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### Thomas Jefferson Writes a Letter

On August 13, 1813, Thomas Jefferson took up his pen to write to Isaac McPherson.<sup>1</sup> It was a quiet week in Jefferson's correspondence. He wrote a letter to Madison about the appointment of a tax assessor, attempted to procure a government position for an acquaintance, produced a fascinating and lengthy series of comments on a new "Rudiments of English Grammar," discussed the orthography of nouns ending in "y," accepted the necessary delay in the publication of a study on the anatomy of mammoth bones, completed a brief biography of Governor Lewis, and, in general, confined himself narrowly in subject matter.<sup>2</sup> But on the 13th of August, Jefferson's mind was on intellectual property, and most specifically, patents.

Jefferson's writing is, as usual, apparently effortless. Some find his penmanship a little hard to decipher. To me, used to plowing through the frenzied chicken tracks that law students produce during exams, it seems perfectly clear. If handwriting truly showed the architecture of the soul, then Jefferson's would conjure up Monticello or the University of Virginia. There are a few revisions and interlineations, a couple of words squeezed in with a caret at the bottom of the line, but for the

most part the lines of handwriting simply roll on and on—"the fugitive fermentation of an individual brain,"<sup>3</sup> to quote a phrase from the letter, caught in vellum and ink, though that brain has been dust for more than a century and a half.

I love libraries. I love the mushroom smell of gently rotting paper, the flaky crackle of manuscripts, and the surprise of matching style of handwriting with style of thought. Today, though, I am viewing his letter over the Internet on a computer screen. (You can too. The details are at the back of the book.)

I think Jefferson would have been fascinated by the Internet. After all, this was the man whose library became the Library of Congress,<sup>4</sup> who exemplifies the notion of the brilliant dabbler in a hundred fields, whose own book collection was clearly a vital and much consulted part of his daily existence, and whose vision of politics celebrates the power of an informed citizenry. Admittedly, the massive conflicts between Jefferson's announced principles and his actions on the issue of slavery have led some, though not me, to doubt that there is *any* sincerity or moral instruction to be found in his words.<sup>5</sup> But even those who find him a sham can hardly fail to see the continual and obvious joy he felt about knowledge and its spread.

In the letter to Isaac McPherson, a letter that has become very famous in the world of the *digerati*,<sup>6</sup> this joy becomes manifest. The initial subject of the correspondence seems far from the online world. McPherson wrote to Jefferson about "elevators, conveyers and Hopper-boys." Specifically, he wanted to know Jefferson's opinion of a patent that had been issued to Mr. Oliver Evans. Jefferson devotes a paragraph to a recent retrospective extension of patent rights (he disapproves) and then turns to Evans's elevators.

Patents then, as now, were only supposed to be given for inventions that were novel, nonobvious, and useful. Jefferson had considerable doubt whether Evans's device, essentially a revolving string of buckets used to move grain, actually counted as "an invention." "The question then whether such a string of buckets was invented first by Oliver Evans, is a mere question of fact in mathematical history. Now, turning to such books only as I happen to possess, I find abundant proof that this simple machinery has been in use from time immemorial." Jefferson cites from his library example after example of references to the "Persian wheel"—a string of buckets to move water. The display of scholarship is effortless and without artifice. If the device existed to move water, he declares, Mr. Evans can hardly patent it to move grain. "If one person invents a knife convenient for pointing our pens, another cannot have a patent right for the same knife to point our pencils. A compass was invented for navigating the sea; another could not have a patent right for using it to survey land."<sup>7</sup>

So far as we can tell, this was the only part of the letter that interested McPherson. Later correspondence indicates that he had a pamphlet printed questioning the patent.<sup>8</sup> But while it is impressive to see Jefferson's easy command of historical evidence or his grasp of the importance of limiting the subject matter, scope, and duration of patents, these qualities alone would not have given the letter the fame it now has. It is when Jefferson turns to the idea of intellectual property itself that the letter becomes more than a historical curiosity. In a couple of pages, quickly jotted down on a humid August day in 1813, he frames the issue as well as anyone has since.

He starts by dismissing the idea "that inventors have a natural and exclusive right to their inventions, and not merely for their own lives, but inheritable to their heirs." In lines that will sound strange to those who assume that the framers of the Constitution were property absolutists, Jefferson argues that "stable ownership" of even tangible property is "a gift of social law." Intellectual property, then, has still less of a claim to some permanent, absolute, and natural status.

[W]hile it is a moot question whether the origin of any kind of property is derived from nature at all, it would be singular to admit a natural and even an hereditary right to inventors. It is agreed by those who have seriously considered the subject, that no individual has, of natural right, a separate property in an acre of land, for instance. By an universal law, indeed, whatever, whether fixed or movable, belongs to all men equally and in common, is the property for the moment of him who occupies it, but when he relinquishes the occupation, the property goes with it. Stable ownership is the gift of social law, and is given late in the progress of society. It would be curious then, if an idea, the fugitive fermentation of an individual brain, could, of natural right, be claimed in exclusive and stable property.<sup>9</sup>

Jefferson's point here may seem obscure to us. We are not used to starting every argument from first principles. But it is in fact quite simple. It is society that creates property rights that go beyond mere occupancy. It does so for several reasons—reasons of both practicality and natural justice. (Elsewhere in his writings, Jefferson expands on this point at greater length.) One of those reasons has to do with the difficulty, perhaps even the impossibility, of two different people having full and unfettered ownership of the same piece of property simultaneously. Another linked reason comes from the practicality of excluding others from our property, so that we can exploit it secure from the plunder or sloth of others. The economists you encountered in Chapter 1 have, with their usual linguistic felicity, coined the terms "rivalrous" and "excludable" to describe these characteristics.

With rivalrous property, one person's use precludes another's. If I drink the

milk, you cannot. Excludable property is, logically enough, property from which others can easily be excluded or kept out. But ideas seem to have neither of these characteristics.

