

2 The National Information Infrastructure and the Policymaking Process

Who are the users of today's digital technologies? What are their expectations, and how are they effectively cocreated alongside the digital technologies that more and more are ubiquitously mediating culture? In an age where new technologies emerge into the consumer market at a blistering pace, it should strike no one as surprising that consumer expectations are created by the hype and realities of "ease of use," "portability," productivity, and connectivity. In other words, we are often sold gizmos and gadgetry imagined for us but not yet defined by us and our unique uses. So when technologies of this sort come into our possession, they morph into something sometimes unimagined by their designers. They are often broken into, hacked, glitched, or worked around. More and more media corporations and technology makers have come to fear these activities even as they ironically strive to sell technology as something uniquely personal, tailor made for me (or you) alone. Technology companies hope to control appropriations and to limit user control of technologies and content contained therein at the same time that their rhetoric (and, to be fair, some of their design) seeks to convince us that we are at the helm, plotting the course of use. As Tarleton Gillespie (2007) has shown us, designers often effectively "frustrate" certain uses in order to preserve copyright or licensing controls over content. However, the history of technology shows that these efforts have sometimes been met with user resistance and that there is often a degree of plasticity in the ways technologies are adopted and used (Oudshoorn and Pinch 2003).

Laws and lawmakers, for their part, struggle with user forays into agency and appropriation, often ignoring or downplaying legitimate user claims about their right to control the kinds of uses they want to make. In the case of the early days of the digital rights movement in the mid-1990s, the struggle over how to reign in unforeseen consequences of digital technology became centered on Internet policy. Rightly seeing the Web as an

extremely convenient way to distribute content and as the key technology that would connect consumer-owned media (CDs, DVDs, eBooks, etc.) to easily accessible distribution systems that at the time could only be imagined (but that later became Napster, Grokster, torrent technology, etc.), content owners began to fret and lobbied lawmakers for more stringent technolegal protections. And so it came to be that the early battleground for the digital rights movement centered on copyright law, the legal instrument (along with licensing) that has traditionally regulated and protected cultural products conveyed via media (digital or otherwise).

I purposefully focus here on the legislative history of one law affecting copyright in particular, the DMCA, because its deliberations, the debates that are part of the Congressional Record, and its ultimate enactment illustrate the issues that confronted policymakers, content owners, and some consumer representatives. Deliberation for policymakers began with the call to develop guidelines to regulate the National Information Infrastructure (NII), what is now known as the Internet or World Wide Web. The DMCA itself was a result of these deliberations as well as a desire by lawmakers and copyright holders to normalize US copyright statute with emerging global intellectual-property law regimes. Review of these documents illuminates the way legislators eventually came to see the challenges of digital technology for the cultural industries and points out some of the blind spots in those views that eventually both shaped law and spurred activism against it. Subsequent sections address the final recommendation for the DMCA and the relevant sections of the DMCA.

A very short summary of the US copyright statute is prudent first because, as will become apparent, although much of the early activism on digital rights targeted the DMCA, it happened in the shadow of copyright law and its rationale.

A Brief History of Copyright in the United States

The Constitution grants Congress the power “to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries” (Art 1, sec. 8, clause 8; Copyright Clause). In response to this mandate, Congress has developed a series of laws that protect intellectual property in a variety of forms. For example, an individual with a unique idea may choose to patent his or her invention, thus gaining a temporary legal monopoly over the use of that invention as well as a stake in any subsequent inventions derived from the protected work (in the form of royalties and permissions).

Copyright law grants creators of written works the sole right to reproduce and perform their works, and trademark law protects brand marks from reproductions that may undermine the market reputation of that mark's owner.

Congress first codified copyright law in Title 17 of the US Code of Law in 1790. Since its enactment, the copyright statute has gone through four major revisions. The Copyright Act of 1790 applied the Constitution's intellectual-property provisions to copyright. It granted American authors a limited monopoly over their work and gave them the exclusive right to print and reprint their works for fourteen years. At the end of the fourteen-year monopoly, authors had the option to extend their protection for another fourteen years. Thus, per the 1790 Copyright Act, an author had exclusive copyright over his or her work for a total of twenty-eight years.

In 1831, Congress revised the Copyright Act for the first time since its enactment, extending the initial time limitation on exclusive copyrights from fourteen to twenty-eight years, with an option to extend it for an additional fourteen years. As a result, by 1831 authors could hold copyright over their works for a total of forty-two years. With the 1870 revision of the act, Congress shifted the administration of copyright from district courts to the Library of Congress Copyright Office but did not extend the term limits.

Today, the 1909 Copyright Act is considered a major revision of the copyright statute because it expanded the categories of copyrightable material beyond literary works to all works of authorship (Litman 2001). In addition, Congress again extended the copyright term, raising the potential number of years an author could hold copyright to fifty-six years. A copyright holder now had twenty-eight years of protection with the possibility of further extension of the application for an additional twenty-eight years.

