ED 354 574   CS 508 100

AUTHOR   Thompsen, Philip A.
TITLE   Scholarly Publishing in the Electronic Age: A
              Graduate Student's Perspective.
PUB DATE   30 Oct 92
NOTE   5p.; Paper presented at the Annual Meeting of the
              Speech Communication Association (78th, Chicago, IL,
              October 29-November 1, 1992).
PUB TYPE   Speeches/Conference Papers (150) -- Viewpoints
              (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE   MF01/PC01 Plus Postage.
DESCRIPTORS   *Electronic Publishing; Faculty Publishing; *Graduate
              Students; Higher Education; Information
              Dissemination; *Scholarship; *Writing for
              Publication
IDENTIFIERS   Author Text Relationship; *Scholarly Writing; Text
              Factors

ABSTRACT
        The issue of whether the nature of scholarship is
being changed by electronic publishing was made clear to a graduate
student when his telecommunication link to the world (his modem)
failed. While the newer forms of academic communication offer
impressive advantages over traditional publishing, scholars still
feel compelled to retain somehow the sense of quality, rigor, and
"sweat-off-the-brow" labor that characterizes the best of traditional
forms of scholarship. As scholars discover the potential of
electronic publishing for entirely new forms of intellectual work,
they may find themselves creating a new kind of scholarship, an
"electronic scholarship," with different advantages and
disadvantages, and reflecting different values. There are four signs
of a possible shift in how scholarship is viewed: (1) speed of
delivery versus care in preparation; (2) depth of information versus
breadth of knowledge; (3) print-based literacy versus computer-based
literacy; and (4) author control versus audience control. Scholars
should approach the future of scholarship with their eyes wide open,
working to recognize shifting epistemological foundations, and trying
to detect and document their changing view of scholarship for future
generations of scholars. (RS)

Scholarly Publishing in the Electronic Age: A Graduate Student's Perspective

by **Philip A. Thompsen**

Department of Communication, The University of Utah, Salt Lake City, UT, 84112
E-mail: Philip.A.Thompsen@m.cc.utah.edu (Internet) • Panthony@UTAHCCA (Bitnet) • JNFM97A (Prodigy)

A panel presentation to the Speech Communication Association, Chicago, October 30. 1992

It was a nightmare. I dreamed I was living in a world without computer networks. Without the Internet. computer conferencing, electronic mail, on-line database searching, and electronic journals. What would I do? Many of my professors tell stories of living a life of scholarship in such a world—for whatever reason some still prefer such a life—but as a graduate student of the '90s, I can't imagine how I could do what I do in graduate school without the tools for scholarship and colleagueship offered by computer networks.

And then the nightmare came true. My trusted friend "Zoomer," a 2400 baud modem, gave up the ghost. My telecommunication link with the network nation[1] was severed. It was as if part of my academic self had been amputated. How could I maintain contact with my e-mail partners, many of whom were at that moment working on projects with me? How could I get by without the ability to search library catalogs from my own computer, or download bibliographies from an anonymous FTP site, or retrieve citations to put in my reference database? How could I keep up with the latest "threads of conversation on the various "discussion lists" and "news groups" I subscribed to? What was a graduate student cum cyberspace cowboy to do?

I found that I could function as a graduate student without computer networks, although it took some time to adjust. I found that I suddenly had more time to read books and write papers—things I did before, to be sure, but now I found my quiet time strangely "quieter" without those eerie sounds my modem made when "logging on." I found that my scholarly work depended less on these computer network "tools" than I had imagined.

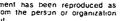And within a week, I also found a modem I could borrow from a friend.

There are many issues facing scholarly publishing in the electronic world: Will the electronic journal become a viable replacement for the print journal? Will tenure and review committees recognize electronically published scholarship? Will libraries be able to cope with the tremendous volume of information that academic computer networks are producing? And how will electronic publishing affect the relationship between publisher and scholar? These are all important issues, but there may be a more essential issue we need to address, one that was made very clear to me in my moment of "disconnection": *Is the nature of scholarship being changed by electronic publishing?* It is that issue I would like to address today, since it is that issue that may be most pressing for a graduate student preparing for a scholarly career in the 21st century. My comments are essentially speculative, and often quite personal; they are offered to advance the argument that quality of scholarship depends more on the scholar than on how it is published.

