

North Carolina Serials Conference
April 14-15, Chapel Hill, NC

Opening Statement
T. Scott Plutchak

Introduction

For purposes of today's discussion, I want to present some positions that I may not necessarily completely agree with. But one of the fascinating things about watching how the discussions have unfolded over the past two years is how many different positions reasonable (and less than reasonable) people can take. What we hope to be able to do during our "debate" here, and in the panel discussion that follows, is present some of these differing points of view as a way engaging in a substantive discussion of the issues. It is entirely possible that during the course of the afternoon I will contradict myself – probably more than once. So be it.

Defining Open Access

For purposes of today's discussion, I am defining "open access" simply, as the elimination of subscription barriers to accessing electronic scholarly publications. To many people "open access" automatically implies a funding model similar to that used by the Public Library of Science or BioMed Central, where charges are assigned to the publication of each article, and the expectation is that the author or the author's institution or funding agency will pay those charges. While this model has generated the most publicity and the most heat, if one looks at the 1500+ journals in the Directory of Open Access Journals, many, if not most of them, do not use that funding model. My own journal, for example, meets my definition of an open access journal, but does not use that funding model and it is extremely unlikely that we would move into that sort of a model. Conversely, there are very many "subscription-based" journals currently that include page charges or submission fees as part of their revenue stream. We may well, this afternoon, get into a discussion of the pros and cons of the PLoS/BMC models, but I hope that we can keep that discussion within a broader context.

The Value of Eliminating Subscription Barriers

The primary argument that I would like to make is that there is a sufficient value to the elimination of subscription barriers that the scholarly community (which most certainly includes librarians) should make it a high priority to figure out how we can protect the most important elements of the current system, while developing funding models that will enable us to eliminate subscription barriers.

- No educational or research institution, in this day and age, can afford to subscribe to all of the content that may be of value to the students and scholars of that institution. And indeed, as all of us in libraryland understand, most institutions are able to subscribe to an increasingly smaller proportion of available published material. We rely on our resource sharing arrangements to make up the difference, even though we know that all too often, someone will forego requesting an article or a book through ILL rather than take the time. This tendency to “make do” with what is readily available is exacerbated in the electronic age. Increasingly the evidence shows that students & scholars will not even make a trip to the library on campus to consult print resources that may be readily available, in favor of those electronic resources that can access from the comfort of home or office or lab. How much less will are they to go through ILL hoops? And as all science becomes increasingly interdisciplinary, it is those just-out-of-scope publications that may, in fact, become the most essential. The current subscription-based system threatens to strangle the ability of scholars to continue to advance knowledge at the astonishing pace that we have witnessed over the past half century.
- Studies have shown that the further physicians and other healthcare professionals get from a major academic medical center, the further behind their practice becomes. There are estimates that a rural physician may, in fact, be practicing medicine that is ten years or more behind the times. Much of this can be attributed to a lack of access to current information resources. I’ve spent over twenty years dealing with the information needs of rural physicians, and I can tell you that the situation has gotten progressively worse, with hospital libraries closing and the steady increase in costs for materials incessantly eroding the ability of rural hospitals and practices to afford anything beyond the very bare minimum. My seventy-six year old mother lives in a small town in Wisconsin. Perhaps some of you in similar situations are comfortable with the notion that your parents are receiving care that is a decade behind what’s available in our major academic health centers. I’m not.
- One hears the argument that, particularly when we’re talking about the results of government funded research, the public “shouldn’t have to pay twice” in order to get the benefits of that research. I’ve never been entirely comfortable with that argument, despite the fact that it makes a great sound bite – but there is a core element of truth to it. With the massive investments that we make in the development of new knowledge, it can seem unconscionable that we then set up financial barriers that prevent members of the public from getting immediate access to those results in order to do the kind of research about the situations that they or their family members may find themselves in that could really make a difference. There are plenty of anecdotal stories about how somehow has stumbled across information on their own that they were able to leverage

to find a cure or a solution – dig into those stories and you see that in almost every case, it was someone who was fortunate enough to live near a major library that they could get access to. I've heard the argument made that the library systems that we have do in fact make all of that information available to anyone. That may be true in some theoretical sense – it's true here in Chapel Hill, certainly and it's true in Birmingham. But it is not true in much of the country where the ability to get physically to a major research library may indeed be something beyond practicality. But home computers are becoming more ubiquitous and the public libraries around the country are, in many cases, doing a splendid job of providing access to the Internet in small towns and communities everywhere. Shouldn't people living in those areas have the same opportunities for doing their own research as those who happen to live near a great research library?

The Red Herring of Peer Review, Copyright and Journal Quality

It has been suggested that open access publishing risks a lowering of quality. This argument is made particularly against those funded under the PLoS/BMC model. The claim here is that since the journal is dependent on revenue gained from each article published, it is in the journal's economic interest to publish more articles, thereby weakening the peer review process and accepting articles that are marginal.

