THE DISTANT DRUMBEAT: WHY THE LAW STILL MATTERS IN THE INFORMATION ERA*

MARCI A. HAMILTON**

Utopias tempt devotion to simple formulae, and there was a time when the Information Era appeared to introduce a utopia. It was supposed to offer freedom to all. Instead of simplicity, however, we have landed in the midst of a pitched political, legal, and ideological struggle that arises out of the technological changes of this era.

The truth is that simple formulae work no better now than they ever did, and they should not displace our nuanced legal regime despite novel technology. A matrix of legal principles—many of which are explored in this collection—that ensure accountability of government, the rule of law, and liberty are as important now as they were a decade or even two centuries ago. However technologically advanced they are, the Internet and the technology that travels across it remain tools that are humanly manipulable for good or bad.

The fundamental principle underlying the Constitution—that all those holding power may abuse it—remains invulnerable to disproof. As we have learned, governments intent on censorship will suppress information traveling via the Internet as readily as that traveling via the post, and individuals are more than capable of turning the Web to their own, sometimes criminal, ends. The honeymoon of the Information Era is over, and humans—not technology or code—remain the factor determining good or bad results. While the technology is new, human nature remains disarmingly complex and the law a necessary antecedent to society.

The Information Era, then, does not guarantee democracy. Nor does the technology inevitably let the people rule. Rather they will rule, or will only be ruled by those they choose as in the United States, only if law and public policy conform the uses of the new technologies to those ends. Democracy on or through the Internet is no inevitability, but rather must be affirmatively chosen if it is going to be realized. Thus, even this wondrous collection of new

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** Paul R. Verkuil Chair in Public Law & Director, Intellectual Property Law Program, Benjamin N. Cardozo School of Law, Yeshiva University.

technology cannot relieve us of the heavy burden of choosing how we will be governed.

The Information Era was officially initiated when Stewart Brand of the Electronic Frontier Foundation declared that "[i]nformation wants to be free."[1] This mesmerizing, utopian call has had a powerful impact, leading otherwise law-abiding citizens to declare that copyright law—the hackers' most hated legal regime—was dead, that national boundaries are ephemeral, and that privacy was impossible. They have treated the collection of new technologies we have dubbed an "era" as the path to democracy, the path to free creative products, and the path to radical egalitarianism.

The hackers who initiated the Information Era have touted an anti-government, anti-law, and anti-big business mentality that challenges the fundamentals of the modern legal, creative culture. The fertile ground of their radical posture has generated arguments against any regulation of the Web (even including child pornography regulations), arguments against sales taxes on the Web as though sales that happen to occur via the Web are categorically different from other types of sales, and, most vociferously of all, arguments that copyright laws are simply obsolete. While challenges to existing powers can be constructive, if successful, such challenges could lead to less liberty.

In fact, the logical structure of the hackers' utopia is socialist, despite its adolescent foot-stomping about government regulation. The futuristic quality of the Information Era with its new technologies, its new businesses, and its new jobs has led most of us to treat it as an utterly new phenomenon, but this era is actually part and parcel of some of the most important ideological battles being waged around the world, in particular the intertwined battles between socialism and capitalism, and between extremism and the rule of law.

It should come as no surprise that dominant political, intellectual constructs have been translated into the hackers' philosophy, for ideas and philosophies are not the products of immaculate conception, but rather reconfiguration of the available intellectual materials. When the Berlin Wall fell, the people of East Germany were demanding not only an escape from the political structure of communism, but, even more vehemently, an open door to the world's fabulous marketplace of goods. American television, espe-

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[1] Stewart Brand, *Finding a Balance in the Slippery Economics of an Information Age: Depending on Your Perspective, Data's Free—Or Priceless*, L.A. TIMES, Nov. 8, 1987, at C3.

cially shows like *Dallas*, had whetted appetites for luxury items and a luxurious life clearly unattainable under the existing regime. The crystalline promises of a better life under communism, with shared resources and centralized planning, were shattered by the demand for products. The same was true for countries like Hungary. Indeed, one of the most difficult challenges the new democracies faced was the disappointment of their people that fighting off communism did not result automatically in increased consumer goods.

