Improving Access to Research Results: Six Points

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I had the opportunity to offer closing comments at the recent forum on "Improving Access to Publicly Funded Research" sponsored by the Association of American Universities (AAU), ARL, CNI, the National Association of State Universities and Land-Grant Colleges (NASULGC), and SPARC and held in Washington, DC, on October 20, 2006. These comments combined synthesis and commentary on the earlier presentations at the symposium with my own thoughts on some of the issues. While my comments were extemporaneous, with the assistance of ARL's Jaia Barrett and Kaylyn Hipps (to whom I'm greatly indebted), I've provided a summary of my key points here.

1. Open Access Is Inevitable: How Best to Get There?

There seems to be a growing consensus that open access to the research journal literature is inevitable, and that open access has compelling advantages. Many of the key questions involve how we map a course from the present to an open access future. Naturally, many of the players in the current system are concerned about what this transition will mean to them.

I don't want to spend time here arguing about a precise definition of open access—suffice it to say that open access means an increased elimination of barriers to the use of the scholarly literature by anyone interested in making such use. These barriers can be lowered or removed in many ways: through public access upon publication, ever-shorter embargo periods, author self-archiving, or other approaches.

I do want to be clear that open access doesn't mean that publishing is free—rather it implies a shift from funding by end-users of the literature through subscriptions to one of a number of alternative economic models: submission, publication, or page charges; outright subventions; Public Broadcasting–style membership underwriting by individuals or institutions.

I also want to take a moment to quarrel with the distinction between open access to published research results (the avowed focus of this meeting) and the access to underlying research data. As scholarly communication evolves under the influence of e-research practices in various disciplines, I think that analysis and underlying data will become increasingly intertwined and inseparable. Michael Kurtz's presentation at this forum on scholarly communications developments in astrophysics[1] highlighted this well; the work of many other scholars, such as Peter Murray-Rust in chemistry or Ed Ayers and Will Thomas in history, provide other compelling examples of how these developments are likely to unfold.

There's been a lot of discussion about the desirability and potential implications of federal government mandates about deposit and access to the reports of findings of federally funded research. We should not forget that, even in disciplines where federal agencies are generous funders, a substantial part of the literature reports on the results of research that isn't federally funded. In my view, when we think about the fundamental integrity of the scholarly record available for open access via the Internet, we would be much better served if we can make the shift to open access at the level of entire journals or entire publisher journal portfolios rather than article by article. We know from past experience that it's very difficult for many users of the scholarly record to understand what they are navigating and exploiting when there's only partial coverage. Think about our experience in making abstracting and indexing databases publicly available, or the implications of legal decisions such as *Tasini v. New York Times*.

Of course, if we can't persuade the journals and the publishers to support the move to open access, we'll have to go to less optimal approaches like author self-archiving and mandates by specific research funding agencies (both government and private).

Finally, in this connection, I'll observe that at least right now it may well be that the threat of legislation mandating deposit of research results may be doing more good, in terms of advancing progress and focusing discussion on the issues with a certain sense of urgency, than actual legislation would. And while I'm not opposed to legislative intervention here, I'd hope that any legislation that is enacted is transparent and invisible to authors who publish with journals that appropriately support open access.

2. Universities Have a Key Stake in the Future of the Scholarly Literature and Thus Should Support Faculty in Negotiations with Publishers

Universities need to recognize and take seriously the asymmetrical nature of negotiations when a faculty member faces a publisher on copyright transfer agreements. We heard earlier today about the way in which such agreements intimidate faculty when they suddenly emerge as a final hurdle before an article is accepted for publication in a prestigious journal. Universities will do well to follow the lead of the Massachusetts Institute of Technology and the University of California by providing institutional support for faculty negotiations—this shifts the balance of power in these discussions to a more symmetrical and typically better balanced negotiation between publishers and institutions of higher education as institutions.

