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INTELLECTUALIZING PROPERTY: THE TENUOUS CONNECTIONS BETWEEN LAND AND COPYRIGHT

STEWART E. STERK*

ABSTRACT

Increased use of the intellectual property label to describe copyright and related areas of law has spawned analogies to the protections afforded real property. These analogies ignore significant differences between the foundations that undergird real and intellectual property rights. In particular, real property rights operate to avoid breaches of the peace and tragedies of the commons—problems that do not arise with intellectual works—while copyright and other intellectual property rights are designed to provide an incentive to create, an incentive irrelevant when land is at issue. These disparities in justification caution against routine importation of real property concepts into copyright law.

After exploring the weak correlation between justifications for rights in land and in works of authorship, the article explores how the disparate justifications should and do shape doctrine. In particular, the article suggests that differences in the duration of rights, in the scope of the right to exclude, and in the availability of injunctive relief can be explained by differences in justification for property rights. The article then turns to the interplay between copyright and contract, and suggests that here, too, the difference in foundation for real and intellectual property rights cautions against resort to easy analogies to resolve unique and difficult problems.

^{*} Mack Professor of Law, Benjamin N. Cardozo School of Law. I would like to thank Vicki Been, David Carlson, Susan Crawford, Rochelle Dreyfuss, John Duffy, Niva Elkin-Koren, Harry First, Marci Hamilton, Justin Hughes, Mark Lemley, Diane Zimmerman, and participants at the NYU Colloquium on Innovation Policy for their insightful criticisms of earlier drafts.

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Although the "property" moniker is now firmly attached both to rights in land and rights in works of authorship, neither history nor logic required the

Even if conceptualization of copyright and patent as intellectual property is a recent phenomenon,

^{1.} The historical origin of the term "intellectual property" is a matter of some controversy. Mark Lemley has traced the origins of the term "intellectual property" as a common descriptor of copyright, patent, and trademark law to the United Nations' founding of the World Intellectual Property Organization (WIPO) in 1967. Mark A. Lemley, Romantic Authorship and the Rhetoric of Property, 75 Tex. L. Rev. 873, 895 n.123 (1997) (book review). Justin Hughes has observed, however, that the words "literary property" appear in eighteenth century state statutes, and that the Supreme Court used the phrase "literary property" in its famous 1918 decision in International News Service v. Associated Press, 248 U.S. 215, 233 (1918). Justin Hughes, Hurried Views of Digital Copyright (2005) (on file with author).

use of a common label to describe these disparate rights. From a historical perspective, copyright was in its infancy when Blackstone wrote that "[t]he law of real property ... is now formed into a fine artificial system, full of unseen connexions and nice dependencies; and he that breaks one link of the chain, endangers the dissolution of the whole." As a matter of logic, an identical set of copyright rules could have developed with tort labels rather than property labels. That is, copyright and patent infringement need not be treated as a species of theft or conversion, but could instead be treated as "business torts," akin to unfair competition or trademark infringement.

The choice of label, however, is not without consequence. Property rules are imagined (not always accurately) to be rule-like, rigid and formal.⁴ Tort

property analogies date from Sixth Century Ireland and the story of King Diarmed, who concluded that when a student copied his teacher's psalm book, the teacher owned both the original and the copy, reasoning by analogy: "To every cow her calf, and accordingly to every book its copy." Laurie Stearns, Comment, Copy Wrong: Plagiarism, Process, Property and the Law, 80 CAL. L. REV. 513, 535 (1992). For further discussion of the Diarmed story, see ALAN J. LATMAN, THE COPYRIGHT LAW 2 (5th ed. 1979); Linda J. Lacey, Of Bread and Roses and Copyrights, 1989 DUKE L.J. 1532, 1541. And British booksellers used property analogies drawn from Locke to support passage of the Statute of Anne. See generally Dane S. Ciolino & Erin A. Donelon, Questioning Strict Liability in Copyright, 54 RUTGERS L. REV. 351, 366 (2002); Mark Rose, Copyright and Its Metaphors, 50 UCLA L. REV. 1, 7–8 (2002).

- 2. Perrin v. Blake, (1772) 96 Eng. Rep. 392 (K.B.). The Statute of Anne, 1710, 8 Ann., c. 19 (Eng.), England's first copyright statute, was barely half a century old when Blackstone made his famous characterization of the law of real property.
- 3. Wendy Gordon has suggested that the common law of tort and restitution could accommodate the imposition of rights and duties to generate benefits akin to those provided by statutory intellectual property law. See generally Wendy J. Gordon, Of Harms and Benefits: Torts, Restitution, and Intellectual Property, 21 J. LEGAL STUD. 449 (1992); see also Wendy J. Gordon, Copyright As Tort Law's Mirror Image: "Harms," "Benefits," and the Uses and Limits of Analogy, 34 MCGEORGE L. REV. 533, 534–35 (2003).

Pamela Samuelson has noted that "[w]hat we now refer to as intellectual property law has long been part of unfair competition law." Pamela Samuelson, Information as Property: Do Ruckelshaus and Carpenter Signal a Changing Direction in Intellectual Property Law?, 38 CATH. U. L. REV. 365, 399 (1989). Adam Mossoff has noted that the first collection of rules and policies for American trade secret law appeared in the first Restatement of Torts, not the Restatement of Property. Adam Mossoff, What Is Property? Putting the Pieces Back Together, 45 ARIZ. L. REV. 371, 416 (2003). And a leading casebook concludes that "[t]he fundamental principles of trademark law have essentially been ones of tort [T]rademarks may not be thought of as analogous to 'property rights' at all." ROBERT P. MERGES ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 559 (2d ed. 2000).

4. Blackstone, in both his judicial opinions and his commentaries, contributed significantly to the conception of property as rigid and rule-laden. In addition to his characterization of real property law as a "fine artificial system," he wrote, in the Commentaries:

There is nothing which so generally strikes the imagination, and engages the affections of mankind, as the right of property; or that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe.

2 WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND 2 (photo. reprint 1978) (1766). Carol Rose has demonstrated that this vision of property as comprised of hard-edged rules is overstated, coexisting side-by-side with fuzzier doctrines that relieve parties from hardship caused by

doctrines are imbued with standard-like concepts of "reasonableness." A person who appropriates another's property is a "thief." No comparable term of opprobrium attaches to a tortfeasor who interferes with prospective profits. One might surmise then, that introduction of the property label into copyright and patent was not accidental. Neil Netanel has suggested that supporters of expanded copyright and patent protections invoked property terminology to seize rhetorical advantages not otherwise available. Moreover, general acceptance of the "intellectual property" label has spawned analogies to the protections afforded other forms of property—particularly real property.

Reasoning by analogy is as dangerous as it is ubiquitous. Even within the domain of real property, disparities in circumstance caution against routine importation of doctrines from one area to another. Similarly, differences between the structure of patent and copyright limit the persuasive force of analogical reasoning. The differences, however, are compounded when one

hard-edged rules. See generally Carol M. Rose, Crystals and Mud in Property Law, 40 STAN. L. REV. 577 (1988) [hereinafter Rose, Crystals and Mud]. Ultimately, Rose concludes that the distinction between crystals and mud is most critical at the level of rhetoric. Id. at 580, 610. See also Michael A. Carrier, Cabining Intellectual Property Through a Property Paradigm, 54 DUKE L.J. 1, 52–82 (2004) (discussing doctrinal limits on absoluteness of property rights); Carol M. Rose, Canons of Property Talk, or, Blackstone's Anxiety, 108 YALE L.J. 601 (1998); Joan Williams, The Rhetoric of Property, 83 IOWA L. REV. 277, 280–84 (1998) (discussing gap between rhetoric of absolute property rights and practice of more limited rights).

- 5. See, e.g., RESTATEMENT (SECOND) OF TORTS § 291 (1965):
- Where an act is one which a reasonable man would recognize as involving a risk of harm to another, the risk in unreasonable and the act is negligent if the risk is of such magnitude as to outweigh what the law regards as the utility of the act or of the particular manner in which it is done.
- 6. For invocation of the "theft" label in the copyright context, see, for example, Iowa State Univ. Research Found., Inc. v. Am. Broad. Co., Inc., 621 F.2d 57, 61 (2d Cir. 1980): "The fair use doctrine is not a license for corporate theft, empowering a court to ignore a copyright whenever it determines the underlying work contains material of possible public importance." See generally Samuelson, supra note 3, at 399; Jeremy Waldron, From Authors to Copiers: Individual Rights and Social Values in Intellectual Property, 68 CHI.-KENT L. REV. 842, 847 (1993) [hereinafter Waldron, Authors to Copiers] (noting that typically, something more may be said on behalf of the would-be copier than the would-be burglar).
- 7. As Mark Lemley has put it, "The importance of the shift in rhetoric is clear here: 'infringement' may be a morally neutral term, but 'theft' is clearly wrong, and courts are more likely to be inclined to punish the latter." Lemley, supra note 1, at 896.
- 8. Neil Weinstock Netanel, *Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J.L. & TECH. 1, 22 (2003) (copyright industries employ private property rhetoric to support lobbying efforts and litigation).
- 9. To take an extreme example, a Canadian government report on copyright declared, "ownership is ownership is ownership. The copyright owner owns the intellectual works in the same sense as the landowner owns land." Carys J. Craig, Locke, Labour and Limiting the Author's Right: A Warning Against a Lockean Approach to Copyright Law, 28 QUEEN'S L.J. 1, 13 (2002) (quoting Canada, Sub-Committee on the Revision of Copyright, A Charter of Rights for Creators, at 9 (Ottawa: Standing Committee on Communications and Culture, 1985)).

seeks to translate real property doctrine into the world of intellectual property.

Intellectual property rights rest on foundations considerably different from those that undergird real property rights. Unlike intellectual property rights, real property rights are in considerable measure designed to avoid breaches of the peace. Unlike real property rights, intellectual property rights are designed to provide an incentive to create. Real property rights operate to avoid the "tragedy of the commons"—a problem that does not arise with intellectual works—because once created, those works, unlike land, are non-rivalrous public goods.¹⁰

These disparities caution against routine importation of real property concepts and doctrines into the law of intellectual property. My objective here is not to ignore the commonalities between justifications for real and personal property rights, but to demonstrate that the disparities in justification have significant implications for the shape of intellectual property doctrine—particularly copyright doctrine, which serves as the principal focus of this article.

Part One canvasses the most common justifications for the institution of property and explains why most persuasive justifications for the institution of property do not translate into justifications for particular doctrinal rules. Part Two focuses on wealth-maximization, which does provide a framework for evaluating doctrinal rules, and demonstrates that the justifications for property rights in land correlate poorly with the justifications for property rights in works of intellectual creation. Part Three turns to doctrine. The part first demonstrates how, in several areas, disparities in doctrine track the disparities in justification. Finally, the part turns to an area in which current law remains uncertain—the interplay between copyright and contract—and demonstrates how the difference in the foundations for real and intellectual property can and should shape copyright doctrine.

I. WHY PROPERTY?: JUSTIFYING THE INSTITUTION

Why property? That question has engaged some of the world's leading minds for centuries.¹² Another question helps focus the inquiry: why not

^{10.} Cf. Ciolino & Donelon, supra note 1, at 372 (arguing that, unlike tangible property, works of authorship are both non-excludible and non-exhaustible).

^{11.} See Michael A. Carrier, supra note 4, at 5 (characterizing tendency to input property concepts into intellectual property law as "unfortunate" but "irreversible").

^{12.} Within the Anglo-American tradition, Locke, Hume, and Mill have all grappled with the question. See DAVID HUME, A TREATISE OF HUMAN NATURE bk. III, pt. II, § II (2d ed. 1978); JOHN LOCKE, TWO TREATISES OF GOVERNMENT bk. II, §§ 27–34 (Peter Laslett ed., Cambridge Univ. Press

property? The most common answer to that question rests on the inequalities of wealth and power that inevitably result when persons enjoy the opportunity to accumulate property. Another answer focuses on the limitations on personal freedom that accompany any regime of property rights; creation of a right in one person leads to a correlative duty in another. Another are the common of the limitations of a right in one person leads to a correlative duty in another.

To overcome these objections to the institution of property, justifications have followed a variety of paths. One—to which I will return—emphasizes the efficiency gains generated by a property system. A second, traceable to John Locke, focuses on labor and desert. The thrust of the labor/desert argument is that property rights are required in justice as a return for efforts made by a laborer that have left no one else worse off. A third path, traceable to Hegel, treats property as a necessary component in the development of personality. By transforming abstract individuals into persons with distinct individual characteristics, property enables persons to relate to one another in ways that would otherwise be impossible. A fourth

^{1963) (1690);} JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY bk. II, ch. 1 (1894).

Property also plays a central role in the work of Hegel and Kant. See G.W.F. HEGEL, PHILOSOPHY OF RIGHT ¶ 40 (T.M. Knox trans., Oxford Univ. Press 1967); IMMANUEL KANT, THE PHILOSOPHY OF LAW 61 (W. Hastie trans., Morrison & Gibb 1887).

^{13.} Among the most famous opponents of property rights was Proudhon, who wrote: "[E]very argument which has been invented in behalf of property ... always and of necessity leads to equality; that is, to the negation of property." PIERRE J. PROUDHON, WHAT IS PROPERTY 39-40 (Benj. R. Tucker, trans., The Humbolt Publishing Co.).

^{14.} See generally JEREMY WALDRON, THE RIGHT TO PRIVATE PROPERTY (Oxford Univ. Press 1988) [hereinafter WALDRON, PRIVATE PROPERTY] (creation of property right in one person imposes obligations on everyone else; obligations which are often onerous).

^{15.} Locke's justifications for property rights include utilitarian elements as well as rights-based elements focused on labor and desert. Thus, Locke argued that if privatization of common resources required the unanimous consent, "man might have starved, notwithstanding the plenty God has given him." Locke, supra note 12, § 28. See also WALDRON, PRIVATE PROPERTY, supra note 14, at 137 (noting that Locke's property theory has utilitarian strands); Richard Epstein, The Utilitarian Foundations of Natural Law, 12 HARV. J.L. & PUB. POL'Y 713, 733–34 (1989) (noting the utilitarian foundation of Locke's property theory); Seana Valentine Shiffrin, Lockean Arguments for Private Intellectual Property, in NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY 152 (Stephen R. Munzer ed., 2001) (reading Locke to justify acquisition of land because land could not be used effectively without exclusive control).

^{16.} See LAWRENCE BECKER, PROPERTY RIGHTS 36 (1977). For a critique of the notion that a laborer deserves the product of his labor, see WALDRON, PRIVATE PROPERTY, supra note 14, at 205 ("That seems odd in a situation where the sole merit of his deserving action consists in the fact that it benefits himself!").

^{17.} Hegel noted that:

A person by distinguishing himself from himself relates himself to another person, and it is only as owners that these two persons really exist for each other. Their implicit identity is realized through the transference of property from one to the other in conformity with a common will and without detriment to the rights of either.

HEGEL, supra note 12, ¶ 40. See also Justin Hughes, The Philosophy of Intellectual Property, 77 GEO.

path, advanced by Friedrich Hayek, treats private property as an essential pillar in the protection of political liberty. 18

Each of these last three justifications for property proves more successful as a foundation for the institution of property than as a justification for property rights in any particular category of asset. 19 Consider first the argument for property as a protection of political liberty. For Hayek, "It is competition made possible by the dispersion of property that deprives the individual owners of particular things of all coercive powers."²⁰ When individuals and groups pursue different ends, the market—governed by abstract rules of conduct—produces a spontaneous order that permits people to "live together in peace and mutually benefitting each other without agreeing on the particular aims which they severally pursue."²¹ Markets generate instability, reducing the potential for oppression by established groups. Property, in turn, serves as an essential foundation for the market.²² Nevertheless, the content of property rules can vary considerably without undermining the market's spontaneous order. 23 Indeed, Hayek acknowledged that the presence of externalities weakens the case for strong property rights in land.22

of the world. The private ownership of any valuable resource ... can confer the economic independence that permits genuine political and social choice.

L.J. 287, 343 (1988) ("Hegel argues that recognizing an individual's property rights is an act of recognizing the individual as a person."); Jeanne L. Schroeder, *Virgin Territory: Margaret Radin's Imagery of Personal Property as the Inviolate Feminine Body*, 79 MINN. L. REV. 55, 133–34 (1994). *But see* Edward J. McCaffery, *Must We Have the Right to Waste?*, in Munzer, *supra* note 15, at 81 (concluding that property is not necessary for Hegel's notion of personality).

^{18.} For Hayek, "[i]t is competition made possible by the dispersion of property that deprives the individual owners of particular things of all coercive powers." FRIEDRICH A. HAYEK, THE CONSTITUTION OF LIBERTY 141 (1960) [hereinafter HAYEK, CONSTITUTION]; see also John W. Chapman, Justice, Freedom, and Property, in PROPERTY: NOMOS XXII, at 293 (J. Roland Pennock & John W. Chapman eds., 1980) [hereinafter PROPERTY: NOMOS XXII] (concluding that for Hayek, "[a] competitive economy based on private property is the institutional guarantee of freedom.").

