

THE UNIVERSITY COMMUNITY PURSUIT OF THE PROMISE OF THE NEW MEDIA

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INTRODUCTION

I would like to convey a sense of the university community's needs regarding the development of the National Information Infrastructure ("NII") by examining the following points: (1) experimental projects involving users and producers of information, in our case, libraries and publishers, should play a crucial role in defining the new rules of the road; (2) fair use is a necessary backdrop to such experimentation, but it may become less important in the future; and (3) certain principles which will lay the foundation for the exchange of electronic information as well as guide the development of the NII must be enumerated to make the NII most useful to the university community.

I. CONCEPTUALIZING THE POSSIBILITIES

One may view the electronic environment as simply another medium for the exchange of information and analyze its use by comparing the NII with other more familiar media forms. In a time of transition, this kind of integration of the new with the old, while typical, is not without drawbacks. Attempting to constrain the new technology within the confines of existing and possibly irrelevant media concepts, merely because those concepts are familiar, may result in a considerable waste of the benefits of the new technology. In a recent article, Jerome Reichman chronicled the effects of such attempted accommodation by criticizing the manner in which copyright law has been made to protect software and electronic information products.¹ Reichman illustrated the disser-

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¹ Jerome H. Reichman, *Electronic Information Tools—The Outer Edge of World Intellectual Property Law*, 24 IIC 446, 474 (1993) ("[E]lectronic information tools pose a challenge to world intellectual property law that will not go away. [The] laws applicable to patents, copyrights, trade secrets, unfair competition, trade marks, and industrial design are increasingly destabilized by the need to deal with aspects of new technologies for which they are inherently unsuited.") He argues that the legal process itself has slowed the pace of

vice which this process can do to the very creativity it purports to protect. In response to the "Green Paper,"² recent public testimony by Paul Aiken on behalf of the Authors' League of America also illustrates how conceptualizing new technologies by analogy to old ones can waste the new technology's benefits.³ Mr. Aiken suggests that tomorrow's library users, like those of yesterday, *before electronic access was possible*, ought to have to make a trip to the library to exercise fair use.⁴ Certainly this is one possible way to address the complex issues created by emerging technologies, but rather than maximizing the benefits of the new technology, this approach tends to minimize or waste them.

While we must recognize that such analogies and accommodations will take place at various levels, we may take some comfort in the temporary nature of this transitional period. I predict that in the near future, consumers, producers, service and content providers, university researchers, computer scientists, and our cultural and historical guardians will finally refuse to accept unnecessary or artificial limitations on the usefulness of a technology. It is a basic precept of social advancement that we should strive to accomplish all tasks in the manner that is quickest, cheapest, and most efficient. Authors, publishers, and users will undoubtedly want to exploit the efficiencies of a new technology. Ostensibly, changes in the law should facilitate mutually beneficial exploitation. The law makers, however, as an essentially conservative institution, may take an inordinately long time to come to grips with their task. Eventually though, the law will change, as the difficulty of trying to under-

innovation. He predicts that even more difficult challenges lie ahead. These challenges, he warns, could bring our whole system of protecting intellectual property "to its knees." *Id.* at 475 (citing the challenge of accommodating computer generated productions, computer-aided design and artificial intelligence machines as an example).

² INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATURAL INFORMATION INFRASTRUCTURE: A PRELIMINARY DRAFT OF THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 1 (July 1994) [hereinafter IITF GREEN PAPER].

³ This account of Mr. Aiken's testimony is contained in a summary of the proceedings of a public hearing on the Green Paper provided by Professor Jessica Litman to subscribers to the CNI-Copyright Listserve [hereinafter Litman]. It was not represented to be a verbatim transcript of remarks. The hearings took place in late September, 1994.

The Green Paper, responsive comments, testimony from the public hearings, and other related documents have been made available by Professor Mary Brandt Jensen at the University of South Dakota's Gopher site (sunbird.usd.edu) under Academic Divisions/School of Law/NII Working Group on Intellectual Property [hereinafter Comments of Jensen on the Green Paper]. These papers should also be available through many university Gophers under Government Information directories. The government's Information Infrastructure Task Force bulletin board (iitf.doc.gov) also maintains copies of some of these documents.

⁴ For a discussion of fair use and its continuing viability in the twenty-first century see *infra* note 8.

stand new methods of interaction within the boundaries of old methods takes its toll.

Thus, we are faced with a period of time during which the legal concepts that generally guide and define our relationships are, in some important respects, inadequate to provide answers to the questions raised by electronic information exchange. For example, when one asks, "Is it OK to do this?" the question is unanswerable because the word "this" may refer to anything from downloading an image from a World Wide Web homepage⁵ to digitizing the entire art history slide collection of the College of Fine Arts for distribution to art history students over the Internet. The rules are not clear because the cases that might settle these questions have not yet been litigated. Furthermore, the legislature has not directly attempted to answer these issues. Currently, these unanswered questions seem to exist in a vacuum. To fill this vacuum with unworkable, unrealistic rules would only stifle a new technology's potential for impact and growth.⁶ Since it would be infinitely more appropriate for new guidelines to develop naturally from our practical experience with a new medium, there is a call for massive experimentation.

