

Scholarly Publishing

1. What is the most pressing problem associated with scholarly publishing today?

Stanley Chodorow, Special Associate of the President, University of California, for Instructional Technology, and Chair, Board of Directors of the Council on Library and Information Resources: The most pressing problem is not the rising prices of journals and the resulting restrictions on acquisition of materials. The most pressing problem is that a very large and growing percentage of information used by scholars is created and acquired outside the traditional channels, which include publishers and libraries, and that these information assets are being neither cataloged for access nor preserved for posterity.

Billy E. Frye, Chancellor, Emory University: The most pressing problem is actually a cluster of problems relating to the shift to digital publication: authorship, authenticity, and provenance; ownership, copyright, and costs; and evaluation, particularly in the traditional tenure process. A major emerging problem concerns the excessive emphasis on publication of fragmented bits of information quickly, as opposed to the synthesis of information into systematic knowledge, and the need for bringing sensible order, reliability, and meaning out of the chaotic explosion of Web-based information.

Douglas Greenberg, President, Chicago Historical Society: The most pressing problem is the need to maintain the infrastructure of the traditional system of analogue scholarly publishing while simultaneously investing in and developing a new system that relies on digital creation, transmission, and distribution. The costs of doing both things simultaneously are enormous, both to scholarly publishers and to research libraries. No model exists to handle the need to cover these costs, since in the medium term a new system will add costs rather than replace them.

Paula T. Kaufman, University Librarian, University of Illinois at Urbana-Champaign: The lack of widespread understanding about the complexities and impending changes in scholarly communication and, within that context, in scholarly publishing. There is a growing sense of urgency about the need to fix the system, but there is no concomitant understanding about what it is that needs to be fixed. All stakeholders within each discipline must become involved both in developing a communal understanding of the problems and in shaping a shared vision of the future.

Susan L. Perry, College Librarian and Director of Library, Information, and Technology Services, Mount Holyoke College: The price of scholarly materials is the most difficult issue that small colleges face. We have quite literally been priced out of the market for many materials. A more strategic problem is how we can make a rational move from print to electronic information. Problems include not only pricing but also ownership, continuity, and preservation issues for electronic information.

Richard West, Executive Vice Chancellor and Chief Financial Officer, California State University, and Chair, Coalition of Networked Information: The economics of the scholarly publishing process. The most prestigious journals—particularly in the sciences, medicine, and technology—are produced by just a few publishers. The academic enterprise values publication in these journals and pressures libraries to acquire them. Since there are no substitutes for these journals, the publishers are able to command a high price. Thus we have artificially high prices and the journals pricing “crisis” that has existed for the last ten years.

2. Can the current model of scholarly publishing survive into the next century?

Chodorow: The current model is already breaking down. For a time in the new century, the traditional system will survive because it is the best way to preserve information resources and to make them accessible. By 2025 or so, we will have new ways to do this, and the old system will wither rapidly.

Frye: The static paper book or monograph will not likely survive. But the *concept* of the book or monograph can and should survive. Ideas need to ripen, to be criticized and synthesized, in order to have lasting meaning and be truly accessible to the larger community. The change will be one of addition to rather than replacement of the current model. But the resulting “hybrid” may indeed look and feel very different from what we now use.

Greenberg: A better question would be: “How far into the next century will the current model survive?” Scholarly communication will be entirely electronic before the first decade of the next century ends. The real question concerns what will happen to the still growing, accumulated print archive of scholarly communication, both while the transition is under way and after the transition to a completely electronic system is complete.

Kaufman: I would have to question if it *should*. Clearly, many important components of the system—peer review, fast distribution, access through finding tools, and enduring access—will be retained, but they may be carried out quite differently and in different parts of the system. Value may also be placed on new features, such as prepublication access, continuous peer review, and strong linkages among the various types of scholarly publications on which new research will be based.

Perry: Most likely the current model will survive into, but not through, the next century. However, I am always surprised by how long it actually takes to make change in academia.

West: We have come to better understand the flaws in the scholarly publishing marketplace. In fact, several active experiments are using technology to try to create new competition in this market. These technologies will increasingly change the print-based dissemination, quality control, and archiving functions we have relied on until now, and our current scholarly publishing approach will eventually disappear as a result.

3. What single action can individual campuses take to begin to address the issues associated with scholarly publishing?

Chodorow: First, campuses must make a concerted effort to educate faculty and students about the problems in today's system. Second, institutions must develop much better consortia for digitizing information resources. Third, they must seriously consider the preservation and access issues raised by the acquisition of information resources outside the library. Fourth, campuses must start to experiment with new ways to generate and manage scholarly communication based on Web sites that become the loci for scholarly discourse.

Frye: Campuses need to empower groups of scholars to stop and study the implications, both positive and negative, of the erratic rush into digital publication and, in light of that study and reflection, make some recommendations to institutional leaders as to what we have to gain, what is at risk, and therefore what actions we should take. This kind of reflection may have more to say about *how* we respond to the inevitable flood than *whether* we do.

