

## Analogies and Precedents for the FOS Revolution

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<http://dash.harvard.edu/handle/1/4727449>

If asked for a precedent for the kind of revolution represented by FOS [Free Online Scholarship], we might first mention the Gutenberg Press. But it isn't a very good fit. It's a technological advance, and all the technology required for FOS already exists. We're trying to bring about an economic change that will take advantage of existing technology.

If we want an example of an economically sustainable industry which gives away its product to end-users because the costs of production and distribution are paid by others, then we need look no further than television and radio. I've used these examples more than once recently to argue that the long-term sustainability of FOS is not problematic.

<http://www.upi.com/view.cfm?StoryID=15022002-015414-4119r>

<http://lists.topica.com/lists/fos-forum/read/message.html?mid=903623859&sort=d&st art=111>

But television and radio were “born free” (for end-users). From the start, those wanting to make a profit in these businesses needed a funding model compatible with open access for users. But most scholarly journals were born priced. If future journals are to be free for end-users, then we must transform their business model.

Are there precedents for this? Can you think of a product that was unfree for end-users at one time, and became free at a later time, because an intervening economic revolution shifted the costs from end-users to others?

Leave aside products now paid for by the governments (like roads), because that isn't the only model we seek for FOS. Let's also put self-archiving to one side, since it didn't exist in some pre-FOS form needing transformation.

I've thought of one precedent: mail. The postage stamp allowed us to change the funding model for letters, newspapers, and other mail, from "recipient pays" to "sender pays."

When this example first occurred to me, I thought it minor and stretched. But as I've learned more about the postal revolution, I've changed my mind. It was an important social and economic transformation, and its similarities to the FOS transformation are real, even if there are important dissimilarities as well. Bear with me now.

Before stamps, writers sent letters free of charge. Recipients had to pay to take their mail home from the post office. If they couldn't afford to pay, they couldn't read their mail. Stamps were introduced precisely to allow senders to pay in advance and lift the burden from recipients.

The revolution was launched by Rowland Hill (1795–1879), in his 1837 pamphlet, *Post Office Reform: Its Importance and Practability*. The idea of shifting costs to senders was instantly popular. A group of businessmen interested in implementing the idea collected four million signatures—more than 15% of the British population at the time. Parliament gave Hill a temporary position in the Treasury so that he could put his theory into practice. In 1840, England adopted the postage stamp and the "sender pays" rule. Switzerland and Brazil made the change in 1843, and the U.S. followed suit in 1847.

The primary similarity holding up the analogy is the switch from "access fees" (paid by recipients) to "dissemination fees" (paid by senders). That's precisely the change we need to make scholarly journals free for readers and their institutions, and the internet makes it easier by radically reducing the cost of dissemination. This suggests a secondary similarity as well. Before stamps, postage rates depended on weight and distance, which required separate calculations and record-keeping for every letter. Hill realized that his reform would not only make access to mail free for recipients, but would significantly lower the overall cost of delivery. Likewise, providing open access to journals costs much less than disseminating journals on paper or even disseminating them online through DRM software that blocks access to non-subscribers.

There are limits to the analogy, of course, and exploring what they are helps to illuminate the problems facing FOS. If universities agree to support open-access journals by paying a dissemination fee for every outgoing article, then during some indefinite transition period they will still have to pay access fees for desirable journals using the older business model. This forces them either to increase their overall serials budgets or cancel subscriptions to cover their new costs at the other end. (I sketched this dilemma in FOSN [Free Online Scholarship Newsletter] for 1/1/02, and pointed out several possible solutions that make the situation more complex but also more hopeful.) But when nations adopted Hill's funding model for mail, there was no transition period in which users faced the dilemma of greater net outlays or lost content. The only people who

didn't save money from the start were those who sent much more mail than they received.

<http://www.earlham.edu/~peters/fos/newsletter/01-01-02.htm>

This highlights another difference. With mail, essentially all senders are receivers. Mail senders consented to the change, and even clamored for it, not because they would be relieved of costs as receivers but because they would pay less as senders than they were currently paying as receivers. Libraries are similarly situated, and this explains why librarians tend to support FOS. But libraries are not the most likely sources of dissemination fees for FOS journals, and the more likely sources tend to be senders who are not receivers, breaking the symmetry that creates one incentive for the change. These are foundations and government agencies, the funders of research who are not always readers or consumers of research literature. These potential payors have been slower to show up at the revolution and many still need persuading.

Moreover, journal subscribers are always volunteers, while mail recipients are not. While both revolutions want to put costs only on volunteers, postal costs were previously borne by non-volunteers. So the postal revolution had at least this one incentive missing from the FOS revolution. [...]

England loved Hill for his reform. This son of a schoolteacher who painted landscapes and built scientific instruments was knighted in 1860, commemorated with a statue outside the General Post Office in London, buried in Westminster Abbey—and of course he had his face on a postage stamp.

Dwight Rhodes, *History of Postal Systems*

<http://www.aretex.com/POSTHISTORY.html>

Biographies of Rowland Hill

<http://members.tripod.com/~midgley/rowlandhill.html>

<http://web.archive.org/web/20011026185310/>

<http://www.fortunecity.com/marina/armada/367/hillrowl.htm>

<http://web.archive.org/web/20011205083545/>

<http://www.glassinesurfer.com/f/growlandhill.shtml>

### Postscript

I don't claim that the postal revolution is the best analogy or precedent for the FOS revolution, only that it is good enough (in Robert Nozick's words) to be worth surpassing. I hope you'll post your thoughts to our discussion forum, especially proposals for better analogies and precedents.

Here are some questions. Are there better analogies or precedents than Hill's postal revolution for the transformation of scholarly journals sought by the FOS movement? One reason to have a precedent is to show that the transformation we seek for scholarly journals is economically possible, even feasible and realistic. Does the postal transformation show this for journals? If not, again, are there other precedents that might show it better?

Another reason to have a good precedent is to study it and learn to learn how the transition was managed. What were the obstacles and how were they overcome? What were the opportunities and how were they seized? Are there lessons in the postal revolution that the FOS movement should take to heart?