Exploration into the electronic medium must begin by creating and testing hypotheses regarding the medium's potential, analyzing the results of our experiments for their implications, and, in general, discovering the new rules of the road as we travel. Thankfully, the vagaries of law that may hamper unilateral action are not an impediment to negotiated agreements. Our current copyright law is a sufficient backdrop to commercial arrangements.

⁵ The World Wide Web is a part of the Internet that utilizes electronic links to connect documents, images, sounds, and video—or specific parts of such media—to each other. This allows the reader or "browser," as readers are called in this environment, to instantly follow trains of thought through related works that may be located on the same computer or on computers located half a world apart from each other. These electronic linkages are called hypertext links, hyperlinks, or simply links.

Users browse the Web by using software such as Mosaic, created by the National Center for Supercomputing Applications at the University of Illinois, Champaign-Urbana. It is also available without charge at sites over the Internet, or over other products that work in a similar fashion, such as Lynx or Cello.

⁶ Francis Dummer Fisher, *The Electronic Lumberyard and Builders' Rights*, CHANGE, May-June 1989, at 13. "In the information age, it is likely that commercial interests will gain as much as higher education from a freer access to intellectual expressions and a robust nurturing of new ideas that is not linked to restrictions on their use." *Id.* at 21. Mr. Fisher explains, among other things, why an economic analysis of the proper incentives to create would be more appropriate for the future of intellectual property protection than dwelling upon the definition of a copy.

II. THE UNIVERSITY AS ELECTRONIC LABORATORY

The university community is well situated to take advantage of the new technological possibilities embraced by the Clinton Administration's proposal for developing the NII. We are comprised of constituents on all sides of the transactions that make up the creation, exchange, and dissemination of information. Within the community there are creators of information, consumers of information, users who transform it into more information, libraries who catalog and collect information, publishers who contribute the value of their editorial expertise and point of view, computer scientists who create the mechanisms that can help to exploit the medium more efficiently and fully, and visionaries who can see possibilities far beyond those that most people envision. The university community, in many respects, is like a company that owns all the facets of a manufacturing concern, from suppliers of raw materials to distributors of finished products, but one which fails to take advantage of its common ownership.⁷

This is not to say that we, as the university community, are the only environment in which experimentation should be embraced. In fact, there has been a steady growth in commercial experiments, illustrated by the phenomenal evolution of the Internet from a basically noncommercial network to one that now accommodates commerce. The university community, however, will miss an important opportunity to contribute a great deal of knowledge to the development of the NII if it waits for commercial interests to define the new rules. The time is right for those of us in the academic community, who have often been on opposite sides of the table, to come together and recognize our common interests. We first must imagine what we want to do within the networked environment, and second, how we might structure relationships, in order to accomplish our goals.

A. Information Exchange Today

Before we leap ahead into the future of information exchange, it may be helpful to understand how exchange is currently constituted and practiced in the university environment. It should not be a surprise to anyone in the university community that we spend the equivalent of millions of dollars in time, effort, and money to obtain, preserve, distribute, publish, and supply informa-

⁷ See generally Colin Day, *The Economics of Electronic Publishing: Some Preliminary Thoughts*, GATEWAYS, GATEKEEPERS AND ROLES IN THE INFORMATION OMNIVERSE: PROCEEDINGS FROM THE THIRD SYMPOSIUM (Nov. 1993).

tion to users. Only a fraction of these expenditures inure to the benefit of the authors of the works. Much of the expenditure is wasteful when measured against the efficiency of electronic communication and dissemination. A greater share of these resources could and should be going to the authors, publishers, and other individuals who create or add value to the information.

For example, let us examine the typical process of acquiring a copy of a journal article from the library. One must include *all* the costs: the time away from other work (lost productivity); the burning of fossil fuels and resultant air pollution to get to the library; the wear and tear on the car; the ticket you get if you do not put enough money in the meter; the money and paper going into the copy machine; and finally the time and effort of the library staff to keep the copy machine running and stocked. Now, imagine the millions of such transactions that comprise the massive transfer of information that is the university community.

B. Information Exchange Tomorrow

The university community is replete with costly transactions centering around the creation, acquisition, and transformation of information. As we begin to contemplate electronic substitutes for these transactions, it is plain that such substitutes do not have to be *free* to be considerably attractive to both suppliers and users of information. Many publishers believe university users want cost-free access and many university users believe publishers want to make a killing on permission fees. It may be that both parties are wrong. In many cases, the costs of electronic access may be *in lieu of* what universities are already spending and what the publishers are already receiving, rather than *in addition to* those costs. The issue should be framed as, "Can we have a more efficient electronic access system than we have today?" Thus, the focus ought to be on shifting costs and revenues, rather than significantly increasing them.