If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possess the less, because every other possess the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density in any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation. Inventions then cannot, in nature, be a subject of property.<sup>10</sup>

Those who quote the passage sometimes stop here, which is a shame, because it leaves the impression that Jefferson was unequivocally against intellectual property rights. But that would be a considerable overstatement. When he says that inventions can never be the subject of property, he means a permanent and exclusive property right which, as a matter of natural right, no just government could abridge. However, inventions *could* be covered by temporary state-created monopolies instituted for the common good. In the lines immediately following the popularly quoted excerpt, Jefferson goes on:

Society may give an exclusive right to the profits arising from [inventions], as an encouragement to men to pursue ideas which may produce utility, but this may or may not be done, according to the will and convenience of the society, without claim or complaint from any body. Accordingly, it is a fact, as far as I am informed, that England was, until we copied her, the only country on earth which ever, by a general law, gave a legal right to the exclusive use of an idea. In some other countries it is sometimes done, in a great case, and by a special and personal act, but, generally speaking, other nations have thought that these monopolies produce more embarrassment than advantage to society; and it may be observed that the nations which refuse monopolies of invention, are as fruitful as England in new and useful devices.<sup>11</sup>

Jefferson's message was a skeptical recognition that intellectual property rights *might* be necessary, a careful explanation that they should not be treated as natural rights, and a warning of the monopolistic dangers that they pose.

He immediately goes on to say something else, something that is, if anything, more true in the world of patents on Internet business methods and gene sequences than it was in the world of “conveyers and Hopper-boys.”

Considering the exclusive right to invention as given not of natural right, but for the benefit of society, I know well the difficulty of drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not.<sup>12</sup>

So Jefferson gives us a classic set of cautions, cautions that we should be required to repeat, as police officers repeat the Miranda Warning to a suspect. In this case, they should be repeated before we rush off into the world of intellectual property policy rather than before we talk to the police without our lawyers present.

#### THE JEFFERSON WARNING

Like the Miranda Warning, the Jefferson Warning has a number of important parts.

- First, the stuff we cover with intellectual property rights has certain vital differences from the stuff we cover with tangible property rights. Partly because of those differences, Jefferson, like most of his successors in the United States, does not see intellectual property as a claim of natural right based on expended labor. Instead it is a temporary state-created monopoly given to encourage further innovation.
- Second, there is no “entitlement” to have an intellectual property right. Such rights may or may not be given as a matter of social “will and convenience” without “claim or complaint from any body.”
- Third, intellectual property rights are not and should not be permanent; in fact they should be tightly limited in time and should not last a day longer than necessary to encourage the innovation in the first place.
- Fourth, a linked point, they have considerable monopolistic dangers—they may well produce more “embarrassment than advantage.” In fact, since intellectual property rights potentially restrain the benevolent tendency of “ideas . . . [to] freely spread from one to another over the globe, for the moral and mutual instruction of man,” they may in some cases actually hinder rather than encourage innovation.
- Fifth, deciding whether to have an intellectual property system is only the first choice in a long series.<sup>13</sup> Even if one believes that intellectual property *is*

a good idea, which I firmly do, one will still have the hard job of saying which types of innovation or information are “worth to the public the embarrassment” of an exclusive right, and of drawing the limits of that right. This line-drawing task turns out to be very difficult. Without the cautions that Jefferson gave us it is impossible to do it well.

Jefferson’s message was famously echoed and amplified thirty years later in Britain by Thomas Babington Macaulay.<sup>14</sup> Macaulay’s speeches to the House of Commons in 1841 on the subject of copyright term extension still express better than anything else the position that intellectual property rights are necessary evils which must be carefully circumscribed by law. In order for the supply of valuable books to be maintained, authors “must be remunerated for their literary labour. And there are only two ways in which they can be remunerated. One of those ways is patronage; the other is copyright.” Patronage is rejected out of hand. “I can conceive no system more fatal to the integrity and independence of literary men than one under which they should be taught to look for their daily bread to the favour of ministers and nobles.”<sup>15</sup>

We have, then, only one resource left. We must betake ourselves to copyright, be the inconveniences of copyright what they may. Those inconveniences, in truth, are neither few nor small. Copyright is monopoly, and produces all the effects which the general voice of mankind attributes to monopoly. . . . I believe, Sir, that I may safely take it for granted that the effect of monopoly generally is to make articles scarce, to make them dear, and to make them bad. And I may with equal safety challenge my honorable friend to find out any distinction between copyright and other privileges of the same kind; any reason why a monopoly of books should produce an effect directly the reverse of that which was produced by the East India Company’s monopoly of tea, or by Lord Essex’s monopoly of sweet wines. Thus, then, stands the case. It is good that authors should be remunerated; and the least exceptionable way of remunerating them is by a monopoly. Yet monopoly is an evil. For the sake of the good we must submit to the evil; but the evil ought not to last a day longer than is necessary for the purpose of securing the good.<sup>16</sup>

Notice that it is the *monopolistic* quality of intellectual property that really disturbs Macaulay. His was a generation of thinkers for whom the negative effect of monopolies of any kind (and state-granted monopolies in particular) was axiomatic. He becomes almost contemptuous when one of the supporters of copyright extension declared that it was merely “a theory” that monopoly makes things expensive. Macaulay agrees, tongue in cheek. “It is a theory in

the same sense in which it is a theory, that day and night follow each other, that lead is heavier than water, that bread nourishes, that arsenic poisons, that alcohol intoxicates.”<sup>17</sup>

These words from Jefferson and Macaulay encapsulate an eighteenth- and nineteenth-century free-trade skepticism about intellectual property, a skepticism that is widely, but not universally, believed to have played an important role in shaping the history of intellectual property in both the United States and the United Kingdom. Certainly the U.S. Supreme Court has offered support for that position,<sup>18</sup> and, with one significant recent exception,<sup>19</sup> historians of intellectual property have agreed.<sup>20</sup> Jefferson himself had believed that the Constitution should have definite limits on both the term and the scope of intellectual property rights.<sup>21</sup> James Madison stressed the costs of any intellectual property right and the need to limit its term and to allow the government to end the monopoly by compulsory purchase if necessary.<sup>22</sup> Adam Smith expressed similar views. Monopolies that carry on long after they were needed to encourage some socially beneficial activity, he said, tax every other citizen “very absurdly in two different ways: first, by the high price of goods, which, in the case of a free trade, they could buy much cheaper; and, secondly, by their total exclusion from a branch of business which it might be both convenient and profitable for many of them to carry on.”<sup>23</sup>

It is important to note, though, that the eighteenth- and nineteenth-century writers I have quoted were not against intellectual property. All of them—Jefferson, Madison, Smith, and Macaulay—could see good reason why intellectual property rights should be granted. They simply insisted on weighing the costs and benefits of a new right, each expansion of scope, each lengthening of the copyright term. Here is Macaulay again, waxing eloquently sarcastic about the costs and benefits of extending the copyright term so that it would last many years after the author’s death:

