WAVE OF THE PRESENT: The Scholarly Journal on the Edge of the Internet

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American Council of Learned Societies

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Introduction

Increasingly widespread experimentation with electronic alternatives to print publishing is now very much the order of the day, as is a rapidly changing environment in which scholars, publishers, and librarians can be heard greeting the future both with heraldic trumpets and with apocalyptic predictions. Within the learned societies of the ACLS, one fact at least seem clear: the scholarly journal has already become a major test bed for electronic technologies—witness recent initiatives within the American Philological Association, the American Historical Association, the College Art Association, the Organization of American Historians, and the Society for the History of Technology. This development is especially significant, since the journal has always been critical to shaping and to defining an academic disciplines' identity; it both codifies and communicates what is distinctive about professional academic practice.

In this study, Christopher Tomlins, Editor of *Law and History Review*, assesses the future of the scholarly journal and its role in professional discourse in light of the move towards electronic retrieval and distribution of information. Inside the academy, the development of electronic publication often has been viewed as a threat to the journals' traditional role as preeminent arbiters and distributors of authoritative scholarship—and, in fact, Tomlins foresees an "irreversible irrelevance" for journals that do not respond creatively. But Tomlins also sees increasing recognition of the opportunities presented by our transformation to an electronic environment. While the form of the journal may change, he argues, its authoritative role can not only be maintained but enhanced, as scholars increasingly recognize the need to bring order to the vast and undifferentiated pool of information on the Internet.

Tomlins points out that the "real future" of academic journals is currently being determined largely outside the academy—by publishers, aggregators, information services, and their institutional clients, who are determining storage and delivery schemes. In this arena and in this process, he notes that "scholarly societies are weakest in their own positioning" and "organization is most essential."

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1998). The present version was published in the *Journal of Scholarly Publishing* (April 1998). It is reprinted here with permission. We publish it as an ACLS Occasional Paper in the hope that Tomlins' analysis of the issues at hand will stimulate further discussion around issues that affect the future of scholarship, and affect as well the learned societies which remain critical to the sociology of learning in the United States.

— John H. D'Arms, President
American Council of Learned Societies

Wave of the Present:
The Scholarly Journal on the Edge of the Internet

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I write as the editor of a scholarly journal, a position that today demands knowledge that extends well beyond the scholarly and the editorial. Specifically, it demands that I possess sufficient knowledge of the absolute, irrevocable, and accelerating transformation of the environment of information dissemination to be able to think about how best to protect the fragile resource that I have in my charge. That resource is the *Law and History Review*, the scholarly journal of the American Society for Legal History. Its circumstances are sufficiently typical of those confronting history journals in general that my ruminations on the current situation of the scholarly journal may be useful to other editors and, more generally, to the mass of historians who subscribe to and use the journals we edit.

Both the Society, which was created in 1956, and its journal, which was created in 1983, are relatively youthful as learned societies and their publications go. In America, peak scholarly associations in the humanities, such as the American Historical Association (founded in 1884), began to appear with growing frequency from the last quarter of the nineteenth century. They were creatures, and propagators, of professionalism in the academy, itself an expression of the larger tendency to occupational reorganization and creation of knowledge monopolies with which all students of the later nineteenth century are familiar. In the discipline of history, as elsewhere, the motive for scholarly association, and the essential goal of association

publications, was to sharpen historians' claims to a distinctive occupational identity and expertise: distinctive, that is, from what other scholars might be doing simultaneously in roughly cognate disciplines like political science and sociology; distinctive also from most of what might previously have been expounded as history—whether the musings of dilettante amateurs, the rantings of sensationalists, the earnest antiquarianism of "buffs," or the murmurings of the mob. By the end of the second decade of the twentieth century, history had been successfully decreed serious business. Historians were no longer to be educated as gentlemen but trained as professionals.[1]

Scholarly journals were established as mechanisms crucial to defining that early professional identity and to communicating the distinctive practices that would constitute it and thereby bring discipline, as it were, to scholarly—and, some would add, to cultural—disorder. The first editor of the *American Historical Review*, J. Franklin Jameson, put it thus in 1902: it was not the primary mission of the journal, Jameson said, "to evoke originality" or "kindle the fires of genius." Its most important job was "to regularize, to criticize, to restrain vagaries, to set a standard of workmanship and compel men to conform to it."[2]

Almost a century later, it seems to me that some, though by no means all, of what Jameson offered as the meaning of the scholarly journal continues to be applicable to discussions of its function. Individual editors will weigh differently to what extent it is their job to evoke originality, kindle genius, or restrain vagary in the name of regularizing scholarly production. Personally, I see less merit than Jameson apparently did in enforcing orthodoxy, less danger in cultural variety and experimentation. But he and we live in very different eras. We take for granted, or at least as common ground upon which to debate, many of the basic scholarly norms that he and his peers saw themselves as fighting tooth and nail to establish for the first time—norms of form of argumentation, of use of evidence and what constitutes misuse, of elementary causal sensibility. All of this is what he meant by workmanship. Journals have in the past, do now, and should continue to accommodate variety. They should also offer disciplinary leadership, or at least influence, rather than simply attempt to compel regression to a mean. They can do all of that precisely because over the last century the scholarly profession

has become thoroughly educated in and socialized to practice the basics of its craft. We need not be as cautious in matters of scholarship as Jameson precisely because professionalization has inculcated a good many of the lessons he wanted learned.

