February 8, 2002



COMPETITIVE ENTERPRISE INSTITUTE

Defending Intellectual Property

By James V. DeLong Senior Fellow -- Project on Technology & Innovation Competitive Enterprise Institute 1001 Connecticut Ave., NW Washington, DC 20036 (202) 331-1010 jdelong@cei.org www.cei.org

TO BE PUBLISHED IN: *Copy Fights: The Future of Intellectual Property in the Information Age*, Cato Institute (Summer 2002)

The Competitive Enterprise Institute is a 501(c)(3) organization.

Food Fights

Intellectual property (IP) is a fine topic for anyone with a bent for mischief. Because views in the interested community are both fractured and vehement, at any gathering one can idly ask, "So, what do you think of Napster?" and sit back to enjoy the entertainment. This is special fun at lunch meetings, as anyone with fond memories of the food fight in *Animal House* will quickly understand. If you have forgotten that scene, you can rent the movie for about \$3.00, thanks to a system of protecting intellectual property that enables video rental outlets to maintain large stocks of old classics.

Despite the virtues of protecting IP, as demonstrated by such pragmatic criteria as the easy availability of old movies, not everyone likes the institution. One camp of skeptics contains libertarian-oriented critics who accept the institution of tangible property as both morally compelled and socially vital, but do not believe that intellectual property is supported by the same philosophical and practical considerations. They would not allow a creator to invoke the legal power of the state to exclude others from using his creation.¹ However, they would allow self-help, ranging from encryption to contract. Their objection is not so much to the idea of intellectual property as it is to the use of state power to enforce it.

Another camp might be called the anarchists. Their view seems to be that the intellectual property should be available to all, in no way subject to the control of the creator.² I have yet to read of anyone propounding the proposition that a creator has an

¹ See Tom G. Palmer, "Intellectual Property: A Non-Posnerian Law and Economics Approach, "in *Intellectual Property: Moral, Legal, and Intellectual Dilemmas*, ed. Adam D. Moore (Rowman & Littlefield, 1997), p. 179; N. Stephan Kinsella, "Against Intellectual Property," *Journal of Libertarian* Studies, Vol. 15, No, 2 (Spring 2001), p. 1 www.mises.org/journals/jls/15 2/15 2 1.pdf.

² See, *e.g.*, Richard Stallman, *Why Software Should Not Have Owners* (1994, Last update 2001/09/15) <<u>www.gnu.org/philosophy/why-free.html</u>>. Professor Neil Weinstock calls those who adopt this position

affirmative duty to create, and may not withhold his effort just because he has no mechanism for obtaining recompense for the effort, but I would not be surprised to see such an argument.³

The number of avowed anarchists is small, but they seem to me to have many fellow travelers in the academic world, closet anarchists who claim to favor intellectual property, in the abstract, if the rights of creators and the public are properly balanced, but whose policy prescriptions would in pragmatic reality destroy IP as an institution. In *Universal City v. Corley*, ⁴ 48 prominent law professors endorsed the theory that encryption vitiates "fair use" doctrines that permit limited copying of IP and that the Digital Millennium Copyright Act (DMCA), which outlaws some encryption-cracking devices, is therefore unconstitutional.⁵ Their view seems to encompass the proposition that encryption itself should be illegal because it extends protection of IP beyond the powers granted to Congress by the copyright clause of the Constitution.

The professors reject alternative methods of recognizing the interests protected by fair use doctrine, and do not consider at all whether the doctrine should be retooled for the digital age. For example, a strong argument for treating copying for academic use as fair use has always been that obtaining permission involves high transaction costs. Because

with respect to material distributable via the Internet "minimalists." Neil Weinstock, "Copyright and a Democratic Civil Society," 106 *Yale L. J.* 283, 336-41, 372-75 (1996), and sources cited therein. ³ An analogy can be drawn to laws mandating preservation of historic properties. Initially, these forbade owners to alter property. However, in many cases a property is not a viable economic proposition if alterations are forbidden, as neighborhoods change and costs increase, and it becomes a cash drain on the owner. Owners respond by skimping on maintenance, naturally enough. This does not cause local officials to rethink the laws. Instead, they thunder against the evil owners and their "demolition by neglect," and promote new laws to compel owners to maintain the property for the public benefit. See the District of Columbia Prevention of Demolition of Historic Buildings by Neglect Emergency Amendment Act of 1998, Bill 12754, Sept. 17, 1998 <www.dcwatch.com/archives/council12/12-754.htm>.

