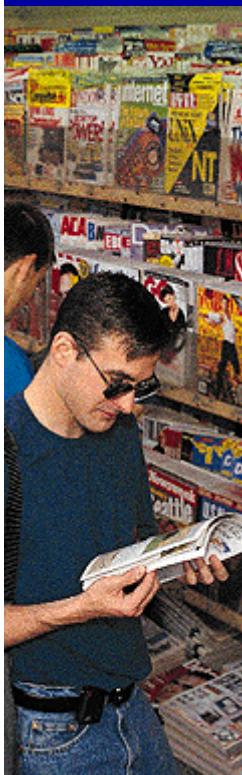


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Who Owns Digital Works?

**Computer networks challenge
copyright law, but some proposed cures
may be as bad as the disease**

by [Ann Okerson](#)

BROWSING is a time-honored tradition at newsstands and in bookstores and libraries. Proposed changes to copyright law could regulate electronic browsing and make it illegal unless expressly permitted. Although it is unlikely that electronic publishers would utterly prohibit people from leafing through their publications, the author asserts that even a partial ban would upset the current balance between the rights of readers and copyright holders.

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Millions of readers since 1926 have found A. A. Milne's stories of Pooh and Piglet and their friends Eeyore and Tigger delightfully simple and yet profound. So it is not surprising that [James Milne](#) (no relation) of Iowa State University thought that it would be a wonderful idea to put [Winnie-the-Pooh](#) on the World Wide Web. A computer attached to the Internet could take a few files containing linked text and pictures from the books and make them available to children of all ages around the world. In April 1995, shortly after he created the Web site, Milne received a very polite letter (as have other Pooh fans) from E. P. Dutton, the company that holds the rights to the text and classic Pooh illustrations, telling him in the nicest way imaginable to cease and desist. His other choice was to sequester a substantial part of his life's savings for the coming legal bills.

About the same time, a [scandalous new book](#) about the private life of former French president Francois Mitterand was banned from distribution in print in France. It turned up anonymously on the Internet days later. There was little anyone

could do to prevent its rapid digital dissemination.

Some network enthusiasts assert that "information wants to be free," but an equally vociferous band of digital pioneers contend that the real future of the global Internet lies in metering every drop of knowledge and charging for every sip. How will society's legal and cultural institutions react? Will tomorrow's readers be able to browse [electronic works](#) as easily as they have been able to peruse books at their favorite bookstore? Will they be able to borrow from virtual libraries? Authors, publishers, librarians and top-level government officials are debating these questions.

No More Yawns

Even five years ago few people would have thought of [electronic copyright](#) as an issue for heated national controversy. But today there are vast sums to be gained-or lost-as a result of the inevitable legal decisions to be made regarding ownership of "intellectual property" transmitted via electronic media. By the early 1990s the core copyright industries of the U.S. (which include publishing, film and music) accounted for more than \$200 billion in business annually, or about 3.6 percent of the gross domestic product. In 1993, when QVC and Viacom battled for control of [Paramount and its archive of classic films](#), it became clear that both companies believe the future lies in ownership of "content." Since 1981 the [National Writers Union](#) has sued large publishing organizations, including the [New York Times Company](#) and [Mead Data Central](#), for allegedly selling unauthorized digital copies of its members' works. Even universities now think about how to maximize the return on the intellectual property they produce, rather than simply assigning full rights to publishers.

For the most part, the copyright industries create mass-market products such as trade books, films and related items. (The novel [Jurassic Park](#), for example, spawned a [major movie](#), videotapes, audiotapes, T-shirts, toy dinosaurs and other derivatives, all protected by various rights.) Scholarly and literary publishing-the scientific, critical and artistic record of human knowledge, culture and experience-accounts for only about half a percent of the total, or \$1 billion a year. (Publicly funded government information, freely

distributed, plays no important part in that market.)