I will take an example. Dr. Johnson died fifty-six years ago. If the law were what my honourable and learned friend wishes to make it, somebody would now have the monopoly of Dr. Johnson’s works. Who that somebody would be it is impossible to say; but we may venture to guess. I guess, then, that it would have been some bookseller, who was the assign of another bookseller, who was the grandson of a third bookseller, who had bought the copyright from Black Frank, the Doctor’s servant and residuary legatee, in 1785 or 1786. Now, would the knowledge that this copyright would exist in 1841 have been a source of gratification to Johnson? Would it have stimulated his exertions? Would it have once drawn him out of his bed before noon? Would it have once cheered him under a fit of the spleen? Would it have induced him to give us one

more allegory, one more life of a poet, one more imitation of Juvenal? I firmly believe not. I firmly believe that a hundred years ago, when he was writing our debates for the Gentleman's Magazine, he would very much rather have had twopence to buy a plate of shin of beef at a cook's shop underground.<sup>24</sup>

Again, I am struck by how seamlessly Macaulay coupled beautiful, evocative writing and careful, analytic argument. Admittedly, he was remarkable even in his own time, but it is hard to imagine a contemporary speechwriter, let alone a politician, coming up with Dr. Johnson "cheered . . . under a fit of the spleen" or buying a "plate of shin of beef at a cook's shop underground." Almost as hard as it is to imagine any of them engaging in Jefferson's correspondence about mammoth bones, orthography, and the practicalities of the nautical torpedo. But I digress.

Macaulay is not against using a lengthened copyright term to give an extra reward to writers, even if this would dramatically raise the price of books. What he objects to is dramatically raising the price of books written by long-dead authors in a way that benefits the authors hardly at all.

Considered as a reward to him, the difference between a twenty years' and a sixty years' term of posthumous copyright would have been nothing or next to nothing. But is the difference nothing to us? I can buy *Rasselas* for sixpence; I might have had to give five shillings for it. I can buy the *Dictionary*, the entire genuine *Dictionary*, for two guineas, perhaps for less; I might have had to give five or six guineas for it. Do I grudge this to a man like Dr. Johnson? Not at all. Show me that the prospect of this boon roused him to any vigorous effort, or sustained his spirits under depressing circumstances, and I am quite willing to pay the price of such an object, heavy as that price is. But what I do complain of is that my circumstances are to be worse, and Johnson's none the better; that I am to give five pounds for what to him was not worth a farthing.<sup>25</sup>

Though Macaulay won the debate over copyright term extension, it is worth noting here that his opponents triumphed in the end. As I pointed out in the last chapter, the copyright term in most of Europe and in the United States now lasts for the life of the author and an additional seventy years afterward, ten years more than the proposal which made Macaulay so indignant. In the United States, corporate owners of "works-for-hire" get ninety-five years.<sup>26</sup> The Supreme Court recently heard a constitutional challenge to the law which expanded the term of copyrights by twenty years to reach this remarkable length.<sup>27</sup> (Full disclosure: I helped prepare an amicus brief in that case.)<sup>28</sup> This law, the Sonny Bono Copyright Term Extension Act, also ex-



tended existing copyrights over works which had already been created.<sup>29</sup> As I observed earlier, this is particularly remarkable if the idea is to give an incentive to create. Obviously the authors of existing works *were* given sufficient incentive to create; we know that because they did. Why do we need to give the people who now hold their copyrights *another* twenty years of monopoly? This is all cost and no benefit. Macaulay would have been furious.

When the Supreme Court heard the case, it was presented with a remarkable friend-of-the-court brief from seventeen economists, several of them Nobel laureates.<sup>30</sup> The economists made exactly Macaulay's argument, though in less graceful language. They pointed out that copyright extension imposed enormous costs on the public and yet conveyed tiny advantages, if any, to the creator. Such an extension, particularly over works that had already been written, hardly fit the limits of Congress's power under the Constitution "to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."<sup>31</sup> Macaulay doubted that these enormously long terms would encourage the living. Surely they would do little to encourage the dead, while imposing considerable costs of access on the living? Thus they could hardly be said to "promote the progress" of knowledge as the Constitution requires. The Court was unmoved by this and other arguments. It upheld the law. I will return to its decision at the end of the book.

The intellectual property skeptics had other concerns. Macaulay was particularly worried about the power that went with a transferable and inheritable monopoly. It is not only that the effect of monopoly is "to make articles scarce, to make them dear, and to make them bad." Macaulay also pointed out that those who controlled the monopoly, particularly after the death of the original author, might be given too great a control over our collective culture. Censorious heirs or purchasers of the copyright might prevent the reprinting of a great work because they disagreed with its morals.<sup>32</sup> We might lose the works of Fielding or Gibbon, because a legatee found them distasteful and used the power of the copyright to suppress them. This is no mere fantasy, Macaulay tells us. After praising the novels of Samuel Richardson in terms that, to modern eyes, seem a little fervid ("No writings, those of Shakespeare excepted, show more profound knowledge of the human heart"), Macaulay recounts the story of Richardson's grandson, "a clergyman in the city of London." Though a "most upright and excellent man," the grandson "had conceived a strong prejudice against works of fiction," "thought all novel-reading not only frivolous but sinful," and "had never thought it right to read one of

his grandfather's books."<sup>33</sup> Extended copyright terms might hand over the copyright to such a man. The public would lose, not because they had to pay exorbitant prices that denied some access to the work, but because the work would be altogether suppressed. Richardson's novels—*Pamela*, *Clarissa Harlowe*, and so on—are now the preserve of the classroom rather than the drawing room, so this might not seem like much of a loss. But Macaulay's next example is not so easy to dismiss.