⁵ 273 F. 3d 429 (2d Cir. 2001), Brief *Amicus Curiae* in Support of Defendants-Appellants (Jan. 26, 2001) <www.eff.org/IP/Video/MPAA_DVD_cases/20010126_ny_lawprofs_amicus.html>. Kathleen Sullivan,

the Internet reduces these costs, it undercuts this rationale and militates in favor of shrinking rather than expanding the scope of the fair use doctrine.⁶ Realistically, an inevitable consequence of eliminating encryption would be to make all digitized property indefensible, which would be the destruction of intellectual property rights in anything that can be digitized. Since the professors are not stupid, it is fair to assume that they are aware of this consequence of their position, and that their dedication to fair use is in fact a cloak for a desire, or at least a willingness, to bring about this destruction.

That such views are found in academia is not surprising. Anyone who deals with issues of rights in tangible property knows that academia generally is permeated by hostility to property rights, usually justified by reference to environmental protection, smart growth, historic preservation, social justice, or some other abstraction.⁷ Skepticism about IP is a logical extension of this distaste for property generally.

Another camp of skeptics focuses on the problems created by collisions between intellectual property rights and other values. Some measures designed to protect rights in IP, notably the DMCA, present serious First Amendment issues involving free speech, as in *Universal City v. Corley,* in which the defendant is charged with publishing a computer program that constituted a device for cracking encryption.

Other collisions can arise out of law enforcement or self-help efforts to defend intellectual property. Suppose, for example, that authorities or private parties hack into an individual's computer hard drive to see if it contains pirated material; the effort would

Dean of Stanford Law School, made the same argument, Electronic Frontier Foundation, Appeal Brief (Part V) (Jan. 19, 2001) < <u>www.eff.org/IP/Video/MPAA_DVD_cases/20010119_ny_eff_appeal_brief.html</u>>.

⁶ For an excellent discussion of the issue, see *American Geophysical Union v. Texaco*, 802 F. Supp. 1, 23-26 (S.D.N.Y. 1992), aff'd, 60 F.3d 913, 930-31 (2d Cir. 1994).

⁷ See generally James V. DeLong, *Property Matters: How Property Rights Are Under Assault—And Why You Should Care* (Free Press, 1997).

present problems of search and seizure under the Fourth Amendment, of invasion of privacy, and of interference with business relationships. Even a firm supporter of IP rights can believe that they should be subordinated to other values in particular contexts. On the other hand, it is also possible for those who oppose intellectual property rights to seize on the need to protect other values as yet another weapon against IP in general. The Electronic Frontier Foundation,⁸ which is the laboring oar in *Universal City v. Corley*, sees no grays at all. In any collision between IP and some other value, the other value wins.

One more position is also identifiable. Numbers of people who strongly support protection of intellectual property are happy to dilute rights in tangible property, at least when the tangible takes the form of real estate and the dilution carries a tag of environmental protection. (They would probably view differently any government effort to appropriate their retirement accounts.) This stance is not the product of a consistent philosophy, but it has a solid basis in the *realpolitik* of the modern world. Real estate has become less important as a producer of wealth and more of a consumption good. Intellectual property is an increasingly important source of wealth. Those whose economic position depends on IP defend it, even as they are indifferent to protecting rights in other forms of property not important to their economic well-being.

I have heard representatives of Hollywood-based entertainment industries, people who endorse any diminution of property rights characterized as "protecting endangered species, "wetlands preservation," "smart growth," or other environmentalist cause, bemoan the lack of respect for property rights exhibited by the Napster generation. At one panel session, I finally got up, pointed out the incongruity, and asked: "Is it not

⁸ www.eff.org.

possible that the Napsterites are only practicing what you taught them?" The remark was not well received, or even understood.

This phenomenon of picking and choosing among property rights also operates in the software industry. Think-tank staffers who regard the government's antitrust prosecution of Microsoft as an attack on intellectual property rights note wryly that Microsoft employees are major supporters of anti-property movements in the Northwest, and rarely see the connection between the government's quick willingness to appropriate Microsoft software and its cavalier attitudes toward the rights of owners of other types of property. These observers also believe that Microsoft's competitors are foolish to support the antitrust action, because success will provide a basis for continuing government efforts to take and reallocate other intangible assets that are important to the intellectual classes, such as 401(k) plans or telecommunications capacity.⁹

Not that the government needs much encouragement; it already regards telecommunications as subject to allocation by the government through "open access" and "must carry" rules.¹⁰ Congress also arrogates to itself the right to reallocate intellectual property rights according to political whim -- recent legislation extended the copyright term of property that was about to fall into the public domain, for example.¹¹ Washington scuttlebutt lays responsibility on the Disney Corporation, which was petrified about the expiration of copyright on some of its cartoon characters.

⁹ See James V. DeLong, *The Battle Over Property Rights Hits the Corporate Boardroom* (National Legal Center for the Public Interest, 1999) <//www.nlcpi.org/books/pdf/Briefly_july99.pdf>.