1. Will Fair Use Survive in the Electronic Environment?

Accounting for fair use in the electronic environment has quickly become a central issue in the debate over how best to utilize the new medium. Moreover, fair use is likely to be an important element of many experiments.⁸ The university relies heavily

⁸ Fair use is often described as the balance point between the needs of the public for access to ideas and the needs of authors and publishers for remuneration for their efforts. Its beginnings were in the middle of the nineteenth century when it became evident that

upon fair use to meet the needs of students, scholars, educators, and researchers for access to the works of others.⁹ Many in the university community, especially library administrators, feel that without fair use they would be unable to fulfill their role in the community as information providers. Moreover, it may be that fair use does not play the role we have generally believed it to play. Regardless of whether fair use does what we think it does, the legal and economic bases for the fair use doctrine may cease to exist in the electronic environment.¹⁰

There is tremendous disagreement as to the meaning of fair use.¹¹ Many, if not most, users would agree that fair use entitles the

some limitations would have to be placed upon the "exclusive" rights of the copyright owner in order for the law to truly further the purpose for which it was established, that is, to further progress in arts and science. *Folsom v. Marsh*, 9 F. Cas. 342 (C.C.D. Mass. 1841). It became clear that some exercises of an author's exclusive rights could stifle creativity by withholding from the public the raw materials of new creations. Certain activities appeared to further the goals of copyright even though they may have treaded upon the copyright owner's exclusive domain. Fair use is the term we apply to some of those activities. For most of the history of the copyright law, fair use existed only as a court-created doctrine. It was only recently codified when the copyright law was revised in 1976. 17 U.S.C. § 107 (1988).

⁹ Those in the university community have assumed that fair use immunizes many copying activities from liability for infringement; long-time practice and several notable cases helped further that belief. See *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (timeshifting television broadcasts for personal use is not an infringement); *Williams & Wilkins v. United States*, 487 F.2d 1345 (Ct. Cl. 1973), *aff'd by an equally divided court*, 420 U.S. 376 (1975) (copying entire journal articles by nonprofit government research institutes (NIH and NLM) at patrons' requests is not an infringement). But recently, other cases have cast doubt upon that assumption. See *Basic Books, Inc. v. Kinko's Graphics Corp.*, 758 F. Supp. 1522 (S.D.N.Y. 1991) (finding infringement in holding unauthorized copying of excerpts from publishers' books by duplication business for university course packets not "fair use" of publishers' copyrights); *American Geophysical Union v. Texaco, Inc.*, 802 F. Supp. 1 (S.D.N.Y. 1992) (finding infringement in holding profit-seeking company's unauthorized photocopying of copyrighted articles not "fair use"); *American Geophysical Union v. Texaco, Inc.*, 37 F.3d 881 (2d Cir. 1994).

¹⁰ IITF GREEN PAPER, *supra* note 2, at 133-34 (an observation at the end of discussion of fair use that technology may obviate its necessity); *Texaco*, 37 F.3d at 898 (basic assumption underlying holding was that the reach of fair use was commensurate with high transaction costs associated with asking for permission; as such costs declined, so would the scope of fair use); see generally Wendy J. Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors*, 32 COLUM. L. REV. 1600 (1982).

¹¹ Fair use evokes such disagreement because its boundaries are deliberately vague. Fair use subsumes different kinds of uses such as quotation, parody, criticism, comment, and news reporting on the one hand, and making copies for research, scholarship, and educational purposes on the other hand. Further, such uses might occur in a multitude of environments. Each case comprises a particular set of facts related to the nature of the use, the amount, and significance of the part that will be copied, the nature of the work being copied, and the effect of the copying on the market for the original. Thus, one must analyze fair use with respect to all the relevant facts on a case-by-case basis; there are no quantitative or formulaic rules that would apply in all, or even in many, situations.

The statute reflects the fact-intensive nature of the inquiry:

§ 107 Limitations on Exclusive Rights: Fair Use Notwithstanding the provisions of section 106, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (in-

user to copy some part of the works of others for free. Many publishers would just as readily characterize most fair use copying as excessive and illegal. So long as those who rely upon it think fair use means *free* use, they will be unwilling to "give it up" by agreeing to pay royalties for copies they already have the right to make for free. In reality, there may be an enormous cost associated with fair use when one takes into account the inflated prices for journal subscriptions and books. Price inflation is a practice many publishers would admit they engage in to make up for revenues they believe they lose from university copying (including library copying permitted under section 108 of the Copyright Act).¹² If fair use does in fact not only carry a price tag, but a relatively high one, it is reasonable to suppose that libraries, among others, would be willing to discuss with publishers a trade of such real costs that may be associated with the current exercise of fair use. For example, publishers might propose an electronic solution to the need for easy, reasonably priced, and efficient access. Further, publishers should be willing to discuss trading a system they distrust for one that more directly compensates them.

Thus, within the framework of what libraries already pay, it should be possible to substitute valuable electronic services for the system that exists today. Those in the university community who agree with this thesis must take advantage of the opportunity to look for solutions now, while the state of the law involving modes of interaction remains in transition. We have the opportunity to

cluding multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include-

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.