You see, I know I could survive as a scholar without computer technology. I still remember the experience of thumbing through a card catalog and writing with a pencil. Heck, I still use a slide rule now and then—just for fun. But I may be among the last generation of graduate students who remember a mode of scholarly work that is rapidly becoming anachronistic. And the more I become comfortable with using computer technology to assist me in my scholarship, the more I question why anyone would miss the "old fashioned" ways. Why would I want to leaf through volumes of *Dissertation Abstracts* when I can punch key words into a search field and find what I need in a fraction of the time? Why would I want to buy another bookcase for my already crowded office when I could just store a book on a floppy disc or, better yet, a small library on a CD-ROM? Why would I want to ponder over a paper journal when I can

---

[1] The term "network nation" was coined by Hiltz and Turoff (1978) in their prescient analysis of computer networks: "We will become the Network Nation, exchanging vast amounts of both information and social-emotional communication with colleagues, friends and 'strangers' who share similar interests, who are spread out all of the nation" (p. xxix).

retrieve the text of the article I want right into my word processing program, and cut and paste just the right quote into my next paper — or should I say, my next work of electronic text?

Indeed, why would I want to give up any of these conveniences? And yet, I can't escape the feeling that in the rush to exploit the potential of technology for the pursuit of knowledge, we may be leaving behind the scholar in our scholarship, or at least changing how we define the role of scholar in the process of scholarship. The tireless solitary toil of the ascetic academician may have delivered more than just finely crafted prose. It may have been the primary fuel for the epistemological engine that kept the train of academia on course for the future. But the future is here, and the old train seems just too slow for the pace of our electric lifestyle. As we experiment with more modern modes of moving our scholarship forward, am I just being too sentimental when I suggest we consider the scenery we may be missing on the ride?

Extending this transportation metaphor just a bit further, I would guess that most of us came to Chicago by airplane. I did, primarily because my department was gracious enough to pay for my plane ticket. But two years ago, when SCA was also held in the "Windy City," I had to pay my own way here. So I arrived by another form of transit, one more within the means of a graduate student — the Greyhound Bus. Which trip do you think I enjoyed more? To be honest, it was no contest. I think anyone who has taken a cross-country bus ride recently will agree: it is a slow, smelly, uncomfortable and inconvenient form of transportation. While air travel certainly isn't perfect, I'll take a plane over a bus any day.

But you know, I've already forgot my plane ride. I will never forget my bus ride. I remember the smell of flat soda pop, dripping from the overhead luggage compartment where someone had left a half-empty can. I remember watching the sun rise over a western Nebraska ranch newly dusted with snow. I remember how much I read — dozens of journal articles and a few books as well — and how leisurely it felt to ponder what I read while gazing upon the raindrops slowly meandering down the window. I remember how good the coffee tasted at Williamsburg, Iowa, and how awful it tasted in Des Moines. I remember having a most fascinating discussion on

existential philosophy with a teenage high-school dropout. I remember talking about religion with a young woman in black leather. I remember the unscheduled detour the driver had to make to take one of the elderly passengers to a hospital emergency room. I remember arriving in Chicago at 4 a.m., weary, but strangely satisfied...as if I had just spent 33 hours in the Twilight Zone, and lived to tell the tale. Yes, there are many memories I could share with you about that trip, some of them pleasant, many of them not. But it was an experience that had an impact on my life.

I can't say the same for the plane ride...nor would I want to. I have come to value in air transportation its relatively low level of intrusiveness. Each plane trip has much in common with previous ones, from the instructions on using the emergency exits to the captain's weather report, from the foil bag of peanuts to the warning to raise your seat to its full upright position. There may be some minor differences from flight to flight, but typically there are few surprises, and those that may occur—such as a problem with your luggage or a delay in takeoff—are reasons for complaint. In short, a good flight is one that has no surprises, that gets you where you want to go in the most painless way.

