

RESPONSE

The economic implications of alternative publishing models: views from a non-economist

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In composing this short response to the paper in this issue by Houghton and Oppenheim (2010), based on their larger report to the Joint Information Systems Committee (JISC) (Houghton *et al.*, 2009), I confess I am no economist, nor an expert in quantitative methods. Thus I cannot respond to their paper in either of these roles. Instead, I propose to respond both as an academic who conducts research, writes about it and tries to get it published, and as a researcher interested in scholarly communication, publishing and open access.

The Houghton and Oppenheim paper and the JISC report focus on three publishing models: subscription publishing; open access (OA) publishing (often called 'Gold OA'); and open access self-archiving. The authors acknowledge that this last model does not constitute a publishing model in and of itself, so their analysis of self-archiving focuses on two publishing models in which self-archiving is supplemented by peer review and the production mechanism of formal publishing. These are (i) 'Green OA' self-archiving operating in parallel with subscription publishing; and (ii) the 'overlay' or 'deconstructed' journal model. Summaries of the approach, method and difficulties are provided; costs and benefits are quantified and compared; and conclusions arrived at. The analysis finds potential economic benefits for scholarly publishing in more open access, both Gold and Green.

Houghton and Oppenheim then summarize the polarized responses to the report. Some scholarly publishers and their trade associations reacted negatively. Houghton and Oppenheim suggest that these responses be modeled and justified with data and analysis, to allow for open review and dialogue. While I would welcome reading the argument so supported, I also welcome comments and perceptions as contributions to the discussion. Like many other academics, and apparently some funders, I welcome the report – and any other reports which canvass the alternatives. Would we ever have innovation if we did not canvass the alternatives, examining costs and benefits as well as discussing, speculating, creating and imagining?

Before progressing further with this essay, I must declare that at present I am a strong supporter of OA, and in particular Green OA (it just seems so much more possible for me to achieve). I write from this perspective. My support for OA comes from studying the implementation of two open access institutional repositories while writing a thesis (Kennan, 2008). I became enrolled by its vision of free and unre-

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stricted access to research 'uniting humanity in a common intellectual conversation and quest for knowledge' (Budapest Open Access Initiative, 2002). But there are other reasons. Working in a small, not-well-funded university, I am constantly having to beg, borrow and occasionally steal articles and books via time-consuming interlibrary loan and document delivery services or (often more speedily) direct from my betterfunded colleagues. I inwardly cheer whenever I find a paper that has free full text, openly accessible. One of the charges made in response to the JISC report is that it under estimates the levels of access of UK academics. Maybe so, but the report does not under estimate my level of access.

A key question addressed by Houghton and Oppenheim in this paper is whether there are 'new opportunities and new models for scholarly publishing that might better serve researchers and more effectively communicate and disseminate research findings'. How could anyone familiar with the current system not believe that the answer to this question must be a simple yes. The study would not have been commissioned had not the process of scholarly publishing already faced many questions (Gibson, 2005; Dodgson, 2009; Whitworth and Friedman, 2009a, 2009b) and not already been undergoing change. Scholars around the world have been asking questions of themselves and their colleagues. As one of the academic participants in my study said:

There has been a technology shift that shows in some respects what we are doing with thousands and thousands of journals that begin here and end there and the whole system that is set up for this brick and mortar world. We wouldn't come up with anything like that if we invented academic publishing today. (Professor, Business Studies)

Am I surprised that the JISC study concludes that OA is likely to have substantial net benefits? No!

Let us briefly move beyond cost and benefit and examine some of the sociotechnical aspects. Developments in information and communication technologies (ICT), particularly the Internet and the World Wide Web, have created high expectations for improvements in scholarly communications (Kling *et al.*, 2003) and scholarly publication (Kling and Callahan, 2003). These technological advances afford OA. In the words of the Budapest Open Access Initiative (2002), OA has arisen because 'an old tradition and a new technology have converged to make possible an unprecedented public good'. OA could not do its work without its colleagues, the Internet and the Web, search engines such as Google and Google Scholar, repositories, open source communities and so on.

From the early 1990s, it was envisaged that electronic publication, enabled by ICT developments, would:

- make material available to readers 24 hours a day;
- ensure lower costs as there would be no need to print hardcopies and it is cheaper to store electronic materials than paper;
- permit timely publication as communications improved; and
- enable a wide variety of document formats and other media to be included.