¹⁰ The FCC's "Must Carry" rules require cable and satellite providers to carry the signals of local television stations without recompense. "Open Access" requirements force cable providers that provide Internet service to provide access to independent ISPs as well to the cable provider's own service. See William E. Lee, *Open Access, Private Interests, and the Emerging Broadband Market*, Cato Institute Policy Analysis No. 379 (Aug. 29, 2000).

¹¹ For example, Congress recently extended copyright for works that were about to fall into the public domain. See Eldred v. Reno, 239 F.3d 372 (D.C. Cir. 2001), *petition for cert. filed*.

The analysis in this chapter addresses all these lines of thought, but its focus is on the views of the critics who defend tangible property while rejecting intellectual property. The other criticisms are taken up in passing. Similarly, the views of those who support intellectual property while disrespecting tangible property are addressed only by implication – it is not possible to make a coherent argument to this effect, because arguments for IP are built on arguments for property generally, and any devotee of IP who ignores protection of tangible property is cutting off the roots of his own position.

Back to Basics: In Defense of Property

A fundamental reason for skepticism about the legitimacy of establishing property rights in the products of the mind is that consideration of IP tends to be divorced from thought about tangible property. This is evident in the legal profession, where both academicians and practitioners regard "property," meaning real property and other tangible goods, and "intellectual property" as distinct topics, with little cross fertilization. The divorce seems to hold in economic discussion as well, and in general public discourse.

The roots of this division go back to the different origins of the different types of property in England, where tangible property was a creature of common law and copyright largely a creature of statute. For U.S. lawyers, the dichotomy is inherent in the Constitution. It is clear that "property" in tangible form has a legitimacy that pre-dates that basic charter. In the Fifth Amendment, which says that one may not "be deprived of ... property, without due process of law" and "nor shall private property be taken for public use without just compensation," the drafters did not define "property," nor has Congress ever done so. A court deciding a case under the Fifth Amendment looks to

state law to determine whether property exists.¹² Intellectual property is different. While patents, copyrights, trademarks, and trade secrets long antedated 1787, to U.S. lawyers, including those who sit on the Supreme Court, patents and copyrights are a product of laws enacted pursuant to Article I, Section 8 of the Constitution, which gives Congress power: "To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." The lawyers tend not to look to any common law gloss on intellectual property lurking in the background, because, as the Supreme Court said:¹³

The clause is both a grant of power and a limitation. This qualified authority, unlike the power often exercised in the sixteenth and seventeenth centuries by the English Crown, is limited to the promotion of advances in the 'useful arts.' It was written against the backdrop of the practices--eventually curtailed by the Statute of Monopolies--of the Crown in granting monopolies to court favorites in goods or businesses which had long before been enjoyed by the public. . . . The Congress in the exercise of the patent power may not overreach the restraints imposed by the stated constitutional purpose. Nor may it enlarge the patent monopoly without regard to the innovation, advancement or social benefit gained thereby. Moreover, Congress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available. Innovation, advancement, and things which add to the sum of useful knowledge are inherent requisites in a

¹² See, e.g., Philips v. Washington Legal Foundation, 524 U.S., 156 (1998).

¹³ See, *e.g.*, Graham v. John Deere, 383 U.S. 1 (1966). However, before statutory changes enacted in 1976, common law copyright existed for unpublished works. Upon publication, the common law right ceased and only statutory rights existed.

patent system which by constitutional command must 'promote the Progress of * * * useful Arts.' This is the standard expressed in the Constitution and it may not be ignored. And it is in this light that patent validity 'requires reference to a standard written into the Constitution.' [Citation omitted]"

As a result, while definitions of tangible property may have some independent basis derived from pre-existing common law and perhaps even from natural law, intellectual property is primarily the toy of Congress.¹⁴ The legal consensus is that: "Aside from an early and sporadic influence, the notion that authors are entitled, as a matter of natural right, to a reward for their intellectual labor, let alone to a full proprietary right in their creative product, has been rejected repeatedly and in no uncertain terms by both Congress and the courts."¹⁵ This legal reality forces lawyers to approach intellectual property issues in utilitarian-instrumental terms, devoid of illumination from the rich history of thought about property in general.

My own view of IP is shaped by the evolution of my involvement in the topic, which blurred the distinction between tangible and intellectual property. For years, I worked on the law and policy of environmental issues and EPA actions. Property rights is a logical segue from this, because property issues are at the core of many environmental topics, including wetlands, endangered species, zoning, land preservation and historic preservation. In each of these areas, governments take property without payment though regulation.

¹⁴ Trade secrets, a very important form of IP, are defined by state law rather than federal, and do indeed contain a large common law component. They are property for purposes of the Fifth Amendment, *Ruckleshaus v. Monsanto Co.*, 467 U.S. 986 (1984), but disclosure of trade secrets is governed by the law of torts. Trademarks, the fourth branch of IP law, are also based on federal law rather than state.
¹⁵ Weinstock, note _____, p. 307 n.97.

