

# FOUCAULT IN CYBERSPACE: SURVEILLANCE, SOVEREIGNTY, AND HARDWIRED CENSORS

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## I. INTRODUCTION

[T]he problems to which the theory of sovereignty was addressed were in effect confined to the general mechanisms of power, to the way in which its forms of existence at the higher level of society influenced its exercise at the lowest levels . . . . In effect, the mode in which power was exercised could be defined in its essentials in terms of the relationship sovereign-subject. But . . . we have the . . . emergence, or rather the invention, of a new mechanism of power possessed of highly specific procedural techniques . . . which is also, I believe, absolutely incompatible with the relations of sovereignty. . . . It is a type of power which is constantly exercised by means of surveillance rather than in a discontinuous manner by means of a system of levies or obligations distributed over time. It presupposes a tightly knit grid of material coercions rather than the physical existence of a sovereign. . . . This non-sovereign power, which lies outside the form of sovereignty, is disciplinary power.<sup>1</sup>

This is an Article about law in cyberspace. It focuses on three interdependent phenomena: a set of political and legal assumptions that I call the jurisprudence of digital libertarianism, a separate but related set of beliefs about the state's supposed inability to regulate the Internet, and a preference for technological solutions to hard legal issues on-line.

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\* Copyright 1997 James Boyle, Professor of Law, Washington College of Law, American University. My remarks at the Symposium dealt more specifically with the law and policy of proposed changes to copyright on the Internet. However, I have already outlined some of those views in print, and at some length. See JAMES BOYLE, SHAMANS, SOFTWARE AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY, 136-39, 192-200 (1996); James Boyle, *Intellectual Property Policy On-Line: A Young Person's Guide*, 10 HARV. J.L. & TECH. 47 (1996); James Boyle, *Sold Out*, N.Y. TIMES, Mar. 31, 1996, at E15; James Boyle, *Q: Is Congress Turning the Internet into an Information Toll Road?*, INSIGHT ON THE NEWS, Jan. 15, 1996, at 24; James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net*, DUKE L.J. (forthcoming). The editors of the *University of Cincinnati Law Review* were kind enough to allow me to address myself in this Article to a slightly different issue, though one of profound importance to the Symposium as a whole—the extent to which state regulation of the Internet is possible at all, and the costs and benefits of technical solutions. In the course of that discussion, I use a number of examples drawn from the recent proposals on Internet copyright.

1. Michel Foucault, *Two Lectures*, in MICHEL FOUCAULT, *POWER/KNOWLEDGE: SELECTED INTERVIEWS AND OTHER WRITINGS, 1972-1977*, 78, 103-05 (Colin Gordon ed. & Colin Gordon et al. trans., 1980).

I make the familiar criticism that digital libertarianism is inadequate because of its blindness to the effects of private power, and the less familiar claim that digital libertarianism is also surprisingly blind to the state's own power in cyberspace. In fact, I argue that the conceptual structure and jurisprudential assumptions of digital libertarianism lead its practitioners to ignore the ways in which the state can often use privatized enforcement and state-backed technologies to evade some of the supposed practical (and constitutional) restraints on the exercise of legal power over the Internet. Finally, I argue that technological solutions which provide the keys to the first two phenomena are neither as neutral nor as benign as they are currently perceived to be. Some of my illustrations will come from the Clinton administration's proposals for Internet copyright regulation, others from the Communications Decency Act (CDA)<sup>2</sup> and the cryptography debate. In the process, I make opportunistic and unsystematic use of the late Michel Foucault's work to criticize some of the jurisprudential orthodoxy of the Internet.

## II. THE INTERNET TRINITY

For a long time, the Internet's enthusiasts have believed that it would be largely immune from state regulation. The theory was not so much that nation states would not want to regulate the Internet, it was that they would be unable to do so, forestalled by the *technology of the medium*, the *geographical distribution of its users*, and the *nature of its content*. This tripartite immunity came to be a kind of "Internet Holy Trinity"; faith in it was a condition of acceptance into the community. Indeed, the ideas I am about to discuss are so well known on the Internet that they have actually acquired the highest status that a culture can confer: they have become clichés.

### A. "The Net interprets censorship as damage and routes around it."

This quote from John Gilmore,<sup>3</sup> one of the founders of the Electronic Frontier Foundation, has the twin advantages of being pithy and

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2. Communications Decency Act of 1996, 47 U.S.C.A. § 223 (West Supp. 1997).

3. There are a variety of versions of the claim but the content is pretty consistent. See, e.g., John P. Barlow, *Passing the Buck on Porn* (visited June 24, 1996) <[http://www.eff.org/pub/Publications/John\\_Perry\\_Barlow/HTML/porn\\_and\\_responsibility.html](http://www.eff.org/pub/Publications/John_Perry_Barlow/HTML/porn_and_responsibility.html)> ("The Internet, in the words of . . . John Gilmore, 'deals with censorship as though it were a malfunction and routes around it.'"); Judith Lewis, *Why Johnny Can't Surf*, LA WKLY., Feb. 21, 1997, at 43. ("[I]t's not easy to push standards of 'decency' on a network that, as . . . John Gilmore allegedly put it (though even he can't remember where), treats censorship as damage and routes around it.'").

technologically accurate. The Internet was originally designed to survive a nuclear war; its distributed architecture and its technique of packet switching were designed to get messages delivered despite blockages, holes, and malfunctions.<sup>4</sup> Imagine the poor censor faced with such a system. There is no central exchange to seize and hold; messages actively “seek out” alternative routes so that even if one path is blocked another may open up. Here was the civil libertarian’s dream: a technology with a comparatively low cost of entry to speakers and listeners alike, technologically resistant to censorship, yet politically and economically important enough that it cannot easily be ignored. The Internet offers obvious advantages to the countries, research communities, cultures, and companies that use it, but it is extremely hard to control the amount and type of information available; access is like a tap that only has two settings—“off” and “full.” For governments, this has been seen as one of the biggest problems posed by the Internet. To the Internet’s devotees, most of whom embrace some variety of libertarianism, the Internet’s structural resistance to censorship, or any externally imposed filtration, is “not a bug but a feature.”

B. *“In Cyberspace, the First Amendment is a local ordinance.”*<sup>5</sup>

To the technological obstacles the Internet raises against externally imposed content filtration, one must add the geographic obstacles raised by its global extent. Because a document can be retrieved as easily from a server five-thousand miles away or a server five miles away, geographical proximity and content availability are independent of each other. If the king’s writ reaches only as far as the king’s sword, then much of the content on the Internet might be presumed to be free from the regulation of any particular sovereign.

The libertarian culture that dominates the Internet at present posits that state intervention into private action is only necessary to prevent the infliction of harm. Seeing the Internet as a speech-dominated realm of human activity in which harm would be comparatively hard to inflict, libertarians have been even more resistant to state regulation of the

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4. See generally Todd Flaming, *An Introduction to the Internet*, 83 ILL. B.J., 311, (1995); JOSHUA EDDINGS, *HOW THE INTERNET WORKS* 13 (1994); Bruce Sterling, *Short History of the Internet* (last modified Feb. 1993) <[gopher://gopher.metronet.com:70/00/inet/A\\_Short\\_History\\_of\\_the\\_Internet](http://gopher://gopher.metronet.com:70/00/inet/A_Short_History_of_the_Internet)>. For background information on Internet legal issues, see generally Lawrence Lessig, *The Zones Of Cyberspace*, 48 STAN. L. REV. 1403 (1996); Lawrence Lessig, *The Path Of Cyberlaw*, 104 YALE L.J. 1743 (1995); David R. Johnson & David Post, *Law and Borders—the Rise Of Law In Cyberspace*, 48 STAN. L. REV. 1367 (1996).

5. See, e.g., John P. Barlow, *Leaving the Physical World* (visited June 24, 1997) <[http://www.cff.org/pub/Publications/John\\_Perry\\_Barlow/HTML/leaving\\_the\\_physical\\_world.html](http://www.cff.org/pub/Publications/John_Perry_Barlow/HTML/leaving_the_physical_world.html)> (discussing the inapplicability of physical-world standards in cyberspace).

digital environment than of the disdainfully named, "meatspace." "Sticks and stones can break my bones but bytes can never hurt me," or so goes their assumption. Thus, the postulate that a global Internet cannot be regulated by national governments has been seen as an unequivocally positive thing.

John Perry Barlow's description of the First Amendment as a local ordinance offers the sobering reminder that it is not merely "bad" state traditions, interventions, and regulations that are enfeebled by cyberspace. There is a difference between speech being constitutionally protected and practically immune from regulation; a free speech tradition that pins all of its hopes on physical immunity from regulation is likely to be particularly vulnerable if that immunity proves illusory.

C. *"Information Wants to be Free."*

To a person interested in political theory, one of the most striking things about the Internet is the instability of its political cartography. We divide our world up into contiguous and opposing territories—public and private, property and sovereignty, regulation and laissez faire—solving problems by deciphering their placement on this map. In the everyday world, these divisions seem comparatively solid and lumpish, even if clever academic critics may harp on their theoretical indeterminacy. On the Internet, things are different. Concepts and political forces seem to be up for grabs. Nothing illustrates this point better than the debate over intellectual property online. In the digital environment, is intellectual property just property, the precondition to an unregulated market, just another example of the rights that libertarians believe the state was specifically created to protect? Or is intellectual property actually *public regulation*, artificial rather than natural, an invented monopoly imposed by a sovereign state, a distorting and liberty-reducing intervention in an otherwise free domain?

