

# I

## Why Intellectual Property?

Imagine yourself starting a society from scratch. Perhaps you fought a revolution, or perhaps you led a party of adventurers into some empty land, conveniently free of indigenous peoples. Now your task is to make the society work. You have a preference for democracy and liberty and you want a vibrant culture: a culture with a little chunk of everything, one that offers hundreds of ways to live and thousands of ideals of beauty. You don't want everything to be high culture; you want beer and skittles and trashy delights as well as brilliant news reporting, avant-garde theater, and shocking sculpture. You can see a role for highbrow, state-supported media or publicly financed artworks, but your initial working assumption is that the final arbiter of culture should be the people who watch, read, and listen to it, and who remake it every day. And even if you are dubious about the way popular choice gets formed, you prefer it to some government funding body or coterie of art mavens.

At the same time as you are developing your culture, you want a flourishing economy—and not just in literature or film. You want innovation and invention. You want drugs that cure terrible diseases,

and designs for more fuel-efficient stoves, and useful little doodads, like mousetraps, or Post-it notes, or solar-powered backscratchers. To be exact, you want lots of innovation but you do not know exactly what innovation or even what types of innovation you want.

Given scarce time and resources, should we try to improve typewriters or render them obsolete with word processors, or develop functional voice recognition software, or just concentrate on making solar-powered backscratchers? Who knew that they needed Post-it notes or surgical stents or specialized rice planters until those things were actually developed? How do you make priorities when the priorities include things you cannot rationally value because you do not have them yet? How do you decide what to fund and when to fund it, what desires to trade off against each other?

The society you have founded normally relies on market signals to allocate resources. If a lot of people want petunias for their gardens, and are willing to pay handsomely for them, then some farmer who was formerly growing soybeans or gourds will devote a field to petunias instead. He will compete with the other petunia sellers to sell them to you. *Voilà!* We do not need a state planner to consult the vegetable five-year plan and decree “Petunias for the People!” Instead, the decision about how to deploy society’s productive resources is being made “automatically,” cybernetically even, by rational individuals responding to price signals. And in a competitive market, you will get your petunias at very close to the cost of growing them and bringing them to market. Consumer desires are satisfied and productive resources are allocated efficiently. It’s a *tour de force*.

Of course, there are problems. The market measures the value of a good by whether people have the ability and willingness to pay for it, so the whims of the rich may be more “valuable” than the needs of the destitute. We may spend more on pet psychiatry for the traumatized poodles on East 71st Street than on developing a cure for sleeping sickness, because the emotional well-being of the pets of the wealthy is “worth more” than the lives of the tropical world’s poor. But for a lot of products, in a lot of areas, the market works—and that is a fact not to be taken for granted.

Why not use this mechanism to meet your cultural and innovation needs? If people need *Madame Bovary* or *The New York Times* or a new kind of antibiotic, surely the market will provide it? Apparently not. You have brought economists with you into your brave new world—perhaps out of nostalgia, or because a lot of packing got done at the last minute. The economists shake their heads.<sup>1</sup> The petunia farmer is selling something that is “a rivalrous

good.” If I have the petunia, you can’t have it. What’s more, petunias are “excludable.” The farmer only gives you petunias when you pay for them. It is these factors that make the petunia market work. What about *Madame Bovary*, or the antibiotic, or *The New York Times*? Well, it depends. If books have to be copied out by hand, then *Madame Bovary* is just like the petunia. But if thousands of copies of *Madame Bovary* can be printed on a printing press, or photocopied, or downloaded from [www.flaubertsparrot.com](http://www.flaubertsparrot.com), then the book becomes something that is nonrival; once *Madame Bovary* is written, it can satisfy many readers with little additional effort or cost. Indeed, depending on the technologies of reproduction, it may be very hard to exclude people from *Madame Bovary*.

