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Pondering the Digital Dilemma: A Personal Reflection

by **Clifford Lynch** (Executive Director, Coalition for Networked Information) <cliff@cni.org>

Over the past three years I have had the privilege of serving on a National Research Council committee examining issues related to intellectual property in the emerging information infrastructure. This committee issued a report entitled *The Digital Dilemma* in November 1999; it was formally published by the National Academy Press in January 2000. This article discusses both the process that led to the development of the report and some of the key findings of the report and also includes some personal comments that go beyond what the report says. I will try to carefully distinguish the findings of the report from my personal opinions in what follows; this is an important obligation, and a vital distinction that I would urge the reader to honor.

The material here is adapted from a presentation to library directors sponsored by Elsevier Science at the winter 2000 American Library Association Meeting in San Antonio, Texas. I am deeply indebted to Karen Hunter of Elsevier for not only inviting me to give a presentation at this session, but also for making a tape of my talk available, and to Ann Okerson of Yale University for somehow discovering, obtaining, transcribing, and making sense out of the tape as a starting point for this article. I have taken the opportunity to update and extend some of the points I made in San Antonio.

History and Composition of the Committee

Four or five years ago, the advisory committee of the Federal Networking Committee, which at the time, by the way, was chaired, I believe, by Carol Henderson of the American Library Association's Washington office, made a recommendation to the Federal Networking Committee that, as the Internet developed, it was high time to take a hard look at intellectual property issues. This recommendation resulted in funding from the National Science Foundation to the National Research Council (NRC) to conduct such a study. The NRC is the operating arm of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. It is not a federal agency; rather, it is a private not-for-profit with a special legal status that has a lengthy history of doing very high quality, objective studies to support federal government policymaking and planning, particularly in areas where science, technology or health care are involved. The NRC typically goes about its business by appointing a committee of experts, seeking opinionated but rational committee members, and populating its committees with a real diver-

sity of points of view and stakeholding on the issues in question. The NRC then leaves those committees to sort things out, to reach consensus, and to produce a report. Typically, the reports tend to document consensus among the committee members.

The *Digital Dilemma*, the report here under discussion, is a little unusual in the sense that it not only documents consensus, but it also identifies a number of issues on which there was near consensus or where the committee could not agree and therefore believed it helpful to document the varying points of view. Draft reports of these NRC committees, by the way, are typically reviewed in detail by 20 to 30 external reviewers prior to publication to ensure accuracy and balance; the committee then addresses the reviewers' comments literally sentence-by-sentence.

To give a sense of the diversity of the group, let me mention some of the individuals involved. The committee was chaired by Randall Davis. Randy is a professor of computer science at MIT. He specializes in artificial intelligence and has done a great deal of work around patents in software and related issues. It also included a number of other fascinating and thoughtful individuals, such as Jonathan Tasini, a man you may know from the Tasini versus New York Times lawsuit. He is a writer, as well as a union activist for writers. We had lawyers that included Pam Samuelson from the University of California, Berkeley and also Bernard Sorkin from Time-Warner. The group included librarians, information scientists and commercial publishers. Alan Inouye's introductory piece lists the full membership.

While the committee did not always agree on the issues, the degree of mutual respect among committee members was very striking and welcome; the work of the committee included a great deal of really open-minded discussion and intellectual exchange, and I believe that we all learned from each other.

The Scope of the Committee's Work

The committee began its work by addressing the charge from the NRC and by defining and narrowing the charge to what the group believed could and should be accomplished. Let me describe a few things that are not to be found in the report.

— There is no substantive discussion of trademark issues; this has become a very visible and difficult problem, as trademarks (which are often geographically-based) intersect with domain name assignment.

— There is no substantive discussion of the various proposed legislation around database protection. A parallel NRC committee had been established to address this issue (it recently issued its own report called *A Question of Balance*, building on earlier NRC work such as the *Bits of Power* study).

— Despite the fact that we all recognize that the information infrastructure is a global phenomenon, the report is heavily U.S.-centric. That is because the committee's expertise was in U.S. law and U.S. developments, and also because the audience for the report was primarily U.S. based. It was difficult enough to deal with this in the U.S. context.

— Finally, the report provides only limited coverage of patent issues. The report documents the committee's great concern about the expansion of patent protection into business models and certain aspects of software and the group's feeling that the greatly enlarged scope of patentability over the last five to ten years deserves some focused, full-scale attention, particularly because much of it has evidently been done by policy-making at the Patent and Trademark Office, rather than through deliberate legislative action. The committee, therefore, placed the topic of patents and their appropriate scope on the national agenda for future attention, but we did not attempt a substantial analysis.

