INTELLECTUAL PROPERTY POLICY ONLINE: A YOUNG PERSON’S GUIDE

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This is an edited version of a presentation to the “Intellectual Property Online” panel at the Harvard Conference on the Internet and Society, May 28-31, 1996. The panel was a reminder of both the importance of intellectual property and the dangers of legal insularity. Of approximately 400 panel attendees, 90% were not lawyers. Accordingly, the remarks that follow are an attempt to lay out the basics of intellectual property policy in a straightforward and non-technical manner. In other words, this is what non-lawyers should know (and what a number of government lawyers seem to have forgotten) about intellectual property policy on the Internet. The legal analysis which underlies this discussion is set out in the Appendix.

I am going to start with a primer on intellectual property policy, followed by a very general impression of some of the current attempts to regulate copyright on the Internet: the “White Paper”1 and the “Bills”2 that would implement its recommendations. This discussion may also be of interest because of its relevance to the World Intellectual Property Organization (“WIPO”) “Basic Proposals” now being considered internationally.3 These proposals repeat the significant elements of the White Paper’s scheme, while adding a new sui generis scheme for the

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protection of databases. My claim is that each of these regulatory efforts reveals a pattern of structural malfunctions in the way that policymakers think about intellectual property on the Internet. In other words, the White Paper and the Bills are not simply flawed; they are reveally flawd, even usefully flawd.

In the American tradition, intellectual property law is largely motivated by utilitarian concerns. It is not designed to give property rights solely as a reward for hard work or to provide creators with a dependable annuity for their children, though it may in fact produce those results in some cases. It is about setting up conditions under which creators can and will produce new works. As I have argued elsewhere, many policymakers seem to view intellectual property rights as a simple linear function. They act as if the more intellectual property rights we grant the larger we make each right, the more creators will produce new books, movies, computer programs, and pharmaceuticals. But this view is wrong. Setting the proper level of intellectual property protection requires a complex balancing act. Given the context of these remarks, the analogy I would use is an electronic one: computer simulation games such as SimCity, which rest on models similar to the so-called predator/prey equations. Typically these games require the player to deal simultaneously with potentially contradictory goals: fostering economic growth, expanding transportation systems, minimizing pollution, keeping taxpayers happy, and so on. Too little road-building will stifle economic development; too much will create excessive pollution and cause taxpayer flight. The player who single-mindedly pursues one goal, neglecting its feedback effects, is quickly deposed by an irate cybernetic citizenry.

4. Compare WHITE PAPER, supra note 1, with Literary and Artistic Works Treaty, supra note 3, and Treaty in Respect of Databases, supra note 3. Some of the most directly relevant articles of the Literary and Artistic Works Treaty are: art. 7, Scope of the Right of Reproduction (paralleling the White Paper’s RAM copy theory while allowing nationally legislated exceptions); art. 10, Right of Communication (providing an even more extensive right than the “reproduction right” proposed in the Bills and apparently subjecting Internet Service Providers (“ISPs”) to strict liability in a manner similar to the White Paper); art. 12, Limitations and Exceptions (apparently cutting back on fair use and similar limitations on the rights of content providers in a manner similar to the White Paper); and art. 13, Obligations concerning Technological Measures (paralleling in many respects the anti-circumvention provisions of the Bills). The Treaty in Respect of Databases would provide a sui generis right for databases which is beyond the scope of this article; it has been widely criticized and is arguably unconstitutional.


These simulations offer an insight for intellectual property policy. If the level of intellectual property protection is too low, negative effects follow. Prospective authors turn to other careers. Drug companies decrease investment in research and development. Yet every intellectual property right granted diminishes the public domain of freely available material. If intellectual property rights are set too high, future creators will be deprived of the raw materials they use to create new works. For example, could Bill Gates have created MS-DOS if BASIC and CP/M had been proprietary systems protected by an expansive intellectual property regime? We must remember that the system is not a linear function with each additional property right producing a corresponding increase in future production. It is just as dangerous to produce a system with too much intellectual property protection as one with too little. Each proposed expansion (and even the current state) of intellectual property rights should be approached with the same skepticism as any other state-backed monopoly. We should ask whether the monopoly has been shown to be necessary. We should worry about all of the effects of enforcement of the monopoly, not just the diminishing public domain but also possible side effects on free speech, competition in information products, and privacy. We should see whether there are other available ways for creators to receive a return adequate to promote future investment.

It is important to understand the significance of the empirical issues about the level of protection necessary in the digital environment. Content providers can receive a return on the investment of their time and ingenuity in many ways, for example by being first to market, offering service packages and upgrades, advertising, encryption, steganography, or digital rights management. At present, we lack even the most rudimentary understanding of what kind of returns these methods will bring, yet, inexplicably, the attempt to expand copyright in the digital environment proceeds apace. Some analysts seem to think that the methods mentioned above are merely additions to the market strategy that a content provider might pursue — as if expansive intellectual property rights were somehow an entitlement to which one might add other strategies. But the converse is true. It is only if...

7. See, e.g., Lori Lesser and Susan Arafeh, moderators, Notes from Intellectual Property Online (last modified June 4, 1996) <http://www.harvnet.harvard.edu/online/notes/ip-online.html> (describing comments of Mr. Henry Gutman). Some of Mr. Gutman’s comments at the conference appeared to move towards this argument; however, he limited his remarks to the extent of rights under current law. "Gutman then noted the important distinction between one’s legal IP rights and one’s business strategy for maximizing profit from them. The legal rights are clear, he noted, that an author is entitled to a copyright and an inventor is entitled to a patent. These rights must be preserved on the Internet. What is less clear, Gutman added, is what works as a business strategy and what laws should govern
monopoly rights are necessary to produce an incentive to future production that the Congress is economically justified (and constitutionally authorized) to provide them. If content providers can receive a return adequate to provide the incentive for future production without being granted a legal monopoly, then the monopoly should not be granted.

Prudent skepticism of the need for monopolies is particularly needed with "information products," where economic phenomena variously referred to as "increasing returns on production," "network effects," and "tippy markets" often disrupt standard assumptions about market operation. In slightly more familiar terms, the issue is often connected with standardization and "sunk costs." Imagine that there are two competing systems, for example, VHS and Betamax or DOS/Windows and the Macintosh OS. If one of them starts to pull ahead in terms of number of units sold — or even bootlegged or pirated — there may come a point where the market suddenly "tips" and the competitor is wiped out as consumers and secondary service providers flee the "loser" the moment they judge the battle to be over. The flip side of this point is that producers of the more widely used system gain an important market advantage as their system is adopted by each new user — even, remarkably, if it is given away for free. This is the strategy behind Netscape's free distribution of its Web browser. (This logic indicates that a few software producers may even have received some benefit from the piracy of their products!)

These economic phenomena have a number of important implications for intellectual property policy. First, policymakers and lawyers should realize that simplistic analogies to markets in physical goods are profoundly misleading. In what other market might one strive to achieve dominance by giving one's good away? Second, the "tipping effect"

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8. "To promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Rights to their respective Writings and Discoveries." U.S. CONST. art. I, § 8, cl. 8.

mentioned above can transform an apparently insignificant legal monopoly, a copyright on an operating system or a patent on a video-recording device, into a situation of market domination. Policymakers should exercise a corresponding degree of care. Third, the very unfamiliarity of these phenomena means there is a danger that analysts might be better at spotting the costs of a new technology than its benefits. The Internet makes copying, both licit and illicit, easier. Because we think of copying in terms of infringement and loss to the owner, we assume that rights-holders will have a diminished return on their investment. But the ease and near-costlessness of digital duplication also provide benefits and opportunities such as diminishing the costs of advertising and lowering search costs for detecting piracy. Even more strangely, the features of this environment transform the way in which rewards and market share operate—as in the Netscape example, above. Because this market environment just doesn’t fit our “common sense” or intuitive assumptions about markets in more tangible goods, the hunches and anecdotes that now dominate our discussion of these issues are likely to provide a poor footing for intellectual property policy.

Now, I will turn to the current proposed reforms of copyright protection on the Internet. These proposals come in two parts: (1) a White Paper that purports to describe the state of current law and (2) the Bills now stalled in Congress, which would implement the supposedly minor changes the White Paper claims are necessary. Interestingly, the more controversial of these two documents is the White Paper, which purports simply to describe current law. By comparison, the Bills are more modest in the transformations they recommend, although they too would make major changes in the law and have been strongly criticized by a wide range of groups including libraries, teachers, writers, civil liberties groups, and online service providers.

The Appendix provides a guide to the problems with the White Paper’s depiction of current law: in particular, its distressing tendency to concentrate almost entirely on decisions, quotations, and analyses that...
extend the scope of intellectual property rights, misstating or ignoring contrary authority, statutory history, and legislative policy.

Summarizing brutally, I will make three points. First, the White Paper is demonstrably and repeatedly wrong about the state of current law, always tilting in the same direction. The most charitable description one could provide is that it is a shockingly careless piece of work. Second, the White Paper bases much of its rhetoric on the claim that it is describing settled, uncontroversial law, and hence that little justification for its proposals is required. Yet, a substantial portion of the intellectual property community, including some of those philosophically in agreement with the White Paper itself, disagree with its claims. When much of your audience disagrees, you can claim to be right, but you cannot claim to be uncontroversial, particularly not if you intend to transform those "descriptive" statements into the basic framework for intellectual property in an entire medium. Even the most distinguished scholarly defense of the White Paper's approach is careful to acknowledge that one of its basic tenets has been "questioned or even strongly criticized." Third, even if the White Paper were correct about the state of current copyright law, it would still be necessary to work out whether this would be a desirable legal regime for the Internet. The very existence of a task force on intellectual property and the National Information Infrastructure shows that a mere statement of current practice is not enough, yet the White Paper fails to take seriously the true complexity of the positive and negative changes that the Internet will bring to the production and distribution of "information products." Without an examination of these changes, its tendentious summary could not be an adequate guide to future policy.

The White Paper's basic philosophy is two-fold. First, it argues that content will drive the Internet. I agree. Second, a close reading of the document and of the hearings over the Bills shows that the authors of the White Paper see the Internet as a giant copying machine, a threat to content providers rather than an opportunity for them. Indeed, if there is a theory behind the White Paper's curious vision of copyright law, it seems to be this: more copying equals more copyright violation, thus it is necessary to increase copyright protection as a compensation for


declining revenues. The White Paper achieves this increase in copyright protection by mischaracterizing current law using the following devices.

(1) An extremely narrow definition of the "fair use" exception in copyright. (Fair use is a defense to infringement whereby certain educational, journalistic and other uses of copyrighted material are excused from liability).\(^\text{14}\)

(2) An expanded definition of "copying" on the Internet, whereby even loading material into RAM counts as copying, though such a "copy" is transitory and fleeting. Under this definition, browsing, not just downloading, could itself be an infringement.\(^\text{15}\)

(3) The imposition of strict liability upon online service providers for copyright infringement by their subscribers.\(^\text{16}\)

The White Paper's simplistic and absolutist vision of intellectual property is apparent elsewhere. For example, it offers a program for educating pre-school children in a particular view of intellectual property; the tone alternates between George Orwell and Barney the Dinosaur. Clearly, children should know that it is wrong to steal and that copying can be a form of theft. Yet one searches this section in vain for a suggestion that questions of how extensive intellectual property rights should be, what legitimate exceptions are made to them, and what effect they have on economic development education and free speech, are a little more complicated and politically controversial than teaching children not to swipe each other's Power Rangers. The Software Publishers Association may not be the most disinterested moral instructor in the meaning and sanctity of these particular property rights.

The White Paper's account of fair use has the same tone. It always argues as if the possession of an extensive monopoly in the form of an

\(^{14}\) See infra text accompanying notes 68-86.

\(^{15}\) See infra text accompanying notes 42-67.

\(^{16}\) See infra text accompanying notes 87-93. The White Paper correctly notes that copyright is a strict liability system. It fails, however, to answer the more basic question, given the goals of copyright and the communicative importance of the Web, should we view an ISP, whose computers automatically duplicate and repost all messages, as more like the person who rents out copying machines (who is not liable if infringing copies are made) or the photofinishing lab (who is liable for innocently reproducing an infringing photograph)? The only court to confront this issue squarely had no doubt. "If Usenet servers were responsible for screening all messages coming through their systems, this could have a serious chilling effect on what some say may turn out to be the best public forum for free speech yet devised." Religious Technology Ctr. v. Netcom On-Line Communication Servs., 907 F. Supp. 1361, 1377-78 (N.D. Cal. 1995).
intellectual property right were the norm; thus, any deviation would somehow be a "taking" from the copyright holder. At one point it goes so far as to describe fair use as a "tax" on copyright holders. Yet by the same (or slightly better) logic, one could describe copyright itself as a "subsidy."

The Bills go even further. New definitions would widen the copyright holder's distribution right to cover every transmission of the work. Civil liability would be imposed on creators of any device with the primary purpose or effect of interfering with an author's copy protection system. This sounds eminently reasonable, until one realizes that it could be used to attack everyone from the shareware creator of a macro designed to maintain browser privacy on the Web to the software company that creates a device to crack open a program's protective system, even though the device was created for the legitimate goal of decompiling the program in order to make it interoperable with other programs.

By expanding copyright liability dramatically, the effect of the White Paper and the Bills is to shift power from users and future creators to current copyright holders. What can we learn from this? Quite a lot. In fact, these proposals are a kind of checklist of ways to fail at the task of fashioning a good intellectual property regime.

First, the current proposals show that it is always easier to imagine an infringing use of a new technology than to imagine the ways in which the technology will lower costs and offer new markets. Consequently, we tend to over-protect; we are thinking about losses, not corresponding gains. The authors of the White Paper and the drafters of the WIPO proposals focus on ways that the Internet will lead to widespread copying of digital products, rather than thinking about how it might also allow producers to make money through different business strategies or to gain a greater return from a lower investment.

