Lawrence Lessig, from Free Culture, NY: Penguin, 2004.

CHAPTER FIVE: "Piracy"

There is piracy of copyrighted material. Lots of it. This piracy comes in many forms. The most significant is commercial piracy, the unauthorized taking of other people's content within a commercial context. Despite the many justifications that are offered in its defense, this taking is wrong. No one should condone it, and the law should stop it.

But as well as copy-shop piracy, there is another kind of "taking" that is more directly related to the Internet. That taking, too, seems wrong to many, and it is wrong much of the time. Before we paint this taking "piracy," however, we should understand its nature a bit more. For the harm of this taking is significantly more ambiguous than outright copying, and the law should account for that ambiguity, as it has so often done in the past.

Piracy I

All across the world, but especially in Asia and Eastern Europe, there are businesses that do nothing but take others people's copyrighted content, copy it, and sell it—all without the permission of a copyright owner. The recording industry estimates that it loses about $4.6 billion every year to physical piracy[1] (that works out to one in three CDs sold worldwide). The MPAA estimates that it loses $3 billion annually worldwide to piracy.

This is piracy plain and simple. Nothing in the argument of this book, nor in the argument that most people make when talking about the subject of this book, should draw into doubt this simple point: This piracy is wrong.

Which is not to say that excuses and justifications couldn't be made for it. We could, for example, remind ourselves that for the first one hundred years of the American Republic, America did not honor foreign copyrights. We were born, in this sense, a pirate nation. It might therefore seem hypocritical for us to insist so strongly that other developing nations treat as wrong what we, for the first hundred years of our existence, treated as right.

That excuse isn't terribly strong. Technically, our law did not ban the taking of foreign works. It explicitly limited itself to American works. Thus the American publishers who published foreign works without the permission of foreign authors were not violating any rule. The copy shops in Asia, by contrast, are violating Asian law. Asian law does protect foreign copyrights, and the actions of the copy shops violate that law. So the wrong of piracy that they engage in is not just a moral wrong, but a legal wrong, and not just an internationally legal wrong, but a locally legal wrong as well.

True, these local rules have, in effect, been imposed upon these countries. No country can be part of the world economy and choose not to protect copyright internationally. We may have been born a pi-

rate nation, but we will not allow any other nation to have a similar childhood.

If a country is to be treated as a sovereign, however, then its laws are its laws regardless of their source. The international law under which these nations live gives them some opportunities to escape the burden of intellectual property law.[2] In my view, more developing nations should take advantage of that opportunity, but when they don't, then their laws should be respected. And under the laws of these nations, this piracy is wrong.

Alternatively, we could try to excuse this piracy by noting that in any case, it does no harm to the industry. The Chinese who get access to American CDs at 50 cents a copy are not people who would have bought those American CDs at $15 a copy. So no one really has any less money than they otherwise would have had.[3]

This is often true (though I have friends who have purchased many thousands of pirated DVDs who certainly have enough money to pay for the content they have taken), and it does mitigate to some degree the harm caused by such taking. Extremists in this debate love to say, "You wouldn't go into Barnes & Noble and take a book off of the shelf without paying; why should it be any different with on-line music?" The difference is, of course, that when you take a book from Barnes & Noble, it has one less book to sell. By contrast, when you take an MP3 from a computer network, there is not one less CD that can be sold. The physics of piracy of the intangible are different from the physics of piracy of the tangible.

This argument is still very weak. However, although copyright is a property right of a very special sort, it *is* a property right. Like all property rights, the copyright gives the owner the right to decide the terms under which content is shared. If the copyright owner doesn't want to sell, she doesn't have to. There are exceptions: important statutory licenses that apply to copyrighted content regardless of the wish of the copyright owner. Those licenses give people the right to "take" copyrighted content whether or not the copyright owner wants to sell. But

where the law does not give people the right to take content, it is wrong to take that content even if the wrong does no harm. If we have a property system, and that system is properly balanced to the technology of a time, then it is wrong to take property without the permission of a property owner. That is exactly what "property" means.

