding a death knell of scholarly publishing, however, note how resilient the system has remained despite these problems. It is probably helpful to look at the various parties involved in the current scholarly ecosystem in more detail. Who are the primary players? The lynchpin and largest player in the entire system is the university. The university subsidizes the scholar in terms of salary; it subsidizes the library which in turn purchases the material necessary for scholars to do their work; it
subsidizes the university press (from which the library then purchases books and articles), and in some cases it handles the distribution of money paid to the scholar from a funder. Additionally, funders like the National Endowment for the Humanities (NEH), the National Science Foundation (NSF), the Mellon Foundation, and scores of others support scholars to do their research. Traditionally these agencies have expected their recipients to publish their work in a peer reviewed academic book or journal handled either by a university press or by a commercial publisher. Moreover, the foundation of the entire system, scholars, research and produce articles, books, and other materials that reflect their academic interests. Yet, scholars often feel a closer attachment to their colleagues at a scholarly society and (perhaps unwittingly) to the publishers who produce similar work in their field rather than to the university which employs them. Furthermore, scholarly societies which are made up of individual scholars, serve as a professional outlet for scholarship, and their members serve as the peer reviewers for the journals on which university departments rely to perform tenure and promotion. Commercial publishers often act as distributors for the articles of scholarly societies. Commercial publishers also provide a share of their revenues to the scholarly societies which the societies use to subsidize their other activities.

Concurrently, university presses (at least traditionally) produce scholarship that commercial publishers are unable to distribute, but in fact often are asked to act as commercial revenue streams for the university. Therefore, they increasingly have to operate more like commercial publishers. Finally there are university libraries, which like university presses are subsidized by the university, but in a sense act as purchasing agents for the university to archive and distribute scholarship.

Obviously this is a very complicated arrangement of at least seven players, all of whom are receiving and distributing money. Perhaps a better way of thinking about this system would be to map it out graphically. The picture might look something like this (arrows representing where money is flowing and boxes representing who is paying that money):
Two questions arise from this graph: who is giving the most money into the scholarly publishing system and who is receiving the most money from the scholarly publishing system? The tally would look something like this:

- **University**
  - Giving to – University Press, Library, Scholar
  - Receiving from - Funders
- **Funders**
  - Giving to – University
  - Receiving from – None of the players noted above
- **Scholars**
  - Giving to – University Press, Scholarly Societies, Commercial Publishers
  - Receiving from – University
- **Scholarly Societies**
  - Giving to – None of the players noted above
  - Receiving from – Scholars
- **Commercial Publishers**
  - Giving to – Scholarly Societies
  - Receiving from – Libraries, Scholars
- **University Presses**
  - Giving to – None of the players noted above
  - Receiving from – University, Library, Scholars
- **University Library**
  - Giving to – Commercial Publishers, University Press
  - Receiving from – University
One then notices several imbalances. Some are giving more than they are receiving and others are receiving more than they are giving. On the giving side, universities give to three sources but receive from only one, scholars give to three sources but receive from only one, and libraries give to two sources but receive from only one. On the other side of the balance sheet, university presses receive money from three sources but are not giving money to any of them, publishers receive from two sources but give only to one, and scholarly societies receive from two sources but give to none.

At first glance it would seem that university presses are the serial receivers of money and universities and scholars are the serial givers. Obviously this is a bit deceptive. Unlike commercial publishers, which are comparatively small in number (at least in the academic market), nearly every university has a university press and as a result university presses sell a fairly small number of books to a limited market (libraries and scholars). Therefore, they receive less money than a commercial publisher who has a very large number of books, articles, and other scholarship to sell to exactly the same market. So whereas the revenue streams coming in to university presses is small (hence their need for university subsidies that are increasingly being reduced or eliminated) the amount of money flowing to commercial publishers is fairly large. Also, since scholars, university libraries, and university presses are all subsidized by a larger entity, the university, let us simplify the graph of relationships between the major players, namely the university, scholarly societies, and commercial publishers, all of whom are largely independent of each other:
Under this scenario the serial giver is the university, giving both to scholarly societies (through their scholars) and to commercial publishers (through scholars and the library), but it receives nothing in return. Scholarly societies receive both from universities and commercial publishers, but put nothing back into the system. This is not to suggest that scholarly societies are rolling in money and not doing anything. They, like everyone else, are suffering and do a great deal of good through conferences, professional advocacy, and many other worthy endeavors. What I am suggesting, though, is that scholarly societies are a key player in the publishing system that is often overlooked and needs to be addressed more thoroughly. Additionally in terms of actual dollars, the subscription fees and book/journal purchases from libraries and scholars to commercial publishers is far higher than the dues that scholarly societies receive from their members. Therefore, the real issue of the economics in scholarly publishing is the relationship between scholarly societies and commercial publishers.