Eventually, I struck a deal with a publisher to write a book about property rights.¹⁶ As a by-the-way, my editor told me to put in a chapter on intellectual property. Reacting like most lawyers, my immediate response was: "Different topic; nobody treats tangible property and IP as part of the same whole."

But the editors insisted. And they were correct, because in fact the reasons for recognizing IP are much the same as the reasons for recognizing other forms of property, even though the historic evolution of the two types of property may have been distinct and even though a couple of important differences exist and create substantial analytical and practical difficulties.

The concept of property is one of humanity's great inventions. It appears to be universal in human culture; the stories of noble savages who lacked a concept of ownership have been debunked, and the general rule is that if a resource is scarce or if it takes labor to convert it to a useful state then humans will attach property rights to it. An Indian tribe would not recognize ownership rights in a buffalo running loose, but once shot it belonged to the hunter whose arrow brought it down.¹⁷

Property is one of the great foundation stones of civilization. It is the basis of the market systems and wealth accumulation that create economic progress, and thus cultural and spiritual progress. Material wealth may not be the highest goal of human life, but it is a prerequisite for other things that may be regarded as more exalted. When people talk of the excessive materialism of American life, it is fair to ask just what it is they want to give up: the electronic equipment that provides access to great music and theater at the touch of a button? The automobiles that provide the mobility and fantastic freedom of

¹⁶ James V. DeLong, *Property Matters: How Property Rights Are Under Assault—And Why You Should Care* (Free Press, 1997);.

our professional and personal lives? The machines that allow us to spend about 3 percent of our collective time producing food rather than the 95+ percent required a couple of centuries ago?

Starting in the earlier part of the 20th century, and at an accelerated rate after the New Deal 1930s, property rights fell into disrepute in academic and intellectual circles, and for several decades their advocates adopted a hangdog air of apology. Eventually, however, reality reasserted itself, and recognition of the importance of property to a free and prosperous society has recrudesced, due in no small part to the efforts of Cato, CEI, and similar institutions. At least two books, in addition to my own, have recently appeared that proudly defend the institution of property rights.¹⁸

The high water mark of the anti-property movement—its Gettysburg—may have been 1972, when the Supreme Court was invited to state unequivocally that "property rights" occupied a lesser status than "personal rights." Given the set of the legal current at the time, this request was not frivolous. Many objective legal scholars would have given it excellent odds. The Court declined, emphatically:¹⁹

[T]he dichotomy between personal liberties and property rights is a false one.

Property does not have rights. People have rights. The right to enjoy property without unlawful deprivation, no less than the right to speak or the right to travel, is in truth a "personal" right, whether the "property" in question be a welfare check, a home, or a savings account. In fact, a fundamental interdependence exists between the personal right to liberty and the personal right in property. Neither could have meaning without

¹⁷ Terry L. Anderson, Property Rights and Indian Economies (Rowman & Littlefield. 1992).

¹⁸ Tom Bethell, *The Noblest Triumph: Property and Prosperity Through the Ages* (St. Martin's Press, 1998); Richard Pipes, *Property and Freedom* (Alfred A. Knopf, 1999).

¹⁹ Lynch v. Household Finance Corp., 405 U.S. 538, 552 (1972).

the other. That rights in property are basic civil rights has long been recognized. J. Locke, Of Civil Government 82-85 (1924); J. Adams, A Defence of the Constitutions of Government of the United States of America, in F. Coker, Democracy, Liberty, and Property 121-132 (1942); 1 W. Blackstone, Commentaries *138-140.

Since 1972, the Supreme Court has backed and filled and dithered, but the tide has turned. Starting in the 1980s, landowners actually began to win some regulatory takings cases under the Fifth Amendment in the Court, for the first time since the 1920s, and in 1998 a takings analysis was applied to a particularly high-handed retroactive Congressional cash-grab.²⁰

Now, while property rights remain under attack in a multitude of specific contexts, at a general level the legitimacy and importance of the institution of property is universally recognized. Indeed, conventional wisdom is coalescing around an assumption that failure to recognize this importance is a symptom of dementia in a society.

Tenacious institutions, such as property, have deep roots. Richard Pipes, the eminent Russian scholar and author of *Property and Freedom*, notes that discussions of property "from the time of Plato . . . to the present" have involved four themes: concepts of morality, economics, politics, and psychology. (Pipes also noted that *Property and Freedom* is his only book that is not directly about Russia. But in a way, he said, it is very much about Russia, because it is precisely the absence of property that determines so much about that benighted place. The former USSR now acknowledges that progress depends on the expansion of property rights.²¹)

²⁰ Eastern Enterprises v. Apfel, 524 U.S. 498 (1998).