Finally, we could try to excuse this piracy with the argument that the piracy actually helps the copyright owner. When the Chinese "steal" Windows, that makes the Chinese dependent on Microsoft. Microsoft loses the value of the software that was taken. But it gains users who are used to life in the Microsoft world. Over time, as the nation grows more wealthy, more and more people will buy software rather than steal it. And hence over time, because that buying will benefit Microsoft, Microsoft benefits from the piracy. If instead of pirating Microsoft Windows, the Chinese used the free GNU/Linux operating system, then these Chinese users would not eventually be buying Microsoft. Without piracy, then, Microsoft would lose.

This argument, too, is somewhat true. The addiction strategy is a good one. Many businesses practice it. Some thrive because of it. Law students, for example, are given free access to the two largest legal databases. The companies marketing both hope the students will become so used to their service that they will want to use it and not the other when they become lawyers (and must pay high subscription fees).

Still, the argument is not terribly persuasive. We don't give the alcoholic a defense when he steals his first beer, merely because that will make it more likely that he will buy the next three. Instead, we ordinarily allow businesses to decide for themselves when it is best to give their product away. If Microsoft fears the competition of GNU/Linux, then Microsoft can give its product away, as it did, for example, with Internet Explorer to fight Netscape. A property right means giving the property owner the right to say who gets access to what—at least ordinarily. And if the law properly balances the rights of the copyright owner with the rights of access, then violating the law is still wrong.

Thus, while I understand the pull of these justifications for piracy, and I certainly see the motivation, in my view, in the end, these efforts at justifying commercial piracy simply don't cut it. This kind of piracy is rampant and just plain wrong. It doesn't transform the content it steals; it doesn't transform the market it competes in. It merely gives someone access to something that the law says he should not have. Nothing has changed to draw that law into doubt. This form of piracy is flat out wrong.

But as the examples from the four chapters that introduced this part suggest, even if some piracy is plainly wrong, not all "piracy" is. Or at least, not all "piracy" is wrong if that term is understood in the way it is increasingly used today. Many kinds of "piracy" are useful and productive, to produce either new content or new ways of doing business. Neither our tradition nor any tradition has ever banned all "piracy" in that sense of the term.

This doesn't mean that there are no questions raised by the latest piracy concern, peer-to-peer file sharing. But it does mean that we need to understand the harm in peer-to-peer sharing a bit more before we condemn it to the gallows with the charge of piracy.

For (1) like the original Hollywood, p2p sharing escapes an overly controlling industry; and (2) like the original recording industry, it simply exploits a new way to distribute content; but (3) unlike cable TV, no one is selling the content that is shared on p2p services.

These differences distinguish p2p sharing from true piracy. They should push us to find a way to protect artists while enabling this sharing to survive.

Piracy II

The key to the "piracy" that the law aims to quash is a use that "rob[s] the author of [his] profit."[4] This means we must determine whether and how much p2p sharing harms before we know how strongly the law should seek to either prevent it or find an alternative to assure the author of his profit.

Peer-to-peer sharing was made famous by Napster. But the inventors of the Napster technology had not made any major technological innovations. Like every great advance in innovation on the Internet (and, arguably, off the Internet as well[5]), Shawn Fanning and crew had simply put together components that had been developed independently.

The result was spontaneous combustion. Launched in July 1999, Napster amassed over 10 million users within nine months. After eighteen months, there were close to 80 million registered users of the system.[6] Courts quickly shut Napster down, but other services emerged to take its place. (Kazaa is currently the most popular p2p service. It boasts over 100 million members.) These services' systems are different architecturally, though not very different in function: Each enables users to make content available to any number of other users. With a p2p system, you can share your favorite songs with your best friend—or your 20,000 best friends.

According to a number of estimates, a huge proportion of Americans have tasted file-sharing technology. A study by Ipsos-Insight in September 2002 estimated that 60 million Americans had downloaded music—28 percent of Americans older than 12.[7] A survey by the NPD group quoted in *The New York Times* estimated that 43 million citizens used file-sharing networks to exchange content in May 2003.[8] The vast majority of these are not kids. Whatever the actual figure, a massive quantity of content is being "taken" on these networks. The ease and inexpensiveness of file-sharing networks have inspired millions to enjoy music in a way that they hadn't before.

Some of this enjoying involves copyright infringement. Some of it does not. And even among the part that is technically copyright infringement, calculating the actual harm to copyright owners is more complicated than one might think. So consider—a bit more carefully than the polarized voices around this debate usually do—the kinds of sharing that file sharing enables, and the kinds of harm it entails.