It was also envisaged that these potential benefits would make participation in scholarly publishing more open and democratic, and make the outputs available to a wide audience. Perhaps only the first point in this list has been achieved, and then just

for those who have subscriptions themselves or via their employers to all the titles they need.

OA comes to scholarship as a vision that makes sense; it is hard to argue against, it is congruent with the aims of science and scholarship. Research, often funded out of the public purse, should be a public good, and should be equally accessible to rich and poor, now that ICT makes this feasible. That this also makes economic sense is a bonus. In the words of some of the participants in my study:

OA. I think it's a thing that we should strive for. (Associate professor, Information Management)

I'm a strong supporter of OA publishing models. (Researcher, Social Science of Medicine)

... sounds like motherhood to me. (Senior lecturer, Science)

The reason we are in academia is to generate information to disseminate knowledge and to provide that information to as many colleagues and friends and interested people as possible. ... You want to get it out to teachers, to policy makers and practitioners. So OA provides free access to it. (Professor, Education)

Well I mean the profession of scientists are all for OA. The more people can read it with the least barriers the more impact we think we have so we don't want anybody to be excluded from reading our work. (Professor, Economics)

Given its visionary characteristics and its congruence with the aims of scholarship, why is OA not practiced by all researchers all the time? In my research, I found many forces operating against OA. For example, we researchers, as authors, editors, peer reviewers and readers are familiar with traditional scholarly subscription-based publishing, and so we adopt and enact a particular set of values congruent with subscription-based publishing rather than scholarship. Our connections, entanglements, relationships are with subscription-based publishing and unless we make a conscious decision and effort to explore the alternatives, as this report does, the *status quo* is preserved without question, as a matter of course.

How do we make changes such as those that Houghton and Oppenheim indicate have potential benefits for scholarship? How do we counter the forces working against OA? Let's talk about an elephant in the Green OA room - institutional mandates favoring OA. The JISC report discusses mandates, largely as a process authors have to consider when making decisions about how to communicate and disseminate their results. It does not suggest mandates are a way of overcoming the barriers (Houghton et al., 2009, p. 232). I suggest they are. Of the two university OA repositories I studied, one had a mandate, and one did not. The institution with a mandate had more than 75% of its research output available as OA. Statistics were much harder to come by at the other institution, but knowledge of the number of academics and therefore the number of potential papers indicated the proportion of the university's research output in the non-mandated repository to be quite low. What is a mandate and why are we so against them? An institutional mandate (or policy promoting OA) signals the university's support for OA to the scholarly corpus. It flags the centrality of research and access to that research as a part of the university's mission. In the university studied, the mandate combined aspects of the OA vision and the university's vision into a single policy requiring staff to deposit their papers and other research outputs in the repository (where this was legal).

The university I studied was the first in the world to institute such an institution-wide mandate, active from 2004. Indeed, it is the first example I can find of a mandate of any kind (Suber, 2007). Now many more such mandates exist (eprints.org, 2008). Where institutions do not follow suit, researchers may take the matter into their own hands. Staff at such powerful institutions as Harvard and Stanford have enacted their own faculty mandates rather than waiting for their institutions to act. Individuals self-archive or publish Gold OA. There is a growing network of mandates around the world (eprints.org, 2008). In Australia, for example, mandates are proliferating (Australian Department of Innovation, Industry, Science and Research, 2008; Carr, 2008). The Australian Research Council 'strongly encourages' OA deposit in institutional repositories and this encouragement reinforces the university mandate:

I can see problems here because the ARC also now wants us to give access to papers published from grants funded by them so I guess that I will have to change my attitude! (Professor, Mathematics)

Those of us who work in universities will be familiar with the myriad of policies, rules and regulations under which we toil. One further regulation will bring us benefits by making our work more accessible to potential readers, reviewers, and citers, and will benefit the university by enabling it to manage its research output. Why does one additional regulation requiring us to make our work open access generate so much discussion and antipathy? Perhaps those unexamined entanglements with subscription publishing cloud the view. In the end, the new models of scholarly publishing we adopt may be none of those suggested by Houghton and Oppenheim. However, work like theirs, examining the costs and benefits, potentials and opportunities, is essential. To continue with a system (of scholarly publishing or anything else) without regularly investigating and analyzing the alternatives, is neither common sense nor scholarly.

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