The most recent major revision to the copyright statute is the Copyright Act of 1976. In the 215-year history of federal copyright law, the 1976 act is the most expansive revision, enacted in part as a direct response to the emergence of new technologies that could affect a copyright owner's ability to exercise his or her rights. Although the act was revised in 1909 in part to respond to the developments in technology, such as the piano roll and the talking machine, adjusting to technological change was not its primary aim. Rather, it was meant to normalize copyright law, which had become an amalgamation of the various major and minor revisions since 1790 (Litman 2001). In comparison, the 1976 revision extended term limits of copyright to the life of the author plus fifty years and extended the term

limit of works for hire (works owned by someone other than the author) to seventy-five years.¹ The 1976 revision covered a great deal of ground: defining the scope of copyright, codifying the fair-use and first-sale doctrines, defining copyrightable material, and defining remedies against copyright violation. Since the enactment of this revision, the copyright statute has received a host of amendments and expansions, of which the DMCA is but one.

The NII

Shortly after the 1992 elections, the Clinton administration appointed Secretary of Commerce Ronald H. Brown to head the newly convened Information Infrastructure Task Force (IITF) and charged it with formulating telecommunications and information policies that represented the administration's vision of the NII (Litman 2001).² The IITF envisioned the NII as "a seamless web of communications networks, computers, databases, and consumer electronics that will put vast amounts of information at users' fingertips" (Brown 1992). The IITF noted the primacy of businesses in building this communications and consumption infrastructure and, as a result, wanted government to facilitate the work that businesses were doing. To achieve this goal, the IITF's policy recommendations were guided by objectives such as providing tax incentives to business, helping businesses develop technologies, ensuring protection of intellectual-property rights and recognizing the NII's potential for being borderless, and coordinating with other governments for the regulation of a global information infrastructure (Brown 1992).

The IITF organized itself into three committees: "[t]he Telecommunications Policy Committee, which formulated Administration positions on key telecommunications issues; the Committee on Applications and Technology, which coordinated Administration efforts to develop, demonstrate and promote applications of information technologies in key areas; and the Information Policy Committee, which addressed critical information policy issues that must be dealt with if the NII is to be fully deployed and utilized" (Lehman 1994). The Working Group on Intellectual Property Rights (WGIP), chaired by Assistant Secretary of Commerce and Commissioner of Patents and Trademarks Bruce A. Lehman, was a subcommittee of the Information Policy Committee. Its objectives mirrored those of the IITF, and it sought to achieve those objectives by analyzing how copyright might have to change to protect content on the NII. In July 1994, the WGIP released the first draft of its recommendations for amendments to

the US copyright statute based on the technological implications of the NII. The Green Paper (WGIP 1994), as the preliminary report came to be called, was written in the shadow of the copyright statute and directly addressed how content in digital networks and embedded in digital media would be protected.

Prior to the release of the Green Paper, the WGIP convened hearings in Washington, DC, Los Angeles, and Chicago. The hearings were meant to allow interested parties the opportunity to provide suggestions to the WGIP regarding the kind of policy needed to protect copyright on the NII. These testimonies and written comments submitted beforehand informed the Green Paper and give an important sense of how representatives of the cultural industries as well as some consumer representatives saw the challenges of the emerging NII.

The WGIP posed the following questions to respondents in the notice for the hearings:

1. Is the existing copyright law adequate to protect the rights of those who will make their work available via the NII?
2. Do the existing fair-use provisions of copyright law adequately accommodate the interests of the users of the works available via the NII? What statutory or regulatory changes, if any, should be made?
3. Should standards or other requirements be adopted for the labeling or encoding of works available via the NII so that copyright owners and users can identify copyrighted works and the conditions for their use?
4. Should standards be established to encourage or require intercommunications or exchange of information and the interoperability of the different types of computer software and systems supporting or utilizing the NII?
5. Should a licensing system be developed for certain uses of any or all works available via the NII? If so, should there be a single type of licensing, or should the NII support a multiplicity of licensing systems?
6. Are there technical means for preventing unauthorized reproduction or other unauthorized uses of copyrighted works that should be mandated or required to comply with certain standards (similar to the serial-copying controls required in digital audio-recording devices and digital audio-interface devices under the Audio Home Recording Act of 1992)?
7. What types of educational programs might be developed to increase public awareness of intellectual-property laws, their importance to the economy, and their application to works available on the NII? (*Federal Register* 58-[53917])

Imagining the Web: A Clear Vision of an Unknown Future

In response to this call for policy suggestions, eighty-two written comments from seventy-two organizations and individuals were submitted to

the WGIP prior to the hearing, addressing the various questions it had posed.³ Of the written comments submitted for the record, twice as many were from representatives of the software, publishing, motion picture, and music industries as those submitted on behalf of user or consumer interests. Furthermore, whereas organizations such as the Home Recording Rights Coalition and the Electronics Industry Association nominally represented consumers, none represented media users outside of institutional frameworks (such as libraries) or outside of the “consumer” category (such as customers for the VCR industry).

At the hearings, organizations and individuals gave testimony reiterating the position they presented in their written comments. Predominantly present at the hearing were copyright owners. Of the twenty-five or more testimonies at the hearings, only six came from libraries and universities, and only one came from the Electronics Industry Association, representing consumer use of potentially infringing electronics (see table 2.1).

When asked if existing copyright law was adequate for protecting copyrighted material over the NII, content owners overwhelmingly said it was. Fritz Attaway, representing the Motion Picture Association of America (MPAA), noted that “[w]ith relatively modest fine-tuning, including the recognition of performance rights for sound recordings, our existing copyright law is adequate to protect the rights of those who will make their works available via the NII. . . . [I]f existing law is given broad application to protect the rights of copyright owners, few statutory or regulatory changes should be necessary” (in *Comments* 1993).