File sharers share different kinds of content. We can divide these different kinds into four types.

A. There are some who use sharing networks as substitutes for purchasing content. Thus, when a new Madonna CD is released, rather than buying the CD, these users simply take it. We might quibble about whether everyone who takes it would actually have bought it if sharing didn't make it available for free. Most probably wouldn't have, but clearly there are some who would. The latter are the target of category A: users who download instead of purchasing.

B. There are some who use sharing networks to sample music before purchasing it. Thus, a friend sends another friend an MP3 of an artist he's not heard of. The other friend then buys CDs by that artist. This is a kind of targeted advertising, quite likely to succeed. If the friend recommending the album gains nothing from a bad recommendation, then one could expect that the recommendations will actually be quite good. The net effect of this sharing could increase the quantity of music purchased.

C. There are many who use sharing networks to get access to copyrighted content that is no longer sold or that they would not have purchased because the transaction costs off the Net are too high. This use of sharing networks is among the most rewarding for many. Songs that were part of your childhood but have long vanished from the marketplace magically appear again on the network. (One friend told me that when she discovered Napster, she spent a solid weekend "recalling" old songs. She was astonished at the range and mix of content that was available.) For content not sold, this is still technically a violation of copyright, though because the copyright owner is not selling the content anymore, the economic harm is zero—the same harm that occurs when I sell my collection of 1960s 45-rpm records to a local collector.

D. Finally, there are many who use sharing networks to get access to content that is not copyrighted or that the copyright owner wants to give away.

How do these different types of sharing balance out?

Let's start with some simple but important points. From the perspective of the law, only type D sharing is clearly legal. From the perspective of economics, only type A sharing is clearly harmful.[9] Type B sharing is illegal but plainly beneficial. Type C sharing is illegal, yet good for society (since more exposure to music is good) and harmless to the artist (since the work is not otherwise available). So how sharing matters on balance is a hard question to answer—and certainly much more difficult than the current rhetoric around the issue suggests.

Whether on balance sharing is harmful depends importantly on how harmful type A sharing is. Just as Edison complained about Hollywood, composers complained about piano rolls, recording artists complained about radio, and broadcasters complained about cable TV, the music industry complains that type A sharing is a kind of "theft" that is "devastating" the industry.

While the numbers do suggest that sharing is harmful, how harmful is harder to reckon. It has long been the recording industry's practice to blame technology for any drop in sales. The history of cassette recording is a good example. As a study by Cap Gemini Ernst & Young put it, "Rather than exploiting this new, popular technology, the labels fought it."[10] The labels claimed that every album taped was an album unsold, and when record sales fell by 11.4 percent in 1981, the industry claimed that its point was proved. Technology was the problem, and banning or regulating technology was the answer.

Yet soon thereafter, and before Congress was given an opportunity to enact regulation, MTV was launched, and the industry had a record turnaround. "In the end," Cap Gemini concludes, "the 'crisis' . . . was not the fault of the tapers—who did not [stop after MTV came into

being]—but had to a large extent resulted from stagnation in musical innovation at the major labels."[11]

But just because the industry was wrong before does not mean it is wrong today. To evaluate the real threat that p2p sharing presents to the industry in particular, and society in general—or at least the society that inherits the tradition that gave us the film industry, the record industry, the radio industry, cable TV, and the VCR—the question is not simply whether type A sharing is harmful. The question is also *how* harmful type A sharing is, and how beneficial the other types of sharing are.

We start to answer this question by focusing on the net harm, from the standpoint of the industry as a whole, that sharing networks cause. The "net harm" to the industry as a whole is the amount by which type A sharing exceeds type B. If the record companies sold more records through sampling than they lost through substitution, then sharing networks would actually benefit music companies on balance. They would therefore have little *static* reason to resist them.

Could that be true? Could the industry as a whole be gaining because of file sharing? Odd as that might sound, the data about CD sales actually suggest it might be close.

