ESSAY

THE ENCLOSURE OF CULTURE

Lewis Hyde

"Most people act as if they had a private understanding, but in fact the Logos is common to all."— Heraclitus

The Encouragement of Learning

"If you have an apple and I have an apple and we exchange apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas." That is supposedly George Bernard Shaw's formulation of an old idea about ideas, and about works of art (incorporeal ones, that is—poems, tunes, ancient myths). The *Iliad* and the *Odyssey* can be spread throughout the world without anyone being deprived of them as a consequence. As Henry Fielding writes in *Tom Jones*, "The ancients may be considered as a rich Common, where every Person who hath the smallest tenement in Parnassus hath a free right to fatten his Muse." Nor need your muse even have a tenement, really, nor live in the village, nor graze in summer only (these being typical of the constraints that governed England's old agricultural commons): our inheritance from the ancients is a beneficence without rule. The Pythagorean theorem, *Gilgamesh*, the poems of Sappho, the *Tao Te Ching*, or—to move closer in time—Benjamin Franklin's invention of bifocals or the

autobiography that he wrote: it is in the nature of all such creations not to decline and perish but to survive and flourish in proportion to their unconstrained use. Social scientists have famously worried that common property is by nature tragic, that commoners will simply destroy what they share through overuse. In a cultural commons, however, the opposite is the case. Here we find the promise of comedy. When it comes to art and ideas, the more the merrier. Let every shepherdess freshly fatten her Muse, and let all nations dance on the unmuddied fields; nothing will be lost.

Not only are such cultural creations undiminished by use but also, once they are at large in the world, it is difficult—often impossible—to make them private again. If I have a bright idea and want no one to "trespass" on it, I had better keep it to myself. In this sense, if we define property only in terms of the right to exclude, then we must say that there can be no property in revealed ideas. That was in fact one widespread belief in the eighteenth century. "The Copies of ancient Authors," a pamphleteer typically remarks, "are no more susceptible of Property than the Element of Air and Water, which are for the common Benefit of Mankind." So too with modern authors: should they wish to possess their meditations they had best not release them to the world.

Incorporeal art and ideas are what economists now call "nonrivalrous" and "nonexcludable." They are by nature abundant and gateless. The apples in that remark from George Bernard Shaw, like most tangible things, are rivalrous: if I consume them, you cannot. Ideas, inventions, melodies, or ancient epics, on the other hand, are nonrivalrous: if I consume them, so may you. Nor, once they have been made public, are they easy to make "excludable," especially when there are devices like the printing press or the Internet to disseminate them. The edition of *Poor Richard's Almanac* for 1753 carried Benjamin Franklin's clear instructions as to how to construct a lightning rod. That invention has belonged to the common stock of human knowledge ever since; nobody owns it and nobody can be excluded from it.

Rivalrous or nonrivalrous, excludable or nonexcludable: economists sort goods into categories based on the presence or absence of these traits, the limiting cases being private goods (both rivalrous and excludable) and public goods (neither rivalrous nor excludable). Public goods are not limited to the obvious cases of intangible art and ideas, either; something as concrete as a lighthouse has the same characteristics. Once it is up and running, the benefit of a lighthouse to any one ship does not lessen its benefit to all others, nor would it be easy to give exclusive light rights to paying customers and leave all others in the dark.

Public goods belong to the public domain, that great and ancient storehouse of human innovation. The public domain surrounds us, but almost invisibly so, as if it were the dark matter in the universe of property. To illuminate but one case

in point, every time you drive your car to work you unwittingly take a ride on the public domain. Exactly how many inventions of the human mind are bundled in a working automobile? There are the four wheels, of course, and all that goes into making them: vulcanized rubber, steel-belted radials, air valves, wheel bearings and the ball bearings inside them, various kinds of grease, threaded lug nuts, metals and the metallurgy to produce them, brakes both disc and drum, devices to cool the brakes, devices to adjust them. And we haven't even left the ground yet; from the rubber that meets the road to the drive shaft to the laminated windshield to the paint on the roof, an automobile is a congress of thousands upon thousands of human inventions.

Non non plat. Min commodi ut fuga. Ignimil ipitem illupta sitati vid quat eum atis nis incit lam exeribe rrundis sunt alis excea quis re

What would it cost if each of them were covered by a perpetual patent, and a fee had to change hands each time the dealer let a car off his lot? What is each one worth?

Luckily we have a case that names the value of a single invention. In 1962 one Robert Kearns came up with the idea for an intermittent windshield wiper and demonstrated the device to the Ford Motor Company. The Ford engineers asked Kearns a lot of questions, then sent him away. In 1969 Ford began to offer the intermittent windshield wiper under its own patents. Kearns filed a suit against Ford and others who had licensed the invention. He won $10.2 million from Ford and $11.3 million from Chrysler. In the latter case, the jury ordered Chrysler to pay ninety cents for each vehicle it had sold with intermittent wipers.

One small invention, ninety cents.

If we could multiply that by all the inventions that constitute a working automobile we might be able to put a price on one small slice of the public domain. But of course there is no price, no fee, for the ideas behind spark plugs, rearview mirrors, turn signals, crank shafts, and so on; their patents—if they ever had them—have expired and they have taken their place in the public domain, that comedic commons to which each newborn child is heir and beneficiary.

Once we have charted the nature and the value of public goods, a question will surely arise: if, by their very nature, the fruits of human wit and imagination fall into the cultural commons, what might motivate us—*contra naturam*—to introduce a right to exclude? Why allow law, custom, or power to convert public into private goods? Why offer Benjamin Franklin, for example, despotic dominion over the manufacture of bifocals or the printing of his autobiography?

There are roughly four traditional

answers to these questions. One assumes that all creative men and women have a natural right to the fruits of their labor and that, where nonexcludability makes it hard to claim those fruits, society should intervene. (If it takes me ten years to write my novel, it is right and proper for the law to help me earn my rewards.) Another answer assumes that creative work is a kind of extension into the world of the creator's personality and that the work therefore deserves that same respect and protection that we accord to individuals. (My novel bears the stamp of my being; others should not be allowed to insult it, mutilate it, misattribute it, or use it to earn money without my permission.) Here the concern is not simply with just reward for effort spent but more broadly with questions of honor, respect, and reputation.