The other serious hurdle posed to each emerging democracy is the identical problem facing the Information Era: the institution of the rule of law. The American Bar Association's Central and Eastern European Law Initiative (CEELI), led by Justice Sandra Day O'Connor, has dedicated its mission to assist the Eastern European countries to institute the rule of law. Russia, China, and South American and African countries labor under the same requirement that they construct a path to the rule of law, which yields just and predictable application of the laws to all.

The deep irony is that, as the Internet has shrunk the world, making it more feasible for political reform and the principle of the rule of law to spread, some of its founders have constructed a vision of a lawless world, controlled by code, not law. Their vision is a world in which code rules, as Professor Lawrence Lessig has argued, but it rules in the absence of human capacity to choose the good over the bad. For them, engineering dictates results, rather than moral or policy choices. Not only is this "new world" lawless, it is a world where products valued and owned by others are free and where everyone is permitted, in fact encouraged, to take from an unlimited commons. The borderless world has deconstructed the ownership fences around each intellectual product to open them to all. There is no meaningful theoretical distinction between this vision of the relationship between the people and the market and communism.

Like communism, the hackers' utopia is fatally flawed, because it is built on the empirically disproved proposition that such a commons will be replenished as it is siphoned off. In the absence of a reward for contributions to the commons, the commons is inevitably depleted. In contrast, the capitalist structure at the heart of the American copyright system creates the potential for reward for creative products delivered to the people. The dynamic relationship between reward and the author of an existing work, which results in incentives to further creation, has engendered a marketplace that is regularly restocked with new, original works. In contrast,

when the online supermarket is plundered under the hackers' world view, there is no reason for any creative person to release her works into the commons out of any motivation other than ideological devotion to the commons. The sad fate of the citizens of the former communist countries, especially East Germany and Russia, proves that such ideological devotion will not engender a thriving marketplace of consumer goods or even ideas, but rather a citizenry dependent on a structure centrally controlled and necessary to deliver even the minimum necessities. Lack of reward for individual effort—the insight at the heart of capitalism—generates dependence.

The hackers, of course, began as the central controllers in the Information Era. Like the communist leaders, they are not elected, but self-appointed, and, like the communist leaders, they lead with an ideology that does not mandate accountability to the common good.

That communist ideology is fundamentally opposed to copyright law is seen most vividly in China, where piracy has been rampant. Because of the resistance in communist dogma to private property barriers, especially those surrounding intellectual products, the Chinese are having to do contortions to become part of the world's expanding global market, a market they deeply desire. Having literally begged to be part of the World Trade Organization ("WTO"), and then included because of its huge market potential, China is now at a crossroads. To satisfy the demands of the Western countries that led the way for their WTO membership, China must institute a rule of law. At the same time, its leaders are not willing to release the centralized control of the communist party that impedes the development of the rule of law.

Like the stories of the fall of communism around the world, the emerging story of the Information Era is a story about power. In the early days of the Internet, when the control of the system lay in their hands, the hackers' vision was the only vision, and the supposed freedom of information transmogrified into a freedom of the people. The Internet became the typical utopian promise: cost-free, freedom-enhancing, and a solution for the downtrodden. But, of course, hackers promoted this vision of freedom in the context of their own de facto control of the Internet. While believing in their ideal, borderless world, they had no need to face the necessity of boundaries, legal or otherwise, because no one was challenging their hegemony in their self-created world. Like all utopias, this was a utopia with an underbelly.

For the last twenty years, technological change has been rapid

and its potential shocking to pre-existing legal and economic structures, leaving the hackers' mantra significant time to grow roots into the Internet culture, where it continues to bloom today. The creators of freenet.com, for example, continue to treat their software product as a free product. They believe it should not be subject to copyright law, which ironically means that they cannot make money on it (despite its clear market value). Instead, they support themselves by selling freenet T-shirts, a socialist approach to family support if there ever was one.