Copyright owners’ major concern was over how existing definitions of distribution, transmission, and copying would be enforced in the NII. In this regard, Mark Traphagen, representing the Association of Software Publishers, commented that “[c]opyright and other intellectual property rights must be respected regardless of the technological means by which they are presented or disseminated for rights holders to make their works available at all. Therefore, it should be made clear that the exclusive rights provided to copyright owners, as well as other intellectual property rights, must be respected on the NII” (in *Comments* 1993).

Content owners, in affirming the adequacy of the copyright statute for the NII, portrayed fair use in a way that constricted personal uses and proposed that the statute and the courts already agreed with their viewpoint. Libraries and other public institutions, in contrast, argued for the preservation of fair use in terms of archiving and other processes that would ensure their continued operation in the digital domain but did not push the notion that the consumer might have other personal interests or

that the emergence of the NII and digital technology might constitute a reason to expand fair use and give users facilitated access to cultural products. For example, Robert Oakley, the director of the Law Library at Georgetown Law School, understood libraries to be the primary mediators of fair use and argued for the preservation of their exemptions. He noted that “the fundamental purpose of copyright is for the public good [and] to achieve the goal of promoting the public good. . . . [T]he NII should preserve fair use in the library exemptions and allow for a variety of pricing structures” (in *Testimony* 1994).

Some individuals responded to issues concerning potential legal and technological limits to fair use and personal use by suggesting that a licensing scheme, dictated by the market, would be best suited to structure the types of uses that would be legal for purchasers of copyrighted content. For example, Steven Metalitz, speaking for the Information Industry Association, noted,

Marketplace trends have also influenced the development of fair use concepts. In particular, the growing trend toward defining permissible uses of copyrighted material by contract is a positive development for both copyright owners and users of copyrighted material. Technological changes accompanying NII development could reinforce this trend and should therefore be encouraged. . . . In practice . . . we often look to a contract to specify the degree to which (and the circumstances under which) the author will permit another to exercise the exclusive right created by copyright law. Without the ability to license exercise of exclusive rights through contract, a marketplace for digital information products would be severely constrained. (in *Comments* 1993)

This comment confuses the origins of the exclusive rights granted to authors by copyright and the limits of those rights outlined in the statute under the fair-use doctrine. It implies that contracts ought to govern fair use when in fact the copyright statute and court doctrine delineate what is and is not fair use. Metalitz’s view allows content owners to be the arbiters of boundaries of fair use by implementing contract and skirting delineations in the statute and case law. The suggestion that contract ought to dictate the conditions of fair use put individual users at a great disadvantage. The only users in a significant position to bargain for rights of use are large institutional consumers who can act as gateways for large groups of users.

Last, in response to questions about technological measures to enforce copyright industry interests, commenters concurred that technological protection measures would be vital and that laws to protect those measures would be necessary. Metalitz emphasized that it would be “appropriate . . .

Table 2.1
List of Organizations Present at the IITF WGIP Public Hearings at Andrew Mellon Auditorium, Washington, DC, September 1994

Witness	Position	Organization
Steven J. Metalitz	vice president (VP) and general counsel	Information Industry Association
Maria Pallante	executive director	National Writers' Union
Stephen Haynes	manager	West Publishing Company
Lisa Freeman	director and chair	Electronic Caucus Association of American University Presses
Timothy King	VP planning and development	John Wiley Publishers
Robert Oakley	director of law library	numerous library and education associations
Joseph Cosgrove	professor	Department of Political Science, King's College
Dennis Bybee	not listed	International Society for Technology in Education
David Rothman	private individual	none
David Pierce	president	American Association of Colleges
Fritz Attaway	senior VP	MPAA
Bernard Sorkin	VP and general counsel	Time Warner
Hilary Rosen	VP	RIAA
Lawrence Kenswill	VP	MCA Music Entertainment Group
Richard Ducey	VP	National Association of Broadcasters Research and Information Group

Table 2.1
(continued)

Witness	Position	Organization
Benjamin Ivins	general counsel	National Association of Broadcasters Research and Information Group
John Masten	VP	New York Public Library
Gary Griswold	president	Infologic Software
Robert Kahn	president	National Research Initiatives
Brad Cox	not listed	Center Electronics Markets
Ronald Laurie	not listed	Weil Gotshal and Manges
Henry Perritt	assistant law professor	Villanova University
Ronald Palenski	VP	Information Technology Association of America
Mark Traphagen and Irene Rosenthal	not listed	Software Publishers Association
Thomas Lemberg	VP	Lotus Development Corp., on behalf of Business Software Alliance and Alliance to Promote Software Innovation
Brian Kahin and Philip Dodds	not listed	Interactive Multimedia Association
Gary Shapiro	VP	Consumer Electronics Group Electronic Industries Association
Douglas Brotz	not listed	Adobe Systems
Frank Connolly	assistant professor	American University

to consider legal sanctions against the distribution of devices or techniques whose primary use is to defeat or circumvent intellectual property management technology" (in *Comments* 1993).