Most scientists and scholars are far more interested in the widest possible distribution of their work to their professional colleagues than in capturing every possible royalty dollar. The Internet can deliver information more quickly and cheaply than traditional print formats can, which makes it an appealing vehicle for publishing. An electronic copy of a document or program will also usually be identical to the original and exactly as functional.

Yet such authors are merely passengers on a mass-media ocean liner, required to abide by the same copyright laws as the makers of action-figure toys based on Saturday-morning cartoons. And publishers' exhilaration about new products and markets is offset by fear that a single sale to a library or an individual could result in the endless reproduction of a document over the global Internet, eliminating hopes of further revenue.

Questions about how to apply current copyright law to new formats and media abound: To what extent are works on the newer-let alone not yet created-electronic media protected by law? Is cyberspace a virtual Wild West, where anyone can lay claim to anyone else's creations by scanning and uploading them or simply copying a few files? Many works are being created through extensive electronic communities or collaborations-who owns and benefits from these? How can we track who owns what, assuming that ownership makes sense at all? How do we efficiently compensate information owners when their works can be sold by the word, phrase or even musical note? What are the liabilities of Internet access providers, who may be unaware of copyright violation over their facilities? Should we dispense with copyright as we have known it entirely and seek new paradigms, as the Office of Technology Assessment advocated in 1986?

Where the Law Stands

The roots of copyright are old, and the lines along which it has grown are complex. One of the earliest copyright disputes, from sixth-century Ireland, sets the tone: St. Columba had copied out for himself a manuscript of the Latin Psalter, and the owner of the original, Finnian of Druim Finn, objected. The king ruled: "As the calf belongs to

the cow, so the copy belongs to its book." A war ensued; the "copyright violator" prevailed and held on to the book. (The manuscript has had a long history as a good luck charm for the Columba clan's military adventures and survives to this day in the library of the [Royal Irish Academy](#) in Dublin.)

The [Statute of Anne](#), enacted in England in 1710, was the first national copyright law. It gave authors rights to their work and limited the duration of those rights; it served as a model for the first statute governing copyrights in the New World, enacted in 1790. On both sides of the Atlantic, copyright in its nascent stages balanced neatly the interests of private property and public use. Indeed, the constitutional authority for U.S. copyright is based on its potential to "promote the progress of science and useful arts."

In successive revisions, Congress has extended the period of copyright, expanded the types of works that are protected, and joined in global copyright agreements, such as the [Berne Convention](#). Berne signers agree to give copyrighted works from other countries the same protection they would have if they had been produced in the home nation.

American publishers have not always been so scrupulous in observing foreign copyrights. Pirate editions were common during the 19th and early 20th centuries (when, according to an argument made by [Paul Goldstein](#) of Stanford University and others, the U.S. was a net importer of intellectual property). British artists then, from Gilbert and Sullivan to J.R.R. Tolkien, were acutely aware of such trespasses. Today, however, Americans look at such lax-copyright countries such as China as disapprovingly as Britain looked westward 100 years ago.

Some observers have argued that cyberspace is a similarly underdeveloped territory with respect to intellectual property-many words and images from other media find their way there, but relatively few cyberworks have crossed in the opposite direction. That asymmetry is changing rapidly, though: the land rush of media companies to the Internet in the mid-1990s may already have put an end to the frontier era. And, of course, because cyberspace has no physical territory, its citizens are subject to the laws of whatever jurisdiction they live in.

A Tilted Playing Field

The most recent revision of the U.S. [copyright law](#), made in 1978, is far more thorough than its predecessors. It protects creative works in general, including literature, music, drama, pantomime, choreography, pictorial, graphical and sculptural works, motion pictures and other audiovisual creations, sound recordings and architecture. (Patents and trademarks are governed by their own laws, as are trade secrets.) Copyright explicitly grants the owners of the expression of an idea the right to prevent anyone from making copies of it, preparing derivative works, distributing the work, performing it or displaying it without permission.

At the same time, the law limits the exclusive rights of owners in various ways. The most important of these exceptions is [fair use](#), which allows copies to be made without either payment or permission under certain conditions. Fair use includes copying for purposes of research, teaching, journalism, criticism, parody and library activities.