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Both the labor theory and the moral rights theory, as these are called, focus on the individual creator. The third argument in support of otherwise "unnatural" exclusive rights does not ignore the individual but it begins, by contrast, with the needs of the community. If the group as a whole would benefit from a constant flow of useful and wonderful creations, and if an exclusive right would motivate creators to make these things, then why not offer it? After all, if public goods are common by nature then their very nature is an impediment to their production (so long as producers need to earn a living). The question lying behind the labor theory—shouldn't labor have its reward?—arises here as well, but in this case the just reward for labor spent is not an end in itself but a means toward a broader, utilitarian goal of providing the greatest good for the greatest number.

But how exactly shall we know this "greatest good"? Here the utilitarian or "public benefit" model divides into two versions, the commercial and the civic. The former shies away from trying to describe "the good," trusting in market forces to reveal it, while the latter begins by nominating worthy ends, then seeks to shape the offered exclusive rights so as to achieve them. There is much to say about each of these, of course, but for now the point is simply that in both the commercial and civic forms, a utilitarian theory of exclusive rights allows a taking from or enclosure of the cultural commons in the near term so as to create a larger and richer commons in the long term. It does not set the private against the public but hopes, rather, to leverage the former for the benefit of the latter.

An example from the early days of patent will illustrate the logic. In the early eighteenth century, a man named Chester Moor Hall invented a cunning way to

overcome a problem in the manufacture of telescope lenses. The index of refraction of glass varies with the wavelength of light and as a result even a simple converging lens will have a bothersome problem called "color flare." To eliminate color flare, Hall devised a lens made of two kinds of glass whose indices of refraction canceled each other out. He combined a positive lens of crown glass and a negative lens of flint glass to produce what is now known as the achromatic telescope doublet.

For some reason, Hall wished to keep his discovery a secret and he therefore ordered the first two lenses to be made for him by two different opticians in London. Both of these men were too busy to do the job, however, and each subcontracted the order to a third man. This man was clever enough to realize that when he was asked to make two lenses of identical diameters, and having the same curvature on one face, someone meant to put them together. He did so and found that they produced an image free of color flare.

The technique for making an achromatic lens was then common knowledge among the instrument makers of London from about 1733 onward. These technicians, however, kept the method as a trade secret and Hall himself never published his results, being, as one account puts it, "a man of independent means, and . . . careless of fame."

As a consequence, it was necessary for a second man, John Dollond, to rediscover the telescope doublet, which he did and described in papers read before the Royal Society in 1758. He manufactured achromatic lenses, offered them for sale, and obtained a patent for his discovery.

The opticians of London begrudged this patent, however, having long known how to make telescope doublets. Eventually, Dollond's son—who had inherited the patent right upon his father's death—took one of the infringing opticians to court. The optician argued that the patent should never have been granted to Dollond because the discovery had been made many years earlier.

When the case came to trial, the opticians lost and the Dollond family won. Lord Mansfield, Lord Chief Justice of England, asserted that a patent is a contract between the inventor and the public. The commercial advantage which the inventor gains is his reward, *not for having made the invention, but for having disclosed it to the public* so that when the limited period of his patent has expired, the public gains the free use of the new idea. "It was not the person who locked up his invention in his scrutoire that ought to profit for such invention," Mansfield wrote, "but he who brought it forth for the benefit of mankind."

While it may not be obvious at first glance, copyright can be described in similar terms, as a grant whose true purpose is not so much to reward creators as to enrich the cultural commons. To see how this might be so, it helps to know the historical context of the first copyright laws. In England before the eighteenth century a group of London printers known as the

Stationers' Company dominated all publishing. A royal charter of 1557 gave these guild-like artisans exclusive and perpetual rights in duly registered books. These rights had nothing to do with rewarding authors and everything to do with the Crown's control of the press, the charter making it clear that church and state were never to be subjected to heresy, scandal, or dissent.

It was in this context—publishers enjoying a state-sanctioned monopoly over what appeared in print—that the British Parliament enacted the first-ever copyright law, the Statute of Anne, in 1710. This law gave "the Author or Proprietors" of books "the sole liberty of Printing and Reprinting . . . for the term of fourteen years" (once renewable if the author were still living). The privilege was not automatic; authors and publishers had to apply for it, pay a nominal fee, and register the work in question.

Taken together, these two things—a limited term and a registration requirement—amounted to a revolution in the history of the dissemination of knowledge. In regard to printed books, at least, they brought the public domain into being. Even after 1710, most work remained unregistered (and so became public as soon as it appeared) and what did get registered enjoyed only a limited run of exclusivity, after which it was automatically released to join the ancients in that unowned commonwealth where no one needs permission to fatten a muse. These changes were a challenge to the printers of London, of course, for they had long enjoyed a protected market; they were not, however, a challenge to publishing itself, for they opened up the trade. Scottish printers, especially, entered the book business and offered classic and modern work to the public at greatly reduced prices. A cultural commons is not necessarily the opposite of a lively market; it is sometimes the precondition of one (as the Scottish printers proved).

Samuel Johnson, born about the same time as the Statute of Anne, once laid out the logic behind the new rules:

> There seems to be in authors [he told his friend Boswell] . . . a right, as it were, of creation, which should from its nature be perpetual; but the consent of nations is against it, and indeed reason and the interests of learning are against it; for were it to be perpetual, no book, however useful, could be universally diffused amongst mankind, should the proprietor take it into his head to restrain its circulation.

Johnson begins with a labor theory of ownership, then pivots and ends with a utilitarian common-good theory. Yes, by rights authors should be owners, but the public has rights as well; learning and the general diffusion of knowledge matter. An exclusive right, especially a perpetual one, would not only mean that nothing becomes common, but that authors and booksellers could manipulate both access and price. That this not be the case, that prices be low and access easy, was a familiar concern

in the eighteenth century. As one contemporary jurist wrote, dismissing a claim of unlimited ownership:

> It might be dangerous to determine that the author has a perpetual property in his books . . . . Such property would give him not only a right to publish, but to suppress too . . . this would be a fatal consequence to the public.
>
> Others stressed the matter of cost. If a perpetual right became law it would "unavoidably raise the price of books beyond the reach of ordinary readers." Indeed, "a perpetual monopoly of books would prove more destructive to learning, and even to authors, than a second irruption of Goths and Vandals."

With such issues in mind, Samuel Johnson concluded his reflections where the Statute of Anne began, with a limit on the length of ownership:

> For the general good of the world, therefore, whatever valuable work has once been created by an author, and issued out by him, should be understood as no longer in his power, but as belonging to the publick; at the same time the author is entitled to an adequate reward. This he should have by an exclusive right to his work for a considerable number of years.
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> And how many years ought that to be? The statute gave a possible twenty-eight-year limit; Johnson thought that the author's life plus thirty years would be reasonable. Wherever the line falls, however, the point is that only by drawing it does the public domain come into being, and the Statute of Anne drew the line for the first time in history.