^{19.} Cf. BECKER, supra note 16, at 23 (distinguishing between general and specific justifications for property rights).

^{20.} HAYEK, CONSTITUTION, supra note 18, at 141. See also id. at 124: "... [t]he whole system of separate enterprises, offering both employees and consumers sufficient alternatives to deprive each organization from exercising coercive power, presupposes private ownership and individual decision as to the use of resources."

^{21. 2} FRIEDRICH A. HAYEK, LAW, LEGISLATION AND LIBERTY 109 (1976).

^{22.} See Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1315, 1352 (1993): [P]rivate property, by insulating owners from expropriations by neighbors and state officials, provides an economic security that may embolden owners to risk thumbing their noses at the rest

^{23.} Of course, Hayek might have supported individual property rules, and in particular intellectual property rules, on market efficiency grounds, independent of their impact on political liberty. See Waldron, Authors to Copiers, supra note 6, at 855–56, 880 (associating Hayek with marginal productivity theory, while emphasizing Hayek's caution that market rewards are unrelated to desert).

^{24. 3} FRIEDRICH A. HAYEK, LAW, LEGISLATION AND LIBERTY 43 (1976):

For Hegel, too, property's significance did not depend on the form or content of property rules.²⁵ In Hegel's scheme, property enables the abstract person to develop individuating characteristics that enable her to engage in intersubjective relations.²⁶ Hence, property is a necessary stage in the process of individual social development.²⁷ For Hegel, however, personality theory dictates no particular form of property right.²⁸ Indeed, Hegel did not believe that philosophy could provide answers to positive questions of law.²⁹

At first glance, the labor/desert theory might appear to justify property in a specific asset: the asset produced by dint of one's labor. But virtually no asset of value can be produced by labor alone; labor must be combined with some combination of other scarce resources to produce something in which the laborer seeks "property." The laborer who consumes scarce resources in creating a thing of value violates a fundamental premise of labor theory: the premise that the laborer's appropriation leaves no one else worse off than before the appropriation. As a result, the laborer's desert-based claim is at

[O]wnership of a particular movable subject generally confers on the owner control over most of the beneficial or harmful effects of its use. But as soon as we turn from commodities in the narrow sense to land, this is true only to a limited degree. It is often impossible to confine the effects of what one does to one's own land to this particular piece; and hence arise those 'neighborhood effects' which will not be taken into account so long as the owner has to consider only the effects on his property.

See also id. at 109. On the other hand, Robert Ellickson has argued that "land remains a particularly potent safeguard of individual liberty" because "land can provide a physical haven to which a beleaguered individual can retreat." Ellickson, supra note 22, at 1353.

- 25. See WALDRON, PRIVATE PROPERTY, supra note 14, at 129 (noting that Hegel is concerned with property not as a mechanism for deriving sustenance or enjoyment in an object, but "rather with a person's moral or spiritual interest in being in control of or responsible for some external object connected essentially with his well-being.").
- 26. See id. at 375-77; Jeanne L. Schroeder & David Gray Carlson, The Appearance of Right and the Essence of Wrong: Metaphor and Metonymy in Law, 24 CARDOZO L. REV. 2481, 2495 (2003); Stewart E. Sterk, Rhetoric and Reality in Copyright Law, 94 MICH. L. REV. 1197, 1241 (1996).
 - 27. WALDRON, PRIVATE PROPERTY, supra note 14, at 348.
- 28. Others, while acknowledging that Hegel himself says little about intellectual property rights beyond acknowledging the instrumentalist justification, have articulated personality-based justifications based loosely on Hegel. See Hughes, supra note 17, at 331–350, 338–39.
 - 29. See Schroeder, supra note 17, at 131 n.287.

Indeed, with respect to the boundaries of plagiarism—an area today comprised within intellectual property—Hegel wrote that "[t]here is no precise principle of determination to answer these questions, and therefore they cannot be finally settled either in principle or by positive legislation." HEGEL, supra note 12, ¶ 69.

- 30. Locke avoided this problem by assuming that labor is responsible for nine-tenths or ninetynine hundredths of the value of the products of the earth. LOCKE, *supra* note 12, § 40. That assumption can only be accurate if other resources are not scarce resources. Today, the assumption would hold only in relatively trivial circumstances—as, for instance, acquisition of a small rock collection. *See* BECKER, *supra* note 16, at 56.
- 31. Locke's famous proviso requires that there be "enough, and as good left in common for others." LOCKE, *supra* note 12, § 27. That condition can only be met in two circumstances: (1) when the resource appropriated by the laborer is not scarce (and therefore has no economic value) or (2)

best a claim to value proportionate in some way to the benefits created by his efforts, not to any particular form of property.³²

Unlike labor/desert, personality, and political liberty theories, all of which provide justifications for the institution of property, but not for any particular rules, justifications based on wealth-maximization do operate at the "micro" level. That is, one can ask meaningfully whether a rule protecting individual ownership of land generates more wealth than a regime of free use, common ownership or state ownership.³³ Similarly, one can ask whether a rule permitting an inventor or an author to control dissemination of her work (permanently or for a limited period) generates more wealth than a regime in which others are free to reproduce and disseminate the work as they see fit.³⁴ The answers to these questions may not be obvious, but the questions themselves are not incoherent.

None of this suggests that wealth maximization can generate a full-blown set of optimal property rights. Social norms and customs inevitably influence any efficiency calculus.³⁵ For instance, in a society where exclusion from a decisionmaking process is painful and parties can rapidly reach agreement on uses of land, communal ownership may have significant advantages over private ownership—advantages that disappear in a society that treats decisionmaking as a cost rather than a benefit.³⁶ Nevertheless, wealth-maximization can provide a society-specific framework for evaluating property rules, even if that framework is subject to contest at every point. The next section begins to develop that framework with respect to land and works of authorship—the objects that have recently evoked so many analogies.

where the resource is scarce, but the laborer appropriates no more than his proportionate share of the resources available for appropriation.

The inability to meet Locke's proviso is perhaps clearest in contemporary patent law, where an inventor who obtains a patent forecloses other inventors from using independently developed inventions.

^{32.} Lawrence Becker explains that the labor desert argument "gives no unequivocal grounds for the private ownership of the things produced unless there is no substitute for it acceptable in terms of the goals of the labor." BECKER, *supra* note 16, at 54. Becker notes that where production of things is a means to an end—security, power, etc.—and where the state can provide those things as the laborers' deserts without granting ownership rights over the thing produced, labor theory does not justify private ownership of the particular thing. *Id*.

Jeremy Waldron advances a more direct attack on Lockean desert theory: if an individual's personality is itself a cultural product, how can a person deserve property in himself and his intellectual work? See Waldron, Authors to Copiers, supra note 6, at 879-80.

^{33.} See Munzer, supra note 15, at 218; see also RICHARD A. POSNER, THE ECONOMICS OF JUSTICE 70–72 (1983).

^{34.} See, e.g., William M. Landes & Richard A. Posner, Indefinitely Renewable Copyright, 70 U. CHI. L. REV. 471 (2003).

^{35.} See, e.g., Duncan Kennedy & Frank I. Michelman, Are Property and Contract Efficient?, 8 HOFSTRA L. REV. 711, 728-29 (1980).

^{36.} Stewart E. Sterk, Neighbors in American Land Law, 87 COLUM. L. REV. 55, 94 (1987).

II. LAND AND WORKS OF AUTHORSHIP AS OBJECTS OF PROPERTY RIGHTS

A. Propertizing Resources: The Global Case and its Limits

Property rights play an essential role in neoclassical economic theory. Without property rights, the signaling process so critical to an efficient market would break down.³⁷ For this reason, neoclassical theory has generally assumed the existence of property rights.³⁸ Recent property theorists, building on the work of Harold Demsetz,³⁹ have examined more carefully the conditions under which property rights develop. Their work suggests caution about the global conclusion that greater propertization leads to greater efficiency.⁴⁰

Consider how Adam Smith's invisible hand leads to efficient levels of production. Consumers, through their purchasing decisions, signal manufacturers to continue production until the marginal cost of production equals the price consumers are willing to pay. Once the cost of producing an additional widget exceeds the value of the widget (as measured by the price consumers are willing to pay), the widget maker has no incentive to produce additional widgets. Simultaneously, the price mechanism assures that widgets will be put to their highest and best use: prospective purchasers who attach less value to widgets than the marginal cost of production will not purchase widgets; those who attach more value will continue to purchase until the marginal value to them declines to the marginal cost of widget production.⁴¹

^{37.} See Harold Demsetz, Toward a Theory of Property Rights II: The Competition Between Private and Collective Ownership, 31 J. LEGAL STUD. S653, S654 (2002) [hereinafter Demsetz, Theory of Property Rights II] (noting that "the price-determining market conditions that derive from the perfect-competition model, reflect private ownership institutional arrangements.").

^{38.} Id.

^{39.} Demsetz' pioneering article was Harold Demsetz, Toward a Theory of Property Rights, 57 AM. ECON. REV. 347 (1967) [hereinafter Demsetz, Theory of Property Rights].

^{40.} See, e.g., Michael A. Heller, The Tragedy of the Anticommons: Property in the Transition from Marx to Markets, 111 HARV. L. REV. 621 (1998) (emphasizing that too many overlapping property rights can inhibit efficient use of resources); Saul Levmore, Two Stories About the Evolution of Property Rights, 31 J. LEGAL STUD. S421 (2002) (noting that property rights expansion and contraction might reflect transaction costs, or alternatively interest group pressure); Henry E. Smith, Exclusion versus Governance: Two Strategies for Delineating Property Rights, 31 J. LEGAL STUD. S453 (2002) (noting that governance mechanisms associated with common property rather than exclusion rules traditionally associated with private property sometimes lead to more efficient use).

^{41.} See generally PAUL A. SAMUELSON & WILLIAM D. NORDHAUS, MICROECONOMICS 402-03 (1989) (discussing basic theorem of welfare economics, which holds that competitive markets will generate allocative efficiency).

Note that this process requires property rights in widgets.⁴² If consumers cannot own widgets—if all widgets are free for anyone to use—consumers will not pay manufacturers to make more widgets, even if consumers would prefer more widgets and fewer of some other goods or services. In addition, so long as widgets are free for all to use, those persons who seek to use them can ignore the possibility that others might place a higher value on widgets. Property rights in goods create incentives for manufacturers to produce goods purchasers want and incentives for purchasers to put those goods to value-maximizing uses. 43 Of course, central planners could decide how many widgets manufacturers should make and how consumers should use them. but economists—bolstered by the experience of Soviet-style planned economies—almost universally believe that the "invisible hand" of the market is more likely to anticipate and satisfy consumer demand.⁴⁴ This rosy picture might lead one to conclude that propertizing things of value always leads to efficiency gains; thus, much copyright literature starts with that assumption.⁴⁵ But the thesis that propertization generates efficiency gains is subject to significant qualification.

1. Qualifications from Within the Efficiency Paradigm

Propertization is not costless. First, defining property rights can be costly.⁴⁶ In a regime permitting free use of a particular resource, the need to draw boundaries between what is yours and what is mine disappears. Land lends itself to clear boundaries more than most resources,⁴⁷ but propertization

^{42.} See Demsetz, Theory of Property Rights II, supra note 37, at S654.

^{43.} As Robert Ellickson has put it in the context of land, "Compared to group ownership, not to mention an open-access regime, private property tends best to equate the personal product of an individual's small actions with the social product of those actions." Ellickson, *supra* note 22, at 1327.

^{44.} See WALDRON, PRIVATE PROPERTY, supra note 14, at 9 ("It is now accepted that a centralized command economy, in which all productive decisions were taken on the basis of central allocation of scarce resources, would lead, in the conditions of modern industry, to radically inefficient and perhaps catastrophic results."); Demsetz, Theory of Property Rights II, supra note 37, at 5664 (noting that "central planning depends on acquisition of knowledge about which goods are wanted in what quantities, but has no good method for enabling central planners to acquire that knowledge").

^{45.} See, e.g., Landes & Posner, supra note 34, at 475 (identifying as a basic proposition believed by most economists that "all valuable resources, including copyrightable works, should be owned...").

^{46.} See YORAM BARZEL, ECONOMIC ANALYSIS OF PROPERTY RIGHTS 91–104 (2d ed. 1997) (cataloguing examples in which cost of defining and enforcing rights lead potential owners to leave rights unpropertized); see also Terry L. Anders & P.J. Hill, The Evolution of Property Rights: A Study of the American West, 18 J.L. & ECON. 163 (1975).

^{47.} Cf. Henry Hansmann & Reinier Kraakman, Property, Contract, and Verification: The Numerus Clausus Problem and the Divisibility of Rights, 31 J. LEGAL STUD. S373, S415-16 (2002) (concluding that a "simple labeling system (for example, fences) is adequate to support division of property rights in land along physical boundaries...").

nevertheless requires extensive surveys,⁴⁸ not to mention determinations about the scope of the right to exclude, transmit, and divide property rights. Definitional problems may be even more significant with other resources. If you write a novel, for example, how much of your work can I use without infringing your copyright?

Second, even the most clearly defined property rights sometimes require enforcement.⁴⁹ Property rights are of limited value if no consequences are ever visited upon a person who violates those rights.

Third, although standard justifications of property rights emphasize property's role in reducing transaction costs, ⁵⁰ propertization sometimes increases transaction costs. ⁵¹ Property's potential to increase transaction costs is especially great in those areas where a no-property regime would generate little potential for conflict. Consider, for instance, the traditional maxim "cujus est solum ejus est usque ad coelum" (to whomsoever the soil belongs, he owns also to the sky). Although traditionally used to resolve building encroachment cases, ⁵² the maxim by its terms would apply to give a landowner the right to prevent airplane overflights. But such a result would create a transaction cost nightmare; airlines would need permission from countless landowners before putting a plane in the air. For that reason, courts have refused to extend the maxim to airplane overflights. ⁵³

Moreover, the benefits associated with a regime of propertization depend on the nature of the market for the propertized good. When propertization facilitates creation of competitive markets, propertization tends to generate

^{48.} Robert Ellickson has observed that "advances in surveying and fencing techniques may enhance the comparative efficiency" of property as an institution. Ellickson, *supra* note 22, at 1328–29.

^{49.} It is, of course, true that more clearly defined rights typically generate fewer enforcement costs than fuzzier rights. For example, Ellickson has noted that "[a] key advantage of individual land ownership is that detecting the presence of a trespasser is much less demanding than evaluating the conduct of a person who is privileged to be where he is. Monitoring boundary crossings is easier than monitoring the behavior of persons situated inside boundaries." *Id.* at 1327–28.

^{50.} See Demsetz, Theory of Property Rights, supra note 39, at 347–52 (noting that communal ownership of land generates large transaction costs that can be avoided if a single owner co-ordinates use of land).

^{51.} See generally Levmore, supra note 40, at S424; see also id. at S434-35 (noting how private ownership of roads might lead to inefficient use if toll collection imposed high transaction costs).

^{52.} See, e.g., Peters v. Archambault, 278 N.E.2d 729 (Mass. 1972).

^{53.} See, e.g., United States v. Causby, 328 U.S. 256, 261 (1946), where Justice Douglas said of the maxim: "But that doctrine has no place in the modern world. The air is a public highway, as Congress has declared. Were that not true, every transcontinental flight would subject the operator to countless trespass suits. Common sense revolts at the idea." See generally Thomas W. Merrill, Trespass, Nuisance, and the Costs of Determining Property Rights, 14 J. LEGAL STUD. 13, 35-36 (1985): Ellickson, supra note 22, at 1363-64; Saul Levmore, Property's Uneasy Path and Expanding Future, 70 U. CHI. L. REV. 181, 192 (2003).

efficient production and development of the propertized resource. But when propertization results in markets characterized by some degree of monopoly power, the efficiency advantages of propertization become more equivocal; imperfect markets are accompanied by deadweight losses that can equal or even exceed the efficiency gains generated by propertization.⁵⁴

Works of authorship furnish an example. In a world that does not recognize property rights in such works, one would expect (1) fewer works; and (2) underexploitation of some of those works, because investment in those works could be captured without cost by other potential exploiters. Propertizing works of authorship cures those inefficiencies, but introduces a new one: if the holders of a property right in the work of authorship enjoy market power, they face a downward sloping demand curve, which induces them to restrict supply, generating deadweight losses. If, by contrast, the holder of a property right enjoys no market power, the potential for deadweight losses disappears. ⁵⁶

2. Qualifications from Outside the Efficiency Paradigm

Much property scholarship assumes that the impact of a propertization regime can be reduced to quantifiable costs and benefits. The assumption, however, is not universal. Neil Netanel, for instance, contends that economic approaches to copyright "threaten to diminish" copyright's "central role in promoting public education and expressive diversity." For Netanel, copyright's purpose is "to underwrite political competency," leaving "allocational efficiency as a secondary consideration." Netanel argues that the state should define entitlements in a way that "augments citizens' capacity for independent-minded participation in public discourse." A property right in works of authorship becomes important because "a strong self-reliant expressive sector whose roots are outside the state . . . constitutes an indispensable ingredient of representative democracy." At the same

^{54.} Saul Levmore warns that when the efficiency case for property protection is equivocal, interest group pressures tend to expand property protection, in part because there is no clear efficiency case to rebut their propertization claims. Levmore, *supra* note 53, at 192–93.

