

Foreword

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# Foreword

Professor Lawrence Lessig\*

In December, 1993, I was trapped in Manhattan, between flights, roaming a cold and particularly grimy part of the city. I had just finished an extraordinary book by Catharine MacKinnon—*Only Words*—a book about the way in which words, speech, and texts, help construct inequality.<sup>1</sup> Though MacKinnon is a legal scholar, this was not your typical scholarly text. There was profanity in this text; there was profanity described by this text; and so gruesome were these profanities that they seemed to bleed onto the griminess of the city.

I finished MacKinnon's book on the downtown subway, and as I left the subway station, I was eager for something different—for different words, a balance, a text to recolor the dinginess that this mix of MacKinnon and the city had produced. I stopped at a news stand, and my eye caught an issue of the *Village Voice*. How perfect, I thought. What better antidote for Catharine MacKinnon than the *Village Voice*?

I thought that not because I had read the *Voice* much. Indeed, I had only ever read the *Voice* when roaming New York. But I did have good reason to believe that the *Voice* would be contra MacKinnon: I had been pushed to read her book by a particularly viscous review by Carlin Romano in the *Nation*.<sup>2</sup> Romano had used the *Voice*'s Nat Hentoff as a protagonist in the piece—actually “Dworkin Hentoff” was the character's name.<sup>3</sup> It evinced no understanding of MacKinnon. The two authors were speaking different languages—loudly, and apparently incapable of connecting on any issue that was important to either.

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\* This Foreword is adapted from remarks made by Professor Lessig as the keynote address for the “Cyberspace and Privacy” Symposium on Feb. 6, 2000. At the time of the Symposium, he was the Jack N. and Lillian R. Berkman Professor for Entrepreneurial Legal Studies at Harvard Law School. In the fall, 2000, Professor Lessig joins the faculty at Stanford Law School. Copyright © 2000 by Lawrence Lessig and the Board of Trustees of the Leland Stanford Junior University.

1. CATHARINE A. MACKINNON, *ONLY WORDS* (1993).

2. Carlin Romano, *Between the Motion and the Act*, *NATION*, Nov. 15, 1993, at 563 (reviewing three books on the topic of speech and obscenity).

3. Hentoff published a strong criticism of Romano's review in his column in the *Village Voice*. See Nat Hentoff, *Catherine MacKinnon's Rape in the Nation*, *VILLAGE VOICE*, Jan. 4, 1994, at 16.

Connecting. These authors knew little of E.M. Forster's ideal, but I am fascinated with it—connecting. At one stage, it seemed like the only idea worth pursuing in academics, so infrequently did it occur among academics. But this time, connecting wasn't the point. I wanted to be taken away from the story MacKinnon had told. Unconnected, a different world, a bit of Disney to balance a certain intellectual depression. The *Voice* was to be it. And so I grabbed the current issue, and returned to my hotel.

The cover story was an article by an author I had not heard of before, Julian Dibbell, on a topic I could not begin to understand, "A Rape in Cyberspace." I turned to it to turn away from MacKinnon.<sup>4</sup>

I, like the authors writing for this issue, work in the field of law and cyberspace. And as is true of any field, there are texts that we all have read. Dibbell's text is one such text. It is a founding document in this weird branch of legal studies; it tells the story of a "rape"—a virtual rape—committed within a MOO (multiple user dimension, object oriented) called LambdaMoo. A virtual rape—a sexualized assault performed through words. Only words. "No bodies touched," Dibbell wrote. Instead whatever crime there was was a crime built in text.

I could not put the story down, so extraordinary was the account. But by the end, I felt I had been cheated. I had wanted an antidote to MacKinnon's text. But here she was throughout Dibbell's article. As Dibbell wrote:

the more seriously I took the notion of virtual rape, the less seriously I was able to take the notion of freedom of speech, with its tidy division of the world into the symbolic and the real.