One of the most instructive, interesting, and delightful books in our language is Boswell's *Life of Johnson*. Now it is well known that Boswell's eldest son considered this book, considered the whole relation of Boswell to Johnson, as a blot in the escutcheon of the family. He thought, not perhaps altogether without reason, that his father had exhibited himself in a ludicrous and degrading light. And thus he became so sore and irritable that at last he could not bear to hear the *Life of Johnson* mentioned. Suppose that the law had been what my honourable and learned friend wishes to make it. Suppose that the copyright of Boswell's *Life of Johnson* had belonged, as it well might, during sixty years, to Boswell's eldest son. What would have been the consequence? An unadulterated copy of the finest biographical work in the world would have been as scarce as the first edition of Camden's *Britannia*.<sup>34</sup>

From more recent examples we can see that outright suppression is not the only thing to fear. The authors' heirs, or the corporations which have purchased their rights, may keep policing the boundaries of the work long after the original author is dead. In 2001, Alice Randall published *The Wind Done Gone*. As its title might indicate, *The Wind Done Gone* was a 220-page "critique of and reaction to" the world of *Gone With the Wind* by Margaret Mitchell.<sup>35</sup> Most crucially, perhaps, it was a version of *Gone With the Wind* told from the slaves' point of view. Suddenly the actions of Rhett ("R"), Scarlett ("Other"), and an obviously gay Ashley ("Dreamy Gentleman") come into new perspective through the eyes of Scarlett's "mulatto" half-sister. Mitchell's estate wanted to prevent publication of the book. At first they were successful.<sup>36</sup> As Yochai Benkler puts it,

Alice Randall, an African American woman, was ordered by a government official not to publish her criticism of the romanticization of the Old South, at least not in the words she wanted to use. The official was not one of the many in Congress and the Administration who share the romantic view of the Confederacy. It was a federal judge in Atlanta who told Randall that she could not write her critique in the words she wanted to use—a judge enforcing copyright law.<sup>37</sup>

"They killed Miss Scarlett!" the astonished trial judge said after reading Randall's book. My colleague Jennifer Jenkins, one of the lawyers in the case,

recounts that the judge saw the case in relentlessly physical terms, seeing the parody as a “bulldozer” and *Gone With the Wind* as a walled country estate into which the bulldozer had violently trespassed. He was consequently unimpressed with the claim that this “bulldozer” was protected by the First Amendment. Eventually, the court of appeals overturned the district court’s judgment.<sup>38</sup> Fifty-two years after Margaret Mitchell’s death, it was a hotly debated point how much leeway copyright gave to others to comment upon, critique, embellish upon, and parody the cultural icon she had conjured up.

#### A NATURAL RIGHT?

To some people, my argument so far—and Jefferson’s and Macaulay’s—will seem to miss the point. They see intellectual property rights not as an incentive, a method of encouraging the production and distribution of innovation, but as a natural or moral right. My book is mine because I wrote it, not because society or the law gives me some period of exclusivity over allowing the copying of its contents. My invention is mine because it came from my brain, not because the law declares a twenty-year monopoly over its production or distribution. My logo is mine because I worked hard on it, not because the state grants me a trademark in order to lower search costs and prevent consumer confusion. One answer is simply to say “In the United States, the framers of the Constitution, the legislature, and the courts have chosen to arrange things otherwise. In copyright, patent, and trademark law—despite occasional deviations—they have embraced the utilitarian view instead.”

Broadly speaking, that answer is correct.<sup>39</sup> It also holds, to a lesser extent, in Britain. Even in the *droits d’auteur* countries, which have a markedly different copyright law regime, it largely holds for their patent and trademark law systems, and utilitarian strands suffuse even “the sacred rights of authors.” So, on a national level, we have rejected or dramatically limited the natural rights view, and on an international level, we have rejected it in “industrial property”—patent and trademark—and modified it in copyright.

I think this answer is correct and important, but we have an obligation to go further. Partly that is because intuitions about ownership coming naturally with labor or discovery continue to influence the law. Partly it is because those moral intuitions are important and appealing. Partly it is because we might wish to modify or criticize our current system. Using the views of the framers, or current law, to preempt discussion is unsatisfactory—even though those

views are of particular importance for the legal policy decisions we face in the short run, the issues on which much of my argument is concentrated.

There are varying stated grounds for natural or moral rights in intellectual creations. Some people may think the book is mine because I worked on it—a Lockean conception where I mix my sweat with these words and receive a property right in the process.

For all its attractions, there are considerable difficulties with such a view. Even within the world of tangible property, Locke's theory is more complicated than a simple equation of labor with property right. Jefferson's account of property is actually closer to Locke's than many would realize. When Jefferson points out the difficulty in justifying a natural right even in an acre of land, let alone a book, his premises are not radically different from Locke's. The same is true when Jefferson says that "[s]table ownership is the gift of social law, and is given late in the progress of society." Even if natural right does create the ground for the property claim, it is "social law" that shapes its contours and guarantees its stability. Jefferson, of course, thought that was particularly true for intellectual property rights. In that context, he felt the natural rights argument was much weaker and the need for socially defined purposive contours and limitations stronger.

Locke's own views on what we would think of as copyright are hard to determine. We do know that he had a strong antipathy to monopolies—particularly those affecting expression. He believed, for example, that giving publishers monopolies over great public domain books caused a disastrous fall in quality. Instead, he argued, such books should be open for all to compete to produce the best edition. Of course, he was writing in the context of monopolistic printing privileges—to which he was strongly opposed—rather than of individual authorial rights. Yet he went further and suggested that even for contemporary works, after a particular time in print—say fifty years—books could be printed by anyone.

I demand whether, if another act for printing should be made, it be not reasonable that nobody should have any peculiar right in any book which has been in print fifty years, but any one as well as another might have liberty to print it: for by such titles as these, which lie dormant, and hinder others, many good books come quite to be lost.<sup>40</sup>

This sounds like a strongly utilitarian argument, rather than one based on labor and natural right. Of course, we are not bound by what Locke or Jefferson thought. Still it is striking to see the turn to a utilitarian conception from both of them.

The Lockean tradition is not the only one, of course. Others believe that the property right stems from the unique personality of each individual—the configurations of your individual genius made manifest in the lines of your sonnet. (Some limit the natural right to literary and expressive work; can a mousetrap or a drug molecule express the riddle and wonder of the human spirit?) Whatever their moral basis or their ambit, the common ground between these positions is the belief in a rationale for intellectual property rights beyond the utilitarian concerns of Jefferson or Macaulay.

The norms embodied in the moral rights or natural rights tradition are deeply attractive—at least to me. Many of us feel a special connection to our expressive creations—even the humble ones such as a term paper or a birthday poem. It is one of the reasons that the central moral rights in the French *droits d'auteur*, or author's rights, tradition resonate so strongly with us. The entitlement of an author to be correctly attributed, to have some control over the integrity of his work, seems important regardless of its utilitarian functions.

Yet even as we find this claim attractive, we become aware of the need to find limiting principles to it. It gives us pause to think that Margaret Mitchell or her heirs could forbid someone parodying her work. Are there no free-speech limitations? When other forms of authorship, such as computer programs, are brought into copyright's domain, does the power of the moral right decrease, while the need to limit its scope intensifies?