Not all hackers have taken the freenet route, of course. The free-information concept extended cover for those early participants who seamlessly turned from thinking of their creations as engineers of freedom to engines of profit. While the world was marveling at these new technological miracles, Bill Gates was building an empire that would challenge the power of presidents and foreign governments, simultaneously attempting to corner the Internet market and lobbying worldwide to extend the scope and content of his legal rights in information. And he was not the only one.

The hackers' philosophy led to a Wild West stage in the Information Era during which hackers, e-businesses, and consumers boldly violated copyright, trademark, and even national security laws. E-commerce businesses constructed their business plans on the assumption that information is free. The hackers declared that no law could stop them while those, like Gates, who took early advantage of this new market, assumed that the pre-existing power structures and laws simply did not apply to them. Microsoft's culture was nearly as anti-law as the hackers' world, with few lawyers and even less deference to lawyer-like concerns, including antitrust compliance policies.

Like the gunslingers of the Wild West, though, hackers, Microsoft, e-business, and consumers are finding that the law can catch up to them. As a result of this potent challenge to the status quo, this is a time in which everyone is looking for solid ground for analysis. For example, Professor Lawrence Lessig sought footing in the way that computer code is constructed on the Global Information Infrastructure[2] while Professor Jeffrey Rosen focused on privacy.[3] These are just two of the many arenas that are necessary to

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[2] *See* LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE (1999).

[3] *See* JEFFREY ROSEN, THE UNWANTED GAZE: THE DESTRUCTION OF PRIVACY IN AMERICA (2000).

understand where the Information Era has taken us and where we are or ought to be headed.

A reexamination of information principles is absolutely necessary today, because every judicial or policy decision implicating information needs to be legally contextualized. The moral, political, and policy questions regarding how to or whether to regulate new technology need to be made with full awareness of the backdrop of this amalgam of legal principles. Although this new era would seem to indicate otherwise, we have had a species of information jurisprudence for over two hundred years. Absence of this rich context in the debate over information can short-circuit public and scholarly discussion and hinder the development of constructive information policies.

While it may come as a surprise, this futuristic era desperately needs the context provided by the Framers of the U.S. Constitution. Their wisdom provides solid ground for the legal treatment of issues in the Information Era. The Framers built the Constitution, and therefore the U.S. polity, on the cornerstone that every entity holding power will be tempted to abuse it, that humans are capable of good, but inclined to abuse power. The same focus on the exercise of power and its relation to the public good retains force. When read against the Framers' understanding of the polity they were building, this era is a revolution in technology, but not a revolution in human nature or legal and constitutional principles.

The Framers constructed the most successful constitutional experiment in history by starting at their enduring insight that any person or any institution that holds power will be sorely tempted to abuse that power. The temptation of power was the background assumption of the Constitutional Convention. Framer James Madison remarked that "[t]he truth was that all men having power ought to be distrusted to a certain degree"[4] and that the ends of the Constitution "were first to protect the people against their rulers."[5] This sentiment was frequently invoked with George Mason stating that "those who have power in their hands . . . will always [not give it up] when they can rather increase it,"[6] and Elbridge Gerry declaring that any who "acquire power [will] abuse it."[7] Gouverneur Morris summed up the perspective of the Framers neatly when he referred to humans' "love of power . . . [and]

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[4] JAMES MADISON, NOTES OF DEBATES IN THE FEDERAL CONVENTION OF 1787, at 272 (Adrienne Koch ed., Ohio Univ. Press 1966).

[5] *Id.* at 193.

[6] *Id.* at 266.