Much of the current debate about electronic copyright stems from questions about the future of fair use raised by the Lehman Commission, known more officially as the National Information Infrastructure Task Force's Working Group on Intellectual Property Rights, chaired by [Bruce A. Lehman](#), the U.S. commissioner of [patents and trademarks](#). In mid-1994 the 25-member group released a [first draft](#) of its report for comment. Hearings were held in Washington, D.C., Chicago and Los Angeles, and the group took comments by post, fax and e-mail. Individual readers and copyright market participants offered well over 1,000 pages of opinion. In September 1995 the group released its final draft-[a white paper](#)-containing a legislative package intended to update the current Copyright Act.

In general, the information-producing industries have greeted the white paper's recommendations with relief and acclaim. It forestalls publishers' and authors' worst-case scenario, which could have reduced income to the point where there would be no incentives to produce new works and market them on-line. The tighter controls over digital reproduction proposed in the white

paper appear to secure the industry's financial well-being in the on-line environment.

In contrast, library and education groups, on-line services and private citizens have been mostly negative-and very voluble-in their responses to the [Lehman proposals](#). Their nightmare future is one in which nothing can be looked at, read, used or copied without permission or payment. Many libraries are already feeling pinched as costs for information, particularly scientific books and journals, increase by 10 percent or more annually.

Fees charged for electronic information licenses (which give libraries or schools permission to use material that they do not own) are generally even higher than prices for the equivalent books or periodicals. Thus, the working group's suggestion that the use of licensing should be greatly expanded has an ominous ring for librarians in most American institutions. Under the typical license, such terms as price, permission for users to download sections of a database, liability and long-term ownership favor the information provider in significant ways. If license terms continue to make electronic information more expensive than its print counterparts, and the digital domain continues to grow, libraries will eventually be unable to afford access. At that point, of course, this imbalance will have to change, because there can be no marketplace without a ready supply of customers to buy new products.

Furthermore, in the eyes of many citizens and legal scholars, the Lehman commission's suggested changes upset the balance that the current law maintains between the rights of copyright owners and those of users. For example, the commission affirms that any information alighting in a computer's memory for any length of time-however fleeting-is "fixed" for purposes of copyright. The [Copyright Act](#) governs only ideas "fixed in a tangible medium of expression, when its embodiment... is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." This distinction is crucial. The white paper implies that anyone who for any reason transfers a sequence of bits representing copyrighted information between computers without permission of the copyright owner breaks the law. Indeed, the working group recommends that the

Copyright Act be amended expressly to recognize that transmissions fall within the exclusive right of the copyright owner. Even the act of viewing a Web page, which involves transmitting it from a server to a user's computer, could be interpreted as illegal without specific prior authorization.

In addition, the group refuses to extend to electronic copies the so-called doctrine of first sale. Someone who buys a book or magazine can sell or give away that copy without paying additional royalties, but this would not be true in cyberspace. This apparently illogical recommendation follows the argument that during an electronic transfer, a work is "fixed" in at least two computers, even if only for a few milliseconds-and hence is duplicated rather than being transferred the way that a book might be. Legitimate ways for a lawful owner of a copy of an electronic work to sell the copy or to give it to a friend, an act that is perfectly legal in the world of print-on-paper, are left unexplored. As a result, in the electronic information omniverse, the ability even to glance at materials, an act we take for granted in libraries and bookstores, could vanish. Browsing works on-line without permission could be considered a violation of the law.

Universities and other organizations that supply access to the Internet are particularly concerned by the commission's assertion that they should be liable for any copyright violations committed by their users. Such a situation would force them into the role of unpaid digital police, checking on every piece of data that students, staff or subscribers read or published.

Although the white paper proposes a future inconsistent with the grand tradition of public access, one way around these controversies might be disarmingly simple. The commission emphasizes technological aspects of "transmission" and "fixation," but many critics have found those discussions imperfect precisely on technological grounds. A more thorough analysis of the range of technological possibilities for transferring files-including cryptographic methods that effectively limit the number of permanent copies produced-might make the Lehman approach more useful than it now seems likely to be.