^{55.} See infra text accompanying notes 90-92.

^{56.} See SAMUELSON & NORDHAUS, supra note 41 at 236–38 (discussing losses resulting from monopoly power); HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE, § 2.3(c), at 75 (2d ed. 1999) (discussing deadweight losses created by exclusive rights).

^{57.} Neil Weinstock Netanel, Copyright and a Democratic Civil Society, 106 YALE L.J. 283, 341 (1996).

^{58.} Id. at 364.

^{59.} Id. at 346.

^{60.} Id. at 360.

time, excessively broad copyright protection "would stifle expressive diversity and undermine copyright's potential for furthering citizen participation in democratic self-rule." Hence, property in creative works should be defined to further copyright's democratic purpose, not to maximize wealth. As Netanel puts it, "The activities and transactions that copyright encourages are in, but not of, the market."

One might recast Netanel's arguments in economic terms by treating improved public discourse, and the consequent increase in the effectiveness of democratic government, as benefits that an owner of information cannot internalize. The argument is not peculiar to works of authorship. Carol Rose has developed a similar argument to explain the need for public, as opposed to private, roads: commerce, facilitated by public roads, contributes to the "political synergies of democratic self-governance." In both cases, the argument is that complete propertization would result in too little interchange of ideas and discourse.

The argument remains subject to debate. Polk Wagner, for instance, has argued that increased propertization of information will expand the intellectual commons rather than diminish it.⁶⁵ He emphasizes that even in a regime that accords owners of information broad rights over works of authorship, it will be virtually impossible to control derivative information associated indirectly with the creation of core information.⁶⁶ As a result, if the incentives generated by propertization work as theorized, the result will be increased availability of derivative information.⁶⁷ In essence, Wagner focuses on the external benefits associated with propertization, while Netanel focuses on external costs.

Whether external benefits or external costs predominate may be an empirical question that depends on the nature of the resource at issue. But the empirical nature of the question undermines the case for global propertization of resources, and it simultaneously undermines the case for analogizing

^{61.} Id. at 364.

^{62.} Id. As Netanel puts it, law should not "treat creative expression as simply another commodity..." Id.

^{63.} *Id*.

^{64.} Carol M. Rose, *The Public Domain: Romans, Roads, and Romantic Creators: Traditions of Public Property in the Information Age*, 66 LAW & CONTEMP. PROBS. 89, 98 (2003) [hereinafter Rose, *Roads*]. Rose notes that public squares and other places for public speech and political communication are subject to similar public claims on tangible property. *Id.*

^{65.} R. Polk Wagner, Information Wants to Be Free: Intellectual Property and the Mythologies of Control, 103 COLUM. L. REV. 995, 1002 (2003).

^{66.} Id. at 1010-16 (cataloguing obstacles to control of derivative information, including enforcement costs, market pressures, and technological limitations).

^{67.} See id. at 1010.

between land and works of authorship. If the case for propertization of valuable resources were a global one, analogies between real property and intellectual property would generally be unproblematic. But once it becomes apparent that the case for propertization is context-specific, analogies require more careful scrutiny. In particular, any evaluation of the strength of the analogy requires careful consideration of the supposed benefits associated with propertizing the particular resource⁶⁸—the subject of the next several sections.

B. Property as a Protection Against Breach of the Peace

At least since Aristotle, legal thinkers have justified property as a mechanism for avoiding quarrels and settling conflicts.⁶⁹ Even the most libertarian of theorists acknowledge that the state must play a critical role in preventing feuds and controlling violence.⁷⁰ When land is involved, the potential for quarrels is particularly significant. As a New Jersey court put it, "Two men cannot plow the same furrow."⁷¹ Legal rules—property law rules—allocate rights in land, reducing the potential for conflict among potential users of land.

Land need not be divided into privately-owned discrete parcels to reduce the potential for quarrels. State ownership or common ownership would suffice, so long as clearly demarcated rules allocate each scarce use right to a particular person or group or provide a mechanism for resolving disputes

^{68.} Thomas Merrill has identified in the work of Demsetz three distinct benefits of propertization, each of which Demsetz presents in the language of externalities. Thomas W. Merrill, The Demsetz Thesis and the Evolution of Property Rights, 31 J. LEGAL STUD. S331, S331–32 (2002). Other than property's role as a means of reducing transaction costs, Merrill focuses on property as an institution for optimal development of resources (see infra section II.C), and as an institution for reducing the rent dissipation associated with open access regimes (see infra section D). Id.

^{69.} THE POLITICS OF ARISTOTLE, § 1263(a), (b) (Ernest Barker trans., 1946): "When everyone has his own separate sphere of interest, there will not be the same ground for quarrels; and the amount of interest will increase, because each man will feel that he is applying himself to what is his own." Id. See also SAMUEL PUFENDORF, OF THE LAWS OF NATURE bk. IV, ch. iv, § 5, at 322; see also Charles Donahue, Jr., The Future of the Concept of Property Predicted from its Past, in PROPERTY: NOMOS XXII, supra note 18, at 45 (tracing Western property's origin as a dispute-resolution mechanism, but indicating that use of property as a dispute resolution mechanism might have been "an accident of chronology.").

^{70.} See ROBERT NOZICK, ANARCHY, STATE AND UTOPIA 11 (1974). Thus, Robert Nozick describes the state of nature as one in which "private and personal enforcement of one's rights . . . leads to feuds, to an endless series of acts of retaliation and exactions of compensation. And there is no firm way to settle such a dispute, to end it and to have both parties know it is ended." Id. Nozick then demonstrates how the need to secure protection services leads to development of the "minimal state." Id. at 26-28, 51-53, 118-20.

^{71.} Mastbaum v. Mastbaum, 9 A.2d 51, 55 (N.J. Ch. 1939).

over use rights.⁷² Those rules need not derive from positive law; custom might suffice to prevent conflict.⁷³ What is critical, however, is some mechanism for assuring that only one person plows each furrow.⁷⁴ A common ownership regime that permitted each individual to make "free use" of land would inevitably generate conflict among potential users.⁷⁵

By contrast, for resources that are not scarce property rights are not necessary to promote conflict avoidance or conflict resolution. So long as a potential user can find as much as he can use of a resource, why expend energy fighting with other potential users? "Free use" regimes have flourished, for instance, with respect to water—at least in those areas where water has been plentiful. 76

Property rights are similarly unnecessary to prevent conflicts with respect to man-made non-rival goods. Consider, for instance, the beacon of a lighthouse. Use of the beacon by one boat does not diminish the beacon's value to other boats. As a result, a "free use" regime is unlikely to generate conflicts among boats. The same is true with respect to roads (at least until congestion leads to "road rage"); use of a road by one traveler does not diminish the road's value for other travelers, reducing the occasion for conflict.⁷⁷

Building lighthouses and roads requires an expenditure of resources. Property rules might be helpful in assuring that appropriate resources are devoted to creating these non-rival goods. ⁷⁸ For present purposes, however, the critical point is that property rules are not necessary to prevent conflict over the use of these resources; two men cannot plow the same furrow, but two boats can be guided by the same beacon, and two travelers can take the same road.

^{72.} Cf. Henry E. Smith, Exclusion versus Governance: Two Strategies for Delineating Property Rights, 31 J. LEGAL STUD. S453, S454-55 (2002) (contrasting exclusion (private property) with governance (common property) as strategies for resource allocation).

^{73.} See generally ROBERT C. ELLICKSON, ORDER WITHOUT LAW (1991).

^{74.} As Henry Smith has noted, that assurance can be provided either by a private property regime that focuses on exclusion rights or on a common property regime that incorporates a set of governance rules. See generally Smith, supra note 72.

^{75.} See Ellickson, supra note 22, at 1328 (discussing increased policing difficulties generated by common ownership).

^{76.} See generally Joseph W. Dellapenna, The Law of Water Allocation in the Southeastern States at the Opening of the Twenty-First Century, 25 U. ARK. LITTLE ROCK L. REV. 9 (2002).

^{77.} Carol Rose has argued that low levels of congestibility cannot be the only reason for permitting free use of roads; she emphasizes the network effects that make roads more valuable as more people use them. Rose, *Roads*, *supra* note 64, at 97–99.

^{78.} For instance, government might permit creation of private toll roads and then permit the toll road operators to charge tolls reflecting their expenses. See Carol Rose, The Comedy of the Commons: Custom, Commerce, an Inherently Public Property, 53 U. CHI. L. REV. 711, 752 (1986).

Works of intellectual creation—inventions, books, songs, computer programs—are non-rival goods in the same sense as lighthouses and roads. Once intellectual works are created, use by multiple persons does not diminish their value to other users. Indeed, network effects may make them more valuable if they are used widely. As a result, there is little potential for conflict among users, and property rights are not necessary to avoid such conflicts.

Of course, failure to propertize works of authorship might spur violence—perhaps in the form of technological warfare—by creators against users who fail to pay for the works that they use. 82 Conversely, propertization could spur warfare by users against creators who limit access to their non-rival works. Failure to propertize and propertization present reciprocal risks of violence by the parties disadvantaged by the chosen legal regime. There is no *a priori* basis for assuming that a regime marked by propertization will generate fewer (or more) breaches of the peace than a regime that does not propertize works of authorship. Instead, the incidence of violence will depend on the relative power of the competing interest groups and on whether those disadvantaged by the applicable rule can accept the fairness of the rule.

Avoidance of conflict, then, provides no systematic justification for propertizing works of authorship, in marked contrast to the situation with land where the rival nature of the resource makes propertization a useful tool for avoiding breaches of the peace.

C. Property Rights as Incentives to Create

As we have seen, recognizing property rights in widgets generally leads to marginal cost pricing of widgets, which, in turn, leads to an efficient level of widget production. Marginal cost pricing, however, leads to underproduction of public goods—those that can be enjoyed by additional consumers at no marginal cost.⁸³ Works of intellectual creation typically fall

^{79.} Intellectual works are nonrivalrous public goods in the sense that they cannot be depleted by overuse. Wagner, *supra* note 65, at 1001; *see also* James Boyle, *Cruel, Mean, or Lavish? Economic Analysis, Price Discrimination and Digital Intellectual Property*, 53 VAND. L. REV. 2007, 2015 (2000).

^{80.} Id. at 2012 (summarizing economic analysis of information as a public good).

^{81.} See Stephen Breyer, The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs, 84 HARV. L. REV. 281, 288-89 (1970) (noting that property rights in works of intellectual creation are not needed to prevent congestion or strife).

^{82.} See generally Douglas Lichtman, How the Law Responds to Self-Help (John M. Olin Law & Econ. Working Paper No. 232, 2d Series, 2004) (discussing potential for self-help in copyright law).

^{83.} National defense and lighthouses are classic examples. See Mark Lemley, The Economics of

into this category. Once an author writes a book, or a producer makes a movie, the marginal cost of making the book or movie available to consumers is near zero. Marginal cost pricing, then, would lead to a price of zero, which would yield the author or producer no return on effort expended in creating the work.⁸⁴ Ultimately, the result will be underproduction of books, movies, and other works of intellectual creation.⁸⁵

Intellectual property rights address this danger of underproduction. By giving the author an exclusive right to reproduce her work, copyright eliminates the potential that competitors will offer the author's work at the marginal cost of reproduction. Once relieved of competition by potential copyists, some authors—like monopolists—face downward-sloping demand curves. As a result, the author will produce copies only until marginal revenue (not price) equals marginal cost, allowing the author to recover some of the costs incurred in developing her work. In other words, just as property rights create an incentive for manufacturers to make the optimal number of widgets, intellectual property rights create an incentive for authors (and inventors) to create (very roughly) the optimal number of writings and inventions.

Whatever merit the incentive justification has for intellectual property rights—and, for that matter, for property rights in widgets—the justification is not applicable to property rights in land. Because land is fixed in quantity, no set of incentives will result in creation of more.

Improvement in Intellectual Property Law, 75 TEX. L. REV. 989, 995 (1997) [hereinafter Lemley, Economics of Improvement].

^{84.} See Netanel, supra note 57, at 292.

^{85.} Lemley, Economics of Improvement, supra note 83, at 995.

^{86.} See, e.g., Wendy J. Gordon, Intellectual Property as Price Discrimination: Implications for Contract, 73 CHI.-KENT L. REV. 1367, 1370-72 (1998).

^{87.} Intellectual property rights do not transform all authors into monopolists, but they do confer market power on some authors. In Jamie Boyle's words, "The question of whether a monopoly exists is one that is determined by the availability of substitute goods, not the shape of the legal entitlement." Boyle, *supra* note 79, at 2018.

^{88.} The correlation is rough because there exists no a priori basis to determine whether the value of the additional works generated by stronger intellectual property protection would exceed the increased deadweight loss associated with the works that would have been created even without the additional protection. Indeed, some have argued that information markets cannot operate efficiently. See id. at 2013 (citing Sanford J. Grossman & Joseph E. Stiglitz, On the Impossibility of Informationally Efficient Markets, 70 AM. ECON. REV. 393 (1980)); Wendy J. Gordon, Assertive Modesty: An Economics of Intangibles, 94 COLUM. L. REV. 2579, 2590 (1994).

Polk Wagner has introduced an additional complication. He argues that even a system of strong intellectual property protection will fail to give a work's creator property rights over derivative information associated indirectly with creation. See Wagner, supra note 65, at 1002-10. As a result, if stronger protections do in fact incentivize creation of works, the value realized by the creator understates the total social gain generated by that strong protection. Id. at 1016-35.

D. Property and the Tragedy of the Commons

1. Real and Intellectual Property: The Conventional View

Much as property rights in land have been justified as a mechanism to prevent underinvestment in land, property rights have also been justified as a mechanism to prevent overexploitation. Garrett Hardin's now-famous metaphor—the tragedy of the commons⁸⁹—captures the essence of the problem.⁹⁰ A common ownership regime results in overuse of resources because no individual user has an incentive to consider the effect of his own use on other potential users. Private property in land assures that these externalities are internalized to a single person—the owner of the land. The owner will act to maximize the land's value, resulting in efficient use.

Scholars have questioned whether intellectual property presents the same danger of overuse.⁹¹ Because intellectual works are public goods—one person's consumption of a work does not interfere with consumption by others—property rights are not necessary to internalize externalities.⁹² At the same time, because intellectual works are public goods, propertizing them has the potential to generate inefficient underuse.⁹³

The fundamental difference between tangible and intellectual property is that intellectual property is a nondepletable commons, while tangible property necessarily depletes with use. "The tragedy of the commons" is that failure to recognize perpetual and transferable property rights in tangible property leads inevitably to "overgrazing," as soon as the item of property enters the public domain from which everyone may draw freely. Recognition of perpetual property rights leads to economic efficiency, because a rational owner will optimize the balance between present and future consumption.

There can be no overgrazing of intellectual property, however, because intellectual property is not destroyed or even diminished by consumption. Once a work is created, its intellectual content is infinitely multipliable.

Dennis S. Karjala, Statement of Copyright and Intellectual Property Law Professors in Opposition to H.R. 604, H.R. 2589, and S. 505, The Copyright Extension Act 9 (Jan. 28, 1998), reprinted in Landes & Posner, supra note 34, at 485.

^{89.} Garrett Hardin, The Tragedy of the Commons, 162 Sci. 1243 (1968).

^{90.} See generally Lemley, Economics of Improvement, supra note 83, at 1045.

^{91.} See, e.g., Breyer, supra note 81, at 288-89; Julie E. Cohen, Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management," 97 MICH. L. REV. 462, 502 (1998); Rose, Roads, supra note 64, at 90 (noting that tragedy of the commons argument for private property falls away in intellectual space "since there is no physical resource to be ruined by overuse."); Wagner, supra note 65, at 1001 ("Because such goods cannot be depleted by overuse, theories based on avoidance of the tragedy of the commons drop away, leaving incentive-based theories as the core argument.") (footnotes omitted).

^{92.} The position has been articulated in a statement of copyright and intellectual property law professors opposing (unsuccessfully) the Copyright Term Extension Act:

^{93.} See Boyle, supra note 79, at 2013.

2. Landes & Posner: Copyright Externalities

Professors Landes and Posner have recently criticized this view, 94 suggesting instead that externalities are a problem with works of intellectual creation, and that the problem justifies permanent (or at least indefinitely renewable) property law protection. 95 Landes and Posner start by assuming a work that has been protected by copyright for long enough that the expected return on the work would have been sufficient to induce creation even if the copyright expired immediately. 96 In examining the effect that termination of copyright would have on such a work, they start by acknowledging that in the absence of externalities, termination would eliminate the deadweight loss that would result from the copyright holder's decision to charge price P0 when the marginal cost of an additional copy would be zero. 97 Triangle P0Q0P2 illustrates that deadweight loss. 98

Landes and Posner then suggest, however, that if additional uses of the copyright work impose technological externalities, termination of copyright might result in a shift downward in the demand curve, from D^0D^0 to D^0D^1 , potentially resulting in a loss in value that exceeds the deadweight loss associated with above-marginal-cost pricing.