But there's another, and perhaps even more important, point here. If universities negotiate on behalf of faculty, this also helps publishers by reducing the number of special agreements they enter into, and thus benefits the entire scholarly publishing system in the end. Ideally, we'll see convergence on a small number of standard copyright agreements that are very widely used. And these agreements will give *non-exclusive* rights to multiple parties—publishers, educational institutions, and authors—to make use of the material. My worst nightmare is that rights to the scholarly literature become so fragmented, and largely reserved exclusively to individual authors, that the availability and use of this literature cannot evolve in response to new technologies (be it large-scale retrospective digitization, implementation of archiving strategies for digital materials, or the introduction of broad-based text mining). Keep in mind that the reason that we were able to rapidly make most of the journal literature (including backfiles) available in digital form was that the publishers held sufficient rights (on a centralized basis) over this literature to enable such new uses. This does not mean that we want to return to, or perpetuate, a world of centralized *exclusive* rights held by publishers, but we do want sufficient concentration of rights to enable ongoing evolution in response to the needs of the scholarly community.

Again, this connects to the theme of the overall integrity of the scholarly record, and our need to be able to manage this record at scale.

3. We Need to Talk Directly about the Support of Scholarly Societies

Much of the opposition to open access has come from scholarly societies. Implicit in many of the discussions about open access, in fact, are questions and fears about the future fiscal viability of scholarly societies, and about the ongoing stability of their historic funding models.

Most scholarly societies (and I recognize that generalities are dangerous here) are supported by some mix of dues, conference revenue, and revenue from publication programs. Most societies do much more than just run publishing operations—they provide a range of other member benefits, and they do many worthy things on behalf of their disciplines that include public education, advocacy for disciplinary funding, outreach to students at all levels of the educational system, and international coordination and interchange among scholars. Increasingly, the revenue from the publication programs is coming from library budgets. This income stream is often used to support non-publishing activities; sometimes it helps to subsidize member benefits. Is this appropriate? Which societies and disciplines are entitled to what proportionate shares of library materials budgets to underwrite their programs? If libraries are not going to fund the non-publishing programs of scholarly and professional societies, who should—individual members through dues, or academic departments through institutional memberships, for example? Should we just think about scholarly societies as little different from commercial publishers, except that they choose to allocate their "profits" to their other programs, rather than to their shareholder dividends?

We have got to talk openly and directly about the question of how much the academy cares about the survival of scholarly and professional societies, about the appropriate portfolio of activities for these societies, and about how these activities should be funded. The current situation, where the leadership of some of these societies (sometimes to the dismay of many members) are fighting a reactionary battle against developments in scholarly communications because they believe that they must do so to protect the society's financial interests, must cease. Everyone would be better served if we confront these admittedly difficult questions directly and honestly, rather than using the open access question as a proxy for this discussion.

And economic concerns alone don't convincingly explain the opposition to open access from the societies: their journals typically are viewed as offering high quality at reasonable cost, and there's no reason that they shouldn't continue to be highly competitive if one moves away from a reader-pays model. So we need to understand what other issues are lurking here.

4. We Need to Think about What We Can Afford in Scholarly Publishing

There's a troublesome calculation that is becoming commonplace in open access discussions. One takes the operating budget or historic revenue stream of a given journal and divides by the number of articles published or submitted, and announces the per-published-article cost (or submitted-article-cost, if one uses that model) for an open access journal. These costs are typically reported in the range of a few thousand dollars per article. This number is then simply presented as a given: this is what each author (or his or her institution) will have to pay the journal for each article published if it is to move to an open access economic model.

The number that comes out of this calculation is not a God-given, for-all-time entitlement for the publisher of the journal. We need to think about what we can afford, not just what the current system costs.

Perhaps the system needs to be redesigned to deliver a price point per article that we can afford. Suppose we redesigned journal publishing with the goal of $100 per article published? What would this look like? Or, if articles really must cost several thousand dollars each, and we are unwilling to deal with the implications or results of massively reducing costs, we need to explore what can we do to reduce the number of articles going into this costly system. Can we, for example, redirect a substantial percentage of the articles into a much-lower-cost system?

While outside the scope of the discussions today, I want to note that similar questions can and should be asked about monograph publishing; we may have a monograph publishing system today that leads to first-copy costs that are simply unaffordable for many specialized manuscripts. Digital distribution alone will not solve this problem.