Review of the proceedings of these hearings suggests that the use of technological protection measures to enforce copyright on the Internet was a foregone conclusion on the part of the WGIP. The fact that the WGIP did not ask whether these measures were desirable but rather wondered whether there ought to be a government mandate for standardization among them is quite telling. Technological enforcement had precedent in the form of the serial-copy controls of the Audio Home Recording Act (AHRA) of 1992. As far as the WGIP was concerned, that mode of enforcement was a legitimate way to curb unwanted uses of copyrighted works.⁴ The WGIP never raised questions regarding the technology's unintended consequences, its long-term effects on fair use and personal uses, and the implications of the adoption of such a technolegal regime for the constitutional intent of intellectual property and, more broadly, democracy. Thus, the blind spots in this policy process lay not only in inadequate reflection on personal noncommercial uses, but in the very questions posed by WGIP.

Industry positions can be summarized succinctly: industry representatives wanted to extend copyright to the NII and asked for no sweeping changes to the statute; they framed fair use as being properly understood in the law and felt it needed no further protections; and they thought that technological measures to protect and enforce copyright (along with laws to supplement them) were necessary. The discussion of fair use on their part gave a reading that was least problematic from their standpoint. They framed their views as a defense against charges of infringement rather than rights and left untreated the arguments that might frame fair use as a right, especially when considered in light of its importance for free speech.

What is analytically important is not so much that industry representatives responded in this fashion, but rather that the prompts from the WGIP didn't ask them to think beyond the constraints of copyright. The prompts, then, served as a kind of template, presupposing the status quo in copyright protection or suggesting its extension. The first prompt, which asked respondents if existing copyright was adequate for protecting copyrighted material over the NII, is a good example. The assumption was implicit that the NII would contain copyrighted material. Of course it would, but the notion that copyright, as it was, needed to be extended to the NII was posed as a given. Furthermore, the idea that the NII (and ultimately the World Wide Web) would be a medium against which copyright law would

necessarily be applied in existing or extended fashion glosses over other possibilities: that maybe the technological realities, the potential user practices, and the benefits to free speech or creativity would require less copyright protection or a different kind of protection on the Web.

To be fair, policymakers did not assume that the Web or digital technologies would turn out to be like any other medium; if that had been their assumption, then the hearings would not have been necessary. Laws would have simply applied easily to the new technological regime of creation and distribution. The working group and policymakers at the time recognized the challenges digital technology would pose, but their approach was conservative. In other words, the first prompt really was asking, “How can we preserve the current level of protection for cultural products?” This critique does not suggest that lawmakers should have had a better vision of what would happen on the Web or to digital technologies with regard to user practices, but rather that the process of thinking about the technology and cultural production as well as the application of law to those things were entrenched in a particular worldview about the overall nature of cultural production—that valuable creative works would come from primarily established cultural industries. When the WGIP’s prompt asked about “those who will make works available via the NII,” the group was thinking of institutional cultural industries.

In the zealous endorsement for extending and expanding copyright to the NII, some important realities that were not part of content control in the analog world but that became important in the digital world were ignored. First, technological realities in media created a gap between the letter of the law and what was technically enforceable. Prior to the emergence of the digital technologies related to the NII, for example, personal noncommercial infringements on copyright owners’ rights that fell outside of what content owners considered fair use were unpreventable. The copyright owner of a song could not prevent a person from making multiple copies of an audiocassette recording and distributing it to as many of her friends as she desired.

For their part, copyright owners relied on the technological inconvenience of copying and distributing analog media to limit the extent of unauthorized personal uses, although always considering unauthorized copying and distribution an infringement that ought to come under control. Consumers have for some time thought differently, with sampling and “mix tapes” being a typical part of some music fans and artists’ experience. Content owners thought copyright needed reworking in the NII, and the fact that digital technology allowed for easy copying and distribution

of content was perceived as a threat. This threat became a rallying call for content owners to close the gap between copyright law and personal uses. The preferred method for closing this gap was the implementation of access and copy-control technology along with anticircumvention laws to keep people from breaking these technological controls. The implementation of these laws and control technology amounted to more than a “minor change.” By creating technological and legal structures that would regulate the breadth of access a consumer may have to digital media, the law would in fact have a significant impact on consumer behavior.

In testimony, the matter of consumer custom and user engagement with media was not thoughtfully considered. When the industry spoke of users, it spoke of them at best as consumers, noting that value in the NII would be generated along the same lines as it had been before: content would be made by the industry, and people would buy it. When Internet and digital media users were explicitly imagined, they often were thought of as pirates or potential pirates who would need to be educated on the rights of authors or to be technologically protected against.

The consequences of technologically protecting against the threat of personal uses and its impact on legal privileges (such as fair use) were not properly considered. Technological protection measures that would close off personal uses would also close off legally defined fair uses because protection technologies have no way of differentiating between fair or infringing access. No one discussed how this unintended consequence would be addressed. The DMCA in its final form included a weak technological solution for this problem, prompting legal scholar Pamela Samuelson (1999) to ask whether Congress intended to give the public hollow privileges over digital content.

The Green Paper and the 1976 Copyright Act

The Green Paper (WGIP 1994), a result of the meetings, testimonies, and comments described earlier, was the WGIP’s first attempt at formulating a policy that would address issues of copyright in the NII as well as international intellectual-property treaty obligations for the United States. As noted earlier, this review of the documents and legislative history shows how policymakers and content owners saw the challenges posed by emerging digital media in the 1990s. The way they saw these challenges (as well as opportunities) colored how they proposed policy change. The Green Paper addressed a number of issues in its recommendations, but for our purposes and for the purposes of understanding what laws first mobilized

digital rights activists, the recommendations for transmission, first sale, fair use, and technology are discussed here.