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As with Lord Mansfield and patent (granted for "the benefit of mankind"), so then with these eighteenth-century thinkers and copyright. "Ordinary readers," are the object of their reflections, as are "learning" and "the general good" and "the publick." Limits ensure "common benefit," not private property. Even the name of the Statute of Anne pointed in this direction. When it was first debated, some wanted to call it a bill "for Securing the Property of Copies of Books." By the time it became law, all mention of "property" had been erased (the word never appears in the statute), the final title being "An Act for the Encouragement of Learning."

It should be added that copyright law in the United States historically assumed a similar primacy of the public domain. A 1988 review by a committee of the House

of Representatives concludes with a typical summary:

> Under the U.S. Constitution, the primary objective of copyright law is not to reward the author, but rather to secure for the public the benefits derived from the author's labors. By giving authors an incentive to create, the public benefits in two ways: when the original expression is created and . . . when the limited term . . . expires and the creation is added to the public domain.
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> In the United States, the seed of this tradition was planted two centuries earlier when Congress enacted the nation's first copyright law and, echoing the Statute of Anne exactly, described it in the opening sentence as "an Act for the Encouragement of Learning."

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Forever Less One Day

During the eighteenth and nineteenth centuries, agricultural commons in England—all the fields and streams and woodlots that villagers used for centuries "by common right"—were slowly enclosed, fenced off for private use. What some now argue is that we are currently witnessing "the second enclosure," as legal scholar James Boyle has called it, the modern case in which "the commons of the mind" have been more and more converted into private preserves where someone's right to exclude comes before everyone else's right to common. I opened this essay by sketching the reasons why the very idea of such enclosure ought to seem peculiar: most art and ideas, unlike fields and forests, are common by nature, being nonrivalrous and nonexcludable. In fact, for a long time people thought such intangibles could not be property at all, if by that we mean things like cars and houses in which there can obviously be a right to exclude.

And yet property they now are; we have invented legal devices (copyright, patent) to make art and ideas rivalrous and exclusive, and often for good reason. For one thing, exclusive rights solve a problem inherent to public goods: if there is no way to exclude, then there is no way to make money, and thus (in a pure market economy) no incentive to produce. Legally bestowed exclusive rights can solve the special problem of the nonexcludability of public goods and thus, in the long run, actually enrich the commons. As I've shown, both patent and copyright were understood in just this way at the time of their inception.

As for the second enclosure, then, it should first be said that, in the simplest sense, enclosures of the cultural commons

have always been with us. There has long been some knowledge kept secret; there has long been some control of the press. The governors of Venice first granted privileges to favored printers in 1469 and, by so doing, excluded all others. The 1557 charter given to the Stationers' Company in London was a form of enclosure, and was so described at the time. In one court case it seems a certain Seymour had published an almanac to which the Company thought it had exclusive rights. They took Seymour to court and won their suit, the court opinion explaining that ever since the invention of printing a certain portion "hath been kept inclosed, never was made common." Government documents and "matters of state," for example, "were never left to any man's liberty to print." So too with the almanac in question: it was the King's prerogative to give it to the Company and he had therefore removed it from the commons.

The Statute of Anne also authorizes enclosure. If, as some eighteenth-century jurists thought, "the act of publication ... [makes] work common to everybody," then even a fourteen-year grant has to be seen as replacing a right to common with a right to exclude. In this case, however, the substitution seems laudable; it not only beat back the larger enclosure that was the charter of the Stationers' Company, it also—by limiting the term of the grant—established a way to feed new work into the public domain.

The idea of a properly limited exclusive right is itself a cultural innovation of the first order, or so it seems to me. The problem is to figure out what "properly limited" means, and here we come to the true second enclosure, for the history of copyright since 1710 has been the story of a limit that has lost its limit. It seems to be in the nature of all property rights that they expand over time. Those who benefit from exclusive rights have an incentive to encroach upon the commons while those who benefit only from the right to common are rarely even aware of what they have, and even more rarely do they develop any customary beating of the bounds.

A brief history of copyright in the United States will illustrate the consequent ceaseless expansion. At its inception, American copyright was a tightly focused privilege. The original term was fourteen years, once renewable; the grant applied only to "copies of maps, charts, and books"; "authors and proprietors" had to apply for the privilege. This registration requirement is important, as we've seen, for many people have no real interest in owning their work. Almost all political pamphlets published in the 1790s, for example, became common property as soon as they appeared.

In 1790, moreover, "copies" meant literal, verbatim reproductions; no one needed permission to make what are now called derivative works—translations, sequels, abridgments, and so forth. As late as 1853, a U.S. circuit court found that Harriet Beecher Stowe had no right to block an unauthorized German translation of *Uncle Tom's Cabin* (printed domestically

for German-American readers), under the assumption that when an author has published a book, "his conceptions have become the common property of his readers, who cannot be deprived of the use of them." Early nineteenth-century law encouraged translation, and why not? A translation takes time and effort; it is useful to the public; it aids in the dissemination of knowledge; it is hardly a verbatim copy of the original. To reward translators themselves with a limited exclusive right surely makes as much sense as our current practice, which gives the "proprietors" of any work full control over its fate in other languages (such that, for example, for over half a century no one was allowed to make a corrected translation of Simone de Beauvoir's classic, *The Second Sex*, which existed in English only in a 1953 version made by a retired zoologist, a man who knew nothing of French philosophy and who deleted 145 pages of the original book).

The United States never offered special privileges to favored publishers, either. The British had to struggle for years to free the ancient authors from the Stationers' Company, but no such battle was needed in America, where cheap editions flourished from the start. Farmers came home from the plow to read Homer and Tacitus, or so the story always went. The typical brag appears in Franklin's memoirs: easy access to books has "made the common tradesmen and farmers as intelligent as most gentlemen from other countries." Nor did the law offer any rights to contemporary authors in foreign lands. The United States was a pirate nation for a hundred years, and proud of it. The 1790 copyright law mentioned above (the one "for the Encouragement of Learning") contains what can only be called a piracy clause:

> Sec. 5: . . . Nothing in this act shall be construed to extend to prohibit the importation or vending, Reprinting or publishing within the United States, of any map, chart, book or books, written, printed, or published by any person not a citizen of the United States.

