

## CONTRACT AND COPYRIGHT

*Frank H. Easterbrook\**

I ought to begin by confessing that my title *Contract and Copyright* is deceptive—though I deny that it violates the Lanham Act. I will mention other kinds of intellectual property. And my interest is not limited to contracts, either. But the title is catchy and captures the main point: that what copyright and other IP law does is create property rights in information, after which normal rules of contract and property law determine who uses that information.

Intellectual property has been a magnet for assertions that, because law is necessary to create the property right, law also should determine how that right is used.<sup>1</sup> But both the premise and the deduction are faulty. Government has no more role in creating rights in knowledge than it does in creating rights in land or artwork—and if it does have such a role, still that does not imply that IP should be treated differently from physical assets.

Public officials may be necessary to enforce exclusive rights; police, courts, and a stable law of trespass are a better way to keep strangers from squatting in my house than it would be for me to install a spring gun. So, too, judicial enforcement may be a better way to stop people from plagiarizing my operetta than some of the private devices that Gilbert & Sullivan had to adopt to prevent the appropriation of their work—theft just as ubiquitous as anything file-sharing networks do today! Public involvement in defining who *owns* a Monet canvas is no different

---

\* Judge, United States Court of Appeals for the Seventh Circuit; Senior Lecturer, The Law School, The University of Chicago. This Essay, prepared for the 2005 IPIL/Houston Santa Fe Conference: *Transactions, Information and Emerging Law*, is © 2005 by Frank H. Easterbrook.

1. *E.g.*, Wendy J. Gordon, *Intellectual Property as Price Discrimination: Implications for Contract*, 73 CHI.-KENT L. REV. 1367 (1998); Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354 (1999); Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93 (1997). There are overtones of this approach in one of the other papers prepared for this conference: Robert L. Oakley, *Fairness in Electronic Contracting: Minimum Standards for Non-Negotiated Contracts*, 42 HOUS. L. REV. 1041 (2005).

from public involvement in defining who may create reproductions; both sorts of interventions, like the law against robbery, force the parties to the bargaining table, where the Coase Theorem takes over and assets are deployed to their highest and best uses.

This perspective is popular in legislatures, which regularly make contracting easier—the Digital Millennium Copyright Act of 1988<sup>2</sup> is an example of statutory property rights to be followed by private ordering—and in courts as well, for judges regularly enforce licenses.<sup>3</sup> It is popular with consumers, who can take advantage of products at lower prices or in more convenient form. The iPod and iTunes Music Store would not have been possible without the combination of digital rights management (facilitated by the DMCA) and contracts (those on the right-holders' side as well as those on the consumer side). Until recently, people who wanted music had to choose between physical media (usually meaning 45-minute albums) and a life of crime (that is, illegal downloads). Now they still have the old choices but can purchase single cuts from the iTunes Music store or rent a library of music by the month from several vendors. Property rights plus free contracting make this possible. But the approach is an unwelcome one among many legal scholars, who see private choice as a threat to their favored end states—whether that means free IP (Professor Lessig's goal),<sup>4</sup> their preferred scope of fair use, or their preferred choice of particular terms (such as a belief that disputes ought to be settled in person close to the consumer, rather than remotely, as with the tribunal that resolves fights about ownership of domain names).

These challenges to private ordering can be arranged under three headings: competition policy, copyright policy, and contract policy. I take a cursory look at each. (This is *only* a cursory look. It is not a treatise on antitrust or form contracts, but it includes enough to cover the principal points.)

---

2. Digital Millennium Copyright Act (DMCA), Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended in scattered sections of 17 U.S.C.).

3. I suppose that I'm obliged to cite *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, (7th Cir. 1996), which may have led the organizers to invite me to this conference. Many other decisions are to the same effect.

4. Expressed bluntly in *The People Own Ideas!*, TECH. REV., June 2005, at 46, as well as in his books—including the digitally distributed *Free Culture* (2004), available at <http://www.free-culture.cc/freeculture.pdf>.

## I. COMPETITION POLICY

*Aronson v. Quick Point Pencil Co.*<sup>5</sup> illustrates the approach to licensing (which is to say, contracts) that I have in mind. Jane Aronson devised an ingenious keyholder, which she licensed to Quick Point for a royalty. The contract provided that if Aronson obtained a patent the royalty would be 5% of Quick Point's sales; otherwise it would be 2.5%. Aronson applied for a patent and was turned down. Quick Point paid the 2.5% royalty until the patent expired and then stopped. The Eighth Circuit held that patent and antitrust law trumped the contract; after all, the patent term is limited, so private parties cannot create an indefinite monopoly by contract.

The problem with this perspective was that the license did not create a monopoly. Quick Point could not exclude rivals. It had a first-mover advantage, nothing more. Aronson and Quick Point had agreed to pay over time for an idea—a vital input into Quick Point's production. It could have paid a lump sum for the ideas, the blueprints, or for that matter the metal and plastic it used to make the gizmos, without any question under antitrust or patent law. *Brulotte v. Thys Co.*,<sup>6</sup> which had combined patent and antitrust law to hold that royalties must stop once a patent expires, is problematic because it misses this point. Once the patent expires, the power to exclude is gone and all we have is a problem about optimal contract design. If it is lawful to set royalties as "10% during the patent and nothing thereafter," why is it forbidden to set them at 5% during and after the patent? Once the patent has expired, there is no market power; and both sides may gain by longer-term royalties that not only share risk but also link payments to an idea's staying power.<sup>7</sup>

In *Aronson* the Supreme Court grasped this point. It disposed of *Brulotte* quickly by observing that a patent had not issued and then said that details of contracting are up to the parties. If Quick Point could have paid Aronson a salary plus a pension, stringing payments over a lifetime, it could pay a

---

5. *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257 (1979).