[7] *Id.* at 288.

oppression."[8]

The distrust of those in power was a theme of *The Federalist Papers* as well. Alexander Hamilton wrote in *The Federalist No. 6* that "momentary passions, and immediate interests, have a more active and imperious control over human conduct"[9] while James Madison concluded in *The Federalist No. 51* that "[i]f angels were to govern men, neither external nor internal controls on government would be necessary."[10]

The Framers had good reason to trust no entity holding power. Their generation had witnessed cardinal abuses of power by the Church in England, the guild monopolies in England, by Parliament, by King George III, by the state legislatures during the Articles of Confederation, and, immediately before the Convention, by the people. And for most, the Reformation and the Inquisition were fresh historical antecedents proving that even the Church was capable of falling by the wayside. Their utopian expectations, including faith in organized religion and faith in direct democracy, were dashed in a remarkably short period of time, leaving the fledgling states reeling and the Framers in a desperate position: either construct a form of government that can meet all of the abuses they knew so well or fail, with the union of the states disintegrating into a collection of principalities and the promise of international trade and military self-defense an impossible dream.

It would be an overstatement, however, to say that the Framers held out no hope of human achievement in the public good. Their belief was twofold: expect tyranny, but hope for the good in each man to prevail over his baser instincts. In the footsteps of the great Reformation systematic theologian, John Calvin, the Framers believed that the governmental structure could deter the temptation to abuse and turn individuals' sights on a higher good. In this way, they combined a sage distrust of human motives with a hope in properly crafted structures. Thus, the system was built on this paradox of distrust and hope.

Distrust and hope drove the Framers to divide power, to disperse power, and to set power structures against each other for the purpose of checking abuses of power. The President, the Congress, and the Judiciary received distinct powers. The states reserved power distinct from the new federal government. Church and State were to be divided. The people were to have the power

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[8] *Id.* at 323.

[9] THE FEDERALIST No. 6, at 56 (Alexander Hamilton) (Clinton Rossiter ed., 1961).

[10] THE FEDERALIST No. 51, at 322 (James Madison) (Clinton Rossiter ed., 1961).

to vote and the power to communicate with their rulers, but no power directly to rule. Business monopolies also were hated, explicitly in the Copyright and Patent Clause of Article I of the Constitution, which limits property rights in innovative inventions and writings to "Authors" alone[11] and thereby cuts out the industry, guilds, and the government from initial control over these valuable works.

When the Framers' belief in the temptation to abuse power fades into the background, the empty promises of utopian visions can gain a toehold and, inevitably, disappoint. The blinding excitement of the new technologies temporarily eclipsed the Framers' comparatively mundane insights. Yet, technological tools, which are no more than other tools despite their novelty, need not and should not control how we construct the world we want.

The need to check illegal and immoral behavior simply has not been diminished. The Internet may have sped up our communication and increased our dissemination potential, but it has made no inroads into human nature. For that reason, the Framers' vision, which is premised on distrust of and hope for human endeavors and which is embedded in the Constitution, continues to have direct relevance.

In spectacular fashion, the pre-existing legal regime has collided with the hackers' mantra in three arenas: (1) music copying, (2) copying of DVD versions of motion pictures, and (3) disputes over the balance of power in the marketplace of Internet control technologies.

I. THE WAR IN THE COURTROOM BETWEEN THE HACKERS AND THE LAW

New technologies of reproduction and distribution over the Internet have made it possible to disseminate copyright-protected works en masse at lightning speed. Firmly situated in the hackers' utopian mindset, early and successful e-businesses built their business plans on the assumption that the deployment of this fabulous technology need not take into account the copyright interests of the content being copied and distributed. Because the technology has made it possible to copy and distribute content with ease and with close-to-perfect quality, the two most popular copyrighted works to copy to date are sound recordings and motion pictures. As these are the two most powerful copyright industries in the world, the clash between free use of music and movies on the In-

[11] *See* U.S. CONST. art. I, § 8, cl. 8.

ternet with the legal owners of the content being copied was destined for a legal showdown.

While newspapers have been able to establish websites with some success, the longer written works like novels and nonfiction books have lagged in Web copying potential because hard copy continues to be preferable to reading lengthy works on-screen or even having to download and print such works. Even among my most tech-savvy colleagues, snail mail has continued to be the favored mode of exchanging scholarly drafts in most instances.