That said, and notwithstanding differences of emphasis, the point remains that scholarly journals are by function creators and exemplars of current practice. They are created to be disseminators of authoritative scholarship—authoritative in three senses. First, authoritative in the sense that the scholarship the journal publishes is certified by its editorial practices to be as reliable as the collective expertise of the group of professionals who have produced and judged the scholarship can make it (a group that encompasses originating author, editor, referees, copy editor, managing editor, typesetter, production manager, et al.). Second, authoritative in that the journal represents authored knowledge, knowledge that is definitively attributable, that has achieved a unique representation for which an author and an editorial process is answerable and is identifiably responsible, knowledge that is substantively stable and will not alter without becoming something identifiably different, as in differently authored, or differently attributable—and if thus altered, then altered in accordance with defensible and acceptable and reasonable professional canons of what difference constitutes. Third, authoritative in the sense of authorized for inclusion in an archive, for that is what a scholarly journal also is.

Scholarly journals, then, exist to promote original scholarship, to accommodate scholarship in its variety, but also to influence its general direction and shape, to certify it as worthy of note and trust to whatever audience is reached, and to preserve it as such.

Pursuit of all these roles has also given scholarly journals another, somewhat related but somewhat distinct, incarnation, one that is becoming these days increasingly explicit: they are bundles of resources, mobilizable in the rapid commodification of information that dominates late twentieth-century culture. The bundle consists of a site, upon which the creation of information takes place and from which it is disseminated; an audience, the core of which manifests a deep commitment to remaining attentive; a subscriber list; a backset; a reputation; and a trade mark. These may appear to be comparatively modest wares, and they are fragile, but they are valuable and are known to be.

Both incarnations of the journal—authoritative professional voice and resource-bundle—are deeply implicated, though in different ways, by the current turn in scholarly practice towards electronic distribution and retrieval of information, and the more general society-wide revolution in information exchange, in which the scholarly turn is itself but one small ripple. In some quarters within the academy, the implications have been seen as sufficiently momentous that the scholarly journal as such is thought likely to disappear within a decade. Some find this a cause for celebration, others for head-burying despair. As the latest editor of a journal still in its teens that was launched with high hopes and that I think throughout its existence has consistently added value to the scholarship in its field, I have time—figuratively and literally—for neither reaction. The first, celebratory, reaction I think is somewhat faddish, and I find its presentation unconvincing: its proponents' pronouncements of journal-death tend to be vague and utopian—they tend to assume away all obstacles that might interfere with the realization of the prediction. Their discourse is largely self-validating and self-referential.[3] But the second, obverse, reaction I find just as irritating, because it tends either to defeatism or to myopic denial; in either incarnation, it obstructs opportunities to learn from the electronic medium's own forms of scholarly discourse, to be excited by them, to shape them in turn with *our* fund of experience, and to struggle creatively on both terrains to turn current developments to mutual advantage.

As this indicates, I am sufficiently optimistic in my assessment of current possibilities that I do not think I shall be the last editor of something called the *Law and History Review*. But this is not because I see the *Review* and its peers as emanations of a law of nature that scholarly journals exist indefinitely. They came into existence for particular reasons, and the question that confronts them is whether those reasons retain validity or, if not, whether there are sufficient alternative reasons for their being. Simply to present a convincing argument that under current circumstances there is no inherent reason why the journal form should cease to exist does not for one moment mean that it necessarily will *not* cease to exist. I recognize, in short, an absolute obligation to respond to the development of electronic publication.

One can divide the meaning of that development into categories of threat and opportunity. The threat is less of the print

journal's dramatic collapse than of its slower-developing but irreversible irrelevance. Scholarly journals that do not begin changing now in ways that respond creatively to the online environment will no doubt still be around in ten or fifteen years. But their capacity to perform their key disseminating and authorizing functions efficiently and usefully will be significantly impaired, and their audience will by then be rapidly wasting away. They will have become a fringe technology, a curiosity. They will no longer be in a position to add value to professional discourse.

Creative adaptation, in contrast, could well not simply preserve but actually enhance the journal's authoritative and authorizing role. We have entered an intellectual environment in which the immensely expanded accessibility of information produces an equally immense need for efficient means to distinguish between what is useful information and what is not. Michael O'Malley and Roy Rosenzweig have described "the lack of hierarchy" that any Internet search currently reveals "between the traditionally sanctioned and well-funded" and the "unfunded and unsanctioned"—the Web page posted by the Library of Congress sits next to that of "the unsanctioned undergraduate" or the "lone lunatic." They call such juxtapositions "one of the most exciting and most unsettling features of the web."[4] In fact, both scholars and the general public have *always* been confronted by the necessity of choosing among myriad items of information. Choices are made through personal experience, inculcated expertise (training), and, crucially, by privileging information derived from particular sources that the user believes possess a high degree of integrity. Over the next decade, I think, that is the role that scholarly journals must work to preserve and accentuate for their scholarly audiences. Not coincidentally, it is also the role that, in an information environment that is already highly commodified and becoming daily ever more so, best exploits both elements of what a journal is: scholarly authorizer and bundle of valuable resources. I have absolutely no doubt that to continue to play its first, preferred role of scholarly authorizer, the journal will have to prove itself attractive as a player in that second incarnation too, as a supplier fit to be included in the commodification of information. Not surprisingly, it is in that latter realm that I see the most formidable difficulties for the journal.

The Print Journal and Electronic Alternatives

Let me try briefly to deal with these issues in order, and let's start in the internal world of the academy, with the mainstream journal and its alternatives.