²¹ "Putin signs key land code, permitted limited sales of land in Russia," abc News.com, Oct. 30, 2001, <u>http://www.abcnews.go.com/wire/World/ap20011026_395.html</u>>. Sharon LaFraniere, "Cleaning Up Russia's Culture of Corruption," *Washington Post*, Dec. 29, 2001, p. 18.

Examining these themes, and expanding them a bit, produces the following rough and often-overlapping list of justifications for the institution of property.

Morality (or Lockean Justice)

This involves the familiar concepts of John Locke: Each person has the right to the fruits of his industry, and ownership is achieved by mixing one's labor with natural resources.

Interpreting and commenting on Locke is itself an industry, and raises endless problems and complexities. However, the core idea seems indisputable. After all, if you do not own the product of your labor, then who does? Only in slave systems do people lose this basic right. On examination, the disputes over Locke always seem to come down to the extent of the ownership right, not to whether it exists at all.

Economics

Economic arguments contain several sub-themes:

- Incentives—people work hardest and produce the most when they produce for themselves.
- Investment—who would forego current consumption unless he got some future benefit, and the way to ensure investment is to give the investor a property interest?
- Allocation of resources—recognizing rights in property allows resources to flow to their most valuable uses as producers bid for them. Recognizing IP is an important signal that causes resources to flow into the production of intellectual goods as opposed to physical goods.

 Efficient administration—ownership decentralizes decisions so that they can be made at the level of local knowledge. Each of these is the subject of a complex body of analysis.

Politics

The existence of property rights diffuses power. If resources are not owned, they will be allocated by the rules of politics, not by rules of morality or economics. As the USSR showed, resource allocation is a powerful method of government control. It was not necessary for the Party to put people in jail or torture them. Rather, those who obeyed got decent apartments, educational opportunities, and jobs. Those who did not, did not.²²

Another political theme concerns the functioning of a democratic polity. We are a long way from the Jeffersonian ideal of a nation of yeoman farmers, tilling fields that we own. But it remains difficult to refute the idea that a stable political system needs people with a stake in ensuring that its politics do not run off the rails, and that one of the best safeguards is to be sure that people own property and thus have something to lose. Certainly, at the local level, widespread property ownership in the form of homes seems to provide substantial stability and involvement in government.

The themes of economics and politics can also be combined. The long term prosperity of the nation depends heavily on a system for making economic decisions that is divorced from the government. Socialist ownership of the means of production is a discredited concept, as is its cousin, industrial policy. Anyone not persuaded by the experience of the Soviets should examine the United States' own experiment in abolishing property and relying on government allocation of economic assets: the electromagnetic spectrum. In 1927, the airwaves were de-propertized and given over to the agency that eventually

became the Federal Communications Commission, which is micromanaged by the U.S. Congress at its most political.²³ The result has been continuing disaster. Non-profit stations were driven off the air. FM broadcasting was ready for deployment in 1937 and delayed by the FCC until 1960. TV channels were left dark as the FCC favored a threenational-network structure. Cable television was stalled, satellite audio blocked, and cell phones delayed. Only recently, low power radio has been suppressed. It is a dreary tale mostly of regulatory capture, sloth, and vanality.

Government appropriation does not always take the form of outright appropriation. Regulation can also be used, because, obviously, the identity of the holder of a piece of paper that says "Title" means little. Real ownership lies in having the right to decide how to use the property, against the claims not only of other citizens but of government itself. For those who heed the lessons of the 20th Century, the proper respect for property rights is an indispensable bulwark of the market economy.

Psychology (or "Personality")

Professor Pipes lists as the last great theme psychology—the idea that property enhances people's sense of identity and self esteem. Another scholar identifies a more intricate treatment of this concept in Hegelian philosophy: "At the heart of Hegel's philosophy are his difficult concepts of human will, personality, and freedom. For Hegel, the individual's will is the core of the individual's existence, constantly seeking actuality (*Wirklichkeit*) and effectiveness in the world."²⁴

²² See Martin Cruz Smith, Gorky Park (Random House, 1981).

²³ Thomas W. Hazlett, "The Wireless Craze, the Unlimited Bandwidth Myth, the Spectrum Allocation Faux Pas, and the Punchlines to Ronald Coase's 'Big Joke' " (AEI-Brookings Joint Center for Regulatory Studies, Working Paper 01-02, Jan. 2001)

<www.aei.brookings.org/publications/working/working_01_02.pdf>.

²⁴ Justin Hughes, "The Philosophy of Intellectual Property," in *Intellectual Property: Moral, Legal, and Intellectual Dilemmas*, ed. Adam D. Moore (Rowman & Littlefield, 1997), pp. 107, 142.