This kind of technological tunnel vision seems to afflict content providers and their allies whenever any new copying technology arrives. When VCRs first came on the market, Hollywood and the TV industry wanted them taxed to compensate for revenues lost through home taping of protected material. The issue even went to the Supreme Court in the Sony Betamax case, where home taping was upheld as fair use and therefore excused under the copyright laws. Congress and the Supreme Court refused to tax VCRs; their prices dropped; they achieved unprecedented market penetration, boosting demand for new "content." As a result, video rentals became one of Hollywood's largest sources of revenue. A "copying" technology turned out to produce gains as well as

losses. If the maximalist intellectual property agenda had triumphed, content providers would have been wedded for longer to their old business strategies, at a net loss to all concerned.

On the Internet, the same is likely to be true. The distribution of the Netscape browser is a nice illustration: the company believes, and the market seems to agree, that there are lots of ways to extract value from information products without forcing users to pay for each drop. To put it briefly, both the impact of a new technology and the economics of a networked environment are complicated. Congress and WIPO are rushing to “save” the Internet — perhaps the most vigorous and rapidly expanding of all media — and doing so without understanding the technologies, business strategies, and economic realities produced by the new medium. This is a big mistake.

Second, these proposals show that policymakers undervalue the importance of the public domain as a prerequisite for future creation. The White Paper, the Bills, and the WIPO proposals seem to be caught in the thrall of the simplistic “linear function” approach to intellectual property described earlier. Elsewhere, I have suggested that there are deep conceptual roots to this tendency. Under current law, something has to be “original” to receive copyright protection. By focusing on the term “original,” we inevitably underestimate the extent to which the work we are protecting depended on material in the public domain. The romantic idea of originality tends to produce a notion of creators who produce works “out of thin air.”

Third, these proposals show the difficulty that a formalistic model of copyright policy has in dealing with the distributed architecture of the Internet. As a legal regime, copyright premises liability (largely) on copying. If one sees intellectual property as the kind of SimCity balancing act that I described earlier, then the question of how to achieve that balance will depend in part on the technology by which works are created, used, and sold. Copyright marks the attempt to achieve for texts and other works a balance in which the assumption of the system is that widespread use is possible without copying. The relative bundles of rights of the user and the owner achieve their balance based on a set of economic and technical assumptions about the meaning of normal use. The user can do a great deal with a book without copying it; she can borrow it from a library, browse it in a store, buy it, and then lend or resell it. The relatively expansive rights of the copyright holder are thus confined in practice to those occasions and uses for which copying would be necessary. But on the Internet, transmission means the

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18. Or an exercise of one of the holder’s other exclusive rights.
generation of lots of temporary, unstable copies. That's what transmission is. Thus if one labels each of these temporary evanescent copies as "copies" for the purposes of copyright, one has dramatically shifted the balance of power from users and future creators to current rights-holders, solely on the basis of a technological accident. Given the legislative history of the copyright statute, this definition of "copy" is bad law on very traditional grounds. It is also an extremely silly way to choose (or fail to choose) the property structure of the information age. It violates what Laurence Tribe calls the principle of "technological transparency" or technological neutrality, the principle that the social meaning of rules and standards should not be undermined or inflated, simply because an accidental technological change transforms one of the triggers to liability.

Fourth, and perhaps most important, the reaction to these proposals shows that we do not yet have a politics of intellectual property. Media coverage of intellectual property issues is intermittent and uncritical; "cyberporn" interests journalists more than the economic ground rules for the information age. The privatization of public lands is likely to draw a much more heated reaction than the privatization of the public domain. Coalitions of those injured by over-expansive intellectual property rights — civil libertarians, innovative software developers, librarians, teachers, and so on — are only beginning to form. It seems that a lot could be learned from the history of the environmental movement. That movement not only alerted the public that the political process was failing to take account of an important set of values that in the long run would affect everyone, but offered a set of conceptual tools that helped us both to understand those issues and to build coalitions around them. We need an equivalent set of tools for understanding the effects of intellectual property on the cybernetic commons. But that is a subject for another essay.

I began with an intellectual property policy primer for non-lawyers for a reason. Lawyers will continue to have an important role in the development of intellectual property, but we need a democratic politics of intellectual property protection. When presidential candidates propose a flat tax, everyone understands roughly what the issues are, what the distributional effects are likely to be, the competing claims

19. Though, to reiterate, even under the traditional definition most of those copies are too unstable and evanescent to count as copies for the purposes of the Copyright Act.
about efficiency, regressive effects, and so on. No one would suggest that tax policy be left to lawyers. The same should be true of intellectual property, particularly intellectual property online. Intellectual property implicates values ranging from free speech and privacy to scientific progress and antitrust policy. To put it bluntly, intellectual property is the legal form of the information age: all the more reason that it should not just be a matter for lawyers.
APPENDIX:
THE DEBATE OVER THE WHITE PAPER

I. INTRODUCTION

This Appendix is a transcription of an exchange of letters over, and a legal analysis of, the White Paper. It is hoped that the material provided here will enrich the debate and provide a useful compendium of the research on, and the critique and defense of, the White Paper itself.

The Appendix begins with an Open Letter from 106 law professors criticizing the White Paper and its recommendations for copyright on the Internet. This is followed by a response from Bruce Lehman for the Information Infrastructure Task Force. The final letter is my response to Bruce Lehman. An attachment to that letter sets forth a detailed legal analysis of the current state of copyright law and the flaws in the White Paper.

The Open Letter was distributed last year to the sponsors of the legislation in the House and the Senate, to Vice-President Gore, and to the late Secretary of Commerce, Ron Brown. Around the same time, criticisms were leveled at the White Paper and the Bills by a remarkable range of groups — including library associations, consumer groups, civil liberties groups, writers, teachers, online service providers, and computer companies.

Just before his tragic death, Secretary Brown asked Assistant Secretary Bruce Lehman, the main author of the White Paper and chair of the body that produced it, to respond to the Open Letter. Secretary Lehman was kind enough to provide an extended response.

My reply to Secretary Lehman is even longer, I am ashamed to say. I took so many pages because Secretary Lehman’s basic tactic was to repeat the White Paper’s claim that its most significant proposals are already “existing law.” Since this claim of “settled law, settled law” has so dominated and impoverished the debate, I tried to lay it to rest once and for all by actually quoting some of the material that, in my opinion, the White Paper omits, minimizes, or misstates. Many trees paid for this impulse with their lives. At the very least I would hope that this discussion shows that the account of the law given in the White Paper was contentious and is an inappropriate basis for far-reaching decisions about the property regime for the Internet.

Although it initially seemed as though the Bills would glide through without any impediment, the sudden appearance of a substantial and diverse opposition slowed things down considerably. The future of the legislation remains uncertain, but congressionally sponsored negotiations
between online service providers and content providers on the standard of liability have broken down. The consensus seems to be that the Bills are in trouble. The Administration has apparently concluded that it has little chance of producing a domestic consensus over the principles and instead plans to short-circuit the domestic political process by pursuing a similar policy on the international level at WIPO. The WIPO Basic Proposals repeat the elements of the White Paper described here — an expanded definition of copying, the imposition of strict liability on online service providers, and a curtailed conception of fair use. The hope seems to be that the White Paper’s agenda could be put in treaty form, thus producing substantial leverage on Congress to pass enacting legislation in the interests of “harmonization.” This strategy is particularly disturbing in the light of the — now prescient, it seems — request of the signatories to the Open Letter.

We also ask . . . that, consistent with the principle of the separation of powers, the administration not take any action on the international arena which would effectively commit the United States to a particular set of intellectual property rules without domestic debate.  

The White Paper continues to be relevant in another context. Since the strategy of the drafters of the White Paper was to make it appear that no legislative action is necessary to achieve its most significant changes, it has some chance of convincing courts, whatever the Congress or WIPO does. Thus, material contained in these letters and analyses could be valuable both to courts and to policy makers. The letter and responses have been reproduced without substantive changes. In a few instances, cases were relied on which have now been overturned or minor mistakes were made in the press of the moment. Editorial notations indicating changes and errors have been made inside square parentheses.

23. An Open Letter to Senator Orrin Hatch, Senator Patrick Leahy, Representative Carlos Moorhead, the Honorable Ron Brown, and Vice-President Al Gore, infra Appendix, Part II [hereinafter Open Letter].
II. AN OPEN LETTER TO SENATOR ORRIN HATCH, SENATOR PATRICK LEAHY, REPRESENTATIVE CARLOS MOORHEAD, THE HONORABLE RON BROWN, AND VICE-PRESIDENT AL GORE

Dear Sirs:

We are a group of over 100 law professors, concerned about the Administration's "White Paper" on "Intellectual Property and the National Information Infrastructure." Some of us are teachers or scholars of intellectual property, but many of us are not — instead focusing on constitutional law, the First Amendment, law and economics, private law, education policy or some other area. All of us, however, are concerned about privacy, about free speech, about access to information and about the structure of the information economy. We write to you as the legislators and high executive officials most closely concerned with this area of the law. As you know, Senators Hatch and Leahy have just introduced the legislative recommendations of the White Paper as Senate Bill 1284 and an identical Bill has been introduced in the House. We urge that these Bills be withdrawn for further study, that there be an open and public debate of this important area of information policy, and that the Administration not take any action on the international front which would effectively commit the country to a set of rules without a real domestic or legislative debate.

Discussion:

The White Paper says it is just a "minor readjustment" of the law. In fact, it is a radical measure which has negative implications for public, journalistic, and scholarly access to information, for free speech and for privacy. In economic terms, the Report's recommendations seem to be designed around the imagined needs of the largest current rights-holders, with a corresponding negative effect on future innovation and competition. Finally, the Report's inversion of fair use doctrine and its maximalist stance toward intellectual property rights seem to presage a country divided among information "haves" and "have-nots" in which the Clinton Administration's promise of universal access would be lost. The radical quality of the White Paper's suggestions and interpretations of current law can be seen from the fact that they:

Through a far-fetched and formalistic interpretation of 
*copying*, would make reading a document on the screen 
of your Web browser a copyright violation.

- Privatize much of the public domain by overturning the 
current presumption of "fair use" in non-commercial 
copying. Instead, wherever the same material could instead be licensed by the user, the use would be presumed to be an infringement. Fair use is a crucial part of copyright law, providing as it does the raw material for much of scholarly research, news reporting, and public debate. This provision, coupled with others in the White Paper, has the potential to cut those who cannot afford to "license" information off from the information highway, in dramatic contrast to the Clinton Administration's expressed commitment to "universal access."

- Make [online] providers — America [Online], for example — strictly liable for violations of copyright by their members, making it necessary for them to monitor what their users are doing, with obvious negative effects on privacy and on affordable access to [online] services.

- Make you civilly liable for attempting [to] tamper with any copyright protection device or system (such as encryption of programs and other digital products or the [online] equivalents of caller ID.) even if you do so not with the intention of illegitimately copying the product but for entirely legitimate purposes, such as protecting your own privacy. This provision would also allow software companies to circumvent the current law on decompilation; by locking up their programs they could deny other companies the right they hold under current law to "decompile" those programs so as to achieve "interoperability." In doing so it would confer an enormous advantage on the current large players, increase the monopolistic tendencies in this market and undermine innovation and competition.

- Make it a Federal crime to remove, for whatever reason, any of the copyright management information embedded in any document.

There is more, but we think that this makes the point that the issues here go beyond the purview of "intellectual property" narrowly defined. The White Paper has effects on privacy, on the potential for informed democracy, on public education, on scholarly research, on future innovation, on market power, on the very structure of the information economy. Though these points were made during the Hearings, they are
nowhere seriously discussed in the Report itself. We need a more inclusive and deliberative legislative process to decide such issues — in which the voices of those who wish to protect the public domain, or who simply believe that there has been a rush to judgment, can be heard. The idea that “emergency” action is necessary to save the Net[,] or to save the “digital” high tech economy generally, hardly fits with the astounding growth of both over the last three years.

To all of these substantive concerns we would add a concern with the process. The Administration has pursued a “dual track” strategy with the White Paper, lobbying for it both as the basis for both domestic legislation and international agreement. Intellectual property treaties generally only allow the citizens and corporations of a state to claim particular intellectual property protections abroad if their own state recognizes those same protections at home. Thus, an Administration which proposes expansive intellectual property protection abroad can, by getting other countries to accept these protections, put overwhelming pressure on the Congress. Only by voting for restrictive rules at home, the argument will go, can we assure that our companies can compete on a level playing field abroad. This “bootstrapping” technique obviously has disturbing consequences, both for the separation of powers and for citizens’ ability to participate in democratic decision making.

For all of these reasons we would ask that:

- Senate Bill 1284 and House Bill 2441 be withdrawn for further study.
- Hearings be held in which there are representatives of all views, and not merely those of the largest rights-holders.
- An open, public deliberative process can be conducted in which participation is not effectively limited to the copyright bar.
- We also ask Secretary Brown and Vice President Gore that, consistent with the principle of the separation of powers, the administration not take any action on the international arena which would effectively commit the United States to a particular set of intellectual property rules without domestic debate.

Whatever happens, the addressees of this letter will be remembered for drawing attention to the need for new ground rules for the information society. It would be a tragedy if those ground rules smothered the economic, political, educational[,] and cultural potential of the information highway under a regulatory apparatus set forth with unnecessary haste. The digital environment is currently a thriving area of both
economy and culture; emergency action intended to "save" this flourishing environment might actually harm it. We would respectfully ask you to slow the process down — and open it up — before that harm comes to pass.