Although it would be hard to find anyone who believes entirely in either of these two stereotypes, recognizable versions of both do exist in the debate over intellectual property and—more interestingly—can be found across the political spectrum. George Gilder of the conservative Manhattan Institute, a fervent booster of capitalism and laissez faire economics, has shown considerable skepticism about intellectual

property.<sup>6</sup> Peter Huber, from the same conservative think tank, has pronounced it the very acme of liberty, privacy, and natural right.<sup>7</sup> The Clinton administration attempted to extend intellectual property rights

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6. One of the strongest statements of his position comes in the manifesto he co-authored with a number of other prominent members of the digerati:

Unlike the mass knowledge of the Second Wave—public good knowledge that was useful to everyone because most people's information needs were standardized—Third Wave customized knowledge is by nature a private good.

If this analysis is correct, *copyright and patent protection of knowledge (or at least many forms of it) may no longer be necessary*. In fact, the marketplace may already be creating vehicles to compensate creators of customized knowledge outside the cumbersome copyright/patent process, as suggested by John Perry Barlow.

Esther Dyson, et al., *A Magna Carta for the Knowledge Age*, 11 NEW PERSPECTIVES QUARTERLY 26, 29 (1994) (emphasis added).

7. Huber, in fact, took a direct shot at the notion that "information wants to be free." See Peter Huber, *Tangled Wires: The Intellectual Confusion and Hypocrisy of the Wired Crowd*, SLATE, Oct. 18, 1996 <<http://www.slate.com/Features/TangledWires/TangledWires.asp>>. In this article, Huber labeled the intellectual property rights skeptics as hypocrites whose real attitude reflects a desire for liberal redistribution of everyone else's stuff. See *id.* His views are frankly dismissive and puzzlingly so. He criticized a group of people with widely varying political views, linked mainly by an opposition to the expansion of intellectual property rights. Some have argued in favor of maintaining the existing intellectual property rules in cyberspace, others have claimed that reliance on rules rather than technological innovation would actually inhibit the operation of capitalism on-line. Yet Huber's description of this "Wired Crowd," many of whom make Ayn Rand sound like Vladimir Ilyich, is that their position is that of a hypocritical New Dealer—"My property is mine; yours is for sharing." *Id.* *Wired*, we are supposed to believe, is the Economic and Philosophical Manuscripts in cyberspace. (Would that it were true! In fact, *Wired's* ideal of scathing social commentary is to claim that someone's computer is out of date.) Huber then seeks to restore normative appeal to intellectual property by arguing that it "is just a commercial form of privacy law. Indeed for some, it's the only kind of privacy they still own." *Id.* This powerful argument suffers a little from the example that follows. "Madonna can no longer stop you from gazing at her breasts. Copyright at least makes you pay for the pleasure." *Id.* Our sympathies are with her (and with him if this is the best illustration that comes to mind.) Stopping the world from gazing at her breasts has never seemed to be particularly high on Madonna's list of priorities—at least as a matter of "privacy." True, Madonna might prefer a legal regime that would allow her to wring the maximum commercial advantage in every market for images of her and references to her—by making people like Huber pay if they wished to use her as an example, restricting the fair use privilege, or limiting news reporting and biography to authorized images. Yet it is not clear why this desire, in itself, makes the notion of such a regime normatively compelling as a matter of social policy. There is also a danger in labeling critics of extensive intellectual property rights "anti-privacy." If there is a privacy interest consisting solely in the extraction of the maximum rent for one's intellectual property, then was the Justice Department's investigation of Microsoft's allegedly anticompetitive practices an attempt to cut down on Bill Gates's privacy interest in Windows '95? Or are we referring simply to spin-off effects in a particular case? Are federal automobile emissions standards "anti-privacy" if they make it harder for me to leave the paparazzi in the dust? Surely one must distinguish occasional opportunistic uses of a right from the underlying purposes of that right? We have all used things for other than their intended purpose. Intellectual property *can* sometimes be used to preserve privacy and I have used a stout and WASP-y pair of wingtips to hammer in a nail; this does not mean that the manufacturers of Birkenstock sandals are "anti-carpentry." There are indeed profound and interesting linkages and tensions between property and privacy, and this point has been made for some time. Compare Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193 (1890), with Michael Madow, *Private Ownership of Public Image: Popular Culture and Publicity Rights*, 81 CAL. L. REV. 125 (1993). Yet, as these articles both show, intellectual property most definitely is not "just a commercial form of privacy law."

on-line,<sup>8</sup> and has been roundly criticized by both civil liberties groups and right wing intellectuals.<sup>9</sup> This is not just a disagreement as to tactics among people who might be said to share the same ideology: it is a fundamental set of disputes over the very social construction and normative significance of a particular phenomenon—as if the Libertarian party couldn't agree on whether its motto was to be "Taxation is theft" or "Property is theft." In this contested terrain, Stewart Brand's phrase, "information wants to be free," marks out the territory of those who are skeptical of both the need for, and the utility of restraints on the flow of information and who frequently extend that skepticism to intellectual property rights.

As a phrase, "information wants to be free,"<sup>10</sup> has sufficiently penetrated the culture that it is now actually parodied in advertisements. Yet its ubiquitous nature may work to conceal the claims that it makes. John Perry Barlow began his famous essay, "Selling Wine Without Bottles: The Economy of Mind on the Global Net," with this quote from Thomas Jefferson:

If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of everyone, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density at any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation. Inventions then cannot, in nature, be a subject of property.<sup>11</sup>

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8. See generally INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (Sept. 1995).

9. See James Boyle, *Intellectual Property Policy On-Line: A Young Person's Guide*, 10 HARV. J.L. & TECH. 47, 52 (1996).

10. John P. Barlow, *Selling Wine Without Bottles: The Economy of Mind on the Global Net*, WIRED 2.03 1993, at 86 (visited June 24, 1997) <[http://www.eff.org/pub/Publications/John\\_Perry\\_Barlow/HTML/idea\\_economy\\_article.html](http://www.eff.org/pub/Publications/John_Perry_Barlow/HTML/idea_economy_article.html)> (crediting Stewart Brand with the statement).

11. *Id.* (quoting THOMAS JEFFERSON, 13 THE WRITINGS OF THOMAS JEFFERSON 333-34 (Albert E. Bergh ed., Monticello ed., Thomas Jefferson Memorial Ass'n 1904) (letter from Jefferson to Isaac

The quotation expresses perfectly the mixture of Enlightenment values and upbeat, public-goods theory that typifies Internet analysis of information flows. Information *is* costless to copy, *should* be spread widely, and *cannot* be confined. Beyond the Jeffersonian credo lies a kind of Darwinian anthropomorphism. Information really does *want* to be free. John Perry Barlow credited Brand's phrase with "recognizing both the natural desire of secrets to be told and the fact that they might be capable of possessing something like a 'desire' in the first place."<sup>12</sup> Barlow continued:

English biologist and philosopher Richard Dawkins proposed the idea of "memes," self-replicating, patterns of information which propagate themselves across the ecologies of mind, saying they were like life forms.

I believe they are life forms in every respect but a basis in the carbon atom. They self-reproduce, they interact with their surroundings and adapt to them, they mutate, they persist. Like any other life form they evolve to fill the possibility spaces of their local environments, which are, in this case the surrounding belief systems and cultures of their hosts, namely, us.

Indeed, the sociobiologists like Dawkins make a plausible case that carbon-based life forms are information as well, that, as the chicken is an egg's way of making another egg, the entire biological spectacle is just the DNA molecule's means of copying out more information strings exactly like itself.<sup>13</sup>

Viewed through this lens, the Internet is the ultimate natural environment for information; trying to regulate the Internet is like trying to prohibit evolution.

Taken together, the three quotations assert that the technology of the medium, the geographical distribution of its users, and the nature of its content all make the Internet specially resistant to state regulation. The state is too big, too slow, and too geographically and technically limited to regulate a global citizenry's fleeting interactions over a mercurial medium. Though I do not subscribe to the full-throated versions of any of these slogans, I have sympathy with each of them. It does excite me that the Internet is highly resistant to externally imposed content filtration, although I tend to worry about structural private filters as well as command-based public filters, and I also recognize that speech and information can and will produce harm as well as good. I do think that the global nature of the Internet is, by and large, a positive thing, though

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McPherson, Aug. 13, 1813)).

12. *Id.*

13. *Id.*

we need to pay more attention to things like the cost of the technology required to play the game, or the effects on workers of a networked economy in which companies can relocate around the world and find a new on-line workforce in an afternoon.<sup>14</sup> Finally, I am optimistic about the historical conjunction of technologies based on nearly costless copying and a political tradition that treats information in a more egalitarian way than other resources.<sup>15</sup> It is possible, of course, to conjure up a world in which rampant info-kleptocracy undermines scientific and artistic development. I have argued elsewhere that the main danger is not that information will be unduly free, but that intellectual property rights will become so extensive that they will actually stifle innovation, free speech, and educational potential. In any event, I want to set aside my agreement or disagreement with the values behind the Internet catechism, and focus instead on the factual and legal assumptions on which it relies. My argument is that info-libertarians should not be so quick to write off the state. In fact, I argue that the work of the distinctively nondigital philosopher, Michel Foucault, provides some suggestive insights into the ways in which power can be exercised on the Internet and the reasons why much contemporary analysis is so dismissive of the power of law and the state.

### III. FOUCAULT & THE JURISPRUDENCE OF DIGITAL LIBERTARIANISM

When "Netizens" think of law, they tend to conjure up a positivist, even Austinian, image:<sup>16</sup> law is a command backed by threats, issued by

14. Global, lightspeed mobility of *labor* is not something that Adam Smith had contemplated; is it a quantitative or a qualitative distinction?

