Book Review:
Law, Economics, and Intellectual Property

William M. Landes & Richard A. Posner

The Economic Structure of Intellectual Property Law

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Reviewed by Thomas F. Cotter

George Priest is a law professor at Yale and one of the better-known figures—along with such luminaries as Richard Posner, Ronald Coase, and Guido Calabresi—in the law-and-economics movement. In 1986, Priest published an article in which he lamented that "economists can tell lawyers ultimately very little about how to enforce or interpret the law of intellectual property." As Priest knew, the principal economic justification for the state's conferral of exclusive rights upon inventors and authors is the intuition that, absent these rights, rational actors would prefer to copy others' inventions and works of authorship, rather than to invest in creating and publicizing their own, because copying is often cheaper than creating (or discovering creative works that are worth publishing). Of course, if everyone followed this "free rider" strategy, nothing would ever be created or published; and so rights in intellectual property (IP for short) can be viewed as a sort of correction for a potential market failure.

Critics of IP, however, had long noted the social costs of IP rights, which can in some cases confer market power and limit public access. Some of these critics (including a former Harvard Law School professor named Stephen Breyer) had also noted that inventors, creators, and publishers often are motivated for reasons other than money—and that, even when they are motivated by money, they may have other means (such as simply being the first in the market with a new product) for recouping their fixed costs before the inevitable onslaught of free riders. Finally, while in theory a carefully tailored IP law could balance the social costs and benefits in such a way as to maximize the surplus of the former over the latter—to resolve the "incentive-versus-access" problem in the optimal way—no one has ever devised a method for determining exactly where that optimal balance lies. Given this fundamental, probably insoluble dilemma at the heart of IP law, Priest doubted whether economics would ever have anything meaningful to say about the appropriate scope or duration of IP rights.

Notwithstanding Priest's doubts, the last fifteen years or so have witnessed an explosion, not only in the importance of IP and IP law to domestic and foreign commerce, but also to the economic analysis of this body of law. (By economic analysis I mean, roughly, the use of microeconomic and industrial organization theory to predict the consequences of legal rules, typically based upon the assumption that actors frequently, though not necessarily always, behave in predictable ways in response to incentives.) Economic theory as it relates to IP law is now a common topic of discussion in the leading law journals. More importantly, economic theory often takes center stage in judicial and even legislative discourse over IP rights, as policy makers grapple to

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formulate, apply, extend, and adapt legal doctrine to phenomena ranging from Napster to domain name disputes to business methods patents.

The Economic Structure of Intellectual Property Law, a new book by William M. Landes—an economist who holds the Clifton R. Musser Professorship of Law and Economics at the University of Chicago Law School—and Richard A. Posner, the federal judge, former law professor, and now lecturer at the University of Chicago, and prolific author of countless books and articles on a vast range of topics, many of them steeped in the economic analysis of human behavior—comes as a welcome addition to this growing body of literature. The book is based in part on a series of law review articles that Landes and Posner have authored since the late 1980s, but it contains substantial revisions of these works and a considerable amount of new material, including several empirical studies. Landes and Posner acknowledge the intractable nature of the incentive-versus-access problem, but they argue that the problem does not imply, as Priest thought, that economics has nothing useful to say about IP law. In fact, as they demonstrate, there are a variety of ways in which economics can shed much light upon IP doctrine and policy.

The bulk of the book is devoted to copyright and patent law, both of which bodies of law arguably provide much stronger protection today than they did even twenty-five or thirty years ago. Since that time, the copyright term has been extended and copyright rights have proliferated; meanwhile, the Court of Appeals for the Federal Circuit, which since 1982 has heard all appeals in patent infringement cases, appears to most observers to have adopted a more pro-patentee stance than did the regional circuit courts of appeals before it. The impact of these changes upon social welfare is debatable. Because existing works and existing inventions form part of the capital stock from which future works and inventions are derived, strengthening the protection of existing works beyond what is necessary to induce their creation and public dissemination may induce more cost than benefit. Landes and Posner are skeptical—more skeptical than I recall them being in the published articles upon which some of their analysis is based—of the effects of some of these long-term changes, and towards the end of the book they speculate on why, in an era characterized by government deregulation, government largesse in the form of copyright and patent rights has expanded. (They conclude that it's not *all* due to the lobbying of the entertainment industry.) They repeatedly stress—as have others before them, including Thomas Jefferson—that IP is different from real and personal property insofar as (much of) our intellectual creations tend to be, in the absence of legal protection, both nonrivalrous and nonexcludable. In economic parlance, "nonrivalrous" means that many people can enjoy a good at the same time without depleting it; ideas are nonrivalrous but your personal computer is not. "Nonexcludable" means that, once you have disclosed the good to others, you cannot easily prevent their using it; again, ideas tend to be nonexcludable whereas tangible things are not. IP law is one way to make some products of the mind excludable, and hence artificially scarce.