Yours sincerely,

Professor Keith Aoki, University of Oregon Law School
Professor Gregory Alexander, Cornell Law School
Professor C. Edwin Baker, University of Pennsylvania Law School
Professor Hugh Baxter, Boston University Law School
Professor Margreth Barrett, University of California, Hastings
Professor Loftus E. Becker, Jr., University of Connecticut Law School
Professor Derrick Bell, New York University Law School
Professor Steven Bender, University of Oregon School of Law
Professor Nathaniel Berman, Northeastern Law School
Professor James Boyle, Washington College of Law, American University
Professor Ronald Brand, University of Pittsburgh Law School
Professor Dan L. Burk, Seton Hall Law School
Professor Peter Byrne, Georgetown Law School
Professor Paul Carrington, Duke Law School
Professor Caroll Chomsky, Minnesota Law School
Professor Margaret Chon, Syracuse University College of Law
Professor George L. Christie, Duke Law School
Professor Elizabeth Clark, Boston University Law School
Professor David Cole, Georgetown Law School
Professor Jane M. Cohen, Boston University Law School
Professor Julie E. Cohen, University of Pittsburgh School of Law
Professor Richard Danner, Duke Law School
Professor Adrienne Davis, Washington College of Law, American University
Professor James R. Elkins, West Virginia University College of Law
Professor Garrett Epps, Oregon University Law School
Professor Alan Feld, Boston University Law School
Professor Marc Feldman, University of Maryland School of Law
Professor Eric Freedman, Hofstra University School of Law
Professor William W. Fisher III, Harvard Law School
Professor Caroline Forell, University of Oregon Law School
Professor Stephen P. Garvey, Cornell Law School
Professor Laura Gassaway, University of North Carolina Law School
Professor Ibrahim J. Gassama, University of Oregon Law School
Professor Wendy Gordon, Boston University Law School
Dean Russell K. Osgood, Cornell Law School
Professor Margaret L. Paris, University of Oregon Law School
Professor Dan Partan, Boston University Law School
Professor Peter Pitegoff, SUNY Buffalo Law School
Professor Andrew Popper, Washington College of Law, American University
Professor Margaret Jane Radin, Stanford Law School
Professor Jamin Ben Raskin, Washington College of Law, American University
Professor Milton C. Regan, Jr., Georgetown University Law Center
Professor David A. Rice, Rutgers-Newark School of Law
Professor David Rossman, Boston University Law School
Professor David G. Post, Georgetown University Law Center
Professor Pamela Samuelson, Cornell Law School
Professor Thomas Sargenti, Washington College of Law, American University
Professor David Seipp, Boston University Law School
Professor John Henry Schlegel, SUNY Buffalo Law School
Professor Stewart J. Schwab, Cornell Law School
Professor Ann Shalleck, Washington College of Law, American University
Dean Peter Shane, University of Pittsburgh Law School
Professor Ken Simons, Boston University Law School
Professor Katerine Silbaugh, Boston University Law School
Professor Bill Simon, Stanford Law School
Professor Joe Singer, Harvard Law School
Professor Girardeau A. Spann, Georgetown University Law Center
Professor Robert K. Stumberg, Georgetown University Law Center
Professor Burton Wechsler, Washington College of Law, American University
Professor Jonathan Weinberg, Wayne State University Law School
Professor Wayne Westling, University of Oregon Law School
Professor Mary Christina Wood, University of Oregon Law School
Professor William van Alstyne, Duke Law School
Professor Robert Vaughn, Washington College of Law, American University
Professor Russ Versteeg, New England Law School
Professor Dominick Vetri, University of Oregon Law School
Professor Robert Volk, Boston University Law School
Professor Larry Yackle, Boston University Law School
Professor Alfred C. Yen, Boston College Law School
Professor Diane Zimmerman, New York University Law School
(Institutions for identification purposes only.)
III. RESPONSE TO THE OPEN LETTER WHICH JAMES BOYLE RECEIVED FROM SECRETARY LEHMAN IN EARLY MARCH, 1996

February 28, 1996

Professor James Boyle
Washington College of Law
American University
4400 Massachusetts Avenue NW
Washington, DC 20016

Dear Professor Boyle:

Thank you for your letter to Secretary Brown expressing the views of you and your academic colleagues on the Administration’s White Paper on “Intellectual Property and the National Information Infrastructure.” As I am the Chair of the Intellectual Property Working Group that produced the White Paper, your letter has been forwarded to me for response.

In an effort to solicit as many comments as possible, we have tried to make the process of drafting the White Paper as open and accessible as possible. To achieve these goals, the Working Group has held numerous public hearings throughout the country, solicited comments for over two years[,] and distributed thousands of copies of the Working Group’s preliminary report (a.k.a. the “Green Paper”) and the White Paper in paper and electronic form. In all, the Working Group received more than 1,500 statements from 150 individuals and organizations representing more than 425,000 members of the public. This open process resulted in a well-developed, voluminous record reflecting the views of a broad spectrum of interested parties. It is unfortunate that neither you nor most of your colleagues took advantage of the opportunity, as so many others did, to express their views during the White Paper drafting process. Nevertheless, we are very pleased to receive your comments and I can assure you that the views expressed in the Open Letter will be fully considered as the Administration continues to formulate its policies in this area. In addition, the House and Senate have already held public hearings on the pending bills, and additional hearings are contemplated, which should give you and others an additional opportunity to further express your views and concerns.

I have enclosed detailed responses to the bulleted comments in the Open Letter. Put very simply, most of the comments in the Open Letter are simply not true. In addition, I would like to respond to your statement that the White Paper is a “radical measure” that will have a
The White Paper is not "a radical measure," but rather takes a minimalist approach when considering the implications the Internet will have on intellectual property.

The White Paper recommends essentially only four amendments to the existing copyright law. First, it recommends amending the Copyright Act to expressly recognize that copies or phonorecords of works can be distributed to the public by transmission. This amendment is not a radical departure from existing law, but rather, it reflects a codification consistent with court's interpretation of the distribution right in existing law. Second, the White Paper suggests making it illegal to import, manufacture[,] or distribute any device or product, or to provide any service, the purpose of which is to defeat technological protections used by copyright owners to protect their works. This proposed amendment parallels protections afforded by Federal telecommunications law and state laws. Third, the White Paper recommends making remedies available against those who knowingly alter or disseminate false copyright management information, such as the author's or copyright owner's name. The purpose of the proposal is to protect authors, copyright owners and the public from the inclusion of fraudulent information concerning the status of protected material or the terms for its use. This provision mirrors the copyright notice provision in section 506 of the existing Copyright Act. Finally, the White Paper recommends amending the Copyright Act to improve access to works by the visually impaired and to expand certain exemptions benefitting libraries. These recommendations clearly do not constitute "radical measures."

I hope the enclosed response adequately addresses the concerns of you and your colleagues. Once again, thank you for your comments and for your continued interest in intellectual property and the National Information Infrastructure.

Sincerely,

Bruce A. Lehman
Assistant Secretary of Commerce and Commissioner of Patents and Trademarks
A. Attachment: Response to Law Professors' Open Letter

The Law Professors' Open Letter says that the White Paper would:

"Make reading a document on the screen of your Web browser a copyright violation."[26]

The truth is that the White Paper does not recommend making the mere act of reading a document on a computer screen a copyright violation. There are essentially two errors in this statement.

First, the act of reading, standing alone, is not and has never been proposed to be a copyright violation. The Copyright Act grants copyright owners certain exclusive rights that, together, comprise the bundle of rights known as copyright. Specifically, section 106 of the Copyright Act gives copyright owners the rights of reproduction, adaptation, distribution, public performance and display. This essentially means that one needs the permission of the copyright owner of a work to copy it, distribute the work to others, or to perform it before an audience. Nowhere in section 106 or elsewhere in the Copyright Act is the copyright owner given the right to read or prevent someone from reading.

The misunderstanding in the Open Letter probably stems from a misinterpretation of the reproduction right in section 106 of the Copyright Act. Under section 106 a copyright owner is granted the exclusive right "to reproduce the copyrighted work in copies or phonorecords." The copyright owner's section 106 reproduction right is implicated in most computer-to-computer communications because whenever a work is placed into a computer, whether on a storage device (such as a disk, diskette, [or] ROM) or in RAM for more than a very brief period, a copy is made. For instance, when a "Web browser" accesses a document that resides on another computer, the image on the browser's screen exists only by virtue of the copy that is reproduced in the browser's computer memory. Therefore, it is not the act of reading that may be a copyright violation, but rather the act of copying.

Second, the White Paper does not recommend making the Web browser's act of copying copyrighted material into the browser's computer memory a reproduction of that material under section 106. Rather, it is well established under existing U.S. law that placing copyrighted material into a computer's memory is a reproduction of that material. Specifically, in 1978, the Final Report of the National

26. Open Letter, supra Appendix, Part II.
Commission on New Technological Uses of Copyrighted Works (CONTU) noted,

"[T]he application of principles already embodied in the language of the [current] copyright law achieves the desired substantive legal protection for copyrighted works which exist in machine-readable form. The introduction of a work into a computer memory would, consistent with the [current] law, be a reproduction of the work, one of the exclusive rights of the copyright proprietor." CONTU Final Report at 40.

The case law further establishes that putting copyrighted material into a computer's memory is a reproduction. See Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 260 (5th Cir. 1988); MAI Systems Corp. v. Peak Computer Inc., 991 F.2d 511 (9th Cir. 1993); Advanced Computer Services v. MAI Systems Corp., 845 F. Supp. 356 (E.D. Va. 1994); Triad Systems Corp. v. Southeastern Express Co., 64 F.3d 1330 (9th Cir. 1995), [cert. denied, Southeastern Express Co., 116 S.Ct. 1015 (1996)]. In all these cases, the court held that when copyrighted material is placed into a computer's RAM a reproduction is made, thereby implicating the copyright owner's reproduction right. Neither the White Paper nor the pending bill would change this well-established principle of copyright law.

However, just because a copy is made does not necessarily mean that an infringement has occurred. If copying is authorized by the copyright owner, exempt from liability as a fair use or otherwise exempt under the Copyright Act, or of such a small amount as to be de minimis, then there will be no infringement liability. Therefore, the mere fact that a Web browser is copying copyrighted material does not necessarily mean that the browser is a copyright infringer.

Furthermore, most of the information presently accessible on the Internet is information that people have no desire to assert copyright protection in at all. A great deal of public domain information available [online] today, including, for example, Government reports, records of Congressional deliberations[,] and information regarding pending legislation, is not protected by copyright and is available royalty-free. The White Paper and the [B]ills do nothing to change this. A lot of other "information" on the Internet is "chat" and e-mail, [which] the "authors" make available with no intent to enforce their copyrights or obtaining license fees. Therefore, in reality, the fact that the reproduction right is implicated in most NII transactions will have very little practical effect on most uses of the NII.
The Law Professors' Open Letter says that the White Paper would:

"Privatize much of the public domain by overturning the current presumption of 'fair use' in non-commercial copying."[28]

The truth is that the White Paper does not recommend any change in the fair use doctrine. Under the existing Copyright Act, section 107 makes clear that the rights of the copyright owner do not extend to "fair use" of a work. Under the long-respected "fair-use doctrine," a copyright owner cannot prevent others from using the work for purposes such as research, scholarship[,] or criticism. In addition to this general limitation, the Copyright Act also expressly exempts from the control of the copyright owner certain specific uses by libraries and educators, and a series of provisions further limit the applicability of exclusive rights in a variety of defined circumstances.

Like the views expressed in the Open Letter, the Working Group recognizes that the general doctrine of fair use, as codified in section 107 of the Copyright Act, is a "crucial part of the copyright law." This is evidenced by the Working Group's expanded discussion of the fair use doctrine in the White Paper. The Working Group concluded that no changes in section 107 were necessary because the fair use doctrine will continue to work well in the NII environment.

Although no changes to the general fair use provision in section 107 are necessary, the Working Group believes that changes to the specific fair use provisions in section 108 are warranted. These changes would broaden the fair use provisions in section 108. In particular, the Working Group recommended that fair use provisions for libraries in section 108 be amended to accommodate the reality of the computerized library by allowing libraries to prepare three copies of works in digital form; by no longer mandating the use of a copyright notice on a published copy of a work; and by authorizing libraries to make digital copies for purposes of preservation.

The White Paper goes even further in broadening "fair use," by recommending a new provision, section 108A, which would allow the visually impaired to obtain more books, more quickly. Proposed section 108A would ensure fair access to all manner of printed materials by the visually impaired by providing an exemption from copyright liability for non-profit organizations to reproduce and distribute to the visually impaired — at cost — Braille, large-type, audio[,] or other forms of previously published literary works, provided that the owner of the

[28. Open Letter, supra Appendix, Part II.]
exclusive right to distribute the work in the United States has not entered the market for editions accessible to the visually impaired during the first year following the first publication of the work.

The Open Letter also suggests that the White Paper recommendations would "cut those who cannot afford to 'license' information off from the information superhighway."[29] This conclusion is based on the faulty assumption that every bit of information travelling the information highway will bear a price tag. As noted in the response to the prior comment, this is not correct. Most information available on-line today is either e-mail, "chat," or public domain information, all of which the "authors" make available with either no intent or no ability to obtain a license fee.

On the other hand, some of what is available [online] now is commercially valuable material that has been produced with significant investment on the part of the copyright owner. Today, available works are largely (but not exclusively) limited to "print" material — magazines, reference texts[,] and parts thereof. In the not too distant future, however, recordings and motion pictures will also be available through enhanced, interactive cable or other services.

While some copyright owners may wish to make available portions, or even entire works, for promotional purposes, many will wish to obtain payment for the use made. In practice, the marketplace will demand that charges be reasonable from the consumer's standpoint. If the charge is too high, consumers will decline the opportunity to copy or view the work, and the copyright owner will neither recover its investment nor earn a profit.

The goal of the White Paper and the pending legislation is simply to enable copyright owners to maintain an acceptable level of control over the uses of their works in the network environment. They should be able to prevent the electronic distribution of their works without authorization, and — absent the application of fair use principles or statutory exemptions — should be permitted to charge market-driven fees for the use of their works. As you can see from the above response, neither the White Paper nor the pending bills would produce the harms suggested in the Open Letter in achieving the stated goal.

The Law Professors' Open Letter says that the White Paper would:

"Make [online] service providers — America [Online], for example — strictly liable for violations of copyright by their members, making it necessary for them to

29. Open Letter, supra Appendix, Part II.
monitor what their users are doing, with obvious negative effects on privacy and affordable access to online services.\textsuperscript{30}

The truth is that neither the White Paper nor the pending legislation would alter the standard of liability for copyright infringement. Online service providers are subject to the same standard of liability as anyone else who transmits a copyrighted work in violation of the copyright owner's exclusive rights. Under existing law, an online service can be held directly liable for its own acts of infringement. Such a service could also be found vicariously liable if there is sufficient connection between the online service provider and the direct infringer or to have engaged in contributory infringement if the online service provider knew of the infringing activity and materially participated in the infringing activity. This is well-established law, not a change made by the White Paper.