It should be obvious by now to everyone—even to those who don't dabble—that the online environment is not the wave of the future, it is the wave of the present. In the past fifteen years, we have seen the phenomenon of computer-assisted electronic information dissemination and retrieval achieve deep penetration in specialized areas, such as legal information, and in particular scholarly disciplines where the electronic forum has long since demonstrated a convincing ascendancy: computer science and high-energy physics are the normal examples cited; economics seems to me another area of deep penetration. In these areas, crucially, digitized information dissemination and retrieval has proven harmonious with pre-existing professional cultures and has provided efficient responses to obstructions in information flows. Elsewhere, the penetration of electronic information distribution/retrieval has proven to be less systematic, but it is growing rapidly. With the immense upsurge over the last four years of popular knowledge about, and use of, the Internet, the phenomenon has become irreversibly part of contemporary popular culture. The World Wide Web, then, is not a 1990s version of the 1970s CB radio craze. Its current incarnations are in many cases provisional: the only thing that erodes faster than an industry standard is the hypertext link that rots out from underneath your little arrow. As well, for all its glitz, the Web's technologies—particularly its forms of representation and its interfaces—often seem unwieldy. Several months ago, I went to read a paper that has attracted considerable attention in the law school world, "Last Writes? Reassessing the Law Review in the Age of Cyberspace," posted on the Web by its author, Professor Bernard Hibbitts of the University of Pittsburgh Law School. I suffered so many of the medium's clichéd frustrations —inadequate software and hardware at my end, excessive download times, transmission interruptions, a zip file that wouldn't unzip,

and so forth—that eventually I borrowed the bound volume of the *New York University Law Review*, where a version of the piece had been published, and photocopied it.[5] This makes a good story, but that's not the point. The medium itself is with all of us, perhaps crude now but in the future likely to exist in sophisticated forms currently unimaginable.

Amongst those who have committed themselves fully to the electronic medium, there has been a tendency to celebrate it as the liberation of scholarship. In "Last Writes," Hibbitts provocatively predicts the demise of the law review, calling upon legal academics to self-publish on the Web instead and rely on a form of post-hoc peer review—in the form of author-invited, author-posted commentary—to sort the wheat from the chaff. Relying on his account of how legal scholarship is generated and published, and from my own, fortunately more limited, encounters with the law review world and its rather unique editorial practices, I see absolutely no reason to defend it from his critique. I am less confident than Hibbitts, however, that post-hoc review would provide the quality control he recognizes as a necessary authorizing element in a world of routine self-publication. First, I doubt that attracting negative comment, or no comment, would ever discourage further self-publication; nor, necessarily, should it. At the 1997 meeting of the American Sociological Association, Donald Black of the University of Virginia, on receiving an award from the Association's Sociology of Law section praising the originality of an article he had written,[6] provocatively raised the question of whether a scholar striving seriously for originality should be reassured or concerned when a committee of other scholars "recognized" that work as sufficiently "original" to merit a prize. Second, it seems to me that the likeliest practical outcome in a self-publication/post-hoc peer review system would be frantic competition to attract any form of positive comment, an outcome likely to diminish scholarly discourse's integrity and originality rather than enhance it. Finally, I doubt that any more than a tiny fraction of self-published work would attract any comment at all, and that provenance would predict most of what did, and the outcome. Thus, I suggest that the system might accentuate already current tendencies towards scholarly cliquishness and self-justifying solipsism, and, overall, generate more sludge than the law reviews currently do.

But even if I am right, post-hoc peer review is not really the core of Professor Hibbitts' case. The core is a critique of the efficiency of what has been for many years one of the basic systems for delivering knowledge in law's scholarly and professional worlds, and it is pretty convincing. Nor is Hibbitts alone. Coming from backgrounds primarily in information and behavioural sciences and high-energy physics, people like Stevan Harnad and Andrew Odlyzko have praised the unmediated knowledge flows that self-publication and online information dissemination and retrieval make possible for their potential to subvert the conventional structures of scholarly publishing that they criticize as outmoded, inefficient—even illegitimate.[7]

Approaching this set of opinions from the humanities/social sciences, it is important to bring into play certain caveats. First and most familiar—because it recurs at every level of professional scholarly life in the humanities—simply as a matter of strategy one must resist the assumption that the physical sciences and their practices and culture should also constitute the world of the humanities. Our professional culture is very different. In their world, the premium is on rapid exchange of the most recent information and experimental data. Old data and old argument matter little (except to the historian of science). Law, to a very appreciable extent, also values and privileges recency of discovery and argument. I do not think that speed of circulation is anything like as important in the humanities or most of the social sciences, where knowledge has a much longer half-life than in the sciences because the passage of time alone almost never renders this knowledge superfluous.[8]

Second, and a somewhat different point, it is quite clear that some of the motivation of scholars in the sciences in seeking new structures for knowledge creation and dissemination—and, if we take Professor Hibbitts' contribution into account, this is also true of scholars in law—derives from what are not simply inefficient, but positively oppressive, practices associated with traditional or mainstream modes of publication and dissemination in those fields. Part of the original motivation for scholars in the sciences to trash existing channels of information flow and seek alternatives derived, for example, from the extraordinary elevation of prices, and the consequent circulation inefficiencies, to which since the early 1970s trade publishers have driven serials in the

sciences.[9] And part of the motivation that Hibbitts has in trashing the law reviews derives from the indignities that he describes their tyro student editors visiting upon legal scholars.[10] It seems to me that neither issue is paralleled to anything like the same extent in the humanities and social sciences. There, the primary drive to creating new outlets and new information flows is the creation of new genres of scholarship from the splitting-up and reconstitution of existing disciplines and subdisciplines. The challenge for journal editors and scholarly societies in the humanities and social sciences, in other words, is one that is intellectually manageable—to recognize and respond to innovation in scholarship and to preside actively and creatively over the evolution of disciplines. Fail to meet this challenge and the enterprise will fail. Meet it and one's chances improve. There is no guarantee of success, but the problem is an intellectual one, and hence not beyond the resources that the protagonists have available to them.