. . . [W]hatever else these thoughts tell me, I have come to believe that they announce the final stages of our decades-long passage into the Information Age, a paradigm shift that the classic liberal firewall between word and deed . . . is not likely to survive intact. After all, anyone the least bit familiar with the workings of the new era's definitive technology, the computer, knows that it operates on a principle impractically difficult to distinguish from the pre-Enlightenment principle of the magic word: the commands you type into a computer are a kind of speech that doesn't so much communicate as *make things happen*, directly and ineluctably, the same way pulling a trigger does. They are incantations, in other words, and anyone at all attuned to the technosocial megatrends of the moment—from the growing dependence of economies on the global flow of intensely fetishized words and numbers to the burgeoning ability of bioengineers to speak the spells written in the four-letter text of DNA—knows that the logic of the incantation is rapidly permeating the fabric of our lives.<sup>5</sup>

This was something truly extraordinary. The *Voice* had uttered MacKinnon. It had connected to and affirmed a point that was central to her work, without the editors objecting. It had seen in this space—cyberspace—something that she urged us to see everywhere. It was able to see this because the space had disoriented the debate. Cyberspace had disoriented us.

4. Julian Dibbell, *A Rape in Cyberspace*, VILLAGE VOICE, Dec. 21, 1993.

5. *Id.* at 42.

space had disoriented the debate. Cyberspace had disoriented us. Locating the story in this alien space meant it was possible to utter alien thought.

We all had a moment when we decided that this field would be ours. This was mine. As though it were yesterday, I can remember the flash of excitement—the recognition that there was a reason to be here, to write about the stuff that was here. Because here, I thought, I could get ideas to connect. Here was a place where we could get sides to see the other; where there was a possibility of understanding, or of seeing, or of recognition, if only because the ordinary clues of politics had been removed. Here conversation could happen because here the signs of left and right, of conservative and liberal, had been spun.

Here was a subject I would teach because I was a teacher, and the greatest opportunity of a teacher is to get others to see what they hadn't before. To, in other words, connect.

Cyberspace law has a different feeling for me now. It's not a better feeling. Its feeling is something less academic; less purely academic; less about how to teach; less about how to get people to see; less about the pleasant surprise in hearing the wrong words out of the right mouth.

Its feeling now is the feeling of a struggle, sometimes a war. There is an urgency now to get others to see how this ecology, this space, the life this space enables, is changing. The feeling of a race—a race run against time, against changes that are happening faster than time, and against an attitude that makes these changes invisible.

We are at a critical time in the history of cyberspace. The space is changing before we have learned what was special about the place.

That something special is seen in what is now a very old thought, and in something of a new thought, and we will learn something interesting by comparing the two.

The old thought is about whether government can regulate in cyberspace. The old answer was “no.” Behavior, the meme goes, cannot be regulated by government in cyberspace; behavior in cyberspace was therefore free; the only regulation that was possible here was the regulation of norms, and those, we learned when America OnLine (AOL) carpet bombed America with its code, would change.<sup>6</sup>

We learned, however, that this wasn't all that could change. Lex informatica, as Joel Reidenberg called it in 1996<sup>7</sup>—the law in the software, the control made possible by the software, the law in the code, we could say—this too could change. And in the years since 1996, this law has changed.

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6. See, e.g., Marc Gunter & Margaret Boitano, *These Guys Want It All: The AOL-Time Warner Merger*, FORTUNE, Feb. 7, 2000, at 70.

7. Joel R. Reidenberg, *Governing Networks and Rule-Making in Cyberspace*, 45 EMORY L.J. 911 (1996).

Since the time when no control was the rule, the rule in the code has changed. Layered onto the first architecture of the Internet, woven into the tools that defined that first initial architecture of the Net, supplementing what the Net was, is a set of controls that change this first truth about what the Net was. Code that enables control, code that facilitates tracking. Code that makes possible regulation.

These changes have come about for the most part without the government doing anything. They have come about as those who used the Net built it out for their own purposes—as those who paid the coders of the net, for example, paid those coders to code the net for their purposes. Those who paid the coders—commerce—coding the net to secure commerce, to lower the cost of commerce, to facilitate secure commerce, to make possible the control that any commercial system needs.

This coding has happened without the help of government. But government is not irrelevant to the change. For even if government could not, in the first instance, regulate this space directly, government can help change the space so it can regulate behavior better. Government, that is, can help architect the space so that government can regulate well.

These lessons I summarized in a slogan. “Code is law.”<sup>8</sup> I meant this originally in a metaphorical sense, but we are beginning to see the same idea in quite a literal sense as well. Metaphorically, in that the code controls behavior as law might control behavior: You can’t easily rip the contents of my DVD because the code locks it tight. The code functions as a law might function: Telling the user what she can and cannot do.