Imagine a Napster for French literature; everyone could have *Madame Bovary* and only the first purchaser would have to pay for it. Because of these “nonrival” and “nonexcludable” characteristics, Flaubert’s publisher would have a more difficult time coming up with a business plan than the petunia farmer. The same is true for the drug company that invests millions in screening and testing various drug candidates and ends up with a new antibiotic that is both safe and effective, but which can be copied for pennies. Who will invest the money, knowing that any product can be undercut by copies that don’t have to pay the research costs? How are authors and publishers and drug manufacturers to make money? And if they can’t make money, how are we to induce people to be authors or to be the investors who put money into the publishing or pharmaceutical business?

It is important to pause at this point and inquire how closely reality hews to the economic story of “nonexcludable” and “nonrival” public goods. It turns out that the reality is much more complex. First, there may be motivations for creation that do not depend on the market mechanism. People sometimes create because they seek fame, or out of altruism, or because an inherent creative force will not let them do otherwise. Where those motivations operate, we may not need a financial incentive to create. Thus the “problem” of cheap copying in fact becomes a virtue. Second, the same technologies that make copying cheaper may also lower the costs of advertising and distribution, cutting down on the need to finance expensive distribution chains. Third, even in situations that do require incentives for creativity and for distribution, it may be that being “first to market” with an innovation provides the innovator with enough of a head start on the competition to support the innovation.<sup>2</sup> Fourth, while some aspects of the innovation may truly be nonrival, other aspects may not. Software is nonrival and hard to exclude people from, but it

is easy to exclude your customers from the help line or technical support. The CD may be copied cheaply; the concert is easy to police. The innovator may even be advantaged by being able to trade on the likely effects of her innovation. If I know I have developed the digital camera, I may sell the conventional film company's shares short. Guarantees of authenticity, quality, and ease of use may attract purchasers even if unauthorized copying is theoretically cheaper.

In other words, the economic model of pure public goods will track our reality well in some areas and poorly in others—and the argument for state intervention to fix the problems of public goods will therefore wax and wane correspondingly. In the case of drug patents, for example, it is very strong. For lots of low-level business innovation, however, we believe that adequate incentives are provided by being first to market, and so we see no need to give monopoly power to the first business to come up with a new business plan—at least we did not until some disastrous patent law decisions discussed later in this book. Nor does a lowering of copying costs hurt every industry equally. Digital copies of music were a threat to the traditional music business, but digital copies of books? I am skeptical. This book will be freely and legally available online to all who wish to copy it. Both the publisher and I believe that this will increase rather than decrease sales.

Ignore these inconvenient complicating factors for a moment. Assume that wherever things are cheap to copy and hard to exclude others from, we have a potential collapse of the market. That book, that drug, that film will simply not be produced in the first place—unless the state steps in somehow to change the equation. This is the standard argument for intellectual property rights. And a very good argument it is. In order to solve the potentially “market-breaking” problem of goods that are expensive to make and cheap to copy, we will use what my colleague Jerry Reichman calls the “market-making” device of intellectual property. The state will create a right to exclude others from the invention or the expression and confer it on the inventor or the author. The most familiar rights of this kind are copyrights and patents. (Trademarks present some special issues, which I will address a little later.) Having been given the ability to forbid people to copy your invention or your novel, you can make them pay for the privilege of getting access. You have been put back in the position of the petunia farmer.

Pause for a moment and think of what a brilliant social innovation this is—at least potentially. Focus not on the incentives alone, but on the decentralization of information processing and decision making that a market offers.

Instead of having ministries of art that define the appropriate culture to be produced this year, or turning the entire path of national innovation policy over to the government, intellectual property decentralizes the choices about what creative and innovative paths to pursue while retaining the possibility that people will actually get paid for their innovation and creative expression.