So, what functions do scholarly societies provide in creating scholarship and what role commercial publishers offer? Fundamentally each of these groups does two things that are essential to the functioning of the system. Scholarly societies first provide the peer reviewers and quality assurance for the content within their journals. Next, and perhaps more importantly the brand of their journal serves as a guide to scholars that the content contained within this journal is of quality. This guidance helps scholars navigate an increasing sea of digital content by providing a kind of “seal of approval” which scholars can use to sift through the various pieces of information that they have to use for their research. Publishers on the other hand also provide two essential functions. They oversee and manage the peer review, copyediting, and formatting of these articles into something presentable for publication. Publishers also oversee the distribution of these articles either by creating print copies and selling them or by creating reliable locations electronically for articles which in turn they sell primarily to libraries.
In an exclusively print publishing system where costs of production were high and the ability to reproduce material was difficult, the economics of scholarly publishing (which has largely remained the same) made sense. In an electronic publishing system where the cost of production remains high but the ability to reproduce books is extremely easy, these economics no longer make sense. Often people confuse the economics of distribution (making copies of materials) with the economics of production (creating a piece of scholarship). Distribution only requires a person writing an article on his or her computer and placing it on a blog, all of which can be done for a relatively low cost. Production however requires peer review and quality control. When a publisher could make a product that could not be reproduced (at least not easily) it made sense for this work to be subsidized. In an exclusively electronic publishing system where information is freely available and cheap to put online, publishers often are unable to create a product that cannot be easily downloaded and distributed outside of their control. As a result consumers (scholars and libraries) have seen costs escalate astronomically and publishers clamp down on access. In essence this is the same tension that Brand, Franklin, and Jefferson all noticed, the need for freely available ideas while at the same time a need for their commercial exploitation. Ironically, at the very point where it has been most possible to freely distribute ideas because of technology, the pressure to commercially profit from them is higher than ever (a good example of this digital distribution is the music industry. For more information on the economics of digital distribution, see Kevin Zhu, and Bryan MacQuarrie, “Economics of Digital Bundling: The Impacts of Digitization on the Music Industry.” Communications of the Association for Computing Machinery, Vol. 46, No. 9, pp. 264-270. Available at SSRN: http://ssrn.com/abstract=526562).

Where do we go from here?

It is important to connect more clearly the various strands of interrelated issues before answering answer the question of what the future holds. A few examples of such issues would be open access, peer review, e-publishing, digital humanities, and tenure and promotion. In all it would seem that there are three
separate questions that need to be answered. What constitutes scholarship? In the print world there were often only two types: books and articles. Now, it is possible to create websites, databases, dynamic wikis in addition to more traditional books and articles albeit in an online format. How should scholarship (however defined) be distributed? In other words should scholarship be openly available to the world or available only to a small number of trusted colleagues? Either is possible with the web and depending on the situation either could be appropriate (in the sciences one would not wish to openly distribute scholarship which may soon be patented for instance). Finally, and most importantly, when the first two questions have been answered, how should this entire system be sustained? This is the question that is not often addressed, or is addressed only as a kind of ancillary point to one of the first two questions. It is extremely important, however, to carefully consider all three questions and not just one or two of them.

What Constitutes Scholarship?

As with all other questions related to scholarly activity, the question of what scholarship is cannot easily be answered. Every field is different and depending on how research is performed in that field, the answer could vary tremendously. Now scholars can create both final and fixed narratives (as they have always done with books), and with electronic technology they can also create dynamic narratives in which they add new details and information as a project unfolds. As a result, it now becomes possible to publish experimental work and to refine it as more people read it. Scholars can also create tools for others to use in order to answer particular questions. Is a “tool” scholarship? It does not fit the “traditional” modes of scholarly inquiry, but also requires a great deal of work and knowledge of scholarly methodologies. Therefore, it perhaps should count, though to do so would require new standards of scholarly recognition.