All these things have changed, of course. Not only do we now insist that other nations refrain from piracy, the ownership we seek to protect has vastly expanded in both scope and duration. Copyright at present subsists in any work "fixed in any tangible medium of expression, now known or later developed," and these works include not only the obvious—novels, songs, motion pictures—but *any* "fixed" thing, whether formally registered with the Copyright Office or not, be it a grocery list, a ransom note, or a child's drawing of the sun. The term for individuals is now lifetime plus seventy years, and for corporations or work made for hire it is ninety-five years. A novel written by a young author who lives to be eighty would be protected for over a century. The poems of Emily Dickinson, due to anomalies in their publishing history, are owned by Harvard University Press and will be until 2050, well over 175 years after they were written.

It was a 1976 revision of copyright law that eliminated the registration requirement, meaning that since that date no new creations have entered the public domain; everything carries a presumptive right to exclude. In fact there is no statutory provision whereby a work can be given to the public domain.[1] Authors who do not wish to be owners must invent complicated schemes such as issuing a license to the public at large (and even that may not work: the law includes a "termination of transfer" provision whereby rights revert to the creator after a certain number of years no matter what licenses or contracts have been signed).

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Default copyright has changed the very ground from which all discussion and policy must proceed. Until 1976, the point of departure was the assumed common nature of creative work; everything belonged to the commons, and the exception, "intellectual property," was a small set of things removed from the commons by consent, by an overt and public action, for a short term, and for a good reason. Now the point of departure is the assumption of exclusive ownership, and those who think they have a right to common are greeted by FBI warnings at the start of every movie.

These ownership rights endure for a very long time, too. The film industry lobbyist Jack Valenti, when forced to admit that the term of copyright should be limited, used to joke that from his point of view the ideal term would be "forever less one day." His wish has essentially been granted. When the most recent extension of copyright was challenged before the Supreme Court, a group of economists—both liberal and conservative, including five Nobel prizewinners—filed a "friend of the court" brief that analyzed the financial benefit of various terms. One of their conclusions was that "the current copyright term already has nearly the same present value as an infinite copyright term." In regard to money to be earned, the difference between the current term of copyright and a perpetual term is statistically trivial.[2]

1 There *is* such a provision in patent law; an inventor has the right "to confer gratuitously the benefits of his ingenuity upon the public." Not so with copyright.

2 The economists assumed that "copyright provides incentives for creation by solving the special problem of non-excludability of creative works," and then tried to figure out what sort of "incentive" another twenty years offered for creators of new works. To do this they looked at the "present value" and "future value" of the possible new earnings: "For a given amount of money today, future value is the amount that money would be worth at some point in the future. For example, if the interest rate is 7%, $1 today has a

In the copyright sphere, at least, all these things taken together are what is meant by "the second enclosure": the law grants nearly perpetual private rights to nearly every creative expression appearing in any media now known or yet to be discovered. This is one reason it seems to me that the entertainment industry's anti-piracy campaigns lack moral force. Yes, people should obey the law, but doing so in this case means participating in the breach of a centuries-old understanding about the public domain.

Every family has its own culinary traditions, its own peculiarly idiosyncratic attitudes toward food. Every family thinks its own attitudes are the norm.

If we turn briefly to patent rights, that other major sphere of "intellectual property," we will find that while they have not expanded in term the way copyright has (they used to run seventeen years, now they run twenty), they have nonetheless expanded considerably in scope. It has long been the understanding that facts, and especially facts of nature, cannot be owned. You might discover, as Sir Isaac Newton did, that the planets have elliptical orbits, but you cannot own that fact, you can only claim credit for having been the first to declare it. And, as explained in an 1892 case, Lane Fox vs. The Kensington Electric Lighting Company, "When [Alessandro] Volta discovered the effect of an electric current from his battery on a frog's leg he made a great discovery but no patentable invention." When Sir Alexander Fleming noticed that penicillin mold destroys most bacteria he uncovered a natural fact, he "lifted the veil," as they say, but he made no invention and thus had nothing to patent.

In fact, as soon as Fleming discovered it, penicillin entered the public domain, a lively competition arose to manufacture it, and the cost quickly dropped—93 percent in the first five years. Almost as quickly, the old understanding regarding facts of nature began to be challenged: drug companies managed to persuade patent offices that to isolate and purify a natural organism somehow converted it from a discovery to an invention. Thus when later generations of antibiotics like streptomycin

future value of $1.07 a year from now. Present value is the reciprocal of future value; thus $1.07 next year has a present value of $1 today. One dollar, received a year from now, has a present value of approximately $0.93 ($1/1.07) . . . . $1 in two years is equivalent to approximately $0.87 today. The further away in time it is paid, the less that payment is worth in present value." By this reckoning, adding twenty years to the term of copyright yields a 0.33 percent increase in present-value payments to an author. The difference between such an increase and that of "in infinite copyright term" they judged to be "trivial."

came along, decades passed before they became as cheap as penicillin.

The simple distinction between discovery and invention has been eroded in other ways as well. We now offer patents to those who first describe gene sequences, albeit these are natural facts of great antiquity. The genetic structure of the hepatitis C virus has been patented, and as much as one fifth of the human genome is now privately controlled, including DNA segments related to diabetes, human growth hormones, and certain kinds of breast cancer.

To make matters worse, it used to be that patents were granted only for useful inventions, and inventors were required to demonstrate utility up front. Now patents are issued for DNA sequences whose purposes are wholly obscure. As one wit has said, in the United States "you can get utility if you can spell it."

Even where biological utility can be demonstrated, it is often nature's utility, not ours. In a *New York Times* op-ed, the novelist Michael Crichton offered a list illustrating a disturbing trend in regard to naturally occurring correlations: "Elevated uric acid is linked to gout. Elevated homocysteine is linked to heart disease. Elevated homocysteine is linked to B-12 deficiency, so doctors should test homocysteine levels to see whether the patient needs vitamins." But, Crichton concluded, "Actually, I can't make that last statement. A corporation has patented that fact, and demands a royalty for its use."

Traditional knowledge and heritage have also been the target of patent enclosure. The Indian government estimated that at the turn of the century as many as two thousand patents were being issued annually based on indigenous medicines. The therapeutic uses of turmeric, for example, long known on the Indian subcontinent, are now privately owned.

Farmers have always saved seed from one season to the next and, for a long time, no one was allowed to introduce a right to exclude into that cycle. Not until the late sixties in Europe and the United States, that is, when "utility patents" were introduced to give plant breeders ongoing rights to the varieties they had developed. Now the farmer who saves his seeds will find they bear a crop of royalties for someone else even as they bear a crop of corn and wheat for him.