Then there is the question of length. How long is a natural right in expression or invention supposed to last? It seems absurd to imagine that Shakespeare's or Mozart's heirs, or those who had bought their copyrights, would still be controlling the performance, reproduction, and interpretation of their works hundreds of years after their death. If the rights are truly formed for a nonutilitarian purpose, after all, why should they expire? The person who first acquires property rights in land by work or conquest passes those rights down to heirs and buyers with the chain of transmission reaching to the present day. Should copyright follow suit? Even in France, the home of the strongest form of the *droits d'auteur* and of the "moral rights" tradition, the answer to this question was in the negative.

We owe a large part of the literary moral rights tradition to the immediate aftermath of the French Revolution. In France before the Revolution, as in England before the Statute of Anne, the first true copyright legislation, the regulation of publishing was through a set of "privileges" given to printers, not rights given to authors. Publishers would have a guild-enforced monopoly over certain titles. Their right was against competing publishers printing the

list of titles over which they had the privilege. The Revolution abolished these privileges and, at first, put nothing in their place. On the other hand, as Carla Hesse's fascinating work reveals, there was intermittent interference by the Prefecture of Police with those who copied most flagrantly. One such publisher was sternly instructed by the police in these terms:

[A]ccording to the Declaration of the Rights of Man, liberty means only the freedom to do what does not harm others; and that it harms others to appropriate the work of an author, because it is an infringement of the sacred right of property; and that such an enterprise, if it were to remain unpunished, would deprive citizens of the instruction they await from celebrated authors like M. Bernardin de St. Pierre, because no author would want to consecrate his labors to the instruction of his age if piracy were ever authorized.<sup>41</sup>

Note the interesting mixture of the language of the "sacred rights of property" and the strong utilitarian justification which cites effects on future literary production and the "instruction" of citizens.

More expansive conceptions of the rights of authors and, particularly, of publishers were also offered. Even before the Revolution, publishers had been making the arguments that their privileges were a form of property rights and had the very good sense to hire the young Diderot to make those arguments. Hesse quotes his words:

What form of wealth could belong to a man, if not a work of the mind, . . . if not his own thoughts, . . . the most precious part of himself, that will never perish, that will immortalize him? What comparison could there be between a man, the very substance of man, his soul, and a field, a tree, a vine, that nature has offered in the beginning equally to all, and that an individual has only appropriated through cultivating it?<sup>42</sup>

Diderot's theme is that authors' rights should actually be stronger than other property rights for two reasons. First, they relate to the very essence of the person, the most "precious part of himself." Second, they are the only property rights over something that has been added to the existing store of wealth rather than taken from it. Authorial property, unlike property in land, adds to the common store rather than detracting from it. Locke believed that a just assertion of property rights must leave "enough and as good" for others in the society. What could better satisfy this condition than a property right over a novel that did not exist before I wrote it? One hundred years later Victor Hugo echoed the same thoughts in a speech to the Conseil d'Etat and pointed out at the same time that literary property rights could potentially "reconcile" troublesome authors to society and state.

You feel the importance and necessity of defending property today. Well, begin by recognising the first and most sacred of all properties, the one which is neither a transmission nor an acquisition but a creation, namely literary property . . . reconcile the artists with society by means of property.<sup>43</sup>

Diderot wanted perpetual copyrights for authors and, agreeably to his employers, a correspondingly perpetual printing privilege. If the author's heirs could not be traced, the copyright would devolve to the current publisher.

But as Hesse points out, there was another view of literary property—a much more skeptical one put forward best by Condorcet. This view is also an influential part of the heritage of the *droits d'auteur*, even if it is downplayed in its contemporary rhetoric. Condorcet began by framing the question of literary property as one of political liberty. “Does a man have the right to forbid another man to write the same words that he himself wrote first? That is the question to resolve.”<sup>44</sup> Like Jefferson, Condorcet is utterly unconvinced that property rights in a book can be compared to those in a field or a piece of furniture which can be occupied or used by only one man. The type of property is “based on the nature of the thing.” He concluded, again in language strikingly similar to Jefferson's and Macaulay's, that literary property was not a real property right but a privilege, and one which must be assessed on a utilitarian basis in terms of its contribution to enlightenment.<sup>45</sup>

Any privilege therefore imposes a hindrance on freedom, placing a restriction on the rights of other citizens; As such it is not only harmful to the rights of others who want to copy, but the rights of all those who want copies, and that which increases the price is an injustice. Does the public interest require that men make this sacrifice? That is the question that must be considered; In other words, are [literary] privileges needed and useful or harmful to the progress of enlightenment?<sup>46</sup>

Condorcet's conclusion was that they were not necessary and that they could be harmful. “The books that most furthered the progress of enlightenment, the *Encyclopédie*, the works of Montesquieu, Voltaire, Rousseau, have not enjoyed the benefits of a privilege.” Instead he seemed to favor a combination of “subscriptions” to authors with a trademark-like protection which allowed an author to identify a particular edition of his work as the genuine one, but which also allowed competing editions to circulate freely. In such a market, he believed that the price of the competing editions would fall to “natural” levels—today we would call it marginal cost—but the original author would still be able to charge a modest premium for the edition he

authorized or certified because readers would prefer it as both more accurate and more authentic. One possible analogy is to the history of the fashion industry in the United States. It operates largely without design protection but relies heavily on the trademarks accorded to favored designers and brands. There are “knockoffs” of Armani or Balenciaga, but the wealthy still pay an enormous premium for the real thing.

Condorcet also insisted that whatever protection was accorded to literary works must not extend to the ideas within them. It is the truths within books that make them “useful”—a word that does not have the same luminance and importance for us today as it did for the philosophers of the Enlightenment or the French Revolution. He argued that any privilege given the author could not extend to “preventing another man from exhibiting the same truths, in perfectly the same order, from the same evidence” or from extending those arguments and developing their consequences. In a line that Hesse rightly highlights, he declares that any privileges do not extend over facts or ideas. “Ce n’est pas pour les choses, les idées; c’est pour les mots, pour le nom de l’auteur.”

In sum, Condorcet favors a limited privilege, circumscribed by an inquiry into its effects in promoting progress and enlightenment. The privilege only applies to expression and to “the author’s name,” rather than to facts and ideas. This is very much within the tradition of Jefferson and Macaulay.

