

Copyright Seminar
Prof. Kurlantzick
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Sharon M. Foster

Copyright and Electronic Publishing

Introduction

Publishing, traditionally thought of as primarily a print medium, is undergoing important changes that will affect the ways in which we think about, acquire, and use information. The English word "ephemera" comes from the same root as the modern Greek word for "newspaper"; we still include newspapers and news magazines in this category, print items whose immediate value is short-lived. But new methods of publishing are taking the concept of "ephemera" to a new level. "Publications" exist which never had, and never will have, physical form except as bits recorded on a magnetic disk or CD-ROM at the host computer and transmitted with or without a wire connection to the subscriber's desktop or laptop computer, or hand-held "personal digital assistant". In fact, electronic publications can have as many forms as there are users, as each user interacts with the information to present it in the way most useful to her. The economics of publishing is being affected as well. "As more page elements are available for electronic assembly, the cost of the elements and of the final page is dropping and production times are much shorter."¹

The concept of electronic publishing was born with computers. For many years, we have talked of software "publishing" and database "publishing", even though the only printed material that is distributed to the buyer is the

¹Judith Booth, The Digital Original, Publisher's Weekly, November 8, 1991, at 43.

user's manual. Ever since 1978, when Apple introduced the Apple II, and 1981, when IBM introduced the first "personal computer", computers have become both more powerful and more affordable each year. Patty Stonesifer, vice president of the new Microsoft Consumer Division, says that about twenty percent of American households have personal computers, and another twenty percent are planning to buy one in the near future.² From the early days of timesharing, where many users shared one CPU (central processing unit) to today, where one user may have several CPUs on her desk -- one for word processing, one to manage the video display, one to perform complex mathematical functions, one to manage communications with the local network, and one to communicate with the world-wide Internet, just to name a few possibilities -- has been a mere forty years or so. Fifty years ago, there wasn't a single computer in the entire world, at least, not in the sense that we think of them today. Then, in 1949, the first full-scale electronic stored program computer began operating at Cambridge University.³ By 1954, there were approximately 250 computers in the United States; by 1964, there were 24,000; by 1984, there were millions.⁴ This proliferation of computers has changed the way we think about and use the

²Peter H. Lewis, Exploring the Frontiers of Electronics at Home, The New York Times, December 14, 1993, at C12.

³Stan Augarten, An Illustrated History of Computers 297 (1984).

⁴Id. at 283.

information that they make available to us in forms that we could not have imagined 50 years ago, or even 20 years ago.

Another factor in the sudden boom may be the Clinton Administration's support for the "information superhighway", evidenced by the fact that, since June 1, 1993, anyone with a computer and a modem can send electronic mail to the President.⁵ In a move that also signals support for broader public access to government information, the Securities and Exchange Commission has announced plans to make S.E.C. reports available on the Internet beginning sometime next year.⁶ The S.E.C. database is currently available through Mead Data Central's Nexis service, which charges about \$15 for each S.E.C. document, plus a connection charge of \$39 an hour and a printing charge of about \$1 a page.⁷

The increase in the number of personal computers, the increase in the number of on-line services, and the prospects for more services and lower prices, has apparently brought us to a critical mass of computing power. Soon there will be enough hardware in use to make it commercially viable to supply audio and video information on-line in addition to text. Even with the current uncertainty in the

⁵The addresses are America On-Line: ClintonPZ; Comuserve: 75300,3115; Genie: WHITEHOUSE; MCI Mail: 5895485; Internet: President@Whitehouse.gov. Phil Patton, Disk-Drive Democrats, The New York Times, November 28, 1993, at 7.

⁶Filing by modem has been available for about two years, according to my sister, who does that sort of thing for J.C.Penney headquarters in Dalls, Texas.

⁷John Markoff, U.S. Shifts To a Freer Data Policy, The New York Times, October 22, 1993, at D1.

state of copyright protection for electronic publishing, many companies are going ahead with plans to make massive amounts of information available in electronic form. Consider the following news items from the last few months of 1993.