15. See JAMES BOYLE, SHAMANS, SOFTWARE AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY at 182-83 (1996) ("To someone like me, who believes a lot of our social ills come from the restriction of egalitarian norms, [the] fact [that our current ideas about information have strong egalitarian underpinnings] has an optimistic ring."); see also Eugene Volokh, *Cheap Speech and What It Will Do*, 104 YALE L.J. 1805, 1847 (1995).

[T]he [Supreme] Court has based its jurisprudence on an idealized view of the world, a view that doesn't quite correspond to the world in which we live . . . . [T]his idealized world . . . is much closer to the electronic media world of the future than it is to the print and broadcast media world of the present. If my predictions are right, the new technologies will make it much easier for all ideas, whether backed by the rich or the poor, to participate in the marketplace . . . . [D]uring the print age, the Supreme Court created a First Amendment for the electronic age. The fictions the Court found necessary to embrace are turning, at least in part, into fact.

*Id.*; cf. C. Edwin Baker, *New Media Technologies, the First Amendment and Public Policy*, 1 Communications Review 315 (1996) (arguing that Volokh's view reduces the First Amendment to the marketplace of ideas theory that, in fact, represents only a part of First Amendment doctrine and theory).

16. JOHN AUSTIN, *THE PROVINCE OF JURISPRUDENCE DETERMINED* (Isaiah Berlin, et al. eds.,

a sovereign who acknowledges no superior, directed to a geographically defined population which renders that sovereign habitual obedience.<sup>17</sup> Thus, Netizens think of the state's law as a blunt instrument, incapable of imposing its will on the global subjects of the Internet and their evanescent and geographically unsituated transactions. Indeed, if there was ever a model of law designed to fail at regulating the Internet, it is the Austinian model. Fortunately or unfortunately for the Internet, however, the Austinian model is both crude and inaccurate. That is where the work of the late Michel Foucault comes in.

Michel Foucault was one of the most interesting postwar French philosophers and social theorists. His work was wide-ranging, sometimes obscure,<sup>18</sup> indeed deliberately so, and his historical generalizations would have been insufferable if they were not so often provocatively useful.<sup>19</sup> Above all, Foucault possessed a knack for posing problems in a new way—reorienting the inquiry in a way that was

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1954); see also James Boyle, *Thomas Hobbes and the Invented Tradition of Positivism: Reflections on Language, Power, and Essentialism*, 135 U. PA. L. REV. 383 (1987).

17. The overwhelmingly libertarian cast to Internet politics in the United States might provide an explanation for this view. Libertarians tend to concentrate on state power rather than private power, and focus on the obvious restraints on freedom imposed by criminal law's impact against the citizen, rather than the subtler restraints imposed by the rules constituting and structuring market and other relationships. Both ideas fit the Austinian image. By making a criminal statute the paradigm of the *exercise* of state power, and the citizen's right against the government the paradigm of its *limitation*, the libertarians code their normative ideas about political problems and solutions into the very image of law itself.

18. Foucault wrote:

You will recall my work here, such as it has been . . . None of it does more than mark time. Repetitive and disconnected, it advances nowhere. Since indeed it never ceases to say the same thing, it perhaps says nothing. It is tangled up into an indecipherable, disorganized muddle. In a nutshell, it is inconclusive.

Still, I could claim that after all these were only trails to be followed, it mattered little where they led; indeed, it was important that they did not have a predetermined starting point and destination. They were merely lines laid down for you to pursue or to divert elsewhere, or re-design as the case might be. They are, in the final analysis, just fragments, and it is up to you or me to see what we can make of them. For my part, it has struck me that I might have seemed a bit like a whale that leaps to the surface of the water disturbing it momentarily with a tiny jet of spray and lets it be believed, or pretends to believe, or wants to believe, or himself does in fact believe, that down in the depths where no one sees him any more, where he is no longer witnessed nor controlled by anyone, he follows a more profound, coherent and reasoned trajectory. Well, anyway, that was more or less how I at least conceived the situation; it could be that you perceived it differently.

Foucault, *supra* note 1, at 78-79.

19. Michel Foucault, *What Is an Author?*, in *TEXTUAL STRATEGIES: PERSPECTIVES IN POST-STRUCTURALIST CRITICISM* 141, 141-160 (Josue V. Harari ed., 1979); MICHEL FOUCAULT, *DISCIPLINE AND PUNISH: THE BIRTH OF THE PRISON* (Alan Sheridan ed. & trans., 1979) [hereinafter FOUCAULT].

manifestly helpful for those who followed. Thinkers whose politics and methodology are very far from Foucault's own have testified to this facility.<sup>20</sup>

From the point of view of this Article, one of Foucault's most interesting contributions was to challenge a particular notion of power, power-as-sovereignty, and to juxtapose against it a vision of "surveillance" and "discipline."<sup>21</sup> At the heart of this project was a belief that both our analyses of the operation of political power and our strategies for its restraint or limitation were inaccurate or misguided. In a series of essays and books Foucault argued that, rather than the public and formal triangle of sovereign, citizen, and right, we should focus on a series of subtler private, informal, and material forms of coercion organized around the concepts of surveillance and discipline. The paradigm for the idea of surveillance was the Panopticon, Bentham's plan for a prison constructed in the shape of a wheel around the hub of an observing warden. At any moment the warden *might* have the prisoner under observation through a nineteenth century version of the closed-circuit TV.<sup>22</sup> Unsure when authority might in fact be watching, the prisoner would strive always to conform his behavior to its presumed desires. Bentham had hit upon a behaviorist equivalent of the superego, formed from uncertainty about when one was being observed by the powers that be. The echo of contemporary laments about the "privacy-free state" is striking. To this, Foucault added the notion of discipline—crudely put, the multitudinous private methods of regulation of individual behavior ranging from workplace time-and-motion efficiency directives to psychiatric evaluation.<sup>23</sup>

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20. See, e.g., RICHARD A. POSNER, *SEX AND REASON* 23, 182 (1992) (describing Foucault's writings on sexuality as "remarkable" and "eloquent").

21. FOUCAULT, *supra* note 19.

22. See JANET SEMPLE, *BENTHAM'S PRISON: A STUDY OF THE PANOPTICON PENITENTIARY* (1993). The two writers to have used Foucault's ideas most notably in the legal privacy and cyberspace context are J.M. Balkin, *What is a Postmodern Constitutionalism?*, 90 MICH. L. REV. 1966, 1987 (1992), and Larry Lessig, *Reading the Constitution in Cyberspace*, 45 EMORY L.J. 869, 895 (1996) (citing FOUCAULT, *THE BIRTH OF THE PRISON*, *supra* note 19, at 139-40).

23. In many ways, Foucault himself was most interested in a portion of this analysis that I shall pursue here only episodically. In a series of works on penology and the treatment of insanity, he argued that the emergence of the academic and intellectual "disciplines" as we know them now is reciprocally linked in important ways to this minute and quotidian regulation of behavior. At the same time, retrofitting some of his earlier work on the human sciences into this new theoretical mold, he suggested that our conception of "an individual" was not some naturally occurring fact of nature from which analyses could begin, but instead, in part, a result of the concatenation of discipline and surveillance. Elsewhere I have explored the connections between power and knowledge on the one hand, see James Boyle, *The Politics of Reason: Critical Legal Theory and Local Social Thought*, 133 U. PA. L. REV. 685 (1985), and the effects of the construction of subjectivity on the other, see James Boyle, *Is Subjectivity Possible? The Postmodern Subject in Legal*

Foucault pointed out the apparent conflict between a formal language of politics organized around relations between sovereign and citizen, expressed through rules backed by sanctions, and an actual experience of power being exercised through multitudinous non-state sources, often dependent on material or technological means of enforcement. Writing in a manner that managed to be simultaneously coy and sinister, Foucault suggested that there was something strange going on in the coexistence of these two systems:

Impossible to describe in the terminology of the theory of sovereignty from which it differs so radically, this disciplinary power ought by rights to have led to the disappearance of the grand juridical edifice created by that theory. But in reality, the theory of sovereignty has continued to exist not only as an ideology of right, but also to provide the organising principle of the legal codes . . . .

Why has the theory of sovereignty persisted in this fashion . . . ? For two reasons, I believe. On the one hand, it has been . . . a permanent instrument of criticism of the monarchy and all the obstacles that can thwart the development of a disciplinary society. But at the same time, the theory of sovereignty, and the organisation of a legal code centered upon it, have allowed a system of right to be superimposed upon the mechanisms of discipline in such a way as to conceal its actual procedures . . . .<sup>24</sup>

Foucault was not writing about the Internet. He was not even writing about the twentieth century. But his words provide a good starting place from which to examine the catechism of Internet inviolability. They are a good starting point precisely because, when viewed within the discourse of sovereign “commands backed by threats” aimed at a defined territory and population, the Internet does indeed look almost invulnerable. Things look rather different when viewed from the perspective of “a type of power which is constantly exercised by means of surveillance rather than in a discontinuous manner by means of a system of levies or obligations distributed over time [and which]. . . . presupposes a tightly knit grid of material coercions rather than the physical existence of a sovereign.”<sup>25</sup> What is more, there is a sense in which the “system of right [is] superimposed upon the mechanism of discipline in such a way as to conceal its actual procedures . . . .”<sup>26</sup> The jurisprudence of digital libertarianism is not simply inaccurate; it may

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*Theory*, 62 U. COLO. L. REV. 489 (1991). Although there are interesting things to be said about the construction of subjectivity in cyberspace, my goal here is more mundane.