In some ways the answers to these questions can be determined only by individual disciplines and is beyond the scope of this article. Nonetheless, it is possible to say one thing about scholarship, regardless of whether it is in print or electronic: scholarship is assessed for quality by other scholars. Unlike a print
publication, however, when a book or article had to be reviewed only once, a scholarly website which
often is in the hands of a team of scholars who may go from university to university and who may or may
not remain interested in the project over time, must be continually reviewed to determine whether it has
kept up to date with current scholarship and whether it still represents quality. One can assume that an
article from 1955 was (at least by the standards of its day) a quality item. One cannot make the same
assumption for a website from 1995. So, particularly for electronic scholarship, a more robust system of
continual peer review is necessary (an overall review of what constitutes “digital scholarship” is available
Societies Commission on Cyberinfrastructure for the Humanities and Social Sciences report from the
American Council of Learned Societies, 2006.).

*How should scholarship be distributed?*

This is perhaps the most talked about question in current library and scholarly discourse. Should
scholarship be openly available to the world or closed only to a small number of people? With electronic
technology either solution is possible and, depending on the situation, both may be appropriate. One
clearly can make arguments about the need to make scholarship freely available in order to build on old
ideas. One can also make the argument that even under a print publication system, scholarship was never
freely available. Large research libraries had access to enormous collections of books and journals;
smaller libraries had to rely on inter-library loan or modify research proposals based on the collections
available to them. Actually, nothing has changed in terms of access to information. What has changed is
that technology now allows instantaneous distribution to everyone in the world relatively quickly. As a
result, lack of access is much more noticeable.

A second element of this question is the open access debate. Many other issues (peer review, tenure, and
the like) get conflated into this question about open access. Yet it is important to note that open access is
only a question about how freely accessible a piece of scholarship is. In some sense of the term a book is open access because it is available to everyone through inter-library loan. It is important to keep this question of open access in its contextual frame. When is it appropriate to release a piece of scholarship to the wider world, and conversely when is it appropriate to keep it limited for a time? To confuse open access with other larger questions, particularly the question of sustainability only makes the debate less helpful to all parties involved. Some scholarship, particularly that funded by tax payer funds, should be openly accessible as quickly as possible. Other scholarship, particularly that which is patentable or potentially marketable, needs to be closed access until such time as it is ready to be released. Still other scholarship needs to be hybrid open/closed access. In other words, some aspects would be publicly available; others would be closed only to the scholars who really need them. In all, it is not helpful to view open access as a binary issue. Rather, it is more productive to view it as a spectrum with open access at one end and closed access on the other end. Some scholarship will need to be at the two extremes, but most scholarship will likely fall in the middle of one of those two options (an excellent overview of these issues is available in the Ithaka report by Kevin Guthrie, Rebecca Griffiths, and Nancy Maron Sustainability and Revenue Models for Online Academic Resources Ithaka, May 2008, http://www.jisc.ac.uk/media/documents/themes/eresources/sca_ithaka_sustainability_report-final.pdf).

How should the entire scholarly system be sustained?

Undoubtedly this is the most important question among the three. Having said that electronic scholarship in particular needs to be constantly peer reviewed and that scholarship may need to be open, closed, or hybrid access depending on the situation, it then becomes a question of how the various parties outlined previously distribute money in order to continue publishing. The print system was facing breakdowns fifty years ago. Economic problems since then have only made the situation worse.
Stuart Shieber, the director of the Office for Scholarly Communications and professor of computer science at Harvard University has recommended, and other people have agreed that the answer to solving the problems in scholarly communication is to create an open access fund whereby universities, most likely through library funds, would pay publishers to disseminate their scholarship publicly on the web rather than through subscriptions as is currently practiced (for more detailed information about Shieber’s argument, see his blog, the Occasional Pamphlet at http://blogs.law.harvard.edu/pamphlet/). In 2009 the Ithaka foundation took a different look at the issue by suggesting that a variety of different routes had to be considered depending on the type of resource. The solutions included creating revenue streams through subscriptions, foundation money, institutional subsidies, and other means (Sustaining Digital Resources) The Scholarly Publishing and Resources Coalition (SPARC) also released a similar report the same year entitled Income models for Open Access: An overview of current practice which also investigated how people are funding open access publications including article processing fees and other payment options (the full SPARC report is available at http://www.arl.org/sparc/publications/papers/imguide.shtml. All of these reports are commendable and have many good suggestions. Nonetheless, one must still consider the relationship between the various players in the scholarly publishing system and see if it might be possible to fundamentally change the scholarly publishing system rather than tweaking the current broken one. It would seem that transformational change is needed, yet only incremental change has so far been considered.