Landes and Posner concede that termination of copyright would result in a net destruction of value only if externalities are "large," and they concede that they "do not wish to press this argument too far." Nevertheless, they do draw the analogy to real property externalities, and they contend that unlimited reproduction of a celebrity's name or likeness "could prematurely exhaust the celebrity's commercial value, just as unlimited drilling from a common pool of oil or gas would deplete the pool prematurely." Moreover, they suggest that premature exhaustion could also arise with copyrighted works, particularly "with regard to copyrights on components of completed works"—such as Mickey Mouse. 103

^{94.} Landes & Posner, supra note 34.

^{95.} Id.

^{96.} Id. at 487.

^{97.} Id.

^{98.} See infra fig.1.

^{99.} As Landes and Posner put it, the result would destroy "value equal to the difference between the area under the original demand curve D⁰D⁰ up to P⁰ and the area under D⁰D¹ up to a zero price." Landes & Posner, supra note 34, at 487.

^{100.} Id.

^{101.} Id. at 488.

^{102.} Id. at 487.

^{103.} Id.

The Landes and Posner analysis, however, is unpersuasive for three reasons. First, they incorrectly attribute to copyright termination a shift in the demand curve associated with overexposure of intellectual work. Second, in their focus on the external costs associated with extensive use of intellectual work, they ignore external benefits. Third, their model focuses on the effect copyright termination would have on the market for individual works taken in isolation; they do not consider the effects of more global termination of copyright protection.

a. Technological Externalities: Overexposure of Intellectual Work

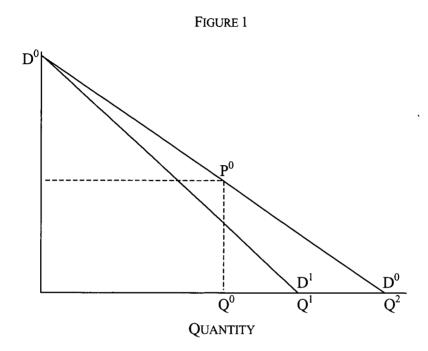
Assume the technological externalities hypothesized by Landes and Posner. That is, assume that each additional use of an intellectual work reduces the marginal value of the work to other users. As a result, the demand curve for the work is not D^0D^0 , but instead $D^0D^{1.104}$ Note, however, that even if we extend copyright protection to the work, internalizing any externalities by permitting the copyright holder to control the number of units of work distributed, the demand curve does not shift upward to $D^0D^{0.105}$ Even with copyright protection, if suppliers of the work supply quantity Q^0 , they cannot obtain price P^0 , but only price $P^{1.106}$ That is, the quantity Q that prospective purchasers will demand at any price P reflects a discount for market saturation.

^{104.} See infra fig.1.

^{105.} Landes & Posner, supra note 34, at 437.

^{106.} Id.

^{107.} Id.



Assume now that copyright in the work is terminated. Termination does not reduce the number of units purchasers will be willing to purchase at any given price; given the assumptions Landes and Posner make about market saturation, demand will reflect market saturation whether or not the legal regime protects copyright. It is the market saturation, Landes and Posner hypothesize, not termination of the copyright, that generates the shift from D⁰D⁰ to D⁰D¹. Landes and Posner appear to be incorrect when they assert: "[S]uppose that, contrary to the usual assumption about copyrights, additional uses impose technological externalities. Then terminating the copyright will lead not only to a movement along the demand curve but also to a downward shift (say to D⁰D¹) in the overall demand." Instead, terminating the copyright will generate marginal cost pricing, which will lead to movement down the demand curve, but the same demand curve, D⁰D¹, would apply whether or not the regime protected copyright.

This error infects their analysis because they go on to assert that termination will destroy "value equal to the difference between the area under the original demand curve D^0D^0 up to P^0 and the area under D^0D^1 up to

a zero price." This assertion assumes that the area under demand curve D^0D^0 represents the value of the work. But this assumption is incorrect. D^0D^0 does not capture any real demand; instead, it represents the demand for the work only on the assumption—inconsistent with the Landes and Posner hypothesis—that the value to any individual purchaser is independent of the quantity of units purchased by others. Once we factor in the congestion effects Landes and Posner hypothesize, the only "real" demand curve is D^0D^1 .

Even the area under the demand curve D⁰D¹ overstates consumer surplus, and therefore the value of the work. Ordinarily, when the cost of producing a good is zero, the area under the demand curve captures the value of the work, 110 but not when the value to individual purchasers is dependent on the quantity of units purchased by others. In the Landes and Posner example, a consumer who would pay a price Px for a work if Qz units were purchased by others would only be willing to pay the lesser price Px-y for the same work if the larger quantity O^{z+w} were purchased by others. As a result, as each additional unit is consumed, the value of all of the other units diminishes. undermining the conclusion that the area under the demand curve represents aggregate consumer surplus. Moreover, in a regime where the copyright has been terminated, and where more of the work will therefore be consumed. the area under the demand curve will represent a more serious overstatement of the product's value than in a copyright protection regime, where, by hypothesis, fewer units will be produced. In this sense, copyright termination could result in a loss in value. Perhaps this is the loss Landes and Posner mean to identify, but it is not the loss they describe.

b. External Benefits and External Costs

Next, even if the external costs identified by Landes and Posner could generate a loss in value, Landes and Posner ignore external benefits likely to be both more common and more significant than the external costs they identify. Intellectual works have the potential to generate network effects.¹¹¹

^{109.} Id.

^{110.} But cf. Michael J. Meurer, Copyright and Price Discrimination, 23 CARDOZO L. REV. 55, 90–100 (2001) (noting that area under demand curve overstates value created by the work's author if some of the demand reflects diversion of demand from other works).

^{111.} As Mark Lemley and David McGowan have put it, "a network effect exists where purchasers find a good more valuable as additional purchasers buy the same good." Mark A. Lemley & David McGowan, Legal Implications of Network Economic Effects, 86 CAL. L. REV. 479, 483 (1998); see also Maureen A. O'Rourke, Toward a Doctrine of Fair Use in Patent Law, 100 COLUM. L. REV. 1177, 1212 (2000) ("[N]etwork effects are present when a consumer's utility associated with a good increases as others also purchase it.") (citing Michael L. Katz & Carl Shapiro, Network Externalities,

The greater the circulation of a work of art or literature, the more valuable the work becomes in facilitating social and professional discourse. If I were the only person to read a novel or see a movie, I would have no one with whom I could discuss the work. Each additional consumer of the work creates value for me—value external to the demand curve faced by the publisher. This network effect exists (in different manifestations) for all intellectual works. If all students in a law school class are familiar with the works of Locke or Coase, I will be able to explore some issues more effectively than if only a fraction of the students are familiar with those works. If students learn more as a result, the benefit will be felt by their clients—not by an owner of the intellectual works of Locke or Coase.

By contrast, the external costs identified by Landes and Posner arise principally when intellectual works are used as symbols. Their arguments focus largely on the symbolic value of copyrighted characters, ¹¹² by analogy to their argument that the right of publicity may be necessary to avoid dissipation of the advertising value of the image of famous persons. ¹¹³ Outside that realm, it is difficult to imagine works of music, art, or literature whose intrinsic value to consumers is reduced by knowledge that the works are widely disseminated. ¹¹⁴

Competition, and Compatibility, 75 AM. ECON. REV. 424, 424 (1985)).

The classic network effect arises with a telephone network, where each new subscriber increases the value of the network to all previous subscribers. Lemley & McGowan, *supra*, at 488–89. Compatible computer software also generates network effects. For instance, compatible software makes file-sharing easier than it would be if all programs were incompatible. *Id.* at 491.

^{112.} After noting that a celebrity's commercial value can be prematurely exhausted, "just as unlimited drilling from a common pool of oil or gas would deplete the pool prematurely," Landes and Posner assert that "[t]he same could be true of a novel or a movie or a comic book character or a piece of music or a painting, particularly with regard to copyrights on components of completed works rather than on the completed works themselves." Landes & Posner, supra note 34, at 487 (emphasis added). They explicitly use Mickey Mouse as an example and suggest that if everyone were free to incorporate the Mickey Mouse character into a book, movie, or song, the public might tire of Mickey, and "his image would be blurred" as authors portrayed him in different lights. Id. at 487–88.

^{113.} Id. at 486 (discussing tarnishing of advertising value of Humphrey Bogart).

^{114.} Landes and Posner offer three examples of "works of elite culture that may have been debased by unlimited reproduction": the *Mona Lisa*, the opening of Beethoven's *Fifth Symphony*, and several Van Gogh paintings. *Id.* at 488. Although proof or disproof of this assertion would be difficult to come by, it would appear that the public's widespread familiarity with these works contributes to their value for symbolic purposes. Moreover, my surmise is that symphony orchestras have an easier time selling tickets for a performance of Beethoven's *Fifth* than they would if the symphony were less frequently exposed to the public, and that any museum would be delighted to have the opportunity to display the *Mona Lisa*—not because of the painting's intrinsic merit, but because of its familiarity.

c. The Static Nature of the Landes/Posner Model

Suppose the negative externalities hypothesized by Landes and Posner were significant, and positive externalities were not. Suppose further that termination of copyright in a particular work would result in a loss in value of that work. That loss in value does not translate to inefficiency if the overall result of the change is to compensate for that loss with commensurate increases in value of other goods and services in the economy. 115

The Landes and Posner model examines termination of copyright in a single work—say, Mickey Mouse. Termination of Mickey's copyright, and the resulting drop in price to marginal cost, leads more authors and producers to use Mickey, resulting in a loss in value to those who would pay to exploit Mickey as a symbol (but who find Mickey's symbolic value reduced by market saturation). But if we assume that substitutes for Mickey (perhaps Big Bird or Barney) remain subject to copyright protection, an efficiency analysis would have to account for the impact of Mickey's termination on the value of those other works.

The demand curve for substitutes (take Big Bird as an example) would certainly shift, but the direction and magnitude of the shift would depend on the cross-elasticity of demand for Mickey and Big Bird in two separate markets—the market of purchasers interested in the entertainment value of the characters, and the market of those interested in exploiting their symbolic value. For those interested in entertainment value, the demand for Big Bird would decline to the extent that Mickey is a good substitute who has now become available at a lower price. ¹¹⁶ For those interested in symbolic value, the demand for Big Bird would increase, because Mickey, at his new lower price and higher quantity, is no longer a good substitute. ¹¹⁷ Whether these two competing factors will lead to an increase or decrease in the equilibrium price for Big Bird, and whether the result will be a higher or lower value for

^{115.} Christopher Yoo has observed that the consumer surplus associated with a particular copyrighted work does not always reflect increased economic welfare as a result of production of that work. Christopher Yoo, *Copyright and Product Differentiation*, 79 N.Y.U. L. REV. 212, 260–61 (2004). Instead, some of that surplus reflects demand diverted from other works. *Id*.

^{116.} See generally RICHARD H. LEFTWICH, THE PRICE SYSTEM AND RESOURCE ALLOCATION 48 (4th ed. 1970) (cross elasticities of demand for closely related goods is high and positive); GEORGE A. STIGLER, THE THEORY OF PRICE 33 (3d ed. 1966) (close technical substitutes will have positive cross-elasticities).

^{117.} This assumes, however, a limited number of alternatives to Mickey and Big Bird. If there were many other comparable symbols that retained copyright protection, then loss of Mickey as a substitute would have only a marginal impact on Big Bird. Cf. STIGLER, supra note 116, at 243 (discussing cross-elasticity of demand for services used to produce a product for sale, and concluding that "the demand for a service is more elastic, the more readily other services may be substituted for it.").

Big Bird, is entirely indeterminate without knowledge about the crosselasticity of demand for these and other intellectual works. Hence, even if copyright termination would reduce the value of Mickey Mouse, termination need not result in inefficiency.

So far, the assumption has been that copyright in Mickey Mouse has been terminated, but that other works have remained subject to copyright protection. Suppose, however, that all copyright protection were eliminated. Would that result in an overall reduction in value (leaving aside the effects the reduction would have on the incentive to create)? First, microeconomic comparisons of such globally different economic situations are fraught with difficulty; economists take care to change one variable at a time and to qualify their conclusions with the phrase "ceteris paribus" (other things being equal). 118 Second, any global comparison would have to examine the percentage of intellectual works imbued with significant symbolic value; for other works, marginal cost pricing generates no external costs. Eliminating copyright protection would generate increased value for all works; the loss in value Landes and Posner hypothesize would apply to a narrower set of works. In short, if Landes and Posner bear any burden of proof in their effort to establish that externalities justify copyright protection, they have not met that burden.

E. Property and Incentives to Invest and Develop

Although private property rights cannot induce creation of additional land, it has become a commonplace to justify private property as a mechanism for optimizing use and development of land. One important aspect of this optimization is the incentive property creates for an owner to invest in a resource. Self-interested actors will underinvest in a resource that is not propertized because the investor will not reap the benefits of her investment. At the most primitive level, imagine a person whose only resource is his labor. He can hunt all year for nuts and berries (yielding 100 berry-equivalents a year), or he can spend part of the year cultivating ten berry-equivalents so that the following year he can reap 100 berry-

^{118.} See, e.g., CHARLES L. COLE, MICROECONOMICS: A CONTEMPORARY APPROACH 8 (1973) (discussing importance of ceteris paribus); see also STIGLER, supra note 116, at 32–33 (noting that demand curve for product is specified only if prices of close substitutes or complements are held constant, and noting difficulty of articulating empirical rule for the effects of prices of related goods in a world where each product competes with many others in disparate markets).

^{119.} As Thomas Merrill has put it, "Property concentrates the risks and rewards of investment on designated individuals, thus assuring a correspondence between those who sow and those who reap." Merrill, *supra* note 68, at S332.

equivalents in six months. If land is not propertized, cultivation may not be in his economic self-interest. His sacrifice of ten berry-equivalents may not generate a positive return because others will reap most of what he has sown. That is, cultivating berries—investing in the land—will generate external benefits for other gatherers, leading to underdevelopment of the land. 120

This same incentive-to-invest justification has been advanced with respect to intellectual property. At bottom, this incentive-to-invest justification is a variant of the tragedy of the commons justification, although it has often been treated separately in the intellectual property literature. ¹²¹ The argument was set out most extensively by Edmund Kitch in the patent context. ¹²² Kitch argued that broad patent rights function to limit wasteful duplicate expenditures to develop an existing invention. ¹²³ Without patent rights, many parties would have incentives to compete to develop inventions that build on the status quo. ¹²⁴ Prospect patents, according to Kitch, would put a single owner in a position to coordinate research efforts toward enhancement of the patent's value, increasing efficiency of the investment in innovation. ¹²⁵

Versions of Kitch's argument have also found their way into the copyright literature. ¹²⁶ Notice how this argument relates to the tragedy of the commons. Kitch is essentially asserting that inventions are not non-rival; that every person who seeks to develop an invention reduces the value of the invention for every other potential developer. Property rights, on this theory,

^{120.} Landowner also has an incentive to make the particular investment that maximizes his return on the land. That return will generate a price for the land that assures the land will be used as a resource only when some other resource could not be employed more efficiently. See generally SAMUELSON & NORDHAUS, supra note 41, at 323 (discussing tradeoffs between use of land and use of other resources).

^{121.} See, e.g., Wagner, supra note 65, at 1001 (noting that "the individual incentives generated by a system of private property helps assure the appropriate level of investment in development or improvement of resources," and noting that this justification—unlike a justification emphasizing prevention of resource overuse—applies both to tangible and intellectual property).

^{122.} In a classic 1977 article, Edmund Kitch developed what has become known as the "prospect theory" of patents. Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265 (1977). Kitch argued that the patent system should not be regarded merely as one designed to generate incentives to create, but that propertization of patent rights would lead to efficient development of patented works. *See id.* at 276.

^{123.} Id. at 276.

^{124.} *Id*.

^{125.} Id.

^{126.} Neoclassicist copyright scholars have argued that copyright serves to "rationalize the 'development' of existing creative works and sell exploitation entitlements to those who are best able to satisfy public tastes." Netanel, supra note 57, at 309. For works in the forefront of that movement, see Wendy J. Gordon, An Inquiry Into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory, 41 STAN. L. REV. 1343 (1989); William M. Landes & Richard A. Posner, An Economic Analysis of Copyright Law, 18 J. LEGAL STUD. 325 (1989).

are necessary to eliminate the external costs associated with efforts to develop the invention.

As a justification for copyright, Kitch's theory is problematic for several reasons. First, it is not at all clear that innovation develops in the same way with respect to works of authorship as it does with respect to inventions. Multiple scientists seeking to build on an existing invention would be likely to pursue many of the same approaches, even if they work independently, leading to precise duplication of effort. That is especially true because many of the scientists will be pursuing a common goal: an invention that achieves a particular result. By contrast, in many contexts at least, creators of works of authorship are less directed to a common goal, and there is less reason to think that their separate efforts to build on existing works will prove wasteful.