But now Congress has changed this metaphor into something more. Think of the plight of the Linux programmers who have written code to enable the playing of DVD movies on the Linux platform.<sup>9</sup> There is no evidence that these coders are pirates. No illegal copies of DVD movies are more easily facilitated by this hack—the disks are capable of being copied without the code (called deCSS), that is. All that was facilitated by the program was a porting of a system to enable the playback of presumably legally purchased DVDs on something other than Windows or the Mac.

Yet writing tools to crack this code is a felony. Private code sets a boundary, and reversing it to figure out how to carry it elsewhere is a violation of federal law. In this sense, more real than metaphoric, code has become law.

All that is old hat here among the authors of this Symposium. And so I want to leave that part aside, because it doesn’t touch a second part of this story that we are just coming to see now.

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8. LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* (1999).

9. See Mike Godwin, *Scrambled Signals*, AM. LAW., Apr. 2000, at 47.

There was another consequence of the original architecture of the Net—a consequence beyond the fact that government could do little to regulate behavior. This consequence too is about the imperfections that come from an inability to control. But here the control is not the control by government. Here the power is over competition.

There are many contexts in which this control could be exercised, and many ways in which its exercise will grow. But I want to focus on just one, and then point to a very few others.

The Net is an architecture. This architecture has values—principles that are expressed by the design it embeds.

The original Net—the Net after “TCP” (the Transmission Control Protocol) was linked with IP (the Internet Protocol)—was defined by a principle that network architects call “end-to-end” (“e2e”).<sup>10</sup> Its animating principle is simplicity—simple networks, this principle says, are the key to innovation in network application. Build the network so that network remains simple, keep the intelligence located at the ends, in the applications, or in the uses the Net has, and you will assure, though this simplicity, that the uses of the Net will multiply most quickly.

First described by network architects Jerome H. Saltzer, David P. Reed, and David D. Clark, this principle, architected into the Net’s design, had consequences. Rather than optimizing the Net’s design based on any particular set of uses, this principle guarantees the Net’s uses can change as the demand for uses changes. As Saltzer/Clark/Reed describe, had the Net chosen a different principle—had it, for example, been optimized on the model of telephony—then the World Wide Web would not have been possible.<sup>11</sup> Optimizing—making it smart for one kind of application—would have blocked the possibility of another design that might displace the dominant.

In lawyers speak, e2e codes a kind of neutrality. It means that the network is not in the position to discriminate against new uses of the network. So long as the basic rules are followed, any application can be brought to the Net. This non-discrimination thus invites innovation. It is a guarantee—a constitutional guarantee, if you will—that innovation will be rewarded if the innovation is one that markets respect.

The original Net protected innovation or creativity in other ways as well. Its architecture eliminated barriers to entry.

Think about the constraints on creativity before the Net was built. To publish, one needed a publisher. Printing presses were too expensive. To

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10. See Jerome H. Saltzer, David P. Reed, & David D. Clark, *End-to-End Arguments in System Design* <<http://web.mit.edu/Saltzer/www/publications/>>.

11. See David P. Reed, Jerome H. Saltzer & David D. Clark, *Commentaries on “Active Networking and End-to-End Arguments,”* 12 IEEE NETWORK 66, 69-71 (May/June 1998) (applying their original identification of end-to-end arguments in 1984 as an organizing principle for active networking).

record and distribute music, one needed a record company. Record presses, too, were expensive. And to invent, and bring a product to market, one needed a large organization that could help carry that invention to market.

These constraints were in effect constraints on creativity. They were limits on the ability of many to publish, or to perform, or to invent. They were barriers to innovation, imposed not by some conspiracy, or evil monopolist. They were barriers imposed by real economic limitations. The limitations produced a certain economy to overcome them.

The Internet represents the repeal of many of those constraints. To publish, one needs an html editor, or a pdf writer, not a printing press. To perform and distribute music, one needs an mp3 converter, and a fat pipe, not a record company, or distribution chain. And to invent, one needs not a bank or a company within which to work. One needs an idea, which one puts on the Web.