This argument ignores the dynamics of scholarly publishing. Journals survive and thrive when they are perceived as publishing the best work in their fields, and their audiences are very discriminating. A journal that is perceived as consistently publishing low quality work will be ignored and unable to attract articles. Indeed, since one might argue that since the fee associated with publication represents somewhat of a barrier to submissions in itself, the survival strategy of an open access journal has to be to maintain as high a level of quality as possible to overcome that barrier. It is only by maintaining the highest quality standards that open access journals will get enough authors willing to pay those fees. (One could also make the counter argument that a subscription-based journal might be more willing to make due with lower quality since they can use the increasing size of their journal as a justification for increasing the subscription price).

When one moves looks at other funding models, the supposed incentive to publish lower quality material disappears altogether.

The copyright issue is, in some ways, more contentious, partly because of the way the Bethesda Principles and similar statements have defined open access journals. The Bethesda Principles statement, for example, gives “to all users a free, irrevocable, worldwide, perpetual right of access to, and a license to copy, use,

transmit and display the work publicly and to make and distribute derivative works...” Note that this goes far behind my “simple” definition of open access – the elimination of subscription barriers. My personal view is that such an extensive license is unnecessary and that something along the lines of some of the Creative Commons licenses can provide the guidelines for establishing “simple” open access while enable copyright holders to retain other rights that may be important to them without impinging on the ability to have free and open access.

The Responsibility of Research Institutions to Shoulder A Larger Share of the Publishing Burden

If scholarly publishing is a zero-sum game (that is, regardless of where you put subscriptions in the mix, it still costs the same amount of money overall to fund scholarly publishing), then, if we make radical changes to the funding streams, there are going to be some “winners” and “losers” – i.e., some entities will pay less than they do now, and some entities will pay more. In many of the scenarios that one can create, it is likely that a greater share of the burden will be shifted to the research intensive institutions.

I come from one of those institutions, so I am acutely aware of tightly every dime is controlled and fought over. And yet, there is nothing inherently “unfair” in this shift – certainly the fact that, as discussed above, the current system makes it extremely difficult for many taxpayers to get access to the results of research that they’ve paid for has elements of unfairness to it. Frankly, I don’t know how one really assesses “fairness” in this sort of discussion – what it tends to evolve into is “any system that makes me pay more is unfair”. So let’s leave fairness out of it.

Research institutions have an important social role – they don’t exist in a vacuum. They have grown and developed over the past century as a public good. They engage not just in basic research, but in the transfer of basic knowledge into usable products and services; they provide education, not just for the next generation of scientists, but for citizens across the board; they do outreach in their communities and provide basic healthcare services. Why shouldn’t they take a larger role in disseminating the results of research freely, now that we have the technological tools to make that happen? There are estimates that the cost of publishing represents about 2% of the cost of biomedical research. That’s not trivial – but it is manageable.

The Economics of the Scholarly Publishing Enterprise – How Open Access Publishing Can Reduce Costs

And it may not be a zero-sum game. Of all of the claims of the open access partisans, the one that I have most sceptical of myself is that open access publishing *must* be less expensive than the current system. I’m not yet convinced, but there are some intriguing possibilities:

- Obviously, open access journals don't have the costs associated with managing subscriptions. (Leaving aside for the moment how one handles the print counterpart of those journals). Access controls, and the process of accepting subscriptions and managing accounts payable, all have associated overhead costs. Comprehensive details are hard to come by, but I've heard estimates in the 5% to 10% of total costs range. Not a huge reduction in costs, but not trivial either.
- A BMC-type model that attaches a cost to the publication of each article injects an element of financial competition that has been strikingly absent from the scholarly publishing economy up to now. Other factors being equal (i.e., perceived quality/prestige of journal, quickness of publishing, added feature like multimedia, etc), the journal that has a lower fee is going to attract more manuscripts. Mark McCabe, an economist at Georgia Tech, has done some excellent work in developing models in this area.
- In a general sense, the whole upheaval that the open access movement has caused may lead to greater efficiencies in the publishing system, if only because it is in everyone's interest to do what they can to lower costs.

So it may in fact be the case a comprehensive shift toward open access in scholarly publishing could, both directly and indirectly, lead to an overall reduction in the cost of the entire system.

Conclusion

The challenges are great – but the potential benefits are greater. The current system threatens to stifle innovation and the creation of new knowledge, weakens the healthcare system, and denies access to the scholarly record to many members of the general public who may be able to benefit from it. The actual barriers to shifting to an open access system are not trivial, but they are manageable. Librarians, educational institutions, and scholarly societies should band together to make it a high priority to develop a range of open access models that will enable us to fully take advantage of the electronic technologies for the benefit of all.