The promise of copyright is this: if you are a radical environmentalist who wants to alert the world to the danger posed by climate change, or a passionate advocate of homeschooling, or a cartoonist with a uniquely twisted view of life, or a musician who can make a slack key guitar do very strange things, or a person who likes to take amazingly saccharine pictures of puppies and put them on greeting cards—maybe you can quit your day job and actually make a living from your expressive powers. If the market works, if the middlemen and distributors are smart enough, competitive enough, and willing to take a chance on expression that competes with their in-house talent, if you can make it somehow into the public consciousness, then you can be paid for allowing the world to copy, distribute, and perform your stuff. You risk your time and your effort and your passion and, if the market likes it, you will be rewarded. (At the very least, the giant producers of culture will be able to assemble vast teams of animators and musicians and software gurus and meld their labors into a videotape that will successfully anesthetize your children for two hours; no small accomplishment, let me tell you, and one for which people will certainly pay.)

More importantly, if the system works, the choices about the content of our culture—the mix of earnest essays and saccharine greeting cards and scantily clad singers and poetic renditions of Norse myths—will be decentralized to the people who actually read, or listen to, or watch the stuff. This is our cultural policy and it is driven, in part, by copyright.

The promise of patent is this: we have a multitude of human needs and a multitude of individuals and firms who might be able to satisfy those needs through innovation. Patent law offers us a decentralized system that, in principle, will allow individuals and firms to pick the problem that they wish to solve. Inventors and entrepreneurs can risk their time and their capital and, if they produce a solution that finds favor in the marketplace, will be able to reap the return provided by the legal right to exclude—by the legal monopoly over the resulting invention. The market hints at some unmet need—for drugs that might reduce obesity or cure multiple sclerosis, or for Post-it notes or windshield wipers that come on intermittently in light rain—and the innovator and her investors make a bet that they can meet that need. (Not all of

these technologies will be patentable—only those that are novel and “nonobvious,” something that goes beyond what any skilled person in the relevant field would have done.)

In return for the legal monopoly, patent holders must describe the technology well enough to allow anyone to replicate it once the patent term ends. Thus patent law allows us to avert two dangers: the danger that the innovation will languish because the inventor has no way to recover her investment of time and capital, and the danger that the inventor will turn to secrecy instead, hiding the details of her innovation behind black box technologies and restrictive contracts, so that society never gets the knowledge embedded in it. (This is a real danger. The medieval guilds often relied on secrecy to maintain the commercial advantage conveyed by their special skills, thus slowing progress down and sometimes simply stopping it. We still don’t know how they made Stradivarius violins sound so good. Patents, by contrast, keep the knowledge public, at least in theory;<sup>3</sup> you must describe it to own it.) And again, decisions about the direction of innovation have been largely, though not entirely, decentralized to the people who actually might use the products and services that result. This is our innovation policy and it is increasingly driven by patent.

What about the legal protection of trademarks, the little words or symbols or product shapes that identify products for us? Why do we have trademark law, this “homestead law for the English language”?<sup>4</sup> Why not simply allow anyone to use any name or attractive symbol that they want on their products, even if someone else used it first? A trademark gives me a limited right to exclude other people from using my mark, or brand name, or product shape, just as copyright and patent law give me a limited right to exclude other people from my original expression or my novel invention. Why create such a right and back it with the force of law?

According to the economists, the answer is that trademark law does two things. It saves consumers time. We have good reason to believe that a soap that says “Ivory” or a tub of ice cream that says “Häagen-Dazs” will be made by the same manufacturer that made the last batch of Ivory soap or Häagen-Dazs ice cream. If we liked the good before and we see the symbol again, we know what we are getting. I can work out what kind of soap, ice cream, or car I like, and then just look for the appropriate sign rather than investigating the product all over again each time I buy. That would be wasteful and economists hate waste. At the same time, trademarks fulfill a second function: they are supposed to give manufacturers an incentive to make good products—or at least to make products of consistent quality or price—to build up a good

brand name and invest in consistency of its key features, knowing that no other firm can take their name or symbol. (Why produce a high-quality product, or a reliable cheap product, and build a big market share if a free rider could wait until people liked the product and then just produce an imitation with the same name but of lower quality?) The promise of trademark is that quality and commercial information flow regulate themselves, with rational consumers judging among goods of consistent quality produced by manufacturers with an interest in building up long-term reputation.

