

Editorial

Publishing and the Scientific Community

Publishing is changing rapidly, as is the management of much of the scientific community world wide. Unfortunately there are features of both that should give considerable cause for alarm if one cares to look forward a few years. Let's begin with the remarkable consolidation of ownership in scientific publishing culminating in the latest move - the acquisition of Harcourt by Reed Elsevier - which has been investigated by the Competition Commission in the UK as being potentially against the public interest. Those who buy Reed Elsevier journals at present will know that their subscription rates are some of the highest in the world. It is not obvious that scientists will see any benefit from this takeover. Indeed, what will happen to the provision of information to working scientists as library budgets decline everywhere? Is increasingly expensive equipment for experimental use really more important than the literature? Governments will say that the Web will meet scientists needs to which my reply is that much of its content is uncontrolled rubbish and it certainly does not replace the quality controlled material available in the journals. So our first conclusion for the future could be that consolidation of ownership of journals is bad for science and unless, there is a significant change in library funding, many commercial journals are likely to price themselves out of the general market, leaving only those published by learned societies or charities at an affordable level. Bad news.

A second worrying trend is the increasing difficulty all of us are finding in making time to do our bit as reviewers. Nobody gets any credit for reviewing papers - or even these days for being an unpaid editor - yet both are critical to continuing the structure of peer review that determines acceptability of papers and ultimately pay, promotion, grants and prestige in the science community. How is it that our political masters seem to think we should do all this work in our spare time since by modern management definitions it is "unproductive", or "fails to generate income" or "is not a useful output indicator of innovation". Do any of these people understand how science works? More to the point do they care? More bad news.

Thirdly, just how many times do we need to be told that electronic publishing will shortly supplant the printed versions of journals and books? Technological advances will make it easier and more convenient to use and the development of "electronic paper", allowing you to read the journal in bed or on the plane, is not that far away. The establishment of electronic archives for complete runs of key journals is already well advanced for some subjects. And yet I worry that future researchers, relying entirely on material identified by keyword searches, will never see the material that allows the interdisciplinary idea to develop, will be forever locked into a narrow speciality as browsing will no longer be as easy.

These are not the only trends that we should be concerned about but, since publications are the output indicator most highly valued by the political system and the basis on which science itself develops, they are probably the principal determinants of our future opportunities. As a community we seem so far to have made little impact in convincing others that scientific information should be cheaply and widely available, that reviewing and editing are as essential to the scientific process as writing papers, and that electronic publishing is not a universal panacea. Continuing to sit on our hands will leave our fate in their hands - those with different agendas to scientists.

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