17 U.S.C. § 107 (1988).

Consider, however, the charge contained in the Green Paper that fair use must be taught beginning at the elementary school level. See IITF GREEN PAPER, *supra* note 2, at 117. As someone who has responsibility for making fair use understandable and useful to university faculty, students, and staff so that they may correctly apply it, I seriously doubt that a meaningful explanation of such a complex concept can be crafted for children. Even if such an explanation could be created, there would be lively debate over whether it was "correct" given the disagreement among publishers, authors, and users as to what constitutes fair use.

¹² 17 U.S.C. § 108 (1988).

help shape the future rather than merely react to others' solutions to these problems.

2. Could There Be Life Beyond Fair Use?

Our discussions and experiments may take us beyond merely arguing about the bounds of fair use. That argument is one way to address the problem of how to retool today's information transactions for the electronic future, but it is not the only way. For example, if transaction costs—those costs associated with locating and contacting an owner and negotiating and documenting a copyright agreement—can be significantly reduced within the electronic environment,¹³ access would be easier, and less costly. Perhaps users could then afford the access they desire without the need to assert fair use. Most libraries and university users will immediately refute this suggestion by predicting that if they relinquish fair use they will be vulnerable to drastic escalations in the cost of access, since publishers have the right to charge arbitrary fees for permission to use their copyrighted works. Further, there are fair uses permitted today which many copyright owners would refuse to permit at any price, such as criticism, commentary, parody, and news reporting. Thus, solutions to the problem of prohibitively high transaction costs appear to address only one part of the problem.

Users are also reluctant to relinquish fair use because they perceive fair use as a protection against excessively high license fees relative to what the user can afford. What incentive do users have to give up fair use, which they perceive as free use, when the alternative appears to be loss of control over the price that must be paid to secure permission for use? Publishers will quickly point out that rather than being a leverage against spiraling costs, fair use is "a hidden subsidy that distorts the price-setting function of the market."¹⁴ Fair use, they conclude, forces publishers to charge ever

¹³ For example, authorship, ownership, payment mechanisms, and terms upon which a work will be licensed, including range of uses and fees, may all be incorporated into an envelope that surrounds and accompanies electronic works. Collective rights organizations should be able to facilitate the transfer of rights in works that are not "equipped" with their own rights information. Further, compulsory licensing schemes could play some role with respect to works that are otherwise inaccessible, for example, where the author cannot be located. See generally Comments of Jensen on the Green Paper, *supra* note 3.

¹⁴ Reichman, *supra* note 1, at 464 (discussing the potential that private contractual arrangements have to undermine the balance between public and private interests that copyright law, and particularly fair use, embodies, because publishers may obtain advantages far beyond those they would have under copyright law). Reichman could easily have drawn this conclusion from reviewing typical license agreements for software and databases, which rarely, if ever, acknowledge any user fair use rights. Nevertheless, where the focus of negotiations is upon "the objective of fairness" and "the parties' mutual desire to arrive at workable licensing arrangements," successful, mutually satisfying results are possible. See

higher prices to library users in order to compensate for the steadily diminishing pool of subscribers.¹⁵ In other words, what publishers do not receive in the form of permission fees, they must obtain in the form of upfront fees like subscription costs and book prices. They have to make ends meet somehow.

It is ironic that while users and publishers should undertake at least some experiments that might answer the question of whether fair use is necessary to establish mutually satisfying relationships in the electronic environment, users will probably feel safer undertaking projects that seek to preserve fair use. Most, if not all, university users see fair use as a viable and necessary alternative of the surrender to publishers of complete control over access.¹⁶ Nevertheless, I am fairly sure that fair use does not give us the protection against rising costs that we think it does.¹⁷

3. Experiments with New Markets

a. Generally

The University of Texas Press ("Press") has begun to respond to customers' requests for electronic access with a variety of experiments and projects. Currently, the object of each of these projects is to increase revenues from book sales, a form of print media. The Press has not yet envisioned the new media as an independent source of revenue. Considerable progress in our ability to conduct financial transactions on the network is required before electronic access will be fully utilized and become an independent market. Large commercial publishers—motivated by profit and, apparently a profitable market—may lead the way in innovative responses to the exciting potential offered by the Superhighway. Given the profits to be made by the commercial publishers, can we not as-

Comments of Jensen on the Green Paper, *supra* note 3, statement of Issues for the Fair Use Conference held by the Working Group, presented by the Copyright Clearance Center, Inc., Joseph S. Alen.

¹⁵ This could result from library reliance upon interlibrary loan and document delivery, especially in an electronic environment, rather than subscriptions to journals or purchases of books. While the provisions of section 108 that authorize these practices specifically indicate that copying as a substitute for subscriptions is not permitted, the balance that was achieved in the print environment may have been fundamentally upset with the rapid expansion of reliance upon electronic transmission.

¹⁶ The Green Paper's recommended changes to copyright law suggest that copyright owners may well have more, not less, control in the electronic environment rather than less. The perceived inadequacies in the law are being addressed by proposals to give copyright owners additional rights that they never had in the print environment, with as yet no corresponding expansion of the scope of fair use. See generally IITF GREEN PAPER, *supra* note 2, at 108-16, 120-41; see also *supra* text accompanying note 3.