**Reconstructing the Scholarly Publishing System**

Before even proposing what such change might look like, it is probably important to ask three questions. What does electronic technology offer that print does not? What challenges does this pose to the current scholarly publishing system? How could the current system be changed? These questions should be answered by examining them in terms of the questions above, namely what constitutes “scholarship”, how
should it be distributed, and how should it be sustained. By combining these questions, it may be possible to consider what a new scholarly publishing system might look like.

What does electronic technology offer that print does not?

Usually the first thing people point out about the internet is that it can provide instant availability of information to everyone in the world. Though this is undoubtedly one of its great advantages, for scholarship this advantage has not been as much of a factor because much of the information academic research provides is behind closed walls available by subscription. The small amount of academic research that is available (such as student theses or Wikipedia articles) is generally not widely used by the academy for a variety of reasons. Therefore, the question is whether there are other advantages that the internet offers (aside from instant availability) that would be of use to scholarship? The answer is of course yes.

Electronic technology has made one very interesting contribution: the fusion of data, which can be digitized versions of rare books, census records, photographs, or any other materials scholars use for their research. In other words, it has become more common to see a collection of manuscripts, articles about those manuscripts, along perhaps with supplementary materials from other collections, all gathered into a single place on the internet. Search capability has also opened up new ways of reading so that through simple keyword searching it is possible to bring up relevant articles from medical, humanistic, social science, and other resources. As a result, articles often become somewhat divorced from their original context which editors may have carefully constructed, particularly in print journals. The idea of a long form argument contained in a book seems to be less relevant in digital media than in print materials. Rather than sitting down and reading a long form argument, it is possible to take bits and pieces from many longer arguments and construct them into new arguments. Third linking technology has made it easier to go back to scholars’ sources and trace their arguments. With print resources, one would have to
find a reference, look it up in a book, read that book, and then attempt see if the scholar in question was using the book appropriately. Now, with electronic resources, it is possible to link to an original source online, and anyone can go back to it and see if the scholar is using the material appropriately or not. Therefore, it has become much easier to detect plagiarism, inappropriate use of materials, and the like. (Many of the arguments here are more thoroughly explained in Willard McCarty’s book *Humanities Computing*, New York: Palgrave MacMillan, 2005).

One can argue that scholarship is losing something because of these new technologies such as sustained narrative arguments and closer reading of textual materials. Though it is possible that there are certainly good reasons why one might wish to preserve longer forms of argument, discourage taking bits and pieces of many different arguments, and the like, those questions are beyond the scope of this article. Clearly for many types of research, technology provides some advantages, and there is an important challenge presented by this new environment whether the economic and social systems that support scholarship will or will not be able to rise to the challenge of facilitating the advantages of digital technology.

*What challenges does this pose to the current scholarly publishing system?*

There are two great challenges that the above “advantages” really pose to the current system. First with print, arguments were fixed in a tangible form and not modified later. Books and journals were printed, stored in libraries, and people retrieved them as necessary. If there were mistakes or changes to an argument, it was necessary to create a second edition or a supplementary book or article. On a website or similar electronic medium, arguments are never finished. One can correct mistakes, add further content, and change arguments as needed online. This malleability of digital media is closely tied to the second challenge, peer review. With print it was necessary to review a book or journal only once. Then, when pulling it from a library shelf one could at least determine that at the time the book was published, it was a quality item. Now, with a plethora of options on the internet, it is nearly impossible to tell good
scholarship from bad scholarship. Moreover, since it is possible to change content on a website in ways it was not possible to change a book, the need for peer review becomes more constant. Websites need to be peer reviewed on a regular basis, not just once.