And what of scholarship in this electronic age? Do we value getting to where we want to go in the most painless way, or do we value the satisfaction of surviving an intensely challenging intellectual trek? Do we value speed of information delivery, or do we value the depth and richness of a lifetime of accumulated knowledge? Do we value a lack of surprise in our scholarship, or do we value the delight of serendipity?

I would suggest we value all of these things to some extent, and perhaps here can be found a paradox raised by the electronic publishing of scholarship. For while the newer forms of academic communication offer impressive advantages over traditional publishing, we still feel compelled to retain somehow the sense of quality, rigor, and sweat-off-the-brow labor that characterizes the best of traditional forms of scholarship. We want our cake, and we want to byte it, too. So we take steps to pour old wine into new skins, or as McLuhan and Fiore (1967) put it, "to force the new media to do the work of the old" (p. 81). Yet it is possible that the work of the old is not the best kind of work the new media can perform for us. As we discover the potential of electronic

publishing for entirely new forms of intellectual work, we may find ourselves creating a new kind of scholarship, an "electronic scholarship," with different advantages and disadvantages, and reflecting different values. Just as an airplane flight and a bus ride may have the same final destination, so may electronic scholarship and traditional scholarship have the same ultimate objective. But the experience of the journey may be significantly different. As Haas (Haas, 1987) suggests:

> There are signs that electronics is affecting both the methods and the substance of scholarship....A better understanding is needed of the way scholars work (or would like to work) in the context of new organizational and technical capabilities. (p. v)

How electronic scholarship may differ from traditional scholarship is a question in need of greater research. I suggest that it is a question that may be of particular interest to students of human communication, since scholars communicate with one another and with the public largely through the publication of scholarship. In the few remaining moments of my presentation, I'd like to share with you some thoughts on four potential value conflicts raised by electronic scholarship. I believe these are four signs of a possible shift in how we view scholarship, in how we view knowledge, and in how make knowledge claims. They may reflect what Gozzi and Haynes (Gozzi & Haynes, 1992) call the emergence of a new epistemological zone, an "electric epistemology," challenging the print-based ways of knowing that have been the foundation of our Western intellectual tradition.

Speed of delivery vs. care in preparation. It used to take a year or longer for a manuscript to navigate through peer review, the editor's blue pencil, a rewrite, more peer review, more blue pencil, and perhaps another rewrite. Another six months to a year might be spent in a holding pattern as an accepted article waited for space to open up in a quarterly journal. With electronic publishing, the time gap between the author's writing and the audience's reading can be greatly compressed. By way of electronic networks, an author can quickly distribute a manuscript to an entire audience of scholars, completely circumventing any prior-review process. True, most respectable electronic journals at least

have an editor, and many have a review board. But there is little to stop individuals from starting their own electronic publishing effort, as can be seen in the growth of BITNET discussion lists and USENET news groups (Bailey, 1992). As we increasingly use technology to speed up the delivery of scholarship, will we become any less concerned about care in preparation? I notice typoographical errors all the time in computer-mediated communication, but it doesn't seem to bother me as much as seeing a mistake in a printed document. Perhaps that's because I expect more care in preparation from a printed document, and I seem willing to accept less from an electronic one.

Depth of information vs. breadth of knowledge. It is a cliché to say we live in the midst of an information explosion; the amount of recorded information continues to increase at a staggering rate (Wurman, 1989). Electronic publishing promises to be a great accelerator in the dissemination of this information. More information will be available to more people and with more options of access. But rather than helping scholars develop a more complete knowledge of their field, the information explosion fueled by electronic publishing may be contributing to the proliferation of increasingly narrow scholarly specialties. We may cringe when we hear the adage that a specialist is someone who learns more and more about less and less until he or she knows everything about nothing (Strawhorn, 1980), yet there may be more than a hint of truth to it. At some point, a scholar must strike a balance between depth of information and breadth of knowledge. Traditional scholarship has tended to value the ability to synthesize knowledge, to situate specific arguments within a more general context. The values of electronic scholarship may be contributing to a more myopic concentration of intellectual effort, with only a fuzzy focus on the "big picture."

