November 1997

Continuing the Debate: New Protocols for Scholarly Communication

John E. Cox
Carfax Publishing Company

Anne F. Jennings
Sinkler & Boyd

Jack G. Montgomery
University of Missouri

Follow this and additional works at: <https://docs.lib.purdue.edu/atg>

Part of the [Library and Information Science Commons](#)

Recommended Citation

Cox, John E.; Jennings, Anne F.; and Montgomery, Jack G. (1997) "Continuing the Debate: New Protocols for Scholarly Communication," *Against the Grain*: Vol. 9: Iss. 5, Article 17.
DOI: <https://doi.org/10.7771/2380-176X.2919>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

** LEGAL ISSUES **

Section Editors: Anne Jennings (InfoFacto) <infofacto_aj@charleston.net>
Jack Montgomery (University of Missouri, Columbia)
<MONTGOMERY@law.missouri.edu>

Continuing the Debate: New Protocols for Scholarly Communication

by John E Cox (Managing Director, Carfax Publishing Company, P.O. Box 25, Abingdon, Oxfordshire OX14 3UE, UK. Phone: +44 1235 401000; fax: +44 1235 401550) <john.cox@carfax.co.uk>

The Process of Publishing -- Making Products out of Ideas

The process of publishing is often confused with the printed article that has, until recently, been publishers' only medium of output. In reality, publishing is concerned with the refinement, quality management, packaging, presentation and marketing of intellectual property rather than with the process of imposing characters and images on paper. The publisher's design, typography, specifications for paper, printing and binding, and the marketing, distribution and pricing of the product are required to transform a raw manuscript into something that readers want to buy or have access to. The publishing process is at the heart of scholarly communication because it adds value to the raw material received from the author. Rarely does a paper reach a publisher ready to publish. Authors' strengths lie at the cutting edge of research in their particular subjects. That is quite different from expecting them to be expert in design, typographical layout, copy editing, marketing or distribution.

The Scholarly Publishing Tradition - Peer Review and Quality Control

Scholarly publishing has evolved as a means of efficiently communicating scholarship and research to the global community of scholars. It has

accumulated procedures and policies that have become traditions, including deliberative and objective peer review (and revision if required), and the permanent availability of published papers as part of the eternal scholarly library. Three features in this tradition argue for continuity rather than revolution:

"... the ease with which material can be adapted and used by others using modern technology highlights the need for the legal protection of the author."

- A journal is created as a "brand." Its editor and editorial board members are appointed, either by the publisher or by the society that owns the journal. They are the custodians of the journal's authority, scope and content.

- A journal paper itself passes through a number of stages: preparation and submission, peer review, editorial preparation, copy-editing and proofreading, publication (including marketing and distribution), and archiving and indexing.

- Authors must submit new research and scholarship that does not overlap significantly with previous submissions by them or anyone else, and must give full credit to others who have contributed in any way to its preparation.

Each journal seeks to gain prestige in its discipline by publishing only the most significant and well-grounded papers. Authors gain prestige in their community by having their works published in prestigious journals. Successful publications obtain both tangible and intangible rewards for editors and for authors, and kudos and profit for their publishers. The relationship remains truly a dependent partnership where both parties gain.

The Challenge of the New Media - Reality or Wishful Thinking?

Modern technology, symbolized by the Internet, has given us the opportunity to handle masses of information with speed and economy. The speed of delivery, the elimination of paper, storage and transportation costs, and the ability to handle

complex data tables, moving pictures and sound, are qualities now available to scholarly communication.

Information does not have to remain in the print dimension; images, sound and video can be incorporated as integral components. The Internet provides an unparalleled opportunity for self publishing. There is scarcely a society, publisher or university that does not have a Web Page. It is a symbol of institutional virility. The Internet -- and, more particularly, the World Wide Web -- provides a medium for the exchange of information within the scientific, academic and professional communities that, on the face of things, side-steps traditional intermediaries like publishers and librarians.

The reality is that we have not begun fully to understand the quality and authenticity issues that challenge the scholarly community. The process of peer review needs to be re-evaluated and re-engineered. We need to develop protocols and methodologies for reviewing and authenticating multimedia material as being methodologically sound. The assumptions and values we attribute to text and diagrams may not be sufficient to establish the quality of video, sound, moving graphics, software or large data tables that form part of the article in an electronic environment. This challenge can only be met within the academic community. But progress in this fundamental area has been tantalizingly slow.

The Need for New Publishing Skills

Publishers have always adapted to changing circumstances. The structure of

continued on page 45

Continuing the Debate from page 44

the industry, with a very large number of small publishers, has inevitably driven them to use designers, illustrators, copyeditors and proofreaders, typesetters and other professional and technical personnel -- even sales personnel -- on a freelance basis. There is an army of specialists who work on contract for many publishers rather than as employees for one. Publishers have always been expert at outsourcing. Electronic publication requires new skills and new tools to be integrated into the process: video, sound and multimedia editing, software development and maintenance, network expertise, and new manufacturing processes. The same process of using freelancers or contractors will work in the case of new skills and technologies.