6. *Brulotte v. Thys Co.*, 379 U.S. 29, 33–34 (1964).

7. This is a point that my court made in *Scheiber v. Dolby Laboratories, Inc.*, 293 F.3d 1014 (7th Cir. 2002), which deemed *Brulotte* wrong in principle—but conclusive on the lower federal judiciary until the Justices deliver the R.I.P. The point about arranging a payment stream over time is not novel with the Seventh Circuit. See WARD S. BOWMAN, JR., PATENT AND ANTITRUST LAW: A LEGAL AND ECONOMIC APPRAISAL 232–35 (1973). For later development, see generally WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 372–419 (2003).

lifetime royalty instead. Which arrangement best promotes innovation is for the parties rather than the courts.

No one ever sacked a judge because he misunderstood markets. Businesses use all sorts of clever devices to link payments to success in pleasing customers; these devices applied to the judicial branch would be called bribes. So it is best to leave contract design to the market, where incentives are aligned rather than ignored. Everyone understands this for the branch of intellectual property that we call trade secrets.<sup>8</sup> It is no less true of copyrights, patents, trademarks, and unclassifiable bright ideas such as Aronson's design.

I suspect that my view of intellectual property as a normal form of property subject to normal contract and antitrust rules is widely shared when the question is whether an acquisition or merger produces so much market power that it creates a serious risk of monopoly, or when owners get together to restrict output (that is, create a cartel). Notice the way I have put this—"get together to restrict output." Holders of intellectual property often get together. Blocking or complimentary patents may make cooperation mandatory, or the high costs of individual transactions may make blanket licenses attractive. The Supreme Court held in *Broadcast Music, Inc. v. CBS*<sup>9</sup> that this kind of cooperation is problematic only if the owners have market power and output goes down. In other words, it applied the Rule of Reason rather than a rule of *per se* illegality to transactions in intellectual property that could well produce benefits for consumers as well as producers.

Likewise, I suspect that there is widespread agreement that the Supreme Court should abolish the rule that patents (and perhaps copyrights) are presumed to convey market power.<sup>10</sup> Most patents and copyrights never produce a penny in royalties; the big rewards are concentrated in less than 1% of inventions or publications.<sup>11</sup> There is *much* more competition in intellectual property than in gasoline, steel, autos, and many other markets that have demonstrated that even three or four rivals are quite enough for vigorous competition. The Herfindahl-Hirschmann Index for movies, pop tunes, books, or ways to prevent ice cream cones from dripping is vanishingly small. Rewards to authors

---

8. See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470 (1974).

9. *Broad. Music, Inc. v. CBS*, 441 U.S. 1 (1979).

10. The Federal Circuit recently concluded that the subject is out of the hands of lower courts. See *Indep. Ink, Inc. v. Ill. Tool Works, Inc.*, 396 F.3d 1342 (Fed. Cir. 2005).

11. See F.M. Scherer, *The Innovation Lottery*, in *EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY* 1, 8–9 (Rochelle Cooper Dreyfuss et al. eds., 2001).

and inventors are economic rents, to be sure, but rarely monopoly rents.

Where views are more apt to differ is in the antitrust treatment of exclusionary conduct. Here there seems to be a siren call for intervention. In days gone by people talked about using “leverage” to extend market power to new products. When economic analysis exploded the leverage myth, and the Supreme Court abandoned the doctrine, new claims arose based on physical bottlenecks (such as the “last mile” of wire in telecommunications) or complementarities (such as the relation between software and computer operating systems). These arguments demand that holders of market power cooperate with rivals, a la the joint ticket in *Aspen Skiing*.<sup>12</sup>

Many of these themes bit the dust last year in *Verizon v. Trinko*,<sup>13</sup> when the Supreme Court held that even a monopolist has no general duty to cooperate with rivals. Again, this is a general proposition, extending beyond communications systems. The main goal of antitrust is to compel firms to be rivals; cooperation is the thing to be feared rather than welcomed. Anyone who thinks that judges would be good at detecting the few situations in which cooperation would do more good than harm has not studied the history of antitrust. The *Journal of Law & Economics*, which I used to edit, devotes a couple of articles every year to examining old antitrust cases and asking how the judges did. The answer is that they did miserably. Markets are *much* better than judges at sifting efficient from anticompetitive practices. An anticompetitive practice that produces a monopoly overcharge attracts entry from rivals; a practice that does *not* attract such entry most likely is efficient and could be called “anticompetitive” only because judges and litigants have misunderstood the market.<sup>14</sup>

The big problem with the law of exclusionary practices is that *all* competition seeks to undercut and exclude rivals. Efficient production and lower price is the best exclusionary tactic, but hardly to be condemned on that account. Other tactics, such as supposedly predatory prices and clever changes in product compatibility could in principle exclude without being

---

12. *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

13. *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004).