In its review of the various provisions of the Copyright Act, the WGIP pointed out the effect of emerging information technology on the copyright statute (Lehman 1994).⁵ Based primarily on cultural industry recommendations, the Green Paper set out to preserve copyright protections in the NII; however, because of the technological realities of digital media (explained more fully later in this chapter), that task would require some important redefinition of key terms in the statute to adapt copyright to digital technology. The Green Paper's recommendations can be classified as follows: (1) proposals for law, (2) proposals for technology, and (3) proposals for education.

Proposals for Law: Transmission and Making Copies

In its policy recommendations, the Green Paper first addressed the issue of transmissions of content over the NII because the working group felt the NII's impact on definitions of transmission would be important.

Authors' rights over their works are outlined in section 106 of the US Copyright Act of 1976.⁶ They include the right

- (1) to reproduce the copyrighted work in copies or phonorecords;
- (2) to prepare derivative works based upon the copyrighted work;
- (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;
- (4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly;
- (5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and
- (6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.

Important elements of these "fundamental" rights are the terms *copies* and *phonorecords* as well as their definitions.⁷ *The definitions assume that copies and phonorecords are tangible objects.* Both of these definitions therefore imply that *fixation* of content is a central component of what constitutes a legitimate copy (the generic term *copy* is used to refer to both copies and phonorecords as defined by the Copyright Act). The WGIP thought that the key to preserving authors' rights in the NII would be to maintain the applicability of definitions in the statute. A central concern for why

this definition might be in jeopardy was the possibility that businesses or individuals may distribute copies of content over the NII and that the manner of conveyance might be construed as a “transmission” (a process an author does not necessarily have a right to control) rather than a “distribution” (a process an author does have the right to control). The Green Paper pointed out that a transmission is not a fixation and as such is not protected by the Copyright Act in the same manner as copies unless a copy is simultaneously made.⁸

The WGIP feared that conveyance of content via the NII, because of the manner of conveyance, might be construed as a transmission without fixation, despite the Copyright Act’s legislative history, which more or less inoculates against that interpretation of “transmission.” In such a case, the transmission would not fall under the protection of the Copyright Act.⁹ When the Green Paper contemplated the consequences for the legal notions of transmissions and copies, it framed them with the goal of preventing transmissions via the NII from being considered ephemeral. Beyond wanting transmission classified as a method of distribution, the WGIP also wanted the term *transmission* to encompass all types of content communication via the NII. As such, the WGIP suggested transmission would not only be a form of distribution of copies, but also a form of communicating public performances and displays as well as the making of a copy. This reformulation of transmission is expansive to say the least and stretches the term to its conceptual limits. It would conflate processes in the conveyance of content that had once been clearly distinct.

Proposals for Law: First Sale

Next, the Green Paper addressed the issue of first sale.¹⁰ Noting that if electronic transmissions were viewed as distributions of copies, it indicated that those distributions would be subject to the first-sale doctrine. The Green Paper foresaw a problem if digital content was further distributed—in the same manner that physical books can be resold or donated—by people who had legally purchased that content. This prospect was and continues to be frightening for copyright owners because digital distribution would necessarily make a copy of the work while in the process of conveyance, and there would be no guarantee that the original copy would be deleted after the distribution.¹¹ To address this issue, the Green Paper suggested that in transactions of content via the NII, both the distribution right (right number 3 in the list of rights from section 106 of the 1976 Copyright Act) and the right to make copies are implicated. The Green Paper expanded its definition of distribution of content on the NII to

include not only transmission, but also the making of copies. The WGIP then suggested that the fundamental right would preclude further distribution of digital copies over the NII via the first-sale privilege because such distribution would be a violation of the copyright owner's exclusive right to make copies. By melding the definitions of the terms *distribution*, *transmission*, and *making copies*, the WGIP placed digital content within a hierarchy of rights and privileges in copyright, where the right to make copies afforded to authors by the statute precludes the first-sale privilege.

The WGIP recommended that first sale not be extended to copies of content acquired through distribution by transmission. The Green Paper clearly wanted the copyright statute to treat transmissions as distributions, copying, and/or public performances/displays so that it could grant authors rights to their work. At the same time, in cases where the consumer was ready to benefit from first sale, the WGIP wanted the law to ignore the fact that publishers were indeed *distributing* their goods because that first sale is specifically a limitation on the distribution right. If transmission via the NII were considered solely a distribution, then the consumer would be able to exercise first sale. The WGIP wanted the "fundamental author rights" (the rights to make and distribute copies) to be central in interpreting cases where copies of content were distributed without the copyright owner's consent because this approach would preclude the applicability of the first-sale privilege.

The recommendation for the redefinition of *transmission* would essentially explode its meaning, so that a transmission in legal terms would mean all possible acts for which a content creator has an exclusive right—distribution and the making of copies being the most important. The transmission of copies would be redefined as a type of distribution and therefore be governed by the right to distribute copies when copyright owners were concerned, and any further transmission by consumers exercising the first-sale privilege would be governed by the "fundamental rights." The recommendations regarding first sale, then, created an exemption from first-sale privileges for copies of content acquired through transmission.