Print-based literacy vs. computer-based literacy. Scholarship has traditionally valued proficiency in writing and reading, the essential skills with which scholarly work is performed. Electronic scholarship seems to be amending this print-based literacy with new demands on the scholar. To be a literate scholar today, one needs to understand the logic of a computer program and be able to navigate a variety of human-computer interfaces. While I'm not suggesting that

scholars today must be able to write programs at the machine level (although I know many who do), they often benefit from the ability to program at the software level, from selecting format options in a word-processing program to editing command strings for a statistical package. Some minimal computer skill is necessary to retrieve and make use of electronically published scholarship, and as the audience for this work becomes more adapt at software manipulation, the demand for electronic publishing is likely to rise. While print-based scholarship values clear, concise writing and careful, close reading, these traditional priorities may be competing with other criteria raised by electronic scholarship, such as the desire for a consistent interface, cross-platform compatibility, and "user-friendly" features.

Author control vs. audience control. A traditional book or journal is designed to be read in a linear, beginning-to-end fashion. Of course, many people choose to read selectively, skipping some sections and focusing on others, but the order of sequential presentation is still significantly under the control of the author. Electronic scholarship often allows the audience more control over the manner in which it is used. Hypertext documents are an obvious example of this, as flexibility in presentation is a built-in feature. A computerized database gives the user more direct control over the sequence of events in a search than does looking up a reference in a traditional print bibliography. Electronic mail discussion lists can be viewed as evolving scholarly publications (Glicksman, 1990) in which the boundaries between author and reader are substantially removed. Kist (Kist, 1987) asserts that the user of electronic publishing is participating in "user-driven publishing" where the reader "becomes a publisher in his own right" (p.16). Traditional scholarship has valued a "strong" image of authorship, in which the author bears the burden for creation of scholarly argument, and gets the credit for successful execution. Electronic scholarship may value a sharing by author and reader of both work and reward.

These are just a few of the possible changes that electronic publishing may bring to our view of scholarship. They may at first seem to be minor conflicts, and perhaps just new manifestations of old tensions. After all, there has been a place in traditional scholarship for speed of delivery (e.g., the newsletter), for

depth over breadth (the monograph), for non-print forms of communication (the lecture), and for audience involvement (the forum). An optimist might view electronic publishing as an opportunity to combine the best features of traditional scholarship into a more flexible and more widely approachable medium of scholarly communication. Despite the thoughts I've shared with you today, I consider myself to be an optimist. But I believe we should approach the future of scholarship with our eyes wide open, working to recognize shifting epistemological foundations, and trying to detect and document our changing view of scholarship for future generations of scholars...and the graduate students who aspire to join their ranks.

References

Bailey, C. W., Jr. (1992). Network-based electronic serials. *Information Technology and Libraries*, *11*(29-35).

Glicksman, M. (1990). Changing patterns of scholarly communication: Implications for libraries. *Library Acquisitions: Practice & Theory*, *14*, 341-346.

Gozzi, R., Jr., & Haynes, W. L. (1992). Electric media and electric epistemology: Empathy at a distance. *Critical Studies in Mass Communication*, *9*(3), 217-228.

Haas, W. J. (1987). Foreword. In A. Lowry & J. Stuveras (Eds.), *Scholarship in the electronic age: A selected bibliography on research and communication in the humanities and social sciences* (p. v). Washington, DC: Council on Library Resources.

Hiltz, S. R., & Turoff, M. (1978). *The network nation: Human communication via computer*. Reading, Mass.: Addison-Wesley Publishing Company, Inc.

Kist, J. (1987). *Electronic publishing: Looking for a blueprint*. London: Croon Helm.

McLuhan, M., & Fiore, Q. (1967). *The medium is the massage*. New York: Bantam.

Strawhorn, J. M. (1980). Future methods and techniques. In P. Hills (Ed.), *The future of the printed word: The impact and the implications of the new communications technology* (pp. 13-26). Westport, CN: Greenwood.

Wurman, R. S. (1989). *Information anxiety*. New York: Doubleday.