Publishers are no strangers to digital technology. It is an integral part of the preparation of journals for printing. Gone are the days when all a publisher needed was a typewriter to do business. The hot metal typesetter disappeared 15 to 20 years ago. Publishers incorporate software, hardware and telecommunications into the publication process, in order to drive down costs and improve speed and efficiency. Computerized typesetting and page layout software is the norm. Journal articles are frequently submitted on disk; publishers apply their skills in quality management, presentation and layout to material already in machine-readable form. The printed product may look traditional, but it has been output from a system that our forebears would find unrecognizable. Moreover, that process creates data files from which output can be made in other media.

Regulation and Control

There is much debate about the applicability of legal controls and other rules and regulations to these new publishing models. Some are quite dismissive, and maintain that information should be as free as the air, without any regulation, whether by obscenity, privacy, defamation, intellectual property or any other sort of law. This has only been tried once, during the French Revolution. The press and publishing were deregulated in 1789. The result was the collapse of literary publishing, and an explosion in seditious and pornographic material. In 1793 the revolutionary government reversed its policy, and restored order. In doing so, it recreated copyright law, recognizing the rights of the author as creator and owner of the work and the reader as a consumer.

There is an analogy with the current anarchic state of affairs on the Internet. There are few barriers to self-publishing on the Net; anyone can set up a Web page. Gossip, pornography and the weather sit side by side with a mass of undigested information of varying value. There are sophisticated search tools, but no quality control, or brand names recognized by the user as indicating quality and style. The processes of review, preparation and 'branding' are still needed to provide quality and recognition.

It is not the purpose of this article to assess the suitability of copyright law to the scholarly environment. In any case, copyright is an economic issue rather than a legal issue. But there is one aspect of modern European law that potentially provides tangible assistance to authors and the communities they write for by protecting published works from alterations without review and approval by the author: This aspect of European law is called "moral rights."

Moral Rights in the Electronic Environment

Moral rights originated in France, where the law was as much concerned with the author's right to have the personal relationship between a creator and his or her work recognized as with economic rights. Moral rights are applied throughout the European Union, but are not yet generally recognized as such elsewhere. In principle, they reflect the policies and practices of any ethical publisher. But the ease with which material can be adapted and used by others using modern technology highlights the need for the legal protection of the author.

There are four principal moral rights¹:

1. **Paternity** is the right of an author to be identified with his or her work.
2. **Integrity** is the right of objection to distortion or mutilation or any action prejudicial to the reputation of the author. It covers translations, alterations and adaptations of the work.
3. **Non-attribution** is the right not to have a work falsely attributed to an author.
4. **Disclosure** is the right of a person commissioning a copyright photograph to prevent copies being issued to the public or exhibited or broadcast.

Moral rights are not transferable or assignable, even if the author may have assigned copyright in the work, say, to the publisher. However, they can be waived in writing. Breach of moral rights is actionable in court, and will normally result in the award of damages.

Licensing As an Alternative to Reliance on Copyright

Copyright law is a blunt instrument. It

is imprecise in application and expensive to enforce. Its uncertainties are magnified when applied to electronic publication. As a result, many publishers are turning to license agreements in order to bring greater clarity and understanding both to publisher and to customer.

What publishers have to ensure is that licenses allow universities to do what they need to do in both teaching and research at reasonable cost and without complexity. They enable us to tailor usage rights to the needs of a dynamic and thriving academic community. The evolution of appropriate licenses is bound to be an iterative process. In the UK, for example, the **e-Lib Programme** comprises expenditure of some £16 million (\$26 million) over three years for a series of projects exploring the issues of copyright and license management involved in electronic reserves, on-demand publishing and coursepack production, multimedia e-journals, usage of electronic resources etc.

Partners Not Adversaries

Electronic media have opened up a whole new range of possibilities for authors and readers of research literature. They have also opened up the opportunity for much closer cooperation between publishers -- be they societies, university presses or commercial companies -- and the academic institutions they serve. Publishers add value to basic information gen-

continued on page 46

The Law Office Of
Lloyd L. Rich
1163 Vine Street
Denver, Colorado 80206

EXPERT, AFFORDABLE LEGAL SERVICES FOR THE PUBLISHING COMMUNITY

Phone: 303-388-0291
Fax: 303-388-0477
e-mail: rich@csn.net

Visit Our Web Site & Subscribe to
PubLaw Update, A Free Information
Service for the Publishing Community,
Offering Regularly Updated Articles
About Intellectual Property Law,
Publishing & Related Topics

www.publaw.com

Continuing the Debate from page 45

erated in the academic community. Universities have access to huge bandwidth on the Internet that should be available to any organization serving the interests of academic research, upon mutually agreed terms. Scholarly publishers and universities have a mutually dependent and beneficial relationship that we have yet to exploit to the optimum.

Print vs. Electronic: the Pros and Cons

When one examines the benefits and disbenefits of the electronic and printed media, the future is much less clear. From the financial point of view, electronic publishing eliminates paper, printing, binding, storage and transportation costs. Nevertheless, it is just as costly to employ highly skilled editorial and technical staff to prepare data for electronic publication as it is for paper-based publishing. There are no obvious cost savings on marketing, as users still have to be identified and reached with information about the product. Moreover, the technology requires heavy capital investment in computer equipment that needs to be renewed every two or three years.