The committee's work took place against a volatile backdrop of legal and policy developments, which included not only a variety of database protection bills pending in different sessions of Congress, but also the passage of the Digital Millennium Copyright Act (DMCA), and the moving target of UCC 2B/UCITA (which is discussed in the report though not exhaustively). We deliberately tried to avoid getting involved in debates about proposed legislation, but we did attempt to analyze some of the impacts of legislation such as DMCA, which was actually enacted. (The report contains an excellent critique and set of proposed revisions dealing with anti-circumvention provisions of the DMCA which I will note but not discuss further here.)

The report is thus principally about copyright. It is not narrowly focused on academic or research community copyright issues, and I believe that is one of the things that makes the report so valuable and so worth reading. There has been a tremendous amount of ink and electrons spilled on the topic of copyright in higher education and related areas, but there has been much less thoughtful analysis of the importance of copyright in our society at large: how it affects the consumer, the citizen, businesses, and all other sectors

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of our society. This report attempted to take a very broad view, and I think that when you step away from relatively parochial higher education and scholarly communications issues you may be rather surprised at how much the world is changing, and some of the very deep and difficult problems we will need to address. I believe we need more of this sort of very broad-scale social analysis of intellectual property issues.

A Selective Summary of the Report

It is useful to note that many of the committee's findings are not directly actionable, which I think confused many people in the press when the report was released. Indeed, as I'll discuss later, one of the key recommendations was against premature legislation in these areas, a recommendation for watchful waiting and data gathering rather than precipitous action. This doesn't translate readily into simple headlines and agendas for action. Rather, much of the report notes developments to think about; it offers insights rather than calls to legislate. The report contains more findings than recommendations. I've been delighted to learn that it is finding a place as a reference resource in some graduate programs, and I think this is one useful role it serves.

Let me now highlight a few findings and recommendations:

Copyright's Complexity in Society. It used to be that copyright was a narrow and esoteric issue, a particularly abstruse area of law that a few lawyers worried about and an arena that a few big media companies and publishers negotiated within; occasionally individual authors or librarians might become involved. Copyright in the past has been defined primarily as a legal issue. The committee as a whole felt that today copyright needs to be understood in a much broader context that encompasses not only the law but also a whole range of emerging technologies that permit content to be protected and controlled, as well as business models that structure the economics of intellectual property, as well as broad social norms and beliefs. Copyright cannot be fully understood without appeal to numerous areas of life and commerce. For example, the committee identified a number of emerging business models that alter the traditional role that copyright has played, e.g., copyrighted material may be given away in order to sell tickets for performances. The choice of business models lends complexity to the interplay, with degrees of protection and to consideration of how these fit into the legal regime.

One other important point here: while copyright is now important to everybody, all of the interests are not represented equally in the discussions. The interests of the copyright owners are usually clear and well-advocated;

the interests of the general public and society are more complex and not as well represented. Traditionally, the library and higher education communities have served as a proxy to represent many of these public interests, but in fact they have their own agendas as well.

Copyright and the Consumer. Some very new issues are emerging around copyright and the consumer. In fact, copyright issues are reaching into the consumer arena very rapidly; new technical developments and business models will engage the consumer as never before. There used to be a notion of separation between private space and public space, along with the sense that what happens inside an individual's private space was, in fact, quite private (though perhaps not always legal under the law). Now our society is seeing, on the one hand, new technologies' ability to vastly expand the impact of personal actions — copying a recording for a friend was a very local matter; posting material on a Web page has global reach. The Internet is an incredibly powerful amplifier of the impact of behavior. On the other hand, we are also seeing technologies that reach into, monitor, and control private space in an absolutely unprecedented way. For example, may one make copies of tracks off one's CD to play the same music on one's car, which has a cassette tape player? That kind of practice is widely believed to be reasonable, yet technologies on the horizon are starting to monitor and exert control over such practices, no matter how many consider it to be reasonable. Consider, for example, the Secure Digital Music Initiative.