¹⁷ For a more detailed discussion of the viability of fair use in the electronic environment, see Georgia Harper, *Will We Need Fair Use in the Twenty-First Century?*, SCHOLARLY PUB. ON THE ELECTRONIC NETWORKS, PROC. OF THE FOURTH SYM. (Nov. 5-7 1994).

sume that there might be savings for us? With both the Press' and libraries' budgets shrinking, together we must find ways to provide one another with material benefits, such as tailored access, more convenient access, and reasonable payments for electronic copies. Enhanced cooperative endeavors are necessary to explore the benefits to publishers, authors, and users of information. The Association of American University Presses and the Coalition for Networked Information are working with thirteen university presses to support projects that will explore just these issues. The *Chronicle of Higher Education* reported that one of the goals of the project is "to unite what have been historically disparate elements in scholarly publishing: university presses, academic departments, libraries, and computer centers."¹⁸

b. The Professional Fair Use Market

Some university presses express real skepticism as to whether they can survive financially without tapping into some new market. They face shrinking support from the universities with whom they are associated, and increasingly must support themselves financially. Thus, it is not surprising that the Association of American University Presses—of which The University of Texas Press is a member—recently participated in a lawsuit against the Texaco corporation involving fair use copying by or for Texaco research scientists.¹⁹ University presses look upon the professional fair use market²⁰ as a potential source of revenue. The holding in *Texaco*

¹⁸ David L. Wilson, *CHRONICLE OF HIGHER EDUCATION*, Jan. 26, 1994, at A24.

¹⁹ *Texaco*, 37 F.3d at 881. Numerous publishers and publishing associations sued Texaco alleging that its research library made infringing copies of articles from the plaintiffs' publications. Texaco circulated issues of plaintiffs' journals among Texaco's scientists who would request copies of those articles they wished to retain. In defense, Texaco claimed, *inter alia*, that the copies were a fair use. By stipulation of the parties, the court considered only the fair use defense since the outcome on this issue would be dispositive of other issues in the case.

Texaco lost the case in district court largely on the basis of two facts. Under the first fair use factor, the court equated the fact that its research was done for profit with the copying being done for profit. *Id.* at 890. Additionally, Texaco's unauthorized copying denied the plaintiffs revenues they would have received if Texaco had asked for permission to copy, thus negatively affecting the fourth fair use factor. *Id.* at 894. The court indicated that to the extent the existence of the Copyright Clearance Center provided Texaco with various convenient and reasonably priced mechanisms for payment of fees for copying, the scope of fair use had been reduced. The appellate court confirmed "[t]hough not for precisely the same reasons, emphasizing the archival nature of the use under the first factor rather than the for-profit character of Texaco's research." *Id.* at 883.

²⁰ Professionals, including scientists, researchers, teachers, doctors, and even lawyers, copy scholarly materials in their fields of expertise as a matter of course in the practice of their professions. Most professionals work in settings where they must share access to journals and periodicals with their colleagues either by placing themselves on distribution lists or by reading journals in the library. Only a few of these articles will be of such nature that

favors publishers by finding that such copying is not a fair use and by endorsing the Copyright Clearance Center as an effective mechanism for obtaining and paying for permission to copy.

Texaco only addressed professional copying in the private sector, but if such copying is an infringement, copying in the public sector, including in public educational institutions, may soon be recognized as an infringement as well. The reasoning of *Texaco* cannot logically be limited to the case's particular facts, despite the court's explicit attempt to do so.²¹ The Second Circuit clarified the relationship between for-profit status and commercial or non-commercial purposes under the first fair use factor.²² This should help alleviate the concerns of not-for-profit researchers regarding the effect on the fair use analysis of royalties from technology licenses. Nevertheless, a strong basis still exists for extending the holding of *Texaco* beyond its specific context in the court's endorsement of the Copyright Clearance Center and the role it has played in the development of a viable market for permission to photocopy. The court unequivocally stated that it is now appropriate to consider lost revenues from licensing when weighing the facts under the fourth fair use factor.²³ The issue for not-for-profit researchers will be how heavily the fourth factor weighs against clear not-for-profit educational and research uses. Thus, any line the court sought to draw between profit and not-for-profit research is not as clear as it might seem.²⁴

A battle over the very existence of fair use in the research con-

the reader might want to recall some of the ideas expressed in them at a later time while performing research, laboratory work, or pursuing other similar activities.

Thus, occasionally the reader will request that the librarian make a copy for future reference. As the *Texaco* court explains, the reasons for this request may include, in addition to the fact that the journals need to continue to circulate or otherwise be available to others: the fact that only pertinent articles appropriately indexed or filed, not whole journals, can be kept in personal files; that many professionals prefer to make marginal notes on their copies; that the articles must sometimes be read later as time permits; and that errors that might otherwise occur in preserving the expressed ideas by note-taking or reliance on memories can be avoided by photocopying. *Texaco*, 802 F. Supp. at 4-5. Until *Texaco*, professionals probably widely believed such copying was fair use.