The Leonard Bernstein estate, the Library of Congress, and a consortium of institutions across the nation have announced a plan to create the Leonard Bernstein Multi-Media Archive, a huge collection of correspondence, musical manuscripts, photographs, recordings, and memorabilia that will be digitized and made available to virtually anyone with a computer and the necessary peripherals.⁸

The Nynex Corporation and the Prodigy Services Company announced plans to place on-line all 300 volumes of classified ad pages from Nynex's service area of New York and New England. The service will allow for the use of headline type, color, and photos in the ads. Local phone companies have only recently been freed to enter such non-telephone businesses, having been barred from doing so when the Bell System was broken up a decade ago. Prodigy, which is owned by I.B.M. and by Sears, Roebuck & Company, has about two million subscribers nationwide, and about 180,000 of them are in the Nynex area.⁹

⁸Allan Kozinn, Bernstein Archive To Be Digitized For Public Access, The New York Times, November 9, 1993, at C17.

⁹Joshua Mills, So, Let Your Cursor Do the Walking, The New York Times, December 10, 1993, at D4.

O'Reilly & Associates, a technical book publisher based in Sebastapol, California, and Spry Inc., a Seattle software developer, announced that early next year they would begin shipping a program called Internet-in-a-Box. The program, which will be priced below \$100, will let users with a modem and a personal computer connect directly to host computers on the Internet, send and receive mail, download software, and browse through large digital libraries. Until now, access to the Internet required the user either to belong to an organization that supported an Internet host computer (usually government, academic, and corporate institutions) or subscribe to a service that provides a "gateway" to the Internet, such as Delphi or The WELL. There are now 15 million to 20 million users on the Internet, and estimates of the number of new users joining each year vary from 150,000 to one million.¹⁰

CBS, The New York Times Company, and Apple Computer Inc. announced that they would jointly produce an "interactive multimedia" encyclopedia of the Vietnam War. The product will include a time line that will allow users to pick any date during the war and call up pictures and text on important events at that time in Vietnam and the United States.¹¹

¹⁰New PC Internet Software, The New York Times, December 6, 1993, at D4.

¹¹Computer Disk About Vietnam, The New York Times, December 8, 1993. D18.

The New York Times has been available, on a 24-hour delay, on Mead Data Central's Nexis system for 10 years. The paper recently announced plans to make the New York Times News Service, which comprises about ninety percent of the contents of the New York Times newspaper, available to subscribers of Dow Jones electronic news services on the date of publication.¹²

Even though the new copyright act includes the possibility of media which do not yet exist, it is still based on the traditional model of the author and user relationship, and on the idea of a finite number of copies of the product, whether it is printed material, CDs, or audio or video tapes. But new technologies make possible a virtually unlimited number of copies of a digitized item, whether text, an illustration, or accompanying audio. Furthermore, each copy is identical to the original, assuming there are no undetected and uncorrected transmission errors, and each has a potentially unlimited lifetime.

Old Issues With New Twists

Two of the issues which are always at the heart of a copyright infringement case are ownership of the copyright and fair use.

Ownership

¹²Times News Service on Line, The New York Times, December 7, 1993, at D22.

While the act of authorship may have been readily identifiable when the 1976 Copyright Act went into effect, it is not so easy today. Digitization has blurred the traditional boundaries between author, editor, publisher, database maintainer, commentator, and researcher. Traditionally, most authors depend on publishers to buy, print, and distribute their work. Particularly in the area of news, the author frequently turns over copyrights to the publisher, who is usually in a better position both to detect and to prosecute infringements. But this pattern could be significantly affected as self-publication comes within the reach of more and more people. Authors may come to rely on publishers only to distribute their work, but production itself will come under more and more author control. The entry fee into electronic publishing at its most basic is probably somewhere between three and four thousand dollars. This covers the cost of a software package such as Aldus PageMaker, Word for Windows, or Quark Xpress, a Macintosh or IBM-clone with a 486 processor and enough memory to run such a package and the operating system it requires, a modem, a good, fast, laser or inkjet printer, and a flat-bed scanner which is used to digitize line drawings and photographs. All the recipient needs is the same or compatible system, with or without the high-quality printer.

