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It's Not Academic: How Publishers Are Squelching Science Communication

By Mike Taylor | February 21, 2012 9:45 am

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Everyone involved in academic publishing knows that it's in a horrible mess. **Authors increasingly see publishers as enemies** rather than co-workers. And while publishers' press releases talk about partnership with authors, unguarded comments on blogs tell a different

story, revealing that the hostility is mutual. The **Cost Of Knowledge boycott** is the most obvious illustration of the fractious situation—more than 6000 researchers have declared that they will not write, edit, or review for Elsevier journals. But how did we get into this unhealthy situation? And how can we get out?

The problems all stem from the arrival of the Internet. Or, rather, the Internet has removed problems that used to exist, and this has caused problems for organisations that existed to solve those problems. Which is a problem for them.

Back in the day, it was *hard* to distribute the results of research. Authors would submit typewritten manuscripts, and publishers took it from there. Editors would fix errors and hone language. Typesetting was an art, especially when it involved equations or graphs. Making multiple copies was costly and time-consuming. And distributing them around the world needed enormous resources. So the researchers of 20 years ago saw publishers as necessary to their work. It's no wonder that publishers were generally liked and respected.

But just as long-distance telephone networks made telegrams obsolete, so computers mean that most of what publishers do isn't needed any more. By submitting machine-readable manuscripts and figures, we eliminate nearly all typesetting work. (In maths and physics, authors submit "**camera-ready**" copy that requires no further typesetting at all.) Printing is no longer needed. Copying is quick, free, and perfect. And worldwide distribution is also free and instantaneous.

You might think that publishers' response would be to emphasise and increase their editorial role. Instead, surprisingly, they have shed most editorial work. **Copyediting is rare**, and when it does exist has a reputation for adding more errors than it removes. Most journals have stringent formatting guidelines that authors *must* follow in submitted manuscripts. (A colleague of mine recently gave up attempts to submit his manuscript to a particular journal after it was three times rejected without review for trivial formatting and punctuation errors, such as using the wrong kind of dash. Seriously.)*

Why this abandonment of the only real contribution publishers still brought to the table? I can only guess. Probably it was sheer opportunism: with the Internet slashing printing and distribution costs, publishers were able to increase short-term profits yet further by cutting editorial costs—and to good effect, as all four major scientific publishers (Elsevier, Springer, Wiley, and Informa) routinely post **profits exceeding a third of all revenue**. In the first quarter of 2011, Wiley's profit of \$106 million on revenue of \$253 million represented an astonishing 42%.

But these profits come at a long-term cost. Authors have long known that they're being taken for a ride; now, what had been low-level grumbling has broken out into vocal anger. The Cost of Knowledge site lists three specific grievances against Elsevier: high subscription prices, "bundling" of journal sales into all-or-nothing packages, and support for SOPA, PIPA and **the Research Works Act**, three regressive, punitive measures to further lock down copyrighted works. But while these were the immediate triggers, resentment runs much deeper. Now there are no technical barriers to access, the only way publishers can charge for it is by *making* barriers: paywalls. So we have a huge and tragic disconnect: what publishers want—barriers—is the exact opposite of what authors want—universal access. It's **authors vs. publishers**.

But any business model that depends on artificial barriers is a loser. Information really does want to be free. One way or another

—whether by legislation, piracy, or the continuing rise of open-access publishers—the barrier-based publishing model will fail. Consider Penguin’s absurd decision to stop offering network downloads for ebook loans: they worry that borrowing ebooks is too easy. **They want it to have “friction,”** just like going to a library to borrow physical books, in the hope that people will buy instead of borrowing. But of course readers’ response to this hostile manoeuvre will *not* be to buy more Penguin books, but to borrow from elsewhere—or pirate. Such moves are desperate last throws of the dice.

The trouble is, a big dying animal can do a lot of damage as it thrashes about.

You might wonder why researchers continue to give their work to publishers—**handing over copyright** and often even **paying for the privilege**. Why haven’t we simply deserted the old publishers, walked away and started our own? Well, to some extent we have: that is what the Cost Of Knowledge boycott is about. It’s sometimes been described as a petition, but isn’t trying to persuade Elsevier to *do* something. It’s a declaration of independence. One very successful publisher started by researchers in 2003 is the non-profit **Public Library of Science (PLOS)**. It publishes seven journals, all open access. One of them, **PLOS ONE**, started only in 2006, has quickly become the world’s largest academic journal, with **13,798 papers published in 2011**. And open-access journals can be influential: PLoS Biology consistently has a very high impact factor (IF), though PLoS has de-emphasized this traditional, problematic measure, so you won’t find this fact blazoned across their website.

Yet barrier-based publishers survive because of another disconnect, this one between researchers and libraries. Researchers choose which journals to support with their submissions, but it’s libraries that have to pay for subscriptions to those journals. Because of the stupid way researchers are usually evaluated (and this is another whole issue), the intrinsic quality of our work matters less than the brand name of the journal it’s published in. So we have strong selfish reasons for wanting to get our work into the “best” journals, even if it is at the cost of effective communication. And we have no up-front costs to dissuade us even if those journals are expensive ones. We have a completely dysfunctional journal market because the real purchaser never sees the bill.

At this point, it seems clear that the **old publishers aren’t going to change**; their support for the RWA is proof enough of this. To fix the academic publishing mess, researchers need to stop sending their work to barrier-based journals. And for that to happen, we need funding bodies and job-search committees to judge candidates on the *quality* of their work, not on which brand name it’s associated with.

Happily, there are signs of movement in this direction: for example, The **Wellcome Trust says** “it is the intrinsic merit of the work, and not the title of the journal in which an author’s work is published, that should be considered in making funding decisions.” We need more funding and hiring bodies to make such declarations. Only then will researchers will be free of the need (real or apparent) to prop up parasitic publishers by sending their best work to big-name, barrier-based journals.

**Update, 2/21: This sentence was altered to clarify what happened with the submitted manuscript.*

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