Second, even on its own terms, Kitch's argument is problematic. Professors McFetridge and Smith have demonstrated that a broad patent right does not eliminate rivalry; instead, a broad patent right shifts rivalry earlier in time by increasing the financial incentive to develop a foundational invention. John Duffy has recently resuscitated the Kitch theory in part, but only by demonstrating that the principal benefit of a broad patent is to accelerate the time at which the invention finds its way into the public domain. The longer the duration of the property right, the smaller this advantage becomes and the weaker the justification for copyright (or patent) as an incentive to develop.

Third, Kitch's argument assumes that rivalry is inefficient by comparison to coordinated development. That assumption, however, flies in the face both of our general market preferences and of our treatment of works of authorship in particular. If coordinated development of intellectual works were generally more efficient than rivalry, one might expect government to auction off exclusive rights to innovate in particular areas, rather than leaving innovation to competitive forces. We do not typically see that pattern; instead, our legal system generally assumes that market competition—rivalry among competing creators—will generally lead to more efficient creative

^{127.} See Donald G. McFetridge & Douglas A. Smith, Patents, Prospects, and Economic Surplus: A Comment, 23 J.L. & ECON. 197, 198-201 (1980).

^{128.} John F. Duffy, Rethinking the Prospect Theory of Patents, 71 U. CHI. L. REV. 439, 475-81 (2004).

^{129.} See generally Mark Lemley, Ex Ante versus Ex Post Justifications for Intellectual Property, 71 U. CHI. L. REV. 129, 135–41 (2004) [hereinafter Lemley, Ex Ante] (arguing that investment-based argument for intellectual property rights unduly discounts the advantages of competition and the disadvantages of monopoly).

activity.¹³⁰ Although the question is ultimately an empirical one,¹³¹ if one concludes that rivalry is more efficient than coordinated development for innovation that does not build on existing rights, it is difficult to imagine why rivalry would not also be more efficient than coordinated development for innovation that does build on existing rights.

The difficulties with the prospect theory do not, of course, establish that the creator of a work of authorship should not have an exclusive right to develop that work. But if the legal system accords the creator such an exclusive right, that right is justified not by a notion that the creator is in the best position to coordinate further development, but by the need to provide creators with an adequate incentive to create original works. ¹³² The incentive-to-develop justification, like the tragedy of the commons justification, has little persuasive force with respect to works of authorship.

F. Summary

Analogies between copyright and real property must rest on one of two premises. The first premise is that all value should be propertized. In that event, because both land and intellectual works represent value, they should receive the same legal protection. The second, alternative, premise is that even if value should not always be propertized, the particular reasons for propertizing land and intellectual works are so closely related that legal protection, too, should be closely related.

This part started by demonstrating that the universal propertization premise is untenable. Succeeding sections examine the particular reasons for propertizing land and intellectual works, demonstrating that two of the justifications for property rights in land—avoiding breaches of the peace and tragedies of the commons—are far less persuasive as justifications for property rights in intellectual works. Conversely, the most widely accepted justification for property rights in intellectual works—the need to provide an incentive for creation of those works—is completely inapplicable to land.

Let us assume that legal doctrine is generally, if imperfectly, founded on some justification. If the justifications for propertizing intellectual work

^{130.} See generally Duffy, supra note 128, at 490 (contending that the insight that lies at the heart of the patent system is that "[c]ompetition to obtain, and to maintain, a monopoly position can be harnessed to constrain the monopolist and to increase social welfare.").

^{131.} Lemley, Ex Ante, supra note 129, at 140 (noting that whether the creator of the original work is better suited than the market to coordinate further development of the work is at bottom an empirical question).

^{132.} Cf. Sterk, supra note 26, at 1215–17 (questioning whether incentive to create justifies broad protection of derivative works).

closely paralleled the justifications for propertizing real property, one might expect legal doctrine to feature similar parallels. But because the justifications diverge in important respects, we would expect to find divergence between doctrines surrounding property in land and those surrounding property in intellectual work. The next part explores that divergence.

III. DOCTRINAL IMPLICATIONS

Copyright doctrine diverges from real property doctrine in fundamental respects. Property rights in land are potentially infinite in duration; copyrights are time-limited. Landowners generally enjoy broad exclusion rights, while copyright embraces a number of doctrines—fair use and first sale among them—that limit the copyright owner's right to exclude. Injunctive relief is the standard remedy for encroachment on real property rights, while in a significant subset of copyright cases courts have limited copyright holders to money damages. In each of these areas, copyright doctrine should and does differ from real property doctrine because differing justifications lead to different doctrinal frameworks. This part starts by demonstrating how the doctrinal divergences track the different justifications in the two areas.

Finally, the part closes with an examination of an area in which current doctrine is hotly contested—the power of parties to vary property rights by contract—and shows that here, too, the disparities in justification can shed light on the appropriate shape of doctrine. In particular, the part demonstrates that analogy to real property doctrine does not, by itself, justify a regime in which parties are free to enlarge copyright protection by contract.

A. Duration of Rights

Perhaps the most evident doctrinal difference between property interests in land and property interests in copyrighted works is the difference in duration. Property interests in land are potentially infinite in duration. Landowners may choose to carve up ownership interests in a wide variety of patterns, ¹³³ but ownership interests do not generally expire. ¹³⁴ Copyright, by

^{133.} Professors Merrill and Smith have argued that property rights must conform to standard forms, essentially limiting the number of patterns. Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1 (2000) [hereinafter Merrill & Smith, *Optimal Standardization*].

^{134.} State statutes that limit the duration of possibilities of reverter or rights of entry are an exception. See MASS. ANN. LAWS ch. 184A, § 7 (2004). Other statutes provide that such interests

constitutional command, is limited in duration, ¹³⁵ although Congress appears willing to test the constitutional limit. ¹³⁶

This difference is consistent with the differing justifications for the two sets of rights. Threats of breach of the peace are timeless. Putting a scarce, valuable, and durable resource "up for grabs" inevitably invites disputes, and extra-legal resolution of those disputes. Similarly, the potential for overuse—the tragedy of the commons—does not diminish with time. As a result, the reasons that support recognizing property rights in land also support perpetual duration.¹³⁷

By contrast, to the extent that copyright rests on the need to provide potential creators with a socially optimal incentive to create, permanence may be neither necessary nor desirable. Compare property rights in intellectual works with property rights in tangible goods—compare a novel with a chair. Elementary economic principles teach that when a chair manufacturer has a property right in the chairs he produces, each manufacturer will produce the socially optimal number of chairs. Manufacturers will produce so long as the marginal cost of producing another chair is less than the price consumers are willing to pay for an additional chair. Each manufacturer has an incentive to produce chairs that benefit prospective purchasers more than the chairs cost to produce; no manufacturer has an incentive to produce chairs that benefit prospective purchasers less than they cost to produce.

A novel (or a song or a computer program) is less concrete than a chair; the novel is an organized collection of words that has an existence apart from its manifestation on a printed page. We could (and do) give the novelist a property right in the physical manifestation of the novel, in the same way we give the chair manufacturer a property right in the physical manifestation of the chair. But the physical manifestation of the novel is cheap to produce; the hard work is in organizing the words into an attractive whole, while the marginal cost of making another physical copy is quite small. As a result, giving the novelist a property right only in physical copies will lead to underproduction of novels. Marginal cost pricing will lead to a price lower

expire unless re-recorded after a specified period. See, e.g., CAL. CIV. CODE § 885.030 (West 2004); N.Y. REAL PROP. LAW § 345 (McKinney 2004).

^{135.} U.S. CONST. art. I, § 8, cl. 8.

^{136.} One notable example is the Sonny Bono Copyright Term Extension Act, Pub. L. No. 105-298, tit. I, 112 Stat. 2827 (1998), which extended the copyright period by twenty years both for new works and for works already created. The Supreme Court upheld the statute against constitutional challenge in *Eldred v. Ashcroft*, 537 U.S. 186 (2003).

^{137.} See also Richard A. Epstein, The Dubious Constitutionality of the Copyright Term Extension Act, 36 LOY. L.A L. REV. 123, 125 (2002) (noting that reasons for recognizing property rights in land dictate infinite duration).

than the average cost necessary to produce the novel. Some novelists will not write—and some publishers will not publish—even though the expected value of their work would exceed its expected total cost.

To enable the novelist to recover the initial cost of writing the novel, copyright gives the novelist an exclusive right to reproduce the novel. But this right is at best a rough approximation of the return necessary to induce optimal production of novels; no theory links copyright protection of any particular duration—temporary or permanent—with optimal production of intellectual works. What theory does teach is first, that copyright generates dead-weight losses associated with above-marginal cost pricing, and second, that the marginal impact of copyright protection on potential creators declines over time; an additional ten years of protection will provide far less incentive to a potential creator who starts with fifty years of protection than to one who starts with no protection at all. The combined force of these

^{138.} See Meurer, supra note 110, at 94 ("Competition would drive the price of the work toward the marginal cost of reproduction. The author and publisher might not be able to cover the fixed costs of publishing the original work.").

^{139.} Christopher Yoo has described the conundrum that faces those who analyze the efficiency of copyright rules:

When goods are nonrival, there is no volume at which marginal cost equals or exceeds average cost. As a result, no level of production exists that provides optimal access to the work while simultaneously providing authors with the expectation of sufficient revenue to induce the work's creation. This suggests that absent some other institutional solution, some degree of deadweight loss is endemic to markets for copyrighted works.

Yoo, supra note 115, at 228.

^{140.} Under 17 U.S.C. \S 106(1) (2005), the owner of copyright has the exclusive rights to reproduce the copyrighted work in copies or phonorecords.

^{141.} See, e.g., Epstein, supra note 137, at 126-27: "[J]ust how limited the grant should be and why are complex questions which help demonstrate the reasons for copyright and patent statutes being subject to constant refinement and modification. The real issue in both cases concerns where and how to draw the line."

^{142.} It has become commonplace to note that if the copyright owner were able to engage in perfect price discrimination, deadweight losses would disappear because the copyright owner would distribute works to potential purchasers, each of whom would be willing to pay more than the marginal cost of distributing an additional copy. See, e.g., Meurer, supra note 110, at 68–69 (describing perfect price discrimination).

Price discrimination, however, is not profitable unless copyright holders can inexpensively (1) sort consumers, and (2) block arbitrage. See Michael J. Meurer, Vertical Restraints and Intellectual Property Law: Beyond Antitrust, 87 MINN. L. REV. 1871, 1875–77 (2003). Moreover, Julie Cohen has argued that even perfect price discrimination will lead to underproduction of information goods that generate significant public benefits. Julie E. Cohen, Copyright and the Perfect Curve, 53 VAND. L. REV. 1799, 1822 (2000). Because these creators cannot appropriate all of the value associated with their work, they will undervalue the use of pre-existing works, making a system of price discrimination inefficient. Id. at 1801. And others have observed the distributional effect of perfect price discrimination, which prefers producers over consumers. See, e.g., Boyle, supra note 79, at 2025–26 ("Perfect competition moves consumer surplus to the pockets of consumers. Monopoly coupled with perfect price discrimination moves the surplus to the pockets of the producer.").

^{143.} The economists who filed an amicus brief in Eldred v. Ashcroft calculate that, assuming a

insights leads to copyright of limited duration and to debates about how long that duration should be.

Professors Landes and Posner have recently offered several examples to challenge the conclusion that an incentive rationale supports only a limited duration for copyright protection. 144 Although some of their examples identify economic problems that would be alleviated by permanent copyright duration, the problems hardly appear sufficiently pervasive to justify a blanket rule permitting indefinitely renewable copyright. For example, they note that under current law, a publisher has little incentive to promote an obscure eminent domain author because competitive publishers could quickly freeride on successful promotion efforts without bearing the cost of unsuccessful efforts. 145 Although their conclusion is logically correct, an amicus brief signed by five winners of the Nobel Prize in Economics provides adequate response: "Such cases would occur in at most a small subset of copyrights, since extension has an incremental effect only after many years of copyright, and . . . most works lose their economic value to the initial copyright owner after a very few years." 146 Moreover, even if some incentive might be necessary to eliminate freeriders, it is not clear why indefinitely renewable copyright would be superior to a regime in which law directly protected the current promoter of the obscure work.¹⁴⁷

B. Scope of the Right to Exclude

The right to exclude has often been treated as the most basic in the "bundle of sticks" that make up real property. Thus, the United States Supreme Court has held, as a matter of constitutional law, that government's

constant stream of revenues and a 7% real interest rate, the present value of a twenty-year extension to an eighty-year copyright period would be worth 0.33% of the present value of the initial eighty-year period. Brief for George A. Akerlof et al. as Amici Curiae, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618), at 6 [hereinafter Akerlof Brief]. The brief notes that the figure probably overstates the value of the extension, because the assumption of a constant stream of revenues is inconsistent with the fact that most works lose value over time. *Id.* at 7.

See also Wendy J. Gordon, Authors, Publishers, and Public Goods: Trading Gold for Dross, 36 LOY. L.A L. REV. 159, 180-87 (2002).

- 144. Landes & Posner, supra note 34, at 488-89.
- 145. Id.
- 146. Akerlof Brief, supra note 143, at 9.

148. See, e.g., Kaiser Aetna v. United States, 444 U.S. 164, 179–80 (1979) (characterizing right to exclude as a "fundamental element of the property right.").

^{147.} Mark Lemley has made this point with respect to improvements in intellectual works: "But the need to encourage improvements does not tell us *who* should receive the appropriate incentive. The logical a priori answer must be that the creator of the improvement should receive an intellectual property right, just as the creator of the initial invention received such a right." Lemley, *supra* note 129, at 139 (emphasis added).

permanent physical occupation of land—interference with the landowner's right to exclude—constitutes a per se taking of property. Moreover, as a matter of common law, a landowner is entitled to prevail in an action for trespass even without proof of damages. Courts do not engage in balancing the interests of the landowner against the interest of competing users; the landowner's right to exclude is nearly absolute, qualified only by a limited defense permitting use of another's land in cases of dire necessity.

By contrast, the right to exclude in copyright is far more limited. First, an author is not entitled to prevent others from appropriating the ideas embodied in her work; copyright protection extends only to expression. Second, the fair use doctrine qualifies even the right to exclude others from using the author's expression. Section 107 of the Copyright Act expressly incorporates a balancing test to determine whether appropriation of an author's work constitutes copyright infringement or fair use.

This sharp distinction between the exclusion rights enjoyed by landowners and authors is consistent with the differing justifications for real property and copyright. When preserving peace is at stake, clear rules present significant advantages. The conventional property story, in Carol Rose's words, is that "[w]e establish a system of clear entitlements so that we can barter and trade for what we want instead of fighting." Rules that treat parcels of land as discrete geometric boxes over which a single owner controls entry minimize the advantage of encroachments that could, in turn, lead to physical conflict with the owner. The more exceptions to the landowner's right to exclude, the more incentive a potential user has to encroach rather than negotiating for the rights he wants. And when land is at issue, encroachment inevitably presents the possibility of physical conflict.

To the extent that real property rights are designed to prevent overuse of a scarce resource—to avoid the tragedy of the commons—clear exclusion rules again have distinct advantages. An owner with the power to exclude is in an ideal position to coordinate use of land by private bargain, whether embodied in formal contracts, leases, or deeds; or manifested in implied

^{149.} Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982).

^{150. 6-}A, AMERICAN LAW OF PROPERTY § 28.12 (A. James Casner ed., 1954).

^{151.} Id. § 28.10 (privilege exists in case of private necessity when intruder enters land to save himself or his own property); see also RICHARD A. EPSTEIN, TORTS § 2.15.1, at 60–63 (1999).

^{152. 17} U.S.C. § 102(b) (2000) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery..."); see also Baker v. Selden, 101 U.S. 99 (1879).

^{153. 17} U.S.C. § 106 (2000).

^{154. 17} U.S.C. § 107 (2000) (listing factors relevant to determination).

^{155.} Rose, Crystals and Mud, supra note 4, at 578.

understandings.¹⁵⁶ The owner can choose whether to negotiate, and with whom, minimizing the number of necessary transactions. By contrast, rules that limit the power to exclude increase coordination costs: if multiple persons have rights to use or possess land, negotiations with each of them may be necessary to prevent inefficient exploitation, and the more uncertain the scope of the owner's right to exclude, the more costly those negotiations might become. ¹⁵⁷

Indeed, the one clear exception to the right to exclude—the privilege or defense of "necessity"—occurs when market failure prevents optimal coordination among potential land users. Thus, when a ship owner uses another's private dock in the midst of a storm, the dock owner is not entitled to exclude the ship from the dock.¹⁵⁸ If the weather makes the ship owner's need imminent, and the ship owner cannot find the dock owner to seek permission, the market failure is clear. But even if the ship owner finds the dock owner, and the dock owner refuses to permit use of the dock, failure to reach an agreement may well be the product of bargaining breakdown due to the bilateral monopoly in which the parties find themselves; when the necessity is great, the ship owner almost certainly values the right to use the dock more than the dock owner values the right to exclude.¹⁵⁹

Now consider copyright. To the extent that copyright protection is designed as an inducement to create, an absolute right to exclude proves counterproductive. First, the monopoly power inherent in copyright protection permits the copyright holder to charge potential users—including potential creators seeking to build on earlier work—a price that exceeds the original creator's marginal cost. ¹⁶⁰ If the copyright holder's right to exclude is more extensive than would have been necessary to induce initial creation of the work, the resulting disincentive to creation generates a deadweight loss. Second, transaction costs might prevent subsequent creators from using

^{156.} Cf. Sterk, supra note 36, at 96-99 (noting that obligations to neighbors may arise out of course of dealing).