²¹ *Texaco*, 802 F. Supp. at 12.

²² *Texaco*, 37 F.3d at 889.

²³ *Id.* at 898.

²⁴ Indeed, the Supreme Court discussed this point in its recent fair use decision, *Campbell v. Acuff-Rose Music, Inc.*, 114 S. Ct. 1164 (1994). The Court was discussing the lower court's erroneous application of a presumption of unfair use where the use is for profit, noting the impracticality of such a characterization. The Court observed that "the presumption would swallow nearly all of the illustrative uses listed in the preamble paragraph of section 107, including news reporting, comment, criticism, teaching, scholarship, and research, since these activities 'are generally conducted for profit in this country.'" *Id.* at 1174 (citation omitted). It is not clear whether the *Texaco* court improperly characterized or gave too much weight to the first factor. To the extent that consistent application of its analysis would eliminate fair use for research purposes, it may well be wrong-headed.

text could be quite long and expensive. But such a fight within the broader context of fair use is already taking shape in the discussion of the proposals set forth in the Green Paper.²⁵ While I understand the need for such conflicts to be resolved through debate, adjudication and legislation, I am hopeful that fighting over the extent of fair use will not be the *only* manner through which workable models for relationships and transactions in the electronic environment may be achieved.

c. Electronic Publishing

Electronic publishing could offer a market to the academic presses that may funnel a considerable amount of copyright revenues into their coffers, without such monies being over and above what the university's users are already paying. For example, a faculty member who sought a chapter from a Press publication might be pleased to pay several dollars directly to the Press for it, provided she could receive it directly by electronic request and return. More intriguing, however, would be a situation in which the work could come to her attention as a result of an automated search, in which her computer would peruse hundreds or thousands of relevant articles overnight and prepare an abstract of this particular work for her review. Upon reading the abstract, she might decide to acquire a printed copy of the entire article by downloading and printing it out. This probably sounds like a perfect world to the researcher, but how would the author and publisher react to this prospect? If each were to receive a royalty based on all or some part of the faculty member's activity, the whole scenario might be quite acceptable. While the technology to conduct the automated search exists, we have not yet devised ways to compensate authors and publishers who do not otherwise foreclose this search option.²⁶

²⁵ The Green Paper characterizes its proposals to amend copyright law as "no more than minor clarification and amendment." IITF GREEN PAPER, *supra* note 2, at 10. Critics, however, have characterized the Working Group's proposals as "dramatic expansion" of the rights of copyright owners (comments of Professor Pamela Samuelson); enhancement of the copyright owner's exclusive rights by adding "the exclusive right to control reading, viewing or listening to any work in digital form," see Comments of Jensen on the Green Paper, *supra* note 3; and "[giving] the copyright holder truly monopolistic control over access to copyrighted work in the electronic environment" far beyond that necessary to encourage owners to make their works available electronically, see *id.*

²⁶ For example, some pay-per-view models for access and payment would not permit the economical exploitation of automatic search capabilities because the cost of a computer's viewing thousands of articles when the user might read only a few or even none of them would be prohibitive.

4. Experiments: The Legal Framework and What We Can Do Now

To support the new relationships and transactions, copyright law must provide compensation to authors and publishers, while meeting scholars' and researchers' needs for access. The "new" law may vary from the current law, ranging from a mere creative interpretation of current law to an abandonment of it. While abandonment might sound extreme, it could actually occur rather subtly through increasing the reliance upon contractual arrangements that naturally supersede copyright law. It might also take place more dramatically if the legislature were to determine that wholesale changes in the law will ultimately become necessary.²⁷ Major changes are not likely, however, unless we reach a consensus that some of the fundamental premises of traditional copyright law have become irrelevant.

It is very difficult to predict the future of copyright law because the technology to which it must increasingly apply is itself changing quickly. The problems we see today may completely disappear tomorrow and be replaced by problems that the "new" law may be inadequate to address. Anything we would devise today likely would be conjecture designed to protect our positions in the print world. But our positions are likely to change; we have barely begun to experience the new media. Achieving consensus about the best ways to utilize it for the good of our society will take time. As others have noted, the best laws are those that emerge from actual social conditions, and not those imposed on us from outside or from an allegiance to the print world status quo.²⁸

Our copyright law, despite its incoherence, may currently be all we need to support the experimentation that should take place to develop the picture of what we will need in the twenty-first century. The ambiguity of the law's application in the electronic environment can either invite those affected to litigate to "clear it up," or to negotiate. If we choose the latter alternative, we need to start talking now; the information creators, the providers, and the users must talk to one another about what they need and want in the new environment. Today, we can start to envision markets and

²⁷ The Green Paper suggests that at this time only minor tinkering is needed. See IITF GREEN PAPER, *supra* note 2, at 120. The comments and testimony illustrate that what constitutes minor tinkering to some is considered major tinkering to others. This debate is some indication of how difficult and time consuming it will be to change the law.