This scarcity can be a huge problem, as when life-saving (but patented) drugs are priced too high for impoverished people to afford them. But it can also have some positive effects, and (importantly) these are not limited to the much-discussed incentives to create and disclose. As Landes and Posner argue, the law-and-economics of property rights *does* have some useful things to say about IP—some examples follow below—even if the fit between IP, on the one hand, and real and personal property, on the other, is not perfect. Nevertheless, IP is different enough from real or personal property that analogies with the latter *can* be harmful, if only because these analogies may lead one to the false conclusion that IP rights should be as robust and resistant to exceptions as are rights under real and personal property law. The fact that exist-

ing IP is an important input into the creation of future IP is an important distinguishing factor, one that occasionally calls for radically different treatment (such as the fair use doctrine in copyright, and analogous though less expansive doctrines in patent and trademark law) from other property regimes.

One way in which economic analysis can prove useful to IP law is to begin with the assumption—an arbitrary one, to be sure, but one has to start somewhere—that the existing scope and duration of IP rights are more or less optimal (or at least, that they are a given), and then try to ascertain whether specific incremental changes in doctrine would lead to better or worse outcomes, as measured by some standard of social welfare. On this basis, for example, Landes and Posner advance a general argument in favor of an expansive reading of copyright's fair use doctrine in some circumstances, such as when a work was not intended by its author for publication. The private correspondence at issue in some well-known copyright cases involving biographies of J.D. Salinger and L. Ron Hubbard is a prime illustration. Even if copyright generally provides an important incentive to create and to publish, it seems doubtful that a rule permitting historians and biographers to quote selectively from unpublished materials on deposit in libraries would have an adverse effect upon those incentives. To the contrary, mindlessly enforcing copyright rights in such a case would actually undermine copyright's purpose of inducing creativity and publication—in this case, the creativity and publication of the biography—with little if any offsetting benefit. In cases like this, even if the copyright incentive is in general optimal, economics may provide us with good reasons to believe that a departure from the norm is warranted.

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Second, Landes and Posner recognize that, even aside from whatever incentive effect IP rights may (or may not) have, these rights can have several other effects, some of them beneficial. For example, IP law might reduce a variety of social costs that would be incurred in the absence of IP law. A recurring example is that of "congestion externalities," a cost that society as a whole would bear if too many people (for instance) wanted to make a film version of a particular novel, such that either (1) no one user would find it profitable to undertake the effort, or (2) the resulting multiple efforts would prematurely exhaust the public's interest in the underlying work. This cost may be lower if the copyright system confers upon copyright owners the exclusive right to prepare, or authorize the preparation of, derivative works based upon the copyrighted work. Another cost that IP may help to keep in check is the cost of self-help measures, such as building higher fences or more ingenious methods of encryption. Put another way, IP law may be a lower-cost substitute for some forms of self-help. An illustration is the law of trade secrets. Although trade secret protection may at the margin have some positive effect upon the incentive to invent, it discourages another important policy, public disclosure. Even so, trade secret protection may be socially efficient because it reduces the trade secret owner's need to invest in protective measures, such as impenetrable visual barriers (the famous case of *DuPont v. Christopher*[1] provides an illustration) or restrictive employment policies (such as employing only one's family members, in order to prevent the possibility that a disgruntled employee will disclose your trade secret to a competitor).

A related point is that patent and trade secret law complement each other in several ways. Landes and Posner present a novel argument that, even if patents have little if any positive effect on the rate of invention, they serve an important purpose in facilitating disclosure and licensing that would be more difficult to achieve if only trade secret protection were available.

[1] E.I. du Pont de Nemours & Co. v. Christopher, 431 F.2d 1012 (5th Cir. 1970).