^{157.} This insight explains, in part, the general availability of a partition remedy to resolve disputes among disputing co-owners (see generally 2 AMERICAN LAW OF PROPERTY, supra note 150, § 6.21), and the changed conditions doctrine, which permits judicial modification or termination of a servitude (see generally RESTATEMENT (THIRD) OF PROPERTY: SERVITUDES § 7.10 (2000)). See also Stewart E. Sterk, Freedom from Freedom of Contract: The Enduring Value of Servitude Restrictions, 70 IOWA L. REV. 615, 631–33 (1985) (contending that failure of multiple parties to reach a bargain to terminate a servitude constitutes weak evidence that the servitude remains efficient). But see Richard A. Epstein, Notice and Freedom of Contract in the Law of Servitudes, 55 S. CAL. L. REV. 1353, 1368 (1982) (arguing that covenanting parties can be trusted to anticipate the possible future desire to terminate).

^{158.} Ploof v. Putnam, 71 A. 188 (Vt. 1908).

^{159.} See EPSTEIN, supra note 151, § 2.15.1, at 62.

^{160.} See Lemley, Economics of Improvement, supra note 83, at 998. But cf. Wagner, supra note 65, at 1013-14 (noting limits of monopoly power).

copyrighted works even in those cases where the value to the subsequent creator exceeds the price the original creator would charge. 161

The prohibition on copyrighting an idea responds to the monopoly power problem. Suppose a novelist were to write about the interaction of a fundamentalist Christian family and an Orthodox Jewish family over the union between their gay sons, starting with anger and rejection and working through to reconciliation. The work becomes a critical and popular success. Should the author be able to exclude others from exploring the same idea? Copyright law's answer is no; subsequent creators are free to develop the idea as they see fit, so long as the details of the expression are original. The compromise prevents the original author from monopolizing a literary space broader than necessary to induce the original novel.

The fair use doctrine responds both to the monopoly power problem and to the transaction cost problem. Fair use limits the right of an author to monopolize even expression when the result would limit the ability of subsequent creators to explore matters of significant value to the public. 164 For example, in *Time, Inc. v. Bernard Geis Associates*, 165 the court invoked the fair use doctrine to dismiss an infringement claim by Time, Inc., which had purchased rights to the Zapruder film of the Kennedy assassination and then sought to prevent use of the frames by an author preparing a study of the assassination. 166 Absent application of the fair use doctrine, Time's monopoly over the work would have generated a deadweight loss with respect to a work whose creation was almost certainly unaffected by copyright's incentive structure.

Fair use also permits incidental use of copyrighted work in those cases where the value of the work to the user would not justify the transaction cost of obtaining permission from the author;¹⁶⁷ incidental classroom use of

^{161.} Wendy Gordon emphasized this point in analyzing the legal status of television time-shifting. Wendy J. Gordon, Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors, 82 COLUM. L. REV. 1600 (1982).

^{162.} Cf. Hughes, supra note 17, at 320 (noting that everyday ideas and extraordinary ideas are too useful to allow any person to monopolize them).

^{163.} Cf. Nichols v. Universal Pictures Corp., 45 F.2d 119, 123 (1930), cert. denied 282 U.S. 902 (1931) ("A comedy based upon conflicts between Irish and Jews, into which the marriage of their children enters, is not more susceptible of copyright than the outline of Romeo and Juliet.").

^{164.} See Dan L. Burk & Julie E. Cohen, Fair Use Infrastructure for Rights Management Systems, 15 HARV. J.L. & TECH. 41, 45 (2001) (fair use fosters "an aware and educated populace better able to participate in both public debate and the creation of future works of authorship.").

^{165. 293} F. Supp. 130 (S.D.N.Y. 1968).

^{166.} Mark Lemley cautions, however, that fair use of this sort might be less available when the proposed use is commercial. Lemley, *Economics of Improvement*, supra note 83, at 1026–29.

^{167.} Wendy Gordon highlighted this market failure problem in her discussion of television time-shifting. Gordon, *supra* note 161, at 1601.

copyrighted material furnishes a prime example. ¹⁶⁸ Quoting a sentence from a law review article provides another. In neither case would a right to exclude provide significant incentives to production of creative work.

C. Remedies

Although "property rule" protection—injunctive relief—remains the standard remedy both in real property cases and copyright cases, doctrine nevertheless reflects the different justifications that underlie real property and copyright.

1. Real Property

A landowner is generally entitled to injunctive relief against an encroacher who interferes with his right to possession. Similarly, injunctive relief is the norm when a landowner seeks to vindicate non-possessory rights, including easements and restrictive covenants.

The principal exceptions to property rule protection are two. The first (and most familiar in the economic literature) includes cases in which holdout or freerider problems would impede negotiations to an efficient result. The second exception, one that is not consistently applied, denies injunctive relief when a plaintiff landowner is himself the person in the best position to avoid conflict with an encroaching neighbor, generally by warning the encroacher of the existence and potential consequences of the encroachment. Thus, when a neighbor begins construction in a way that encroaches on landowner's parcel, and landowner permits completion of the

As Professors Burk and Cohen have noted, when transaction costs are low, this type of market failure theory, by itself, justifies finding fair use only for "unauthorized uses of relatively minor value." Burk & Cohen, *supra* note 164, at 44.

^{168.} See H.R. REP. No. 1476, at 68-71 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5680-85 (setting out agreement on guidelines for classroom copying); H.R. CONF. REP. No. 1733, at 70 (1976), reprinted in 1976 U.S.C.C.A.N. 5810 (House and Senate Conferees accept guidelines as "part of their understanding of fair use.").

^{169.} See 6-A AMERICAN LAW OF PROPERTY, supra note 150, § 28.17 ("Injunctions have generally issued against repeated or continuous acts of constructing, maintaining or removing fences, intrusions for hunting or fishing purposes, trespasses by livestock, and interferences of such a nature as to impair the plaintiff's use of the premises."); see also EPSTEIN, supra note 151, § 110.4 (discussing remedies for trespass).

^{170.} See RESTATEMENT (THIRD) OF PROPERTY: SERVITUDES § 8.3 cmt. b (2000): "Injunctive relief is normally available to redress violations of easements and restrictive covenants without proof of irreparable injury or a showing that damages would be inadequate." See also Turner Adver. Co. v. Garcia, 311 S.E.2d 466 (Ga. 1984); Gladstone v. Gregory, 596 P.2d 491 (Nev. 1979).

^{171.} The classic example remains *Boomer v. Atlantic Cement Co.*, 257 N.E.2d 870 (N.Y. 1970), involving the harm caused to neighboring homeowners by a cement plant.

construction before objecting, courts may limit landowner to money damages. Similarly, if a landowner makes improvements in the obvious but erroneous belief that an easement will give him access to the improvements, courts may deny injunctive relief to the neighboring servient owner. Outside these exceptions (and the government's eminent domain power), injunctive relief remains the usual remedy in real property cases.

The general availability of injunctive relief to protect rights in real property, in tandem with a broad right to exclude, operates to minimize breaches of the peace. Ex ante negotiations among potentially disputing parties are the most effective mechanism for avoiding breaches of the peace. Injunctive relief encourages the party in the best position to anticipate a dispute—the potential encroacher—to negotiate before using rights belonging to another. 174 A potential user of another's property right would be foolish to invest time or money in reliance on continued use of that right. The availability of injunctive relief gives the property owner leverage that would permit her to capture some of the value of the encroacher's investment value the property owner would not capture in ex ante negotiations. ¹⁷⁵ By contrast, limiting a real property owner to money damages for intrusions on her rights would encourage potential encroachers to enter first and risk litigation later. So long as: (1) property owners were limited to money damages; and (2) fewer than one hundred percent of property owners would enforce their rights, potential encroachers would have an incentive to encroach rather than to negotiate for the rights they seek.

Similarly, injunctive relief maximizes the property owner's ability to coordinate use of her right, avoiding the overuse that characterizes the tragedy of the commons. By encouraging potential users to negotiate *ex ante*,

^{172.} See, e.g., Hirshfield v. Schwartz, 110 Cal. Rptr. 2d 861 (Cal. Ct. App. 2001); Wojahn v. Johnson, 297 N.W.2d 298 (Minn. 1980); contra Robertson v. Theriault, 2003 Conn. Super. LEXIS 1624 (Conn. Super. Ct. 2003); Walsh v. Johnston, 608 A.2d 776 (Me. 1992).

^{173.} See Brown v. Voss, 715 P.2d 514 (Wash. 1986). But see DND Neffson Co. v. Galleria Partners, 745 P.2d 206 (Ariz. Ct. App. 1987).

^{174.} See Merrill, supra note 53, at 38 n.88 (noting incentive effects of property rule in encroachment cases). See generally Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 HARV. L. REV. 1089, 1097 (1972) (arguing that in the absence of certainty about who can most cheaply avoid costs, "costs should be put on the party or activity which can with the lowest transaction costs act in the market to correct an error in entitlements by inducing the party who can avoid social costs most cheaply to do so..."); see id. at 1124–28 (noting that liability rules are only approximation of value of object to original owner, and suggesting that criminal laws against theft represents a kicker designed to deter future attempts to convert property rules into liability rules); James E. Krier & Stewart J. Schwab, Property Rules and Liability Rules: The Cathedral in Another Light, 70 N.Y.U. L. REV. 440, 464–65 n.72 (1995) (detailing impact of liability rules on ex ante behavior).

^{175.} Cf. Merrill, supra note 53, at 38 (noting potential for strategic bargaining after encroachment occurs).

injunctive relief enables the owner to avoid potential overuse that might not be appreciated by an encroacher, or by a court assessing money damages against an encroacher. ¹⁷⁶

Because the primary benefit of injunctive relief is the incentive it creates for *ex ante* resolution of disputes, ¹⁷⁷ it should not be surprising that the few cases in which real property law does not award injunctive relief are those in which the potential encroacher could not have cheaply avoided conflict through *ex ante* negotiations. Pollution cases, which typically involve large numbers of parties, with consequent holdout or freerider problems, are the classic example. ¹⁷⁸ Courts have also limited the property owner to damage relief in cases where, often due to fuzzy boundaries, the encroacher is "innocent" in the sense that the encroacher does not realize that he or she is encroaching, and hence would not have considered negotiating in advance for the right to encroach. ¹⁷⁹ Often in these cases the landowner was in a position to avoid the conflict, but stood by and took no action.

2. Copyright

Although injunctive relief also remains the norm in copyright cases, doctrine reflects recognition that the fabric of copyright, with its concerns about stimulating creativity, requires careful consideration of demands for injunctive relief. The copyright statute provides a framework for that consideration; although the statute expressly authorizes injunctive relief, it does so in permissive rather than mandatory terms. ¹⁸⁰

In the typical infringement case, where the infringer knowingly appropriates copyrighted work, adding little or no creative content, injunctive relief has become the ordinary remedy.¹⁸¹ In these cases, as in real property

^{176.} See generally RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 77-78 (5th ed. 1998) (discussing difficulties associated with judicial assessments of harm to property owner).

^{177.} Of course, injunctive relief also avoids the cost of judicial determination of damages suffered by a successful plaintiff. *Id.* at 78.

^{178.} See, e.g., Boomer v. Atlantic Cement Co., 257 N.E.2d 870 (N.Y. 1970).

^{179.} See Sterk, supra note 36, at 81-83 (noting distinction in theory and case law between innocent and knowing encroachers).

^{180. 17} U.S.C. § 502(a) (2000) provides: "Any court having jurisdiction of a civil action arising under this title may... grant temporary and final injunctions on such terms as it may deem reasonable to prevent or restrain infringement of a copyright."

^{181.} See, e.g., Video Pipeline, Inc. v. Buena Vista Home Entm't, Inc., 342 F.3d 191 (3d Cir. 2003) (enjoining online use of video clip previews taken from Disney movies after infringer had negotiated license agreement that did not permit use of trailers and had been asked by Disney to remove trailers from its database); Pac. & S. Co. v. Duncan, 744 F.2d 1490 (7th Cir. 1984) (holding injunction appropriate against infringer who videotaped TV news programs and sold news clips of relevant portions of broadcasts); Mattel, Inc. v. Robarb's, Inc., No. 00 Civ. 4866, 2001 U.S. Dist. LEXIS 11742 (S.D.N.Y. 2001) (enjoining infringer's use of registered flame design in toy car display when infringer

cases, there are no significant obstacles to negotiating for a license before using the copyrighted work.¹⁸² Creativity will not be stifled if copyists,¹⁸³ radio stations,¹⁸⁴ or clipping services¹⁸⁵ have to negotiate for the rights they use. As Judge Leval has observed, in language subsequently quoted by the Supreme Court,¹⁸⁶ "In the vast majority of cases, [injunctive relief] is justified because most infringements are simple piracy."¹⁸⁷ Indeed, in many such cases, courts liberally award preliminary injunctions upon proof that the copyright holder is likely to succeed on the merits.¹⁸⁸

By contrast, in cases where the infringer has added value to the copyrighted work, a different picture emerges. In such cases, the Supreme Court has cautioned against routine award of injunctive relief. In *Dun v. Lumbermen's Credit Ass'n*¹⁸⁹—decided in 1908—the Court held that because the infringing material represented a small fraction of the infringer's work, the court below had exercised its discretion wisely to refuse an injunction and remit the copyright holder to a court of law to prove damages. ¹⁹⁰ More recently, in *Campbell v. Acuff-Rose Music, Inc.*, ¹⁹¹ the

acknowledged copying the design); Playboy Enters., Inc. v. Webbworld, Inc. 991 F. Supp 543 (N.D. Tex. 1997) (enjoining operator of website from reproducing, displaying, and distributing images identical to those appearing in Playboy publications where infringement continued even after infringer was put on notice of infringement).

Successful fabric designs, fashion accessories, toys, and videos instantly spawn parasitic industries selling cheap copies. These infringers incur no development cost, no advertising expense, and little risk. They free-ride on the copyright owner's publicity, undercut the market, and deprive the copyright owner of the rewards of his creation. Allowing this practice to flourish destroys the incentive to create and thus deprives the public of the benefits copyright was designed to secure. It is easy to justify enjoining such activity.

Id.

^{182.} And, as one court has noted, denying injunctive relief would effectively make the copyright holder an involuntary licensor. *See, e.g.*, Paramount Pictures Corp. v. Carol Publ'g Group, 11 F. Supp. 2d 329, 338 (S.D.N.Y. 1998).

^{183.} See, e.g., Fisher-Price, Inc. v. Well-Made Toy Mfg. Corp., 25 F.3d 119 (2d Cir. 1994).

^{184.} See, e.g., Canopy Music, Inc. v. Harbor Cities Broad., Inc., 950 F. Supp. 913 (E.D. Wis. 1997).

^{185.} See, e.g., Duncan, 744 F.2d 1490.

^{186.} Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 578 n.10 (1994).

^{187.} Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1132 (1990). Judge Leval went on to explain:

^{188.} In a much-quoted statement, the Third Circuit has indicated that when a copyright holder seeks a preliminary injunction, "a showing of a prima facie case of copyright infringement or reasonable likelihood of success on the merits raises a presumption of irreparable harm"—leading to award of a preliminary injunction. See Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1254 (3d Cir. 1983). For criticism of this development, particularly as an unwarranted intrusion on freedom of speech, see Mark A. Lemley & Eugene Volokh, Freedom of Speech and Injunctions in Intellectual Property Cases, 48 DUKE L.J. 147 (1998).

^{189. 209} U.S. 20 (1908).

^{190.} Id. at 23-24.

^{191. 510} U.S. 569 (1994).

Supreme Court wrote, in the context of parody, that the goals of copyright "are not always best served by automatically granting injunctive relief." In each case, the infringing work reflected creativity by the infringer comparable to that of the copyright holder, and the fuzzy boundaries between idea and expression, or between infringement and fair use, would have created impediments to licensing negotiations.