The Net repeals these constraints, and e2e constitutionalizes that repeal. So long as the Net can't discriminate, so long as there is no entity that can choose how the Net will be used, these freedoms of creativity will be preserved.

Here begins the parallel to the story I said we all knew. I described an unregulable cyberspace which could become regulable if the code changed. That was regulation by government. We all understand the argument about how that unregulability is not fixed; we all see how the code can change to make regulation possible.

But now I want you to see the same point applied to competition and innovation. This condition of almost perfect competition, and optimal innovation—the features of the first Net, that guaranteed easy entry, nondiscrimination, low transaction costs, cheap exchange; these features that make the Net as inviting to competition, creativity, and innovation as it is—these features too are contingent. These features too could be different. And these features, if they were different, would transform the almost perfect competition and innovation that this space enjoys now.

Now once again, I don't say this because I'm a visionary. I haven't imagined this, as a sci-fi author might conjure up a new three-headed monster. The changes that I am describing are changes that we are seeing now. They are all around us. And they proceed so quickly that none of us even has time to point to them. In the time it takes a real space publisher to print a book, the changes I am describing will have been made.

How will this transformation occur?

First, take what I take to be the central architectural value here: end-to-end. We are in the midst of an extraordinary battle about the future of this aspect of the architecture of the Net. It is a battle being waged first in the context of broadband. The question gets framed as a question over "open

access.” But open access is just an expression of this principle of end-to-end. The issue is whether broadband providers can architect their network so that they are in a position to discriminate about the network’s use.

This battle got its first expression in a recent struggle over AT&T’s efforts to buy up as much cable as it could, culminating in the recent proposed merger of AT&T and MediaOne.<sup>12</sup> AT&T insisted that its network would be architected so that it got to control how the network would be used. It got to say, that is, what kind of use was permitted. It got to decide what kind of content flowed most efficiently. It got, that is, a power that had to this date, on this scale, been unknown in the context of the Net—a compromise of the principle of e2e.

This control came through AT&T’s insistence that the Internet Service Provider (ISP) a broadband customer got was the ISP that AT&T chose. Only its ISPs could run broadband cable. And its ISPs then would make it possible that AT&T could direct how networks would run.

When it first demanded this architecture, AT&T said this architecture was necessary because no other architecture was possible. When skeptics suggested that in fact another architecture was possible, AT&T said they were wrong. It knew what was possible. What was possible was only one ISP.

Until pressure pushed AT&T to be a bit more flexible. When AT&T signed its agreement with MindSpring and others, to permit a few other ISPs, some of which AT&T didn’t perfectly control, to connect to its network, it turned out it was possible to connect at least a few ISPs. Not many, AT&T insisted; many ISPs would be technologically impossible. Only a few would work.

Now this battle at first was a fair fight, because against AT&T and MediaOne were some fairly strong opponents—including the Baby Bells and America OnLine. AOL’s opposition to the closed architecture of broadband was obvious—it would be shut out from the broadband market unless customers could choose their ISP. The Baby Bells opposed the architecture because the rules seemed unfair (read: competitively disadvantageous). Existing FCC regulations required them to make their broadband service (DSL) open access; the same rules should apply, they argued, to cable broadband service.

But now that AOL is in a dance with Time Warner, it has backed off its insistence on mandated open access. Time Warner, of course, has its own cable network; and coincidentally with AOL’s purchase, the company now

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12. See *In the Matter of Application for Consent to the Transfer of Control of Licenses of MediaOne Group, Inc. to AT&T Corp.*, CS Docket No. 99-251, Written Ex Parte by Professors Mark Lemley and Lawrence Lessig.



sees the value in *laissez-faire*. Which means it is the Baby Bells, and a bunch of consumer advocates, left arguing against AOL and AT&T.

The FCC could step in here. The FCC could say, networks will be open. That it won't allow these mergers and agreements to permit the architecting of a closed network; that it will require these networks to be built to be consistent with the original principles of the Net; that it will recognize that this most amazing economy, born from the innovation made possible by the Net, is in part born because of the architecture of the Net; and that it will therefore defend that architecture, to preserve this ecology of innovation that the Net represents.

The FCC could say that—just as peace could break out across the world, and just as Europeans could decide to quit smoking. Lots is possible, but I am not betting much that this is possible. It seems much more likely that the trend that AT&T would push, and that AOL would allow, will be towards an architecture that violates end-to-end.