I should say that, as with agricultural enclosure in the nineteenth century, some of this loss of the commons may well have net social benefit. The search for naturally occurring antibiotics takes time, skill, and effort, for example, and these should be rewarded. Still, issuing a right to exclude is not the only way to reward good work; complicated policy questions attend each of the cases I have mentioned, and—for good or for ill—all of these changes amount to an enclosure of parts of nature long thought to be our common inheritance.

This Book Cannot be Read Aloud

The enclosure of the cultural commons is easiest to describe in regard to copyright and patent for in these cases the changing rules are a matter of record and their context has a long history. The enclosures taking place on the Internet are another matter. The technology is new and complicated, and we have as yet very little sense of what might be the most appropriate governing social contract. One thing we do know: in the 1990s, the ease of digital copying and the rise of the World Wide Web combined to throw most of the old social contract into turmoil. As early as 1994, John Perry Barlow—a lyricist for the Grateful Dead and a cofounder of the Electronic Frontier Foundation—sketched the looming confusion:

> If our property can be infinitely reproduced and instantaneously distributed all over the planet without cost, without our knowledge, without its even leaving our possession, how can we protect it? How are we going to get paid for the work we do with our minds? And, if we can't get paid, what will assure the continued creation and distribution of such work?

It will be some time yet before we have answers to these questions. Even after the Statute of Anne, it took more than fifty years for the British to sort out what it really meant to own "literary property," and the puzzles posed by the digital web are arguably more complicated. "Since we don't have a solution . . ." Barlow warned, "we are sailing into the future on a sinking ship."

Either that, or maybe all ships will rise on the digital tide—all ships fitted to digital seas, that is; those built for the days when intangible goods were always delivered in tangible containers are having a harder time. Before digital came along, printed books, reels of film, phonograph records, etchings, maps, compact discs, and so forth gave nice corporeal shells to the incorporeal stuff inside them. The ideas, art, knowledge, or entertainment that they contained may well have been abundant and ungated, but they themselves were, and are, neither. Books must actually be printed with ink on paper, bound, boxed, shipped to stores, sold at cash registers, and so forth, all of which makes exclusive rights fairly easy to manage and royalties easy to reckon. Should a book be pirated, copies can be seized and destroyed, and fines levied.

In this same line, in an essay for *Wired*, the musician and music producer David Byrne asks the simple question, "What do record companies do?" and replies with a list: they "fund recording sessions; manufacture product; distribute product; market product; loan and advance money [to musicians] . . . handle the accounting." In short they "market the product, which is to say the container—vinyl, tape, or disc—that carried the music." But the product is not *music*; music is something "heard and experienced," always in some social setting.

> Epic songs and ballads, troubadours,

> courtly entertainments, church music, shamanic chants, pub sing-alongs, ceremonial music, military music, dance music—it was pretty much all tied to specific social functions . . . . You couldn't take it home, copy it, sell it as a commodity . . . or even hear it again.
>
> Record companies don't sell music; they sell the container, and thinking that the container is the music is like thinking that a shopping cart is food or that the wine bottle is the wine. Substituting the one for the other—the container for the contained—is an old trick of language; rhetoricians call it metonymy.

Non non plat. Min commodi ut fuga. Ignimil ipitem illupta sitati vid quat eum atis nis incit lam exeribe rrundis sunt alis excea quis re

From a business perspective, this is a metonymy well worth preserving: the materiality of the containers, and all the steps involved in getting them from the producer to the consumer, make the whole process sticky; it slows things down and makes them accountable. When concrete objects deliver abstract objects, a skin of scarce and exclusive property settles over the abundant and nonexclusive, stands in its stead, and makes it easy to manage rights holder's privileges.

This is one reason why the business model of the recording industry, from funding the studio session to handling the accounting, worked very well for half a century. Then several things happened at once. By Byrne's account, recording costs dropped almost to zero (it used to cost fifteen thousand dollars to make a studio tape; now "an album can be made on the same laptop you use to check email"), and manufacturing and distribution costs also dropped almost to zero. With LPs and CDs there were costs at every stage—pressing the disc, printing the labels, shipping, and so on. "No more: Digital distribution is pretty much free." Gone too are the economies of scale that drove the star system. On the Internet "it's no cheaper per unit to distribute a million copies than a hundred."

A similar analysis can be applied to book publishing. What do publishers do? Ideally, they sort through a sea of submitted work, selecting for quality or salability; they advance royalty money to authors; they edit and fact-check manuscripts; they design and print books; they advertise and promote; they sell the work to readers though various channels; they sell film, translation, and other secondary rights (and send a percentage along to authors); they keep the accounts and pay royalties, and the list goes on.

And what happens to both publishers and authors (or to musicians and record companies) in a digital environment where a single copy posted on the Web,

can, as Barlow says, "be infinitely reproduced and instantaneously distributed all over the planet"?

We really don't know. Some will undoubtedly adapt and thrive. Barlow himself offered the Grateful Dead as a model, pointing out that not all business needs to be organized around the economics of scarcity. "Most soft goods increase in value as they become more common . . . . It may often be true that the best way to raise demand for your product is to give it away." For decades the Grateful Dead allowed its fans to tape their concerts and demand didn't then fall; it rose, the Dead becoming "the largest concert draw in America, a fact that is at least in part attributable to the popularity generated by those tapes."

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In the book world, a science fiction writer like Cory Doctorow has taken a similar path; his books are available for free on the Web and for sale in bookstores. Neither he nor his publisher seems to be suffering.

Both of these are special cases, however (each having a large fan base and a taste for public performance) and it isn't clear how to move from their examples to a general model. What about a reclusive and unhurried poet like Elizabeth Bishop? What of a publisher whose support for young writers depends on a backlist of authors now dead? The fact is that we are redesigning this ship as we sail it, and no one can yet say how it should be fitted to serve all the ends we care about, nor what it might then look like fifty years from now.

What we can say is that the new technologies have created a medium that replaces the old distribution stickiness with a fluidity that seems to rival that of thought itself. And that change, in turn, has given rise to astounding new commons and, at the same time, to almost as astounding new enclosures. We may not be in a position to describe how the moral and commercial economies of art and ideas will look fifty years from now, but we can at least interrogate particular new models as they arise.

