## Open Access Is a Research Community Matter, Not a Publishing Community Matter

Stevan Harnad

<u>Chaire de recherche du Canada</u>

Institut des sciences cognitives (ISC)

Université du Québec à Montréal

Montréal, Québec, Canada H3C 3P8

School of Electronics and Computer Science
University of Southampton
Highfield, Southampton
SO17 1BJ UNITED KINGDOM

Unlike other kinds of authors, who publish their writings for royalties or fees, researchers publish their findings so they can be used, applied and built upon by other researchers. Research uptake and impact is what both research progress and the careers of scholars and scientists depend upon. Researchers accordingly give away their writings to their journal publishers for free – in exchange for having them peer-reviewed and certified as having met the quality standards of the journal in which they are published. The peer-reviewers (who are likewise researchers) also do the refereeing for free. The journal manages the peer review, with a qualified (and usually paid) editor selecting the peer reviewers, adjudicating their referee reports, indicating what revisions the author must make for acceptance, and deciding whether the revisions have been sufficient to meet the journal's quality standards.

The researcher usually assigns all rights to sell access to the published article – in print or online – to the publisher. The publisher uses this assigned right to sell journal subscriptions to institutions, providing access to the print and online edition for all the institution's researchers. Today, this subscription-based system is covering all the publisher's expenses (plus a profit, which varies from small to large) – for producing the print and online editions, for providing access to them, for archiving the online edition and for managing the peer review.

There are currently about <u>25-30 thousand peer-reviewed research journals</u> across all scholarly and scientific disciplines worldwide, publishing about 2-3 million articles per year. About a quarter of these journals are <u>"Gold" Open Access (OA) journals</u>, meaning that they make their articles accessible online free for all immediately upon publication. A small fraction of these Gold OA journals (perhaps

10% of them) do not have a print edition, do not charge subscription fees for access, and cover their costs through author publication fees. The trouble is that most of the top journals in each discipline (the ones with the highest quality standards) are not OA journals. Hence for 75% of all journals (and almost 100% of the top journals), their articles can only be accessed by researchers whose institutions can afford to subscribe to the journal in which they are published. No institution can afford to subscribe to all or most journals, and because of the high and rising costs of journal subscriptions, most institutions can only afford to subscribe to a <a href="mailto:small and shrinking fraction">small and shrinking fraction</a> of them.

There is a simple but extemely important consquence of this state of affairs: *most research findings are only accessible to a fraction of their potential users*. This means that scientific and scholarly research is only making a fraction of its potential progress, purely because of access denial. Among the many kinds of <u>evidence</u> for this research impact loss are the many studies, in discipline after discipline, reporting that articles that are made OA are downloaded and cited significantly more than articles that are not.

There was no remedy for this state of affairs in the print era; but in the online era there is a simple, natural remedy, and it is entirely in the hands of the research community – the researchers, their institutions, and their funders – as well as being in the interests of the tax-paying public that funds the research and for whose benefit it is being conducted: The remedy is definitely *not* to continue losing research usage and progress while waiting for publishers to raise the proportion of Gold OA journals from 25% to 100%. The remedy is for researchers to immediately begin supplementing the subscription access to the publisher's proprietary version of their research with free online access (OA) to their peer-reviewed final drafts, by depositing them in their institutional repositories immediately upon acceptance for publication. This is called "Green" OA self-archiving.

Publishers – whose primary concern is not with maximizing research usage and progress but with protecting their current revenue streams and modus operandi – are waiting for funders or institutions to pledge the money to pay Gold OA publishing fees. But research funds are scarce and institutional funds are heavily committed to journal subscriptions today. There is no extra money to pay for Gold OA fees – nor do Gold OA fees need to be paid, as long as subscriptions are covering all the costs. In other words, what is missing and urgently needed today is not more money, to pay Gold OA fees, as the publishing community sees it, but more access to articles published in all those subscription journals whose expenses are being fully covered by subscriptions, but inaccessible to nonsubscribers. Publishers will not provide this urgent access: the research community itself must provide it, through Green OA self-archiving. Indeed, researchers' institutions and funders need to mandate OA self-archiving, as a natural extension of their existing publish-or-perish mandate, upgraded for the online era, as a growing number (including Harvard, MIT, NIH, all the UK Research Councils and over two hundred other institutions and funders worldwide) are already doing.

It is ironic that some publishers are calling Green OA self-archiving "parasitic" when not only are researchers giving publishers their articles for free, as well as peer-reviewing them for free, but research institutions are paying for subscriptions in full, covering all publishing costs and profits. The only natural and obvious source of the money to pay for Gold OA fees – if and when all journals convert to Gold OA -- is hence the money that institutions are currently spending on subscriptions! If and when Green OA self-archiving ever makes subscription publishing unsustainable, journals will be able to cut costs by jettisoning their print version and its associated expenses, and offloading onto the worldwide network of institutional OA repositories the task and cost of producing, archiving and providing access to the online version. The only remaining service (and expense) will then be peer review, and that much-reduced cost, per paper, will be easily covered by institutions out of just a fraction of their annual windfull subscription cancelation savings.

But in the meantime, full speed ahead with mandating and providing Green OA, in order to maximize research usage and progress, today. Both the research and the <u>economic</u> benefits are all in the favor of the research community as well as the taxpaying public that supports their research. Publishers are performing a service to research, not vice versa; it's time for the publishing tail to stop trying to wag the research dog.

Harnad, S. (2011) <u>Gold Open Access Publishing Must Not Be Allowed to Retard the Progress of Green Open Access Self-Archiving</u>. *Logos* 21 (3-4): 86-93.

Harnad, S. (2010) <u>The Immediate Practical Implication of the Houghton Report:</u> <u>Provide Green Open Access Now. Prometheus</u> 28 (1): 55-59.

Harnad, S. (2010) <u>Open Access to Research: Changing Researcher Behavior Through University and Funder Mandates</u>. In Parycek, P. & Prosser, A. (Eds.): *EDEM2010: Proceedings of the 4th Inernational Conference on E-Democracy*. Austrian Computer Society: 13-22

Harnad, S. (2010) <u>No-Fault Peer Review Charges: The Price of Selectivity Need Not Be Access Denied or Delayed</u>. *D-Lib Magazine* 16 (7/8).

Harnad, S. (2009) <u>The PostGutenberg Open Access Journal</u>. In: Cope, B. & Phillips, A (Eds.) *The Future of the Academic Journal*. Chandos.

Harnad, S. (2008) <u>How To Integrate University and Funder Open Access Mandates</u>. *Open Access Archivangelism* 369

Houghton, J.W., Rasmussen, B., Sheehan, P.J., Oppenheim, C., Morris, A., Creaser, C., Greenwood, H., Summers, M. and Gourlay, A. (2009). <u>Economic Implications of Alternative Scholarly Publishing Models: Exploring the Costs and Benefits</u>, London

and Bristol: The Joint Information Systems Committee (JISC)

Sale, A., Couture, M., Rodrigues, E., Carr, L. and Harnad, S. (2011, in press) <u>Open Access Mandates and the "Fair Dealing" Button</u>. In: *Dynamic Fair Dealing: Creating Canadian Culture Online* (Rosemary J. Coombe & Darren Wershler, Eds.)