

CAVEAT AUCTOR:

Let the author beware!

Some sceptical thoughts on open access

The author argues that the fundamental philosophical tenet of open access (OA) is a noble one: that all information should be free at the point of use. However, some of the assumptions behind the drive to OA should be questioned. For example: do authors really want everyone to read their articles? Does the general public have an unsatisfied thirst for the arcane thoughts of the academy? Moreover, the economics of the OA model are open to challenge. The traditional publishing business model has developed over 300 years and is self-sustaining, insulates academic deliberations from economic issues and ensures the long-term availability and preservation of published information.



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It seems entirely appropriate that the open access debate in the UK (with the coming Parliamentary investigation by the Science and Technology Select Committee of the House of Commons) will peak in the early months of the new Chinese Year of the Monkey. The characteristics of a Monkey Year are optimism but unpredictability; the Monkey is wily, charismatic, a fast talker, unfocused and gets himself out of trouble through his slickness. Confucius advises that it is wise to have back-up plans in a Monkey Year. The whole serials industry will need one too if we are not to be seduced by the Monkey as he weaves the gossamer spell of open access around us.

I have worked in scholarly publishing for nearly 25 years. In that time, the learned journal – like Mark Twain – has frequently been declared dead only to be discovered to be alive and kicking. First it was microfiche technology, then it was the Internet. Yet proponents of both these journal-less futures overlooked the fundamental functions of the journal and their importance to the intellectual and personal requirements of scholars throughout the ages. The journal, as a means of registering, validating, disseminating and archiving scholarly articles, is still very much alive.

The latest threat to the stability of the journal is of a very different kind. It is not an attack on the principles of the journal model but an attempt to

create an entirely novel approach to its economics. It is a 'motherhood and apple-pie' philosophy wrapped up in several different and sometimes contradictory business models, like fish and chips in different sheets of old newspaper. Its adherents are like the prophets of a new religion, starry-eyed proclaimers of an ultimate truth for whom the inconveniences of contrary fact must be brushed aside with messianic zeal – or at the very least large numbers of febrile postings on library and other listservs.

Having said all this, the fundamental philosophical tenet of open access is a noble one: that all information should be free at the point of use, that the Internet should become a universal library of human knowledge free for all mankind. These types of goal are difficult to disagree with (like the idea that the best design of pub is one where all the drinks are free). Nevertheless I believe that this dream, like so many other utopian desires, could unwittingly lead to a dystopian nightmare for the authors of scholarly papers, for their readers, for librarians and ultimately for the stability of the intellectual heritage of mankind.

The drivers behind the open access vision are clear, if confused. There is clearly a crisis of funding affecting university libraries both in the US and Europe. In real terms the proportion of university spending devoted to the library has

been allowed to fall at the same time as the scholarly literature has grown, both in terms of journal titles and papers.^{1,2} This growth in the literature is not an artefact of publishing but a real outcome of the ongoing growth in the number of researchers in the world and the research funding available to them. In addition, the digital transition – still far from complete – continues to re-define the roles and fundamental processes of all players in the information chain. These are real issues that require resolution, and open access has acted like a lightning rod for them. Yet I would argue that open access is a symptom of these discontents and not their cure.

The principal goal of open access is simply that: access for all. Yet behind this unimpeachable desire lie a number of assumptions that must be questioned:

- *Do scholarly authors really want everyone to be able to read their articles?*

All the research suggests authors have a very clear idea who they want to reach; those audiences are specific, scholarly and generally somewhat circumscribed in number.³

- *Does the general public have an unsatisfied thirst for the arcane thoughts of the academy?* The turn-away rates of the existing electronic platforms suggest not; if only 5–10% of requests for access are refused this does not suggest a pent-up demand or significant lack of scholarly access.⁴

- *Do scholars really have such limited access to the literature of their own subjects?* In the UK, LISU data shows that the number of subscriptions to journals in the average university continues to rise year-on-year while at the same time the unit price of those serials is declining, also year-on-year.² Tenopir and King report that more articles are being read: reading rates per researcher are estimated to have doubled over the last ten years.⁵ Time, that most precious and expensive of scholarly commodities, has been saved by the sophisticated electronic platforms routinely used to access journal material. These are real and lasting efficiency gains. They are some of the benefits of electronic consortial access: more users have access to more information now than at any time in the history of mankind, and that access continues to improve.

- *Are scholars in the developing world excluded economically from such wide-spread electronic access?* It is certainly true that more remains to be done in expanding access to poor countries, but programmes such as the WHO's HINARI and the FAO's AGORA programmes, which are both actively supported by most of the leading STM publishers, have made vast quantities of biomedical and agricultural journal literature available to the world's poorest nations at little or no cost. And further initiatives are under development.

The other motivation of open access adherents is economic. It is frequently asserted that open access models (such as authors-pays) are automatically going to be cheaper and save universities money. The high-priests of the OA movement adduce various arguments in support of this: the profitability of commercial publishers, the alleged cheapness of DIY-journal publishing (said to be achieved through jettisoning the supposedly unnecessary 'bells-and-whistles' of current electronic platforms), or more radically substituting the informal grey literature (e-prints and self-archived draft papers) for the refereed white.

At the heart of these arguments lies the idea that if something is e(lectronic) then it must be free, or at the very least substantially cheaper. The experience of the dot.com boom and bust should have taught all of us the error of such simplistic thinking. At the same time it is suggested that novel revenue-raising approaches are available that are currently not fully exploited: advertising, sponsorship and payment by authors (or by someone on their behalf), and that these can replace subscriptions and allow all barriers to access to be removed. The scale of the challenge should not be underestimated: first copy costs per article are reckoned at \$3,000 to \$4,000,⁶ yet OA publishers are currently only charging \$500 to \$1,500, a shortfall of \$2,500 to \$3,500 per article, and this assumes every author pays. Each year about 1.2 million articles are published: is annual advertising or sponsorship of the order of \$2–3 billion available?