Whether the focus is print or sound recordings or motion pictures, however, the same issue is posed by the clash of the hackers' mantra with the pre-existing legal regime. Copyright law, which is an enumerated power of Congress under Article I of the Constitution, vests power over written works in "Authors" and no others. The scheme instituted by the Constitution has been a fabulously successful, capitalist regime in which authors are given the power to commodify their intellectual products, i.e., to build fences around their creative property, and therefore to be capable of being compensated by a market. Their compensation is not the entitlement of socialist systems, however, but rather is keyed directly to the market. If the marketplace demands the product, the author may profit. If not, the author learns a lesson. What he does with that lesson is completely up to him. In this way, the American system has made it unnecessary for the government to engage in patronage to foster creative activity and, through the First Amendment, has built in a bias against government funding of the arts and a bias in favor of private, creative entrepreneurship.

The market *rewards* original expression, a regime that replaces the enervating concept of the need for government to create incentives for artists to create as though artists find their Muse in the same way that Pavlov's dogs responded to stimulus. As a result, authors and artists in the United States are freer than they are anywhere else in the world. They have more potential to earn wealth, and the market is richer in products, both pop and high art. The key to the United States' successful copyright industry is the Framers' decision in the Copyright Clause of Article I of the Constitution to decentralize control over creative works by vesting power over such works in "Authors." Fully aware that other choices (e.g., publishers or the government) were available, the Framers placed control in the least centralized hands possible as they directed income streams to the creative source of the product.

The hackers, however, would turn this system on its head, by arguing that the authors and artists may not control copying, use,

or distribution of their works. Even worse, they may not profit from the same and would divest individuals of such control. The authors' only means of eliciting profit from their creative contributions to society is through enforcement of copyright, so the hackers have not only instituted a utopian vision that is anti-government, anti-law, and anti-big business, but also anti-author. This is a turn that, if left unchecked by the reimposition of the copyright law in the Information Era, will generate one of two results: a socialist system in which artists will have to beg the government for support or a creative drought as talented authors and artists turn to other careers to support their families and needs.

A. *Naspter / MP3*

The clashes between the music industry and the hackers have been explicitly understood as a battle between the hacker ethos and entrenched copyright principles. When digital compression technology, which allows audio recordings to be stored digitally using far less memory than otherwise, found MP3, a popular, standardized, and high-quality compressed file format, it became possible to upload and download high-quality audio files on the Internet faster and easier than ever before. To say that, however, was not to say that it was fast and easy. The process of finding a server that stored a certain MP3 file a user wanted to download was often very time-consuming and frustrating. Napster aimed to resolve this problem with software that would provide its users with an unprecedented ability to locate specific audio files on the Internet. Users log onto the Napster system and can immediately and easily share files with any other user who is logged onto the system. While Napster attempts to improve the quality of its service and increase its user base (which increases the quantity of files available for download on the service since individuals are sharing files with each other), it remains a free service. Eventually, however, its plan is to become a revenue-generating endeavor, with potential future sources of revenue, including targeted e-mail, advertising, commissions from links to commercial websites, and the direct marketing of CDs, Napster products, and equipment for creating MP3 files and storing them on CDs. Napster built a business plan on becoming *the* distributor of music over the Internet, a sharing of copyright-protected works that then permitted college students (and others) around the country to download CD-quality sound, to copy it, and to distribute it.

The MP3.com site worked differently. Instead of providing a

service allowing individuals to freely share their audio files, the MP3.com site's purpose was to allow the owners of music to digitally access the music they owned from anywhere in the world. It required users to prove that they already owned a hard CD copy of a song or album by either purchasing it from one of its cooperating online retailers or by using the site's "Beam-it Service" which required the user to insert her hard copy of the CD into her computer's CD-ROM drive, where the site could scan it. Once the user proved that she owned the song or album in CD form, the site provided that individual with the file in digital form, which could be easily accessed, via the Internet, from anywhere. In order to provide this service to its users, the site purchased CD copies of tens of thousands of CDs that it copied onto its computer servers without authorization. MP3 argued, however, that it was not displacing a market in music, but rather making already-owned music capable of Internet accessibility—that it merely provided functional equivalent storing its users' CDs. Similar to Napster, MP3.com does not currently charge its subscribers any fee for use of the service, but seeks to create a sufficient clientele to draw advertisers and eventually become profitable.