Greenberg: More collaboration and more consortial planning, accompanied by less institutional ego-tripping, are

key. The competitive model of library acquisitions—dangerous both to institutions and to scholars and scholarship—needs to be replaced with a cooperative model based on service to users. Would it be too Swiftian to suggest that ARL immediately cease collecting its traditional data on library holdings or, that idea failing, modestly to propose that members of ARL collectively refuse to submit the data?

Kaufman: Educate, educate, educate. It is important that everyone who participates in the process of scholarly communication—including faculty, researchers, students, librarians, information technologists, administrators, publishers, and vendors—understand both the dynamics and the forces at work in the system at large, as well as in the segment in which they and their discipline operate, and the ways in which they may individually and in groups influence changes that will benefit the scholarly community.

Perry: Educate ourselves, especially faculty and senior administrators, about scholarly publishing issues and join the national dialogue and programs now emerging to seek solutions.

West: Educate all stakeholders on the need for a change in the roles and economics of traditional scholarly publishing. Faculty need to understand that dissemination of research results can occur in various ways and still satisfy their requirements for scholarly recognition and information access. An important first step would be to craft a campus strategy that would both meet individual faculty members' scholarly publishing needs and recognize the institution's fiscal constraints in purchasing and maintaining research collections.

4. What group or groups do you think the academy should look to for focusing this issue and coming up with action plans?

Chodorow: Organizations such as CLIR, EDUCAUSE, AAAS, and larger scientific societies (ACS, AHA, MLA, etc.) should help universities experiment with new systems of communication and with the management of knowledge. These organizations should make a concerted effort to convince foundations other than Mellon of the importance of these issues.

Frye: Of course provosts and deans, and even presidents, since it is at this level that collaborative plans will have to be rooted. Otherwise the institutional response is likely to be either merely the sum of the individual responses or, worse

yet, a dysfunctional chaos of responses. But the guiding light for the administrative leaders should be the faculty, who should be placed in a “think tank” situation and allowed to develop well-considered advice.

Greenberg: The academy must look to itself. The real question concerns leadership. The librarians and CIOs care about this issue but don't usually have significant clout or money. The faculty care but are too busy producing scholarship to worry much about its distribution. The learned societies, all publishers, understandably have an interest. These groups will have to work together, but without visionary leadership at the highest institutional levels, I fear there will be neither focus nor plans.

Kaufman: Librarians have been very active in raising relevant issues both on their campuses and within scholarly societies. We should continue to look to librarians for this type of activity and support. However, because the problems in scholarly publishing do not constitute a library problem but rather a problem for the entire scholarly community, we should look to influential groups and stakeholders within that community—working together whenever possible—for planning and implementing positive action plans.

Perry: A coalition of academic disciplinary associations, societies such as the American Council of Learned Societies, publishers of scholarly information, and library and computing organizations such as ALA, ACRL, CNI, EDUCAUSE.

West: Faculty, librarians, technologists, and provosts all play essential roles. With the potential for virtually housing scholarly content on the Internet, the location of the physical materials is no longer important. Many of the issues that are now critical—access, quality control, and archiving—should be tackled by professional associations as well as by librarians and technologists. The solution to the scholarly publishing challenge requires a national and even international approach rather than a local one.

5. What technological challenges are important for the transformation of the scholarly communication process?

Chodorow: The first challenge is preserving information in digital formats. The second is learning to manage scholarly

discourse on the Web. The latter is a matter partly of culture and practice and partly of software.

Frye: According to a recent report in the *Chronicle of Higher Education*, only a modest fraction of faculty today use digital technology for anything more than e-mail, and there is a large and growing cohort of mostly older faculty who are not getting engaged in technology. Therefore, we need to provide the necessary education and support to prevent this generation gap from developing further. Philosophically, digital technology can be the most powerful force for reunification of our campus.

Greenberg: The challenges lie not in the technology but in academic culture. The university press book, the peer-reviewed journal, the museum catalogue, and the authoritative reference work will soon be electronic and, therefore, unrecognizable. How the intellectual authority of these new products will be verified, how the stability of their content will be ensured, how their production will be rewarded, and how they will be archived and by whom are much more worrisome issues than any technological barriers.

Kaufman: The process of scholarly communication will continue to be transformed by the widespread use of new technologies. Communication flies through cyberspace; using new technologies to capture it, make it findable through time, and provide enduring access to the texts, images, sounds, and linkages that compose the content of scholarly communication will be a formidable challenge for the entire scholarly community.

Perry: The preservation of electronic materials seems to me to be the most pressing technological challenge facing us all. Coupled with that is the authentication of electronic information.

West: Reliable archiving of scholarly information will be our greatest challenge. Archiving information is more an organization and funding question than a technology question. Accessing repositories of information demands the high-speed, next-generation networking that is increasingly being put in place. However, ensuring access to historical, unmodified, organized scholarly information in an *economical* way remains our biggest unsolved problem.