I earlier indicated that to my mind the "properly limited exclusive right" embodied in the Statute of Anne was a cultural innovation of the first order; it was an enclosure of print's natural commonality, yes, but one that put an end to the larger enclosure of the Stationers' Company while simultaneously initiating the formal release of work to the public domain. Where enclosures of the digital commons arise, we will have to ask if they have similar benefits (are they for "the encouragement of learning"?) or if they are merely designed to maximize the wealth and control of private owners. Do they leave

us with a "generative Internet," as legal scholar Jonathan Zittrain has called it, one where surprising and useful innovations arise precisely because so much is left up for grabs, or will we be left with digital devices so skillfully locked down that we'll wish we were back with the last century's sticky old media?

One typical puzzle raised by cyberspace will illustrate the difficulty of answering such questions. This is not an essay about the Internet, but the Internet is a primary site of cultural enclosure in our age, and it will be useful to offer a sample of the kinds of choices that face us.

Take the problem of what is known as the "first sale doctrine." In physical space, it has always been hard to follow a product once it has left the store; for intangible goods in tangible containers (a book of poems, say), we have therefore long had a "first sale" rule, an understanding most people know about intuitively, though they may not know that it is also spelled out in the law. "First sale" is a limitation on an owner's exclusive rights such that once you have bought a book (or CD, or video disc, or map) you may do almost anything with it that you want. You may return to it multiple times, read it to your child, copy bits into a journal, give it to a friend, loan it to a student, sell it to a stranger. You may not print and sell more copies, that is true, but all these other things you may do. The right of first sale creates an object-specific, downstream public domain; the copyright owner's control ends at the point of purchase.

What happens to the first sale doctrine in cyberspace? It's not even clear if it exists (technically a new copy is created each time someone downloads a file and, for all things under copyright, making that copy requires permission), and if it does exist, can any publisher be assured of selling more than one copy of a book? The first buyer could simply post it for the world at large.

That being the case, perhaps we should just eliminate first sale in the digital world. Market purists on the publishing side might welcome that; after all, with digital copying, "first sale" looks more like a market failure than a consumer right. Yes, they might say, it was once hard to track every use of a book after it was sold, but happily those days are over. In cyber publishing it is easy to record every reading of a book, every passage cut and pasted, every time the work passes to a new user. Why not treat each of these as a unique commercial event and extract royalties along the way?

In a sense, this is already happening. To harvest such payments and thus to abrogate the first sale doctrine, electronic publishers have been designing their products to be as sticky as they were in the old container-based world; they have been wrapping work in "digital rights management" software or selling it under click-through licenses that effectively trump all the public domain aspects of traditional copyright.

Take, for example, an electronic book publisher's recent offering of Lewis Carroll's 1865 *Alice's Adventures in Wonderland*. The copyright notice carried the following warnings:

> COPY: No text selections can be copied from the book to the clipboard.
> Print: No printing is permitted of this book.
> Lend: This book cannot be lent to someone else.
> Give: This book cannot be given to someone else.
> Read aloud: This book cannot be read aloud.

Similarly, an electronic version of the U.S. Constitution, fitted to be read by a Microsoft Reader and offered for sale on Amazon.com, made it impossible for readers to print copies more than twice a year (and it is illegal to hack the code enforcing this restriction). As one wag on the Internet pointed out, if these had been the restrictions on the Constitution when it was first drafted, it would have taken six years to get copies delivered to all thirteen colonies for approval.

Yes, these are silly examples. No one is going to get arrested for hacking the Constitution or for reading *Alice* aloud. They are, however, representative of the impulse to meet the ease of digital copying with new forms of control. On the one hand, they portend the loss of the first sale doctrine and thus the enclosure of an aftermarket commons that has been part of the moral economy of art and ideas for centuries. On the other hand, it would seem impossible to have a first sale doctrine in cyberspace and still honor the other side of the old moral economy, the one that supported creators and publishers for centuries and—as long as copyright was rightly limited—helped enrich the commons with new work.

What is to be done? I obviously lean toward preserving existing commons wherever we can, but just as obviously there are few easy choices in this or in many of the other conflicts produced by the digital Internet. Nor is it the choices themselves that initially concern me but rather the philosophy and values that will help us make them. These at least we can work to clarify. To that end I want to close by moving away from the kind of policy questions that something like "first sale" raises and return to the wider questions of how far and to what ends we presume to extend the right to exclude.

Silence as a Resource

"To study the self is to forget the self," writes Buddhist master Dogen. "To forget the self is to be enlightened by all things." If a painter, self-forgetful, picks up her brush and sketches a cicada, or if a poet hears the mourning doves in the sunrise pines and writes a short poem, from where shall we say the work has arisen? How shall we describe the incentive to create? How shall we think of ownership? Said the fifteenth-century artist Shen Zhou, "if my poems and paintings . . . should prove to be of some aid to the forgers, what is there for me to grudge about?"

We usually say that what lies outside "intellectual property" is the public domain, but even that large preserve does

not contain the fullness of potential creation, especially if we mean by it all that has first passed through the domesticating apparatus of legal ownership. All that has once been owned by someone—Jane Austen's novels, Whitman's poems, the steam engine, the transistor—is domesticated ground, but out beyond the palings there are lands as yet untamed. It is a very old idea that human beings and their cultures are renewed by quitting the familiar and going (in fact or in imagination) to the desert. In many traditions, the young must go into silence or wilderness before they can emerge as real persons. It is not enough to take instruction; there has to be some contact with what lies outside our knowledge, which is to say, with our collective ignorance, how large it is, and how fertile.

Non non plat. Min commodi ut fuga. Ignimil ipitem illupta sitati vid quat eum atis nis incit lam exeribe rrundis sunt alis excea quis re

The more we know and control, the less surprise and revelation. How sad if Columbus had actually landed in India, or if nature threw up no sports, if there were no misshapen fruits for the gleaners to carry home. Ungoverned spaces make for fertile breeding grounds. A year after the first Apple II computer appeared, the company was surprised by a spike in sales. It turned out that the first spreadsheet—VisiCalc—had been written to run on the new machine. That was not a use Apple had imagined, nor one that could have appeared had their device been locked down the way many Apple products now are. The emergent properties of systems are never apparent from the conditions going in. From no single goose could you predict that flocks would fly in such fine harrows.