At least one author has already self-published a self-help book (appropriately).¹³ Undaunted by rejections from traditional publishers, Doyle P. Henderson committed his 450-page book to disk and distributes it as shareware for a \$5 registration fee. If you like it, you can buy the printed version for \$39.50.¹⁴

A lawsuit that promises to help clarify the issue of copyright ownership in factual material and its subsequent release in electronic form was recently filed in Federal District Court in Manhattan. Ten freelance writers, with the backing of the National Writers Union, an organization that says it represents 3,000 freelance writers nationally, have filed suit against several major news organizations over who controls the rights to reproduce their articles in electronic media after initial publication. Jonathan Tasini, the president of the National Writers Union and one of the plaintiffs, said that many publishers have assumed¹⁵ that they, rather than freelance contributors, own the rights to electronic reproduction after initial publication. The writers are suing The New York Times Company, the Time, Inc. Magazine Company, Newsday, the Mead Data Central Corporation, which runs Nexis, a data service that provides the archives of many news organizations via computer, and University Microfilms International, a division of Bell &

¹³Doyle P. Henderson, Amazing New Truths About Your Emotions.

¹⁴Bill Machrone, Shareware to the Rescue!, PC Magazine, October 27, 1992, at 87.

¹⁵Someone didn't read the contract(?).

Howell, which provides the archives of The New York Times and many other newspapers on microfilm.¹⁶

Fair Use

The case of Feist Publications Inc. v. Rural Telephone Service Co., 499 U.S. 340, 111 S.Ct. 1282 (1991) gave the Court the opportunity to clarify the distinction between facts and the compilation thereof, and is sure to be cited often in future cases involving electronic databases. As Justice O'Connor stated it:

Facts, whether alone or as part of a compilation, are not original and therefore may not be copyrighted. A factual compilation is eligible for copyright if it features and original selection or arrangement of facts, but the copyright is limited to the particular selection or arrangement. In no event may copyright extend to the facts themselves.¹⁷

Put another way, new arrangements of the same facts are fair use and copyrightable, as is the same arrangement if arrived at independently and showing some minimal level of creativity. This is good news for current and future electronic databases. In the same way that the traditional database systems, of which there are probably hundreds for the IBM-PC and its clones alone, distinguish themselves from each other by having faster access, or using less memory, to access the same data, hypertext databases can now take the same "facts" (text, pictures, sounds) and by rearranging

¹⁶10 Freelance Writers Sue Over Electronic Rights, The New York Times, December 17, 1993, at C32.

¹⁷Feist Publications, Inc. v. Rural Tel. Serv., Inc., 111 S.Ct. 1282, 1290 (1991).

them or improving the access methods, make them "better" in some sense which is important to the end user.

The academic community has been developing electronic solutions to the problem of fair use of electronic databases. Since the Kinko's¹⁸ case, universities and professors have become better educated in the copyrights of publishers and authors. Previously, it was a fairly common practice for professors to put together a "coursepack", a custom-published collection of photocopied newspaper and magazine articles, and often entire pages from traditional textbooks, and make it available to students at the campus bookstore or local copyshop for perhaps half the price of a formal textbook which, depending on the subject of the course, may already be out-of-date by the first class. Since Kinko's, several publishers and colleges, most notably McGraw-Hill and the University of California at San Diego, have begun developing their own custom publishing systems that automate the process of producing coursepacks and at the same time ensure that the copyright owners receive their due.¹⁹ Suzanne DeBell, the executive editor of McGraw-Hill's Primis (for "Prime Information System"), believes that electronic publishing will make control over copyright easier, not harder, because the system controls the access

¹⁸Basic Books v. Kinko's Graphics Corp., 758 F.Supp. 1522 (S.D.N.Y. 1991).

¹⁹Sally Taylor, Primis Mover: McGraw-Hill's Revolutionary Custom Textbook System Comes of Age at Cal-San Diego, Publisher's Weekly, January 13, 1992, at 24.

to the copyrighted materials as well as the making and distributing of copies. Furthermore, course materials produced on Primis or similar systems never need to go out-of-print or out-of-stock, because they are printed on an as-needed basis only. (The second-hand textbook market in such course materials is practically non-existent.) Another advantage is that corrections don't have to wait until the next print run, as in traditional textbook publishing; the next "edition" can be published immediately. Indeed, having the potential for so many different editions of the same material may pose an interesting problem of citation. If there are only ten copies of a particular edition of an essay, it is not going to be easy for another researcher to locate that particular edition.²⁰

New Models: Electronic Databases

There are many different forms of information, all of which can be described as "electronic publishing", such as CD-ROM, tape (digital as well as analog), and floppy disk. Let us focus on the relatively intangible medium of the electronic database.