Hesse argues, correctly I think, that two warring ideas shaped—or are at least useful ways of understanding—the development of the *droits d’auteur* tradition. On one side were Diderot and the publishers promoting an expansive and perpetual natural authorial right, which nevertheless was supposed to vest suspiciously easily in publishers. On the other was Condorcet, looking skeptically at authorial privileges as merely one type of state interference with free markets and the free circulation of books and ideas. In place of Diderot’s perpetual natural right, Condorcet sketched out a regime that encourages production and distribution by granting the minimum rights necessary for progress.

Different as they are, these two sides share a common ground. They both focus, though for different reasons, on “expression”—the imprimatur of the author’s unique human spirit on the ideas and facts that he or she transmits. It is this “original expression” that modern copyright and the modern *droits d’auteur* actually cover. In today’s copyright law, the facts and ideas in an author’s work proceed immediately into the public domain. In other work, I have argued that by confining the property right tightly to the “original expression” stemming from the unique personality of an individual author the law seems to accomplish a number of things simultaneously. It provides



a *conceptual basis* for partial, limited property rights, without completely collapsing the notion of property into the idea of a temporary, limited, utilitarian state grant, revocable at will. [At the same time it offers] a *moral and philosophical justification* for fencing in the commons, giving the author property in something built from the resources of the public domain—language, culture, genre, scientific community, or what have you. If one makes originality of spirit the assumed feature of authorship and the touchstone for property rights, one can see the author as creating something entirely *new*—not recombining the resources of the commons.<sup>47</sup>

That is an account of the romantic theory of authorship in the context of contemporary Anglo-American copyright law. But when one looks at the history of the French *droits d'auteur* tradition, it is striking how well those words describe that system as well. When the French legislature finally produced a law of authors' rights it turned out, in Hesse's words, to reflect "an epistemologically impure and unstable legal synthesis that combined an instrumentalist notion of the public good with a theory of authorship based on natural rights."

Although it drew on a Diderotist rhetoric of the sanctity of individual creativity as an inviolable right, it did not rigorously respect the conclusions Diderot drew from this position. In contrast to the *privilège d'auteur* of 1777, the law did not recognize the author's claim beyond his lifetime but consecrated the notion, advanced first by Pierre Manuel to defend his edition of Mirabeau, that the only true heir to an author's work was the nation as a whole. This notion of a public domain, of democratic access to a common cultural inheritance on which no particular claim could be made, bore the traces not of Diderot, but of Condorcet's faith that truths were given in nature and, although mediated through individual minds, belonged ultimately to all. Progress in human understanding depended not on private knowledge claims, but on free and equal access to enlightenment. An author's property rights were conceived as recompense for his service as an agent of enlightenment through publication of his ideas. The law of 1793 accomplished this task of synthesis through political negotiation rather than philosophical reasoning—that is, by refashioning the political identity of the author in the first few years of the Revolution from a privileged creature of the absolutist police state into a servant of public enlightenment.<sup>48</sup>

Hesse argues that this instability would continue through the revolutionary period. I agree; indeed I would argue that it does so to the present day. Why? The answer is simple. The moral rights view simply proved too much. Without a limiting principle—of time, or scope, or effect—it seemed to presage a perpetual and expansive control of expressive creations, and perhaps of inventions.

Our intuition that this is a bad idea comes from our intuitive understanding that “Poetry can only be made out of other poems; novels out of other novels. All of this was much clearer before the assimilation of literature to private enterprise.”<sup>49</sup>

This is the flip side of the arguments that Diderot and later Hugo put forward. Perhaps the romantic author does not create out of thin air. Perhaps he or she is deeply embedded in a literary, musical, cultural, or scientific tradition that would not flourish if treated as a set of permanently walled private plots. Even within the *droits d’auteur* tradition, we see a recognition that the continuing progress of enlightenment and the sacred genius of authors might both require a certain level of freedom in knowledge inputs and a certain level of control over knowledge outputs. We see also the recognition that these two requirements are in fundamental tension. When it comes to reconciling that tension we must turn in part to utilitarian effects. In short, we should pay attention to Jefferson and Macaulay and Condorcet, not just because their thoughts shaped the legal and philosophical traditions in which we now work—though that is particularly true in the case of the United States—but because they were right, or at least more right than the alternative.

Of course, we could build a culture around a notion of natural, absolute, and permanent rights to invention and expression. It is not a world many of us would want to live in. There are exceptions of course. In a recent *New York Times* op-ed, Mark Helprin—author of *Winter’s Tale*—argued that intellectual property should become perpetual.<sup>50</sup> After all, rights in real estate or personal property do not expire—though their owners might. Why is it that copyrights should “only” last for a lifetime plus seventy additional years, or patents for a mere twenty? Mr. Helprin expresses respect for the genius of the framers, but is unmoved by their firm command that rights be granted only for “limited times.” He concludes that it was a misunderstanding. Jefferson did not realize that while ideas cannot be owned, their expression can. What’s more, the framers were misled by their rustic times. “No one except perhaps Hamilton or Franklin might have imagined that services and intellectual property would become primary fields of endeavor and the chief engines of the economy. Now they are, and it is no more rational to deny them equal status than it would have been to confiscate farms, ropewalks and other forms of property in the 18th century.” Poor Jefferson. How lucky we are to have Mr. Helprin to remedy the consequences of his lack of vision.

Or perhaps not. Think of the way that Jefferson traced the origins of the mechanical arts used in the elevators and hopper-boys all the way back to

ancient Persia. (In Mr. Helprin's utopia, presumably, a royalty stream would run to Cyrus the Great's engineers.) Jefferson's point was that for the process of invention to work, we need to confine narrowly the time and scope of the state-provided monopoly, otherwise further inventions would become impossible. Each process or part of a new invention would risk infringing a myriad of prior patents on its subcomponents. Innovation would strangle in a thicket of conflicting monopolies with their roots vanishing back in time. Presumably the title of Mr. Helprin's excellent novel would require clearance from Shakespeare's heirs.

Of course, one could construct a more modest Lockean idea of intellectual property<sup>51</sup>—building on the notion of “enough and as good” left over for others and drawing the limits tightly enough to avoid the worst of Mr. Helprin's excesses. But as one attempts to do this systematically, the power of the Jeffersonian vision becomes all the more apparent—at least as a starting place.