The Working Group did consider whether a change in the existing liability standard for online service providers was appropriate, but concluded that it would be premature to make any legislative change in this area. The Working Group believes that it would be unfair — and set a dangerous precedent — to allow one class of distributors to self-determine their liability by refusing to take responsibility. This would encourage intentional and willful ignorance. Whether online service providers choose to reserve the right to control activities on their systems, they have that right. Service providers expect compensation for the use of their facilities — and the works thereon — and have the ability to disconnect subscribers who take their services without payment. They have the same ability with respect to subscribers who break the law.

Holding online service providers liable for unauthorized distributions of copyrighted works will not have "negative effects on privacy." Clearly, online service providers play an integral role in the development of the NII and facilitate and promote the free exchange of ideas. However, the same can be said of other information providers and facilitators, such as bookstores, photocopying services, photo-finishers, broadcasters, etc., and that has not been grounds for removing or reducing their liability for copyright infringement. One can perform these functions without infringing or facilitating the infringement of the copyrighted expression of others and without adversely affecting privacy.

Holding online service providers liable for unauthorized distributions of copyrighted works will also not have "negative effects on affordable access." Reports are published daily on the Internet's tremendous growth. In fact, the number of Internet users is estimated

\textsuperscript{30} Open Letter, supra Appendix, Part II.
somewhere between 30 to 40 million — more than five times the number of users in 1992 — and is growing daily. Based on this, it is relatively clear that the existing standard of liability of online service providers has certainly had no adverse effect on affordable access to date.

The Law Professors' Open Letter says that the White Paper would:

"Make you civilly liable for attempting [to] tamper with any copyright protection device or system (such as encryption of programs and other digital products or the [online] equivalents of caller I.D.)"

31

The truth is the White Paper does not recommend making it illegal to "tamper with any copyright protection device or system." Rather it proposes adding a new provision, section 1201, to the Copyright Act that would make it illegal to import, manufacture[,] or distribute any device or product, or to provide any service, the purpose of which is to defeat technological protections used by copyright owners to protect their works. This proposed amendment is not a radical departure from existing law in this area. In fact, this provision parallels protections afforded by Federal telecommunications law and state laws.

To fully understand the scope and purpose of this proposed change, it is helpful to recall that unlike most property, copyrights are intangible. Although copyrights are property rights that can be sold, licensed[,] or even given away like other forms of property, they cannot be adequately protected by physical means. This is true because there are laws prohibiting the circumvention of physical means used to protect other forms of property, such as laws prohibiting "breaking and entering." However, at present, there are no such laws protecting the technical means used to protect copyrighted works on the National Information Infrastructure. Section 1201 would close this loophole and ensure that copyrighted works are treated the same as other forms of property.

Section 1201 does not shift the balance of rights between copyright owners and copyright users. Rather, it restores the balance between them. In our review of the copyright law, we found that technological advances over the past decade have altered the copyright balance — in some instances, in favor of copyright owners and in others, in favor of copyright users. The goal of the recommendations in the White Paper is to clarify existing law and adapt it where this balance has shifted. In particular, we found that the ease of infringement and the difficulty of detection and enforcement will cause copyright owners to look to

31. Open Letter, supra Appendix, Part II.
technology, as well as the law, for protection of their works. However, it is clear that technology can be used to defeat any protection that technology may provide. The Working Group found that legal protection alone will not be an adequate incentive to authors to create and to disseminate works to the public. Similarly, technological protection likely will not be effective unless the law also provides some protection of the technological processes and systems used to prevent or restrict unauthorized uses of copyrighted works. Therefore, the Working Group sought to restore the copyright balance between owners and users by prohibiting devices, products, components[,] and services that defeat technological methods of preventing unauthorized use.

In restoring this balance, we also recognize the concerns of some that section 1201 is incompatible with fair use (including decompilation). This is one of the reasons we chose the “without the authority of the copyright owner or the law” language. If the circumvention device is primarily intended and used for legitimate purposes, such as decompilation, the device would not violate the provision, because a device with such a purpose and effect would fall under the “authorized by law” exemption.

The Law Professors’ Open Letter says that the White Paper would:

“Make it a Federal [c]rime to remove, for whatever reason, any of the copyright management information embedded in any document.”[32]

This statement is essentially correct. The White Paper recommends protecting users and copyright owners by prohibiting the falsification, alteration[,] or removal of any copyright management information. The proposal contains a knowledge requirement. Therefore, inadvertent falsification, alteration[,] or removal would not be a violation.

It is not clear what concern the Open Letter is addressing. Perhaps, the concern is with the criminal nature of the provision. However, if this is, in fact, the case, it is not clear why making the falsification, alteration[,] or removal of any copyright management information a criminal act would be problematic. Under existing copyright law, certain non-infringing acts are considered to be criminal acts, including: fraudulently placing a copyright notice that a person knows to be false on any article; fraudulently publicly distributing or importing for public distribution any article containing a copyright notice the distributor or importer knows to be false; and fraudulently removing or altering any

32. Open Letter, supra Appendix, Part II.

The copyright management information provision[s] suggested in the White Paper simply mirrors existing law with respect to copyright notices. Both provisions are intended to protect the public. The copyright notice provisions in section 506 of the existing Copyright Act protect the public from false information regarding whether the work is protected by copyright, who owns the copyright in the work, and when the work was first published. Similarly, the copyright management provisions suggested in the White Paper attempt to protect the public from false information about who created the work, who owns rights in the work, and what uses may be authorized by the copyright owner. Because of the similarities between the scope and the purposes of the two provisions, the Working Group believed that, like violations of the copyright notice prohibitions, violations of the copyright management information provisions should likewise be considered to be [criminal acts].
IV. RESPONSE TO SECRETARY LEHMAN FROM JAMES BOYLE

April 19, 1996

The Honorable Bruce Lehman
Assistant Secretary
Department of Commerce
Room 906, Crystal Park, Building 2
2121 Crystal Drive
Arlington, VA 22202

Dear Secretary Lehman:

First let me extend my condolences to you and your colleagues at the Commerce Department on the tragic deaths of Secretary Brown and your other co-workers. I did not have the honour of knowing Secretary Brown personally, but I always had the greatest respect for him, particularly for his commitment to showing that ideals and practicality, business and justice, were not incompatible. He was a pathbreaker in many ways and I think he will be remembered as such. As for the other Commerce Department staff, the moving eulogies carried in the Washington Post left no doubt about their professionalism, dedication[,] and willingness to undertake a risky trip in the course of public service. Clearly they are a loss not merely to their families and to Commerce, but to the nation as a whole.

I am writing to thank you for, and reply to, your response to the law professors' Open Letter. (Hereinafter, the Response.) The Response concentrates on four aspects of the criticisms raised by the Open Letter. 1) That S. 1284 and the White Paper would make reading and browsing documents on the Web a copyright violation. 2) That they would dramatically restrict "fair use." 3) That they would unwisely impose strict liability for copyright violations on [online] service and Internet access providers. 4) That they would impose civil and sometimes criminal liability for tampering with copy-protection schemes, with possible detrimental effects on privacy and on interoperability. The Response is especially welcome because, in the last six months, each of these aspects of the White Paper[ ] and S. 1284 has been subject to extensive and similar criticism from the very groups and organizations that the information superhighway was supposed to benefit

33. See, e.g., Letter from the recently formed "Digital Future Coalition" [at <http://www.epic.org/privacy/copyright/dfcltr.txt>]. The letter says:

While the authors of the White Paper claim that its recommendations, embodied in legislation now pending in both Houses of Congress, constitute only a "minor
tors, libraries, writers, civil liberties groups, computer companies, consumers[,] and [online] providers. If the Open Letter is, as the Response says, "simply wrong" in making these four key criticisms, then the Response could also correct the remarkably similar "errors" that seem to have been made independently by groups ranging from AT&T to the American Library Association, from the National Writers Union to People for the American Way, and from Electronic Frontier Foundation to the National Education Association. These are, after all, groups who traditionally have strong[,] well-informed[,] but very different perspectives on intellectual property law.

clarification" of current copyright law, the real ramifications of those recommendations are sweeping. . . . Specifically, the DFC believes that the legal regime envisioned in the White Paper, and reflected in S. 1284 and H.R. 2441, is one that could . . . [among other things] invite invasion of the privacy of digital information users (including students and library patrons), and expose [online]/internet service providers to unspecified legal liability, by failing to address the unique circumstances of these new communications media . . . reduce educators' and the public's access to digital information by creating a new "transmission right" which would make electronic communications "distributions" within the meaning of the Copyright Act, and by categorizing even "browsing" as a potentially infringing "reproduction," . . . erode the traditional concepts and practices of "fair use" by failing to reaffirm their importance in the digital environment.


34. See, e.g., Letter from Amdahl Corporation, America Online, Ameritech, AT&T, Bell Atlantic, BellSouth Corporation, Broadcast Productions Group, CompuServe Incorporated, Computer & Communications Industry Association, Commercial Internet eXchange Association, Dun & Bradstreet, Inc., Electronic Messaging Association, Information Technologies Association of America, ManyMedia, MCI Communications Corporation, Multimedia Telecommunications Association, National Retail Federation, Netcom On-Line Communication Services, Inc., Prodigy Services Company, SNET, SBC Communications Inc., Spyglass, Inc., The Internet Company, Pacific Telesis Group, and US WEST to the House Committee on the Judiciary (Feb. 12, 1996) (available at <http://acm.org/usacm/co_copyright_letter.txt>) (expressing concern with the "significant changes" that the White Paper, [H.R. 2441, and S. 1284] make in the copyright law, changes which "expand the exclusive rights granted copyright owners, while placing legal burdens upon information service providers who transmit communications for content providers," and questioning the expansion of "distribution rights to include 'transmit'").
In fact, however, a close reading of the Response shows that it merely repeats the analysis of the White Paper and S. 1284, failing to meet, or even acknowledge the existence of, the profound criticisms that have been made of that analysis. If each of the criticisms made in the Open Letter had been met on its own terms, the claim that they were all "simply wrong" would be surprising — particularly given the number of groups who seem to have fallen under a common delusion — but useful. Sadly, the Response does no such thing. Like the White Paper before it, it presents as well-settled law[] that which is the subject of profound legal dispute, fails to mention controlling precedent, pertinent legislative history, copyright policy[,] and scholarly dissent and uses a few cases that were widely criticised even on their own facts as the template for regulating the information highway as a whole. Even if the cases on which the White Paper and Response rely — most of them decided outside of the context of the Internet — were universally accepted, and all interpreted as the White Paper interprets them, one might want to think twice before turning them into an unbreakable legislative structure for the most important communications network of the 21st century. Since these cases are described, even by their defenders, as controversial, since at least one of the White Paper’s key claims (on fair use) flies in the face of a Supreme Court ruling to the contrary, and since there is generally no shortage of contrary authority, policy, history[,] and commentary — the claim that the most important portions of the White Paper and S. 1284 are already “settled law” is profoundly misleading. They most certainly are not. More specifically:

• **Browsing as a Copyright Violation:** The “settled law” on which the White Paper and the Response rely comes from a case, the holding of which has been applied only in two circuits and that deals with the very different situation of the loading of software into RAM by a competing repair company. The case ignores clear legislative history to the contrary and has been criticised by all but one of the law review articles that discussed it. To make this case, described as controversial even by its defenders and probably wrong on its own facts, into the legal lynchpin for the property regime of the entire information highway is indeed a “radical” suggestion. It is also something that should not be done without considering the very different policies at stake in the Internet context, and without revealing the profound legal, economic[,] and policy criticisms that have been made of such an approach.
• Does the White Paper Undermine the Concept of Fair Use? The White Paper's picture of the law of fair use is similarly one-sided and inaccurate. The White Paper emphasizes only those cases (and parts of cases) that construe fair use narrowly. Thus it ignores a significant part of the Sony decision, recharacterizes both Sony and Campbell, fails to mention the decompilation decisions, and invents a presumption that copying is presumed to be a violation if a market for licensing the same material either exists or might exist in the future. The White Paper also claims that there is a presumption that commercial uses are unfair. The Supreme Court explicitly rejected this position when it was taken by a circuit court. "Sony itself called for no hard evidentiary presumption. There, we emphasized the need for a 'sensitive balancing of interests,' noted that Congress had 'eschewed a rigid, bright-line approach to fair use,' and stated that the commercial or nonprofit educational character of a work is 'not conclusive,' but rather a fact to be 'weighed along with other[s] in fair use decisions.' The Court of Appeals's [sic] elevation of one sentence from Sony to a per se rule thus runs as much counter to Sony itself as to the long common-law tradition of fair use adjudication."

The combined result of the White Paper's revisionist account is to confine the fair use privilege principally to the cases in which a user would not have needed it in the first place. Throughout its discussion, the White Paper seems to assume that the copyright owner is legally entitled to receive all of the returns that he or she would have received in the absence of the fair use privilege. With this as the benchmark, it is unsurprising to find that, under the White Paper's vision of current law, the potential for present or future licensing produces a presumption against fair use. Unfortunately, not every court agrees with this kind of circular logic. As a recent Court of Appeals case put it, "Evidence of lost permission fees does not bear on market effect. The right to permission fees is precisely what is at issue here. It is circular to argue

37. Id. at 1174.
that a use is unfair, and a fee therefore required, on the basis that the publisher is otherwise deprived of a fee."\(^{38}\)

- **Is the White Paper Merely Restating the Law about [Online] Service Provider Liability?** The White Paper and the Response claim that providers would be directly liable — both for transmitting the works up and downloaded [sic] by their users and for automatically producing copies of those transmitted works. In fact, the only court squarely to address the issue of liability for Internet access providers found otherwise. In that case, dealing with liability for Usenet postings, the court agreed with the lawyers for the service provider; “holding such a server liable would be like holding the owner of the highway, or at least the operator of a toll booth, liable for the criminal activities that occur on its roads.”\(^{39}\) The White Paper and the Response both point out, correctly, that copyright is a strict liability regime. But even if we were to proceed formally, this does not — in and of itself — tell us how and whether to apply the law of direct infringement to [online] service providers. No mechanical parsing of legal concepts can tell us whether an [online] service provider, whose facilities automatically transmit, store[,] and repost, “is” more like a common carrier — as in the case of phone service — more like the lessor of a device that can be used to violate copyright (say a VCR or a photocopy machine)[,] or more like a photo-finishing lab whose facilities are used by third parties to develop infringing photographs. Rather, the tradition of common law adjudication and of copyright in particular, is to have constant recourse to the goals of the system in defining the statutory terms. The *Netcom* court recognized this point specifically, “If Usenet servers were responsible for screening all messages coming through their systems, this could have a serious chilling effect on what some say may turn out to be the best public forum for free speech yet devised.”\(^{40}\)

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40. *Id.* at 1377-78.
Do the new criminal and civil penalties imposed by the legislation pose a threat to privacy, fair use[,] and "decompilation"? The Response is commendable in recognizing the concerns raised about these sections — both those of privacy and those of decompilation. But though the Response does dramatically advance the debate by offering the most far-reaching interpretation of the legislation seen to date, many concerns remain — most of them driven by the vagueness of the regulations in question and the various technological methods that could be used to implement them.