24. Foucault, *supra* note 1, at 105.

25. *Id.* at 104.

26. *Id.* at 105.

actually obscure our understanding of what is going on. Thus, even the digerati may find the analysis that follows of interest, if only to see how far the Internet can be made to treat censorship as a feature not a bug, how far local ordinances may reach in cyberspace, and how information's desire for freedom may be curbed.

The examples I will give are drawn from different areas of regulation of communications technology. Some of them deal explicitly with the Internet—the CDA, the proposed National Information Infrastructure (NII) Copyright Protection Act, and the regulation of cryptography. Others are directed towards technologies outside of the Internet, at least for the present—the V-chip, the Clipper Chip, digital telephony, and digital audio recorders. All of them share one thing—the state has worked actively to embed or hardwire the legal regime in the technology itself.<sup>27</sup> In most of them, the exercise of power is much more a matter of the quotidian shaping and surveillance of activity than of imposing sanctions after the fact. Yet these examples also present revealing differences, illustrating a range of goals, tactics, and results. Sometimes technology has been mandated by legislation, sometimes facilitated through state-sanctioned, standard-setting bodies. Sometimes the legislation defines technological safe harbors to sanctions that would otherwise apply, and sometimes the state uses the power of the purse to create a de facto standard by refusing to purchase any equipment that does not conform to the desired technical or legal standards. I will begin with the CDA, turn to the use of strict liability and digital fences in Internet copyright policy, and conclude with a sampler of hardwired regulation drawn from a number of areas of communications technology.

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27. The best chronicler of the role of hard and softwired legal regimes is Lawrence Lessig. He wrote: I don't take issue with the values inherent in any one particular system of code. My criticism is directed against those who think about cyber regulation solely in terms of "law." Laws affect the pace of technological change, but the strictures of software can do even more to curtail freedom. In the long run, the shackles built by programmers may we constrain us most.

*Cyber Rights Now: Tyranny in the Infrastructure*, WIRED 5:07 (July 1997) <[http://www.wired.com/wired/5.07/cyber\\_rights.html](http://www.wired.com/wired/5.07/cyber_rights.html)>; see also Lawrence Lessig, *The Zones of Cyberspace*, 48 STAN. L. REV. 1403, 1408 (1996) ("In the well implemented system, there is no civil disobedience. Law as code is a start to the perfect technology of justice."). I discovered during the writing of this piece that Lessig's most recent paper comes even closer to my concerns here. See Lawrence Lessig, *What Things Regulate Speech*, (visited October 22, 1997), <<http://www.si.umich.edu/~prie/tprc/abstracts97/lessig.pdf>>. Jonathan Weinberg's work provides a thoughtful description of the techniques and consequences of various Internet rating systems. See Jonathan Weinberg, *Rating the Net*, 19 HASTINGS COMM. & ENT. L.J. 453 (1997). Julie Cohen has provided a very thought-provoking analysis of the significance of technologically hardwired regimes in the context of intellectual property law in Julie Cohen, *Reverse Engineering and the Rise of Electronic Vigilantism: Intellectual Property Implications of "Lock-out" Programs*, 68 S. CAL. L. REV. 1091 (1995), and of the jurisprudential assumptions of the supporters of hardwiring, in Julie Cohen, *Lochner in Cyberspace*, (visited October 22, 1997) <<http://www.si.umich.edu/~prie/tprc/abstracts97/011.txt>>.

## IV. SAFE HARBORS AND UNINTENDED CONSEQUENCES

The CDA has been hailed as the nadir of congressional regulation of communications technology. Badly drafted, inconsistently worded,<sup>28</sup> and palpably unconstitutional, it appeared to most of the Internet community to be a case of technological ignorance run rampant. Congress regulated what it did not understand, and did so in a way that would be practically futile because of the amount of content that came from beyond the jurisdiction of the United States. The reactions ranged from condescending amusement at the lack of Congress's technological knowledge, to proprietary anger that the state was overtly asserting its power over the electronic frontier. "Keep your laws off our Net," went the slogan.

When the CDA was struck down by two different three-judge panels<sup>29</sup> and then by a unanimous Supreme Court,<sup>30</sup> the decisions were seen as an inevitable vindication of these libertarian views. The victory was only sweetened when the lower court opinions pointed out that some of the CDA's constitutional problems came from its practical inability to reach much of the content on the Internet. Federal judges had come a long way towards recognizing both the technological resistance of the Internet to censorship, and the fact that a global net could *never* be

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28. Compare 47 U.S.C.A. §223(a)(1)(A)(ii) ("obscene, lewd, lascivious, filthy, or indecent") with §223(a)(1)(B)(ii) ("obscene or indecent") and §223(d)(1)(B) ("in terms patently offensive as measured by contemporary community standards"). Communications Decency Act of 1996, 47 U.S.C.A. §223 (West Supp. 1997). None of these terms is defined, and it is not clear that they are intended to be distinct from each other. With some reservations, the courts that have scrutinized the Communications Decency Act (CDA) have treated both phrases as equivalent to "indecent" as defined in *Pacific*. *FCC v. Pacifica Foundation*, 438 U.S. 726 (1978). The Supreme Court was less willing to waive away the statute's internal inconsistencies:

Regardless of whether the CDA is so vague that it violates the Fifth Amendment, the many ambiguities concerning the scope of its coverage render it problematic for purposes of the First Amendment. For instance, each of the two parts of the CDA uses a different linguistic form. The first uses the word "indecent," while the second speaks of material that "in context, depicts or describes, in terms patently offensive as measured by contemporary community standards, sexual or excretory activities or organs." Given the absence of a definition of either term, this difference in language will provoke uncertainty among speakers about how the two standards relate to each other and just what they mean.

*Reno v. ACLU*, 117 S. Ct. 2329, 2344 (1997) (citations omitted). Perhaps in desperation the government ended up by declaring that the CDA was intended to regulate only "commercial pornography," a phrase that appears nowhere within it. *ACLU v. Reno*, 929 F. Supp. 824, 854-55 (E.D. Pa. 1996).

29. See *ACLU*, 929 F. Supp. 824. In striking down the CDA, the district court held that, "[j]ust as the strength of the Internet is chaos, so the strength of our liberty depends upon the chaos and cacophony of the unfettered speech the First Amendment protects. For these reasons, I without hesitation hold that the CDA is unconstitutional on its face." *Id.* at 883 (Dalzel, J., concurring).

30. *Reno v. ACLU*, 117 S. Ct. 2329.

effectively regulated by a single national jurisdiction.<sup>31</sup> Thus, two of the three parts of the Internet Trinity had been acknowledged in the federal reporters. What is more, they had actually been plugged into the framework of conventional First Amendment analysis. Given the fact that the CDA was likely to be ineffective, could we possibly say that it passed strict First Amendment scrutiny?<sup>32</sup> Was this not a case of substantially restricting the freedom of speech without effectively achieving the compelling state interest?

Seen through the lens provided by the jurisprudence of digital libertarianism, these reactions were entirely warranted. A command backed by threats, uttered by a sovereign, and directed towards a geographically defined population had met and been annihilated by a right held by citizens against intrusion by state power, in part, because of the sovereign's inability to regulate those outside its borders. The CDA vanishes as if it had never been—an utter failure. Yet this analysis misses the developments surrounding the CDA, not the public criminal sanction, but rather the shaping and development of privately deployed, materially based, technological methods of surveillance and censorship.

The CDA aimed to protect minors from indecent material. However, if it did so by substantially limiting the speech of adults, it would be held unconstitutional as overbroad; in the words of Justice Frankfurter, “burning down the house to roast the pig.”<sup>33</sup> The CDA's answer to this problem was to create safe harbors for indecent, but constitutionally protected speech aimed at adults, provided that speech was kept from the eyes of minors.<sup>34</sup> The CDA offered a number of methods to achieve this goal, such as “requiring [the] use of a verified credit card, debit account, adult access code, or adult personal identification number.”<sup>35</sup> Given the technology and economics of the Internet, however, the most important safe harbor for nonprofit organizations was clearly going to be that provided by § 223(e)(5)(A), which offered immunity to those who

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31. *ACLU*, 929 F. Supp. at 824 (discussing findings of fact). “There is no centralized storage location, control point, or communications channel for the Internet, and it would not be technically feasible for a single entity to control all of the information conveyed on the Internet.” *Id.* *But cf.* *ACLU Cyber-Liberties*, Transcript of Supreme Court Oral Argument, *Reno v. ACLU*, Oral Argument of Bruce J. Ennis (visited June 24, 1997) <<http://www.aclu.org/issues/cyber/trial/sctran.html>> (statement of Chief Justice Rehnquist) (“But if 70 percent [of indecent speech on the Internet] is shielded and 30 percent isn't, what kind of an argument is that against the constitutionality of the statute?”).

32. Charles Nesson & David Marglin, *The Day the Internet Met the First Amendment: Time and the Communications Decency Act*, 10 *HARV. J.L. & TECH.* 113, 115 (1996).

33. *Butler v. Michigan*, 352 U.S. 380, 383 (1957), *quoted in* *Sable Communications v. FCC*, 492 U.S. 115, 127 (1989).

34. *See* 47 U.S.C.A. § 223(e)(5)(A) (West Supp. 1997).