In an electronic database, the text is only one part of the experience, as Dennis Ashbaugh said of the "book" Agrippa: A Book of the Dead, which he and William Gibson produced in September, 1992. Agrippa came in two parts, a

²⁰The Bluebook, naturally, already contains rules for citing electronic databases. See the Fifteenth Edition, Rule 17.3.

book and a computer diskette which contained the text of the book and a program for reading it. Both parts were designed in such a way that they will begin to self-destruct as soon as the user opens the book or activates the diskette. The text of Gibson's story was broadcast via modem to sites across the country and in Japan and Germany. Agrippa sold in three editions: ten deluxe copies sold for \$7,500 each, a 95-copy edition sold for \$1,500 each, and a simpler 350-copy edition was priced at \$450 each, so maybe its creators don't much care if curious hackers tapped in and lifted the text.²¹

The term "hypertext" describes systems which allow the user to non-linearly follow links between documents, and some even allow the user to create new links. Lexis and WestLaw are such systems, in that they allow the user to jump from the case currently being viewed, to a referenced case, just by "clicking" on a symbol on the screen. With the advent of the CD-ROM, "richer" systems, usually referred to as "multimedia", have been developed which allow the user to link to audio and video information as well. For example, one can read a biography of Bach, click on a screen icon and listen to a fragment of one of his concertos, and click on another icon to see a portrait of the musician who recorded the piece. (The Patent and Trademark Office issued a patent on the hypertext/multimedia system to Compton's New

²¹This is one solution to the copyright dilemma, but I doubt that we want our books to cost \$450 and self-destruct.

Media, publisher of Compton's Multimedia Encyclopedia, in August, 1993, even though several such systems have been on the market for years and are the basis for much CD-ROM-based software. Many software publishers, whose development costs would be significantly impacted, loudly protested, and the PTO recently announced that they would review the decision.²²⁾

Several levels beyond hypertext is the experience known as "virtual reality", in which the user sees, hears, and otherwise interacts with the computer-generated environment as if he were actually in it. Practical applications include architect's models which allow the user to "walk through" the proposed structure. There is really no equivalent to virtual reality in any traditional media;²³ copyright protection will no doubt rely upon the "look and feel" protection presently accorded to software.

The real product in the electronic database is not the text, which is usually available elsewhere at less cost. The real product is all the value-added services which are possible only because the information is in electronic form, such as the links between documents and the convenience of obtaining the text in machine-readable form for incorporating into other documents, storing on disk and reading later.

²²John Markoff, Review Set of Patent In Dispute, The New York Times, December 17, 1993, at D1.

²³Unless you count the experience of reading a really good book.

Such convenience can become a liability for some people. A California attorney who specializes in family law recently escaped disciplinary action and was awarded only \$3,000 of the \$4,950 that he had billed a client in a child custody case for memorandums that he had produced using his new West CD-ROM Library system, which reduces the last 33 years of published California court opinions to three compact disks. Apparently, large portions of the resulting memorandums were copied verbatim, without attribution, from various court decisions.²⁴

Another value-added feature of electronic databases is their search capability. For example, rather than rely on a digest of decisions, the user of WestLaw or Lexis can construct his own search pattern and find new connections between cases that the digest editor may not have spotted or may not have considered interesting or important enough to include.

A third important feature is the timeliness of the information. Court decisions, for example can be located immediately and are usually available within days or even hours on the on-line systems, while slip opinions may not be issued for at least two weeks.

Another feature of the on-line systems which is particularly important to law students is their 24-hour availability. Anyone who has ever had to track down an un-

²⁴David Margolick, At The Bar, The New York Times, November 12, 1993, at B20.

shelved law book or treatise, or who lives more than half an hour from the nearest law library, can appreciate this extraordinary property of on-line databases.