For all their importance, however, recognition and accommodation of cultural and intellectual distinctions among genres of scholarly practice are not going to be decisive in determining the way electronic information dissemination/retrieval plays out in humanities scholarship or the place of the journal in it. I do not mean to imply that these are small issues or that one can afford to ignore them: if one does, one's enterprise will certainly falter. But addressing the issue will not of itself guarantee survival. Nor, I think, will the issue be determined on the terrain of the technology itself. Again, there's nothing trivial about the debate per se. There are obvious technological advantages to online distribution of information; there are also obvious technological advantages to print distribution. Current print journals, for example, can already claim to be efficient and attractive broadcast delivery systems for knowledge. They are infinitely portable and browsable; they are searchable within limits; they require no expensive hardware, software, or linetime to use; and they become the property of their subscribers in a far less ambiguous sense than an electronic image does, downloaded and printed or not. Print journals are not free to the initial subscriber, of course, but neither is their electronic counterpart in any real sense, nor is it ever likely to be. Cost of first copy is currently estimated to be the same in both media, and the more elaborately electronic

journals exploit the possibilities of their medium the more the real labor costs (not to say permissions costs) of first-copy production are likely to increase. Artefactual reproduction and dissemination costs are clearly lower in the electronic medium than in the print, but subscriber processing costs, particularly for institutions, are currently probably higher. Obviously the fixed costs of access are high. Cost considerations favour the electronic medium, but current differences are substantially less than one might think.[11]

All these are major issues to negotiate, misjudgement of any one of which could put a journal in jeopardy. None, however, is likely to be *the* fundamental issue that decides the future of the journal as such. They are essentially management decisions, the quality of which may determine the fate of any individual journal but which are not so basic as to have determinative impact so far as journals per se are concerned. For example, there are no inherent technological difficulties or barriers that would prevent me as the editor of the *Law and History Review* from deciding tomorrow to jump from print to electronic dissemination. If the *Review* wanted to become a wholly electronic journal, it could. The question is whether it should: and this is not a technical issue but a matter for an editor's managerial judgement. Similarly, although attendant cost questions are of deep significance—particularly the implications of the extended period of parallel production that I think is going to be an inevitable element in any print journal's process of reinventing itself—again there is nothing here that is going to determine the fate of the journal form itself.

What *will* determine whether a journal such as the *Law and History Review*, and by extension scholarly journals as such, has a future is whether the functions it performs are perceived to have continuing value irrespective of the medium it appears in. Here I am quite optimistic; first, because, as I put it at the outset, my experience is that the editorial process is integral to the production of scholarship—that it adds value; and second, because it appears to me that lately the discourse of proponents of online publication has been evolving towards precisely the same conclusion.

What I find interesting about much of this discourse as it has developed over the past couple of years is the relative weakening of its Utopian aspect and the re-entry of two related phenomena: authority and form. Much of the discussion of electronic scholar-

ship has become a discussion of the ways to acquire for it the authority and relative stability that print publication has previously lent paper scholarship. To refer once more to Bernard Hibbitts' assault on the law reviews, his solution is not actually free-form anarchy at all but the conservation of the law article form in an authoritative archive supervised by the American Association of Law Schools that could "set and enforce minimal standards of access and conduct to ensure that only authorized individuals—e.g., lawyers and academics—submit materials to or register materials with the archive," its object being "to preserve the necessary decorum of academic debate."[12] Other proponents of electronic publication—Stevan Harnad, for example—have begun to emphasize how standards like those of edited print journals, from peer review through copy editing, can be just as much a feature of electronic publication as paper.[13] In the current generation of electronic publications, some of the most successful—such as the *Bryn Mawr Classical Review* and the *Journal of Artificial Intelligence Research*—are those that present themselves as at but one or two removes in appearance and internal practice from paper journals.[14]

All of these seem to me to be examples of a convergence of possibilities that replaces eliminationist discourse with the construction of a basis upon which print and electronic publication find that they have quite a lot in common, because the basis of the discussion has passed precisely to that of function, crudely to the ways of adding value. Because of what I see as a convergence in recognition of the need for form and authority in scholarly discourse, and a convergence in motivation to answer that need, then, I see the impulse towards journal eliminationism from *within* the scholarly world losing steam.