In the full response which follows this cover letter, I have documented each of these assertions, citing chapter and verse — pointing out the controversy over the cases described as "settled law," quoting extensively from the scholarly literature, and from the cases and legislative history that the Response ignores or minimizes. I also provide a broader challenge to the economic and technological assumptions on which the White Paper seems to be based. I apologize for the length of this document, but I wanted to lay to rest — once and for all — the claim that all of the White Paper's proposals are already well-settled law. The price of doing that was quoting page after page of evidence to the contrary. The debate should go forward from here, but let us have no more of the rote cry that the White Paper makes no recommendations of changes in the law.

How should the debate continue? More broadly, the Open Letter pointed out that S. 1284 and the White Paper propose legal changes with major implications for free speech, privacy, education, competitiveness[,] and research. Our letter argued that 1) information policy should not be developed solely in the language of the copyright expert, [and] that 2) [t]he Net is currently flourishing and does not require emergency intervention. Thus we encouraged the sponsors of the legislation to slow the process down and open it up. We need additional time, reflection, and debate in the context of a more open — and open-minded — process.

The Response claims no further debate is necessary because there has already been an open process where all views were taken into account, and all interests balanced. I would suggest that the articles, testimony[,] and analysis cited in the subsequent portion of this letter indicate otherwise. As the citations show, most of the objections in the Open Letter were made, forcefully, in the hearings on the White and Green Papers, in print, in newspaper articles, law reviews[,] and in the computing literature. In a number of cases those objections and criticisms were made by the signatories of this letter, signatories who did,
contrary to the suggestion made by the Response, take the opportunity to testify and to comment in the press. Despite the vigour with which those objections were presented, and the impressive weight of case-law, legislative history[,] and policy analysis offered in support, hardly any of the substantive criticisms made its way into the White Paper. Indeed, after the publication of the Green Paper this failing was pointed out a number of times, sometimes quite indignantly. Yet the White Paper and, most recently, the Response continue to ignore these critiques, as perhaps they must if they are to continue with the claim that this is all already well-settled and accepted.

It may be that each of the objections we raise in the Open Letter can be challenged, discussed on its own grounds[,] and defeated; that cannot happen while the strategy of the proponents of this legislation is to deny that the other side of the argument exists and that all who believe otherwise are suffering from a strange, though apparently highly contagious, delusion. Such a rhetorical strategy is also unlikely to produce the best possible legislation. Thus, I would encourage the Commerce Department to admit that its proposals as well as its account of existing law, are controversial — that many of the groups who would be most directly affected disagree with both the proposals and the “description” of the law — and then to defend its proposals on their own merits. This has not yet happened, but there is still time. Thanks again for your Response.

Yours sincerely,

James Boyle

Attachment: Detailed Discussion
cc: Vice-President Gore, Senators Leahy [and] Hatch, Representatives Moorhead and Schroeder, Secretary Kantor.
A. Detailed Discussion

1. Browsing as a Copyright Violation:

Summary: The "settled law" on which the White Paper and the Response rely comes from one case that has been applied only in two circuits and that deals with the very different situation of the loading of software into RAM by a competing repair company. The case ignores clear legislative history to the contrary and has been criticised by all but one of the law review articles that discussed it. To make this case, described as controversial even by its defenders and probably wrong on its own facts, into the legal lynchpin for the property regime of the entire information highway is indeed a "radical" suggestion. It is also something that should not be done without considering the very different policies at stake in Internet context, and without revealing the profound legal, economic[,] and policy criticisms that have been made of such an approach.

The first point of controversy is the Open Letter’s claim that, under the regime proposed by the White Paper and the legislation, reading a document on the screen of your Web browser could be a copyright violation. This is a surprising argument because copyright law requires that copies be "fixed," which is clearly a problem for the evanescent images on a browser. How does the White Paper get around this requirement? In a recent debate with Representative Moorhead, the Chair of the House Judiciary Subcommittee, I described its theory thus:

Take the white paper’s surprising assertion that, under current law, one copies a document simply by reading it on a computer screen. The argument is that the computer has to load the document into its random-access memory before displaying it. This copy disappears the moment one goes to the next screen or turns off the computer, but the white paper contends that no use is too small to pay for. Thus, browsing becomes a copyright violation and the information superhighway

41. In preparing this analysis, I received invaluable help from Professor Pamela Samuelson, Professor Peter Jaszi, and Peter Choy. I would particularly like to acknowledge the assistance of Professor Jessica Litman who gave advice at every stage. None of those thanked are to be held responsible for my ultimate analysis: errors are mine.
turns into an information toll road. Tell those third graders to have their credit cards ready. Some courts have taken this position, but it has been widely criticized. Would Congress really want to give copyright-holders exclusive control over reading and viewing? In fact, Congress’ own legislative report on the current copyright statute gave as an example of a non-infringing reproduction the temporary display of images on a screen.42

The Response, as I understand it, argues that: 1) The reading itself isn’t the copyright violation, just doing the thing which is an absolute precondition to reading.43 That argument seems sufficiently weak to move on without comment to the second and third arguments; 2) That many documents are not covered by copyright (true) and many copyright owners won’t choose to enforce the rights the legislation gives them, so its effects won’t be as bad as the professor[s’] letter suggests. This seems to beg the question of why the change in rules is necessary in the first place. Indeed, if the goal is to fill the Net with content, the suggestion that the Net will be fairly full even without the enforcement of existing copyright hardly suggests that a dramatic extension of rights is necessary. Also, one can’t help but be concerned by any large-scale extension of rights whose proponents justify it by hoping that the rights won’t be widely utilised; 3) Most importantly of all, the Response argues that the White Paper’s proposed regime is not a change in the law, let alone one with radical implications, but settled law already. (Even if this were true, of course, it would not establish that such a rule is a good thing — indeed the very existence of the NII Task Force indicates a feeling that we should not take it for granted that the existing law is always desirable. Nevertheless, it is on this positivist ground that the Response stakes its case.) What is the authority for the claim of “settled law”? The answer, both in the White Paper and in the Response, is the case of MAI v. Peak,44 and the cases which have applied its test. What does the case say? I will quote from a recent law review article:

On April 9, 1993, the Court of Appeals for the Ninth Circuit in MAI Systems Corp. v. Peak Computer Inc. notably held that loading software into a computer’s

42. James Boyle, Is Congress Turning the Internet into an Information Toll Road?, INSIGHT, Jan. 15, 1996, at 24.
43. In fact, under the White Paper’s scheme one could copy without reading, but one could not read without copying.
44. MAI Systems Corp. v. Peak Computer, Inc., 991 F.2d 511 (9th Cir. 1993).
random access memory ("RAM") creates a copy under section 101 of the Copyright Act. Although the court acknowledged that it had no "specific" authority for this proposition and that those authorities cited were "somewhat troubling," the court took its conclusion to be "generally accepted." ... Peak vigorously insisted that loading of the copyrighted software into RAM does not create a copy that is fixed. However, the court found "no specific facts" which demonstrate that the copy created in the RAM is not fixed. Although it located "no case specifically holding that the copying of software into RAM creates a 'copy' under the Copyright Act," the court held that it is "generally accepted" that loading software into RAM creates a copy under the Copyright Act. The court cited as its authority *Vault Corp. v. Quaid Software Ltd.*, Nimmer on Copyright and the CONTU report, but distinctly acknowledged that these sources "do not specify that a copy is created regardless of whether the software is loaded into the RAM, the hard disk or the read only memory ('ROM')." Nonetheless, the court held that, because the copy created in RAM can be "perceived, reproduced or otherwise communicated," the loading of software into RAM creates a "copy" under section 101 of the Copyright Act.45

What does MAI mean for copyright on the NII?

- The first question is whether MAI is actually a good, uncontroversial interpretation of the copyright law even on its own facts — whether it is binding law outside of the 2 circuits in which it has been adopted, and whether it is likely to survive as a precedent.
- A second question is whether this decision should be applied beyond the realm of software, to other digital products that might be loaded into RAM, and displayed on a screen, for example a page of text.
- A third question is whether it should become the primary legal method of regulating the Internet — making this

widely criticised opinion about software error logs, in effect, one of the landmark cases of the information society.

- A fourth question is whether we should do so without an empirical, ethical[,] and constitutional discussion of the effects of such an action.

For the White Paper and S. 1284 to be correct, each of these questions [has] to be answered in the affirmative. Inexplicably, the White Paper and the Response do not answer, or even ask, any of them.

More disturbingly still, the Response and the White Paper still do not mention the controversy over the MAI decision, the apparently inconsistent policy, precedent[,] and legislative history, or the overwhelming criticism made by scholars and commentators. These have been repeatedly pointed out — in the Comments[46] and Hearings[47] on the Green Paper, in law review articles,[48] newspaper and magazine articles,[49] articles in the computing literature,[50] by librarians,[51] civil


It seems to us that this approach incorrectly arrives at a formal result based on a technical description of current computer technology, rather than on the underlying policies of the Copyright Act. The question should not be whether a particular function of a computer can be construed as the making of a fixed copy. It should be whether, as a matter of policy, we want people who wish to use their computers in a certain way to have to obtain the permission of a copyright owner or to pay a statutory royalty in order to do so. Given the economics of the Internet and the desire to provide for the maximum production, distribution and use of creative works at reasonable cost, does it make sense to define looking at a work on an Internet host as an act that requires the permission of the owner of the copyright in the work?


48. See articles cited infra Appendix, Part III.A.1. See also Ginsburg, supra note 12, at 1476 [Defending the White Paper's embrace of MAI but pointing out that this approach has been questioned or even strongly criticized]; Litman, supra, note 12.


51. See Evan St. Lifer & Michael Rogers, NII White Paper Has Librarians Concerned About Copyright, LIBR. J., Oct. 1, 1995, at 12. Mary Brandt Jensen was particularly clear in pointing out the problems with the Green Paper's reading of MAI. "Although the MAI case does support the proposition that loading a copy into RAM may be sufficient fixation, in some cases, to support a finding that a copy has been made, I don't think it supports the claim that I believe the Draft Report is making. Nor is the MAI case necessarily a correct
libertarians, educators, lawyers for computer companies, by groups of
law professors such as the authors of the Open Letter[,] and even on
television. Those critics have said, in sum, that we should not base the
legal regime of the information highway on a doctrine enunciated only
in the context of copying of software, which is contrary to legislative
history and copyright policy, widely criticised by commentators[,] and
deeply controversial even on its own facts. Yet nowhere in the White
Paper, or in the Response[,] does one find a mention of the substance or
even the existence of these criticisms. If you believe your position
would triumph in an open debate, surely it is incumbent on you to admit
that the other side of the debate exists and to discuss the arguments that
have been made for it?

Instead, the Response’s strategy — like that of the White Paper —
is simple denial. Thus, for example, the Response claims that “most of
the comments in the Open Letter are simply not true,” and “it is well
established under existing U.S. law that placing copyrighted material into
a computer’s memory is a reproduction of that material[,]” and so on. I
would contrast this strategy of denial with the commendable frankness
of the only law review article I could find defending the position that the
MAI case 1) Is correctly decided and 2) Should be extended to cover all
digital transmissions. The author, Professor Jane Ginsburg, agrees with
the White Paper that a [RAM-copy-based] regime would help “put cars
on the information highway.” She argues for such a regime with
commendable vigour and great skill. She is careful, however, to note
that this position has been “questioned or even strongly criticized” by
commentators and [] then to cite and discuss some of the applicable
criticisms, including the apparent inconsistency with legislative history.52
Surely this approach is more consistent with the job that the task force

interpretation of the law. It appears that the Draft Report is stating that any loading of
information into RAM is sufficiently fixed to support a finding that a copy has been made.
Such an interpretation is contrary to the actual language of section 101 which says that
fixation requires stability of more than transitory duration. Storage in RAM is transitory
and decidedly not stable. This is especially true of the time that E-mail spends in the RAM
of various intermediary computers as it travels across the nets. The time that many E-mail
messages spend in the RAM is probably less than the time that television images remain on
a cathode ray tube. The draft Report recognizes that television images displayed on a tube
are not fixed, and it should also recognize that [E-] mail is not necessarily any more fixed
than television images. RAM storage can be precisely the type of transitory duration that
the drafters had in mind when they added that language to the definition.” Comments of
Professor Mary Brandt Jensen, Director of Law Library Operations and Professor of Law,
University of South Dakota School of Law, on the Green Paper, Intellectual Property and
the National Information Infrastructure, Preliminary Draft of the Report of the Working
52. Ginsburg, supra note 12 at 1476 n.39.
was given — particularly in that portion which is supposed to be an objective statement of the law?

Is MAI well-settled, uncontroversial law even as applied to its ostensible subject — the loading into RAM of software programs by repair engineers from a competing company?

