The only way to make inflated journal subscriptions unsustainable: Mandate Green Open Access.

In light of further data provided by Tim Gowers on unsustainable costs of journal subscriptions for academic libraries and stretched university budgets, **Stevan Harnad** finds that plans for universities to fund open access alternatives will also be a burden as 80% of journals are still subscription-based. What is needed now is for universities and funders to develop mutually reinforcing self-archiving policies, like HEFCE's new open access policy for the Research Excellence Framework.



Tim Gowers is quite right that

the pace of change is slow, and the alternative system that is most strongly promoted — open access articles paid for by article processing charges ["Gold OA"] — is one that mathematicians tend to find unpalatable. (And not only mathematicians: they are extremely unpopular in the humanities.)... there is no sign that they will help to bring down costs any time soon and no convincing market mechanism by which one might expect them to.

This is all true as long as the other form of OA ("Green OA" self-archiving by authors of published articles in OA repsositories, mandated by funders and institutions) has not prevailed. Pre-Green Gold is "Fool's-Gold." Only Post-Green Gold is Fair-Gold.



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The current Finch/RCUK policy, preferring Gold OA, has had its predictable perverse effects:

- 1. sustaining arbitrary, bloated Gold OA fees
- 2. wasting scarce research funds
- 3. double-paying publishers [subscriptions plus Gold]
- 4. handing subscription publishers a hybrid-gold-mine

- 5. enabling hybrid publishers to double-dip
- 6. abrogating authors' freedom of journal-choice [based on cost-recovery model, embargo or licence instead of on quality]
- 7. imposing re-mix licenses that many authors don't want and most users and fields don't need
- 8. inspiring subscription publishers to adopt and lengthen Green OA embargoes [to maxmize hybrid-gold revenues]
- 9. handicapping Green OA mandates worldwide [by incentivizing embargoes]
- 10. allowing journal-fleet publishers to confuse and exploit institutions and authors even more

But the solution is also there, as already adopted by University of Liege and FRS-FNRS (the Belgian Francophone research funding council), EC Horizon2020 and now also by HEFCE for REF2020.

- a. funders and institutions mandate immediate-deposit
- b. of the peer-reviewed final draft
- c. in the author's institutional repository
- d. immediately upon acceptance for publication
- e. whether journal is subscription or Gold
- f. whether access to the deposit is immedate-OA or embargoed
- g. whether license is transfered, retained or CC-BY;
- h. institutions implement repository's facilitated email eprint request Button;
- i. institutions designate immediate-deposit the mechanism for submitting publications for research performance assessment;
- j. institutions monitor and ensure immediate-deposit mandate compliance

This policy restores author choice, moots publisher embargoes, makes Gold and CC-BY completely optional, provides the incentive for author compliance and the natural institutional mechanism for verifying it, consolidates funder and institutional mandates; hastens the natural death of OA embargoes, the onset of universal Green OA, and the resultant institutional subscription cancellations, journal downsizing and transition to Fair-Gold OA at an affordable, sustainable price, paid out of institutional subscription cancellation savings instead of over-priced, double-paid, double-dipped Fool's-Gold. And of course Fair-Gold OA will license all the re-use rights users need and authors want to allow.

In summary, plans by universities and research funders to pay the costs of Gold OA today are premature. Funds are short; 80% of journals (including virtually all the top journals) are still subscription-based, tying up the potential funds to pay for Gold OA; the asking price for Gold OA is still high; and there is concern that paying to publish may inflate acceptance rates and lower quality standards. What is needed now is for universities and funders to mandate Green OA self-archiving (of authors' final peer-reviewed drafts, immediately upon acceptance for publication). That will provide immediate OA; and if and when universal Green OA should go on to make subscriptions unsustainable (because users are satisfied with just the Green OA versions) that will in turn induce journals to cut costs (print edition, online edition, access-provision, archiving), downsize to just providing the service of peer review, and convert to the Gold OA cost-recovery model; meanwhile, the subscription cancellations will have released the funds to pay these residual service costs. The natural way to charge for the service of peer review then will be on a "no-fault basis," with the author's institution or funder paying for each round of refereeing, regardless of outcome (acceptance, revision/re-refereeing, or rejection). This will minimize cost while protecting against inflated acceptance rates and decline in quality standards.