A number of courts have followed the Supreme Court's lead, denying injunctive relief where an injunction would threaten publication of an infringer's creative work. 193 Sometimes, those courts, borrowing from principles established outside of copyright, have emphasized the extraordinary nature of injunctive relief. Thus, In Silverstein v. Penguin Putnam, Inc., 194 Silverstein, the editor of a 1996 volume of unpublished Dorothy Parker poems sought to enjoin Penguin from distributing copies of a three-volume 1999 work collecting all Dorothy Parker poems. Penguin's work included all but one of the poems in Silverstein's volume, chronologically arranged at the back. The district court granted summary judgment to Silverstein and issued an injunction, but the Second Circuit reversed, finding material questions of fact that precluded summary judgment, and also holding that even if Penguin had infringed, Silverstein's right was "too slight to support an injunction against publication of the Penguin volume. ... "195 The court cited non-copyright cases for the principle that injunctive relief is an extraordinary remedy 196 and went on to emphasize that issuing an injunction would reduce the value of the copyright in the poems themselves—a copyright not held by Silverstein, who claimed a copyright only in the arrangement of poems.¹⁹⁷ Hence, even if Silverstein

^{192.} *Id.* at 578 n.10. *See also* New York Times Co. v. Tasini, 533 U.S. 493, 505 (2001), where the Court, after a finding of infringement by databases of newspaper article prepared by freelance authors, wrote that "it hardly follows from today's decision that an injunction against the inclusion of these Articles in the Databases (much less all freelance articles in any databases) must issue."

^{193.} Abend v. MCA, Inc., 863 F.2d 1465 (9th Cir. 1988) provides a classic example. In denying an injunction preventing further exhibition of "Rear Window," the Ninth Circuit wrote:

The "Rear Window" film resulted from the collaborative efforts of many talented individuals other than Cornell Woolrich, the author of the underlying story. The success of the movie resulted in large part from factors completely unrelated to the underlying story, "It Had To Be Murder." It would cause a great injustice for the owners of the film if the court enjoined them from further exhibition of the movie. An injunction would also effectively foreclose defendants from enjoying legitimate profits derived from exploitation of the "new matter" comprising the derivative work. . . .

Id. at 1479. The Supreme Court affirmed without explicitly addressing the remedial issue. See Stewart v. Abend, 495 U.S. 207 (1990).

^{194.} No. 03-7363, 2004 U.S. App. LEXIS 9006 (2d Cir. 2004).

^{195.} Id. at *3.

^{196.} Id. at *19.

^{197.} Id. at *21.

proved at trial that Penguin's work had infringed on his selection and arrangement, Silverstein would not have been entitled to injunctive relief.

In other cases, courts have applied equitable doctrines like laches to prevent copyright holders from capturing the fruits of investments made by infringers. Again, a Second Circuit case is illustrative. In *New Era Publications International v. Henry Holt and Co.*, ¹⁹⁸ the court refused to enjoin a biography of L. Ron Hubbard even after concluding that the biography, which quoted extensively from Hubbard, infringed upon the copyright in Hubbard's published and unpublished writings. ¹⁹⁹ The court invoked laches, emphasizing that the copyright holder's delay in bringing the action prejudiced the biographer, who might have changed the book at minimal cost if the action had been brought earlier. Moreover, on the victorious defendant's petition for rehearing *en banc*, all eight participating judges, in two separate opinions, made it clear that "injunction is not the automatic consequence of infringement and that equitable considerations always are germane to the determination of whether an injunction is appropriate." ²⁰⁰

This doctrinal pattern—routine injunctive relief in cases of "simple piracy," a balancing of equities, with frequent refusal to award injunctions, when the infringer introduces creative work—is consistent with the underlying justifications for copyright. Widespread availability of injunctive relief encourages potential infringers to negotiate in advance with copyright owners, enabling those owners to coordinate investment in the copyrighted work. But several factors make it more difficult for potential infringers to negotiate in advance with copyright holders, at least in those cases where the potential infringer expects to combine aspects of the copyrighted work with creative output of her own. And if *ex ante* negotiations between copyright holder and infringer are not feasible, the principal underpinning for injunctive relief disappears.

For at least three reasons, the advantages generated by property rule protection of property rights in land, founded on the preference for *ex ante*

^{198. 873} F.2d 576 (2d Cir. 1989).

^{199.} The unflattering biography of the founder of the Church of Scientology was entitled "Bare-Faced Messiah: The True Story of L. Ron Hubbard." Id. at 577.

^{200.} New Era Publ'ns Int'l, APS v. Henry Holt Co., 884 F.2d 659, 661 (1989) (en banc) (Miner, J., concurring) (concurring for himself and three other judges). See also id. at 664 (Newman, J., dissenting) (dissenting for himself and three other judges from denial of the rehearing en banc: "[T]he panel's application of the laches doctrine demonstrates that equitable considerations, in this as in all fields of law, are pertinent to the appropriateness of injunctive relief. The public interest is always a relevant consideration for a court deciding whether to issue an injunction.").

negotiations, is less significant with respect to copyright.²⁰¹ First, information asymmetries often make it difficult for the copyright holder to coordinate licensing of the copyrighted work. A potential licensee may be reluctant to disclose the details of a prospective use until after securing the license; premature disclosure may cause the copyright holder to appropriate the unprotectable idea.²⁰² On the other hand, the copyright holder may balk at granting a broad license without knowing the nature of the licensee's use.²⁰³ No comparable problems arise when land rights are at stake.²⁰⁴

Second, copyright's fuzzy boundaries (between idea and expression, or infringement and fair use), together with the difficulties inherent in proving infringement rather than independent creation, make bargaining over copyright licenses more difficult than bargaining over land rights, which tend to be clearly defined. Bright Tunes Music Corp. v. Harrisongs Music, Ltd. In furnishes an extreme example. A federal district court found as a fact that George Harrison's "My Sweet Lord" subconsciously appropriated musical phrases and harmonies from an earlier song, "He's So Fine." If Harrison was not aware of the appropriation, how would he know—ahead of time—to negotiate with the copyright holder? The fuzzy boundary problem is not, however, limited to cases of subconscious appropriation. Even if a songwriter knows that he is drawing on an earlier work, doctrine provides no clear demarcation between appropriation of an unprotected idea and of protected expression.

^{201.} The copyright statute explicitly provides for compulsory licensing—a liability rule—for several categories of work. See, e.g., 17 U.S.C. § 115 (2000) (musical recordings); id. § 116 (songs played on jukeboxes); id. § 118 (use of certain works by public television). These provisions are designed, at least in part, to reduce the transaction costs associated with negotiating individual licenses. Terry Fisher has argued for an expansion of compulsory licenses to overcome transaction costs with respect to other low-valuing users. William W. Fisher III, Reconstructing the Fair Use Doctrine, 101 HARV. L. REV. 1661, 1724–25 (1988). But, as Robert Merges has argued, a statutory compulsory licensing scheme may deter private parties from developing privately administered liability rules, which tend to be superior to government-developed rules. Robert P. Merges, Contracting Into Liability Rules: Intellectual Property Rights and Collective Rights Organizations, 84 CAL. L. REV. 1293 (1996).

^{202.} See Lemley, Economics of Improvement, supra note 83, at 1053.

^{203.} Cf. Clarissa Long, Proprietary Rights and Why Initial Allocations Matter, 49 Emory L.J. 823, 830 (2000) (discussing analogous problem in patent law).

^{204.} When a neighbor seeks an easement, or a covenant, the neighbor can disclose his or her proposed use without concern that the landowner would appropriate the use; ownership of neighboring land will generally be a prerequisite to making use of the right at issue.

^{205.} See generally Merrill, supra note 53, at 24 (noting that when entitlement determination costs are high, Coase theorem's assumption of efficient bargains may not hold, because disparities in parties' assessments of their respective rights often cannot be resolved without litigation).

^{206. 420} F. Supp. 177 (1976), aff'd sub nom. ABKCO Music, Inc. v. Harrisongs Music, Ltd., 722 F.2d 988 (2d Cir. 1983).

^{207.} See Rehyer v. Children's Television Workshop, 533 F.2d 87, 91 (2d Cir. 1976), cert. denied

expression, that appropriation may be authorized by the multi-factored fair use doctrine.²⁰⁸ In these circumstances, knowledge that courts will award injunctive relief against infringers is unlikely to generate significantly more before-the-fact negotiations. Of course, uncertainties about the scope of legal rights are not unknown in real property law, but areas of significant uncertainty are the very areas in which courts most often limit owners to damage remedies rather than issuing injunctions that would require forfeiture of significant investments.²⁰⁹

Third, because intellectual works often incorporate copyrightable contributions by multiple authors, a rule that allocates to each copyright holder a right to enjoin use of her work creates an anticommons—an environment in which multiple parties have the power to exclude each other from use of the work. Ex ante negotiations, then, would not necessarily produce value enhancing bargains.

Once the preference for *ex ante* dispute resolution fades, the commitment to injunctive relief becomes problematic in light of copyright's objective to generate optimal incentives to create. Because copyright's boundaries are fuzzy, and because it is not always easy to separate independent creation from infringement, the prospect of injunctive relief may stifle creativity. Protecting copyrights with a property rule often allocates to the initial copyright holder bargaining power disproportionate to the value of her

The difficult task in an infringement action is to distill the nonprotected idea from protected expression.... While the demarcation between idea and expression may not be susceptible to overly helpful generalization, it has been emphasized repeatedly that the essence of infringement lies in taking not a general theme but its particular expression through similarities of treatment, details, scenes, events and characterization.

See also Nichols v. Universal Pictures Corp., 45 F.2d 119 (1930) (Hand, J.), cert. denied 282 U.S. 902 (1931) (noting that there is a point in a series of abstractions about a play "where they are no longer protected, since otherwise the playwright could prevent the use of his 'ideas,' to which, apart from their expression, his property is never extended. Nobody has ever been able to fix that boundary, and nobody ever can.").

208. See 17 U.S.C. § 107 (2000) (enumerating four fair use factors). Moreover, when the timing of a work is critical, as it often is when copyrighted work has significant news value, the likelihood of pre-publication negotiations is even smaller. Cf. Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539 (1985) (Nation magazine publishes excerpts from President Ford's memoirs in an effort to "scoop" the competition; divided Supreme Court rejects the Nation's effort to advance fair use as a defense).

209. See, e.g., Manillo v. Gorski, 255 A.2d 258 (N.J. 1969) (injunctive relief not available to remove minor, difficult-to-detect border encroachment where removal of encroachment would entail hardship); Brown v. Voss, 715 P.2d 514 (Wash. 1986) (injunctive relief not available for technical and unintentional misuse of easement when dominant owner would suffer hardship from grant of injunction).

210. Lemley, Economics of Improvement, supra note 83, at 1020; see also Francisco Parisi & Catherine Sevcenko, Lessons from the Anticommons: The Economics of New York Times Co. v. Tasini, 90 KY. L.J. REV. 295 (2001).

⁴²⁹ U.S. 980 (1976) stating:

creative output.²¹¹ Consider, for instance, George Harrison's plight, or that of a movie producer whose film uses, as background, copyrighted paintings.²¹² If the original author has a right to enjoin production or sale of the song or movie, despite a trivial contribution to the success of the work, the author's bargaining power decreases the value of the song or film—reducing the incentive to create such songs or films.²¹³ Although negotiations with the copyright owner before composing the song or making the movie would reduce the bargaining power of the original composer or artist,²¹⁴ those negotiations are not always feasible—particularly in the case of the subconscious infringer.²¹⁵ Moreover, given the abundance of themes, plots, characterizations, and musical figures, many authors are in danger of infringement actions by authors whose works they have never read or heard. If a successful infringement action would lead to injunctive relief, the effect on creative output might be significant.²¹⁶

These difficulties with injunctive relief do not apply in the case of simple piracy. There would be little reason to limit Disney to money damages in an action against an animator who drew a children's cartoon starring Mickey Mouse, identified by name and appearance.²¹⁷ But the case for injunctive

^{211.} See generally 2 PAUL GOLDSTEIN, COPYRIGHT § 11.2.1, at 11:33 (2d ed. 2000) ("Armed with ... an injunction, the copyright owner can extract not only the value of the infringing portion of defendant's work, but also some part of the work's value that is attributable to the defendant's independent effort.").

Stewart v. Abend, 495 U.S. 207 (1990) provides a famous example. There, the holder of a copyright in Cornell Woolrich's story demanded fifty percent of the gross revenues from Alfred Hitchcock's "Rear Window", which was based on the story. *Id.* at 228. The copyright holder had acquired the copyright for \$650 plus ten percent of proceeds from exploitation of the story. *Id.* at 212.

^{212.} See, e.g., Ringgold v. Black Entm't Television, Inc., 126 F.3d 70 (2d Cir. 1997) (poster of copyrighted quilt used as background in television situation comedy).

^{213.} See Wendy J. Gordon, On Owning Information: Intellectual Property and the Restitutionary Impluse, 78 VA. L. REV. 149, 259 (1992); Mark F. Grady & Jay I. Alexander, Patent Law and Rent Dissipation, 78 VA. L. REV. 305, 307–08 (1992).

^{214.} Cf. Gordon, supra note 213, at 259 (discussing effect of injunctive relief and various damage measures on the incentive for parties to use the market).

^{215.} Even when those negotiations are feasible, Robert Merges has emphasized the possibility of strategic behavior and bargaining breakdown. Robert Merges, *Intellectual Property Rights and Bargaining Breakdown: The Case of Blocking Patents*, 62 TENN. L. REV. 75, 82–83 (1994).

^{216.} Mark Lemley has suggested another approach to this problem, a "blocking copyrights" doctrine similar to the well-established "blocking patents" doctrine. Lemley, *Economics of Improvement, supra* note 83, at 1076–77. As he points out, such a doctrine would prevent an original creator from capturing the work of a subsequent improver, because the subsequent improver would "own a copyright in her contributions." *Id.* at 1077.

^{217.} Terry Fisher has, however, offered another justification for liability rules in copyright. Fisher notes that compulsory licenses—a form of liability rule—can operate to reduce the deadweight loss associated with monopoly power. Fisher, *supra* note 201, at 1723–24. Fisher argues that if the licensing fee were set at a price less than the price the copyright holder would charge for the work, the work would circulate more widely. *Id.* This wider circulation would generate efficiency gains in light of the non-rivalrous nature of intellectual work. *Id.* Fisher concedes, however, that the copyright

relief in copyright infringement actions is more contextual than the case for injunctive relief in trespass or quiet title actions. Copyright doctrine generally—but not universally²¹⁸—reflects that difference.

D. Freedom to Contract: Conditional Transfers

Free alienability of property rights has obvious advantages. When a potential buyer values a right more than the current owner, both parties are better off if the owner is free to transfer to the buyer. Moreover, a change in the identity of the owner does not typically generate externalities. Because owner and buyer are the only parties affected by the transfer, there is little reason for legal rules to prevent them from making a deal that benefits both of them.

Suppose, however, that an owner wants not to transfer her rights *in toto*, but to carve up those rights, or to condition those rights on assumption of specified legal obligations. Should the law ever interfere? That question has long been a live one in real property law, ²¹⁹ and it has increasingly become a subject of debate in copyright law, where the primary question has been whether a copyright owner can impose contract conditions on potential users of the copyrighted work—conditions that limit the uses that copyright law would otherwise permit a licensee to make. ²²⁰

holder might have to be given additional rights to maintain the same incentive to create. Id.

^{218.} Cf. Woods v. Universal City Studios, Inc., 920 F. Supp. 62 (S.D.N.Y. 1996) (granting preliminary injunction of movie that allegedly infringed on cartoon without inquiry into relative creative contributions of cartoon and movie).

^{219.} The debate has proceeded among several lines. A basic question involves the scope of landowner's freedom to impose constraints on purchasers or other successors. Although the common law has traditionally imposed a variety of such constraints, among them the Rule Against Perpetuities, the rule against restraints on alienation of fee interests, and the privity and touch and concern doctrines for real covenants, those restrictions on landowner freedom have also been under attack. See generally Epstein, supra note 157.

A second line of debate involves the mechanisms landowners use to impose constraints on purchasers and successors. After an era in which it had become fashionable to attack formal rules limiting the mechanisms for imposing restrictions, Tom Merrill and Henry Smith have studied and defended standardization of property forms as a mechanism for minimizing measurement costs borne by third parties. See Merrill & Smith, Optimal Standardization, supra note 133; Thomas W. Merrill & Henry E. Smith, The Property/Contract Interface, 101 COLUM. L. REV. 773 (2001).

^{220.} For a small sample of the debate, see Yochai Benkler, An Unhurried View of Private Ordering in Information Transactions, 53 VAND. L. REV. 2063 (2000); Mark A. Lemley, Beyond Preemption: The Law and Policy of Intellectual Property Licensing, 87 CAL. L. REV. 111 (1999); Michael J. Madison, Legal Ware: Contract and Copyright in the Digital Age, 67 FORDHAM L. REV. 1025 (1998); J. H. Reichman & Jonathan A. Franklin, Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good Uses of Information, 147 U. PA. L. REV. 875 (1999).

As with free alienability, analysis starts with the principle that parties should be free to carve up rights in a way that makes both parties better off. The next question, however, is whether conditioning rights in particular ways creates negative externalities that legal limits on free contract might control.