B. *Reimerdes*

The motion picture industry invested heavily in technology research to create the means of sending motion pictures over the Web, an effort that resulted in the DVD technology. To prevent the unauthorized copying of motion pictures on DVD, the motion picture companies utilized an encryption-based technology, CSS, which allows users only to play back movies on licensed players. In order to circumvent this technological limitation on the copying of movies, a group of well-known computer hackers developed a software utility, DeCSS, which enabled users to decrypt the CSS protection system. DeCSS was then widely and freely disseminated over the Internet, allowing anyone to view DVDs on unlicensed players or make digital copies of them with very minimal quality loss.

The court in *Universal City Studios v. Reimerdes*[12] understood that it was being asked to choose between the hackers' utopia and the copyright law, noting:

> Plaintiffs have invested huge sums over the years in producing motion pictures in reliance upon a legal framework that,

[12] 111 F. Supp. 2d 294 (S.D.N.Y. 2000).

> through the law of copyright, has ensured that they will have the exclusive right to copy and distribute those motion pictures for economic gain. They contend that the advent of new technology should not alter this long established structure.
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> Defendants, on the other hand, are adherents of a movement that believes that information should be available without charge to anyone clever enough to break into the computer systems or data storage media in which it is located. Less radically, they have raised a legitimate concern about the possible impact on traditional fair use of access control measures in the digital era.[13]

The court had no problem, however, in deciding that the hackers lost this time. First, it concluded that, although tensions could arise between access-control measures and fair use, Congress properly resolved those tensions when it passed the Digital Millennium Copyright Act, and that there was really no serious contention that the hackers' dissemination of DeCSS did not violate the Act.[14] The court also easily disposed of defendant's First Amendment claims. While computer code is in part expressive, the court argued, it also can cause computers to perform in ways that would create serious harm to society.[15] Thus, society must be able to regulate the use and dissemination of code in appropriate circumstances such as these, where the government is protecting "copyrighted works stored on digital media from the vastly expanded risk of privacy in this electronic age."[16] In a testimony to the reach of the hackers' world view in the Information Era, however, the court was careful to preserve the hackers' arguments for other factual scenarios, noting that under a different set of facts some of the hackers' claims would be "[p]otentially more troublesome"[17] and that "[g]iven the *peculiar* characteristics of computer programs for circumventing encryption and other access control measures, the DMCA *as applied to posting and linking here* does not contravene the First Amendment."[18]

C. *Microsoft*

Unlike the copyright disputes in the music and motion picture cases, Microsoft found not just its actions with copyrighted products, computer programs, under attack by the Department of Jus-

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[13] *Id.* at 346.
[14] *See id.* at 321.
[15] *See id.* at 330.
[16] *Id.*
[17] *Id.* at 325.
[18] *Id.* at 346 (emphasis added).

tice, but rather its entire approach to the law, and specifically antitrust law. This case is a battle between a corporation with elements of the hacker philosophy and the rule of law. It is also the clearest reaffirmation in the Information Era of the Framers' belief that power is dangerous and that concentrated power is the shortest route to tyranny.

While the first two types of conflict involve copying generated by new technologies, this last example of the confrontation of law and the Information Era involves power, pure and simple. Bill Gates built an Information Era empire, the basis of which was that technology mattered, not law. He transported the hackers' antigovernment mantra into a Fortune 500 company, a move that would explain his apparently genuine, if tragic, surprise when he was treated by the Antitrust Enforcement Division of the Department of Justice as a Fortune 500 company capable of abusing its power in the marketplace. If John Heileman's reports are correct, Microsoft not only did not have a well-developed legal culture for many years, but it was in fact the hackers' antinomian shell. Technology was its business, period. Indeed, there seems to have been a fear that if the company took its eyes off the technology to comply with the status quo law, it would lose competitive advantage.