35. 47 U.S.C.A. § 223(e)(5)(B).

had used "any method which is feasible under available technology."<sup>36</sup>

It is here that the irony begins. When the CDA was first proposed, a number of computer scientists and software engineers decided that they would do something more than merely rail against its unconstitutionality. They were convinced that an answer to the perceived need for regulation could be met within the language of the Internet itself.<sup>37</sup> I am not using the phrase, "language of the Internet" as part of some deconstructive or Saussurean trope—the idea was literally to provide a filtering system built into the same language that makes the World Wide Web possible: Hyper Text Markup Language (HTML). Conceiving of technical solutions as intrinsically more desirable than the exercise of state power by a sovereign, as facilitators of private choice rather than threats of public sanction, they offered an alternative designed to show that the CDA was, above all, unnecessary. This technological alternative to the CDA, called the Platform for Internet Content Selection (PICS), allows tags rating a web page to be embedded within "meta-file" information provided by the page about itself.<sup>38</sup> PICS can be adapted to provide both first party and third party content labeling and rating.<sup>39</sup> The system is touted as value neutral because it could be used to promote any value-system. Sites could be rated for violence, for sexism, for adherence to some particular religious belief, indeed for any set of criteria that was thought worthwhile. The third party filtering site could be the Christian Coalition, the National Organization for Women, or the Society for Protecting the Manifest Truths of Zoroastrianism. Of course in practice, we might believe that the PICS technology would be disproportionately used to favor a particular set of ideas and values and exclude others, just as we might believe that in practice, a *Lochner* regime of "free contract" would actually favor some groups and hurt others, despite the fact that each

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36. 47 U.S.C.A. §223(e)(5)(A). The statute provides:

(5) It is a defense to a prosecution under subsection (a)(1)(B) or (d) of this section, or under subsection (a)(2) of this section with respect to the use of a facility for an activity under subsection (a)(1)(B) of this section that a person—

(A) has taken, in good faith, reasonable, effective, and appropriate actions under the circumstances to restrict or prevent access by minors to a communication specified in such subsections, which may involve any appropriate measures to restrict minors from such communications, including any method which is feasible under available technology . . .

47 U.S.C.A. § 223(e)(5)(A).

37. See Paul Resnick & Jim Miller, *The CDA's Silver Lining*, WIREd, Aug. 1996, at 109.

38. See generally *Platform for Internet Content Selection: What Does It Do?* (visited June 24, 1997) <<http://www.w3.org/PICS/951030/AV/StartHere.html>>.

39. Self-rating is rating provided by the person posting the information. Third party rating is rating provided by some other entity. World Wide Web Consortium, *PICS Statement of Principles* (visited June 24, 1997) <<http://www.w3.org/PICS/principles.html>>.

is—on its face—value neutral. However, as Owen Fiss, Jack Balkin, and Richard Delgado have each pointed out (though in very different contexts), this kind of legal realist insistence on looking at actual effects, and scrutinizing actual, rather than formal power, is much rarer in the context of the First Amendment than it is in private law.<sup>40</sup>

While PICS and a variety of other systems offered a technical solution at the “speaker” end of the connection, other software programs also offered technical solutions at the “listener” end. These programs would not offer speakers a safe harbor from the reach of the CDA. Rather, they “empowered” computer users to protect their families from unwanted content by using software filters, thus raising in civil libertarians’ hearts the hope that the whole Act was unnecessary. Programs such as SurfWatch, CyberPatrol, NetNanny, and CyberSitter blocked access to unsuitable material and did so without the need for constant parental intervention.<sup>41</sup> Typically, these programs maintained a list of forbidden sites as well as a text-search filter, which would not load documents containing forbidden strings of words.

The irony that I mentioned is that these technical solutions were used by both sides in the dispute over the CDA. Those challenging the CDA

40. See Owen M. Fiss, *Free Speech and Social Structure*, 71 IOWA L. REV. 1405, 1424-25 (1986). Today abolition of the fairness doctrine can be passed off as just one more instance of “deregulation.” It seems to me, however, that there is much to regret in this stance of the Court and the [First Amendment] Tradition upon which it rests. The received Tradition presupposes a world that no longer exists and that is beyond our capacity to recall—a world in which the principal political forum is the street corner.

*Id.*; see also OWEN M. FISS, *LIBERALISM DIVIDED* (1996); J.M. Balkin, *Some Realism About Pluralism: Legal Realist Approaches to the First Amendment*, 1990 DUKE L.J. 375, 427 (1990).

In assessing what constitutes substantial overbreadth or vagueness, I do not think it inappropriate to employ common sense judgments about the way the world works. Although the distinction between public power and private power is significant, even more significant for me are what power relations (public or private) exist in the standard case in which the statute operates.

*Id.* See also Richard Delgado, *First Amendment Formalism Is Giving Way to First Amendment Legal Realism*, 29 HARV. C.R.-C.L. L. REV. 169, 170 (1994) (“The transition to the new [legal realist] paradigm is, however, far from complete.”). *But cf.* Steven G. Gey, *The Case Against Postmodern Censorship Theory*, 145 U. PA. L. REV. 193, 195-97 (1996).

The theoretical advances celebrated by Delgado and other progressive critics of the First Amendment are not really advances at all. They are simply refurbished versions of arguments used since the beginning of modern First Amendment jurisprudence to justify government authority to control the speech (and thought) of citizens. . . . Moreover, despite the different objectives of the new censors, their reasons for supporting government control over speech are not significantly different from those of their reactionary predecessors. . . . The postmodern censorship theory offered by this new generation of politically progressive legal scholars is neither progressive nor, for that matter, even “postmodern.” In the end, it is just censorship.

*Id.*

41. See generally Kathryn Munro, *Filtering Utilities*, PC MAG., Apr. 8, 1997, at 235 (describing and reviewing various filtering software products).

argued that the availability of privately implemented technological solutions meant that the CDA failed First Amendment scrutiny: clearly it was not the least restrictive means available to achieve the objective. "Listener-based" blocking software allowed parents to control what their children saw while "speaker-based," or third party rating systems such as PICS offered a private solution to the problem of rating the content available on the Internet.

The government took the opposite position, arguing that the availability of systems such as PICS meant that the CDA was not overbroad. Adult speakers would not be burdened by the law because such systems provided adequate methods for adult speakers to segregate their indecent but protected speech from the eyes of minors. Thus, in their eyes, the PICS scheme, developed to destroy the CDA, actually saved it.<sup>42</sup> The Supreme Court ultimately disagreed, though Justice O'Connor left open the possibility that future technical developments might change that conclusion.<sup>43</sup> Before the decision was even handed down, President Clinton was already signaling his political preference for a technical solution to the question of regulating speech on-line, talking vaguely of a "V-chip for the Internet."<sup>44</sup> Bills have already been advanced in Congress that would require Internet service providers to provide filtering software to customers and aim at the development of an "E-chip."<sup>45</sup>

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42. For a fuller version of this argument, see James Boyle et al., *Before the Supreme Un-Court of the United States* (visited June 24, 1997) <<http://www.wcl.american.edu/pub/faculty/boyle/unreno.htm>> (Un-Scalia, J., dissenting).

43. Justice O'Connor wrote:

Despite this progress, the transformation of cyberspace is not complete. Although gateway technology has been available on the World Wide Web for some time now, it is not available to *all* Web speakers, and is just now becoming technologically feasible for chat rooms and USENET newsgroups. Gateway technology is not ubiquitous in cyberspace, and because without it "there is no means of age verification," cyberspace still remains largely unzoned—and unzoneable. User based zoning is also in its infancy. For it to be effective, (i) an agreed upon code (or "tag") would have to exist; (ii) screening software or browsers with screening capabilities would have to be able to recognize the "tag"; and (iii) those programs would have to be widely available—and widely used—by Internet users. At present, none of these conditions is true. Screening software "is not in wide use today" and "only a handful of browsers have screening capabilities." There is, moreover, no agreed-upon "tag" for those programs to recognize.

Reno v. ACLU, 117 S. Ct. 2329, 2354 (1997) (O'Connor, J., concurring in part and dissenting in part) (citations omitted).

44. Remarks by President Clinton at Town Hall meeting in Bridgeport, W. Va. (May 22, 1997), in 33 WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, 758 [hereinafter President Remarks]. "[I]t may be that what we have to do is to try to develop something like the equivalent of what we are developing for you for television, like the V-chip . . . . It's technically more difficult with the Internet . . . . But I think that is the answer. Something like the V-chip for televisions. And we are working on it." *Id.*

45. See, e.g., Communications Privacy and Consumer Empowerment Act, H.R. 1964, 105th Cong. (1997).

So where does on-line speech stand after the Supreme Court's decision in *Reno v. ACLU*? From the perspective of the digital libertarian, the Internet remains unregulated and the Internet Trinity is undisturbed. From the perspective I have been developing here, things seem much more mixed. As the CDA was being constitutionally voided, the technological "solutions" were proceeding apace, some because of the CDA, some in spite of the CDA. In contrast to the extensive attention given to CDA, much of this process was effectively insulated from scrutiny because of the assumptions about law and state that I have been exploring here.

PICS is a wonderful tool for content selection and, in many ways, if one assumes a world very much like the idealized version of the marketplace of ideas, an unthreatening and beneficial one. Yet its technological goal—to facilitate third- and first-party rating and blocking of content—helps to weaken the Internet's supposed resistance to censorship at the same moment that it helps provide a filter for user-based selection. If national networks can be more easily run through a kind of PICS-filtered firewall, what happens to the notion that the Internet tap can only be turned to off or full? One wonders how China, Singapore, or Iran would choose to employ this value-neutral system. The technological component of the Internet faith does not fall, but it is weakened. The state may not be able to deploy Austinian sanctions backed by threats over the Internet, but the technology provided by PICS gives it a different arsenal of methods with which to regulate content materially, rather than juridically—by everyday softwired routing practices, rather than by threats of eventual sanction.