Technological protections on copyrighted works. These come in two flavors. One I will characterize as "closed trusted systems." We are seeing a lot of this type of protection in the consumer electronics marketplace. The classic example is digital audio tape, where digital audio tape players sold in the United States have circuitry that prevents the making of second generation copies. Essentially, a kind of control is built into these consumer electronics. Now, it is true that one can buy specialized studio gear that bypasses such circuitry, and a very good electrical engineer could probably work around such controls. But, by and large, the consumer is presented with a closed system that effectively controls use and copying. On the other hand, we see the emergence of technical protection systems living on the general-purpose computer; these raise many issues about privacy, security, and consumer and content provider acceptance. The committee's findings are that these remain to be fully proven in practice. They are not yet widely deployed.

The changing nature of publication or dissemination. Intellectual property in the United States was originally a bargain between creators and society; creations were protected, for a limited time, as an incentive to the producers to create and make their creations available to the public. This goes back to the Constitution. Over the past few de-

cades, however, we have seen more and more ambiguity in the way in which some materials are actually made available to the public: limited distributions, licensing, and the like. The digital environment makes these ambiguities much more extensive and raises real questions about the meaning of publication, and social expectations related to this process.

Public Understanding of Copyright

The report raises concerns about the consumer's understanding of copyright's impact on everyday life. If one accepts the committee's findings that copyright is now an issue that everyone must deal with, and if one agrees that a shift is happening from outright purchasing to licensing — including potentially "shrink-wrap" or "click" licenses — all of a sudden individual consumers need to understand what they can and cannot do under copyright.

As far as it is possible to tell, the general public does not understand copyright well, if at all. If attorneys who specialize in copyright cannot agree on what the law allows, then the average member of the general public has a significant problem. There is no systematic copyright education at the elementary and high school level, and our committee discussed some of the potential ramifications of that lack and ways in which it might be addressed — although we were not optimistic about seeing a copyright module included in a civics course.

Given that our society operates under a set of copyright laws that the general public does not well understand, getting guidance about appropriate use of intellectual property presents quite a problem. The committee searched in numerous places for copyright "mythology" in an attempt to gauge the public understanding and how it is shaped. These mythologies ranged on the one hand from statements inside the covers of books, such as "No part of this book can be reproduced without the explicit permission of the publisher" to Websites giving guidance to the general public. On one of these sites we were fascinated to learn that one can copy anything for 24 hours without permission and put it on the Web, so long as the copy is erased after that. But, of course, one could download it again.

The move to licensing, particularly for the consumer, is troublesome. It is worth pointing out that in the early 1990s, librarians were very much concerned about the shift from purchasing to licensing of electronic information resources. If one looks at what happened through the 1990s as libraries and publishers became more sophisticated and developed a better understanding of the issues, one sees that a lot of the early problems have been worked out. One of the reasons those have been worked out — and this is very much a personal view — is that library licensing requires negotiation among equals who share a certain set of common assumptions and goals and values about the content

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in question. Libraries and scholarly publishers, for example, must come together to make the market in scholarly communication.

Now, contrast that with an “average” consumer purchasing a shrink-wrapped license for Microsoft Word. Imagine our consumer opening the software, reading the language of the tiny print generic license, and saying, “Well, gee, I don’t like this clause here that says I am not allowed to write documents critical of Microsoft,” (this is not in the Word license; I am simply illustrating) and ringing up Redmond, WA, and saying to Microsoft, “I’m really unhappy about this license. I’d like to talk to your attorney about negotiating an amendment.” I do not believe that kind of negotiation is likely to happen. That illustration characterizes part of the problem, i.e., the imbalance that in the consumer world is a real issue.

Laws that widely affect the public, but that the public does not understand and may not intuitively behave in sympathy with, represent problematic public policy; they raise the specters of widespread contempt for the law and of selective and discriminatory enforcement.

Some Specific Recommendations

Exhortation to legislative bodies not to act prematurely. We do not need, in the view of the committee, a tremendous amount of new legislation right now in the area of copyright. Our society has numerous technical, business, social, and political forces, all trying to help sort out intellectual property in the digital environment. Legislating in haste at this time, when we do not understand the implications of technological transformations, trying to “legislate every problem into submission,” as Randy liked to say, especially when the problems might be dealt with by technical or business solutions, is a great mistake that may both discourage innovative solutions and give rise to unexpected consequences.

DMCA; Archiving. That said, the report does call for some specific corrections to the Digital Millennium Copyright Act, particularly in the area of anti-circumvention issues. These are fairly technical. The report also calls strongly for action in the area of archiving, both through the removal of legal barriers to archiving and broad actions to engage all of the players about issues related to archiving in the digital world.