A prosaic version of the arguments from psychology or personality is also available, one that crosses these concepts with economic arguments to create a hybrid. Property enhances not just the sense but the reality of personal autonomy and power. To exercise these, people must be able to pursue their own visions of how to conduct their lives, which means that they must have resources to support themselves while they do so, which means they must have property.

Even the most anti-bourgeois artist in a garret, totally contemptuous of the commercial world and its values, must have the economic means to obtain paint and canvas and to support herself, which means she must have access to property. At the least, she must have property rights in her own work.

Comparing POP (Plain Old Property) and IP

These themes of Lockean Justice, morality, economics, politics, and psychology can be and have been explored at length and in depth. Each presents multiple layers of complexity, and the literature is vast. Interpreting John Locke is in itself a minor industry, and commenting on property rights in the context of economics is a major one.

For purposes of immediate analysis, the salient point is simple. Speaking broadly, the rationales for recognizing property rights apply to property in its intellectual as well as its tangible form.

The qualification "speaking broadly" is necessary because the intangible nature of IP does create some real and significant differences between it and POP. Intangibility also creates some apparent differences which, on further analysis, are not significant.

The most obvious distinctions go under the rubrics of "non-exclusivity" and "nonexhaustion." The first means that possession and use of intellectual property is not limited to one person at time. Only one entity can farm a plot of land or drive a car at any point in time, and multiple ownership will result in irreconcilable conflicts. If I sing a song, on the other hand, you can be singing it somewhere else at the same time without interfering with my "use." If I build a machine based on a novel idea, your construction of a similar machine based on the same idea does not at all affect mine.

Non-exhaustion means that the resource is not depleted by use. Even land, the quintessential symbol of permanence, loses its capacity to support crops and must be replenished. Veins of minerals run out. Capital goods wear out. Over-grazed pastures become bare dirt.

This depletion does not affect intellectual property because an idea exists forever. Your singing my song does not wear out the tune. Nor does your use of the idea underlying my patented invention destroy the idea.

The intangibility of ideas also means that they are easily transferred and used, which makes difficult the defense of property rights in them. My property right in my house is protected in part by the difficulty of stealing it. Even a portable item is protected by the requirement that anyone who wants to take it must be in physical proximity, which means that I must worry about only a small percentage of the billions of people in this world. This protection does not apply to intellectual property, especially in an age of instantaneous long distance communication. IP can be copied by anyone who hears or reads it, and even by people who only hear it described. Policing also becomes difficult. Imagine the holder of the copyright on the song "Happy Birthday," which is indeed under copyright, trying to control all infringements.

There is no question that these differences between tangible and intellectual property have an impact on the basic arguments that support property rights as an institution, especially the Lockean and economic arguments.

But in one respect, the intangible nature of IP makes the Lockean case for recognizing it stronger than the case for recognizing physical property.

Lockean philosophy has trouble with a world in which natural resources are not unlimited. Locke recognized that labor had to be mixed with the blessings of the natural world to create the basis for property. For example, a farmer claimed land because of his investment in clearing it, draining it, and rendering it fit for cultivation. So, what happens when there is no more land to clear? In Lockean thought, the moral claim is limited to the situation in which there is "enough and as good" of the natural endowment so that others can also mix their labor with it. If the natural resource has been entirely taken, Lockeans have a problem.

Obviously, this is not a problem for intellectual property. The physical resources used to create it are not limited in any meaningful sense—there is no shortage of paper and ink, and much of the raw material of intellectual property is itself intellectual property, such as alphabets and systems of musical notation. Thus the enough-and-asgood dilemma does not exist.

The enough-and-as-good dilemma is particularly acute when one considers property over time. Given resource scarcity, as generations pass, X, however indolent he may be, may be wealthy because his ancestors were industrious, while Y, deeply industrious, is poor because he lacks access to natural resources, loses force. Lockean theory deals

poorly with situations in which indolent Xs become rack-renting landlords while industrious Ys become poor tenants.

Again, this objection is weaker for intellectual property. Because the "enough and as good problem" is avoided, any gap between "haves and have nots" is less offensive. X's property does not keep Y from creating his own. And because intellectual property can be, and, in the real world, always is, limited in time, the intergenerational transfer problem is also limited. After some period, the idle progeny of the industrious lose their advantage.

One can also call on Lockean principles to contend against intellectual property on the ground that recognizing your dominion over an idea can inhibit my use of my physical property. If you patent a particular kind of plow, then the prohibition on my use of it constrains my actions on my own land.

This argument seems weak. No kind of property rights exist in a total vacuum, and uses of physical property are constantly adjusted in the light of conflicting rights. Your right to be free of offensive odors inhibits my right to use my land as a stockyard, for example, without violating Lockean principle. If intellectual property is an otherwise legitimate form of property, then the fact that its recognition inhibits uses of other property may present difficult practical problems of defining rights, does not constitute a fundamental objection.

