

PublisherInfo		
PublisherName	:	BioMed Central
PublisherLocation	:	London
PublisherImprintName	:	BioMed Central

e-publishing - Paris, profit and potential

ArticleInfo		
ArticleID	:	3994
ArticleDOI	:	10.1186/gb-spotlight-20010228-01
ArticleCitationID	:	spotlight-20010228-01
ArticleSequenceNumber	:	65
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	:	4
ArticleHistory	:	RegistrationDate : 2001-02-28 OnlineDate : 2001-02-28
ArticleCopyright	:	BioMed Central Ltd2001
ArticleGrants	:	
ArticleContext	:	130592211

Pete Moore

Email: pete.moore@dial.pipex.com

LONDON In 1996 UNESCO organised a meeting to discuss the potential use of electronic media in science publishing. The delegates [reconvened](#) last week in Paris. According to e-media visionary Paul Ginsparg, both occasions ended with attendees putting forward the same list of recommendations. This, he feels, confirms that the requirements of any publishing system have not changed - what has changed, however, is the complexity and depth of understanding of the discussions.

"When UNESCO held its first meeting in 1996 to look at the potential of e-systems to empower academic life, one of the questions that kept floating to the surface was 'Will the web ever catch on?' You could still have an argument as to whether commercial journals were going to go online and if so when. Dates like 2100 or 2200 were taken seriously. But it has happened already - so all those peripheral points have been eliminated and we could focus on the real issues," says Ginsparg. A physicist working at the Los Alamos National Laboratory, New Mexico USA, [Ginsparg](#) was the driving force behind the development of the most successful [pre-print server](#) in existence, a resource that opened in August 1991.

Ask anyone working in the physical sciences whether e-publishing has changed their life and they will be amazed at the question. It would run on a level of naivety along with, is warm water wet? Web-based libraries now contain tens of thousands of papers and handle thousands of interactions per hour. They allow for almost instant publication of data and papers, with a variety of systems of online and open reviewing.

In biomedical sciences the change has been less dramatic. Although journals have started to make their papers available online, they are by and large the same journals and the same papers. Nothing has really changed.

"What has been clarified in my mind over the past few years has been the issue of cost. For example, why is there a factor of 10 disparity in revenues between some professional societies and some commercial publishers?" Currently Ginsparg believes that the commercial publishers are enjoying huge profits but thinks that, as e-publishing becomes more established, these margins will be squeezed.

This squeeze could bring with it a potential crisis. "Commercial publishers over the long-term are surprisingly ephemeral - if you look at publishers now compared to 100 years ago, many have come and gone. The only ones that have been stable over this timescale have been the professional Society's publishers," he says. The reason for this he believes is that Society's publishers put their service to science first and profit second - commercial publishers are in there to make money; if no profit is available then they leave. That, he says, was all right because archiving was done by a myriad of libraries around the world, not the publishers. Once companies not only publish papers, but also run and own the archives there is the possibility of a tragic loss to the scientific community if one of them ever went out of business. "Think about it, this could result in a whole section of the literature disappearing from the archival record," he speculates.

Ginsparg was pleased to hear reassurances at the meeting from Derk Haank, Director of Reed Elsevier plc, that mirror sites and multi-party collaborations are being established to protect against this possibility, but is anxious that people remain aware of the potential danger.

The second issue of cost that Ginsparg believes has come to the fore, is the relative prices of reviewing and publishing. In conventional publishing the cost of printing on paper and distributing is in the same order of magnitude as the cost of running the editorial end of the business, each costing about \$1,000 per paper. "With e-publishing the cost of distribution and archiving falls to about \$1 per paper. Now editing is 1000-fold more expensive. Currently some commercial journals are generating revenues of \$15,000 to \$20,000 per paper - an additional factor of ten," he comments, saying that if these companies are going to justify such high figures they are going to have to supply some staggeringly brilliant services.

Ginsparg's claim is that scientific publishing could be 20-fold cheaper, releasing cash for scientific endeavour. Why then isn't biological science welcoming the new age with open arms?

The stumbling block seems to be the thorny issue of quality control. The anxiety is that the resulting free-for-all will make it impossible to peer-review papers thoroughly.

Ginsparg counters this from two directions. First, he points out that in the physical sciences peer-review has adapted to the new publishing genre and is, if anything, stronger in the new habitat. "People were afraid that there would be complete chaos, that the structure of science would fall apart if you took control away from a bank of editors - it didn't." Second, he asks, what is so great about peer-review? He pointed out that editor of the *BMJ* Richard Smith presented data at the meeting indicating that for all the cost and attention given to peer-review, the process was only marginally better at choosing papers than flicking a coin. Smith also said that one of the great paradoxes in publishing is that the majority of time is spent on papers that don't appear - the good papers go through very smoothly.

In a [BMJ editorial](#) published in January, announcing the link-up between the *BMJ* and PubMed Central, Smith and colleague Tony Delamothe profess their certainty that web-based repositories of peer-reviewed reports that are freely available to all users, are the way ahead. Conventional print journals will only survive if they add to the information by providing education or entertainment.

"It's clear that we are still far from the end of the publishing journey," says Ginsparg. "But already I'm eager to see what the destination looks like."

References

1. Second Joint ICSU Press - UNESCO Expert Conference on Electronic Publishing in Science, [<http://associnst.ox.ac.uk/~icsuinfo/introd01.htm>]

2. Paul Ginsparg, [<http://xxx.lanl.gov/blurb/ywn.jpg>]
3. arXiv.org e-print archive, [<http://xxx.lanl.gov>]
4. Delamothe T, Smith R: PubMed Central: creating an Aladdin's cave of ideas. *BMJ* 2001, 322:1-2. , [<http://www.bmj.com/cgi/content/full/322/7277/1>]