And what will that mean?

It will mean the first layer of constraint returned to this space—the first step back to the 1970s. The architecting of control back into the architecture of the Net; the reenabling of regulation, but this time regulation over competition; the reconstruction of a space where large actors get to discriminate, where large actors gets to decide what uses of the Net will be permitted.

For let's remember our past: In my view, the Net was made possible in the early 1980s—when a consent decree freed our telecommunications network from the control of a single corporation.<sup>13</sup> But it might have been born much earlier than that.

In 1964, Paul Baran was a researcher at the Rand Corporation. He proposed a design for a telecommunications network that was fundamentally different from existing telecommunications networks, but very much like the Internet. The Defense Department took that design to AT&T. AT&T rejected it. Said AT&T's Jack Osterman: "First . . . it can't possibly work, and if it did, damned if we are going to allow the creation of a competitor to ourselves."<sup>14</sup>

So now back to the future: Let's say you've got a great idea to stream video across broadband. You might be, say, Canada's iCraveTV, and want to retransmit television broadcasts (permissible under Canadian law), or a company that wants to displace Blockbuster by streaming video on demand. You've got this idea, but then you look at an emerging architecture of broadband, and you notice that the company with its hands on the switches is an agglomeration of cable companies—local monopolies that make lots of

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13. See *U.S. v. AT&T*, 552 F. Supp. (D.D.C. 1982) (modification of final judgment) (entering an antitrust decree against AT&T in pursuit of the "public interest").

14. JOHN NAUGHTON, A BRIEF HISTORY OF THE FUTURE 107 (1999).

money streaming video on demand to television sets, not computers. And so you ask yourself: What is the likelihood that this collection of cable monopolies will allow a service on their wires that will compete with their video service?

Forget likelihood: AT&T's head of cable services answered the point quite directly: When asked whether cable broadband could be used to stream video, AT&T's Broadband and Internet Services CEO Daniel Somers is reported as having said, no. AT&T didn't spend \$56 billion to get into the cable business "to have the blood sucked out of our vein."<sup>15</sup>

To innovate in the broadband space, at least the broadband space controlled by cable, requires the permission of cable. The use requires their okay. We might say, with Yogi Berra, it is *déjà vu* all over again.

The end of e2e is just the first change to this architecture of free competition. We could point to many more. Think about the expansion of intellectual property (IP) protection. Despite the Clinton Administration's White Paper whining that without strong intellectual property protection, cyberspace would never grow,<sup>16</sup> for many years, without really any IP protection at all, cyberspace grew quite well. But now the tables are beginning to turn. The explosion of technologies to protect IP, tied with the explosion of laws to back up that protection, mean that more and more, to use or to deploy stuff capturable by IP requires the permission of someone else.

The permission of someone else: For here was the essential characteristic of the original Net—that it functioned as a commons.<sup>17</sup> Control was not possible, because technologies and law did not enable it; stuff on the Net existed in a commons. So if you wanted to link, or wanted to post, or if you wanted to copy, all these things you could do without the permission of anyone else. All these things you were free to do because no code—East Coast Code (law) or West Coast Code (software)—could stop you.

But the changes we are seeing now are changes to enable someone to stop you. Whether technologies alone, or technologies and law, they both are designed to require that you get the permission of someone else before you use or deploy a given idea. Want to post a Simpson's fan club page? Call your lawyer; icon bots will find you. An archive of CDs you purchased, converted to MP3? Don't post it on a public server (even a server that is password protected) or the Recording Industry Association of America (RIAA) will find you. One click shopping? Have your lawyer call Amazon.com before you deploy it on your Web page.

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15. David Lieberman, *Media Giants' Net Change*, USA TODAY, Dec. 14, 1999, at 3B.

16. TASK FORCE—WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS, U.S. DEP'T OF COMMERCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (1995).

17. See Lawrence Lessig, *Commons and Code*, 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 405, 459 (1999).

The last example is one of the most dramatic and potentially the most threatening. Since *State Street Bank*<sup>18</sup> decided that patent law has “always” permitted something called a business method patent, there has been an increase in some 40 % of Internet-related patent filings. These patents, like any patent, give the holder a monopoly over an idea that has been instantiated in technology. The trouble (or opportunity, depending on your perspective) is that every idea in cyberspace gets instantiated in technology. Cyberspace is technology; there is no other way to be there. So every method of doing business now is subject to patent in cyberspace, and increasingly many are patented. The reverse auction, the linking based on advertising, the downloading of software, the one-click shopping—the list is long and growing.