The intangible nature of IP generates another, more complex argument. Opponents of IP may say that they fully recognize your right to use the products of your labor, whether these products are physical or mental. But only for physical property does recognition that the creator has a property right require that others be excluded from using the

property. Given that only one person can use physical property, the creator has the superior claim.

For intellectual property, multiple use is possible, so recognizing the right of the creator to the fruits of his labor does not require that others be excluded. The laborer, after all, still has his creation, undiminished. Granted, other users are free riding on his labor, but so what? The creator has lost nothing, and why should we recognize a right based on the desire to deprive others of something? The most famous statement of this view is a quotation from Thomas Jefferson: "He who receives an idea from me receives instruction himself without lessening mine—as he who lights his taper at mine, receives light without darkening me."²⁵

This argument that free-riding is not a problem in the context of intellectual property has force only in the limited context of a society without barter or specialization of labor. When these elements are introduced, it weakens.

To illustrate this, imagine a situation involving tangible property. Suppose X is an expert arrow maker, but a terrible stalker. He spends his time fletching, trading the arrows to better hunters in exchange for a share of the kill. They get good arrows, which enables them to kill to more game, he gets fed, and all are content.

If Y steals a batch of arrows from X, he does not deprive X of arrows to shoot. After all, because X is producing more arrows than he personally can use, especially since he is not a good enough stalker to get close to a deer. What has been taken is his livelihood, or his ability to barter, or his time. X's Lockean right to exclude others from using the arrows he has created unless they pay him for the privilege encompasses a right to their exchange value, not merely to their use value.

If one makes the society in the example more sophisticated, and substitutes songs or ideas or literature for arrows, then the basic Lockean argument is still valid. It is the exchange value that matters, not just the use value. In fact, the parallel is very close indeed, because in a primitive society all the hunters have access to the same stock of wood. The special skill needed to make superior arrows is an intangible, a knack — quite similar, when one thinks about it, to products of the intellect. The finished arrows incorporate the knack the same way that a finished song incorporates the creator's ability.

This analysis segues nicely into consideration of the economic issues.

As noted, one argument for property is that ownership is necessary to ensure that resources are allocated to their most productive uses and not devoted to inferior purposes. This need provides a rationale for leaving the property rights in the hands of the indolent progeny of the industrious. They may be indolent, but they are also greedy, so if the highest return to the cleared land comes from farming they will devote it to this purpose rather than to some inferior use. Society as a whole benefits from having properties devoted to their best use, so, therefore, establishing ownership as a mechanism to ensure that this happens makes overall economic sense.

This need for efficient allocation does not apply to intellectual property. A piece of IP can be used for a book, a movie, a play, a musical, a TV show, and any other uses one can think of without in the least subtracting from its capacity to be put to another use. A patented idea can be used as the basis for one machine, and then a thousand more constructed without in the least detracting from the first one.

²⁵ Thomas Jefferson, Letter to Isaac McPherson, Aug. 13, 1813.

This exception is important, with some analysts leaping to the conclusion that the lack of a need for rationing and allocation obviates all need for property in intellectual creations.

However, such a leap is reductionist because it assumes a static world, in which the amount of property is fixed and property rights play no role in bringing new property into existence. In reality, we live in a dynamic world in which the amount of property that can be created is virtually unlimited, and depends almost completely on the incentives for individuals to create it. The importance of incentive effects provides the justification for patent law, the creation of incentives not just to invent but to disclose inventions and make them into fodder for other creators and to convert ideas into commercially usable gadgets.26

Even intellectual property needs to be maintained—think of software—and administered. Innovation will spread more rapidly if inventors have incentives to find new uses for their creations and to open up new markets for them. Reportedly, the 19th Century thinker Herbert Spencer invented "an excellent invalid chair," and in an excess of charitable zeal declined to patent it. As a result, no manufacturer was willing to risk making it. If the chair failed, the manufacturer would bear the entire loss, while if it succeeded then others would enter the market that the pioneer had developed, and he would, again, be unable to recover the costs.²⁷

Commenting on the industrial revolution, Douglass North, 1993 winner of the Nobel Prize in economics, concluded:

²⁶ See, e.g., Donald S. Chisum et. al., Principles of Patent Law (Foundation Press, 1998, 2001)(2d ed.), pp. 58-90. ²⁷ Chisum, p. 74.