14. If you don't want to read the 48 available volumes of the *Journal of Law & Economics*, take a look instead at two of my articles: *The Limits of Antitrust*, 63 TEX. L. REV. 1 (1984), and *Ignorance and Antitrust*, in ANTITRUST, INNOVATION, AND COMPETITIVENESS 119 (Thomas M. Jorde & David J. Teece eds., 1992).

efficient. But how can we tell which is which? If a rival asserts that a given tactic is exclusionary, there are three hypotheses: it is exclusionary but also beneficial for consumers because the defendant has made a better mousetrap; it is exclusionary and will in the long run lead to higher prices as more-efficient rivals founder; or it is not exclusionary at all, and the complainant is just Chicken Little.

How can courts tell the difference? They can't. *Every* indicator of exclusion is present with efficient competition. Both predators and efficient producers undercut rivals and gain market share. What distinguishes exclusion from efficiency is what happens in the *future*: exclusion leads to monopoly overcharges later, and efficiency does not. Judges are no better than the rest of us at predicting the future. My colleagues and I spend most of our time on cocaine prosecutions, employment discrimination, and the myriad other subjects within federal jurisdiction. We cannot hope to be students of industrial organization; and my friends who study that subject are themselves no great shakes at prediction.

If there is any interesting difference between IP and hard assets, it is that entry into the knowledge business is easier, and so competition should be more vigorous and market power easier to undercut. This suggests less of a role for antitrust in IP than in old-economy industries.

Judges and (other) enforcers must be wary of claims that take the form: "Here is a model in which bad results *can* happen; let's use the legal system to find out *whether* they happen." That approach assumes away the costs of false positives. Because these costs are high (that's what errors over the last century tell us), we should not seek to test theory in the halls of government, where mistakes may be inflicted on the populace. Test models the professional way, by gathering data, running regressions, and publishing in professional journals. Before predicting that the future will be unlike the past—that is, before predicting that judges and juries will acquire a comparative advantage at identifying practices that are bound to reduce welfare in the future—one must do empirical testing. Government fared poorly between 1890 and 2005 even when the rules were simple. Why should we think that regulators (including judges) will do well when the rules become complex, when strategies are designed to conceal relevant costs, and so on? If the strategies conceal matters from competitors, then they conceal from judges and other regulators too.

Just as we all insist today on proof that a given *practice* is bad for consumers,<sup>15</sup> so we must insist on proof that a given *legal regimen* implied by an economic model does better than the unregulated market. To point to a competitive failure is not to show that regulation is better. That's the Nirvana Fallacy. Government has its own costs and errors, which may be worse (and harder to correct) than the problems of markets. Don't invoke a theory of market failure unless you *also* have a theory of regulatory failure—and a way to show that the costs of the former exceed the costs of the latter.

The Department of Justice has learned, and the Supreme Court has done nothing in the past decade to give any comfort to exclusionary-practice claims. In the tobacco predatory-pricing case,<sup>16</sup> the Court essentially held that no predatory-pricing claim can succeed unless the industry has entered the recoupment period. That's the best way to separate wheat from chaff: accept the low prices and wait to see whether monopoly ensues.

The Court gave a ray of hope to raising rivals' costs theories by refusing to toss out the third-party repair suit against Kodak in the copier market. Some have read *Kodak*<sup>17</sup> as embracing the search, through litigation, for raising rivals' costs. I don't think that this is right. A series of decisions in the courts of appeals<sup>18</sup> have held that *Kodak* is about nasty surprises—about a change in policy that took advantage of customers who had calculated life-cycle costs of copiers by assuming competitive repair—and does not create any obligation to sell parts to one's rivals.<sup>19</sup> It extends no further than an obligation to live by one's promises. A firm that promises cheap replacement parts can't pull the rug out from under those who took advantage; but a firm that always has consistently sold high-priced peanuts at basketball games, or otherwise engaged in price discrimination, remains on the right side of the law.<sup>20</sup> A duty to *assist* rivals has been a bust in earlier antitrust cases, and came to grief in *Verizon v. Trinko*.<sup>21</sup> Any such duty would do more to dampen rather than promote competition.

---

15. See, e.g., *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447 (1993).

16. *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993).

17. *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451 (1992).

18. One of them was from my court. See *Digital Equip. Corp. v. Uniq Digital Techs., Inc.*, 73 F.3d 756 (7th Cir. 1996).

19. One may wonder whether *Kodak* did not err in equating injury with an antitrust problem; many kinds of loss do not reflect any reduction in output or the welfare triangle that characterizes antitrust. But this is unimportant for current purposes.

20. See *Elliott v. United Ctr.*, 126 F.3d 1003 (7th Cir. 1997).

21. For two good examples from my court, see *Olympia Equipment Leasing Co. v. Western Union Telegraph Co.*, 797 F.2d 370, 376 (7th Cir. 1986) (the defendant's name

Just a reminder about how this played out in telecom law. New entrants, encouraged by the breakup of AT&T plus a 1996 statute, want access to incumbents' lines or switching services in order to reduce the costs of entry and avoid wasteful duplication. Or so they say; how could one tell whether duplication would be "wasteful"? Perhaps they want a government-sponsored cartel; perhaps the entrants want to compel the government to set a price on the incumbents' network, which they will accept whenever the government mistakenly sets the price too low. In either case the regulation would reduce consumers' welfare. What the entrants do *not* want is free contracting.