So there we have the idealized vision of intellectual property. It is not merely supposed to produce incentives for innovation by rewarding creators, though that is vital. Intellectual property is also supposed to create a feedback mechanism that dictates the contours of information and innovation production. It is not an overstatement to say that intellectual property rights are designed to shape our information marketplace. Copyright law is supposed to give us a self-regulating cultural policy in which the right to exclude others from one's original expression fuels a vibrant public sphere indirectly driven by popular demand. At its best, it is supposed to allow a decentralized and iconoclastic cultural ferment in which independent artists, musicians, and writers can take their unique visions, histories, poems, or songs to the world—and make a living doing so if their work finds favor. Patent law is supposed to give us a self-regulating innovation policy in which the right to exclude others from novel and useful inventions creates a cybernetic and responsive innovation marketplace. The allocation of social resources to particular types of innovation is driven by guesses about what the market wants. Trademark law is supposed to give us a self-regulating commercial information policy in which the right to exclude others from one's trade name, symbol, or slogan produces a market for consumer information in which firms have incentives to establish quality brand names and consumers can rely on the meaning and the stability of the logos that surround them. Ivory soap will always mean Ivory soap and Coke will mean Coke, at least until the owners of those marks decide to change the nature of their products.

Some readers will find my use of the term “intellectual property” mistaken and offensive. They will argue, and I agree, that the use of the term “property” can cause people mistakenly to conflate these rights with those to physical property. (I outline that process and its negative consequences in the next chapter.) They will argue, and again I agree, that there are big differences between the three fields I have described. Should we not just list the specific rights about which we are speaking—copyright, patent, or trademark? Both

of these concerns are real and well-founded, but I respectfully disagree with the conclusion that we should give up the term “intellectual property.”

First, as I have tried to show above, while there are considerable differences between the three fields I discussed, there is also a core similarity—the attempt to use a legally created privilege to solve a potential “public goods problem.” That similarity can enlighten as well as confuse. Yes, copyright looks very different from patent, just as a whale looks very different from a mouse. But we do not condemn the scientist who notes that they are both “mammals”—a socially constructed category—so long as he has a reason for focusing on that commonality. Second, the language of intellectual property exists. It has political reality in the world. Sometimes the language confuses and misleads. There are two possible reactions to such a reality. One can reject it and insist on a different and “purified” nomenclature, or one can attempt to point out the misperceptions and confusions using the very language in which they are embedded. I do not reject the first tactic. It can be useful. Here, though, I have embraced the second.

I have provided the idealized story of intellectual property. But is it true? Did the law really develop that way? Does it work that way now? Does this story still apply in the world of the Internet and the Human Genome Project? If you believed the idealized story, would you know what kind of intellectual property laws to write? The answer to all of these questions is “not exactly.”

Like most social institutions, intellectual property has an altogether messier and more interesting history than this sanitized version of its functioning would suggest. The precursors of copyright law served to force the identification of the author, so that he could be punished if he proved to be a heretic or a revolutionary. The Statute of Anne—the first true copyright statute—was produced partly because of publishers’ fights with booksellers; the authorial right grew as an afterthought.<sup>5</sup> The history of patents includes a wealth of attempts to reward friends of the government and restrict or control dangerous technologies. Trade-mark law has shuttled uneasily between being a free-floating way to police competition so as to prohibit actions that courts thought were “unfair” and an absolute property right over an individual word or symbol.