Now again, think about the effect of this on innovation and creativity in cyberspace. No doubt these IP rights provide some increase in incentives to innovate. But so too do they increase the costs on innovation. No longer is the space open to innovation first; it is open to innovation only after you have run the ideas past your patent lawyers. Innovation will be that allowed by the lawyers.

Or consider one last example that we will see much more about soon: the regulation of bots. Bots are programs that spider the Web, finding and indexing content found on the World Wide Web. For the most part, the information they index is not protectable by copyright. The price of an item on eBay, for example, is not original under *Feist*.<sup>19</sup> So for the most part these bots are collecting information designed to be free. And an extraordinary set of meta information services has now arisen from the strategic and intelligent use of bots.

But no doubt expressing a law of nature—that every good and innovative action invites an equally powerful and predictable legal reaction—lawsuits to regulate the use of bots have now emerged. eBay, for example, has filed suit against a company that gathers information about eBay’s auctions, as well as those by other auction sites, and repackages that information in different ways.<sup>20</sup>

What is eBay’s claim? Not copyright, but trespass. The bots are trespassing on eBay’s service—they are gaining access that exceeds their authorized use (since eBay has informed the owners of the competing auction service that their bots are not welcome) and so by exceeding the author-

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18. See *State Street Bank & Trust Co., Inc. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998) (overruling cases suggesting that “methods of doing business” were not patentable).

19. *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346 (1991).

20. See *Bidder’s Edge Responds to eBay Suit* <<http://www.biddersedge.com/beipressreleases/14dec99.html>> (describing lawsuit).

ized access, and taking information, they have violated the Computer Fraud and Abuse Act<sup>21</sup>—felon bots, which a court, eBay says, should enjoin.

eBay doesn't have a general policy against bots. It is happy to license bots who are willing to pay a licensing fee. What it doesn't like are bots that take without paying. And so eBay intends to use law to close off bots that won't pay.

To spider another's page, your bot need the permission of someone else.

From end-to-end, to copyright control systems, to the ratification of the click-wrap license, to the explosion of patents, to the regulation of bots—in each of these areas, the effect is the same. We are remaking the competitive field that cyberspace was. We are changing it from a place where an innovator or creator was free to innovate; where much lived in the commons, and much was built on what was in the commons, to a place where to transact, or innovate, or create, or explore, one needs the permission of someone else first. As Yochai Benkler calls it, it is cyberspace's enclosure movement.<sup>22</sup> And the consequence will be a radical change in the nature of competition. A return of the technologies, both East Coast and West Coast code technologies, of control.

And thus the parallel that I promised at the start. Just as architecture is changing to better enable government regulation, so too is architecture changing to better enable market regulation. In both cases, the architecture is changing to make the Net more like real space—more like real space, but threatening to regulate even more than real space. Better, more efficient regulation through code than the regulation effected in real space through code and contract.

This is the Net's change; this is the change we need to begin to see.

My aim in this introduction is not to convince you this change is bad. My aim is a very different sort of appeal—for Symposium, and for scholars in our field. My appeal that we learn again to connect. And I have standing to make that appeal because I can ground it with a confession of error.

These issues about the transformation of cyberspace—about the change of its architecture—are hard. What struck me most as I was writing my book was just how impossible I found it to actually decide what to do. Whenever I came across what I called a latent ambiguity—where the code was making manifest a choice that we would have to make about how we wanted cyberspace to be—I could see the issues on both sides. But rarely did I feel that the issues resolved themselves. It is easy to be Cassandra about the coming darkness of a regulation-enabled cyberspace, but the fact is, I am really not

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21. Computer Fraud and Abuse Act, 18 U.S.C. § 1030(a)(5)(A) (1988) (current version at 18 U.S.C. § 1030[a][5][A] [1994], amended by 18 U.S.C. 1030[a][5][A] [Supp II 1996]).

22. Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 NYU L. REV. 354 (1999).

against regulation in the abstract. I am a believer in the need for collective action. And so the same changes that I described when I described how the Net would become regulable were changes that in some contexts, in quieter moments, I had to confess were for the good.

The same ambiguity exists, I suggest, with the changes in the field of competition. Rhetoric notwithstanding, it is impossibly difficult to figure out whether reenabling extensive IP in cyberspace will do some good. And it is extremely hard to identify why patents here should be different from patents in real space. And in the context of end-to-end, it is hard to know which way we should view these emerging networks—under an antitrust paradigm, where the concentrations may not be enough to raise the concerns we might have about closed access, or under a common carrier paradigm, where any discrimination, however slight, violates the principle of neutrality.

These questions will be difficult, and will demand careful thought.

But more importantly, they demand license to think. They require permission to say what may be wrong; an allowance to raise ideas that might sound heretical.

The topic of this Symposium—privacy—is a perfect example of this need, and the perfect context to think about both aspects of the increasing regulability that I have described.

In one aspect, the concern about privacy is a concern about government—how will the emerging architectures of monitoring facilitate bad acts by government. But in a different aspect, the concern about privacy is a concern about competition—how will the emerging architectures of monitoring enable innovation, or disable innovation; enable commerce, or enable the commodification of a fundamental right called privacy.

I don't find these issues easy. Or at least, I don't find all of these issues easy. Of course, whether the government should be able to watch every action of mine—keep databases of my email, for example, that they readily produce in litigation—that feels like an easy question, but maybe not. And if that is not easy, then I find impossibly difficult the range of new questions raised about monitoring action in cyberspace—profiling, and preference matching, and cookie collection, and experience tailoring—these are hard questions because in an important sense, they are new questions. We have not had the technology before to make it possible cheaply to track preferences and reflect them; we have therefore not had before the tradition to think about what kind of risk, what kind of harm, this is.

In this context, what we need—we, who aspire to be academics, who aspire to work things out—is permission to work things out freely. We need a space where we can experiment with ideas without condemnation reigning down around us. This is not the 1980s and 1990s; this is not a battle about feminism, or racism, where the aim was to remake a set of biased and ine-

galitarian norms. We had the right, I believe, to punish then; we had ways of living that needed to be remade.

But this is cyberspace, where no one has the right to declare truth is on their side; and where no one should claim the right to condemn. This is a space where we need the space to try out different, and even heretical, ideals. In this space, the heroes will be lunatics like David Brin—arguing that, in the transparent society, we give up on the tradition to hide;<sup>23</sup> or crazies like Simson Garfinkel, who in a wonderful new book, *Database Nation*, is crazy enough to argue that a national databank run by the government might protect privacy better than a world without regulation of personal information.<sup>24</sup>

We need to subsidize the David Brins and the Simson Garfinkels, because we need to see their ideas worked out. We need to imagine these problems differently, and we need to encourage people to imagine them differently. We need to preserve this space as a place where the *Voice* can speak MacKinnon without noticing it; or where a MacKinnon can speak the *Voice* without condemnation reigning down around her.

We need, to be perfectly Republican about it, an “enterprise zone” of free thought—untaxed by ordinary politics, free to develop to work ideas out, without apology.

We need this because there is an urgency here. The changes here are dramatically quick, and before we get a chance to talk through this well, the well, here, will have disappeared.

I have been guilty of the sin I condemn. The last chapter in my book—“What Declan Doesn’t Get.”<sup>25</sup>—is a wonderful example of this sin.

My stupidity here is on many levels. Let’s take the most obvious first. How stupid must you be not to see that a chapter like that will just inspire a litany of responses of the form “What Larry Doesn’t Get.” My friends at Chicago would say controversy is great success, but of course I left my friends at Chicago, and would love to leave controversy as well

But a back-firing title is not the real problem. The real problem is the effect such rhetoric has—on debate, and on understanding. For its effect is to end thought. To push the anti-Declan button—to push the pro-/anti-libertarianism button—is simply to categorize the argument, to put it into a box, and to give readers an excuse not to read.

That’s been the most frustrating part of this experience so far, though again, it was stupid of me not to see this. I don’t think the issues I’ve raised map directly into the pro- or anti-libertarianism camp. Indeed, I was surprised, as I worked through it, how much of what I thought was, in its core, libertarian.