Academic researchers are oddly ambivalent about changing the present system of research publishing based on the printed journal. Tenure, promotion, and the grant of research monies depends on the applicant's publishing record. Some are reluctant to discard existing information sources. Many are simply intimidated by the technology, for which new techniques have to be learned. There is a constant demand for the establishment of new journals, as new frontiers of scholarship are reached, and research funding patterns change. There is little demand for them to be published only as electronic journals.

The printed word is still seen as being the authoritative medium and format for the publication of peer reviewed research. But the printed word has more substantive advantages than those perceived by present day faculty, which will undoubtedly change as new blood is recruited. In our headlong enthusiasm for the new, we ignore some very real qualities which paper-based products will continue to offer:

- The printed word is still the best medium for reading narrative text. Most research papers are predominantly text. They are difficult to read on screen. Paper is still the natural medium for this purpose.

- Print also provides color illustrations of a quality that is impossible to render with reliability on current technology.

- Print accommodates mathematics and diacritics much better than the Web can.

- The printed product does not require any specialized equipment to access it. It is portable. It does not require a power supply. Moreover, it is a familiar technology that

has 500 years of development behind it. It enfranchises everyone who has basic reading skills, wherever in the world they may be.

- Paper-based publications have a 'fixity' that facilitates retrieval, citation, archiving and, ultimately, scholarship.

The benefits of electronic journals from the user point of view are counterbalanced by institutional concerns about the cost-effectiveness. Even if they are free, online journals involve substantial technical support costs. It is often less expensive to support a current print subscription than to support an online equivalent. Where online journals are on trial, librarians still have to maintain print subscriptions for archival purposes and for those patrons who refuse to use the electronic version. The complexity of networking online journals and the daunting nature of many license agreements have dissuaded many institutions from persevering with online versions when the printed version remains available.

The question is when and how the de-

"Scholarly publishers and universities have a mutually dependent and beneficial relationship that we have yet to exploit to the optimum."

mand for publication is to be met in a multiple medium environment, and how we are to adopt new methods of working and developing new products without throwing away the considerable benefits of that somewhat older technology, the printed word.

My view as a publisher is that the paper-based journal will survive, but it will no longer have the field to itself. Electronic products, particularly material delivered over the Internet, will become more important, when and where the unique features of the medium become important in relation to the research to be reported.

New Publishing Definitions and Protocols

The scholarly publishing tradition needs to be updated. Within the scholarly community we need to establish the rules, protocols and understandings that will enable us to preserve and certify the quality of the literature. The **Association for Computing Machinery (ACM)** has published thoughtful papers on copyright policy and electronic publishing². As a contribution to the debate, they are invaluable. For example, electronic media provide means whereby readers can attach comments to a work, and authors can respond. These comments must not corrupt or alter the original. Indeed, by posting such comments to a database, their authors are formally attaching those comments to the work as part of a public discussion. These comments themselves should not be altered or withdrawn without formal annotation on the database.

As we become more familiar with the characteristics of each medium now available to us, scholarly publishing will exploit different media for different purposes or user requirements. We need to establish exactly what we mean by the act of publication, as definitive versions of works may well be stored not only in print but on databases offering a variety of browsing, extracting and repackaging services.

- "Publication" will mean that a publisher has declared the author's work acceptable after a review process and applied his imprimatur to it. The paper published and available from the publishers' file server constitutes the definitive work just as much as the printed version.

- "Journals" will more clearly become brands around which interest groups will coalesce, and in which a paper will be placed. Libraries or individuals may subscribe to a printed journal, or buy access to a database on which that journal is held. They may simply shop on a pay-as-you-go basis for documents as the need arises. Profiles will be maintained, so that customers may be notified when new items matching those profiles have been posted. Items may be supplied in print, by fax or electronically to a PC. They will, in most cases, also be available in the printed issue.

Electronic publishing still has to marry its informality, economy and speed with the authority and authenticity given to the printed word. It is subject to the vagaries of archiving, the lack of indexing and the disdain of many in the academic community. The hypertext-linked database that characterizes electronic publishing may be wholly unsuitable for the linear progression or narrative character of academic argument in the humanities, social sciences and professional disciplines, in spite of its attractions in science and technology.

Whatever happens, content will be king. Formal publication involves an assurance of quality and good presentation. The need for an orderly infrastructure to research literature will remain paramount. It is true that any individual can offer for dissemination any work at low cost and with great speed. But without an agreed system or recognized publishing structure, there will be no assurance of quality, no index, no brand recognition, no order, only the noise of the playground. And scholarship deserves better than that, doesn't it?

Endnotes

1. *Copyright Designs & Patents Act 1988*, UK, Sections 77, 78, 80, 84.

2. Peter J Denning and Bernard Rous, *The ACM Electronic Publishing Plan (with interim copyright policies and an author's guide to those policies)*, *Communications of the ACM*, vol 38 no 3, April 1995.

continued on page 48