The heart of this problem lies beyond semantics. At the core is the NII's effect on legal definitions of transmission, distribution, and the making of copies. What the Green Paper does not overtly mention is that transmission, distribution, and the making of copies are all one in the same in the context of the NII. It implicitly recognizes this view by recommending that the definition of *transmission* be expanded, but this recommendation leaves one with a feeling of unfairness to the consumer. Because the

method of distribution changed, the WGIP expanded legal definitions to stem unwanted circumstances for copyright owners. Yet such an expansive redefinition occurred at the expense of consumer privileges.

The Green Paper lacked analysis in its attempt to rationalize exempting digital copies from first sale. Although it is clear that copyright owners are potentially harmed from the distribution of digital media if original copies remain in the distributing systems, there is no analysis or mention of the market benefits of reselling digital goods. After passage of the DMCA (based on the Green Paper and the revision of it in the final draft, the White Paper [WGIP 1995]), however, Congress mandated that the US Copyright Office evaluate the effects of the DMCA on first sale. In sum, the registrar of copyrights recommended against creating the “digital first-sale” privilege, a decision based primarily on copyright owners’ arguments of potential market harm (US Copyright Office 2001). It seems that fear of the unknown in this respect preempted exploration of new markets.

For the WGIP, preserving publisher rights for content on the NII was the central goal and redefining key legal terms was one way in which to achieve it. The WGIP, when faced with the NII’s possibilities, found itself with a problem of metaphysical proportions. To ensure a copyright owner’s right in controlling copies and phonorecords, it pointed out that transmission is a form of immediate fixation in which copies are distributed, implying that the distribution right and the right to make copies apply. It also noted that because many people can potentially view a single transmission, that transmission, under certain circumstances, might constitute a public performance and display. However, to ensure continued control over that fixed media and to exploit the low cost of distribution, the Green Paper made the applicability of the distribution right serve only copyright owners during initial distribution and focused on the right to make copies when it became apparent that consumers may want to further distribute those copies.

The definitions of *transmission*, *distribution*, *copying*, and *public displays/performances* are strained by the technologies of the NII (computers and the Internet, for example) because they have abstracted content from their tangible confines. Distribution, copying, public performances/displays, and transmission, previously separate processes, have converged into a hybrid process made possible by digital technologies. Rather than reevaluate the hybrid processes anew with respect to implications for both distributors and consumers, the Green Paper fit old definitions into new contexts, making them benefit only the distributors of content.

Proposals for Law: Fair Use

The fair-use doctrine has historically been defined in the courts and was codified in the 1976 Copyright Act. Section 107 of the act states:

Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

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

The issue of fair use is central to many of the debates that surround technology and copyright of digital content. The popular and legal meanings of *fair use* are in fact at the heart of what the digital rights movement would like to capture and are discussed further in later chapters. For now, it should suffice to say that the WGIP's Green Paper argued that fair-use case law supported claims by copyright owners (in their written comments) that fair use is a highly regulated doctrine relying heavily on the fourth factor listed, "the effect of the use upon the potential market for or value of the copyrighted work." The Green Paper argued that the burden of proof is on the potential infringers to show that their use was noninfringing.¹² The Green Paper noted that so long as the courts continued to interpret law as they had done in the past, clear-cut cases of fair use and infringement on the NII would be properly decided.

The Green Paper mentioned two cases that support its claim that courts had already applied proper guidelines to questions of fair use on the NII. The first was *Playboy Enterprises v. Frena* (839 F.2d 897 [1993]) in which courts ruled that uploading and downloading proprietary images by users on George Frena's electronic bulletin board system did not constitute a fair use because of the effect that such transmission of content could have on the market for *Playboy's* images. As a consequence, the court held Frena guilty of contributory infringement of copyright. The second case was *Sega Enterprise Ltd. v. MAPHIA* (948 F.Supp. 923, 41 USPQ2d 1705 [1996]), involving another electronic bulletin board service. Much like in the *Playboy* case, the courts found that MAPHIA was contributing to copyright infringement by its users when they

uploaded copies of Sega's videogames. The court argued that such uploading could have a detrimental impact on Sega's market. In its recommendations, the WGIP did note that there might be some adverse effects to fair use as a result of its call for technolegal copyright-protection measures and so it convened a Conference on Fair Use to discuss these potential impacts (Lehman 1994).¹³

The Green Paper failed to take into account the meaning of fair use as defined by common user practices and anticipated that users would simply acquiesce to the dictates of the technological regimes designed by copyright owners. In this respect, the WGIP was short-sighted or chose to ignore the implications of a case from ten years earlier, *Sony Corp of America. v. Universal City Studios Inc.* (464 US 417 [1984]), which it reviewed only in passing, thinking that it lent support to its claims that fair use is strictly defined and contingent on the absence of market harm to copyright owners. In truth, the Sony case was unique in that it defined copying of copyrighted material on a VCR tape for the purpose of "time shifting" as a fair use and refused to hold Sony responsible for contributory infringement for its manufacture of the VCR. This court decision opened up the door for the manufacture and design of copying technologies with potentially infringing uses so long as there is no demonstrable market harm and that the primary uses of the technology are not infringing.

The Green Paper underestimated user resourcefulness and determination. Some consumers had a significantly different reading of the meaning of fair use from the one articulated by the Green Paper and in practice would adopt user-centered notions of fair use and interpretations of the Sony case as defenses in the design and distribution of peer-to-peer technologies, the design of circumvention technologies to access content on DVDs, and the design of technologies to circumvent DRM systems.