Finally, an important part of the service is the speed of access to the information and the elimination of the need to locate the exact volume and page of the original text. This particular characteristic of WestLaw and Lexis was the subject of litigation between West Publishing Company and Mead Data Central a few years ago.²⁵

Mead Data Central first began marketing Lexis in 1973. At that time, the first screen of each case included a citation to the first page of West's report of the opinion. In 1985, Mead announced plans to add "star pagination" to the text of the opinions in its database. This feature would allow the user to cite the exact page in the West's National Reporter publication without ever obtaining or even using the West publication.

The United States District Court for the District of Minnesota granted a preliminary injunction against Mead Data Central to block the introduction of the new service, and the United States Court of Appeals for the Eighth Circuit affirmed. The court found that West's page numbering system follows from its compilation and arrangement of the cases, and is therefore an original work of authorship for which copyright protection is available. The Supreme Court denied

²⁵West Pub. Co. v. Mead Data Cent., Inc., 799 F.2d 1219 (8th Cir. 1986).

certiorari on the issue of the preliminary injunction, and the case went to trial, but was settled when the parties reached a licensing agreement.

The dissenting opinion indicated that the court may have stretched too far in order to find originality. After all, how many different USEFUL ways can there be to organize the cases? However, an important point in the majority opinion, and reinforced by the United States Supreme Court in Feist²⁶ in 1991, is that the originality threshold is quite low, and almost any ingenuity in selection, combination, or expression, no matter how crude, humble, or obvious, will be sufficient.²⁷

Protection Through Pricing Schemes

There are at least two ways to model a system for accessing an electronic database, and probably several hybrid systems. They are the usage-based system and the fixed-fee system.

Usage-Based

Under a usage-based system, the access rules would be designed to compensate the copyright holders for viewing, downloading, or using their information. This system would also be designed to protect against unauthorized modification or destruction of information, to provide for

²⁶Feist Publications, Inc. v. Rural Tel. Serv., Inc., 111 S.Ct. 1282, 1287 (1991).

²⁷Goldstein v. California, 412 U.S. 546, 561, 93 S.Ct. 2303, 2312, 37 L.Ed.2d 163 (1973).

the creation of derivative works while protecting against unauthorized repackaging, to protect against bulk copying, and to protect against unauthorized alteration of the access rules themselves. The examples best known to law students are the Lexis and WestLaw systems.

Both West and Mead Data Central are extremely proprietary concerning information about their pricing structures, but it seems safe to assume that their billing systems are mainly usage-based, with a connect-time charge and additional charges for downloading or printing information. In addition, a charge is probably applied each time the user changes libraries or begins a new search. There are probably several tiers of pricing for connect time, somewhat like the phone company and some of the on-line services like CompuServe and Delphi. There may be a flat fee, probably on a yearly basis, for heavy users such as large law firms and law schools, and scaled down fees for a fixed number of hours, where excess hours are billed at a relatively higher fee. Both services provide newspapers and magazines on a wide variety of topics, in addition to the usual statutes, case law, and law journals. The government publications are free of copyright; indeed, West is already the publisher of much of this material anyway; but the other materials such as magazines and newspapers must be available under some agreement between West or Lexis and the copyright owners. Some arrangements may be a flat licensing fee, but others are conceivably based on the amount of usage of the

publication. It is unlikely that usage is traced down to the individual article, however. The reason for this is that most of the services' customers do not want their reading patterns to be traceable, for fear that a rival might be able to discern their business plans.²⁸

An article from a 1991 symposium on law and electronic communications²⁹ analyzes a usage-based hypertext publishing system proposed by Ted Nelson, who coined the term "hypertext". In his system, which he calls "Xanadu", authors contract with the database publisher and pay a fee in order to place and keep their work in the database. Users are charged both for viewing a document, and for traversing the links between documents. The author of the document receives a royalty each time the document is linked to, as does the creator of the link. The article points out several of the pros and cons of such a system and concludes that it does not accurately reflect how authors and users would likely behave, but that it is a good place from which to begin formulating new concepts of intellectual property rights in electronic media. Under this system, copyright protection essentially is conferred by contract. There is virtually no end to the duration of the author's right to royalties, but the author will no longer control other user-

²⁸Informal conversation with Mead Data Central's UConn student representative.