But does intellectual property work this way now, promoting the ideal of progress, a transparent marketplace, easy and cheap access to information, decentralized and iconoclastic cultural production, self-correcting innovation policy? Often it does, but distressingly often it does the reverse. The rights that were supposed to be limited in time and scope to the minimum monopoly necessary to ensure production become instead a kind of perpetual corporate



welfare—restraining the next generation of creators instead of encouraging them. The system that was supposed to harness the genius of both the market and democracy sometimes subverts both. Worse, it does so inefficiently, locking up vast swaths of culture in order to confer a benefit on a tiny minority of works. But this is too abstract. A single instance from copyright law will serve as a concrete example of what is at stake here. Later in the book I will give other examples.

#### YOU'LL GET MY LIBRARY OF CONGRESS WHEN . . .

Go to the Library of Congress catalogue. It is online at <http://catalog.loc.gov/>. This is an astounding repository of material—not just books and periodicals, but pictures, films, and music. The vast majority of this material, perhaps as much as 95 percent in the case of books, is commercially unavailable.<sup>6</sup> The process happens comparatively quickly. Estimates suggest that a mere twenty-eight years after publication 85 percent of the works are no longer being commercially produced. (We know that when U.S. copyright required renewal after twenty-eight years, about 85 percent of all copyright holders did not bother to renew. This is a reasonable, if rough, guide to commercial viability.)<sup>7</sup>

Yet because the copyright term is now so long, in many cases extending well over a century, most of twentieth-century culture is still under copyright—copyrighted but unavailable. Much of this, in other words, is lost culture. No one is reprinting the books, screening the films, or playing the songs. No one is allowed to. In fact, we may not even know who holds the copyright. Companies have gone out of business. Records are incomplete or absent. In some cases, it is even more complicated. A film, for example, might have one copyright over the sound track, another over the movie footage, and another over the script. You get the idea. These works—which are commercially unavailable and also have no identifiable copyright holder—are called “orphan works.” They make up a huge percentage of our great libraries’ holdings. For example, scholars estimate that the majority of our film holdings are orphan works.<sup>8</sup> For books, the estimates are similar. Not only are these works unavailable commercially, there is simply no way to find and contact the person who could agree to give permission to digitize the work or make it available in a new form.

Take a conservative set of numbers. Subtract from our totals the works that are clearly in the public domain. In the United States, that is generally work produced before 1923. That material, at least, we can use freely. Subtract, too,

the works that are still available from the copyright holder. There we can gain access if we are willing to pay. Yet this still leaves a huge proportion of twentieth- and twenty-first-century culture commercially unavailable but under copyright. In the case of books, the number is over 95 percent, as I said before; with films and music, it is harder to tell, but the percentages are still tragically high. A substantial proportion of that total is made up of orphan works. They cannot be reprinted or digitized even if we were willing to pay the owner to do so. And then comes the Internet. Right now, you can search for those books or films or songs and have the location of the work instantly displayed, as well as a few details about it. And if you live in Washington, D.C., or near some other great library, you can go to a reading room, and if the work can be found and has not been checked out, and has not deteriorated, you can read the books (though you probably will not be able to arrange to see the movies unless you are an accredited film scholar).

I was searching the Library of Congress catalogue online one night, tracking down a seventy-year-old book about politics and markets, when my son came in to watch me. He was about eight years old at the time but already a child of the Internet age. He asked what I was doing and I explained that I was printing out the details of the book so that I could try to find it in my own university library. “Why don’t you read it online?” he said, reaching over my shoulder and double-clicking on the title, frowning when that merely led to another information page: “How do you get to read the actual book?” I smiled at the assumption that all the works of literature were not merely in the Library of Congress, but actually on the Net: available to anyone with an Internet connection anywhere in the world—so that you could not merely search for, but also read or print, some large slice of the Library’s holdings. Imagine what that would be like. Imagine the little underlined blue hyperlink from each title—to my son it made perfect sense. The book’s title was in the catalogue. When you clicked the link, surely you would get to read it. That is what happened in his experience when one clicked a link. Why not here? It was an old book, after all, no longer in print. Imagine being able to read the books, hear the music, or watch the films—or at least the ones that the Library of Congress thought it worthwhile to digitize. Of course, that is ridiculous.