The form, of course, may change over time. Becoming electronic, humanities journals might, for example, decide to become far more an aggregation of individual items than they are at present. In many ways, this is what the standard law review form has been, and is what has made it, in my opinion, an inferior product to the humanities journal. But there are already electronic journals of that nature, with little if any issue structure, simply posting articles as they become finalized to the satisfaction of author and editor. There seems at this stage no particular popularity for article-by-article publication among would-be

authors, at least to judge from those electronic journals that practice it.[15] There is much, in fact, to recommend the enhanced identity that the periodic regular publication of whole issues lends to the individual items gathered. They attain an added profile or cachet as the collective representation of the current output of a field of study; they affirm through that participation the value of broadcast communication, of membership, of association within a scholarly field whose bounds are wider than any individual item's sectional appeal or any individual's ambition. Journals, like broadsheet newspapers, are an antidote to intellectual solipsism, and when editors can achieve real integration of content, the whole definitely becomes greater than the sum of the parts. Nevertheless, making those kinds of strategic choices about what kind of publication best serves a field are what individual editors are for. The fundamental point is a distinct one: what I see in looking at the discussion internal to the academy is a reaffirmation of the virtues of the edited form of scholarly discourse, an endorsement of its role in enhancing and authorizing intellectual communication. This in turn suggests a convergence of electronic and print cultures from which both can profit, whatever modes of presentation the edited form actually takes.

Looked at from outside the academy, however, the story is quite different and much more forbidding. Here the journal exists only as a bundle of commodifiable resources. Here the journal's biggest assets are its subscription list, its backset, and its name and reputation—the value added by its capacity to place its stamp of authority on this or that fragment of information. These resources should not be discounted, but on an individual basis they are dwarfed by the scale of current dealings between information suppliers and subscribers. In October of 1997, for example, the newsletter of OhioLINK, the consortium of Ohio university and college libraries, announced that the consortium had contracted with Reed Elsevier, the Anglo-Dutch publishing conglomerate, to obtain "electronic versions of more than 1000 of the most-used research journals" published by Reed Elsevier, at an annual cost of $6.3 million. OhioLINK prices the cost of the same journals in print form, if subscribed to by all participating libraries, at $46 million annually.[16] It is not irrelevant to note that Reed Elsevier, itself the product of a 1992 merger, has recently

merged with Wolters Kluwer, another very large international publisher of scholarly books and journals, creating an even more formidable concentration of information distribution capacity, particularly in the science, technology, and medical research arenas.[17]

Obviously, individual journals have no voice in decisions currently being made on this scale. Yet the decisions themselves are likely to change dramatically the mode of delivery of their most valuable product—certified information—from the relative certainty of subscription sales to something far more contingent. Henceforth, the relevant considerations for a journal are going to be: Who is your publisher? What "stable" of journals does that publisher produce? Does it plan to sell online access to its journals as an aggregated bundle subscription, replacing individual title subscriptions? Will subscribers to online information also, or alternatively, obtain access on demand, and, if so, what will the unit of pricing be—a volume, an issue, an item, a fragment of an item, or what?[18] These decisions, currently being negotiated among publishers, aggregators, information services, and their institutional clients, to price the furnishing and form of supply of information online (and, no less important, to decide what it is that is being furnished, user ownership or user access) are what will determine the real future of the academic journal, because they are determining the forms in which information will be stored and disseminated. And it is here that the scholarly societies and their journals are weakest in their own positioning in this process, and where organization is most essential. It is encouraging that in August 1997 the peak U.S. history associations, the American Historical Association (AHA) and the Organization of American Historians (OAH) (with funding from the Andrew W. Mellon Foundation), provided facilities for a conference of history journal editors in Bloomington, where many of these issues were discussed and an organization of history editors formed. Even so, given the scale of commercial organization in the scholarly information field, our presence remains insignificant.[19]

Commercial decision making will create hierarchies of availability among the many academic journals that collectively constitute so much of the active scholarly discourse of the humanities. Already, in fact, those discriminations are in train, as,

for example, in the decision of the Mellon-funded JSTOR project to archive electronically and sell access to backsets of only a particular set of high-circulation journals. Journals like the *Law and History Review* could continue to exist indefinitely outside the upper echelons, say in the form of an electronic newsletter. But in that world, our place in the library would be marginalized, becoming the equivalent in effect to all those free publications that heap up on the far side of the entry desk. That is one of the unpleasant prospects that smaller scholarly journals face.

Electronic Publishing and Scholarship

This essay has concentrated on the impact of electronic distribution on the journal as a form for presenting scholarship, but we should also give our attention to the impact of the electronic medium on our scholarship per se. Here one can see immense opportunities for joint learning in forms of presentation that exist between print and electronic forms of publication. One can already see in many journals signs of a desire to open ideas and research to greater dialogue between authors and critics through the use of mechanisms such as commentary or discussion forums. It seems to me this is a clear response to the popularity among scholars of online discussion groups and their success in highlighting the value of interactive communication. One can also see, of course, that spontaneity and participation have limits —that carefully prepared exchange has its value. But no one can deny that the urge to engage in dialogue that one sees in journals has received an enormous boost from discussion networks.

That, however, is just the surface. Peter Boyce of the American Astronomical Society wrote recently of the richness that sophisticated use of hypertext links to references and citations, to archived data and video, could bring to an electronic article.[20] "These articles are not dead words on a page, put down once and

subsequently left alone. They are living entities, updated as often as needed to remain fresh and accessible by the current software and technology."[21] Most established humanities journals are only now at the stage of grappling with whether and how to adapt to electronic delivery of their current pages, but in Boyce's estimation these would be but Potemkin electronic journals, merely "fossilized words" on a screen. He describes how the *Astrophysical Journal* has been transformed by retrospective HTML tagging, with supplementary databases of twenty years of abstracts and back issues of most major journals in astronomy, with both backward links (references) and forward links (citations) carried with each article, plus access to databases of astronomical information. "As new browsing tools become available," Boyce writes, "the entire corpus of the publicly available electronic journal can be rederived from the richly tagged archival copy maintained by the publisher. In this way, we have a journal which has to be maintained on a regular basis. But more than that, we have a journal in which the links make up a substantial portion of the value of the articles." The journal becomes a living, vibrant entity, in which the linked back issues become a required part of every issue.[22]