²⁹Pamela Samuelson and Robert J. Glushko, Symposium: Electronic Communications and Legal Change: Intellectual Property Rights for Digital Library and Hypertext Publishing Systems, 6 Harv. J. Law and Tech. 237 (Spring, 1993).

authors' rights to make unlimited derivative works. Users will pay a premium for using the first publication on a given topic, even if it is incorrect or a shallow treatment of the subject. Those users with the most curiosity and tenacity -- qualities of good scholarship -- will pay the highest usage rates, which will tend to discourage just those qualities. Authors will pay to get "published", a requirement which can seriously deter authorship.

Fixed-Fee

The fixed-fee system is similar to the old Bell System pricing structure for unlimited local calls. It eliminates the requirement to monitor usage and so lowers the administrative costs of the system. Costs become more predictable for both user and publisher, and the use of the materials in the database is encouraged. A predictable royalty stream is created for the rights holders. The database's primary worth is preserved, even if small portions are copied or retransmitted without permission. The disadvantage is that overhead is incurred in guarding against unauthorized access.

Lexis and WestLaw are actually hybrid systems, in that some classes of users, such as law schools and large law firms, can choose to pay a fixed fee and receive unlimited connect time.³⁰

³⁰Informal conversation with Mead Data Central's UConn student representative.

Conclusion

There are at least two approaches to balancing owners' and users' interests in the information business. The first approach is to limit access to the data by charging high prices which reflect the high costs of entry into the business. This is what happens when innovative new services first go on-line. The specialized databases, such as Dow-Jones, Lexis, and WestLaw reflect this model. They began with a relatively small, but well-identified target audience, and being early in the field they were and are still able to command high subscription rates. Frequently, as in the case of Dow-Jones and West, they already had their databases in electronic form, and had only to modify their access system to make it useable via a personal computer and modem. High entry costs for collecting the data make for high prices which means limited access to the database. This is the approach taken by WestLaw, Lexis, Nexis, Dow Jones, and others today.

Another possible approach is to take advantage of lowering entry costs, for users as well as for producers, and to promote lower prices and therefore wider access to the database. In the computer industry, lower prices and wider use tend to reinforce each other. To paraphrase one observer, if the economics of the automobile industry were as responsive to the application of technology as the computer industry is, the average automobile would get 1,000 miles to the gallon and cost \$1,000.

Copyright law can respond to the growth of electronic publishing in one of at least three ways.

First, it can do nothing, leaving all rights to be negotiated by contracts. Because of continuing rapid change and unpredictability, authors and publishers will probably continue to rely on contract to resolve the issues of ownership and distribution. Even users, rather than merely being purchasers of information, will increasingly find themselves entering into contractual relationships with authors/publishers/database owners.

Second, it can do nothing different from existing protections. After all, how much worse off will the author be than he was before? Anyone with a \$129 hand-held scanner and a personal computer can pirate the same text or graphic that they can with an on-line system. Also, the same tools that make copying easier will also make it easier to detect. If the information, with all its accompanying hypertext features, is available to a wider audience at a lower cost (and dissemination of information is one of the goals of copyright), where's the incentive (profit) to copy without authorization? (There will always be hackers who will do it for the challenge, but Americans are basically law-abiding, as long as they believe that the law is a fair one.)

Third, it can establish special categories, as has been done for programmable logic devices and chip designs. But this promises to be a never-ending task, at least for the foreseeable future. The response of copyright law to

emerging technologies must strike a delicate balance between the rights of the authors or copyright owners and the Constitution's objective of promoting the development of the useful arts through the dissemination of information. Electronic publishing is so tightly connected to computer technology that the "delicate balance", if it were ever attained, will shift with each new development. New forms of media are being invented as technology advances and prices fall. Just as we cannot predict with certainty what new technologies will be available in the next few years, or how current technologies will be affected in terms of price and availability, neither can we predict with certainty how these new means of accessing information will affect users' behavior.

In the 1991 novel Earth³¹, author David Brin envisioned a global computer network that puts virtually limitless information at everyone's fingertips.³² Such a network eliminated the whole concept of copyright piracy in the context of news and other factual information. When everyone has access to the same information, and to all the value-added features of on-line databases, what use is there for only a small, non-interactive fragment of that information, whether on paper or on disk?

³¹David Brin, Earth (1990).

³²It was pretty good with voice commands, too.