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23. DAVID BRIN, *THE TRANSPARENT SOCIETY* (1998).

24. SIMSON GARFINKEL, *DATABASE NATION* 13-15 (2000).

25. LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 231 (1999).

But what “What Declan Doesn’t Get” does is stop the other side from listening. It is a signal that the same old arguments are allowed. It is a marker: nothing new here, continue as usual, say the same thing you’ve always said. No reason to think. No reason to turn all 260 pages. Simply scan for pithy quotes, and then intertwine them into the same old arguments.

This is not universally the case. David Post’s piece, for example, is an extraordinarily smart libertarian response, that will elicit constructive confessions of error in reply.<sup>26</sup> But there was no need to try to win Post over to the view that these issues were hard. It was he who taught me that. The need is to get others to see these issues are hard. The need is to convince a very large political community that we have to think for at least a minute. That rather than screaming-head shows, blasting both sides in the same way they have since the beginning of TV, we must show that there are new questions to be addressed here. And that unless we address them now, right now, the magic of this space will pass.

I offer up this failure in my own book as its lesson. Smugness, righteousness, certainty, insult, *politics*—these things we must put aside. Permission, forgiveness, skepticism, patience, *community*—these things we must embrace. We must embrace ways to get others to see, or better, to see again. We must aspire first to be good teachers, which means we must aspire first to find ways to get others to think.

I end my book (in the chapter before my mistake about Declan) with a lament about democracy. That we are at a place in the history of democracy where skepticism about democracy is so great that few of us—even those who typically like regulation—willingly think about government doing anything.

I want to end this Foreword with a lament about us—about the legal academy and what we have become.

We, legal academics, have just lived through a time of social revolution. We have used law to make that revolution. We have used law to remake law; used law to remake race; used law to remake gender. In each of these stages, with each iteration, this remaking has gotten more personal. Each reform cut closer to the lives of more; each cycle draws more blood.

I’m a believer in those revolutions. I will always defend their aims. I follow Stanley Fish: The question is never *whether* PC-ism; the question is always *which*.<sup>27</sup> And though with any revolution, costs are high, I don’t doubt that we needed a revolution to move an egalitarian cause along. One

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26. See David G. Post, *What Larry Doesn’t Get: Code, Law, and Liberty in Cyberspace*, 52 STAN. L. REV. 1439 (2000).

27. See STANLEY FISH, *THERE’S NO SUCH THING AS FREE SPEECH* (1994) (arguing that speech inherently reflects and promotes political agendas).

hundred years after the word “equal” was penned into the Fourteenth Amendment of our Constitution, it is time that it have meaning.

But our debates in cyberspace are not debates about feminism. They are not about a history of racial exclusion. They are not obvious extensions of the revolution that we’ve just waged. They can be—Jerry Kang’s recently published piece in the *Harvard Law Review* is.<sup>28</sup> But for the most part they are not. They raise different questions; questions that don’t have a clear answer in principle; questions we must decide how to answer.

My sense is that we from the last revolution have developed certain habits of mind, certain ways of framing a debate, designed quickly to orient debate along a political axis. And my suggestion—offered with as much humility as I might be permitted—is that these habits of mind won’t help us here. That they were right in the moments of reform that we have just lived, but that they will stifle more than inspire, here.

We, we on the left, need the freedom to cite Hayek, not often, or obsessively, but every once in a while. And we, we not on the left, need the freedom to wonder whether *laissez faire* really makes sense in a world completely of our making.

We will find this freedom only if we give it to others. And we will give it to others if we remember what our debate was like at the start. For as wonderful as teaching the law of cyberspace was—as wonderful as it was to find a context where students didn’t know what answer was “right”—so too was the world that we in this odd corner of the academy called cyberlaw first created. Where Eugene Volokh, David Post, and I could write a cyberspace law course for non-lawyers. Where a playful and respectful community of scholars, could produce, in my view, an extraordinary collection of insight—quickly.

We need that community, now. This is what I didn’t get, with my bashing of Declan. Stupidly—inexcusably stupidly, for an admirer of Forster.

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28. See generally Jerry Kang, *Cyber-Race*, 113 HARV. L. REV. 1130 (2000) (suggesting that cyber spaces open new possibilities for furthering racial justice).