I was able to find 12 law review articles discussing the case at any length. Ten of them criticised it, one was clearly skeptical, and Professor Ginsburg’s defended it. Here is a rough sampling:

The MAI Systems court reached a flawed decision lacking any cogent rationale or supporting public policy. . . . The MAI Systems decision conflicts with federal copyright law and its underlying principles in four respects. First, the court disregarded the applicability of section 117. Second, the use of MAI’s computer software in performing computer repairs falls within the fair use exemption of the Copyright Act. Third, the decision fails to construe the Copyright Act as a whole. Finally, the decision improperly extends the limited monopoly granted to copyright holders, thus constituting copyright misuse.53

The finding of copyright infringement in MAI Systems should be reversed. The decision extends software developers’ exclusive rights at the expense of software users who have legitimate reasons for using the computer and the software. The Ninth Circuit’s ruling permits software vendors to use copyright interests in their programs to control who uses the machine and in what capacity. In executable software cases, such as MAI Systems, in which copying must occur for the computer to function, the unauthorized user should not be liable for copyright infringement unless an analysis of the purpose of the copying and the effect of use shows clear interference with the copyright owner’s interests.54


This holding is questionable on four grounds: First, the court is unpersuasive when citing support for its decision that the loading of operating system software into RAM creates a copy for copyright purposes; second, the court dismisses section 117 as a possible justification for the copy; third, the court never considers the Doctrine of Fair Use as a possible justification for the copy; and finally, the impact of the court’s decision on the third party maintenance market may bring the decision within the realm of an antitrust violation.\footnote{Katrine Levin, \textit{MAI v. Peak: Should Loading Operating System Software into RAM Constitute Copyright Infringement}, 24 \textit{Golden Gate U. L. Rev.} 649, 668 (1994).}

Other commentators felt that the decision was weak both in its legislative history and its fidelity to Congressional intent and statutory policy.

One curious thing about the holding in MAI v. Peak, is that it appears to conflict with statements in the House Report that accompanied the 1976 Copyright Act. The House Report notes that “the definition of ‘fixation’ would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen . . . or captured momentarily in the ‘memory’ of a computer.”\footnote{Russ VerSteeg, \textit{Jurimetric Copyright: Future Shock for the Visual Arts}, 13 \textit{Cardozo Arts \\& Ent. L.J.} 125, 132 (1994) (quoting H.R. Rep. No. 94-1476, at 53(1976)).}

The MAI Systems case demonstrates how a series of legal determinations, each somewhat defensible as a mechanical application of statutory language and case law precedent, can yield a result that is plainly at odds with the policies behind the statutes it seeks to apply. The MAI Systems court erred both in holding that loading a program onto RAM constitutes a “copy” and in excluding Peak Computer’s customers from the scope of 17 U.S.C. section 117, which stipulates that certain uses of copyrighted computer programs by the owners of copies of those programs or those authorized by such owners are deemed not to be copyright infringements. It is the combination of these two determinations, however, that so distorts the vision not only
of the Computer Software Act of 1980, but of the
Copyright Act as a whole. 57

The Abstract of an excellent article in the High Technology Law Review also gives some sense of the problems that MAI raises in terms of competition policy and trade secret law as well as its basically mistaken premise about the goal of the copyright structure as a whole.

The author argues that [MAI] has unnecessarily extended copyright protection, ignoring the statutory purpose of copyright. . . . The Copyright Act grants copyright owners limited rights to make and distribute copies of their works in order to encourage the creation and dissemination of new works. After MAI, simply turning on a computer and loading the operating software creates an infringing "copy" if not authorized. The author argues that the Copyright Act was not designed to generate a revenue stream based on use, but on the dissemination of permanent copies. In MAI, copyright law is used to restrict access to a work, rather than promote dissemination. MAI effectively grants federal trade secret protection to copyright holders who license software subject to agreements which prohibit use by unauthorized parties such as competing computer maintenance organizations. If versions of the software in RAM are defined as copies, equating use with copying grants the copyright holder trade secret type protection by federalizing what might otherwise be a contractual matter of confidentiality. Since this protection is accomplished through copyright, the plaintiff is provided a federal forum and the defendant does not have the benefit of trade secret defenses such as public disclosure. Nicholson argues that information in RAM is not "fixed" as required by the Copyright Act because it is not permanent. Unlike information in Read Only Memory (ROM) or magnetic storage, information in RAM is volatile; it is constantly rewritten while the computer is being used and cannot survive the loss of power to the computer. Even if information in RAM can be considered a copy, it is not a harmful copy and should not be deemed infringing.

The copy cannot be disseminated without being transferred to a more permanent and infringing type of medium. When it is impossible to use a program without copying it, as in the case of software loaded into RAM, copyright protection should not reach that operation.\textsuperscript{58}

As for the general idea that loading something into RAM constitutes a copy, there is — to say the least — substantial dissent from it, both inside and outside of law reviews.

Proponents of the view that RAM copies infringe copyrights argue that as long as the machine is on — and it can be on indefinitely — a copy of the copyrighted work stored there can be perceived or reproduced, thereby satisfying the "more than transitory duration" standard. (By this logic, holding a mirror up to a book would be infringement because the book's image could be perceived there for more than a transitory duration, i.e., however long one has the patience to hold the mirror.)\textsuperscript{59}

There are a number of other excellent critical articles,\textsuperscript{60} but I think this should suffice.

Are there sources — other than MAI and its progeny — which indicate it is now the law that to load anything into RAM, is to copy it?

Quite the contrary. In fact, the legislative history of the 1976 Act says exactly the reverse. I will set the claims of the White Paper and the Response beside the actual legislative history and readers can judge for themselves. The White Paper makes the following remarkable claim.

The 1976 Copyright Act, its legislative history, the CONTU Final Report, and repeated holdings by courts


\textsuperscript{59} Samuelson, supra note 49, at 21,

make it clear that in each of the instances set out below, one or more copies is made.... When a work is placed into a computer, whether on a disk, diskette, ROM, or other storage device or in RAM for more than a very brief period, a copy is made.\textsuperscript{61}

Let us start with the 1976 Act. Well, here is what the House Report that accompanied the 1976 Act \textit{[says].} The Report addressed the issue directly and came to the opposite conclusion to the one attributed to it by the White Paper. This passage is particularly relevant to the idea that the momentary RAM-based displays occasioned by browsing could be a copyright violation.

\textit{[T]he definition of \textquotedblleft fixation\textquotedblright \ would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the \textquotedblleft memory\textquotedblright \ of a computer.}\textsuperscript{62}

Regrettably, the White Paper chooses to slide by this challenge to its contention that browsing is copyright infringement; after all browsing is exactly the brief \textquotedblleft display of images on a screen, shown electronically on... a cathode ray tube,	extquotedblright \ images which get there by being \textquotedblleft captured momentarily in the memory of a computer.	extquotedblright \ The White Paper simply offers a misleadingly truncated quotation from one of the MAI software cases to the contrary, and uses it to argue that the legislative history must have meant that loading \textit{anything} into RAM for more than \textit{\textquotedblleft seconds or fractions of a second\textquotedblright;} would be an infringement.\textsuperscript{63} Given the last

\begin{footnotesize}
\begin{enumerate}
\item\textsuperscript{61} \textit{WHITE PAPER, supra} note 1, at 65.
\item\textsuperscript{62} \textit{H.R. Rep.} No. 94-1476 at 53 (1976) (emphasis added).
\item\textsuperscript{63} \textit{WHITE PAPER, supra} note 1, at 65 (quoting Advanced Computer Servs. of Michigan, Inc., v. MAI Systems Corp., 845 F. Supp. 356, 363 (E.D. Va. 1994)). The quotation of \textit{Advanced Computer Services} is problematic because the quote is cut short in a particularly misleading way. This error was pointed out in the Green Paper by Professor Mary Brandt Jensen. \textit{[T]he quotation from Advanced Computer Services is cut short too soon. It would be much clearer if it read: See Advanced Computer Services of Michigan Inc. v. MAI Systems Corp., 845 F. Supp. 356, 363 (E.D. Va. 1994)\textit{(})(conclusion that program stored only in RAM is sufficiently fixed is confirmed, not refuted, by argument that it \textit{disappears from RAM the instant the computer is turned off; if power remains on (and the work remains in RAM) for only seconds or fractions of a second, \textit{the resulting RAM representation of the program arguably would be too ephemeral to be considered \textquoteleft fixed\textquoteright\textit{)} but if \textit{the computer, with the program loaded into RAM, is left on for extended periods of time, say months or years... the RAM version of the program is surely not ephemeral or transient... and thus plainly sufficiently fixed to constitute a copy under the\textit{)\textquotedblright\textit{)}}
\end{enumerate}
\end{footnotesize}
phrase, we must conclude that the speediest reading of a document would still constitute "copying"; even Evelyn Wood could not browse without infringement.

Another disturbing feature of this analysis is its impact on "disk-caching." Much of the temporary memory of [a] Web browser is actually on a "disk-cache" — a portion of the hard disk configured by software commands to function like RAM. The disk cache is automatically purged either when the browser is closed, when too much new material is added[,] or at some selected time limit. Even if the White Paper was read so that normal RAM copies were not sufficiently fixed, its language would hold that any disk cache, no matter how temporary, was an infringement. "When a work is placed into a computer, whether on a disk, diskette, ROM, or other storage device or in RAM for more than a very brief period, a copy is made." The "brief period" here refers only to RAM; under its wording disk-caches would always be sufficiently fixed, no matter how temporary. Again, this seems contrary both to copyright policy and legislative history.

Well, if the legislative history of the 1976 Act actually seems to say the opposite of what the White Paper claims, what other authority is there? Both the White Paper and the Response cited the following passage from CONTU:

[T]he application of principles already embodied in the language of the [current] copyright law achieves the desired substantive legal protection for copyrighted works which exist in machine-readable form. The introduction of a work into a computer memory would, consistent with the [current] law, be a reproduction of the work, one of the exclusive rights of the copyright proprietor.65

The puzzling thing about this quotation, used as an endorsement of a RAM copy theory, is that the court itself admitted that this passage from CONTU, as well as the other authorities cited, "do not specify that a copy is created regardless of whether the software is loaded into the

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64. WHITE PAPER, supra note 1, at 65.
65. NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT 40 (1978).
RAM, the hard disk or the read only memory (‘ROM’)." And, as has already been pointed out, the question of whether the copy occurs in RAM or only when saved to [a] hard drive by the user or encoded on a chip is the vital question.

Even if this reading of CONTU had not been challenged by the White Paper’s key authority, and was not directly contradicted by actual legislative history, it is of dubious relevance in the first place.

CONTU took a minimalist approach and did not recommend that Congress enact any revision to its definitions of “fixed” or “copies.”] The drafters of the CONTU report may well have thought that RAM copies “should” be actionable under the law, although certainly no court had yet so held, and may have been unaware of the language on pages 52-53 and 62 of the House Report, but, in any event, no proposal was made to amend the statute accordingly. Since there’s no evidence that any member of Congress read the CONTU Report, much less relied on its descriptions of portions of current law that it was not recommending that Congress amend, it is difficult to argue that Congress implicitly revised the definitions in section 101, with nary a word said by anyone and no change in the statutory language, in order to cause them to conform with some CONTU staffer’s careless misreading of then-current law.

Thus, the entire weight of the White Paper’s argument about RAM copies rests on the MAI case and its progeny, on a case that is deeply questionable even on its own facts, that is law only in two circuits, that contradicts explicit legislative history, that is rejected by the overwhelming majority of commentators, that deals with loading a program, not browsing a document, and that certainly was not intended to form the lynchpin for the regulation of the Internet. Under any definition I can think of, this does not count as “settled law.”

2. Does the White Paper Undermine the Concept of Fair Use?

The White Paper’s picture of the law of fair use is similarly one-sided and inaccurate. The White Paper emphasizes only those cases (and

66. MAI Systems Corp. v. Peak Computer, Inc., 991 F.2d 511, 519 (9th Cir. 1993).
67. E-mail from Professor Jessica Litman to Professor James Boyle (on file with the Harvard Journal of Law and Technology).
parts of cases) that construe fair use narrowly. Thus it ignores a significant part of the Sony decision, recharacterises both Sony and Campbell, fails to mention the decompilation decisions, and invents a presumption that copying is presumed to be a violation if a market for licensing the same material either exists or might exist in the future. The combined result of the White Paper’s revisionist account is to confine the fair use privilege principally to the cases in which a user would not have needed it in the first place. Throughout its discussion, the White Paper seems to assume that the copyright owner is legally entitled to receive all of the returns that he or she would have received in the absence of the fair use privilege. With this as the benchmark, it is unsurprising to find that, under the White Paper’s vision of current law, the potential for present or future licensing produces a presumption against fair use. Unfortunately, not every court agrees with this kind of circular logic. As a recent Court of Appeals case put it: “Evidence of lost permission fees does not bear on market effect. The right to permission fees is precisely what is at issue here. It is circular to argue that a use is unfair, and a fee therefore required, on the basis that the publisher is otherwise deprived of a fee.”

The Open Letter argued that the White Paper would:

Privatize much of the public domain by overturning the current presumption of “fair use” in non-commercial copying. Instead, wherever the same material could instead be licensed by the user, the use would be presumed to be an infringement. Fair use is a crucial part of copyright law, providing as it does the raw material for much of scholarly research, news reporting, and public debate. This provision, coupled with others in the White Paper, has the potential to cut those who cannot afford to “license” information off from the information highway, in dramatic contrast to the Clinton Administration’s expressed commitment to “universal access.”

71. Open Letter, supra Appendix, Part II.
Once again the Response argues that the Open Letter is mistaken because the White Paper “does not recommend any change in fair use doctrine.” I must respectfully disagree. The vision of fair use given in the White Paper is one that publishers dream about — and wake up smiling. It is not “the law.” Once again it ignores contrary authority, reads cases only in the light guaranteed to minimize fair use, and on both a doctrinal and a philosophical level, turns the concept upside down.

First, the White Paper makes the concept of fair use do the work of many of the currently existing limitations on the copyright holder’s rights — limitations that the White Paper would remove. For example, the first sale doctrine and the rights of private performance are stripped from users by the White Paper’s extensions of current law. To the extent that the White Paper offers any consolation, it is to say that users will still enjoy a fair use privilege. Thus fair use becomes even more important than it is now.