The Supreme Court held in *Trinko* that (a) a claim of failure to implement the Telecommunications Act of 1996 arises under that Act and is not an antitrust problem; and (b) the Sherman Act *discourages* cooperation among rivals and does not compel it, even if this means that a new entrant must build a new plant from scratch. The contrary claim is in the nature of the old bottleneck-monopoly point, but now that we know telecommunications to be competitive—it is hard to argue natural monopoly when we see rivals building four or five wireless networks side by side!—even what little intellectual force these old cases had is gone.

My interest, though, is not so much the adequacy of legal theory<sup>22</sup> as it is the strength of prediction. Recall what a raising-rivals'-costs claim implies: rivals' costs are higher now; prices are up and quantity down now because elasticity of supply has been diminished; and if rivals drop out then prices will rise still further tomorrow. Well, we can test for these predictions.

What *do* we see in telecommunications? We see considerable entry, expansion of both infrastructure and sales; we also see falling prices. There may have been *too much* entry—though maybe what dark fiber suggests is just the inevitable error in predicting future demand. We see WorldCom in bankruptcy, not sitting pretty with lower costs than rivals. Quite the contrary, the newer entrants with more modern equipment seem to have lower average and marginal costs. This is why the ILECs challenge the TELRIC pricing method under the 1996 Act, for TELRIC is based on replacement cost—and replacement cost is less than the sunk base.

---

alone tells us something about what technological change does to "monopolists"), and *MCI Communications Corp. v. AT&T Co.*, 708 F.2d 1081, 1132, 1149 (7th Cir. 1983) (rejecting a claim that dominant firms must sell their services to rivals).

22. A subject that I've discussed elsewhere, such as *On Identifying Exclusionary Conduct*, 61 NOTRE DAME L. REV. 972 (1986).

Now maybe my understanding of these markets is bad. I certainly do not want to prejudge any claim pending in another court. But a simple test based on information picked up from the popular press does not imply that incumbents' deeds have reduced output or raises prices.

## II. COPYRIGHT POLICY

Many of the academic proposals to limit the role of contract, and thus establish some protected space for free expression—either a politically selected scope of public domain, or a prescribed extent of fair use—rest on one or more of three propositions:

1. Copyright law serves the public interest by creating an optimal balance of rights to produce and use information. Rights to use information that is unprotected by copyright are part of this optimal balance, which implies that buyers and licensors of intellectual property must be forbidden to grant the owner additional rights by contract.
2. A copyright is a monopoly, which therefore needs regulation.
3. Information is special; unless there is regulation, there will be deadweight social loss because the marginal cost of use is zero, and therefore, any positive price (of the sort that voluntary transactions entail) creates allocative inefficiency.

I do not think that any of these propositions is correct.

1. It is highly unlikely that copyright law contains an optimal prescription for information. That is not just a point about public choice—that is, that statutes are the outcome of a clash among interest groups rather than of academic deliberation. It is more a point about the complexity of the world. Does anyone really believe that one single allocation of rights to produce and use works best for movies, records, books, architectural plans, photographs, software, and so on? The domain of copyright is vast. The most anyone can *hope* for in a law is to create a framework—that is, to endow authors with a set of property rights—and let people work out the details for themselves. This is of course the fundamental point in Ronald Coase's essay *The Problem of Social Cost*, nicely amplified by Calabresi and Melamed in *Liability Rules and Property Rules*.<sup>23</sup>

---

23. R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960); Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One*

Consider for a moment the world of perfect competition in classical economics. Price everywhere equals marginal cost, so all decisions about producing, purchasing, and using goods are both privately and socially optimal. Now consider the problem for intellectual property: an idea, a book, a poem, or a piece of software can be used without being used up. The marginal cost of producing a new example, after the work has been created, is not zero, but it is low—substantially below average total cost. To recover its investment, a producer of intellectual property must be able to sell at average total cost or more; but if marginal cost is under average total cost, the price is “too high” to be socially optimal, for the high price discourages at least some purchases even though the consumer values the work at more than the cost of producing an extra copy. That is the problem with which the law of intellectual property grapples,<sup>24</sup> and no solution can be praised unconditionally.

Patent law, copyright law, trademark law, and the law of contracts (of which trade secrets are a branch) create or employ property rights in information so that the producer of intellectual property can charge more than marginal cost, and thus cover the total cost of producing and disseminating the works. Would-be consumers who value the work at more than marginal cost but less than average total cost lose out; but if the law were otherwise different consumers would lose (and lose even more) because producers would not develop and distribute as many innovations, plays, drugs, and programs. Just *how much* above marginal cost should the price be? No one knows. A patent gives the inventor the right to exclude competition for 20 years, and thus to collect an enhanced price for that period. Is 20 years too long, too short, or just right? No one knows. A copyright lasts the life of the author plus an additional period that Congress keeps increasing in response to producers’ lobbying. What is the right length of a copyright? No one knows. A trademark lasts forever (or at least for as long as the product is made, and the name does not become generic in the public’s mind). A trade secret (such as the formula for Coca-Cola, or the source code of a computer program) lasts as long as the developer can keep the secret. Are these durations optimal? No one knows. How much use, and by whom, should be permitted without compensation under the fair use doctrine? No one knows.