First, consider the issues with respect to property rights in land. In general, a landowner can be counted upon to carve up rights in ways that do not generate overuse, because the owner will bear the cost of that overuse—either in reduced productivity of the rights the landowner has retained, or in reduced sale price for those retained rights. Indeed, the tragedy of the commons justification for property rights is based on just this assumption: that an owner will coordinate use of the resource in a way that avoids overuse. Moreover, carving up rights in land among several owners does not generally have a significant impact on non-owners; whatever externalities the collective owners could impose would also have been within the power of a single owner to impose.

Similarly, permitting a landowner to carve up rights does not generally increase the likelihood of physical conflict among potential users. As the ways in which an owner can divide up rights expand, so do the opportunities to satisfy the needs of diverse parties, reducing incentives for conflict.

It should not be surprising, therefore, that the common law permits landowners to divide the bundle of sticks that constitute the fee simple absolute both by time (leaseholds, life estates) and use (easements, restrictive covenants, and defeasible fees). The parties may also provide, by private agreement, different mechanisms for assuring that the parties abide by the restrictions imposed on them. Thus, parties may provide for enforcement by injunction (as would ordinarily be the case with easements and restrictive covenants), ²²¹ or by forfeiture (as would be the case with leasehold violations or defeasible fees). ²²²

The few limits real property law places on freedom to divide rights in unusual ways reflect two potential externalities: search costs borne by all potential purchasers of rights in land, and harms inflicted on future owners whose interests might not be adequately reflected in current purchase prices. Consider first the search cost justification. Tom Merrill and Henry Smith have argued that the common law prohibits creation of novel property rights, and that the prohibition is rooted in concerns that novel rights would impose search costs not merely on parties to an individual property transaction, but on parties to all property transactions, including those that do not create novel

^{221.} See Gerald Korngold, For Unifying Servitudes and Defeasible Fees: Property Law's Functional Equivalents, 66 Tex. L. Rev. 533, 548 (1988).

^{222.} Id. at 548-52.

rights.²²³ At the same time, however, they concede that the limitation lacks substantive bite because "the system of estates in land is sufficiently flexible that one can nearly always find a way to effectuate a complicated conveyance."²²⁴

The principal limits on a landowner's right to impose restrictions on use and future ownership of land are doctrines that reflect land's permanency, together with the imperfections of human foresight. Owners who carve up interests in land today may not adequately appreciate the extent to which their actions will prevent land from flowing to higher valuing users in the future. One might expect that if restrictions will generate future inefficiency, that inefficiency would be reflected in the current market price of restricted land; but the more distant in time the inefficiency, the more negligible the impact on current price. As a result, the market might not provide adequate protection against long-term restrictions with the potential for inefficiency.

Consider, for instance, the imposition of restraints on alienation, a long-time stepchild of the law. When a lease restrains a tenant's right to sublet or assign the premises, courts typically enforce the restraint, largely on the premise that landlord and tenant are in the best position to evaluate the wisdom of the restraint. By contrast, when an owner imposes a restraint on alienation of a fee interest, common law courts routinely hold the restraint unenforceable. By

^{223.} Merrill & Smith, Optimal Standardization, supra note 133.

^{224.} Id. at 24.

^{225.} Merrill and Smith have argued that concerns about the external costs associated with novel property rights have led courts and legislatures to limit the types of property rights recognized by law. Merrill & Smith, *Optimal Standardization*, *supra* note 133. At the same time, however, they recognize that "the system of estates in land is sufficiently flexible that one can nearly always find a way to effectuate a complicated conveyance." *Id.* at 24.

^{226.} See Ellickson, supra note 22, at 1374 (observing that excessive fragmentation of interests in land reflects incapacity to manage the land); Stewart E. Sterk, Foresight and the Law of Servitudes, 73 CORNELL L. REV. 956, 957–60 (discussing doctrinal treatment of inadequate foresight). Cf. Julia D. Mahoney, Perpetual Restrictions on Land and the Problem of the Future, 88 VA. L. REV. 739 (2002) (arguing that widespread statutory recognition of conservation easements fails to account for limitations in foresight with respect to technological advances and cultural changes).

^{227.} Cf. Robert C. Ellickson, Adverse Possession and Perpetuities Law: Two Dents in the Libertarian Model of Property Rights, 64 WASH. U. L.Q. 723, 734-35 (1986).

^{228.} See generally id.; Sterk, supra note 157, at 631-34.

^{229.} See RESTATEMENT (SECOND) OF PROPERTY § 15.2(2) (1986) ("A restraint on alienation without the consent of the landlord of a tenant's interest in leased property is valid. . . .); see also id. cmt. a (noting that landlord's concerns about personal selection of tenant justifies restraint on alienation of leasehold interest).

^{230. 6} AMERICAN LAW OF PROPERTY, supra note 150, § 26.15. "The authorities are unanimous in holding that a perpetual and unqualified disabling restraint is void when imposed upon an otherwise absolute legal interest . . . An unqualified provision for forfeiture upon alienation is equally void." Id.

The Rule Against Perpetuities reflects similar concerns.²³¹ An owner is entitled to create contingent interests in the land, reflecting the view that the landowner is in the best position to evaluate the costs and benefits of those interests.²³² But the Rule limits the time frame during which interests may remain contingent, reflecting doubts about the owner's ability to foresee the relative benefits and costs into the distant future.²³³ In particular, an owner who attempts to create long-term contingent interests may well ignore first, the cost of locating the parties necessary to recreate a fee simple absolute, and second, the holdout problems inherent in obtaining their agreement to recreate that fee simple.²³⁴ The nineteenth century privity doctrine presents yet another example of a rule premised on inadequate long-term foresight. The doctrine prevented legal enforcement of covenants between neighboring landowners and appears to have been premised on fear that current landowners would ignore the difficulty that purchasers would face in discovering covenants created decades earlier.²³⁵

These limits on freedom to shuffle the bundle of sticks, however, remain the exception rather than the rule, and they appear to be diminishing in

See also Thomas W. Merrill, Property and the Right to Exclude, 77 NEB. L. REV. 730, 743 (1998) ("Under the common law, direct restraints on the power of alienation of a fee simple are strongly disfavored. But lesser property interests, such as leaseholds, can be made inalienable if the landlord expressly so provides in the lease.").

231. Ellickson, supra note 22, at 1374.

232. See Jeffrey E. Stake, Darwin, Donations, and the Illusion of Dead Hand Control, 64 Tul. L. Rev. 705, 717-18 (1990):

The law leaves most decisions as to whether and how rights will be divided and subdivided to the individual holders of those rights. The rights to divide and transfer are important parts of our concept of private property. Because our property system recognizes finely divided rights in things and leaves decisions to subdivide to individual owners, a significant legal potential exists for a broad spreading of rights in assets.

See also Richard A. Epstein, Past and Future, The Temporal Dimension in the Law of Property, 64 WASH. U. L.Q. 667, 705 (1986) (noting ability of owner to tailor terms of grant to mediate potential conflicts among subsequent grantees).

233. See generally JOEL C. DOBRIS, STEWART E. STERK & MELANIE B. LESLIE, ESTATES & TRUSTS 823 (2d ed. 2003) (noting that general idea behind the Rule is that "it is unreasonable for a decedent to attempt to control property beyond the period during which decedent might plausibly assert some special knowledge" of the property's beneficiaries.).

234. The same concern underlies the common law antipathy to servitudes in gross—those whose benefit was not tied to ownership of neighboring land. See Korngold, supra note 221, at 543-44.

235. See Susan F. French, Toward A Modern Law of Servitudes: Reweaving the Ancient Strands, 55 S. CAL. L. REV. 1261, 1292–93 (1982) (noting that in England, horizontal privity rule served to prevent enforcement of affirmative burdens not easily discoverable by successor landowners). Professors Merrill and Smith have taken the argument one step further, suggesting that creation of novel property rights imposes costs not only on land burdened by the novel rights, but also on prospective purchasers of other land. Creators of novel rights have no incentive to consider these costs on third parties. Merrill & Smith, Optimal Standardization, supra note 133, at 27 (noting that parties who create new property rights will not take into account the full magnitude of measurement costs they impose on strangers to the title).

significance. The Rule Against Perpetuities has been abolished in many states and watered down in most others. The advent of recording systems, and concomitant reduction in search costs, has brought a decline (and even abandonment) of the privity doctrine. For the most part, the purposes for recognizing property rights in land—avoiding overexploitation, and minimizing conflict—are best advanced by permitting landowners great freedom to carve up interests as they see fit.

Unlike land, works of authorship do not present a significant danger of overexploitation. Although law extends copyright protection to assure adequate incentives to create and develop intellectual works, law also recognizes that the market power enjoyed by many copyright holders will generate a deadweight loss. To minimize that loss, copyright law incorporates a variety of doctrines, including those discussed in previous sections: durational limits, fair use, and the first sale doctrine. Each of these doctrines increases dissemination of the copyrighted work and reduces the scope of the deadweight loss. The doctrines do so, in effect, by conferring external benefits on persons who are not parties to any intellectual property transactions: for instance, readers who do not pay for the right to read; subsequent creators who benefit from the fair use doctrine; or the principle that ideas are not entitled to protection. Seepage of copyrighted works from licensees to third parties operates to offset the monopoly power enjoyed by copyright owners, and to maintain an appropriate balance between prior and subsequent creators.²³⁸

Permitting a creator to impose, by contract, non-standard conditions on use of a work of authorship permits that creator to eliminate many of the external benefits associated with the statutory copyright regime.²³⁹ For instance, by disclosing copyrighted work to potential purchasers only on

^{236.} See generally Stewart E. Sterk, Jurisdictional Competition to Abolish the Rule Against Perpetuities: R.I.P. for the R.A.P., 24 CARDOZO L. REV. 2097, 2101-03 (2003).

^{237.} RESTATEMENT (THIRD) OF PROPERTY: SERVITUDES § 2.4 (2000), provides: "No privity relationship between the parties is necessary to create a servitude." Comment a describes the decline of the privity doctrine, and comment b notes that the recording acts perform whatever functions the horizontal privity requirement previously performed. See id.

^{238.} See Boyle, supra note 79, at 2032 ("When it comes to the price discrimination argument, however, the critics of intellectual property expansion will stress the way in which the current system is leaky enough to get the goods to many people at zero marginal cost."); id. at 2033 (noting prevalence of leaky system, and general understanding that "accumulation of apparently useless information pays dividends in the long run."); Gordon, supra note 86, at 1386–90.

^{239.} See, e.g., 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, 433–34 (1999) (noting that background law use privileges may generate high positive externalities that would be lost if parties were free to contract out of background law principles); Julie E. Cohen, supra note 142, at 1812–13 (noting that centralization of access control will lead to underproduction of works that generate public benefit).

condition that the purchasers refrain from sharing ideas, or using even "fair use" materials, the creator of the copyrighted work can deny access to users who would otherwise receive the work for free.

Ordinarily, propertization of resources is extolled for its ability to internalize externalities; if a property owner can capture all external benefits created by the resource, the owner is more likely to use the resource efficiently. When the resource is non-rival, however, complete propertization may result not in the capture of external benefits, but in their dissipation. The owner will typically charge a positive price for the resource even though the marginal cost of distributing another unit is zero, resulting in a deadweight loss. Avoiding this loss serves as a foundation for the doctrinal limitations on copyright protection—durational limits, fair use, and first sale among them. It is difficult to see what purpose is served by limiting the scope of copyright protection, only to permit the copyright holder to parlay those limited rights by contract, into a broader property right that avoids doctrinal limitations. Put another way, if one concludes that it is efficient to permit the copyright holder to eliminate positive externalities by contract, it is hard to see why it would not be equally efficient for copyright law to eliminate those externalities by statute-through abolition of first sale, fair use, and other limitations on property protection.

Judge Easterbrook and others have argued that free contract enables the author to price discriminate, making the work more accessible to more users than would be the case if copyright law (or contract law) constrained the terms of license agreements.²⁴⁰ On this analysis, an author will not succeed in leveraging his market power to guarantee even more market power; more consumers will enjoy works of authorship in a regime that permits the author to set the terms and conditions of copyright licenses.²⁴¹

^{240.} See ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449–50 (7th Cir. 1996) (Easterbrook, C.J.) (discussing increase in consumer surplus as a result of price discrimination and use of institution of contract to reduce opportunities for arbitrage, making price discrimination feasible); see also William W. Fisher III, Property and Contract on the Internet, 73 CHI.-KENT L. REV. 1203, 1234–40 (1998); 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) ("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. The dropping cost of consent means that we can more fully exploit—through contract—the value of a particular work.").

^{241.} See ProCD, 86 F.3d at 1449:

If ProCD had to recover all of its costs and make a profit by charging a single price—that is, if it could not charge more to commercial users than to the general public—it would have to raise the price substantially above \$150. The ensuing reduction in sales would harm consumers who value the information at, say \$200. They get consumer surplus of \$50 under the current arrangement but would cease to buy if the price rose substantially.

At bottom, the argument for free contract is an argument that the copyright statute itself provides too little incentive to produce works of authorship because the statute—unlike a regime of free contract combined with perfect price discrimination—does not permit the copyright holder to capture all of the value associated with her work of authorship. That argument, however, rests on a number of heroic assumptions.

First, the free contract argument assumes that the value of a work of authorship is all value that is newly created, not value that is diverted from other works. Michael Meurer has demonstrated the falsity of that assumption; some of the demand for newly-created works of authorship is demand diverted from other works of authorship.²⁴² Hence, if free contract permits the creator of a work of authorship to capture all of the value associated with the work, free contract will provide too large an incentive to create. Limitations on free contract, then, do not inevitably lead to inadequate incentives for creative activity.

Second, the free contract argument assumes that perfect price discrimination leads to efficient distribution of copyrighted works. That assumption, too, rests on questionable foundations. Many potential consumers of a copyrighted work would pay nothing for it, because they lack sufficient information about the work's value. If, however, they are able to use the work for free—as is often the case in a regime that recognizes doctrines like fair use, first sale, and the idea/expression distinction—they may ultimately derive significant value from the work. That value will be lost in a system of free contract, even if copyright holders are capable of perfect price discrimination.

Third, even if copyright holders were entirely free to contract, they would find it impossible to engage in behavior approaching perfect price discrimination. Perfect price discrimination requires perfect information about the preferences of the universe of potential users. Even if we indulge in the questionable assumption that the users themselves know the value of intellectual works they have not yet consumed, copyright holders will find it quite costly to obtain that information. Especially if many users attach very small value to particular works, the cost of obtaining information about that

^{242.} Meurer, *supra* note 110, at 96–97 (explaining how too much protection of works of authorship generate excessive incentives to create).

^{243.} See Boyle, supra note 79, at 2033 (noting prevalence of leaky system, and general understanding that "accumulation of apparently useless information pays dividends in the long run."); Gordon, supra note 86, at 1386–90.

Moreover, as Michael Meurer has observed, low valuing users, including research, religious, or educational users may create positive externalities which will be lost if they are excluded from access to works of authorship. Meurer, *supra* note 110, at 94.

value will typically exceed the value itself.²⁴⁴ As a result, these users will not enjoy the copyrighted work, despite the small marginal cost of providing it to them. And many of these are the very users who will enjoy the work for free in a regime where the copyright holder's protection emanates from the statute rather than from contract.

As price discrimination becomes increasingly imperfect, the argument for free contract becomes even less plausible. To the extent that free contract reduces the scope of fair use, first sale, and related doctrines, free contract excludes some potential users who would pay the marginal cost of distributing a copy of the copyrighted work, resulting in deadweight loss. The only benefit that offsets that loss is the incentive to produce more intellectual works that would result from the right to capture more of the value of those works. But, as we have seen, such a broad right may well lead to overproduction, rather than optimal production, of works of authorship.²⁴⁵

The problems with permitting a copyright holder to contract freely with prospective users of the copyrighted work are directly related to the justification for providing limited property rights in intellectual work. We propertize intellectual work to provide an incentive to create; we limit property rights because the works are non-rival, and complete propertization would lead to underdistribution. Neither of these issues arises with respect to real property.

The point, then, is that copyright's foundation is sufficiently different from the foundation for property rights in land that the analysis is necessarily different. One cannot make a normatively persuasive argument for freedom to impose conditions on copyright licensees simply by analogizing to similar freedom in land law.

CONCLUSION

It is far too late to expunge the rhetoric of property from dialogue about copyright. Moreover, insights developed in the law of real property can sometimes illuminate knotty problems that arise with respect to intellectual works. The problem is not with comparison, but with superficial analogies that do not take account of the often different foundations and functions of legal doctrine in these two areas.

^{244.} *Cf.* Meurer, *supra* note 110, at 75–80 (2001) (discussing sorting costs associated with various forms of price discrimination).

^{245.} Meurer, *supra* note 110, at 96–97 (explaining how too much protection of works of authorship generate excessive incentives to create).

Close examination of the foundations of real property law and copyright law reveal differences, some subtle, some less so, that should and do have an impact on the shape of doctrine in each area. In particular, that examination cautions against importation into copyright law of several defining features of real property law—including permanency of rights, a broad right to exclude, nearly-routine enforcement of rights by injunctive relief, and unlimited contractual freedom to impose conditions on the exercise of statutory rights.