In sum, the WGIP thought that the NII would implicate fair use but that courts would continue to have a strict reading of what constitutes fair use. Keeping its recommendations for technolegal protection measures in mind, the WGIP noted that such measures might excessively expand authors' rights to control their work and recommended a Conference on Fair Use to discuss those effects.¹⁴ The WIPG chose to ignore users' common practices concerning media and popular interpretations of fair use. As a result, it was blind to the potential legal storm that was brewing over the use and design of circumvention technologies that allow users to access or copy technologically protected media.

Proposals for Law: Anticircumvention Provisions

The Green Paper gave clear recommendations concerning the role of technology in ensuring copyright owners' interests. Its recommendations included suggestions for outlawing technological measures that may circumvent content-protection technologies and are the core of the DMCA section that has inspired backlash from activists. Technology is the entry point for digital content; such content cannot be accessed without it. As such, the WGIP saw technology as a central means of guarding against the negative consequences that the NII would have for content owners' rights. It follows that these technologies ought to be protected by law. In other words, copy-protection and access-control technologies are enforcement technologies for the provisions of the Copyright Act that give an author his or her rights. The DMCA's anticircumvention provisions (based on the WGIP's recommendations) are laws that protect those technologies. The WGIP implicitly understood technological protection measures as the best way to protect copyright owners' rights on the NII because of the difficulty in tracking infringers. The WGIP proposed thorough technolegal protection of content as a means of incentivizing for copyright owners to participate and contribute to the NII (Lehman 1994).

Laws that protect content by outlawing technologies and conduct that circumvent copyright protection are not without precedent. The Green Paper noted that the AHRA of 1992 had already done this for the serial-copy-management system on digital tape recorders and that the Telecommunications Act of 1996¹⁵ protected encryption of satellite cable programming. These laws and others account for a trend in legislation that protects copyrighted digital content. The convergence of law and technology ensures protection, while at the same time outlawing technologies that would challenge those technolegal systems.

The Green Paper was relatively heavy-handed in allowing copyright owners protection against circumvention technologies, in proposing broad amendments to the Copyright Act, and in avoiding thorough discussion of how those proposed amendments would affect fair use, first sale, and technological innovation. The amendments include the following:

1. The addition of section 512 to read: "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 authority of the copyright owner or the law, any process, treatment, mechanism or system which prevents or inhibits the exercise of any of the exclusive rights under Section 106."

2. An amendment for section 501 defining an infringer as “anyone who violates section 512 is an infringer of the copyright in a work that utilizes the process, treatment, mechanism or system which the violator’s device, product, component or service circumvents.”

3. Amendments to section 503 granting courts powers in civil cases where section 512 had potentially been violated, noting,

At any time while an action under this title is pending, the court may order the impounding . . . and of all devices, products or components claimed to have been imported, manufactured or distributed in violation of section 512.

As part of a final judgment or decree, the court may order the destruction of all devices, products or components found to have been imported, manufactured or distributed in violation of section 512.

The Green Paper did not thoughtfully address technologies that might be used to access technologically protected works whose copyright had expired or a technology that would allow access to works for the purposes of fair use. For example, in what appears to be an overly simplistic explanation of why technologies designed to access works whose copyright had expired would not constitute infringement, the Green Paper noted that “the ‘primary purpose or effect’ standard will allow for the distribution of devices that deactivate the anti-copying systems used in such works, and that the benefits of the proposed legislation outweigh the possible problems” (quoted in Lehman 1994). The “primary purpose standard” would dictate that the main function of a circumvention technology is to circumvent protection technology on works that are no longer covered by copyright. The standard ignores the fact, however, that copy-protection technologies might be similar whether they protect a work still under copyright or not. Thus, it is impossible to distinguish the primary purpose of a circumvention technology as the Green Paper proposes because such technology would target copy protection generally and would not be specific to one instance in which the work protected had lost copyright.

Another argument against the Green Paper’s anticircumvention provisions was that laws that outlaw technologies stymie technological innovation. Opponents of this argument have suggested that the *Universal v. Sony* case had established a doctrine that would still allow technological development of potential infringing technologies if they have some other significant commercial purpose.¹⁶ The problem with this view is that it ignores the frailty of emerging technologies in a hostile legal environment; the process of establishing alternative valid uses is inherently contentious, and developers of technologies are almost always at a disadvantage when called on in the courtroom to qualify the other legitimate uses of technolo-

gies.¹⁷ Furthermore, if the “noninfringing use” of a technology is defined in part by the market, many technologies designed with little commercial intent in mind are left exposed to regulation.

Perhaps most important were the tones of alarm expressed by representatives of the cultural industry as they reflected on the possible rampant copyright violation that would ensue on the NII if intellectual-property products were not properly protected. In those instances when industry representatives imagined threats from users of the NII, they did so to paint a picture of copyright pirates. Steven Metalitz from the Information Industry Association noted:

While the new information infrastructure offers unparalleled opportunities for the widespread dissemination of this intellectual property to authorized users, it also offers unparalleled threats to [the] exercise of the exclusive rights of authors to reproduce, display and adapt these works. The same capabilities that give advanced information infrastructure its awesome potential also invite an epidemic of abuse of intellectual property rights. If we do not prevent that epidemic our hopes for what the NII can deliver to our workplaces, schools and homes will be blighted. (in *Comments* 1993)

Although there was of course some cause for concern (Napster showed the excesses of the type of infringement possible), the discourse of alarm set the tone and eclipsed the possibility of more reasonable discussion of how business models might function on the Web so that consumers might opt for purchasing content rather than downloading it for free or how business systems might be remodeled to allow for consumers’ access and ease. Online digital-content-distribution models that are now wildly successful were a consequence of consumer behavior that could have been predicted and constructively addressed rather than framed as an epidemic.