Is it conceivable that the traditional publishing sector has missed any advertising opportunities? I think not. The truth is that advertising only works in a very specific subset of learned journals – those with a hybrid magazine/learned journal format – and even then it cannot cover all the costs, as the

British Medical Journal's recent abandonment of its experiment with a freely available online version supported solely by advertising revenue has shown. For pure research journals, which are the majority of the 16,000 peer-reviewed titles that currently publish, advertising plays little or no role at all. And then there is the sponsorship money. Can there really be so much charitable money out there to support scholarly publishing that the learned societies have never come across it before? Can it really support a publishing system year-in year-out?

This brings us back to the author-pays model, the currently predominating business model for achieving the open access dream. This is, of course, not a new idea. Many learned societies have attempted to gain significant revenue from their authors via this route in the past: then it was called page charges, and was used to help reduce pressure on subscription rates. Such charges (and it should be noted that page charges were – and are – much lower per article than most of the author payments currently envisaged) were never paid by the majority of authors and were disliked by the minority that did. Author pressure against such charges has seen their slow (but not complete) eradication from journal publishing over the last twenty years or so. The reintroduction of this idea as a charge for publishing services to be paid by authors who have been accepted at the end of the peer review process (and **not**, it must be noted, those who have been unsuccessful and rejected) lies at the heart of the principal alternative business model that is at the core of the open access vanguard.

One of the core tenets of scholarly journal publishing is that the quality barrier of peer review is the **only** obstacle that an author's article has to surmount in order to be published. Popularity, modishness, saleability, nationality or the nature of the author's affiliation: none of these currently have any bearing on whether an article will be published. Author payment for publication on the other hand, a kind of bizarre vanity publishing, introduces a whole series of conflicts of interest between authors, between author and editor, editor and publisher and so on.

For a financially failing journal, the temptation for publishers and editors will be to move from a presumption to reject papers to one of acceptance in order to publish more articles and thereby

generate more revenue. As the filtering of peer review is weakened under the revenue pressures of an author-pays model, so the quality of the literature declines. The current barriers of needing to satisfy a minimum potential audience of (paying) readers to ensure the survival of new journal starts will vanish; journals will be viable from the moment they have authors to publish – with no check on their proliferation.

Authors from poorer institutions or countries (between 25 and 50% of all authors)⁷ and those without access to funds to publish will be excluded irrespective of the scholarly merits of their articles, unlike at present where they have no barriers to publishing other than quality. Yet at the same time, the large and wealthy research corporations (drugs and chemical companies, computer component manufacturers etc.) that currently pay for about 10–15% of subscriptions will have them all for free.

Within the university sector the richer research universities will see their costs for publishing greatly outstripping their current serials budgets while the smaller, poorer institutions will be left with surpluses. Shall the poor give unto the rich? Research departments will claim the entirety of the library serials budget and administer it on behalf of their authors who want to publish, exercising great power and influence over which authors shall be funded and where they will be allowed to publish, posing great challenges to academic freedom.

Currently all the traditional publishers have a responsibility to past, present and future scholars. The long-term availability and preservation of scientific and medical information is crucial to the future of science. The business model of traditional publishers, the subscription or site licence, ensures that the scholarly community has continuing access to their (and our) intellectual heritage. Being a guardian of the 'minutes of science' means much more than simply organizing peer review and posting the final version of an article online; it means a commitment to support and supply that article to all future readers too, in a form they can easily access on current software and hardware platforms. It is difficult to see how a single one off payment could fund such preservation for (potentially) perpetuity.

The traditional publishing business model is self-sustaining and allows for investment for the

future without government grants, charitable donations or subsidies. It insulates academic deliberations from economic ones. It is finely tuned to matching the requirements of scholarly authors and readers, evolving over three hundred years to serve each niche research community, often taking a lead role in nurturing new groupings of scholars and new fields of endeavour. It has been the basis for investment in the future of publishing. Hundreds of millions of dollars have been invested in the transformation of a paper-based system to an essentially fully electronic one, in less than ten years, with all the efficiencies of speed of access and searching that save researchers valuable time. Access and use of information have soared while cost per use has plummeted. These are significant gains.

With the development of consortial and national site licences we are seeing the evolution of even this traditional model away from its individual journal subscription roots towards a utility model, where access to all the literature by all scholars in a region or nation are possible. This goal, universal scholarly access while retaining the freedom of authors to publish where they want, is surely worth striving for. It is very close. Let's not give the spirit of the Year of the Monkey open access to monkey around when we are on the edge of achieving this dream.

References

1. Library and Information Statistics Unit, Loughborough University, *LISU Annual Library Statistics*, 2003.
2. Library and Information Statistics Unit, Loughborough University, *LISU Annual Library Statistics*, 2003.
3. Nicholas, D., and Rowlands, I., *Scholarly communication in the digital environment: what do authors want?* Report to be prepared by Ciber unit, City University (e-mail: nicky@soi.city.ac.uk), www.soi.city.ac.uk/organisation/is/research/ciber
4. Publishers Association, Evidence Submitted to the House of Commons Science and Technology Committee Inquiry into Scientific Publications, February 2004.
5. Tenopir, C., and King, D., Presentation at Charleston Library Conference, November 2003.
6. Odlyzko, A., The economics of electronic journals, *Journal of Electronic Publishing*, 1997, 4(1) <http://www.press.umich.edu/jep/04-01/odlyzko.html>; Tenopir, C., and King, D., *Towards Electronic Journals*, SLA, 2000.
7. SI Science Citation Index.

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