In 2002, the RIAA reported that CD sales had fallen by 8.9 percent, from 882 million to 803 million units; revenues fell 6.7 percent.[12] This confirms a trend over the past few years. The RIAA blames Internet piracy for the trend, though there are many other causes that could account for this drop. SoundScan, for example, reports a more than 20 percent drop in the number of CDs released since 1999. That no doubt accounts for some of the decrease in sales. Rising prices could account for at least some of the loss. "From 1999 to 2001, the average price of a CD rose 7.2 percent, from $13.04 to $14.19."[13] Competition from other forms of media could also account for some of the decline. As Jane Black of *BusinessWeek* notes, "The soundtrack to the film *High Fidelity* has a list price of $18.98. You could get the whole movie [on DVD] for $19.99."[14]

But let's assume the RIAA is right, and all of the decline in CD sales is because of Internet sharing. Here's the rub: In the same period that the RIAA estimates that 803 million CDs were sold, the RIAA estimates that 2.1 billion CDs were downloaded for free. Thus, although 2.6 times the total number of CDs sold were downloaded for free, sales revenue fell by just 6.7 percent.

There are too many different things happening at the same time to explain these numbers definitively, but one conclusion is unavoidable: The recording industry constantly asks, "What's the difference between downloading a song and stealing a CD?"—but their own numbers reveal the difference. If I steal a CD, then there is one less CD to sell. Every taking is a lost sale. But on the basis of the numbers the RIAA provides, it is absolutely clear that the same is not true of downloads. If every download were a lost sale—if every use of Kazaa "rob[bed] the author of [his] profit"—then the industry would have suffered a 100 percent drop in sales last year, not a 7 percent drop. If 2.6 times the number of CDs sold were downloaded for free, and yet sales revenue dropped by just 6.7 percent, then there is a huge difference between "downloading a song and stealing a CD."

These are the harms—alleged and perhaps exaggerated but, let's assume, real. What of the benefits? File sharing may impose costs on the recording industry. What value does it produce in addition to these costs?

One benefit is type C sharing—making available content that is technically still under copyright but is no longer commercially available. This is not a small category of content. There are millions of tracks that are no longer commercially available.[15] And while it's conceivable that some of this content is not available because the artist producing the content doesn't want it to be made available, the vast majority of it is unavailable solely because the publisher or the distributor has decided it no longer makes economic sense *to the company* to make it available.

In real space—long before the Internet—the market had a simple

response to this problem: used book and record stores. There are thousands of used book and used record stores in America today.[16] These stores buy content from owners, then sell the content they buy. And under American copyright law, when they buy and sell this content, *even if the content is still under copyright,* the copyright owner doesn't get a dime. Used book and record stores are commercial entities; their owners make money from the content they sell; but as with cable companies before statutory licensing, they don't have to pay the copyright owner for the content they sell.

Type C sharing, then, is very much like used book stores or used record stores. It is different, of course, because the person making the content available isn't making money from making the content available. It is also different, of course, because in real space, when I sell a record, I don't have it anymore, while in cyberspace, when someone shares my 1949 recording of Bernstein's "Two Love Songs," I still have it. That difference would matter economically if the owner of the 1949 copyright were selling the record in competition to my sharing. But we're talking about the class of content that is not currently commercially available. The Internet is making it available, through cooperative sharing, without competing with the market.

It may well be, all things considered, that it would be better if the copyright owner got something from this trade. But just because it may well be better, it doesn't follow that it would be good to ban used book stores. Or put differently, if you think that type C sharing should be stopped, do you think that libraries and used book stores should be shut as well?

Finally, and perhaps most importantly, file-sharing networks enable type D sharing to occur—the sharing of content that copyright owners want to have shared or for which there is no continuing copyright. This sharing clearly benefits authors and society. Science fiction author Cory Doctorow, for example, released his first novel, *Down and Out in the Magic Kingdom,* both free on-line and in bookstores on the same day. His (and his publisher's) thinking was that the on-line distribution would be a great advertisement for the "real" book. People would read part on-line, and then decide whether they liked the book or not. If they liked it, they would be more likely to buy it. Doctorow's content is type D content. If sharing networks enable his work to be spread, then both he and society are better off. (Actually, much better off: It is a great book!)

Likewise for work in the public domain: This sharing benefits society with no legal harm to authors at all. If efforts to solve the problem of type A sharing destroy the opportunity for type D sharing, then we lose something important in order to protect type A content.

The point throughout is this: While the recording industry understandably says, "This is how much we've lost," we must also ask, "How much has society gained from p2p sharing? What are the efficiencies? What is the content that otherwise would be unavailable?"