Third, Landes and Posner recognize that, even if the incentive-versus-access problem is insoluble, theoretical and empirical models may be of use in assessing whether the current configuration of these laws is *likely* to affect incentives. The authors' formal economic models will be of most interest to economists, but their empirical studies should be of interest to lawyers and judges too. Among their more interesting findings are the estimated rates of depreciation of various types of intellectual property. (A high depreciation rate for, say, copyrights, would suggest that the value of most copyrights diminishes rapidly, in which case arguments for further extending the copyright term in order to further increase incentives are weakened.) According to Landes and Posner, the depreciation rate for patents and trademarks during the period studied averaged around 6 percent (for patents) and 6.5 percent (for trademarks), while the average for copyrighted works was 8.3 percent, although the rate slowed a bit toward the end of the 20th century. Interestingly, music copyrights have on average depreciated more slowly than have literary and graphic copyrights; but the depreciation rate for music copyrights began to increase in the 1950s and 1960s. Another empirical study suggests, contrary to what theory alone might have predicted, that the U.S. version of "moral rights" as set forth in the Visual Artists Rights Act has had little positive or negative economic impact upon visual artists. And a study of the Federal Circuit, which Landes and Posner will publish separately in a forthcoming issue of the University of Chicago Law Review, is consistent with the hypothesis that that court has been more pro-patent that its predecessor regional circuit courts of appeals.

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On the basis of their theoretical and empirical analyses, Landes and Posner at times suggest some fairly radical proposals—such as a system under which copyrights could be renewed indefinitely for a fee, but otherwise would lapse much sooner than under existing law. They argue that such a system would be an improvement over the status quo, which now keeps virtually every writing with even a modicum of originality under copyright for periods of up to a hundred years or more. Under the Landes and Posner proposal, the most valuable works might remain under copyright longer, but (they argue) this may not be as much of a problem as one might think—particularly if, as they recommend, courts interpret the fair use doctrine somewhat more generously than they sometimes do—and it might even have some benefits, to the extent that copyright renewal would confer an ongoing incentive to bring to the public's attention some otherwise long-forgotten works. The proposal is unlikely to go anywhere any time soon, insofar as it would require the United States to pull out of all of the major copyright treaties, including one that is binding upon all members of the World Trade Organization, but it does provide interesting food for thought. Indeed, one of the most valuable things about the book is its constant challenging of the reader's knee-jerk instincts towards either more or less protection for IP.

Probably the least surprising conclusion in the book is that trademark law promotes economic efficiency, meaning (again roughly) that it provides a clear surfeit of social benefits over costs. Trademarks, which protect words and other symbols that identify a unique source or sponsor of a product or service, make it easier for consumers to locate the products they want (in economic terms, they reduce consumer search costs). Imagine how difficult it would be to find the soft drink having the taste you prefer if there were no way to distinguish Coke from Pepsi prior to the point of purchase. At the same time, trademarks would be meaningless unless producers maintained a consistent level of quality in their products, and so a corollary effect of trademark protection is to provide an incentive for producers to invest in quality control.

Much of trademark doctrine can be viewed as consistent with these dual principles of reducing search costs and inducing quality control, at a reasonable administrative cost. For example, in determining whether a firm's commercial use of a word or other symbol infringes another firm's

trademark, courts employ a multifactor test to determine whether a substantial portion of the relevant class of ordinarily prudent purchasers are likely to be confused. Allowing the trademark owner to prevail on a showing of likely, as opposed to actual, confusion trades off one type of risk (that a court may enjoin a use that would not have caused any actual injury) for another, probably greater one (that waiting until confusion has occurred will cause irreparable damage to the trademark owner's reputation). At the same time, the trademark owner cannot prevail if only a small number of unusually gullible consumers would be confused, because in such a case consumers themselves are able to avoid confusion at lower cost than the alleged infringer.

The chapter dealing with antitrust and IP is illuminating, although it probably will be most rewarding for readers who do not already possess some basic understanding of antitrust economics and the new economic theories, such as network effects, that are often at issue in high-tech antitrust litigation such as the *Microsoft* case. Network effects, otherwise known as network externalities or consumption externalities, are said to exist when the value of an asset to a user increases with the number of other users. The telephone is the archetypal example: its value to you is nil unless at least one other person is connected to the network. Operating systems and some application programs arguably exhibit network effects, which means that there may be something of a natural tendency toward monopoly with respect to some "new economy" products—and also a good deal of effort devoted to gaining and maintaining monopoly power.