I tried to explain this to my son. I showed him that there were some works that could be seen online. I took him to the online photograph library, meaning to show him the wealth of amazing historical photographs. Instead, I found myself brooding over the lengthy listing of legal restrictions on the images and the explanation that reproduction of protected items may require the written

permission of the copyright owners and that, in many cases, only indistinct and tiny thumbnail images are displayed to those searching from outside the Library of Congress “because of potential rights considerations.” The same was true of the scratchy folk songs from the twenties or the early film holdings. The material was in the Library, of course—remarkable collections in some cases, carefully preserved, and sometimes even digitized at public expense. Yet only a tiny fraction of it is available online. (There is a fascinating set of Edison’s early films, for example.)

Most of the material available online comes from so long ago that the copyright could not possibly still be in force. But since copyright lasts for seventy years after the death of the author (or ninety-five years if it was a corporate “work for hire”), that could be a very, very long time indeed. Long enough, in fact, to keep off limits almost the whole history of moving pictures and the entire history of recorded music. Long enough to lock up almost all of twentieth-century culture.

But is that not what copyright is supposed to do? To grant the right to restrict access, so as to allow authors to charge for the privilege of obtaining it? Yes, indeed. And this is a very good idea. But as I argue in this book, the goal of the system ought to be to give the monopoly only for as long as necessary to provide an incentive. After that, we should let the work fall into the public domain where all of us can use it, transform it, adapt it, build on it, republish it as we wish. For most works, the owners expect to make all the money they are going to recoup from the work with five or ten years of exclusive rights. The rest of the copyright term is of little use to them except as a kind of lottery ticket in case the work proves to be a one-in-a-million perennial favorite. The one-in-a-million lottery winner will benefit, of course, if his ticket comes up. And if the ticket is “free,” who would not take it? But the ticket is not free to the public. They pay higher prices for the works still being commercially exploited and, frequently, the price of complete unavailability for the works that are not.

Think of a one-in-a-million perennial favorite—Harry Potter, say. Long after J. K. Rowling is dust, we will all be forbidden from making derivative works, or publishing cheap editions or large-type versions, or simply reproducing it for pleasure. I am a great admirer of Ms. Rowling’s work, but my guess is that little extra incentive was provided by the thought that her copyright will endure seventy rather than merely fifty years after her death. Some large costs are being imposed here, for a small benefit. And the costs fall even more heavily on all the other works, which are available nowhere but in some

moldering library stacks. To put it another way, if copyright owners had to purchase each additional five years of term separately, the same way we buy warranties on our appliances, the economically rational ones would mainly settle for a fairly short period.

Of course, there are some works that are still being exploited commercially long after their publication date. Obviously the owners of these works would not want them freely available online. This seems reasonable enough, though even with those works the copyright should expire eventually. But remember, in the Library of Congress's vast, wonderful pudding of songs and pictures and films and books and magazines and newspapers, there is perhaps a handful of raisins' worth of works that anyone is making any money from, and the vast majority of those come from the last ten years. If one goes back twenty years, perhaps a raisin. Fifty years? A slight raisiny aroma. We restrict access to the whole pudding in order to give the owners of the raisin slivers their due. But this pudding is almost all of twentieth-century culture, and we are restricting access to it when almost all of it could be available.

If you do not know much about copyright, you might think that I am exaggerating. After all, if no one has any financial interest in the works or we do not even know who owns the copyright, surely a library would be free to put those works online? Doesn't "no harm, no foul" apply in the world of copyright? In a word, no. Copyright is what lawyers call a "strict liability" system. This means that it is generally not a legal excuse to say that you did not believe you were violating copyright, or that you did so by accident, or in the belief that no one would care, and that your actions benefited the public. Innocence and mistake do not absolve you, though they might reduce the penalties imposed. Since it is so difficult to know exactly who owns the copyright (or copyrights) on a work, many libraries simply will not reproduce the material or make it available online until they can be sure the copyright has expired—which may mean waiting for over a century. They cannot afford to take the risk.