As for the listener-based software filters, they present even more problems. Journalists studying these programs found that their list of selected sites was problematic and, most importantly, was actually hidden from the users.

A close look at the actual range of sites blocked by these apps shows they go far beyond just restricting "pornography." Indeed, some programs ban access to newsgroups discussing gay and lesbian issues or topics such as feminism. Entire *domains* are restricted, such as HotWired. Even a web site dedicated to the safe use of fireworks is blocked.

All this might be reasonable, in a twisted sort of way, if parents were actually aware of what the programs banned. But here's the rub: Each company holds its database of blocked sites in the highest security. Companies fight for market share based on how well they

upgrade and maintain that blocking database. All encrypt that list to protect it from prying eyes . . . .<sup>46</sup>

The programs turned out to ban sites ranging from the National Rifle Association to the National Organization for Women, and did so in a way that was often undetectable by their purchasers. Nevertheless, enthusiasm for these programs continues unabated. As I mentioned earlier, President Clinton has promised that the government is working on an Internet V-chip,<sup>47</sup> Boston city libraries are installing blocking software on computers accessible to children,<sup>48</sup> and Texas is considering mandating that Internet access companies make copies of such programs available to all their new customers.<sup>49</sup> Representative Markey introduced a bill into Congress that would require both the creation of an "E-chip" and a provision for free or "at cost" blocking software.<sup>50</sup> In constitutional terms, this raises interesting questions of state action. One of the attractions of the technical solution is often that it allows the state to enlist private parties to accomplish that which it is forbidden to accomplish directly. But this state action problem is merely the constitutional incarnation of the political limitations of the jurisprudence of digital libertarianism—its sole focus on state power, narrowly defined, and its blindness to the technical and economic shaping, rather than the legal sanctioning, of the communications environment.

I do not want to overstate the effect of the mindset that I am describing. Not everyone in the digital world thinks this way. Libertarians too, have been worried by the dangers posed by technologically invisible filtering of communication.<sup>51</sup> Indeed, one of the most interesting things about Internet politics is that it has forced libertarians to confront some of the tensions inherent to their own ideas. Finally, other commentators have made the points I make here, though they also lamented the blindness imposed by an entirely libertarian focus.<sup>52</sup> Nevertheless, the result of the Supreme Court's decision in *Reno*

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46. Declan B. McCullagh & Brock N. Meeks, *Keys to the Kingdom* (visited June 24, 1997) <[http://www.eff.org/pub/Publications/Declan\\_McCullagh/cwd.keys.to.the.kingdom.0796.article](http://www.eff.org/pub/Publications/Declan_McCullagh/cwd.keys.to.the.kingdom.0796.article)>.

47. See President Remarks, *supra* note 44.

48. Geeta Anand, *Library OK's limits on 'Net access; Compromise calls for filter software only on computers used by children*, BOSTON GLOBE, Mar. 22, 1997, at A1.

49. Marc Ferranti, *Site-Filtering Issue Goes to State Level*, INFOWORLD, Apr. 21, 1997, at 60.

50. Communications Privacy and Consumer Empowerment Act, H.R. 1964, 105th Cong. (1997).

51. With a cavalier disregard for the problems that this raises for my thesis, some of the best investigative reporting on, and discussion of, the politics of private technological censorship has been done by the cyberjournalist Declan McCullagh and his "Fight Censorship" discussion list. See McCullagh & Meeks, *supra* note 46. In one sense, this raises the issue that I discussed earlier—the politics of the Internet are up for grabs and the conventional categories of political ideology and theory are much more mutable there.

52. One commentator wrote:

*v. ACLU* will simply be to sharpen the turn to the kinds of filtering devices mentioned here. It is unlikely that this will leave the Internet as free, or the state as powerless, as the digerati seem to believe.

## V. PRIVATIZED PANOPTICONS AND LEGALIZED ENCLOSURES

I have argued elsewhere that the current government proposals for the "reform" of copyright on the Internet weigh only the costs of cheaper copying rather than its benefits, underestimate the importance of fair use to competition policy and free speech, fail to recognize the unique features of both intellectual property and networked environments, and apply bad economic analysis to an even worse depiction of current law.<sup>53</sup> Leaving aside the virtues or vices of these proposals for the moment, I will focus here on the methods by which they were to be implemented.

Enforcement is a key problem for any Internet copyright regime. The Internet Trinity I discussed earlier would seem to apply with particular force to the problem of policing copyright on a global distributed network. The technology is resistant to control, the subject matter of the regime is intangible and trivially easy to circulate, and both the content and the people regulated by the regime are frequently beyond the jurisdiction of the sovereign in question. The combination of these circumstances produced a series of warnings that intellectual property law was doomed because neither its conceptual structure nor its enforcement mechanism could survive "being digital."<sup>54</sup> The best known of these warnings is also the best written:

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Although many people were surprised at [the revelations in the McCullagh and Meeks article], it was in fact completely predictable from a historical perspective. Too much discussion of the future of unfettered electronic communications takes place in a social vacuum, from an extremely simplistic viewpoint (I refer to this the "net.libertarian" mindset). Because of a perspective that might be rendered "government action bad, private action good" There's [sic] great unwillingness to think about complicated social systems, of private parties acting as . . . agents of censorship.

Seth Finkelstein, *Internet Blocking Programs and Privatized Censorship*, THE ETHICAL SPECTACLE (Aug. 1996) <<http://www.spectacle.org/896/finkel.html>>. I started this Article convinced that it was about the failures of libertarianism in cyberspace. I now believe that the real question is how cyberspace will *change* libertarianism. Digital libertarians show occasional willingness to admit that property rights can be "coercive regulation" as well as the well-spring of liberty. Privacy discourse in cyberspace focuses on excesses of private, as well as public, power. All in all, cyberspace is a hard place to maintain the most simplistic type of libertarian definitionism.

53. Boyle, *supra* note 9, at 47; BOYLE, *supra* note 15, at 18-20, 51-61, 162-63; James Boyle, *Q: Is Congress turning the Internet into an information toll road?*, INSIGHT, Jan. 15, 1996; James Boyle, *Sold Out*, N.Y. TIMES, Mar. 31, 1996, at E15.

54. NICHOLAS NEGROPONTE, *BEING DIGITAL* (1995).

The riddle is this: if our property can be infinitely reproduced and instantaneously distributed all over the planet without cost, without our knowledge, without its even leaving our possession, how can we protect it? How are we going to get paid for the work we do with our minds? And, if we can't get paid, what will assure the continued creation and distribution of such work?

Since we don't have a solution to what is a profoundly new kind of challenge, and are apparently unable to delay the galloping digitization of everything not obstinately physical, we are sailing into the future on a sinking ship.

This vessel, the accumulated canon of copyright and patent law, was developed to convey forms and methods of expression entirely different from the vaporous cargo it is now being asked to carry. It is leaking as much from within as without.

Legal efforts to keep the old boat floating are taking three forms: a frenzy of deck chair rearrangement, stern warnings to the passengers that if she goes down, they will face harsh criminal penalties, and serene, glassy-eyed denial.<sup>55</sup>

If one saw these technological transformations as mainly a threat to both the copyright owner and the enforcement power of the state, how would one respond, particularly if one took seriously the difficulties in policing that the Internet Trinity points out? One would try to focus on building the regime into the architecture of transactions in the first place—both technically and economically—rather than policing the transactions after the fact. More concretely, one would want to escape from the practical and legal limitations of a sovereign-citizen relationship. Thus, one might seek out private actors involved in providing Internet services who are not quite as mobile as the flitting and frequently anonymous inhabitants of cyberspace. In this case, the parties chosen were the Internet service providers. One would pin liability on them and leave it up to them to prevent copyright infringement through technical surveillance, tagging, and so on, and to spread the cost of the remaining copyright infringement over all the users of their service, rather than all the purchasers of the product in question. By enlisting these nimbler, technologically savvy players as one's private police, one would also gain another advantage: freedom from some of the constitutional and other restraints that would burden the state were it to act directly. Intrusion into privacy, automatic scrutiny of electronic mail, and curtailment of fair use rights so as to make sure that no illicit content was being carried would occur in the

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55. Barlow, *supra* note 5.

private realm, far from the scrutiny of public law. There are advantages to privatizing the Panopticon, it turns out.

Given all these "advantages," it is unsurprising to find that strict liability for on-line service providers became a central feature in the Clinton administration's "White Paper,"<sup>56</sup> the bills implementing its ideas,<sup>57</sup> and the United States proposals for the World Intellectual Property Organization (WIPO) treaties in Geneva.<sup>58</sup> The specifics of the White Paper were relatively simple. On-line service providers were to be made strictly liable for copyright violations committed by their subscribers; in part, this was done by an expansive definition of fixation, so that even holding a document in RAM as it was browsed would constitute the creation of a copy.<sup>59</sup> Clearly then, the relatively more stable versions held in a server's disk cache or stored temporarily in its computers would count as copies. The theory also depends on the notion that we should analogize the on-line service provider to an innocent but infringing photo shop and, thus, impose strict liability on the provider as a direct infringer.<sup>60</sup> Notably, this theory was rejected by the only court to have faced it squarely.<sup>61</sup> In one sense, this strategy is very similar to the use of strict liability elsewhere in the legal system, and of course, it can be understood entirely without reference to the Foucauldian gloss. Yet, the conventional reasons for imposing strict liability are strikingly absent.<sup>62</sup>

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56. INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS, 114-24 (1995) ("White Paper"); Boyle, *supra* note 9, at 58-111; Niva Elkin-Koren, *Copyright Law and Social Dialogue on the Information Superhighway: The Case Against Copyright Liability of Bulletin Board Operators*, 13 CARDOZO ARTS & ENT. L.J. 346 (1993); cf. *Religious Tech. Ctr. v. Netcom On-Line Communication Servs.*, 907 F. Supp. 1361, 1377 (N.D. Cal. 1995) (discussing the theory that strict liability for Internet service providers "would chill the use of the Internet because every access provider or user would be subject to liability when a user posts an infringing work to a Usenet newsgroup").