Second, having made fair use even more important, the White Paper sharply restricts its scope. It does so by a “destructive reinterpretation” of existing law — changing the burden of proof, changing the definition and the implications of “commercial” uses and “market effect,” and ignoring or misstating controlling Supreme Court precedent and scholarship to the contrary. The White Paper’s foundational strategy is to say that “users are not granted affirmative ‘rights’ under the Copyright Act; rather, copyright owners’ rights are limited by exempting certain uses from liability.”

Having thus made fair use privileges appear to be less fundamental than copyright rights, the White Paper further diminishes its scope by characterising those “limitations” primarily as a device for avoiding the transaction costs of obtaining permission. Not only does this undervalue the other reasons for the fair use doctrine — the promotion of free speech, the value of criticism and parody and so on — it also sets the stage for abandoning fair use altogether because such a doctrine has no role in an environment where licensing is easy. Admittedly, the White Paper declines to take this road for the moment — though it does make much of the fact that the law of fair use is merely judicial and not statutory in origin, and that it is very vague. (And thus doubly ripe for further “reform,” one supposes.) Only once does the White Paper tip its hat to the idea that the fair use privilege might be as fundamental to the soundness of the copyright scheme as author’s rights. It notes, in a footnote, that “[i]t has been argued, however, that the Copyright Act would be unconstitutional if such limitations did not exist, as they reduce First Amendment and other concerns” but this acknowledgment is quickly “balanced” by an opposite point: “Others have

72. WHITE PAPER, supra note 1, at 73 n.227.
73. Id.
argued that fair use is an anachronism with no role to play in the context of the NII."\textsuperscript{34} It is a measure of the White Paper's radicalism that when it adopts the time-honored rhetorical strategy of casting its view of fair use as the moderate middle between two extremes, it has to make one extreme the idea that fair use should be \textit{completely abolished}.

The White Paper's treatment of fair use is particularly one-sided and misleading with reference to the first and fourth factors of the fair use analysis; the commercial or non-commercial nature of the copying and its effect on the potential market for the original work. The White Paper also fails to mention the so-called decompilation decisions,\textsuperscript{75} which present an important guarantee of software interoperability.

\textbf{"Commercial" vs. Non-Commercial Use}

The cases of \textit{Sony} and \textit{Campbell} hold the keys to the Supreme Court's fair use jurisprudence. In \textit{Sony} individual home videotaping of television programmes was held to be fair use. The court laid great stress on the fact that the videotaping did not have a commercial purpose. Some commentators read this as a declaration by the Supreme Court that non-commercial copying is presumptively fair use.\textsuperscript{76} The White Paper does not favour this aspect of the case, however, only the more restrictive one — that \textit{commercial} copying is presumptively \textit{not} fair use.

In the Sony case, the Court announced a "presumption" that helps explain courts' near universal rejection of fair use claims in commercial contexts. It declared that all commercial uses were to be presumed unfair, thus placing a substantial burden on a defendant asserting that a particular commercial use is fair.\textsuperscript{77}

Like many others, I would argue that this is a partial — in both senses of the word — reading of Sony. The White Paper picks only the restrictive side of \textit{Sony}, failing to stress sufficiently the flip side of the equation — namely the court's tendency, whether or not it rises to the level of a legal presumption, to see NON-commercial uses as fair. This

\textsuperscript{34} Id.


\textsuperscript{77} \textit{WHITE PAPER, supra} note 1, at 76.
would obviously be of great importance in the NII context, particularly in those cases that implicate speech and information-access values most strongly. In any event, the argument doesn't need to be carried out at length because in [Campbell] the Supreme Court revisited the issue and rejected the White Paper's position. Discussing the decision of the Court of Appeals, the majority opinion repeatedly rejected this characterization of the law in general and Sony in particular:

The court then inflated the significance of this fact by applying a presumption ostensibly culled from Sony, that "every commercial use of copyrighted material is presumptively . . . unfair." In giving virtually dispositive weight to the commercial nature of the parody, the Court of Appeals erred.78

Sony itself called for no hard evidentiary presumption. There, we emphasized the need for a "sensitive balancing of interests," noted that Congress had "eschewed a rigid, bright-line approach to fair use," and stated that the commercial or nonprofit educational character of a work is "not conclusive," but rather a fact to be "weighed along with other[s] in fair use decisions." The Court of Appeals's [sic] elevation of one sentence from Sony to a per se rule thus runs as much counter to Sony itself as to the long common-law tradition of fair use adjudication.79

Compare this to the language from the White Paper quoted on the previous page. This point was reiterated by commentators, from the daily legal press to the law reviews.

The Court's decision in [Campbell] is significant in that it completely retreats from any prior suggestion by the court that commercial use gives rise to a presumption or has dispositive significance in the fair use analysis.80

Inexplicably, the White Paper fails to mention all of this. It repeats, practically word for word, the "commerciality" presumption against fair use that the Court rejected in [Campbell]. Then it adds the following:

79. Id. at 1174.
The Campbell case made clear that the *Sony* presumption was of greatest applicability in the context of verbatim copying, thus giving greater leeway to commercial but transformative uses.\(^8\)

This is a remarkable misreading of the law. Recall Justice Souter's actual words.

*Sony* itself called for *no* hard evidentiary presumption. \(\ldots\) [T]he commercial or nonprofit educational character of a work is "not conclusive," but rather a fact to be "weighed along with others in fair use decisions." The Court of Appeals's elevation of one sentence from *Sony* to a per se rule thus runs as much counter to *Sony* itself as to the long common-law tradition of fair use adjudication. Rather, as we explained in *Harper & Row*, *Sony* stands for the proposition that the "fact that a publication was commercial as opposed to nonprofit is a separate factor that tends to weigh against a finding of fair use." But that is all, and the fact that even the force of that tendency will vary with the context is a further reason against elevating commerciality to hard presumptive significance.\(^8\)

I think that a reasonable person would admit that the White Paper has significantly misstated the law on this issue. If this misstatement is given credence by the courts, and is coupled to the White Paper's preference for strict liability for innocent infringement by [online] service providers, it would have the effect of significantly reducing the public domain, chilling users with fair use privileges from the exercise of those privilege[s], and giving service providers every reason to err on the side of over-protection in the policing of their customers.

**The Effect of Copying on the Market for the Original Work**

Courts have repeatedly identified this as the most significant of the four factors. It is important to recall that it weighs against a defendant not only when a current market exists for a particular use, but also when a potential market could be exploited by the copyright

\(^8\) *White Paper*, *supra* note 1, at 76-77.

\(^8\) *Campbell*, 510 U.S. at 584-85 (emphasis added).
owner. Harm in either market will, in most instances, render a use unfair. 83

As I pointed out earlier, throughout its discussion, the White Paper seems to assume that the copyright owner is legally entitled to receive all of the returns that he or she would have received in the absence of the fair use privilege. With this as the benchmark, it is unsurprising to find that, under the White Paper's vision of current law, the potential for present or future licensing produces a presumption against fair use. Unfortunately, not every court agrees with this kind of circular logic. As a recent Court of Appeals case put it[,] "[e]vidence of lost permission fees does not bear on market effect. The right to permission fees is precisely what is at issue here. It is circular to argue that a use is unfair, and a fee therefore required, on the basis that the publisher is otherwise deprived of a fee." 84

By taking this licensing-centered view of fair use, the White Paper tilts strongly towards copyright owners. In order to reach this cramped vision of fair use, the White Paper concentrates only on the most expansive fair use decisions such as Texaco. 85 Cases that conflict with this interpretation are recharacterised or dismissed. For example, according to the White Paper, the Sony case was decided in favour of viewers only because there was no present and — one must assume — future market for home-taping licenses. Again, I must respectfully say that I think a reasonable reader of the case would find this a strange interpretation of the decision. The recent Court of Appeals decision in Princeton v. Michigan Document Services shows the extent of continuing disagreement with this view, both in academia and in the circuits. To put it tersely, there is a split both in the circuits and in academia about the correct way to view fair use. The White Paper takes the extreme positions within one side of that split and calls them the law, ignoring Supreme Court precedent to the contrary. In the face of all of this, it is hardly a compensation that S. 1284/H.R. 2441 take the commendable step of providing better access to works for the visually impaired.

The Response also replies briefly to our expressed concern that the combined effect of the changes proposed by the White Paper would be to privatize the public domain and cut poorer users off from the information highway. The preceding discussion has shown how far the public domain would be narrowed, directly and indirectly. To the

83. White Paper, supra note 1, at 79.
second point, the White Paper argues that self-interest will lead to rational pricing.

While some copyright owners may wish to make available portions, or even entire works, for promotional purposes, many will wish to obtain payment for the use made. In practice, the marketplace will demand that charges be reasonable from the consumer's standpoint. If the charge is too high, consumers will decline the opportunity to copy or view the work, and the copyright owner will neither recover its investment nor earn a profit.[86]

Naturally, the signatories of the Open Letter believe that copyright holders should be able to extract payment for their works, using the extensive rights that copyright law already gives them. But the question here is whether the copyright owners have, or need to have the dramatically expanded rights offered by the White Paper and its accompanying legislation. The argument that the market will chasten the extraction of monopoly rents from those rights, is no answer to the question of whether the rights need to be given in the first place. This is a basic economic fallacy. Markets result from the initial distribution of rights. To pick an extreme example not suggested by the White Paper; imagine we were considering a proposal that the first person to discover some piece of news should have an intellectual property right in that fact, such that he or she could then charge for access. True, "if the charge [were] too high, consumers [would] decline the opportunity to copy or view the work" but that of course does not tell us a.) whether the right should have been granted in the first place or b.) what the distributional effects will be on poorer users — for example, schoolchildren, who are heavy users of the fair use rights the White Paper would curtail.

3. Imposition of Strict Liability for Copyright Infringement on Online Service Providers

The White Paper and the Response claim that providers would be directly liable — both for transmitting the works up and downloaded by their users and for automatically producing copies of those transmitted works. The only court squarely to address the issue of liability for Internet access providers found otherwise. In that case, dealing with liability for Usenet postings, the court agreed with the lawyers for the

86. Response to Law Professors' Open Letter, supra Appendix, Part III.A.
service provider; "holding such a server liable would be like holding the owner of the highway, or at least the operator of a toll booth, liable for the criminal activities that occur on its roads."\[87\]

The Open Letter argued that the White Paper would make [online] providers strictly liable for violations of copyright by those who use their services, making it necessary for them to monitor what their users are doing, with obvious negative effects on privacy and on affordable access to [online] services. The signatories of the [Open Letter] were particularly concerned that this kind of liability would tend to "chill" speech, by encouraging [online] service providers to adopt restrictive policies and to cut down exactly the kind of debate that the Net should facilitate. For example, an [online] service provider[] faced with the threat of strict liability would have every incentive to adopt an extremely restrictive interpretation of fair use — whatever their users' actual privileges under that doctrine might be. (Obviously, the White Paper's interpretation of fair use would only intensify this undesirable tendency.)

The Response claims, for the third time, that this criticism is incorrect, because the White Paper is merely applying the existing law.

The truth is that neither the White Paper nor the pending legislation would alter the standard of liability for copyright infringement. [Online] service providers are subject to the same standard of liability as anyone else who transmits a copyrighted work in violation of the copyright owner's exclusive rights. Under existing law, an [online] service can be held directly liable for its own acts of infringement. Such a service could also be found vicariously liable if there is sufficient connection between the [online] service provider and the direct infringer or to have engaged in contributory infringement if the [online] service provider knew of the infringing activity and materially participated in the infringing activity. This is well-established law, not a change made by the White Paper.[88]

But again, this last sentence is incorrect; at least as to the subject in issue, the liability for direct infringement of Internet access providers.[89] The White Paper claimed that the providers would be both directly liable

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88. Response to Law Professors' Open Letter, supra Appendix, Part III.A.
89. Obviously as to the vicarious liability and contributory infringement grounds, no strict liability exists.
— for transmitting the works up and downloaded by their users and for automatically producing copies of those transmitted works. The only court squarely to address the issue of liability for Internet access providers found otherwise. In that case, dealing with liability for Usenet postings, the court agreed with the lawyers for the service provider; “holding such a server liable would be like holding the owner of the highway, or at least the operator of a toll booth, liable for the criminal activities that occur on its roads.”

The court was quite specific in its reasoning. “If Usenet servers were responsible for screening all messages coming through their systems, this could have a serious chilling effect on what some say may turn out to be the best public forum for free speech yet devised.”

The White Paper and the Response both point out, correctly, that copyright is a strict liability regime. But even if we were to proceed formally, this does not — in and of itself — tell us how and whether to apply the law of direct infringement to [online] service providers. As was pointed out in the Netcom case, a telephone company is not liable for direct infringement when an infringing fax is transmitted over its lines. No mechanical parsing of legal concepts can tell us whether an [online] service provider, whose facilities automatically transmit, store[,] and repost, “is” more like a common carrier — as in the case of phone service — more like the lessor of a device that can be used to violate copyright (say a VCR or a photocopy machine)[,] or more like a photo-finishing lab whose facilities are used by third parties to develop infringing photographs. Rather, the tradition of common law adjudication and of copyright in particular, is to have constant recourse to the goals of the system in defining the statutory terms. Given the ultimate goal of copyright — which is not to ensure the maximum possible return for creators, but to promote the free exchange of ideas and the progress of art and science — how should we define direct infringement in this case? The Netcom court’s answer, given some time before the Response, but not mentioned by it, was to reject the White Paper’s analysis, and instead to define direct infringement so that it did not interfere with the crucial First Amendment “distribution” function.

91. Id. at 1377-78.
92. See id. at 1367 n.10. The Netcom decision made a point of referring to the method adopted in Cubby v. Compuserve, 776 F. Supp. 135 (S.D.N.Y. 1991). In Cubby, an electronic libel case, the court held that, when fitting bulletin boards into the print-based categories of libel analysis, it was important not to impose a scheme of liability which threatened to impair their free speech function. In other words, the traditional categories were to be defined and applied with one eye firmly on the importance of free speech and the chilling effects of overly harsh liability. The White Paper retreats into formalism when discussing Cubby, treating it as irrelevant because it is a libel case — one of the “other areas
The court hardly left the plaintiffs with nothing—Netcom could still be liable for contributory or vicarious infringement and the original copyright infringer is still liable under the direct infringement standard. The Court laid particular stress on the fact that the dynamic distributed architecture of the Net makes it extremely hard to track down and eradicate illicit copies, and that copying is, in fact, necessary for the communication network to function at all.