For unlike the piracy I described in the first section of this chapter, much of the "piracy" that file sharing enables is plainly legal and good. And like the piracy I described in chapter 4, much of this piracy is motivated by a new way of spreading content caused by changes in the technology of distribution. Thus, consistent with the tradition that gave us Hollywood, radio, the recording industry, and cable TV, the question we should be asking about file sharing is how best to preserve its benefits while minimizing (to the extent possible) the wrongful harm it causes artists. The question is one of balance. The law should seek that balance, and that balance will be found only with time.

"But isn't the war just a war against illegal sharing? Isn't the target just what you call type A sharing?"

You would think. And we should hope. But so far, it is not. The effect of the war purportedly on type A sharing alone has been felt far beyond that one class of sharing. That much is obvious from the Napster case itself. When Napster told the district court that it had developed a technology to block the transfer of 99.4 percent of identified

infringing material, the district court told counsel for Napster 99.4 percent was not good enough. Napster had to push the infringements "down to zero."[17]

If 99.4 percent is not good enough, then this is a war on file-sharing technologies, not a war on copyright infringement. There is no way to assure that a p2p system is used 100 percent of the time in compliance with the law, any more than there is a way to assure that 100 percent of VCRs or 100 percent of Xerox machines or 100 percent of handguns are used in compliance with the law. Zero tolerance means zero p2p. The court's ruling means that we as a society must lose the benefits of p2p, even for the totally legal and beneficial uses they serve, simply to assure that there are zero copyright infringements caused by p2p.

Zero tolerance has not been our history. It has not produced the content industry that we know today. The history of American law has been a process of balance. As new technologies changed the way content was distributed, the law adjusted, after some time, to the new technology. In this adjustment, the law sought to ensure the legitimate rights of creators while protecting innovation. Sometimes this has meant more rights for creators. Sometimes less.

So, as we've seen, when "mechanical reproduction" threatened the interests of composers, Congress balanced the rights of composers against the interests of the recording industry. It granted rights to composers, but also to the recording artists: Composers were to be paid, but at a price set by Congress. But when radio started broadcasting the recordings made by these recording artists, and they complained to Congress that their "creative property" was not being respected (since the radio station did not have to pay them for the creativity it broadcast), Congress rejected their claim. An indirect benefit was enough.

Cable TV followed the pattern of record albums. When the courts rejected the claim that cable broadcasters had to pay for the content they rebroadcast, Congress responded by giving broadcasters a right to compensation, but at a level set by the law. It likewise gave cable companies the right to the content, so long as they paid the statutory price.

This compromise, like the compromise affecting records and player pianos, served two important goals—indeed, the two central goals of any copyright legislation. First, the law assured that new innovators would have the freedom to develop new ways to deliver content. Second, the law assured that copyright holders would be paid for the content that was distributed. One fear was that if Congress simply required cable TV to pay copyright holders whatever they demanded for their content, then copyright holders associated with broadcasters would use their power to stifle this new technology, cable. But if Congress had permitted cable to use broadcasters' content for free, then it would have unfairly subsidized cable. Thus Congress chose a path that would assure *compensation* without giving the past (broadcasters) control over the future (cable).

In the same year that Congress struck this balance, two major producers and distributors of film content filed a lawsuit against another technology, the video tape recorder (VTR, or as we refer to them today, VCRs) that Sony had produced, the Betamax. Disney's and Universal's claim against Sony was relatively simple: Sony produced a device, Disney and Universal claimed, that enabled consumers to engage in copyright infringement. Because the device that Sony built had a "record" button, the device could be used to record copyrighted movies and shows. Sony was therefore benefiting from the copyright infringement of its customers. It should therefore, Disney and Universal claimed, be partially liable for that infringement.

There was something to Disney's and Universal's claim. Sony did decide to design its machine to make it very simple to record television shows. It could have built the machine to block or inhibit any direct copying from a television broadcast. Or possibly, it could have built the machine to copy only if there were a special "copy me" signal on the line. It was clear that there were many television shows that did not grant anyone permission to copy. Indeed, if anyone had asked, no doubt the majority of shows would not have authorized copying. And in the face of this obvious preference, Sony could have designed its sys-

tem to minimize the opportunity for copyright infringement. It did not, and for that, Disney and Universal wanted to hold it responsible for the architecture it chose.