²⁸ See, e.g., John Perry Barlow, *The Economy of Ideas: A Framework for Patents and Copyrights in the Digital Age / Everything you know about intellectual property is wrong*, WIRED, Mar. 1994, at 85.

products that work for all sides of the transaction. We can utilize a mix of competition and cooperation, as needed, to increase quality and reduce cost. We can agree with each other to try new approaches based on our positions under the law as it exists right now, using the leverage which the ambiguity of the law gives each of us. We must, however, be sensitive to the new facts about our relationship that are relevant, rather than the old facts that in the near future may no longer matter. All of us need to be able to take advantage of and make investments in the new media. When our legal rights are too ambiguous to grant us more than a short-term, fragile confidence based on the most recent court holdings, it may make more sense to look to arenas other than the courtroom for the needed measure of stability. We may be able to accomplish much more by agreeing to experiment.

III. THE BROAD OUTLINES OF THE NEW LAW

Multimedia is but one of several examples of the potential of the electronic media that makes me certain we will come to new conclusions about how to handle remuneration for copyright owners. We will have to find these conclusions because the innovative applications are not possible under our present system. The automated search capability referred to earlier cannot function in a networked environment that incorporates the idea of paying per item, or per view, for access to information. Nor can it function in a fully encrypted environment. Multimedia applications are already demonstrating the incredible, and in many cases insurmountable, obstacles that our current concepts of ownership and our systems for compensating copyright owners can place in the path of what otherwise would be beneficial uses of the new media.²⁹ Both the creators and users of multimedia are affected. Many creators find it easier and less expensive to create new but duplicative expression (such as photos, video, and audio clips) rather than to obtain permission on the scale necessary to undertake most comprehensive multimedia projects. Thus, much creative potential is being channeled into creating new works as substitutes for already existing works, which appears to be a waste of both talent and resources. To the extent copyright law contributes to this result, the law contravenes its own purpose and intent.

²⁹ I recently attended a demonstration of multimedia authoring software created by Kaleida Labs, a joint venture of Apple and IBM, that envisions software developers—Kaleida's future licensees—creating "objects" for use in multimedia works which can be freely transferred from one author's program to another author's program. The technology permits the transfer, but our copyright laws would find it highly problematic.

For many in the university community, Mosaic is probably our first window on multimedia. By exploring the World Wide Web, we begin to see the great potential it offers for research in a networked environment and how it could work for us as multimedia creators, as well. Try to imagine, however, Mosaic operating in an environment where the user would continually be warned about impending charges consequent to the pursuit of hyperlinks.³⁰ Neither the creator nor user will find much satisfaction in a system that thwarts them at every turn.

I am uncertain what the copyright law of the twenty-first century will look like, but I feel strongly about the following fundamental principles that must underlie electronic information exchange in the university environment in order for it to fulfill its promise to us:

- Access to ideas must not be impaired. It must remain relatively cheap and easy to spread and collect ideas. The free exchange of ideas underlies the constitutional basis for our democracy, the creation of new intellectual property and economic wealth, and the copyright law. The *quid pro quo* for the constitutional grant to authors of exclusive rights in their writings always has been that the ideas are contributed to the public for its benefit. They must be accessible for use as building blocks for new ideas. The electronic environment offers the promise that ideas will be easier to access, not more difficult. This is one promise we must insist be kept.

As a corollary to the first principle, economic transactions must be based upon some foundation other than control over access. The desire to control, restrict, limit or meter access is inimical to the very nature of the electronic medium and to the constitutional foundations of a democratic society and our copyright law. For example, it seems clear that concern with unauthorized copying is "fighting the last battle" instead of preparing for the new frontier.³¹ It has been our strategy for two hundred years to increase knowledge by compensating authors for their writings, and it has worked well enough; however, the way we implemented this strategy, by controlling access to and charging for copies of writings, was based upon the realities of print media. Today, we must implement a strategy based upon the realities of the new envi-

³⁰ For those readers who have not experienced Mosaic or another of the World Wide Web browsers, any description of the power of this medium and the software that makes participation in it possible will be pale in comparison to even a five minute demonstration of its function. Get connected.

³¹ Fisher, *supra* note 6, at 17.

ronment, where controlling copying has become increasingly more difficult, and perhaps both useless and counter-productive. This is another example of our tendency to conceptualize our possibilities in terms of that to which we are accustomed, and it again demonstrates that such a response to change, while comfortable, may have costly consequences. Attempts to control copies in an environment where they are ubiquitous will likely lead to futile and more insistent restrictions in the name of "protecting" intellectual property.³²