By “no one” I mean more than just legislators and judges. The best academic students of the subject disclaim knowledge. If

---

*View of the Cathedral*, 85 HARV. L. REV. 1089 (1972).

24. See LANDES & POSNER, *supra* note 7.

we do not know the answers to these traditional questions, we certainly cannot proclaim that any given year's legislative choices are the optimal ones that must be protected from readjustment by contract. And the statutes on the books sensibly permit recontracting. I've mentioned the DMCA. Other examples are legion.

- Trade secrets. *A* goes to work for *B* and promises never to reveal what he learns about *B*'s production processes. Suppose *B* is Coca-Cola, and what he learns is the formula for the beverage. It is written down but not copyrighted (and if it had been copyrighted, the copyright would have expired long ago). Can *A* then blab to the world? Not a chance. In *Kewanee v. Bicron*, the Supreme Court held that trade secret law, a branch of contract law, can coexist with copyright. *A*'s contract will be enforced.
- Work for hire. *C* signs a contract with *D* promising to design a beautiful lamp; *D* promises to pay a royalty of 5% in perpetuity. The lamp and its designs cannot be copyrighted because they are useful articles; anyone else in the world can copy and make them. But *D* must pay the agreed royalty. This is *Aronson*. People can form contracts about intellectual property that is in the public domain. And good thing too. But for these contracts, there would be fewer lamps.
- Ordinary contract. ProCD offers \$100 to anyone who brings it a phone book it does not already have. *E* sends in a book. Must ProCD pay? Of course it must—even though the phone book is in the public domain, *E* has created an economic benefit by bringing it to ProCD's attention. Information is *not* free—indeed ignorance is rampant—so we enforce contracts that traffic in “public domain” information.

2. Copyright as monopoly? Please. Copyright law does not regulate independent creation. That's why there are so many detective and romance novels, all fundamentally the same. None of the authors has market power. So too with a CD packed with phone books. This is true even for patents. G.D. Searle invented aspartame, a low-calorie sweetener, but it could not get saccharin, cyclamates, and sugar out of the market.

Now it is true that the marginal cost of using information often is low, but we do not define as a monopoly every market in which  $P > MC$ . That's true of many products with economies of

scale, fixed units of production, or even quasi-rents. Price exceeds marginal cost for airlines and other businesses with high fixed costs. It does not follow that they are monopolies.

3. Information is special in the sense that it can be used without being used up, but this does not mean that use is free. George Stigler was fond of pointing out that the cost of teaching and using the Pythagorean Theorem is billions of times greater than the costs of devising and proving the theorem. And although one can say that property rights in information are social constructs, so are property rights in cattle. They set the stage for contracts; they do not prevent contracts.

Now let me turn to the normative claim that contracts about public domain information such as phone books or old Shakespeare plays reduce social welfare by setting a price exceeding the (presumed) marginal cost of zero, creating deadweight loss.

As a rule,  $MC > 0$ . It is costly to get information into people's hands. ProCD spent \$10 million to compile its database, and there are annual costs of keeping the data current and disseminating it. It is costly to disseminate even with a CD in hand. So too with maps: you can get them on the Internet, often based on data supplied by the federal government (USGS topographic maps or satellite photos), but not without either a subscription fee or exposure to ads that cover the costs of dissemination.

*Given* information's existence, why not use it freely? This is the question asked over and over in the law review literature—and it is *ex post*. The goal of intellectual property law and contracts is to create incentives to make and disseminate information *ex ante*. If we assume that the information exists and is in people's hands, we can construct an argument for free use, but only at the expense of missing the principal point.

What would we like to see happen in intellectual property markets, where the assembly of even public domain information can be very costly? The rough answer is Ramsey pricing, a form of price discrimination in which price is inversely proportional to elasticity. That's the economic prescription for natural monopolies, where marginal cost is below average total cost at the optimal output. With Ramsey pricing, the producer can cover its costs, and the lower-valuing users can still get the product. That is what contracts facilitate.

It is what ProCD did. It offered at least three prices: high to industrial users (who wanted it for mailing lists); middle for online lookup; and low to consumers for personal use. The

problem is of course arbitrage. If the consumer users can resell to high-valuing users, the system breaks down. Thus, the contractual restriction. So too with ASCAP and the blanket license: each subscriber pays a different fee, based on how it uses the music, and this price discrimination allows small customers (the corner bar) to use music while the fixed costs of authorship and distribution are collected from radio stations and the TV networks.