Fair Use-The Balancing Act

If access to electronic materials without payment for every use is to be recognized, then fair use is the area in which the bridges can be built between the rights of copyright owners and those of information users. At least that is where they have been built in the medium of the printed word.

Just what fair use means in the electronic environment is unclear. Other than stating that fair use should continue in the electronic realm and that the need for it will diminish as licenses and other automatic accounting techniques become more widespread, the white paper says little about it. Advocates of readers' and users' rights find this imprecision particularly troubling. Although the Lehman commission made a clear statement in favor of owners' rights, it balked at the chance to clarify users' rights similarly.

Lehman's office has, however, continued to foster an unofficial series of meetings, at which between 50 and 70 users, authors, librarians, lawyers and publishers' representatives meet every month in Washington, D.C., in an attempt to evolve guidelines for electronic fair use. This Conference on Fair Use is affectionately called CONFU, a reference to the CONTU (Commission on New Technological Uses) group that drafted the guidelines that have helped to clarify the 1978 copyright revisions. From the start of CONFU, it quickly became clear that little agreement would be reached by the time the white paper was due or copyright legislation would be introduced and debated on Capitol Hill.

What policymakers may not appreciate is that the inability of the CONFU participants to agree is by no means bad. On the one hand are fears that without a set of electronic fair use guidelines, confusion about the law and the likelihood of litigation will increase-particularly damaging for elementary schools and others who can least afford the risk. Yet on the other hand are the advantages of proceeding slowly with legislation. Because there are not a lot of rules about the new media, publishers, librarians and scholars are free to conduct electronic experiments-many of them governed by written agreements between commercial publishers and educational or library organizations.

Progress in the creation and distribution of electronic information is being made nicely,

though not rapidly. Commercial copyright owners seem a long way from suing libraries or elementary schools. The individual scientist or teacher preparing a Web page may be in technical violation of one or another owner's rights but seems similarly immune, at least for now, from legal action. (If this truce breaks down, of course, the consequences for electronic distribution of information could be grim.)

In the view of many participants, the disagreements at CONFU meetings deserve to be cherished. Many believe the technology is not mature enough for agreement about fair use guidelines. They shy away from making legal commitments before they really understand the implications of what they agree to, and at this writing it appears that the process of reaching adequate voluntary electronic fair use agreements will take a long time.

Coming to Terms with the Future

For all the criticism that some aspects of the Lehman commission's report have generated, there is substantial consensus on many others. Many recommendations have generated dissension not so much about their general appropriateness as about the degree to which they should be codified in law. For example, few take issue with the notion that malicious tampering with encryption methods intended to secure copyright should be illegal. Questions arise only about how draconian the punishment for such an offense should be and whether investigators should be able to presume guilt.

Similarly, everyone, except for the small minority who believe copyright protection has no future on the Internet, agrees that there is an urgent need to educate citizens about copyright. Now that everyone with a computer and modem is a publisher, rules that once applied to only a few companies bind millions of people.

How society ultimately changes the Copyright Act will largely determine the nation's information future. The power of new technologies already transforms the way creators work and how authors and publishers deliver information. Is it too much to hope that widely and cheaply accessible public and academic information will coexist with information sold by publishers at prices that earn profits and foster the copyright industries? We do have the potential, if

we act wisely and well, to arrange matters so that most participants in the new technologies will be winners.

Further Links

[World Wide Web site maintained by the creator of the Pooh FAQ](#)
[Current information on copyright law](#)
[The Copyright Website](#)
[National Information Infrastructure Virtual Library](#)
[Lehman Commission "white paper"](#)
[U.S. Copyright act](#)

Further Reading

The Nature of Copyright: A Law of Users' Rights. L. Ray Patterson and Stanley W. Lindberg. University of Georgia Press, 1991.
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