*How could the current system be changed?*

Before beginning to think about creating new systems, however, it might be helpful to re-ask some earlier questions. What is scholarship? How should it be disseminated? The answer to the first question will obviously vary by field. Nonetheless, with regard to electronic scholarship, one can say that regardless of discipline it will likely be changed over time and need to be re-evaluated on a regular basis. The second question is then really a matter of whether a scholar wants her scholarship available immediately or at a later time. Immediate distribution helps to promote the idea; closed distribution to protect it. The biggest reason many scholars need to protect their ideas is to create patents or technology transfers. For the vast majority of scholarly content, this is not really an issue since the economic value of most scholarship is far outweighed by its value to society and scholarship at large (much like Thomas Jefferson suggested). Thus, closed access is really only an issue for a small number of people. Therefore, these answers help to resolve the third, and arguably the most important, question. Under a print model, a scholar would get a grant to provide research help, and submit research to a journal sponsored by a scholarly society, which then outsourced to a publisher who relied on libraries (and to an extent scholars) to preserve that content over time. Electronic scholarship on the other hand puts much more work in the hands of scholars. To sustain an electronic piece of scholarship (such as a website), scholars need a continuous flow of money that pays for upkeep of servers, updating the site with new materials, migrating old content to new web systems, and the many other duties associated with keeping websites current. Additionally scholars need to rely on word of mouth from other scholars about “good websites.” Since there is no “peer review” system for websites, it takes a great deal of time and effort to assess the quality of the ever proliferating number of potential sources. With print based media, there is an already existing system whereby
scholars can be sure that the content of quality is likely only to appear in particular journals. Finally, all of this needs to be done over the course of an entire career. With print media, scholars often relied on libraries and archives to preserve the scholarly record. With electronic media these same duties often fall to individual scholars rather than libraries or other institutions.

The current scholarly publishing system is not set up to meet these challenges. It may be possible for it to do so, however. Yet for the scholarly publishing system to manage these increasing demands, it will need to change its business and distribution models (Some scholarly societies have tried to address this problem. For instance the Modern Language Association developed guidelines for digital scholarship, http://www.mla.org/guidelines_evaluation_digital, along with the American Association for History and Computing, http://theaahc.org/tenure_guidelines.htm. Additionally, NINES or nineteenth century scholarship online has tried to create an alternative system (http://www.nines.org/), but none of these have achieved wide adoption.) The roles of scholarly societies and publishers has already been discussed, but it might be best to summarize them one more time

Scholarly Societies
- Provide expertise to publishers
- Evaluate ideas of scholars
- Provide a “seal of approval” through the brands of their journals which verify quality of content

Commercial Publishers and University Presses
- Oversee process of peer review, copyediting, and distribution
- Provide location for research

Therefore, the fundamental question still remains how all of these players can utilize their talents under a digital publishing system. The answer lies in a new structure designed to capitalize on the strengths of the electronic medium while at the same time retaining their traditional strengths. The reason the system has
become so untenable at present is because print business models are being applied to the internet to the 
detriment of all involved.

How could it be changed? First, the seven major players need to go back to their core strengths and re-
evaluate how they do things given that this new electronic medium has emerged. Second, they need to 
create a new economic relationship that allows these transactions to occur smoothly. So in order for that 
to happen, it is necessary to change the economic model that looks like this

![Diagram of relationships between University, Scholarly Society, and Commercial Publishers]

into something that is more manageable. The problem with the above system is that the relationship 
between the university, scholarly societies, and commercial publishers has grown unbalanced. “The 
university” has the most economic power in this model, but by definition universities are decentralized 
internally (among departments and schools, libraries, university presses) and therefore unable to make 
unilateral decisions. Publishers, particularly since they have combined into large corporate entities, are 
able to use their power more effectively. How have they done that? They have courted scholarly societies 
who really have very little economic or political power, but control the brand names of journals which 
wield the most loyalty by the employees of universities (scholars). As a result, commercial publishers 
now really have more economic power than anyone else in the system. It is necessary to redress this.
How? First, given that electronic scholarship is forever changing, it seems less necessary to create journals in the sense that we think of them in print. In essence a “journal” should no longer be a printed collection of essays but rather a “seal of approval” that separates quality peer reviewed content from other material on the web. This would allow scholars to easily sift between a large variety of scholarly materials and it would eliminate the increasing costs of producing print runs of journals to ever smaller groups of people. Second, it seems to make little sense that the university is paying for electronic content in the same way that it pays for print content (through personal and institutional subscriptions). Since peer review needs to be done on an ongoing basis, a yearly standing subscription to a publisher seems unnecessary. Third, the brands of scholarship need to be taken out of the hands of commercial publishers and put back in the hands of scholarly societies. Publishers need to make money from their strengths (managing process and distribution) on a fee for service basis. They should not be making money and providing major incentives for scholarly societies to keep the system the same as it currently is.