Where the infringing subscriber is clearly directly liable for the same act, it does not make sense to adopt a rule that could lead to the liability of countless parties whose role in the infringement is nothing more than setting up and operating a system that is necessary for the functioning of the Internet. Such a result is unnecessary as there is already a party directly liable for causing the copies to be made. Plaintiffs occasionally claim that they only seek to hold liable a party that refuses to delete infringing files after they have been warned. However, such liability cannot be based on a theory of direct infringement, where knowledge is irrelevant. The court does not find workable a theory of infringement that would hold the entire Internet liable for activities that cannot reasonably be deterred.93

The Netcom opinion is not the end of the story, of course. To argue that it settles the issue—particularly in light of the cases that considered bulletin board, but not Internet access, liability—would be as silly and one-sided as the White Paper's claims about the MAI case[] settling the RAM copy issue in the Internet context. Even if Netcom were to be accepted by the Supreme Court or taken as a legislative guide by the Congress, there would still be questions about whether different schemes of liability will obtain for reproduction, transmission[,] or distribution and/or for different types of online services—for example, bulletin boards versus Internet access providers, structured [online] services versus passive providers and so on. What Netcom does show, however, is that strict liability for Internet access providers is very far from settled

of the law" in which bulletin board operators face a knowledge-based standard. WHITE PAPER, supra note 1, at 115, n.371. In fact, both the constitutional norm and the interpretive method are particularly relevant to the copyright area; the First Amendment's writ runs beyond libel law, and if a purposive method is necessary anywhere it is necessary in copyright, with its explicitly functional Constitutional basis.

law, and that there are compelling reasons to believe that both courts and the Congress should not impose such liability. It is the White Paper’s failure to recognize those reasons (and the Response’s failure to recognize the lower court opinion in Netcom) that makes the two documents one-sided and their cry of “settled law, settled law” so misleading.

4. Liability for Tampering with Copy Protection Schemes and Copyright Management Information

The Response is commendable in recognizing the concerns raised about these sections — both those of privacy and those of decompilation. The Response’s comments on the latter point are particularly welcome because the White Paper had failed even to mention the existence of the significant fair use/decompilation decisions, whereas the Response classifies decompilation as a legitimate and indeed privileged use. But though the Response does dramatically advance the debate by offering the most far-reaching interpretation of the legislation seen to date, many concerns remain — most of them driven by the vagueness of the regulations in question and the various technological methods that could be used to implement them.

The Open Letter argued that S. 1284/H.R. 2441 would impose new kinds of civil and, in some cases, criminal liability — civil liability for tampering with copyright protection schemes and criminal liability for the alteration of copyright management information. The Open Letter argued that the former provision could have particularly negative effects because it might defeat the legitimate interests of those who were seeking merely to protect their own privacy, for example by seeking to withhold their identity from an electronic “caller I.D. system.” The Open Letter also argued that the copyright protection provision might “also allow software companies to circumvent the current law on decompilation; by locking up their programs they could deny other companies the right they hold under current law to ‘decompile’ those programs so as to achieve ‘interoperability.’” In doing so it would confer an enormous advantage on the current large players, increase the monopolistic tendencies in this market and undermine innovation and competition.”

The Response disagrees. First, it correctly points out that liability is not imposed on anyone who tampers, but rather on manufacturers, distributors, importers[,] and providers of service. The actual [proposed] statutory language reads as follows:
§ 1201. Circumvention of Copyright Protection Systems

No person shall import, manufacture or distribute any device, product, or component incorporated into a device or product, or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent, without the authority of the copyright owner or the law, any process, treatment, mechanism or system which prevents or inhibits the violation of any of the exclusive rights of the copyright owner under section 106.\textsuperscript{94}

In the world of physical machines, the difference between a manufacturer and a user is a large one and thus our use of the shorthand phrase "tamper" might be surprising. In the digital world however, it is vanishingly small. For example, sellers of copyrighted material on the Web may try to use particular software tools to determine the identity of all of their customers, even those using institutional purchase orders or digital cash in order to make their purchases. They would do so partly out of interest of exploiting these identities and addresses, either by using them themselves for promotional mailings, or selling them to other companies. But these software tools could also be legitimately described as "systems" that "inhibit the violation of the exclusive rights of the copyright owner." Imagine that, to preserve my privacy, I create a macro on my Web browser that automatically blanks out my e-mail address when I legitimately purchase copyrighted material on the Web, so that the owner of the material cannot determine my identity. Does the creation of this macro — something that many 12 year-olds, though probably not their parents, could do — count as the "manufacture" of a "device" that could violate section 1201? I would say that it does. If the 12 year-old posts it to a BBS as a freeware utility, or if Netscape includes it as an anonymity and security feature in the next edition of their browser, it seems even more likely that a violation has occurred. Certainly, the person who wishes — for privacy or security reasons — to purchase or acquire such a system will be prevented or inhibited from doing so. In any event, the extraordinary vagueness of the language clearly has the ability to reach far beyond its very legitimate goal, and to inhibit legitimate activities, including some implicating the values of free speech and personal privacy.

The second aspect of the criticism of the 1201 provisions was the potential negative effect on interoperability. The Response is commend-

ably careful to concede the validity of our concerns, and its official statement of support for decompilation is a valuable contribution to debate in this area. However, issues still remain.

[W]e also recognize the concerns of some that section 1201 is incompatible with fair use (including decompilation). This is one of the reasons we chose the "without the authority of the copyright owner or the law" language. If the circumvention device is primarily intended and used for legitimate purposes, such as decompilation, the device would not violate the provision, because a device with such a purpose and effect would fall under the "authorized by law" exemption.[95]

I am grateful for the fact that the Response includes decompilation as a "legitimate purpose[.]" The White Paper, like the Green Paper before it, worried many readers by making no reference to the extremely significant fair use/decompilation decisions, and it is gratifying to have this official endorsement of their holdings and rationale.

But although this apparent change of tack is heartening, it does not completely assuage my concerns and those of the others who signed the letter. May I point out the problems that still remain? First, it seems quite possible that extremely strong "copyright protection" schemes could be developed, for example, schemes which would make the basic code in a system functionally inaccessible, even to the other software developer who is pursuing the legitimate goal of interoperability. What is such a software developer to do? It may not purchase a device to defeat these schemes — because any manufacturer of such a device could be held liable if a court found that a majority of the users of such a product were using it for illegitimate purposes. To require each software developer to spend large amounts of money creating their own "interoperability-cracking" package is colossally inefficient, and would tend to undermine the move towards interoperability.

Second, although the [W]orking Group removed the criminal penalties it had originally placed on manufacturers of copyright protection defeating devices, it retained the criminal penalties for modification of copyright management information and distribution of copies from which copyright management information has been removed.

95. Response to Law Professors' Open Letter, supra Appendix, Part III.A.
§ 1202. Integrity of Copyright Management Information. . . . (b) REMOVAL OR ALTERATION OF COPYRIGHT MANAGEMENT INFORMATION. — No person shall, without authority of the copyright owner or the law, (i) knowingly remove or alter any copyright management information, (ii) knowingly distribute or import for distribution copyright management information that has been altered without authority of the copyright owner or the law, or (iii) knowingly distribute or import for distribution copies or phonorecords from which copyright management information has been removed without authority of the copyright owner or the law. (c) DEFINITION. — As used in this chapter, "copyright management information" means the name and other identifying information of the author of a work, the name and other identifying information of the copyright owner, terms and conditions for uses of the work, and such other information as the Register of Copyrights may prescribe by regulation. 96

The goal of the section again seems laudable. The question, however, is what its effects would be and whether Congress or, for that matter, its drafters, realise the technological power this could put in the hands of current copyright owners — a power that could perhaps be used to defeat entirely legitimate uses. Many readers will imagine that copyright management information would simply be a line of text — for example "James Boyle © 1996" or something of the kind. One might imagine a copyright violator removing the author's name or the line that indicated the software was the copyrighted property of Microsoft and not "freeware." If this were indeed the case, it would be hard to question the rationale of the section.

As the drafters are aware, however, the digital environment permits the embedding of information in a document at a much deeper level so that it appears in every significant fragment of the work; it also permits the embedding of information which automatically changes whenever a copy is made. Thus the distinction between §1201, covering copyright protection devices, and §1202, covering copyright management information, might blur and even disappear. The White Paper itself discusses the use of steganography, popularly known as "digital fingerprinting" or "digital watermarking," to protect documents.

Steganography can embed copyright management information in every fragment of a digital work so that it cannot be disassociated from it. "Digital signatures," allow a different kind of control, one which can actually be used to detect changes made to a document. As the White Paper points out[70,] "[b]y using digital signatures one will be able to identify from whom a particular file originated as well as verify that the contents of that file have not been altered from the contents as originally distributed."[70]

Both of these techniques seem valuable and beneficial ways of tracking copyright violation on the Net. But when they are read in the light of the criminal penalties for the knowing transmission of a document with altered copyright management information, they require — at the least — a little clarification. Will a person using the fair use privilege to quote from a digital document confront an automatic pop-up message which informs him that an excerpt from the document will be detected as an alteration to its checksum, producing a signal that its digital signature is now false? Will a subsequent transmission of the quoted fragment to a friend on the Net violate §1202? (Notice that violation of §1202 is a criminal offense and that the §1201 defenses are unavailable.) Will this device be used by copyright owners to prevent fair use “cut and paste” quotation and thus guarantee themselves a greater flow of licensing fees — assuming that the White Paper’s definition of fair use does not do so in the first place? Will the [online] service providers (particularly if the White Paper has succeeded in making them strictly liable) tend to adopt a rigid and rule-like approach to the subject, refusing to transmit any document with an altered digital signature, thus cutting off fair use by private and mechanical, rather than public and court-enforced means? Will a person who is not otherwise violating copyright law, indeed who is exercising a user’s privilege, but who is informed that this will change the digital signature be criminally liable for knowingly transmitting a document with an altered signature? The answer to all of these questions may be no, but the technology is sufficiently unfamiliar that I, for one, would rather see an amendment that made it clear that this provision could not be used so as to circumvent or frustrate the existing privileges of users.

97. WHITE PAPER, supra note 1, at 187.

98. Indeed, for some of the signatories of the Open Letter, it is the fact that these techniques have not yet been fully explored in cyberspace, that shows the White Paper’s wholesale expansion of intellectual property rights to be unwise. We should experiment with technical and other solutions before engaging in the kinds of dramatic change that sections 1-3 of this reply have discussed.
Conclusion:

1. I would argue that the analysis given here demonstrates that the White Paper is wrong about the law, again and again, and always to the same effect. The direct contravention of controlling Supreme Court precedent in fair use, the minimization of specific legislative history over RAM copies, the turning of widely criticized opinions from two circuits into the legislative framework for the Net, the Response's failure to mention the Netcom case, all of this is troubling. To some extent, it is also beside the point, however; at the very least, this letter, the Open Letter and the scholarly, industry[,] and non-profit sources I quote here show that there is strong disagreement with the White Paper's account of the law, disagreement that comes from the most affected and best informed communities: academia, writers groups, online service providers, civil libertarians, computer companies[,] and teachers. In such a situation, the making of important policy decisions through revisionist accounts of existing doctrine is simply unacceptable as a method. There comes a point where the tactic of dismissing all opposition as based on delusions and unreasonable mistakes ceases to be credible. That point has been reached and passed. The debate should go forward from here, but let us have no more of the claim that the White Paper's recommendations are already "settled law."

2. We should turn instead to the question of what copyright law should be on the Net. The digital environment is unfamiliar and we should not assume that we know exactly what effects the technology will have. It is always easy to imagine the ways that a new technology will defeat old ways of extracting a return on investment in the creation of information products, and artistic works. It is harder to predict the new ways of recovering investment that the technology will allow. A little history is instructive. Fifteen years ago, movie companies were complaining that VCRs would destroy their business. They wanted a tax put on each VCR to compensate them. Luckily for them, Congress and the Supreme Court disagreed. Thanks in part to the availability of cheap, untaxed VCRs, the video business exploded. Video rentals saved Hollywood.

   The Internet makes copying easier but it also makes distribution and access cheaper, so that a smaller initial investment can produce larger returns. Should we raise or lower the level of property protection? Should we raise it in some places and lower it in others? We need to be careful. Any sophisticated information economist will tell you that a

99. The following analysis draws on the article quoted earlier. See James Boyle, Is Congress Turning the Internet into an Information Toll Road?, INSIGHT, Jan. 15, 1996, at 24.
level of intellectual property rights that is too high will stifle innovation just as effectively as a level of intellectual property rights that is too low. Information providers already have lots of ways to protect their investments — existing copyright law, controlled access, encryption. They are inventing new ways every day. Who would have thought that Netscape could become the hottest stock on the market by giving its software away? The point is that the environment is complicated and more inventive than any single person. Right now, it is flourishing both economically and culturally. In this environment, we believe a hasty adoption of S. 1284/H.R. 2441 would be unwise, particularly if the White Paper's account of "current law" is used as legislative history.

We would ask, therefore,

- That Congress not act precipitously in this matter
- That further Hearings be held in which some of the signatories of the Open Letter be allowed to testify, together with other affected groups.
- That far-reaching decisions affecting communications policy, access to information, research education[,] and free speech be made explicitly after careful economic, moral[,] and constitutional scrutiny of their potential effects.
- For my part, I would also suggest that — given the kinds of unanswered criticism I quoted in these pages — it would be helpful if the Working Group was required to respond with specific, reasoned analyses to each of the criticisms made, in the Comments, Hearings[,] and subsequent public debate, of its proposals and its account of current law. This is a familiar process in administrative rulemaking; the rules proposed here are surely important enough to warrant such a procedure.

Thank you for your response to the Open Letter. I hope this reply has clarified things. I will forward a copy of this reply to the sponsors of the legislation, to Secretary Kantor, and Vice-President Gore. Other signatories of the Open Letter may also be writing to you, and to them, independently. With all best wishes.

Yours sincerely,

James Boyle
Professor of Law