Landes and Posner do not reveal their views on *Microsoft* itself but do discuss how network effects can render certain claims, such as tying and predatory pricing, more plausible than they often are in the bricks-and-mortar world. Interestingly, they take issue with Robert Bork, who despite his public support for the government's case against Microsoft continues to express disagreement with the Supreme Court's 1922 opinion in *Standard Fashion*,[2] a case in which the Court held unlawful an exclusive dealing contract that Landes and Posner argue could be viewed as an effort to extend the duration of a monopoly by taking advantage of a type of network externality. They also disagree with Virginia Law School's Professor Edmund Kitch, who has argued that IP rights rarely confer monopoly power. Landes and Posner agree that characterizing all IP rights as monopolies is an exaggeration, but they make a convincing case that many IP rights do confer some degree, albeit minimal in many instances, of market power (often by way of monopolistic competition). They conclude the chapter with a note of caution, however, observing that antitrust enforcement "is not well adapted to deal swiftly and surely with technically complex activities"—an important point, because even if certain anticompetitive activities are more plausible in the new economy, the appropriate response of antitrust enforcers may not be all that obvious. As Landes and Posner also note, however, an adequate discussion of this topic would take them beyond the scope of the book.

Needless to say, not everyone will be convinced by every strand of the authors' analysis. The discussion of trademarks may leave some readers wishing for a more detailed discussion of certain topics, such as the different formulations of the functionality doctrine and their impact on competition among rival brands. There is relatively little about certain "hot" topics, such as peer-to-peer systems for distributing copyrighted music, or the Digital Millennium Copyright Act, or the internationalization of the IP system. A rare gaffe occurs when Landes and Posner assert that in countries which award patents to the first-to-file, as opposed to the first-to-invent—that is to say, in every country other than the United States—the patent applicant has no reason to search the

[2] Standard Fashion Co. v. Magrane-Houston Co., 258 U.S. 346 (1922).

unpatented prior art, to see if his invention is preempted. This is not correct, because even in countries that award patents to the first-to-file, unpatented prior art that anticipates or renders obvious the applicant's invention will result in the denial of a patent. In fact, most countries' patent offices will consider a *larger* universe of prior art than does our own. The error, however, is inconsequential to Landes and Posner's broader discussion of patents.

And, of course, some readers will need more convincing than others that IP law needs an infusion of economics—although, contra Priest, most IP lawyers and scholars by now probably agree on the usefulness of economic analysis to some degree. A final illustration may be helpful. Some people believe quite strongly that celebrities should have a right to control the commercial use of their names and other indicia of identity in advertising and on products. People who defend this right, which is known as the right of publicity and is recognized in about half of the states, including New York and California, typically do so on the basis of some version of natural-rights theory. People who hate the right of publicity tend to emphasize its potential conflict with other laws, including both copyright and the First Amendment. Landes and Posner, who discuss the right only briefly and in passing, find George Mason Law School Dean Mark Grady's explanation the best—namely, that the right of publicity prevents a congestion externality, in the form of a premature depreciation from overuse of the commercial value of celebrity images from which many people apparently derive some measure of satisfaction. A similar explanation might explain, in part, laws prohibiting the "dilution" (as opposed to infringement) of trademarks and, as above, the copyright right to prepare derivative works. Whether one's natural inclination is to love or hate the right of publicity or antidilution laws for the commonly cited reasons, the possibility that these laws may reduce congestion externalities should form some part of one's overall assessment of the laws' advantages and disadvantages. It is, at the very least, an important consideration.

The preceding example also points to a limitation on the uses of economic analysis. An economic theory that takes as a given consumer preferences, such as the satisfaction in purchasing products endorsed by celebrities or the status signaled by wearing clothes bearing designer trademarks, may well maximize consumer welfare by forbidding unauthorized but nonconfusing uses of celebrity indicia and famous marks. To the extent that one questions the value of the preference, however—perhaps our culture is *too* smitten with celebrity and status for its own good—one might reach an opposite conclusion as to the merits of publicity and antidilution rights. There is, in other words, another fundamental question that economics cannot answer, besides the incentive-versus-access problem, and that is *what* society's goals *should* be. Perhaps on balance the better view is to take existing consumer preferences as a given, rather than having Big Brother impose some vision of the common good; but this is a political and philosophical issue about which economics does not speak. What economics *can* do is to help us in predicting how best to attain our goals, whatever they may be, even if it cannot always provide the final word. Landes and Posner have not provided the final word, as they acknowledge, but their book does provide a masterful analysis of numerous ways in which IP law may advance or impede some of society's most important goals. ●