Therefore, a modest proposal might be for universities to calculate exactly how much money they are providing through institutional subscriptions and book purchases, and, rather than individually giving that money to publishers (thus having no power to really change the system), they should collectively create an “approval agency” which would gather that money and distribute it to the scholarly societies who in turn could use that money to pay publishers for the services they provide. Their content could be open access since they would be making money not from the content they provide (as things are currently) but rather for the service they provide (dissemination, peer review management, etc.). This “approval agency” would need to have representatives from scholarly societies, publishers, and universities to keep it accountable. Additionally, the economic value of the “seals of approval” that scholarly societies provide would need to be measured. This could be done through a combination of usage statistics, bibliometric values, surveys of perceived quality by scholars, and any number of other measurements. So, the economic system would look something like this:
If it is possible to shift to an economic framework similar to the graph above, it may be possible to change the way we discuss scholarly publishing. The scholarly publishing system at its heart is about who pays for what services and how best to distribute the money that facilitates that exchange. Scholarship is undoubtedly valuable, but the market price for scholarship is small and of more value to society than to private individuals. Therefore, universities must act together on this issue. Because of the scale of scholarly publishing, individual universities cannot make meaningful changes alone. Through an “approval agency” or proper “middle man” that is controlled by universities and scholarly societies (the primary beneficiaries of scholarship), rather than commercial publishers, it may be possible to affect real change that will bring the costs of producing scholarly content more into line with what they should be. Such a proposal may also open up more competition since scholarly societies would be free to use many “publishers” rather than just one to whom they are economically beholden. Such competition might even spark the invention of new tools or new ways of producing scholarship.

Libraries also have an important role here. When a “seal of approval” is withdrawn either because the content has become outdated or is no longer relevant, libraries will be essential in placing that material into their repositories and preserving it for future generations. Thus, libraries retain their traditional role as a repository for material rather than the role they have taken on recently, a purchaser of services for the university. Scholars would be able to focus on research, not on creating websites. Publishers would be
able to focus on what they do best: managing and disseminating information. Many publishers are currently in a situation where they have invested tremendous amounts of money in creating new technologies that mimic an old distribution model which is increasingly becoming harder to maintain. If one takes the recording industry as an example, it became more convenient for customers to distribute individual songs over the internet rather than paying for physical CDs. Though there were some attempts at creating commercial venues for selling individual songs (iTunes), customers became used to the idea that music should be “free.” As a result copyright law began to lose its moral force, and some young people feel that paying for music is unnecessary (even though that music has already been paid for by commercial distributors who need to make a profit). It would seem current trends (at least in scholarly information) are following the same course with some people saying that “open access” is the solution to current problems. If these trends continue, it would seem that the academic publishing market may wind up in a situation similar to the commercial music market, and that does not seem a particularly good template to follow. Such a model as described above would take all the major players in this system back to their traditional roles while at the same time utilizing the best strengths of electronic technology.

**Conclusions**

Undoubtedly such a system would be a problem for smaller publishers, for scholarly societies that provide their own infrastructure for publishing, and for non-profit publishers (university presses, libraries) that are providing similar services. Additionally such a system will mean drastically less money for all involved. No doubt such a “modest proposal” will cause economic hardship for everyone involved. Yet, unless the framework of scholarly publishing is changed the system will collapse in on itself.

Currently, many of the players within the scholarly publishing system are acting like a Greek chorus complaining that things are going to be catastrophic, yet they are unwilling to specify how things might change. As with all Greek tragedy, unless our own “Deus ex machina” comes to provide a solution,
everything will end badly. It is hard to say that the “approval agency” proposed here really is such a “deus ex machina.”

Certainly the proposals mentioned here need revision. Definitely they will need to be discussed in detail. Undoubtedly the system of scholarly publishing will not look exactly like the outline provided above. Yet if nothing else, it is absolutely essential that the framework of the debate about scholarly publishing be changed. It is not about “open access” “peer review” or “the tenure and promotion system” which are just components that the Greek chorus continues to shout out and by doing so confuses the issue. Rather, the issue is about all of those things and is about finding a “deus ex machina” that will change the publishing system and take into account a variety of factors. It is essential that this be done and soon, so the worst of tragedies (collapse of the scholarly publishing system) can be averted. Even if such a schema is not adopted, hopefully the various players in this system can realize the need to reframe the debate and focus on economics and changing the system to best facilitate scholarly publishing. Perhaps in the same way that a Modest Proposal sparked discussion about the problems of Ireland, the ideas here too can generate similar discussions about the future of scholarly publishing.
Reference List


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