57. See National Information Infrastructure Copyright Protection Act of 1995, S. 1284, 104th Cong. (1995), H.R. 2441, 104th Cong. (1995).

58. See World Intellectual Property Organization Treaty, Dec. 20, 1996, CRNR/DC/94 (visited June 26, 1997) <<http://www.wipo.org/eng/diplconf/distrib/94dc.htm>>; see also *News from WIPO* (visited June 26, 1997) <<http://www.hrrc.org/wiponews.html>> (detailing course of deliberations during the Diplomatic Conference).

59. See Boyle, *supra* note 9, at 83-94 (discussing *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir.1993)).

60. See *id.* at 103-04. The alternative, of course, would be to analogize the service provider to a business that rented copy machines with which material *could* be copied illegally; in that case, the business would be liable only if it was guilty of contributory infringement.

61. See *Religious Tech. Ctr. v. Netcom On-Line Communication Servs.*, 907 F. Supp. 1361, 1377 (N.D. Cal. 1995); see also *Playboy Enters., Inc. v. Chuckleberry Publications, Inc.*, 939 F. Supp. 1032 (S.D.N.Y. 1996); *Sega Enters., Ltd. v. Maphia*, 948 F. Supp. 923 (N.D. Cal. 1996).

62. We impose strict liability on manufacturers of products for a number of reasons—one of which is that we believe the state could not possibly inspect every product and every design in the marketplace. Simply by forcing manufacturers to internalize the costs of injuries caused by their products, we produce

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a strong, private set of incentives that, in turn, encourages internal mechanisms of review and product redesign. See GUIDO CALABRESI, *THE COST OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS* (1970); see also Guido Calabresi, *First Party, Third Party, and Product Liability Systems: Can Economic Analysis of Law Tell Us Anything About Them?*, 69 IOWA L. REV. 833 (1984); A. MITCHELL POLINSKY, *AN INTRODUCTION TO LAW AND ECONOMICS* 97-106 (2d ed. 1989). Plaintiffs become private attorneys general. However, there are striking differences between the familiar example of the use of strict liability in the product liability setting, and the imposition of strict liability on Internet service providers. In product liability, the conventional range of reasons for imposing strict liability on manufacturers and sellers includes a number of assumptions. First, they are generally the cheapest cost avoiders; in other words, they are best able to respond to liability for damage by making changes that could prevent the damage. Second, they are generally the best loss spreaders; in other words, they are best able to pass the cost of unavoidable or cost-justified damage on to the appropriate group: consumers of the good in question. Last, they are generally in an advantageous position in terms of knowledge and effective power—at least as compared to the relatively powerless individual consumer. See *Escola v. Coca Cola Bottling Co.*, 150 P.2d 436, 440-43 (1944) (Traynor, J., concurring).

In the on-line setting, none of these claims is obviously correct. In some cases service providers may be able to prevent illicit copying relatively cheaply without imposing large social costs. On many other occasions, however, it seems that the costs of enforcement may outweigh the benefits. To ensure that illicit copying is not being carried on, service providers may incur, or impose, high transaction costs; they may be forced to impose draconian restrictions on the fair use privileges of their subscribers, for example. (Because Internet service providers would pay for all detected copyright infringements, but would not be forced to internalize the cost to their customers of restricting fair use, the incentives would be asymmetrically anti-consumer.) Leaving aside the efficiency costs of enforcement by service providers, there is also the question of whether they are the cheapest cost avoider. In many cases, the party best situated to avoid the cost of copyright infringement will be the owner of the copyright. Whether by developing technical solutions or by fine-tuning their business plan so as to minimize the incentives to violate copyright in the first place, copyright owners might well be the cheapest cost avoiders. If that is true, it would actually be inefficient to allow them to rely on another party for enforcement of their rights.

Beyond the question of the cheapest cost-avoider, remains the question of best loss spreader. Here, too, it is hard to be confident that the Internet service providers are the appropriate parties upon which to impose liability. The economic analysts' mantra is "activities should internalize their full costs." If the costs of a good or activity are not passed on to those who use the good or engage in the activity, then those individuals will make inefficient choices. Thus, for example, if the price of gasoline does not reflect the environmental damage done by gasoline, that damage becomes a negative externality, and gasoline is inefficiently priced relative to its "true" costs. Over what group, then, should the costs (*i.e.*, the copyright owner's foregone profit) of illicit copying be imposed? The inquiry is a fascinating one, with more layers than I can fully explore here. It is complicated by the fact that the costs imposed by the illicit copying of an information good are economically different in some ways from the costs imposed by theft of material goods. As a content provider, I can make a rational economic decision to sell my good across some cheap but "leaky" medium, which lowers my costs of advertising and distribution and increases the number of unauthorized copies circulating. I may even believe that some of the unauthorized copies provide a benefit to me—making my word processing program a *de facto* standard in the industry or establishing my band as the best known and, therefore, increasing the market for future products. But let us leave aside the joys of pointing out that economic analysis depends on questions of interpretation that cannot themselves be decided according to economic criteria. There is, at the very least, strong reason to doubt that users of on-line services, rather than purchasers of the good in question, are the appropriate group over whom the costs of illicit copying should be spread. This would, in fact, actively undermine the competitive incentives to companies to develop their own anticopying methods.

Finally, the asymmetry of power and knowledge that occurs when Mrs. McPherson confronts the Buick Motor Company is by no means as clear when Microsoft wants Netcom to do its enforcement work. For all of these reasons, imposing strict liability on Internet service providers does look rather different from imposing it on manufacturers of defective products. If there is an advantage to this scheme, that advantage redounds mainly to the content providers; such a plan would shift enforcement costs from

With or without Foucault, however, thinking about the use of strict liability as an enforcement mechanism does illustrate the limitations of the Austinian view of the state's exercise of power. Unsurprisingly perhaps, Austin argued against strict liability and judges under the influence of Austinian reasoning, actually declared that strict liability was not true law.<sup>63</sup> My central point here is not the undesirability of strict liability for on-line service providers, though the rationale, legal basis, and constitutionality of such a system seem doubtful to me. Rather, I think that the possible impact of a strict liability system on actual privacy, speech, and discourse, indicates another limitation of the jurisprudence of digital libertarianism. Once again, the focus on public, criminal, and sanction-backed acts by states exercising their power directly tends to obscure and, therefore, to undervalue the efficacy of efforts that rely on privatized enforcement and surveillance, cost spreading, and the use of "material coercions rather than the physical existence of a sovereign."<sup>64</sup>

It is to the latter point that I now turn. One prong of the Clinton administration's plan for copyright on the Internet depended on enrolling private actors to act as enforcement agents in a way that sidestepped the rights, duties, and privileges between citizen and sovereign. The other prong depended on coating technological anticopying devices with the authority of the law in such a way as to change the relative powers of current copyright holders on the one hand, and their customers and future competitors on the other. The two most important provisions are the "circumvention of copyright protection systems" section and the "integrity of copyright management information" section of the NII Copyright Protection Act of 1995.<sup>65</sup> Similar provisions were proposed by the United States during the WIPO conference.<sup>66</sup>

These two provisions seem, initially, to be entirely unobjectionable. The circumvention section imposes civil liability on importers, manufacturers, and distributors of devices the primary purpose or effect of which is to circumvent a copyright protection system.<sup>67</sup> The

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owners and allow them to reap the benefits of the Internet without fully bearing its costs.

63. See 2 JOHN AUSTIN, LECTURES ON JURISPRUDENCE 136 (5th ed. 1885).

64. Foucault, *supra* note 1, at 104.

65. See National Information Infrastructure Copyright Protection Act of 1995, S. 1284, 104th Cong. §§ 1201, 1202 (1995), H.R. 2441, 104th Cong. §§ 1201, 1202 (1995).

66. See World Intellectual Property Organization Treaty, Dec. 23, 1996, CRNR/DC/94 (visited June 26, 1997) <<http://www.wipo.org/eng/diplconf/distrib/94dc.htm>>; see also *News from WIPO* (visited June 26, 1997) <<http://www.hrc.org/wiponews.html>> (detailing course of deliberations during the diplomatic conference).

67. See S. 1284, H.R. 2441, § 1203.

management section imposes civil *and* criminal liability on someone who removes or tampers with copyright management information.<sup>68</sup> Obviously, technological protections are going to be an important means through which digital intellectual property is safeguarded; these technological protections will include, among other things, the kind of deeply embedded information that the management information section protects. Documents will keep track of how many times they are read and may complain if they are read too much or by the wrong person. Pamela Samuelson calls these texts that "rat" on you.<sup>69</sup> Digital books sold to one person may be encoded so that they cannot be read by someone else on another computer. Given the possibility of documents that have the copyright details bound into in every packet of data, and that also check themselves to be sure that no alterations have been made, quotation may be perceived as alteration. (Presumably Internet service providers would also be encouraged to introduce some system of scanning that looked for altered or unauthorized packets of data.)