Yet, Microsoft grew in size and political influence to a stage where Bill Gates declared that he was more powerful than the President of the United States, when Microsoft became a worldwide lobbyist to expand its information empire and when it could muscle its competition into tying agreements no other company in this fast-moving era could compel. This is the single, best testimony of the enduring relevance of the Framers' understandings. Microsoft, as it developed, heedless of the law, was destined to fall in the American scheme not only because it violated antitrust doctrine, though that of course is relevant, but also because it violated the fundamental principle at the base of the Constitution: all monopolies of power must be divided, dispersed, and then deterred. This is an instinctual, rational fear on the part of the American polity, and it is no less justified in the Information Era than it was at the Framing or during the Civil War or during the 1960s. The fact that Bill Gates was surprised that he could not wield Microsoft's market power with abandon, even in the Information Era, is proof that the hackers' utopian mantra has made it more necessary than usual to invoke the Framers' insights on power.

Here is where the philosophy of the hackers met hard reality. If there was to be no law in the Information Era that could stop the technology creators, and if those same technology creators could

amass as much as power as they could grab, then the market ceased to determine whether a contributor to the storehouse of creative products was successful, and raw power would determine the same. Thus, there would be large hackers and small hackers, and the large had carte blanche to silence or stop the production of the small. From a system operating on merit determined by market demand, the American technological industries evolved into a regime in which creativity was not rewarded, but squelched. This is extremist capitalism, a business world in which Thomas Hobbes is the patron philosopher and the people do not receive the rich marketplace of products on which they can place bids that determine true market valuation. Capitalism is driven not by market demand, but rather by power to squelch. What is missing is the necessary principle that even business can abuse its power and that the American polity cannot tolerate such abuses.

There are two ways out of this conundrum. Either let Microsoft retain its power as government attempts to spur other creative juices through government grants, i.e., the socialist path, or penalize Microsoft and forbid it from exercising its power in ways that are contrary to a free market. The latter is the only choice consistent with the roots of the successful American market in creative products.

The relevance of the Framers' simple insight is truly remarkable. It is also consistent with sophisticated, contemporary economic analysis. Robert Bork, whom one might have expected to have supported a free market, as in a let-the-powerful-control-the-market approach to Microsoft, sided with the government. He and many other economists described Microsoft as a "predator" in the market. While it was perfectly acceptable for Microsoft to be large and to be successful, it was not permissible for it to wield its monopoly power through exclusionary contracts to exclude any meaningful competition from the market, thereby keeping competitive, and potentially better, products from consumers.

Bork cited truly damning evidence of Microsoft executives in internal memoranda saying "that it will be very hard to increase browser market share on the merits of Internet Explorer alone."[19] By tying the browser to the operating program, Microsoft was able to leverage Internet Explorer into its monopoly position already established by the dominance of its operating program. Netscape

[19] Robert Bork, The Amgen Forum: The Law and Economics of United States v. Microsoft, Remarks Before the American Enterprise Institute for Public Policy Research (June 18, 1998), *available at* LEXIS, News Group File.

was the victim, as were the programs, like Java, that would have made possible an endrun around Microsoft's hegemony.

Microsoft's business plan was not driven by a plan to engage in superior marketing or superior product introduction, but rather by the sheer exercise of monopoly power. It was not the technological product that was driving market results, but rather Microsoft muscle. Thus, Microsoft was guilty of abusing its power, which it was irresistibly tempted to abuse because of its monopoly position.

Many defended Microsoft in the early stages of the antitrust lawsuit, before the economists weighed in, saying that Microsoft was a hero for introducing the marvels of the Information Era to so many. The technology's potential blinded those early defenders to the reality that, behind the technology, Microsoft was really no different from any other schoolyard bully or unchecked monarch. Regardless of the magnificence of the product, and there are those who argue that Microsoft's products are in fact the mediocre of Silicon Valley's offerings, the focus must be swung from technology to people to avoid tyranny.