In the 1980s, a group of cell biologists in San Diego described and patented a particular sequence of amino acids, a family of peptides, though they had in fact no idea what role these molecules might play in human physiology. A decade later, another research group theorized that these peptides served to block the growth of blood vessels in cancer tumors. When the patent holders heard of this research, they sued for licensing fees and won a fifteen–million-dollar judgment. Such cases breed caution. A survey of scientists at American universities has found many who are hesitant to work on particular gene targets out of fear of unexpected fees and lawsuits. Exploratory science unfolds into the unknown, but it is difficult to conduct if patent thickets prematurely hedge the empty spaces. If the "second enclosure" means the invasion of exclusive rights into old and recognized cultural commons, perhaps we need yet another category, a "third enclosure," to name this blind prospecting, this preemptive planting of claim stakes in fields not yet understood. In these cases

we cannot even name the commons that are lost; they lie in futures now foreclosed.

Roman law used to include a kind of property called *res nullius*, "things of no one." The fish in the sea, the birds of the air, a gene sequence whose purpose no one knows: *res nullius* are those things that *could* plausibly be owned, but are not yet. If we value the surprise of the new, we need to check the impulse toward too swift an appropriation of these. We need to cultivate a practice of the wild, one whose first condition is the simple freedom to wander out, unimpeded, beyond the usual understanding and utterance. "Out of unhandselled savage nature . . . come at last Alfred and Shakespeare"—or so Emerson once claimed. His young friend Thoreau went to Walden Pond to step outside the village proper, on the chance he might learn something not talked about in the town. Solitude has its lessons, and so does silence. "Silence is audible to all men," Thoreau believed. "She is when we hear inwardly, sound when we hear outwardly." There is a direct line between Thoreau's two years at the pond and his appearance in 1848 as a tax resister able to state clearly the grounds of his refusal. Fresh speech is a translation for one's neighbors of what the inner ear has heard.

The noise of our village now surrounds us so fully it often seems there is no way to escape it. There are a number of projects in the United States whose simple goal is to set a microphone in the woods, fields, or marshes, and make a record of non-human noises—the birds, the wind, the water—but it turns out to be almost impossible to find a square foot of land in the entire nation where you cannot hear the buzz of a chain saw or a distant airplane. In an essay called "Silence is a Commons," Ivan Illich tells of being taken, as a baby, to the Island of Brac, on the Dalmatian coast, to receive his grandfather's blessing. This was a place where daily life had altered little for five hundred years.

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> The very same olive-wood rafters still supported the roof of my grandfather's house. Water was still gathered from the same stone slabs on the roof. The wine was pressed in the same vats, the fish caught from the same kind of boat.

All that was about to change. "On the same boat on which I arrived in 1926, the first loudspeaker was landed on the island . . . . Silence now ceased to be in the commons; it became a resource for which loudspeakers compete." As an experiment sometime, see if you can escape the loudspeakers in

airports. I once paid extra money to get into an airline's "private club" because my flight was delayed and I had work to do. In an almost empty room a huge television ceaselessly delivered the news. When I turned it off (no one was watching), the attendant reprimanded me: some network had also paid to be in that room, and their terms were that the machine would never go quiet.

When I was a child in rural Connecticut, our school bus used to pass through a wooded swamp under whose canopy we sometimes saw wild ducks, or beavers, or once (I thought) a bobcat with its tufted ears. In that time between sleep and the schoolroom, we would ride through the shaded tunnels of land too wet to plow. Now, I read in the paper, the buses are equipped with broadcast music and advertisements. It sedates the restless child, they say. And the school day begins with Channel One, its news and ads. Once upon a time companies fought one another for market share; now they fight for "mind share" and have discovered that elementary schools offer the richest hunting grounds. Hundreds of thousands of dollars they pay to be the only sugared drink in the school vending machines—not to sell the drink so much as to inscribe their brand on the "unhandselled" minds of the very young.

The composer John Cage, who had a lifelong interest in silence, used to tell a story about an event that deepened his understanding of what silence meant. In 1951 he heard that acoustical engineers at Harvard had created a completely soundproof room, an anechoic chamber, and he arranged to spend some time in it. When he emerged he told the technicians that it didn't work: he could hear two noises, one low and one high. They told him that the low hum was his circulating blood, and the high whine was his nervous system.

There is never absolute silence, Cage concluded; there is only sound we intend to make and sound we do not intend. "Silence" in Cage's work indicates the latter, the ambient noise of nonintention. If one listens to the first recording of *4'33"*, his famous silent work—four minutes and thirty-three seconds during which a piano player plays nothing (though he opens and closes the piano to indicate the piece's three segments)—one can hear, among other things, the sound of rain on the roof of the concert hall. For Cage, such "background" sounds are of interest, and we normally do not hear them; we screen out the trivia of life so as to focus on what we take to be the important parts, but by doing so we reduce our own awareness and confine ourselves to the story our intended noise is telling.

I say all this not simply to explain Cage's practice but to introduce a representative tale about the third enclosure. In 2002, the British musician Mike Batt produced an album for the rock group The Planets. Called *Classical Graffiti*, the CD featured two distinct styles, and Batt decided to separate these with a track called "One Minute of Silence." He then credited the

track, "tongue-in-cheek," to "Batt/Cage."

A few months later, much to Batt's surprise, the mechanicals kicked in.

Mechanicals, or more properly "compulsory mechanical licenses," are a device much used in the music industry that allows performers to record someone else's work without having to seek permission. Music publishers grant these licenses and then, if a recording is made, "mechanical royalties" are collected and paid to the owner of the copyright. In this case, after The Planet's album had been on the market for a while, Batt received a letter from Britain's Mechanical-Copyright Protection Society. "It informed me that my silence was a copyright infringement on Cage's silence," he told the *New Yorker*. It indicated, moreover, that an initial royalty payment of over four hundred pounds had been sent to John Cage's publisher, Peters Edition.

That check found its way to the desk of one Nicholas Riddle, managing director of the London office of Peters Edition. Riddle was not entirely amused by the misuse of Cage's name and he informed Mike Batt of that fact. "This is intellectual property that needs protecting," he explained, making it clear that the publishing house was willing to go to court if need be to guard its client's reputation and interests.

There followed a season of bemused banter with apparent good humor on both sides. "Mine is a much better silent piece," Batt declared at one point. "I have been able to say in one minute what Cage could only say in four minutes and thirty-three seconds." Asked which bit of Cage's composition he had stolen, Batt replied, "None of it. My silence is original silence." That summer Peters Edition and Batt agreed to hold a (silent) musical run-off: at Baden-Powell House in London, the Planets performed Batt's one-minute piece and then a clarinetist from the publishing house performed Cage's *4' 33"*.