What is wrong with this picture? Copyright has done its job and encouraged the creation of the work. But now it acts as a fence, keeping us out and restricting access to the work to those who have the time and resources to trudge through the stacks of the nation's archives. In some cases, as with film, it may simply make the work completely unavailable.

So far I have been talking as though copyright were the only reason the material is not freely available online. But of course, this is not true. Digitizing costs money (though less every year) and there is a lot of rubbish out

there, stuff no one would ever want to make available digitally (though it must be noted that one man's rubbish is another man's delight). But that still leaves vast amounts of material that we would want, and be willing to pay, to have digitized. Remember also that if the material were legally free, anyone could get in on the act of digitizing it and putting it up. Google's much-heralded effort to scan the books in major libraries is just the kind of thing I mean. But Google is being sued for violating copyright—even though it allows any author to “opt out” of its system, and even though under the Google system you cannot click to get the book if it is still under copyright, merely a snippet a few sentences long from the book.

If you are shaking your head as you read this, saying that no one would bother digitizing most of the material in the archives, look at the Internet and ask yourself where the information came from the last time you did a search. Was it an official and prestigious institution? A university or a museum or a government? Sometimes those are our sources of information, of course. But do you not find the majority of the information you need by wandering off into a strange click-trail of sites, amateur and professional, commercial and not, hobbyist and entrepreneur, all self-organized by internal referrals and search engine algorithms? Even if Google did not undertake the task of digitization, there would be hundreds, thousands, maybe millions of others who would—not with Google's resources, to be sure. In the process, they would create something quite remarkable.

The most satisfying proofs are existence proofs. A platypus is an existence proof that mammals can lay eggs. The Internet is an existence proof of the remarkable information processing power of a decentralized network of hobbyists, amateurs, universities, businesses, volunteer groups, professionals, and retired experts and who knows what else. It is a network that produces useful information and services. Frequently, it does so at no cost to the user and without anyone guiding it. Imagine that energy, that decentralized and idiosyncratically dispersed pattern of interests, turned loose on the cultural artifacts of the twentieth century. Then imagine it coupled to the efforts of the great state archives and private museums who themselves would be free to do the same thing. Think of the people who would work on Buster Keaton, or the literary classics of the 1930s, or the films of the Second World War, or footage on the daily lives of African-Americans during segregation, or the music of the Great Depression, or theremin recordings, or the best of vaudeville. Imagine your Google search in such a world. Imagine *that* Library of Congress. One science fiction writer has taken a stab. His character utters the

immortal line, “Man, you’ll get my Library of Congress *when you pry my cold dead fingers off it!*”<sup>9</sup>

Familiar with the effect of this kind of train of thought on his father, my son had long since wandered off in search of a basketball game to watch. But I have to admit his question was something of an epiphany for me: Where *do* you click to get the actual book?

The response I get from a lot of people is that this vision of the Library of Congress is communism, pure and simple. Such people view Google’s attempt to digitize books as simple theft. Surely it will destroy the incentives necessary to produce the next beach novel, the next academic monograph, the next teen band CD, the next hundred-million-dollar movie? But this mistakes my suggestion. Imagine a very conservative system. First, let us make people demonstrate that they want a copyright, by the arduous step of actually writing the word copyright or the little © on the work. (At the moment, everyone gets a copyright as soon as the work is written down or otherwise fixed, whether they want one or not.) But how long a copyright? We know that the majority of works are only valuable for five or ten years. Let us give copyright owners more than double that, say twenty-eight years of exclusive rights. If prior experience is any guide, 85 percent of works will be allowed to enter the public domain after that period. If that isn’t generous enough, let us say that the small proportion of owners who still find value in their copyright at the end of twenty-eight years can extend their copyright for another twenty-eight years. Works that are not renewed fall immediately into the public domain. If you check the register after twenty-eight years and the work has not been renewed, it is in the public domain. Works that are renewed get the extra time.