MPAA president Jack Valenti became the studios' most vocal champion. Valenti called VCRs "tapeworms." He warned, "When there are 20, 30, 40 million of these VCRs in the land, we will be invaded by millions of 'tapeworms,' eating away at the very heart and essence of the most precious asset the copyright owner has, his copyright."[18] "One does not have to be trained in sophisticated marketing and creative judgment," he told Congress, "to understand the devastation on the after-theater marketplace caused by the hundreds of millions of tapings that will adversely impact on the future of the creative community in this country. It is simply a question of basic economics and plain common sense."[19] Indeed, as surveys would later show, 45 percent of VCR owners had movie libraries of ten videos or more[20]—a use the Court would later hold was not "fair." By "allowing VCR owners to copy freely by the means of an exemption from copyright infringement without creating a mechanism to compensate copyright owners," Valenti testified, Congress would "take from the owners the very essence of their property: the exclusive right to control who may use their work, that is, who may copy it and thereby profit from its reproduction."[21]

It took eight years for this case to be resolved by the Supreme Court. In the interim, the Ninth Circuit Court of Appeals, which includes Hollywood in its jurisdiction—leading Judge Alex Kozinski, who sits on that court, refers to it as the "Hollywood Circuit"—held that Sony would be liable for the copyright infringement made possible by its machines. Under the Ninth Circuit's rule, this totally familiar technology—which Jack Valenti had called "the Boston Strangler of the American film industry" (worse yet, it was a *Japanese* Boston Strangler of the American film industry)—was an illegal technology.[22]

But the Supreme Court reversed the decision of the Ninth Circuit.

And in its reversal, the Court clearly articulated its understanding of when and whether courts should intervene in such disputes. As the Court wrote,

> Sound policy, as well as history, supports our consistent deference to Congress when major technological innovations alter the market for copyrighted materials. Congress has the constitutional authority and the institutional ability to accommodate fully the varied permutations of competing interests that are inevitably implicated by such new technology.[23]

Congress was asked to respond to the Supreme Court's decision. But as with the plea of recording artists about radio broadcasts, Congress ignored the request. Congress was convinced that American film got enough, this "taking" notwithstanding.

If we put these cases together, a pattern is clear:

CASE	WHOSE VALUE WAS "PIRATED"	RESPONSE OF THE COURTS	RESPONSE OF CONGRESS
Recordings	Composers	No protection	Statutory license
Radio	Recording artists	N/A	Nothing
Cable TV	Broadcasters	No protection	Statutory license
VCR	Film creators	No protection	Nothing

In each case throughout our history, a new technology changed the way content was distributed.[24] In each case, throughout our history, that change meant that someone got a "free ride" on someone else's work.

In *none* of these cases did either the courts or Congress eliminate all free riding. In *none* of these cases did the courts or Congress insist that the law should assure that the copyright holder get all the value that his copyright created. In every case, the copyright owners complained of "piracy." In every case, Congress acted to recognize some of the legiti-

macy in the behavior of the "pirates." In each case, Congress allowed some new technology to benefit from content made before. It balanced the interests at stake.

When you think across these examples, and the other examples that make up the first four chapters of this section, this balance makes sense. Was Walt Disney a pirate? Would doujinshi be better if creators had to ask permission? Should tools that enable others to capture and spread images as a way to cultivate or criticize our culture be better regulated? Is it really right that building a search engine should expose you to $15 million in damages? Would it have been better if Edison had controlled film? Should every cover band have to hire a lawyer to get permission to record a song?

We could answer yes to each of these questions, but our tradition has answered no. In our tradition, as the Supreme Court has stated, copyright "has never accorded the copyright owner complete control over all possible uses of his work."[25] Instead, the particular uses that the law regulates have been defined by balancing the good that comes from granting an exclusive right against the burdens such an exclusive right creates. And this balancing has historically been done *after* a technology has matured, or settled into the mix of technologies that facilitate the distribution of content.