The *Astrophysical Journal* can be the wave of the future for history too—at least for certain applications. The obvious beneficiaries, as Boyce's example stresses, are those whose research lends itself to electronic text's infinite openness to searching and recombinative linkage. Anyone who has visited Edward Ayers' *Valley of the Shadow* will have seen how that future works. Its multiplicity of environments and levels, all manipulable and searchable, offers an immensely enriching experience.[23]

The sheer depth and breadth of hypertext referencing and the search and manipulation capacities of Websites like the *Valley of the Shadow* enable historians to far outreach print in their capacity to present data. The medium seems to me less friendly, however, to what still remains the intellectual basis of so much of what scholars in the humanities and social sciences do, namely linear argumentation or explicit interpretive narrative. At the AHA/OAH Bloomington conference of history journal editors, Ayers himself commented on the gradual disappearance of explanatory argumentation from his site. The more the site became an archive of manipulable research material, the less

point there seemed to be for its creators to tell its story. After all, its archival logic is in good part that of a gateway to resources from which all visitors, and not just the project's designers, could construct their own stories.

It seems to me that Ayers' experience illustrates both the immense descriptive capacities that Web-mounted history possesses and also the possible limitations it offers to the further development of history as authoritative explanatory discourse. Both characteristics seem to me closely related to the medium's subversion of linear argument by its deep archiving capacities. I am concerned at the possibility that in our rush to the Web we are creating a renaissance for antiquarianism—albeit a richer and more sophisticated variety than we have ever previously known. When I look at the *Valley of the Shadow*, for example, what I see is an implicit representation of the coming of the Civil War in which abstractions—the linear explanatory capacities of national politics, economics, and macro-historical developments, for example—have no obvious place. As in the physical experience of Colonial Williamsburg, the recreation of a locale in which the passive "visitor" may become peripatetic "participant" can be exciting and meaningful history. Whether recreation can or should be the principal object of historical scholarship or academic effort—whether it is the "end" of history, in all that phrase's meanings—should, however, be debated. We should not forget that proscenia are "gateways" too.

There are other limits to what we should learn from the culture of electronic publication—or perhaps we should at least learn wariness to go with our excitement. Historians, I think, are less inclined to disdain "fossilized words" than astrophysicists, perhaps because historians know words never die and hence do not fossilize. We deal at least as much in meanings as in observations, and consequently recognize that words are as susceptible to endless interpretation, argument, and ambiguity as images. Because of that we are careful with them. In his lyricism, Boyce talks of the journal as an organic evolving entity, its contents endlessly open to update.[24] But its role as archive is equally important—and one must be careful in opening archives to revision and update. Scholars need to recognize that what we discuss must have, for the purposes of intelligible discussion, fixity. I can think of nothing more deadening of historical enquiry

and imagination, nor, frankly, more bankrupt as an exercise, than the indefinitely provisional conclusion, the publication that is a permanent draft, a bet always hedged. The temptation to airbrush one's previous shortcomings, so that in version 1.6 of my essay they have been "disappeared," like inconvenient Politburo members from atop Lenin's tomb, disturbs me.[25] So here is another argument—my last—for the survival of the journal form. It is an argument for the preservation and propagation of the best forms of print cultural practice in its scholarly incarnation—for the authority of certification, but also for the accompanying willingness to fix and record forevermore one's scholarship as such, warts and all.

The function that scholarly journals perform is the provision of authoritative sites for the production of knowledge—knowledge that is certified, that is in the form presented unchanging, that is archived, and hence that is debatable and worth debating across whatever the available spectrum of forms of argumentation may be. This trademarking capacity may indeed be precisely what saves them in a world of increasingly commodified information. But it matters less in the long run whether journals perform that role on paper or electronically, for sale or for free, or whether they do so quarterly or continuously, than that they continue to perform that function. By doing so, they give scholarly communities concrete signs of their reason for being, they help provide some of the social glue that holds these communities together, and in their small way they promote and add to human knowledge. Without them, scholarly exchange of reliable information and honest opinion would be significantly more difficult—even chaotic, to use a Jamesonian word—than is currently the case.

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Notes

[1] See generally, Dorothy Ross, *The Origins of American Social Science* (Cambridge and New York: Cambridge University Press 1991): 53–300. On the historical profession, see John Higham, *History: Professional Scholarship in America* (Baltimore: Johns Hopkins University Press 1989): 6–25; and Peter Novick, *That Noble Dream: The "Objectivity Question" and the American Historical Profession* (Cambridge and New York: Cambridge University Press 1988): 47–60.

[2] Quoted in Novick, 52. I am indebted to Michael Grossberg's own discussion of these issues, in "History Journals in the Twenty-First Century," *AHA Perspectives* (May/June 1997), for guiding me to Jameson's statement and more generally for its own assessment of the current scene.

[3] See, for example, Andrew Odlyzko, "On the Road to Electronic Publishing" (revised version, 30 April 1995), *Euromath Bulletin* 2, 1 (June 1996) at http://www.math.ethz.ch/~shared/emb [forthcoming]. April 1995 draft printed in *History Journals and the Electronic Future: Conference Reader* (Bloomington: AHA–OAH 1997).