Now this is a conservative suggestion, too conservative in my view, though still better than what we have now. Is it feasible? It would be hard to argue that it is not. This pretty much *was* the law in the United States until 1978. (My system is a little simpler, but the broad strokes are the same.) Since that point, in two broad stages, we have moved away from this system at the very moment in history when the Internet made it a particularly stupid idea to do so.

How have we changed the system? We have given copyrights to the creator of any original work as soon as it is fixed, so that you, reader, are the author of thousands of copyrighted works. Almost everything up on the Internet is copyrighted, even if its creators do not know that and would prefer it to be in the public domain. Imagine that you want to make a documentary and use a film clip that a student filmmaker has put up on his home page. Perhaps you want to adapt the nifty graphics that a high school teacher in Hawaii created

to teach her calculus class, thinking that, with a few changes, you could use the material for your state's K-12 physics program. Perhaps you are a collage artist who wishes to incorporate images that amateur artists have put online. None of the works are marked by a copyright symbol. Certainly they are up on the Internet, but does that mean that they are available for reprinting, adaptation, or incorporation in a new work?

In each of these cases, you simply do not know whether what you are doing is legal or not. Of course, you can take the risk, though that becomes less advisable if you want to share your work with others. Each broadening of the circle of sharing increases the value to society but also the legal danger to you. What if you want to put the course materials on the Net, or publish the anthology, or display the movie? Perhaps you can try to persuade your publisher or employer or distributor to take the risk. Perhaps you can track down the authors of every piece you wish to use and puzzle through the way to get a legal release from them stating that they give you permission to use the work they did not even know they had copyright over. Or you can give up. Whatever happens, you waste time and effort in trying to figure out a way of getting around a system that is designed around neither your needs nor the needs of many of the people whose work you want to use.

Apart from doing away with the need to indicate that you *want* your works to be copyrighted, we have lengthened the copyright term. We did this without any credible evidence that it was necessary to encourage innovation. We have extended the terms of living and even of dead authors over works that have already been created. (It is hard to argue that this was a necessary incentive, what with the works already existing and the authors often being dead.) We have done away with the need to renew the right. Everyone gets the term of life plus seventy years, or ninety-five years for corporate "works for hire." All protected by a "strict liability" system with scary penalties. And, as I said before, we have made all those choices just when the Internet makes their costs particularly tragic.

In sum, we have forgone the Library of Congress I described without even apparently realizing we were doing so. We have locked up most of twentieth-century culture and done it in a particularly inefficient and senseless way, creating vast costs in order to convey proportionally tiny benefits. (And all without much complaint from those who normally object to inefficient government subsidy programs.) Worst of all, we have turned the system on its head. Copyright, intended to be the servant of creativity, a means of promoting access to information, is becoming an obstacle to both.

That, then, is one example of the stakes of the debate over intellectual property policy. Unfortunately, the problem of copyright terms is just one example, one instance of a larger pattern. As I will try to show, this pattern is repeated again and again in patents, in trademarks, and elsewhere in copyright law. This is not an isolated “glitch.” It is a complicated but relentless tendency that has led to a hypertrophy of intellectual property rights and an assault on the public domain. In fact, in many cases, the reality is even worse: there appears to be a complete ignorance about the value of the public domain. Property’s opposite, its outside, is getting short shrift.

To paraphrase a song from my youth, “how did we get here?” Where should we turn to understand the role of intellectual property in the era of the Internet and the decoding of the human genome? We could turn to the cutting edge of technology or to economics or information theory. But none of those would be as useful a starting place as a letter that was written about two hundred years ago, using a high-tech quill pen, about a subject far from the digital world.