The point about all of this is that there will be a continuing technological struggle between content providers, their customers, their competitors, and future creators. Obviously it will sometimes be in the interest of content providers to make it as difficult as possible for citizens to exercise their fair use rights. They will try to build technological and contractual fences around the material that they provide, not just to prevent its theft, but to prevent it from being used in ways that have not been paid for, even if those uses are privileged under current intellectual property law. They may want to stop their competitors from achieving interoperability, or prevent their customers from selling second-hand versions of their products. The technical means through which to do this can be thought of as digital fences. Sometimes those fences will be used to stop clear violations of existing rights. Sometimes they will be used to enclose the commons or the public domain. Thus, by making it illegal or impractical for me to go around, through, or over the fence, the state adds its imprimatur to an act of digital enclosure. The Internet Trinity tells us that information wants to be free and that the thick fingers of Leviathan are too clumsy to hold it back. The position is less clear if that information is guarded by digital fences which themselves are backed by a state power maintained through private systems of surveillance and control.

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68. See S. 1284, H.R. 2441, § 1203, § 1204.

69. Pamela Samuelson, *Will the Copyright Office be Obsolete in the Twenty-First Century?*, 13 CARDOZO ARTS & ENT. L.J. 55, 58 n.18 (1994).

## VI. A COMMUNICATIONS SAMPLER

The tendencies I have been describing here by no means end with the CDA and the NII Copyright Protection Act. In fact, the turn to privatized and technologically-based enforcement to avoid practical and constitutional obstacles seems to be the rule rather than the exception.

Outside of the Internet, the most obvious example of this is the V-chip, a device to enable parents to restrict television programming through a "voluntary" rating system. Although the rating system is voluntary, the device is mandated by § 551 of the Telecommunications Act of 1996.<sup>70</sup> The V-chip decodes a set of ratings agreed to by private parties and suggested by a state-convened "private" board. It then blocks programming that is above a ratings threshold set by parents.<sup>71</sup> The attractiveness of this hardwired mix of public and private decisions can be judged by the spread of V-chip analogies: President Clinton's "V-chip for the Internet," and Representative Markey's "E-chip." Why is this device so popular, not just as a device, but as a rhetorical trope? The answer, I think, is partly provided by the characteristics outlined here. The V-chip seems to be merely a neutral facilitator of parental choice. The various acts of coercion involved—the government making the television company insert the thing into the machine, the public-private board choosing which ratings criteria will be available for parents to use—simply disappear into the background. Finally, the distributed privatized nature of the system promises that it might actually work; though admittedly, state administration of the television system poses fewer headaches than state administration of the Internet.

Another set of examples is provided by encryption policy. In the digital era, encryption is no longer merely the stuff of spy novels. It provides the walls, the boundaries, and the ways of preventing unauthorized or unwanted entry. Faced with the development of a cryptography industry, which would produce digital walls unbreakable by the state, the government responded by attempting to legislate its own back door. The first proposal was that the encryption of all communications had to be made through a government designed device known as the "Clipper Chip." Your phone, fax, or computer system would encrypt your communication using the algorithm hardwired into

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70. See Telecommunications Act of 1996, Pub. L. No. 104-104, § 551, 110 Stat. 56, 140 (to be codified at 47 U.S.C. § 303).

71. See Kristin S. Burns, *Protecting the Child: The V-chip Provisions of the Telecommunications Act of 1996*, 7 DEPAUL-LCA J. ARTS & ENT. L. 143 (1996); David V. Scott, *The V-chip Debate: Blocking Television Sex, Violence, and the First Amendment*, 16 LOY. L.A. ENT. L.J. 143 (1996).

the Clipper Chip. The Clipper Chip utilizes a "key escrow" system under which the government maintains a "back door" key to decrypt all Clipper communications; a key which is supposed to be available only to law enforcement agencies who, most of the time, would have to get judicial approval of their actions. After considerable controversy, use of the Clipper Chip encryption system was declared voluntary for both the government and the private sector.

This might seem to be a partial vindication for the digital libertarian position. In fact, however, the Clipper Chip project continues to have considerable influence on the domestic encryption industry because the government has, for the most part, adopted the Clipper Chip and has used its considerable purchasing power to make it a de facto industry standard.<sup>72</sup> Although the success of this method may have been undermined by later technological development, the strategy shows the way in which a hardwired regime might be implemented by market power as well as legislative fiat.

One of the arguments behind the Clipper Chip was that law enforcement agencies were merely striving to achieve the same level of physically permissible surveillance in a world of encoded transmissions as they currently possessed. With this as a baseline, it was obvious that the material possibility for interception and decryption should be hardwired into the system itself. The same argument was made successfully over digital telephony. Realizing that new telephony technology, such as call forwarding, cellular telephones, and digital communications in general, presented increasing challenges to wire tapping, Congress passed the Communications Assistance for Law Enforcement Act,<sup>73</sup> more commonly known as the "Digital Telephony Act." At its heart, the Digital Telephony Act requires telecommunications companies to make "tappability" a design criteria for the system. Everything recorded by the traditional "pen register" system, as well as a few new categories of information, must be digitally recorded. Under the Digital Telephony Act, information regarding a subscriber's name, address, telephone number, telephone toll billing

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72. See Howard S. Dakoff, Note, *The Clipper Chip Proposal: Deciphering the Unfounded Fears that Are Wrongfully Derailing its Implementation*, 29 J. MARSHALL L. REV. 475, 482-84 (1996) (discussing the use of the government's purchasing power to create a de facto encryption system); see also Richard L. Field, *1996: Survey of the Year's Developments in Electronic Cash Law and the Laws Affecting Electronic Banking in the United States*, 46 AM. U.L. REV. 967, 993 (1997); Ira S. Rubenstein, *Export Controls on Encryption Software* 748 PLI/COMM 309 (1996); A. Michael Froomkin, *The Metaphor is the Key: Cryptography, the Clipper Chip, and the Constitution*, 143 U. PA. L. REV. 709 (1995).

73. 47 U.S.C. § 1001-10 (Supp. 1994).

records, length of service, and the types of services utilized, are now available to the government.<sup>74</sup>

Technologically hardwired protections have also been implemented in order to protect intellectual property as in the Digital Audio Tape (DAT) standard. Unlike compact disks, which until recently were "read-only," digital audio tape technology allows users to make perfect copies of recordings. Fearing that this ability would lead to the development of an extensive market for copied tapes, the recording industry pushed for mandatory technological protection, which they received in the Audio Home Recording Act of 1992.<sup>75</sup> This Act requires all DAT recorders to utilize the "serial copy management system," which allows a first copy to be made onto DAT, but prevents all subsequent copies.

These examples suggest a number of conclusions at odds with popular wisdom. Most obviously, they offer a cautionary note to the libertarian techno-optimists who believe that technology always grows free from governmental control and always moves in the direction of greater liberty. Let us lay aside many of the assumptions behind that belief for a moment, such as that governments are generally the greatest threat to daily liberty, or, conversely, that liberty should be defined primarily around the absence of governmental restraint. Even with these qualifications, the idea that the technological changes of the digital revolution are always outside the control of the state seems unproven. In fact, the state is working very hard to design its commands into the very technologies that, collectively, are supposed to spell its demise.

Another point needs to be made; there are—whether one likes them or not—strong arguments that the "technologies of freedom" actually require an intensification of the mechanisms of surveillance, public and private, to which we are currently subjected. If the digital technologies enlarge our space for living, both conceptually and practically, the dangers posed by that expansion will prompt the demand—often the very reasonable demand—that the Panopticon be hardwired into the "technologies of freedom."<sup>76</sup>

## VII. CONCLUSION

Looked at in a vaguely Foucauldian light, these examples I have given in this Article seem to point to two conclusions, conclusions which may seem paradoxical. On the one hand, the studies indicate that the

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74. 18 U.S.C. § 2703(c)(1)(C) (1994). See Susan Friewald, *Uncertain Privacy: Communication Attributes After the Digital Telephony Act*, 69 S. CAL. L. REV. 949 (1996).

75. 17 U.S.C. §§ 1001-1010 (1994).

76. See generally ITHIÉL DE SOLA POOL, *TECHNOLOGIES OF FREEDOM* (1983).

confident assumption that the state cannot regulate cyberspace is definitionally blind to some of the most important ways that some states could, in fact, exert power. The jurisprudence of digital libertarianism could use a lot less John Austin and a lot more Michel Foucault. But one cannot simply limit the analysis to the available avenues of *state* power. Foucault's *Discipline and Punish* was not a manual for state officials, but a challenge—in some ways similar to the challenges posed by legal realism and feminism—to the very categories of public and private and to the belief that power begins and ends with the state.

We need a similar challenge to those categories in cyberspace. If the first conclusion of this study is that the state may actually have more power than the digerati believe, the second conclusion is that the attraction of technical solutions is that they apparently elide the question of power—both private *and* public—in the first place. The technology appears to be “just the way things are”; its origins are concealed, whether those origins lie in state-sponsored scheme or market-structured order, and its effects are obscured because it is hard to imagine the alternative. Above all, technical solutions are less contentious; we think of a legal regime as coercing, and a technological regime as merely shaping—or even actively facilitating—our choices. In the *Lochner* era, a strikingly similar contrast was drawn between the coercive nature of public law and the free private world of a market that was merely shaped by neutral, facilitative rules of contract and property. The legal realists did a remarkably good job of pointing out the shortcomings of that picture of the market. If we are to have some alternatives to the jurisprudence of digital libertarianism, we will have to offer a richer picture of Internet politics than that of the coercive (but impotent) state and the neutral and facilitative technology.