The role of the creator. A non-consensus recommendation, but one that a number of people on the committee felt strongly about, is the need to examine the status of the creator or author. That role and status is clearly changing in the digital world. For example, we hear a great deal of discussion about disintermediation, re-intermediation, and the restructuring of various industries. There is a tendency, particularly in consumer markets such as popular publishing and popular music, for some of the publishing community to claim to speak for the author. At

the same time, it is very clear that the interests of authors and publishers are not always parallel, and we need a better understanding of where these interests converge and diverge in the digital environment.

Gathering real data. One final point about the report’s findings and recommendations: There are amazingly few real datapoints about copyright, about what the public believes, about how the public acts in relationship to copyright, or about how the public formulates its beliefs in this area. There is very limited data about the economic implications of copyright law. If we truly believe that intellectual property is one of the key coins of the digital age, we are making public policy and business decisions on the basis of virtually no data, either snapshot or time series. That is a very important finding of the report, and one of the recommendations calls for a substantial program of research and data gathering so that future policy making can be informed by a solid base of data.

Control of the Copy. Let me raise one final item from the report. The traditional view of the law pertaining to copyright is about control of the copy. In the digital world, control of the copy is a very shaky model. The digital environment by definition means constant copying of materials: copying as materials move through the network, as users move materials from disk to main memory to video memory for display. Use and reading are inexorably copy-based procedures.

While numerous discussions attempt to define the “significance” or “permanence” of a digital copy, those definitions are an uneasy fit with the foundations of current copyright law. The report raises the question about whether we ought not to think about how to restructure the copyright regime, to focus on some other choke-point than that of the copy: perhaps it is time instead to think about the effect or purpose of copies and who makes them. This perspective is not much fleshed out in the report. Even as all of us on the committee recognized that the challenges of restructuring a well-established legal regime like copyright are formidable, we raised the matter as at least a philosophical and a research exploration deserving more extended consideration — if nothing else it should yield insights that help us steer the future evolution of the current system.

This is a very quick summary of a very rich, multi-hundred page report. I very much enjoyed and learned a tremendous amount from participating on the committee that produced it. The report contains a wealth of material that bears reflection and consideration. I urge you all to read it and to think about and discuss what it says, and particularly to consider the broad-based social changes it describes and the cultural and public policy issues it raises.

This National Academy of Sciences publication can be found at: http://books.nap.edu/html/question_balance/

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tial consequences of that revolution to the public’s attention.

Endnotes

1. The effective date of a prohibition against a person circumventing technological measures that control access to works protected under copyright is delayed until October 28, 2000.
2. The DMCA requires the Librarian of Congress to determine whether persons who are users of copyrighted works are likely to be adversely affected by the prohibition against circumventing technological measures that control access, in their ability to make non-infringing uses of “a particular class of copyrighted works.” The Copyright Office has invited comments on that question. Approximately 230 comments were received and, although many of the comments expressed — sometimes very strongly — opposition to the prohibitions against circumvention, none could point to examples of such adverse effects.
3. I don’t wish to be understood as charging the Committee or any of its members with the same kind of outbursts that characterize much of the criticism leveled at those court actions as well as at the DMCA. The Committee was consistently scholarly and civil and I am proud to have been able to work with them despite some differences in point of view.
4. As is frequently the case, Shakespeare said it better than I: “How oft the sight of means to do ill deeds / Makes ill deeds done!” King John Act IV, Sc. 2.

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vices.”⁸ The *Report* also says that “[t]o the extent that the interests of the general public have been represented, the burden of advocacy has often fallen on libraries and universities.”⁹ I hope that when the aforementioned representatives convene, having shouldered the responsibility of helping to discern the Constitutional balance set forth in the Copyright Clause, they will consider the following question: Will we, as a society, accept as fundamental the premise that all information that can be purchased must be available also to those who can’t afford to purchase it?

Endnotes

1. Page 6 of the *Report*.
2. Page 45 of the *Report*.
3. Page 55 of the *Report*.
4. Page 89 of the *Report*.
5. *Universal City Studios, Inc. v. Reimerdes*, 82 F. Supp. 2d 211, 219 (S.D.N.Y. 2000).
6. See, for example, Pamela Samuelson, “Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to be Revised,” 14 *Berkeley Technology Law Journal* 519 (1999).
7. Page 121 of the *Report*.
8. Page 7 of the *Report*.
9. Page 59 of the *Report*.