Such antics notwithstanding, a few months later Batt elected to resolve the potential conflict without contesting the publisher's legal claims. On the steps of the High Court in London he handed Riddle a check for an undisclosed sum, saying simply that he was "making this gesture of a payment to the John Cage Trust in recognition of my own personal respect for John Cage and in recognition of his brave and sometimes outrageous approach to artistic experimentation in music."

The newspapers have reported that this was a case of "copyright infringement" and that "the lawsuit claimed Batt stole his silence from Cage." This is not entirely accurate. At issue, rather, were John Cage's "moral rights," one of which (under most European law) is the right to be protected from misattribution. As Riddle told me in an e-mail, "the issue was entirely that Batt identified this silence as having Cage authorship." His crime was "misappropriating Cage's name," and that "would not do."

At this point it is worth backing off and saying a little more about Cage's philosophy. As I've indicated, his art often created situations in which to hear and see what

normally passes unnoticed. It is an art of attention and awareness and not, then, an art meant to express the artist's personality. Cage was influenced by Buddhism and in Buddhism the "self" as a thing to be thinned out, not built up; to be forgotten, not remembered. And while the Buddhists suggest meditation as a way to get free of the self, Cage decided to use chance operations. "I used them to free myself from the ego." Flipping coins while he composed was a good way to escape his own sense of how things ought to sound, his own likes and dislikes. He had no interest in making an art that carried the marks of his personality or taste. He loved the incidental drawings that are scattered throughout Thoreau's journals: "The thing that is beautiful about the Thoreau drawings is that they're completely lacking in self-expression."

What is of interest in the Mike Batt affair, then, is the disconnect between Cage's practice and the philosophy behind moral rights which assumes, as some European law asserts, that the work contains "the imprint of the author's personality." United States copyright law has different roots but it sometimes touches on "personality" in a related way. A key Supreme Court case from 1903, for example, concerned whether or not there could be a copyright in something as mundane as printed posters for circus acts. In affirming that indeed there could, Justice Oliver Wendell Holmes wrote that

> an artist who draws from life … makes a work that is the personal reaction of an individual upon nature. Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible which is one man's alone.

Non non plat. Min commodi ut fuga. Ignimil ipitem illupta sitati vid quat eum atis nis incit lam exeribe rrundis sunt alis excea quis re

Fine, but if this is the assumption behind the law, then the law should have no standing where artistic practice seeks to step beyond "unique" personality. ("Personality," Cage once said, "is a flimsy thing on which to build an art!" If, on the other hand, the law claims standing here, if litigation extends even to the fruits of self-forgetfulness, if the mechanicals kick in and checks must be exchanged on the steps of the High Court, then surely the third enclosure is upon us.

The idea of treating art and ideas as a commons is both widespread and old. The aphorism from Heraclitus that stands at the head of this essay ("the Logos is common to all") was written two and a half millennia ago. "Human intelligence is like

water, air, and fire—it cannot be bought and sold; these four things the Father of Heaven made to be shared on earth in common," declared Truth in William Langland's medieval allegory, *Piers Ploughman*. The less mystical, more secular founding generation in the United States held similar beliefs. "The field of knowledge is the common property of mankind," wrote Thomas Jefferson. Elsewhere, he added, "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." The fruits of human wit and imagination "cannot, in nature, be a subject of property."

Non non plat. Min commodi ut fuga. Ignimil ipitem illupta sitati vid quat eum atis nis incit lam exeribe rrundis sunt alis excea quis re

Note the proviso, "in nature": Jefferson knew full well that we may also counterplot nature and create property "in society" where we so choose. And this we have obviously done, often for good reason (to give labor its just reward, for example). We have chosen to remove from the commons a portion of all created things and introduce the social artifice of exclusive rights. Whenever we do so, however, we are left with potential conflicts among the things we value and thus grounds for debate about where to encroach upon a cultural commons and where to resist encroachment.

I want to conclude this essay, then, by turning to the matter of ends or purposes. Every form of property carries with it political, ethical, even eschatological questions. The catechism of the old *New England Primer* asks, "What is the chief end of man?" And it answers, "to glorify God, and to enjoy Him forever." Such declarative faith may not always be available, but that does not mean that questions about ultimate purposes disappear. In service of what ideals have we adopted the ways in which we live? To what end should one or another thing be open to common usage rather than held in private hands?

A look at the medieval English case provides some answers in regard to tangible commons. Traditional agricultural commons in England were organized to ensure the sustainability of forests and arable lands, to give village life stability over time, to lock in the hierarchies of medieval life, and more. As early as 1215 the Magna Carta guaranteed such things as a widow's common right to gather firewood as needed and every "Free-Man's" right to "the Honey that is found within his Woods." That is to say, the commons were understood to serve the subsistence of households. The poor were always entitled to glean after the harvest and to have access to non-arable fields and other "wastes." Gleaning and access rights were especially important in times of dearth or scarcity and were thus part of

a system of communal tenure that knew one of its ends to be the provisioning of the poor.

The modern ends toward which commons might exist are similar if more various. Issues of sustainability have not left us. If we wish to preserve watersheds, the oceans and their bounty, the atmosphere, aquifers, and so on, some modern form of commons is in order. Issues of social equity and distributive justice are always with us, too (in regard to access to the medicines, for example).

As for the ends toward which intangible cultural properties are dedicated, the book I'll be publishing later this year, *Common as Air*, will lay out a set of propositions drawn from the writings of America's founding generation. To frame these I examine a series of cases in which the founders concerned themselves with the circulation of knowledge. We have John Adams in 1765, for example, attacking the Stamp Act not as a case of "taxation without representation" (as the story is usually told) but as a neo-feudal impediment to the spread of learning. And we have Thomas Jefferson, as the Constitution was being framed, trying to get a prohibition on all monopolies—especially patent and copyright monopolies—written into the Bill of Rights. And we find Benjamin Franklin in his later years as a diplomat in France encouraging skilled artisans to smuggle technical expertise out of England. Finally we find James Madison, after his term as president, writing a tract to explain why any unlimited ownership of expression necessarily undermines civic and religious liberty.

Private property in the conventional sense mattered to the founders, but in the cultural realm it was the least of their concerns, always approached with skepticism under the assumption that exclusive control of ideas was at odds with many of the larger purposes toward which the new nation might be dedicated. When it came to the circulation of knowledge, three things mattered above all in what used to be called the Republic of Letters: laying the ground for democratic self-governance, encouraging imaginative communities (such as the scientific community that Franklin knew), and enabling citizens to become public actors, both civic and creative. Surely these are all still honorable ends, well worth keeping in mind as we continue to debate the wisdom and extent of cultural enclosure in the years ahead.