*Ex post*, one can identify welfare losses from blocking resale. But suppose the law takes the position that contracts about use cannot be enforced. What then will happen? There are several possibilities, which I illustrate with ProCD:

- a. Lack of price discrimination may make it impossible to recover the costs of creating the database, and the product won't be sold. Welfare loss then would be *much* higher than the *ex post* allocative loss of enforcing the contract.
- b. ProCD may set a single price, but much higher in order to cover its costs from the industrial users alone. Then the consumer users simply won't buy. This has a lower welfare loss than (a), but still more than the loss from enforcing the license. We see something of this kind in the market for scholarly journals, where prices have shot through the roof because each copy comes with an implied license (under the fair-use rubric) to make photocopies. If arbitrage could be prevented, individual subscriptions still could be sold at low prices; but arbitrage is unstoppable, so even publishers that give discounts to persons (as opposed to libraries) charge high prices. If contracts about photocopying could be made and enforced, price discrimination would be more effective and many consumers could benefit. Likewise, if every music CD comes with an inalienable right to make and distribute MP3 versions, producers will raise the price of all CDs accordingly—and customers who wanted the CD *without* a right-to-copy privilege will be worse off (if they are not priced out of the market altogether). Enforcing contracts can fix this.
- c. ProCD will not sell CDs, but will be a vendor of information only, much like mailing list houses and credit bureaus. You tell it who you want to send to, and provide it the flyers; ProCD slaps on labels and sends them out, without giving you a list of information. This again cuts out consumers, and it

may also deprive the market of the benefits of the division of labor. It may be more efficient to have separate firms in the mailing and data-collection businesses.

- d. ProCD may sell different products for different prices—a high price for current data with SIC codes, and a low price for old data without. Then anyone can use the data freely, but consumers are worse off than when the shrinkwrap licenses are enforced.

The list can be extended, but I think the point is made. Contracts augment the opportunity set; and with a larger opportunity set it is possible to make *everyone* better off. This is true of standard-form contracts no less than others. And intellectual property is no different in this regard from the warranty that comes in a box with a TV, or the terms on a car rental agreement. Producers have the same incentives to create optimal terms as they have to create optimal mixes of product attributes.

Now I recognize that my colleague Richard Posner is a firm advocate of the public domain, and on economic grounds. He thinks (or at least used to think) that excessively strong protection for intellectual property will gum up the works by creating the need for thousands of transactions to produce new intellectual property.<sup>25</sup> Even if the royalties are minimal—William Shakespeare's estate could not deny Leonard Bernstein permission to produce *West Side Story*, because Bernstein and his librettist had so many other options for material—the number of transactions may be high, so transactions costs soar. Doubtless the rule that stock scenes are not copyrightable would hold down these costs, but disputes would crop up. Because most authors are both producers and consumers of intellectual property, it may make sense to cut down the number of required transactions by enlarging the public domain or the extent of fair use. What an author loses on the selling side he gains on the buying side.

The concern about high transactions costs is a substantial one, though it diminishes as time passes. Today your computer can negotiate many of these transactions (as it does with DRM software) without your knowing, and micro-payment systems may debit and credit accounts automatically. Technology is moving us toward the world where transactions costs are close to

---

25. See William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325 (1989).

zero, and the Coase Theorem can be a reality rather than a thought experiment. Professor Picker puts it nicely: “Microconsent, as it were, would make it possible to charge users small amounts for small uses, and we could march down the demand curve for a particular work.”<sup>26</sup>

It is ironic that just as a global network and automation are reducing the costs of contracting, some scholars promote contract-defeating schemes. One is tempted to think that they are concerned not about market failures but about market successes—about the prospect that the sort of world people prefer when they vote with their own pocketbooks will depart from the proposers’ ideas of what people *ought* to prefer. Next thing you know, why, economic transactions between consenting adults will break out *right in public view!*

Of course low transactions costs induce owners of IP to make more demands (they seek royalties only when the payment exceeds the transactions costs of collection). But it is unlikely that this process will impede innovation or authorship. Professor Gomulkiewicz’s paper illustrates a principal reason for this.<sup>27</sup> Contracts can drive price down as well as up; licenses can be designed to allow free access as well as to curtail access. The General Public License works only because (and only to the extent that) the law creates and enforces a property right in information. It is possible to get to free access from a property-rights starting point; it is much harder to go in the opposite direction. In other words, more protection of intellectual property does not imply less public domain; there can be more of each at the same time.<sup>28</sup> Judge Posner and Professor Landes have moved a considerable distance in this direction in their 2003 book, *The Economic Structure of Intellectual Property Law*, and still further in their article proposing that copyright lasts forever if a market test shows that the expression retains substantial value.<sup>29</sup>

---

26. Randal C. Picker, *From Edison to the Broadcast Flag: Mechanisms of Consent and Refusal and the Propertization of Copyright*, 70 U. CHI. L. REV. 281, 295 (2003).

27. Robert W. Gomulkiewicz, *General Public License 3.0: Hacking the Free Software Movement’s Constitution*, 42 HOUS. L. REV. 1015, 1021–23 (2005).

28. This point has been developed nicely in the work of Professor Wagner, one of the contributors to this symposium. See, e.g., R. Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457 (2005); R. Polk Wagner, *Information Wants to be Free: Intellectual Property and the Mythologies of Control*, 103 COLUM. L. REV. 995 (2003).

29. William M. Landes & Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471 (2003).

## III. CONTRACT POLICY

I devote the least attention to the possibility of fiddling with particular terms of contracts, because it is not unique to intellectual property. Litigants, scholars, and occasionally judges have been complaining about supposedly “unconscionable” terms in “contracts of adhesion” for a very long time. This was the theme state courts used a century ago when they refused to enforce agreements to arbitrate; why, it would be unconscionable for one side to foist second-class justice on another. After the Federal Arbitration Act required courts to enforce these clauses if the parties wanted them,<sup>30</sup> the same claim was made for limited warranties, or clauses in insurance or auto-rental contracts.