We should be doing the same thing today. The technology of the Internet is changing quickly. The way people connect to the Internet (wires vs. wireless) is changing very quickly. No doubt the network should not become a tool for "stealing" from artists. But neither should the law become a tool to entrench one particular way in which artists (or more accurately, distributors) get paid. As I describe in some detail in the last chapter of this book, we should be securing income to artists while we allow the market to secure the most efficient way to promote and distribute content. This will require changes in the law, at least in the interim. These changes should be designed to balance the protection of the law against the strong public interest that innovation continue.

This is especially true when a new technology enables a vastly superior mode of distribution. And this p2p has done. P2p technologies can be ideally efficient in moving content across a widely diverse network. Left to develop, they could make the network vastly more efficient. Yet these "potential public benefits," as John Schwartz writes in *The New York Times,* "could be delayed in the P2P fight."[26]

Yet when anyone begins to talk about "balance," the copyright warriors raise a different argument. "All this hand waving about balance and incentives," they say, "misses a fundamental point. Our content," the warriors insist, "is our *property.* Why should we wait for Congress to 'rebalance' our property rights? Do you have to wait before calling the police when your car has been stolen? And why should Congress deliberate at all about the merits of this theft? Do we ask whether the car thief had a good use for the car before we arrest him?"

"It is *our property,*" the warriors insist. "And it should be protected just as any other property is protected."

CHAPTER FIVE: "PIRACY"

1. See IFPI (International Federation of the Phonographic Industry), *The Recording Industry Commercial Piracy Report 2003,* July 2003, available at link #14. See also Ben Hunt, "Companies Warned on Music Piracy Risk," *Financial Times,* 14 February 2003, 11.
2. See Peter Drahos with John Braithwaite, *Information Feudalism: Who Owns the Knowledge Economy?* (New York: The New Press, 2003), 10–13, 209. The Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement obligates member nations to create administrative and enforcement mechanisms for intellectual property rights, a costly proposition for developing countries. Additionally, patent rights may lead to higher prices for staple industries such as agriculture. Critics of TRIPS question the disparity between burdens imposed upon developing countries and benefits conferred to industrialized nations. TRIPS does permit governments to use patents for public, noncommercial uses without first obtaining the patent holder's permission. Developing nations may be able to use this to gain the benefits of foreign patents at lower prices. This is a promising strategy for developing nations within the TRIPS framework.
3. For an analysis of the economic impact of copying technology, see Stan Liebowitz, *Rethinking the Network Economy* (New York: Amacom, 2002), 144–90. "In some instances . . . the impact of piracy on the copyright holder's ability to appropriate the value of the work will be negligible. One obvious instance is the case where the individual engaging in pirating would not have purchased an original even if pirating were not an option." Ibid., 149.
4. *Bach* v. *Longman,* 98 Eng. Rep. 1274 (1777).
5. See Clayton M. Christensen, *The Innovator's Dilemma: The Revolutionary National Bestseller That Changed the Way We Do Business* (New York: HarperBusiness, 2000). Professor Christensen examines why companies that give rise to and dominate a product area are frequently unable to come up with the most creative, paradigm-shifting uses for their own products. This job usually falls to outside innovators, who reassemble existing technology in inventive ways. For a discussion of Christensen's ideas, see Lawrence Lessig, *Future,* 89–92, 139.
6. See Carolyn Lochhead, "Silicon Valley Dream, Hollywood Nightmare," *San Francisco Chronicle,* 24 September 2002, A1; "Rock 'n' Roll Suicide," *New Scientist,* 6 July 2002, 42; Benny Evangelista, "Napster Names CEO, Secures New Financing," *San Francisco Chronicle,* 23 May 2003, C1; "Napster's Wake-Up Call," *Economist,* 24 June 2000, 23; John Naughton, "Hollywood at War with the Internet" (London) *Times,* 26 July 2002, 18.
7. See Ipsos-Insight, *TEMPO: Keeping Pace with Online Music Distribution*

(September 2002), reporting that 28 percent of Americans aged twelve and older have downloaded music off of the Internet and 30 percent have listened to digital music files stored on their computers.

8. Amy Harmon, "Industry Offers a Carrot in Online Music Fight," *New York Times,* 6 June 2003, A1.
9. See Liebowitz, *Rethinking the Network Economy,*148–49.
10. See Cap Gemini Ernst & Young, *Technology Evolution and the Music Industry's Business Model Crisis* (2003), 3. This report describes the music industry's effort to stigmatize the budding practice of cassette taping in the 1970s, including an advertising campaign featuring a cassette-shape skull and the caption "Home taping is killing music."