[4] Michael O'Malley and Roy Rosenzweig, "Brave New World or Blind Alley? American History on the World Wide Web," *Journal of American History* 84, 1 (June 1997): 136. See also Gertrude Himmelfarb, "A Neo-Luddite Reflects on the Internet," *Chronicle of Higher Education* (1 November 1996): A56.

[5] Bernard Hibbitts, "Last Writes? Reassessing the Law Review in the Age of Cyberspace," *New York University Law Review* 71 (June 1996): 615–88; also available (version 1.1) at http://www.law.pitt.edu/hibbitts/lastrev.htm. Professor Hibbitts was a co-panelist in a session at the October 1997 Annual Meeting of the American Society for Legal History, where an early draft of this paper was delivered.

[6] Donald Black, "The Epistemology of Pure Sociology," *Law & Social Inquiry* 20, 3 (Summer 1995): 829–70

[7] See, for example, Andrew Odlyzko, "Tragic Loss or Good Riddance? The Impending Demise of Traditional Scholarly Journals," *International Journal of Human-Computer Studies* 42 (1995): 71–122; Odlyzko, "On the Road to Electronic Publishing"; Stevan Harnad, "Electronic Scholarly Publication: Quo Vadis?" *Serials Review* 21, 1 (1995); Stevan Harnad, "Implementing Peer Review on the Net: Scientific Quality Control in Scholarly Electronic Journals," in R. Peek and G. Newby, eds., *Scholarly Publishing: The Electronic Frontier* (Cambridge, MA: MIT Press, 1996): 103–18. For a useful summary, see Rob Kling and Lisa Covi, "Electronic Journals and Legitimate Media in

the Systems of Scholarly Communication," *The Information Society* 11, 4 (November 1995): 261–71; also at http://www.epas.utoronto.ca:8080/epc/chwp/kling/, sect. 1–6

[8] I can offer a concrete personal illustration. Some years ago, I spent a considerable period of time conducting research in the Social Law Library in Boston, which is located on the twelfth floor of the Suffolk County Court House in Pemberton Square. The Social Law Library was created in the early nineteenth century by practitioner subscription and is one of the oldest practitioner law libraries in the country. As anyone who has worked there recently will know, it is also under enormous and constant pressure to provide access to the most recent information. As a result, all the trial attorneys used the main reading room, which by the end of the 1980s had become a sort of snake-pit of computer cables, terminals everywhere, books increasingly redundant except as dignified decoration. I roamed the mezzanine and the upper levels, deteriorating accommodation for what were called "the old editions." There was no dignity to these books—they were basically discards, crammed backwards into unused space, dingy stacks often without illumination. There I found treasure upon treasure. It was in those old open stacks, for example, under a pile of discarded casebooks, that I found a nineteenth-century attorney's personal manuscript notes on a series of tort cases in which I was interested. My point is that the premium on speed and recency that the library was forced to respect to do its primary job of servicing trial attorneys led it to be indifferent to the older material that was part of its collection. But because speed and recency were not relevant to what I did, we coexisted quite happily. Indeed, my access was actually facilitated by the library's helpless indifference (at that time) to the importance, in my terms, of what they possessed.

[9] Kling and Covi, "Electronic Journals and Legitimate Media," sect. 3; Sandra Woolfrey, "The Economics of Journal Publishing and the Rhetoric for Moving to an Electronic Format," ACLS Background Materials, CAO Meeting, Kansas City (November 1995): 2, i–vii. It is interesting to note that Stevan Harnad's "subversive" antitrade revenue model of financing scholarly publication (subsidy by university presses and scholarly societies) reproduces what has long been traditional practice in the humanities, a model alas now beset by precisely those pressures that he thinks it can subvert. See Harnad, "Implementing Peer Review on the Net," 107, 116.

[10] Hibbitts, "Last Writes," 641–2

[11] See Fytton Rowland, "The Need for Information Organizations and Information Professionals in the Internet Era"; Robert H. Marks, "The Economic Challenges of Publishing Electronic Journals"; and Janet H.

Fisher, "The True Costs of an Electronic Journal"; all in Ellen F. Duranceau, "The Economics of Electronic Publishing," *Serials Review* 21, 1 (1995): 84–90.

[12] Hibbitts, "Last Writes" 675

[13] Harnad, "Implementing Peer Review on the Net," 109–13

[14] Kling and Covi, "Electronic Journals and Legitimate Media," sect. 4; Jacques Leslie, "Pixelating Peer Review Is Revolutionizing Scholarly Journals," *Wired* 2, 10 (October 1994) at http://www.wired.com/wired/2.10/departments/electrosphere/ejournals.html.

[15] This appears to be the experience, thus far, of the *Chicago Journal of Theoretical Computer Science*, published by MIT Press, according to press representatives.

[16] OhioLINK *Update* 3, 2 (September 1997) at http://www.ohiolink.edu/about/update/. Purchase in electronic form of massive aggregations of journal titles like this will become increasingly common. A common emerging pattern is for publishers or aggregators to bundle titles and offer them to libraries on a domain licensing basis. Hard-copy subscriptions are maintained at a discounted additional cost, or are supplied free. The bundle may well include many titles that the purchaser might not previously have subscribed to, and probably would not want if offered on a stand-alone basis. The publisher licenses the purchaser to make the titles available across a defined domain within which all users have broad access rights. For the purchasing library, a crucial contractual question is whether it is buying actual copy or simply renting an efficient electronic distribution service. Are electronic use and access rights meaningful equivalents to the rights conveyed by hard-copy purchases? Who maintains the electronic archive—publisher, library, or third party? What guarantees accrue to those who have bought subscriptions but later discontinue them? What do they have in their (electronic) stacks? If nothing—that is, if they have been renting —then the bundle is unlikely to be considered an adequate substitute for hard-copy subscriptions. If buying, then the impact will likely be much more profound in the long run, and will certainly discourage continuation of multiple individual subscriptions across members of a consortium. Even then, however, the whole issue of what rights the library has in the archive may still be sufficiently ambiguous to prevent the library from dumping its individual hard-copy subscriptions in the short run. The tendency of libraries to negotiate bulk purchases through consortia adds another layer of imponderability, in that stability of access to what one has bought depends on the stability of the consortium and the terms of one's participation in it.