A belief that statutes (or judges) can improve the lot of consumers by adjusting contractual terms is persistent yet unfounded. Contractual terms are product attributes—no different functionally from the quality of a car’s tires, a TV’s capacitors, or a software package’s features—so the assertion is equivalent to a contention that used to be made in antitrust law but has not been heard since the 1950s: that monopolists would make inferior products. Why, exactly? The idea was that the monopolist would save on manufacturing costs but charge the same price. That won’t work; an inferior product draws a lower price even in monopoly. Today all students of industrial organization agree that both competitive and monopolistic firms make the product that consumers prefer, and then sell it for what the traffic will bear. That strategy maximizes profits.

Just so with contractual terms. If Hertz Corporation can exploit its customers despite competition from Avis and National, the best way to do so is to offer the combination of auto and contractual terms that the customers want, and then charge a high price. If Hertz substitutes a cheaper car, or inferior terms, customers notice and pay less or turn to Avis. And if the customers need help recognizing their predicament, Avis will tell them. This is no less true of forum-selection clauses in

---

30. Not everyone has noticed. Echoes of these arguments can be heard today in employment discrimination cases. Despite the fact that organized labor is as enthusiastic about arbitration as are employers, courts occasionally refuse to enforce these agreements. My court is not among those that think they should rewrite contracts one term at a time. *See, e.g.,* *Oblix, Inc. v. Winiecki*, 374 F.3d 488 (7th Cir. 2004); *Carbajal v. H&R Block Tax Servs., Inc.*, 372 F.3d 903 (7th Cir. 2004); *Metro E. Ctr. for Conditioning & Health v. Qwest Commc’ns Int’l, Inc.*, 294 F.3d 924 (7th Cir. 2002); *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147 (7th Cir. 1997).

shrinkwrap licenses than of forum-selection clauses in cruise tickets.<sup>31</sup>

Suppose software customers value local dispute-resolution services by more than the incremental cost required to provide them (compared with arbitration in the vendor's home town). Then vendors will fall over one another to provide local hearings, because doing so enables them to increase price by more than the additional cost. If they continue to use "inferior" terms, they lose out. Self-interest aligns their behavior with consumers' interests. (You can hear Adam Smith saying: "It is as if there were an invisible hand . . .") So when a court comes along and "fixes" what it deems to be an inappropriately pro-seller term, what it is usually doing is compelling the seller to supply something that is worth *less* to the consumer than the marginal cost of its provision. (Otherwise, to repeat, the seller has not been maximizing profits, and few judges who intervene in the cause of consumers do so because they think that sellers are failing to maximize investors' returns!) The price must rise, and by more than the consumers' benefit. The consumers have been made worse off.

In a sentence: As long as price terms remain open, judicial adjustment of contracts' terms will make consumers worse off. Judges cannot redistribute income from producers to consumers; that requires taxes or some other involuntary mechanism. Everyone would agree with this if the proposal were to require every play to have five acts (giving the theatergoer "only" four acts is exploitation!), or every opera to include a ballet, or every book to exceed 350 pages, or every television to include gold-plated Monster™ cables rather than cheap aluminum wiring; judicial design of products' attributes would be a calamity. That's equally true of contractual terms.

True it is that few consumers read the terms; but then few look inside their TV sets to see what kind of wiring it uses, or whether refrigerators use the best connectors between their pipes and the air compressor. My expensive super-automatic coffee maker has cheap plastic on the outside but costly, precise-tolerance metal parts in the brew assembly on the inside, just the reverse of what one would think if consumers value only what they see at first glance. One of the lessons from the economics of information is that it does not take many savvy shoppers to drive price and quality toward the optimal mix that consumers favor.<sup>32</sup>

---

31. See *Carnival Cruise Lines, Inc. v. Shute*, 499 U.S. 585 (1991).

32. See Alan Schwartz & Louis L. Wilde, *Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis*, 127 U. PA. L. REV. 630 (1979).

And what holds for price holds for contractual terms as well; George Priest's elegant demonstration of this for warranty terms needs no elaboration here.<sup>33</sup> Shopping and searching are becoming steadily less expensive, thanks to the Internet. It follows that whatever justification there once was to manipulate contractual terms is evaporating.

Sometimes the shoppers are professionals, and when this is so the use of identical forms is the best way to protect the amateurs. Most suppliers of intellectual property sell to corporations, universities, and individual buyers on the same contractual terms. Terms that satisfy professional buyers are likely to be efficient. Consumers then get the benefit of the pros' efforts. This process is similar to the way in which professional investors' efforts protect amateurs: when securities sell to all at the same price, amateur investors indirectly receive the benefit of information available to professionals. Identical contractual terms for professional and amateur buyers serve the same function.

When the terms are efficient (or even when they are not), there is unlikely to be any benefit in legal rules that require consumers to assent one term at a time. Having to initial an auto-rental contract in five places does no one any good; just so with proposals to require consumers to click "OK" five times after scrolling through boxes of text on their screen. Why force *every* buyer to be a "shopper"? Why assume that buyers' time has no value? When market processes produce generally efficient contracts, forcing every consumer to approve multiple clauses one at a time has net costs even if each consumer's opportunity cost of time is small.