    At the time digital audio tape became a threat, the Office of Technical Assessment conducted a survey of consumer behavior. In 1988, 40 percent of consumers older than ten had taped music to a cassette format. U.S. Congress, Office of Technology Assessment, *Copyright and Home Copying: Technology Challenges the Law,* OTA-CIT-422 (Washington, D.C.: U.S. Government Printing Office, October 1989), 145–56.
11. U.S. Congress, *Copyright and Home Copying,* 4.
12. See Recording Industry Association of America, *2002 Yearend Statistics,* available at link #15. A later report indicates even greater losses. See Recording Industry Association of America, *Some Facts About Music Piracy,* 25 June 2003, available at link #16: "In the past four years, unit shipments of recorded music have fallen by 26 percent from 1.16 billion units in 1999 to 860 million units in 2002 in the United States (based on units shipped). In terms of sales, revenues are down 14 percent, from $14.6 billion in 1999 to $12.6 billion last year (based on U.S. dollar value of shipments). The music industry worldwide has gone from a $39 billion industry in 2000 down to a $32 billion industry in 2002 (based on U.S. dollar value of shipments)."
13. Jane Black, "Big Music's Broken Record," BusinessWeek online, 13 February 2003, available at link #17.
14. Ibid.
15. By one estimate, 75 percent of the music released by the major labels is no longer in print. See Online Entertainment and Copyright Law—Coming Soon to a Digital Device Near You: Hearing Before the Senate Committee on the Judiciary, 107th Cong., 1st sess. (3 April 2001) (prepared statement of the Future of Music Coalition), available at link #18.
16. While there are not good estimates of the number of used record stores in existence, in 2002, there were 7,198 used book dealers in the United States, an increase of 20 percent since 1993. See Book Hunter Press, *The Quiet Revolution: The Expansion of the Used Book Market* (2002), available at link #19. Used records accounted for $260 million in sales in 2002. See National Association of Recording Merchandisers, "2002 Annual Survey Results," available at link #20.

17. See Transcript of Proceedings, In Re: Napster Copyright Litigation at 34-35 (N.D. Cal., 11 July 2001), nos. MDL-00-1369 MHP, C 99-5183 MHP, available at link #21. For an account of the litigation and its toll on Napster, see Joseph Menn, *All the Rave: The Rise and Fall of Shawn Fanning's Napster* (New York: Crown Business, 2003), 269–82.
18. Copyright Infringements (Audio and Video Recorders): Hearing on S. 1758 Before the Senate Committee on the Judiciary, 97th Cong., 1st and 2nd sess., 459 (1982) (testimony of Jack Valenti, president, Motion Picture Association of America, Inc.).
19. Copyright Infringements (Audio and Video Recorders), 475.
20. *Universal City Studios, Inc.* v. *Sony Corp. of America,* 480 F. Supp. 429, 438 (C.D. Cal., 1979).
21. Copyright Infringements (Audio and Video Recorders), 485 (testimony of Jack Valenti).
22. *Universal City Studios, Inc.* v. *Sony Corp. of America,* 659 F. 2d 963 (9th Cir. 1981).
23. *Sony Corp. of America* v. *Universal City Studios, Inc.,* 464 U.S. 417, 431 (1984).
24. These are the most important instances in our history, but there are other cases as well. The technology of digital audio tape (DAT), for example, was regulated by Congress to minimize the risk of piracy. The remedy Congress imposed did burden DAT producers, by taxing tape sales and controlling the technology of DAT. See Audio Home Recording Act of 1992 (Title 17 of the *United States Code*), Pub. L. No. 102-563, 106 Stat. 4237, codified at 17 U.S.C. §1001. Again, however, this regulation did not eliminate the opportunity for free riding in the sense I've described. See Lessig, *Future,* 71. See also Picker, "From Edison to the Broadcast Flag," *University of Chicago Law Review* 70 (2003): 293–96.
25. *Sony Corp. of America* v. *Universal City Studios, Inc.,* 464 U.S. 417, 432 (1984).
26. John Schwartz, "New Economy: The Attack on Peer-to-Peer Software Echoes Past Efforts," *New York Times,* 22 September 2003, C3.