The release of the Green Paper was received with a mixture of criticism and support. Following its release, the WGIP held a series of hearings in Washington, DC, Chicago, and Los Angeles and solicited and received written comments, which it then incorporated into the second version of the policy proposal, called the “White Paper” (WGIF 1995).

Conclusion

With respect to the digital rights movement, the Green paper was a crucial phase in formulating policy and recommendations that would eventually become law. Those recommendations were based on testimony from a host of stakeholders, yet it seems that only those made by representatives of

the cultural industries had an impact. For example, David Rothman, a freelance writer, responding to the initial call for comments on the Green Paper, noted: “The user must have unrestricted access to information available through the National Information Infrastructure (NII). Users must not be inhibited in any way from any use of available intellectual property. The primary user concern here is for the FREE SPEECH RIGHT of use. There shouldn’t be any restrictions on use; nor should there be any administrative burden placed on the user to limit uses to what seems ‘fair’” (in *Comments* 1993, emphasis in the original).

Importantly, Rothman also critiqued the nature of the hearing and its composition, noting that the opinions presented by participants may not have captured a broader view of what the NII would mean for average users. Writing to the working group after the hearings, he said:

I recall your Nov. 18th hearings as valuable and very well organized, but not as reflecting the needs of society at large. Industry witnesses clearly set the tone. . . . Even some school affiliated people were not always representing the true public interest. Certain educators for example did not seem to care that much about the cost of knowledge as long as teachers and students could dial up books through special licensing arrangements. Such people ignore the fact that most learning today takes place long after graduation. (in *Comments* 1993)

Rothman is generally correct. Comments from private citizens who imagined a different kind of impact by the NII (one that affected private learning, creative usage, or a need for an open system that would buttress free speech) were few and ultimately ignored in the Green Paper’s recommendations. Images that struck a chord with policymakers saw industry as the purveyor of value and, ironically, of free speech. Steven Metalitz painted a picture of who would provide useful content: “If copyright cannot be protected in the new information environment, then the supply of useful information will be drastically curtailed—or just as troubling, it will be limited to information that government or some other powerful institution chooses to create” (in *Comments* 1993)—an ironic statement because media corporations are themselves powerful institutions deserving of the same healthy skepticism that government receives and also because in the digital movement it is these same industries that have been shown to be enemies of free expression as a result of stringent protection of cultural goods.

Rothman was also correct in noting the role of institutional actors in representing a more balanced approach. The presence of institutional actors such as libraries and universities as the sole representatives of rights to access colored how access was discussed, imagined, and given value. The

discussions focused on preserving these institutions as conduits of knowledge, but no thought was given to those who might work outside of such structures. This omission yielded a significant blind spot in the discussions. Representative users who might choose to be more participatory in media consumption were not acknowledged. The fact is that although content contribution by the masses was not yet a recognized phenomenon in mass media, it was nevertheless already taking place across the early digital networks of the 1990s. Usenet, iRC, and early Internet bulletin boards had a significant amount of content that was contributed and used by average users. The issues that the WGIP addressed were only those it saw as affecting copyright owners. The issues framed by early adopters and current users of the NII were not understood or not heard.

The next chapter discusses the reactions to the Green Paper from stakeholders and an increasing number of average citizens, intellectuals, and activists, some of whom are here understood as early intellectual contributors to the digital rights movement. The White Paper, a second draft of the policy proposal for the NII, was a further attempt to incorporate stakeholders, but as has been shown in other works and is evident from a review of the Congressional Record, little was done to incorporate expansive views of user participation (see Litman 2001).

This is a section of [doi:10.7551/mitpress/8698.001.0001](https://doi.org/10.7551/mitpress/8698.001.0001)

The Digital Rights Movement

The Role of Technology in Subverting Digital Copyright

By: Hector Postigo

Citation:

The Digital Rights Movement: The Role of Technology in Subverting Digital Copyright

By: Hector Postigo

DOI: 10.7551/mitpress/8698.001.0001

ISBN (electronic): 9780262305334

Publisher: The MIT Press

Published: 2012



The MIT Press

© 2012 Massachusetts Institute of Technology



All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

MIT Press books may be purchased at special quantity discounts for business or sales promotional use. For information, please email special_sales@mitpress.mit.edu or write to Special Sales Department, The MIT Press, 55 Hayward Street, Cambridge, MA 02142.

This book was set in Stone Sans and Stone Serif by Toppan Best-set Premedia Limited. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Postigo, Hector

The digital rights movement: the role of technology in subverting digital copyright / Hector Postigo.

p. cm. — (The information society series)

Includes bibliographical references and index.

ISBN 978-0-262-01795-4 (hardcover: alk. paper)

1. Copyright and electronic data processing. 2. Digital rights management.

3. Hactivism. 4. Internet—Law and legislation. 5. Piracy (Copyright)—

Prevention. 6. Fair use (Copyright). I. Title.

K1447.95.P67 2012

345'.02662—dc23

2012004559

10 9 8 7 6 5 4 3 2 1