#### IV. CONCLUSION

My principal suggestions follow from this understanding about the relative (in)competence of public actors. Three propositions sum up what I know, or think I know, about wise public policy with respect to IP licensing and related subjects.<sup>34</sup>

---

33. George L. Priest, *A Theory of the Consumer Product Warranty*, 90 YALE L.J. 1297 (1981); see also Alan Schwartz & Louis L. Wilde, *Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests*, 69 VA. L. REV. 1387 (1983).

34. Those who have looked at Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, will discover from this concluding section that I have not learned much in the intervening decade.

1. *Make rules clearer, to promote bargains. "We" don't know what is best, but in a Coasean world the affected parties will by their actions establish what is best.*

It is awfully hard to know what the optimal bundle of rights for authors is. When there is ignorance, it is best to give more rights to authors. Why? Because if the best arrangement turns out to be free distribution, then private transactions may produce this result when the statute assigns the rights to authors; but if the best arrangement turns out to be some fee for distribution and a lower price for use, it is extremely hard to get to this state of affairs if the statute cancels the distribution right. Private transactions could move the right back to authors only if the parties have contractual relations (for example, patrons of the opera may agree not to tape the performances). We must bear in mind the high possibility of error in the original specification of entitlements—a risk especially high in a legislative world dominated by interest-group politics. The risk of error should lead to initial assignments that are easy to reverse, so that people may find their own way with the least interference.

2. *Create property rights, where now there are none—again to make bargains possible.*

One common response to a proposition of this sort is that holders of rights in intellectual property are bound to use them to cut out low valuing users, or to squeeze profits from information already in the public domain. I find it odd that this response appears so often in the law reviews, where it is self-refuting. Every law review article is copyrighted. This means that the author *could* insist that the law review pay, say, \$5000 for publication rights, and that Lexis pay another \$5000 (plus \$100 per "hit") for the right to make the text available electronically. But of course authors don't do this. They submit articles without payment, from either law reviews or the electronic services. Perhaps one could infer that the authors know something about the value of their intellectual property. But another possible inference is that when free distribution is socially optimal, people will not enforce their property right to withhold publication or demand fees. If you start from property rights you can negotiate for free distribution; if you start from an absence of property rights, it is very hard to get to the best solution when a charge is optimal.

3. *Create bargaining institutions.*

Computers offer many opportunities to do, at next to no cost, the sort of thing the Copyright Clearance Center tried and failed to do for photocopies. Consider, for example, the question whether a

publisher of content on the Internet wants to authorize the making of copies—and, if so, the making of copies that can be recopied, or a single copy for use on a local computer, or only wants to authorize viewing on screen. All are logical possibilities, each rational for some authors, or for any given author at different times. How is it possible to specify which is which and to collect payment?

The answer lies in a convention—a protocol under which each file contains its own instructions on this question, and programs know how to interpret them. You are familiar with such conventions. When your modem calls a remote modem, the two devices engage in elaborate interrogation to discover what speed to use and what compression and error-correction algorithms are in place. An international standards-setting organization agreed on the language; private firms all over the world have decided whether, and to what extent, to use this agreed language for communications. Some firms have come up with their own extensions, outside the organization's framework. Just so with the Internet's core communications protocol (TCP/IP) and page-description language (HTML). Encryption technology for digital rights management is similar.

A standards-setting organization could prescribe, say, 20 different copying rules—sets of permission and payment terms. There may be competing organizations, with their own standards. Each Internet server and client would understand these terms and carry out the negotiation automatically, remitting any payment to an agreed depository by secure methods. Your future electronic copy of *Moore's Federal Practice* may come tagged with instructions that tell your computer how many times it can be copied, and to whom it may be redistributed. Or you may receive a copy that is locked to your hard disk or, as with Adobe's latest DRM system for digital books, is limited to a certain number of computers. You register each of your computers in Adobe's database, and Acrobat unlocks all of the books you have purchased.<sup>35</sup>

---

35. This is, by the way, how I came to read Professor Lessig's article mentioned *supra* note 4. I subscribe to *Technology Review* through Zinio, which uses Adobe's DRM system to encrypt and distribute electronic magazines. I can read *Technology Review* on any of my computers. Alas, I cannot print it; MIT, which publishes *Technology Review*, had disabled printing. (The Adobe DRM system allows all sorts of fine gradations; one common limit is the ability to print up to 50 pages but no more.) I would have liked to be able to print Lessig's article so I could refer to it at this conference without using my portable computer, but I would not be willing to pay very much for that feature. This is the only time I have wanted to print an article during my two years as a subscriber. Disabling print doubtless enables MIT to sell the digital version for the low price that induced me to subscribe. If I really needed to hold Lessig's article in my hand, I could have made a photocopy from the (considerably more expensive) hard copy of the magazine to which the University of Chicago's libraries subscribe.

2005]

*CONTRACT AND COPYRIGHT*

973

These, then, are my propositions. We live in a world of ignorance. We can expect ignorance about the full consequences and optimality of legal rules to be as prevalent in the 21st century as it has been in the past. We can expect academics, legislators, and judges to have in the future the same comparative disadvantages, *vis-à-vis* the market, that they have had in the past. In a world of imperfect knowledge—that is, in our world—you can benefit from clear rules, property rights, and institutions that promote negotiation and enforce the resulting contracts.