[17] Along with the British publisher Pergamon, Elsevier Science is the publisher most often cited as promoter of the massive increases in science serial prices that helped create the serials budget crisis with which we have all become familiar over the last twenty years. This is relevant because it seems reasonable to expect that bulk electronic information purchases will not only create extensive technical dependencies between purchasers and suppliers, but also render the purchaser effectively captive to the relationship by dint of its sheer scale. Serials budgets may thus become even more hostage to a few bulk suppliers and their pricing policies, rendering unaffiliated titles or small publisher titles (like most humanities journals) highly vulnerable to cancellation.

[18] It is worth noting that Reed Elsevier/Wolters Kluwer also owns Lexis-Nexis and is thus happily positioned to supply information to purchasers either by domain-subscription or on demand by fragment.

[19] "History Journals and the Electronic Future," AHA/OAH Conference, Bloomington, Indiana, 3–8 August 1997. For details of this conference and its final report, see http://www.indiana.edu/~ahr/history.htm. This essay is inspired in large part by that conference, and has benefited enormously from the materials circulated by the organizers.

[20] As a technical device, hypertext is the Goodyear Blimp to the footnote's bicycle. That is, it makes extraordinary depth and breadth of linkage and cross-reference in a field of vision possible. Considered as a mode of discourse, however, hypertext at present seems to me to do no more than reproduce the quality of layered meaning that all good writing should have—and, disturbingly, does so without the artistry. Do I really want my cleverest allusions printed in blue and underlined so that no one will miss them?

[21] Peter B. Boyce, "Perpetual Access," on liblicense-l@lists.yale.edu (3 September 1997).

[22] Ibid. Boyce acknowledges that since the total base of knowledge is distributed over many providers, the problem arises of how to ensure that the complete archive of the interlinked literature remains accessible at every point in its use. Even in his discipline, which he describes as "a compact community with only a few major journals" worldwide, the task is formidable. For the humanities, it would be more complex yet. Here the experience of the *Slavic Review*, described by its editor Diane Koenker, is probably more typical. She reports:

> Six back issues of the *Slavic Review* are currently on-line, a result of an initiative at the University of Pennsylvania. These issues are available on the world

> wide web, for free; they appear with the standard copyright information explaining "fair use." The on-line issues were scanned and converted to ASCII text and coded in HTML: they do not "look" like the printed *Slavic Review* pages, but they are searchable. The on-line *Slavic Review* was cited in a recent ACLS document about the "future of electronic publishing." But the on-line review illustrates many of the problems inherent in the medium. [First, Archiving]: When the editorial office of the journal moved from Penn to Illinois, Penn relinquished all interest in maintaining, let alone updating, the data base. Currently the issues "reside" on a server at Illinois. Were the electronic publication to continue in this low-tech way, there would be a new storage problem the next time the journal changes hands. Our method of operation, in other words, discourages durability of the electronic product. [Second, Technology]: the current format is not state-of-the-art. [Third, Costs]: the current editorial staff does not have the resources to continue preparing the on-line version, thus the six on-line issues dangle out there in cyber-space, creating a public relations problem: false hopes of further electronic issues.

Diane P. Koenker, "Report on Conference of History Editors on Electronic Publishing in the Future," prepared for the American Association for the Advancement of Slavic Studies (AAASS), 25 August 1997, slavrev@ragnar.econ.uiuc.edu.

[23] The *Valley of the Shadow* is a hypermedia WWW site created by Edward Ayers (Professor of History, University of Virginia), which archives, organizes, and displays a mass of information (newspapers, census tracts, church and military records, private letters and diaries, maps and images) about two communities that ended up on opposite sides of the American Civil War: Augusta County, Virginia (Confederate) and Franklin County, Pennsylvania (Union). The archive is divided into "Eve of War" and "War Years" segments, and will also cover Emancipation and Reconstruction. The project began as a research archive specific to Professor Ayers' scholarly work on the coming of the Civil War, but has developed into "a living archive" of wide application for teachers, scholars, students, and the general public, a resource "that encompasses the largest problems in American history, presenting not answers for easy consumption but rather open avenues for investigation." See "The Story Behind the Valley Project," at http://

jefferson.village.virginia.edu/vshadow2/. See also "Taking Aim at the 'Ken Burns' View of the Civil War," *Chronicle of Higher Education* 44, 28 (20 March 1998): A16–A17.

[24] Boyce, "Perpetual Access." See also M. Ethan Katsh, "Law Reviews and the Migration to Cyberspace," *Akron Law Review* 29, 2 (Winter 1996): 115–21.

[25] On this point, see also Howard A. Denemark, "The Death of Law Reviews Has Been Predicted: What Might Be Lost When the Last Law Review Shuts Down?" *Seton Hall Law Review* 27, 1 (1996): 17–20.

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