The Jefferson Warning will play an important role in this book. But my arguments here have implications far beyond Jefferson's time, country, or constitutional tradition. In the last analysis, I hope to convince you of the importance of the Jefferson Warning or the views of Macaulay not because they are famous authorities and revered thinkers or because they framed constitutions or debated legislation. I wish to convince you that their views are important because they encapsulate neatly an important series of truths about intellectual property. We should listen to the Jefferson Warning not because it is prestigious but because of its insight. As the Diderot-Condorcet debates point out, the questions on which Jefferson and Macaulay focused do not disappear merely because one embraces a philosophy of moral rights—if anything, they become more pressing, particularly when one comes to define the limits of intellectual property in scope and time. I ask that those readers who remain leery of the Jeffersonian focus concentrate on that last issue. In an era when we have been expanding intellectual property rights relentlessly, it is a crucial one. If the Jefferson Warning produces in my unconvinced reader even a slight queasiness about the likely effects of such a process of expansion, it will have done its job—though in fact the tradition it represented was much richer than a simple utilitarian series of cautions.

#### A TRADITION OF SKEPTICAL MINIMALISM

Eighteenth- and nineteenth-century intellectual property debates went beyond Macaulay's antimonopolist focus on price, access, quality, and control of

the nation's literary heritage. While Macaulay is the best-remembered English skeptic from the 1840s, there were other, more radical skeptics who saw copyright primarily as a "tax on literacy" or a "tax on knowledge," identical in its effects to the newspaper stamp taxes.<sup>52</sup> This was a time when mass literacy and mass education were the hotly debated corollaries to the enlargement of the franchise. The radical reformers looked with hostility on anything that seemed likely to raise the cost of reading and thus continue to restrict political and social debate to the wealthier classes. Macaulay worried about a world in which "a copy of *Clarissa* would . . . [be] as rare as an Aldus or a Caxton."<sup>53</sup> His more radical colleagues saw copyright—to use our ugly jargon rather than theirs—as one of the many ways in which state communications policy is set and the communicative landscape tilted to favor the rich and powerful.<sup>54</sup> Macaulay worried about the effects of monopoly on literature and culture. All of them worried about the effects of copyright on democracy, on speech, on education. In the world of the Internet, these skeptics too have their contemporary equivalents.

Patent law also attracted its share of attacks in the mid-nineteenth century. A fusillade of criticism, often delivered by economists and cast in the language of free trade, portrayed the patent system as actively harmful.

At the annual meeting of the Kongress deutscher Volkswirthe held in Dresden, September 1863, the following resolution was adopted "by an overwhelming majority": "Considering that patents hinder rather than further the progress of invention; that they hamper the prompt general utilization of useful inventions; that on balance they cause more harm than benefit to the inventors themselves and, thus, are a highly deceptive form of compensation; the Congress of German Economists resolves: that patents of invention are injurious to common welfare."<sup>55</sup>

In the Netherlands, the patent system was actually abolished in 1869 as a result of such criticisms. Observers in a number of other countries, including Britain, concluded that their national patent systems were doomed. Various proposals were made to replace patents, with state-provided prizes or bounties to particularly useful inventions being the most popular.<sup>56</sup>

These snippets are hardly sufficient to constitute any kind of survey of critical reactions to intellectual property systems, but I believe that nevertheless they give us some sense of typical debates. What do these debates tell us?

From the early days of intellectual property as we know it now, the main objections raised against it were framed in the language of free trade and "anti-monopoly." In the United States, the founding generation of intellectu-

als had been nurtured on the philosophy of the Scottish Enlightenment and the history of the struggle against royal monopolies. They saw the arguments in favor of intellectual property but warned again and again of the need to circumscribe both its term and its scope. This is the point at the heart of Jefferson's letter. This is why he insisted that we understand the policy implications of the differences between tangible property and ideas, which "like fire" are "expansible over all space, without lessening their density in any point."

What were the concerns of these early critics? They worried about intellectual property producing artificial scarcity, high prices, and low quality. They insisted that the benefits of each incremental expansion of intellectual property be weighed against its costs. Think of Macaulay discussing Johnson's preference for a shin of beef rather than another slice of postmortem copyright protection. They worried about its justice; given that we all learn from and build on the past, do we have a right to carve out our own incremental innovations and protect them by intellectual property rights?<sup>57</sup> Price aside, they also worried that intellectual property (especially with a lengthy term) might give too much control to a single individual or corporation over some vital aspect of science and culture. In more muted fashion, they discussed the possible effects that intellectual property might have on future innovation. The most radical among them worried about intellectual property's effects on political debate, education, and even control of the communications infrastructure, though they did not use that particular phrase. But the overwhelming theme was the promotion of free trade and a corresponding opposition to monopolies.

Now if we were to stop here and simply require that today's policy makers, legislators, and judges recite the Jefferson Warning before they rush off to make new intellectual property rules for the Internet and the genome, we would have accomplished a great deal. National and international policy makers are keen to set the "rules of the road for the digital age." If they would momentarily pause their excited millenarian burbling and read the points scratched out with a quill pen in 1813, or delivered (without PowerPoint support) on the floor of the House of Commons in the 1840s, we would be better off. Everyone is beginning to understand that in the world of the twenty-first century the rules of intellectual property are both vital and contentious. How good it would be then if our debate on intellectual property policy were as vigorous and as informed as the debates of the nineteenth century. (Though we might hope it would also be more democratic.)

And yet . . . there is much that is missing from the skepticism of the eighteenth and nineteenth centuries and much that remains unclear. Look at the

structure of these comments; they are framed as criticisms of intellectual property rather than defenses of the public domain or the commons, terms that simply do not appear in the debates. There is no real discussion of the world of intellectual property's outside, its opposite. Most of these critics take as their goal the prevention or limitation of an "artificial" monopoly; without this monopoly our goal is to have a world of—what? The assumption is that we will return to a norm of freedom, but of what kind? Free trade in expression and innovation, as opposed to monopoly? Free access to expression and innovation, as opposed to access for pay? Or free access to innovation and expression in the sense of not being subject to the right of another person to pick and choose who is given access, even if all have to pay some flat fee? Or is it common ownership and control that we seek, including the communal right to forbid certain kinds of uses of the shared resource? The eighteenth- and nineteenth-century critics brushed over these points; but to be fair, we continue to do so today. The opposite of property, or perhaps we should say the *opposites* of property, are much more obscure to us than property itself.

For the most part, the antimonopolist view of intellectual property makes a simple case. Monopolies are bad. Have as few as possible and make them as narrow and as short as possible. This is a fine principle, but it falls short of an affirmative explanation and defense of the role of the public domain or the commons in enabling creativity, culture, and science. That is a shame because just as intellectual property is different from tangible property, so too is its opposite, its outside.