[T]he social rate of return from developing new techniques had probably always been high; but we would expect that until the means to raise the private rate of return on developing new techniques was devised, there would be slow progress in producing new techniques. And, in fact . . . throughout man's past he has continually developed new techniques, but the pace has been slow and intermittent. The primary reason has been that the incentives for developing new techniques have occurred only sporadically. Typically, innovations could be copied at no cost by others and without any reward to the inventor or innovator. The failure to develop systematic property rights in innovation up until fairly modern times was a major source of the slow pace of technological change.²⁸

Furthermore, knowledge and technology steadily expand society's production possibility curve, eroding the limits imposed by scarcity of physical resources by making them more productive and by inventing cheap substitutes for expensive raw materials. Until recently, telecommunications consisted of the transmission of energy through the electrons in wire made of copper. The fiber optic revolution made communication into photonic energy traveling through glass, which is manufactured from silicon, a material much cheaper than copper. Then advances in a technology called wave division multiplexing exponentially increased the amount of information that can be transmitted through a fiber optic cable. Incentives for production of intellectual property are growing more important rather than less.

The economic argument is also illustrated by the example of the fletcher. The thief makes everyone poorer, including his fellow hunters. If X cannot make a living by making arrows that he trades for game, then he will be forced to give up fletching and

²⁸ Douglass North, Structure and Change in Economic History (W.W. Norton & Co., 1981), p. 164.

hunt his own food. Everyone else will also be forced to return to a non-specialized system in which each makes his own arrows and does his own hunting. This decreases both the absolute amount of game killed, because the hunters must spend time making arrows, and the value of the game that the hunters do kill, because it no longer has an exchange value. Nor does Y actually do the hunters a long-term favor if, after the theft, he shouts "arrows want to be free" and passes his loot out to them, thus destroying the system for a short-term gain. (Anyone who wants to connect this to Napster, feel free.)

However, an important caveat remains, which is that the differences in the economics of IP and POP must be adverted to. One cannot use them as a catch-all excuse to reject IP, but neither can one reflexively apply to IP all of the doctrines that we apply to POP. University of California economist J. B. DeLong comments:

[W]e don't know yet how to make the intellectual property system work for the coming e-conomy. Back in the Gilded Age, intellectual property was not such a big deal. Industrial success was based on knowledge, yes. But industrial success was based on knowledge crystalized in dedicated capital. Lots of people knew organic chemistry. Few companies--those that had made massive investments--could make organic chemicals.

Now intellectual property is rapidly becoming a much more important source of value. And the political system's response seems to be to tighten up on intellectual property rights. To reinforce the rights of "owners" at the expense of the freedom of "users." The underlying idea is that markets work because everything is someone's property. Property rights give producers the right

incentives to make, and users the right incentives to calculate the social cost of what they use.

But with information goods the social cost of distributing information is close to zero. Hence focusing on the rights of owners rather than the opportunities of users may not generate the fastest rate of economic growth, or the greatest wealth. It is far from clear that the political system will successfully handle the task of building the right intellectual property system for tomorrow.²⁹

Moving beyond the realm of economics into the political and personal rationales, the arguments for recognizing property that takes the form of intangible creations are as strong as the arguments for recognizing tangible property. Indeed, as mental products provide a larger proportion of the value created by our society, the arguments for respecting the importance of intellectual property become even more compelling. The political and personal benefits produced by the existence of property will be ephemeral unless the major sources of wealth are included in that category, and kept free of arbitrary government action..

Conclusion

The arguments for putting IP within the same general framework as POP are persuasive. The two are not totally congruent, but the differences dictate that the definition of IP be adjusted to reflect its special characteristics, not that the basic concept be rejected.

²⁹ J. Bradford DeLong, *What Kind of Historical Turning Point?*, Notes for a talk for the Global Business Policy Council Millennium Meeting, Phoenix, AZ, January 13-16 2000 </br><www.j-bradford-delong.net/OpEd/virtual/phoenix.html>.

The earliest references to protecting IP go back to Sybaris, a Greek colony in Italy around 500 B.C., but the first known patent statute was enacted in Venice in 1474. It included the same basic concepts that inform current patent policy: novelty, creativity, exclusivity, reduction of the creative idea to actual use and an embodiment in physical form, limited duration, and an explicit recognition of incentive effects.³⁰ United States jurisprudence is built around the same factors, adding only a number of limitations on the patentability of laws of nature, mathematical formulae, natural substances, methods of operation, and similar phenomena.

Analysis of these factors is beyond the scope of this paper, but they make good intuitive sense. Those of us who went to law school have been imbued with the "bundle of sticks" view of property rights, which teaches that ownership is not a single immutable thing but a bundle of rights that can vary somewhat with time and circumstance. It is a reasonable metaphor, and it can be applied to intellectual property as well as physical. Because of its special characteristics, our society puts somewhat different sticks into the bundle than is the case for POP, but it is still a weighty bundle indeed.

³⁰ Chisum, note ___, at pp. 10-12.