- The copyright registration system, created by Congress, has brought free deposit copies of these materials to the Library for us to preserve and for future generations to study and learn from. The current costs of access should be shifted, rather than significantly increased. In most cases, access costs in the print world seem reasonable; we have accommodated ourselves to them with the exception of science, medical, and technical journals. Such costs could be shifted from paying inflated subscription prices, to Xerox, Mazda, Goodyear, Texaco, and the Parking Police to paying publishers, authors, and access enhancers who might provide immediate interactive and automated research capabilities. Major increases in the overall cost of access potentially could stifle the very creativity that copyright law was designed to facilitate. This shift will probably occur as a natural consequence of the fact that value will appear in new places. Barlow notes, for example, that unique points of view, expertise, market relevance, as well as the ability to access creative services swiftly, conveniently, and interactively will be at the heart of more valuable relationships in the electronic environment.³³

³² Barlow, *supra* note 28, at 86. Barlow describes the fundamental problems we are encountering as we stretch to apply our intellectual property laws to technologies that are likely to alter the calculus of human interaction more profoundly than any technology ever has. He concludes that the laws cannot be made to fit: "we simply don't know how to assure reliable payment for mental works * * * [unfortunately] at a time when the human mind is replacing sunlight and mineral deposits as the principal source of new wealth." *Id.* He predicts that "the increasing difficulty of enforcing our existing copyright and patent laws [in the electronic environment] is already placing in peril the ultimate source of intellectual property—the free exchange of ideas." *Id.* He describes basic attributes of information that make it imperative that we not treat it legally like "pig iron or pork bellies." *Id.* at 127. He places more faith in commerce to overcome these obstacles than in the law, at least in the short term; as he observes, "[t]he life forms of information are evolving methods to protect their continued reproduction." *Id.* at 128. He also describes a number of possible economic controls based on *relationship* rather than on *possession* (control over copies): the value of real-time performance, provision of service and support, mediating among users, and providing opportunities for direct interaction with authors. *Id.* at 128-29.

The Green Paper's proposals for amending copyright law in many respects bear out Barlow's predictions. See *supra* notes 16 and 25.

³³ Barlow, *supra* note 28, at 128.

- The cost should be so innocuous that it ceases to be an issue and further, it should be exceedingly easy to make the payment by mechanical means. Costs should be lower if they are shared widely by all users instead of being disproportionately borne by a few.³⁴ As for the importance of being able to pay online, shareware offers a telling illustration. Many people would agree that the main problem with shareware is not that people are dishonest, but that it is simply too difficult to pay.³⁵

Users of information are becoming more powerful now than at any time in the past because information is rapidly becoming the key to our nation's economic future. It is in our common interest to work toward the creation of a national database, a resource that would do more than simply facilitate transactions in information. Information is the raw material for creating real wealth. The more widely available and reasonably priced the raw material, the more valuable and competitive the end product will be.³⁶ In the future, our national economic well-being will depend on the NII in the way it once depended on oil, timber, and steel.

CONCLUSION

The twenty-first century is fast approaching but, of course, it has not yet arrived. For now, I advise my clients, our libraries, the Press, and the university's faculty and students to begin to use and understand the new media and to identify their various interests. In a university system as large as that of the University of Texas' system, there is an astonishing diversity of access to and experience with electronic resources. Irrespective of my audience, I always recommend that my clients "get connected." If they are connected, I urge them to ask others for electronic copies in order to make those who provide their information aware that they want it electronically.

I support our libraries' efforts to negotiate agreements with other university libraries to establish mutual electronic access to on-line collections, similar to our mutual interlibrary loan and document delivery arrangements.

I recommend we digitize all information either that is (1) not

³⁴ Wider cost sharing would reverse the trend in scholarly print publications where increasingly expensive subscription prices force some libraries to cancel subscriptions and rely upon interlibrary loan. Wider cost sharing could be achieved with license agreements that are tailored to actual use of particular articles accessed electronically instead of high upfront subscription fees, which many libraries cannot afford, especially when readership for some of the more esoteric journals may be limited to no more than a few patrons.

³⁵ Barlow, *supra* note 28, at 129.

³⁶ See generally, Fisher, *supra* note 6.

copyrighted, (2) that we own the copyright in, or (3) for which we have the copyright owner's express permission to digitize.

Everyone in the university community should be on the Internet, should use Gopher, Mosaic, and the World Wide Web, and should try their hand at creating hypertext documents, in order to become familiar with multimedia issues. Thus, *we will not be satisfied with any plan that diminishes the value of the NII.*

I recommend that we make digital media the preferred media for all submissions to anyone or anything. In order to effectively protect intellectual property in this medium so that no one is reluctant to use it, we must further develop the authentication, financial transactions, and communication privacy aspects of software. We should also actively use the software currently available to meet these needs so our experiences can contribute to improving it.

I also recommend we plan for the short term. We need to recognize and accept that equipment will become obsolete quickly. We cannot expect our investments to last forever, but most importantly, we cannot let the rate of obsolescence stop our efforts.

Finally, I always indicate my preference for electronic communication, not that it is the best method, but that it is a valuable alternative. I do all of these things because I believe informed and experienced users will take this medium and its potential seriously. Once people start exploring it, the medium has a way of becoming more and more valuable. It will not be long before none of us will be able to imagine how we ever got along without it, much like the telephone, the copy machine, and the fax. Try it, and you will see what I mean.