What are those opposites? The two major terms in use are "the public domain" and "the commons." Both are used in multiple ways—probably a good thing. The public domain is material that is not covered by intellectual property rights. Material might be in the public domain because it was never capable of being owned. Examples would be the English language or the formulae of Newtonian physics. Alternatively, something might be in the public domain because rights have expired. The works of Shakespeare or the patents over powered flight are examples.

Some definitions of the public domain are more granular. They focus not only on complete works but on the reserved spaces of freedom inside intellectual property. The public domain would include the privilege to excerpt short quotations in a review. This vision is messier, but more instructive. If one uses a spatial metaphor, the absolutist vision is a tessellated map. Areas of private property are neatly delineated from areas of the public domain. Mozart's plot sits next to that of Britney Spears; one public, the other private. In the granu-

lar view, the map is more complex. Ms. Spears' plot is cut through with rights to make fair use, as well as with limitations on ownership of standard themes. Instead of the simple tiled map, the granular vision has private plots with public roads running through them.

In popular discussion, we tend to use the absolutist view of both property and the public domain. Lawyers prefer the more complex view of property and are coming slowly to have a similarly complex view of the public domain. That is the definition I will be using.

The term "commons" is generally used to denote a resource over which some group has access and use rights—albeit perhaps under certain conditions. It is used in even more ways than the term "public domain." The first axis along which definitions of the term "commons" vary is the size of the group that has access rights. Some would say it is a commons only if the whole society has access. That is the view I will take here.

The other difference between public domain and commons is the extent of restrictions on use. Material in the public domain is free of property rights. You may do with it what you wish. A commons can be restrictive. For example, some open source software makes your freedom to modify the software contingent on the condition that your contributions, too, will be freely open to others. I will discuss this type of commons in Chapter 8.

So these are working definitions of public domain and commons. But why should we *care*? Because the public domain is the basis for our art, our science, and our self-understanding. It is the raw material from which we make new inventions and create new cultural works. Why is it so important? Let us start with the dry reasons.

Information and innovation are largely nonrival and nonexcludable goods. This is Jefferson's point, though expressed in less graceful language. It has some interesting corollaries. Information is hard to value until you have it, but once you have it, how can you dispossess yourself of it? The apple can be taken back by the merchant if you decide not to buy. The facts or the formulae cannot. The moment when you might have decided to pay or not to pay is already over. The great economist Kenneth Arrow formalized this insight about information economics,<sup>58</sup> and it profoundly shapes intellectual property policy. (To a large extent, for example, the requirement of "patent disclosure" attempts to solve this problem. I can read all about your mousetrap but I am still forbidden from using it. I can decide whether or not to license your design at that point.) But for all the material in the public domain, where no intellectual property right is necessary, this point is solved elegantly by

having the information be “free as the air to common use.” All of us can use the same store of information, innovation, and free culture. It will be available at its cost of reproduction—close to zero—and we can all build upon it without interfering with each other. Think of the English language, basic business methods, tables of logarithms, the Pythagorean theorem, Shakespeare’s insights about human nature, the periodic table, Ohm’s law, the sonnet form, the musical scale.

Would you have paid to purchase access to each of these? I might tell you that English was a superior communication tool—a really good command language for your cognitive operating system. There could be levels of access with corresponding prices. Would you pay to get access to “English Professional Edition”? We can certainly imagine such a way of organizing languages. (To some extent, scribal conventions operated this way. The languages of the professions still do. One paid for access to “law French” in the common law courts of England. One pays for an interpreter of contemporary legal jargon in today’s legal system. But even there the language is free to the autodidact.) We can imagine language, scientific knowledge, basic algebra, the tonic scale, or the classics of four-hundred-year-old literature all being available only as property. Those who had the highest “value for use” would purchase them. Those who did not value them highly—whether because they could not know what could be built with them until they had done so or because they did not have the money—would not. What would this world, this culture, this science, this market look like?

It would probably be very inefficient, the economists tell us. Perfect information is a defining feature of the perfect market. The more commodified and restricted our access to information, the less efficient the operation of the market, the more poorly it allocates resources in our society. (The permanent and in some sense insoluble tension between the need to provide incentives to generate information, thus raising its cost, and the need to have access to perfect information for efficiency is the central feature of our intellectual property policy.)<sup>59</sup> When we commodify too much we actually undermine creativity, since we are raising the price of the inputs for future creations—which might themselves be covered by intellectual property rights. But “inefficient” is too bloodless a way to describe this world. It would be awful.

Our markets, our democracy, our science, our traditions of free speech, and our art all depend more heavily on a public domain of freely available material than they do on the informational material that is covered by property rights. The public domain is not some gummy residue left behind when all the good



stuff has been covered by property law. The public domain is the place we quarry the building blocks of our culture. It is, in fact, the *majority* of our culture. Or at least it has been.

I deliberately gave easy examples. It is obvious how unnecessary but also how harmful it would be to extend property rights to language, to facts, to business methods and scientific algorithms, to the basic structures of music, to art whose creators are long dead. It is obvious that this would not produce more innovation, more debate, more art, more democracy. But what about the places where the value of the public domain is not obvious?

What if we were actually moving to extend patents to business methods, or intellectual property rights to unoriginal compilations of facts? What if we had locked up most of twentieth-century culture without getting a net benefit in return? What if the basic building blocks of new scientific fields were being patented long before anything concrete or useful could be built from them? What if we were littering our electronic communication space with digital barbed wire and regulating the tiniest fragments of music as if they were stock certificates? What if we were doing all this in the blithe belief that more property rights mean more innovation? The story of this book is that we are.

The Jefferson Warning is important. It is, however, just a warning. While it would be excellent to print it on pocket cards and hand it to our elected representatives, that alone will not solve the most pressing problems we face. In the chapters that follow, I shall try to go further. In Chapter 3, I set the process of expansion we are engaged in—our “second enclosure movement”—in perspective by comparing it to the original enclosures of the grassy commons of old England. In Chapter 4, I jump from the world of the fifteenth or nineteenth century to the world of the twenty-first, from elevators and grain hoppers to video recorders, the Internet, and file-sharing services. I use the story of several key legal disputes to illustrate a broader history—the history of intellectual property’s struggle with communications technologies that allow people to copy more cheaply. Strangely enough, the Jefferson Warning will be crucial in understanding the debate over copyright online and, in particular, in understanding the fear that drives our current policy making, a fear I refer to as the Internet Threat.