Bare technology and its marvels too long solely shaped how we understand the Internet, the new technologies, and all of their potential. We are being introduced to these novelties through the hackers' lens. And we are disabled in our ability to fully test their hypotheses, because the next wave of technology is just now emerging, and that wave is going to change the borderless quality of the Internet and profoundly shake the ground underneath their claims about pure democracy, free information, and freedom from the law.

II. Technology Today vs. Technology Tomorrow

The current war between the hackers' mantra and the rule of law has occurred against a backdrop of this era's development in technology. Conclusions are being reached based on an incomplete universe of technological possibilities. For example, the borderless world advocated by the hackers is only borderless until the technologies that introduce fences, walls, and locked gates are widely deployed, an era not far in the future, if the market is not squelched by the government's overzealous willingness to protect existing technology. The sound recordings carried by Napster are only capable of free, endless copying and distribution because those files did not have embedded codes that would prevent, or record, such copying. The future tools of distribution on the Internet will prevent the massive, global copying in this intermediate

stage of the Information Era, and instead will introduce an era troubling in its own right, in which the owner of a creative work can prevent all free uses, including fair use, browsing, or personal use. Once again, the rule of law will be necessary, but this time to free information locked up, rather than to ensure authors' remuneration.

The key issue of concern in the next stage of the Information Era will be whether the tools of information disclosure and secrecy are available to the people, or only to the government or big business. It is not in the interest of our now oligopolistic publishers to share information-control technologies with authors or the people, because they could then be cut out of the process (though their power to brand and promote works still will carry value). The federal government has stepped forward for those with encrypted information by making de-encryption devices illegal in the Digital Millennium Copyright Act.[20] The result of this action is to stunt technological development in information-hiding or information-sharing technologies. In a world in which publishers and authors can exert perfect control over their works through digitized information-feedback that tells them precisely what the user is doing with the work and charges the user accordingly, the millions of marginal, fair, and necessary uses made of creative works every day will decline. The only weapon against such technology will be other technology that makes private browsing or fair use feasible, as it prohibits massive redistribution and piracy. The people will need to have access to such technologies to be able to withstand the tyranny of government and big business, but there will be no market in such if the government continues to outlaw such tools. Like the Second Amendment, which was intended to arm the people against government tyranny, a right to information tools, grounded in the First Amendment, can protect the people from the tyrannical exercise of power over information.

The Information Era should not drown out the distant drumbeat of the pre-existing legal regime. Until human nature changes, a complex structure of information/privacy jurisprudence will be needed to deter tyranny and maximize liberty. The existing legal landmarks should continue to be the need for information about government, the necessity of a public storehouse of information, and the need for a measure of personal privacy, all three principles to be mutually considered in the judicial and legislative policy dis-

[20] Pub. L. No. 105-304, 112 Stat. 2860 (2000) (codified in scattered sections of 17 U.S.C.).

cussions implicating information. The legal challenge in this era is not so much the construction of a new world as it is how to sustain time-tested and cherished *legal* principles.

The hackers are simply wrong. Information is not inherently free, Web access does not guarantee either freedom or democracy, and the Internet does not necessarily level the playing field. To the contrary, the hackers, including those transformed into the big business magnates the hackers profess to hate, like Bill Gates, have used new technology and the Internet as a base of control, not liberty for all. Behind the curtain of their utopian vision, they have lobbied the European Union and the United States to expand their power and have been successful in ways the people have yet to comprehend. The existing two centuries of information law in the United States needs to be demythologized and the legal moves of the hackers analyzed to reach a clearer understanding.

Information "wants" nothing. Like technology, it is nothing more than a tool that can be used by humans for good and for evil. The hackers' utopia is a seductive but dangerous dream. The daily battle for liberty from tyrants continues, and the legal tools of the past should be ready to hand, even if they are in need of fine-tuning.