HEFCE/REF Adopts Optimal Complement to RCUK OA Mandate

There are two essential components to an effective "Green" OA mandate (i.e., a mandate that generates as close to 100% compliance, as soon as possible):

requiringimmediate deposit, with no exemptions or exceptions. How long an OA embargo it allows is a separate matter, but on no account must date of deposit be allowed to be contingent on publisher OA embargoes.

This is exactly what the **New HEFCE policy for open access in the post-2014 Research Excellence Framework** has done.

(2) Eligibility for research assessment (and funding) must be made conditional on immediate-deposit (date-stamped by the journal acceptance letter). Again, this is in order to ensure that deposits are not made months or years after publication: no retrospective deposit.

The deposit requirement for eligibility for research assessment and funding is not itself an OA requirement, it is merely a procedural requirement: For eligibility, papers must be deposited in the institutional repository immediately upon acceptance for publication. Late deposits are not eligible for consideration.

This engages each university (always extremely anxious to comply fully with REF, HEFCE and RCUK eligibility rules) in ensuring that deposit is timely, with the help of the date-stamped acceptance letter throughout the entire 6-year REF cycle, 2014-2020.

These two conditions are what have yielded the most effective of all the Green OA mandates to date (well over 80% compliance rate and growing) at University of Liege and FRS-FNRS (the Belgian Francophone research funding council). Other mandates have since been upgrading to this mandate model: Harvard FAS has already adopted immediate-deposit as one of its conditions. So has the European Commission's Horizon 2020. And now RCUK — thanks to HEFCE/REF — will reap the benefits of the immediate-deposit condition as well (see ROARMAP)

OA embargoes are another matter, and HEFCE/REF is wisely leaving that to others (RCUK, EU Horizon2020, and university mandates) to stipulate maximal allowable embargo length and any allowable exceptions. What HEFCE/REF is providing is the crucial two components for ensuring that the mandate will succeed: (1) immediate deposit as a (2) condition for REF-eligibility.

But let me add something else that will become increasingly important, once the HEFCE/REF immediate-deposit requirement begins to propagate worldwide (as I am now confident it will: UK is at last back in the lead on OA again, instead of odd-man-out, as it has been since Finch):

The immediate-deposit clause and the contingency on eligibility for research assessment and funding also ensures that the primary locus of deposit will be the institutional repository rather than institution-external repositories. (Deposits can be exported automatically to external repositories, once deposited and once the embargo has elapsed; they can also be imported from extrenal repositories, in the case of the physicists and mathematicians who have already been faithfully depositing in Arxiv for two decades,)

But besides all that, many of the eprints and dspace institutional repositories already have — and, with the HEFCE mandate model propagating almost all of them will soon have the email-eprint-request Button:

This Button makes it possible for users who reach a closed access deposit to click once to request a copy for research purposes; the repository software emails an automatic eprint request to the author, who can click once to comply with the request; the repository software emails the requestor the eprint. (Researchers have been requesting and sending reprints by mail — and lately by email — for decades, but with immediate-deposit and the Button, this is greatly accelerated and facilitated. So even during any allowable embargo period, the Button will enhance access and usage dramatically. I also predict that immediate-deposit and the Button will greatly hasten the inevitable and well-deserved demise of publisher OA embargoes.)

Let me close by noting another important feature of the new HEFCE/REF policy: The allowable exceptions do not

apply to the immediate-deposit requirement! They only apply to the allowable open-access embargo. To be eligible for REF2020, a paper must have been deposited immediately upon acceptance for publication (with a 3-month grace period). No worries about HEFCE's optional 2 year start-up grace period either: Institutions will almost certainly want their REF procedures safely and systematically in place as early as possible, so everything can go simply and smoothly and there is no risk of papers being ineligible.

This piece originally appeared on Stevan Harnad's personal blog Open Access Archivangelism and is reposted with the author's permission. See also Stevan Harnad's previous pieces on these issues: The Green Road to Open Access: A Leveraged Transition (2007), No-Fault Peer Review Charges: The Price of Selectivity Need Not Be Access Denied or Delayed (2010), Finch Group reviews progress in implementing open access transition amid ongoing criticisms (2013), "Nudging" researchers toward Gold Open Access will delay the shift to wider access of research (2013).

Note: This article gives the views of the author, and not the position of the Impact of Social Science blog, nor of the London School of Economics. Please review our Comments Policy if you have any concerns on posting a comment below.

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