Also in the economic context, I want to underscore the very important point eloquently made by Professor Scott MacDonald of Cornell in his presentation on the fully open access journal *Medieval Philosophy and Theology* during this week's ARL Membership Meeting:[2] that an open access journal eliminates some very substantial expenses in terms of fulfillment, marketing, and access-management technology to keep non-subscribing readers out of the journal. These have to amount to some significant savings in terms of cost per article if a journal goes completely open access.

5. Open Access Is Not a Threat to Peer Review: In Fact, It Has Nothing to Do with Peer Review… but It Is Also Time to Talk about Peer Review

We've heard any number of silly, unsupported, and unsupportable canards about the ways in which open access will destroy peer review. This is so deeply misinformed and disingenuous that it's hard to know how to respond—one wants to characterize these comments simply as scare tactics.

The economic model underlying a journal has nothing to do with its peer review policy—or its quality. There are many online journals that practice rigorous peer review. Indeed, going beyond just peer review, there seems to be no correlation between journal cost and quality.

At the same time—and having just emphasized the complete disconnect between open access and peer review, I almost hate to mention this for fear of adding to the confusion—we are long overdue for a nuanced analysis and reevaluation of peer review practices in scholarly publishing *as an entirely separate issue from open access*. Peer review is the last largely unanalyzed cost component of our present scholarly publishing system, and it represents an enormous hidden tax on the time and the productivity of our scholars. We need to understand the extent of these costs and their implications. I fear that we are far too casual about the near-universal application of traditional peer review in today's scholarly publishing, and far too sanguine about its cost-benefit in terms of quality improvement; we also look to peer review as a panacea for many problems. As new practices and channels of scholarly communication emerge, discipline by discipline, we need to carefully and analytically consider where to most effectively and appropriately allocate the very scarce resource in scholarly time and attention that is implicit in prepublication peer review.

6. Scholarly Publishing Is a Means to an End

Scholarly publishing practices are meant to facilitate scholarly communication, to advance and support scholarship itself. New scholarly communications practices are rapidly emerging; the move to the networked information environment presents a cornucopia of new possibilities and alternatives. Open access appears likely to better serve these new scholarly communication practices by facilitating text-mining; data and literature integration and interconnection; the construction of large-scale knowledge structures; the creation of co-laboratories that integrate the scholarly literature directly into knowledge creation and analysis environments; and the emergence of groups of scholars functioning as virtual organizations that casually cross institutional boundaries and thus are no longer served by the subscription-based access restrictions that are circumscribed by these organizational boundaries. Open access also honors our commitments to the democratization of teaching, learning, scholarship, and access to knowledge throughout our society and globally.

Just because the existing scholarly publishing system has served the academy fairly well in the past does not mean that it has an intrinsic right to continue to exist in perpetuity. It should not, and must not, become a barrier to our aspirations and our innovations. If the day has come when the scholarly publishing system impedes scholarship, teaching, and learning it should—indeed must—be replaced by a new and more responsive system. As Don Waters of The Andrew W. Mellon Foundation famously reminded us, "It's the scholarship stupid."[3]

We need to remember what's really important here, and what our ultimate goals are.

1 Michael J. Kurtz "Data, Literature, and the Price of Research," *Improving Access to Publicly Funded Research: Policy Issues and Practical Strategies: Proceedings* (Washington, DC: ARL, 2006), http://www.arl.org/forum06/presentations/kurtz.htm.

2 Scott MacDonald, "Medieval Philosophy and Theology," *Proceedings of the 149th ARL Membership Meeting* (Washington, DC: ARL, 2006), http://www.arl.org/arl/proceedings/149/presentations/macdonald.htm.

3 Donald J. Waters, "Managing Digital Assets in Higher Education: An Overview of Strategic Issues," *ARL: A Bimonthly Report on Research Library Issues and Actions from ARL, CNI, and SPARC*, no. 244 (February 2006): 1–10, http://www.arl.org/newsltr/244/assets.html.