

Decoding Cyberproperty

Greg Lastowka

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Greg Lastowka*

So, in the memory of men yet living, the great inventions that embodied the power of steam and electricity, the railroad and the steamship, the telegraph and the telephone, have built up new customs and new law. Already there is a body of legal literature that deals with the legal problems of the air.

— Justice Benjamin Cardozo¹

New technologies, as Justice Cardozo noted, can give rise to new laws. This article examines the history and development of one such technology-enabled legal doctrine: cyberproperty.

Recently, several legal commentators have argued that common law doctrines of personal property law should be expanded to give owners of computing equipment the right to prohibit others from interacting with their equipment in ways that cause no physical damage or software malfunctions. The creation of a new “cyberproperty” right has been endorsed by a diverse set of scholars.² The essence of

* Assistant Professor of Law, Rutgers School of Law—Camden. I owe many thanks for helpful comments to Ari Afilalo, Michael Carrier, Jay Feinman, Kim Ferzan, Ellen Goodman, Beth Hillman, Bill McSwain, Kim Mutcherson, Imani Perry, and Damon Smith. Candidus Dougherty provided excellent research assistance. I am especially indebted to David Post and Dan Hunter for early and involved discussions about cyberproperty. Thanks also to Rutgers School of Law-Camden, for providing generous summer research support for this article.

I should probably also note here that, along with William McSwain and Richard Berkman, I was counsel for Ken Hamidi in *Intel v. Hamidi*. The views expressed here are my own.

¹ BENJAMIN N. CARDOZO, *THE NATURE OF THE JUDICIAL PROCESS* 61 (Yale University Press 1921).

² See, e.g., Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164 (2004); Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73 (2003); Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL'Y 147 (2005); Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047 (2005); I. Trotter Hardy, *The Ancient Doctrine of Trespass to Web Sites*, 1996 J. ONLINE L. art. 7; David McGowan, *Website Access: The Case for Consent*, 35 LOY. U. CHI. L.J. 341 (2003); David McGowan, *The Trespass Trouble and the Metaphor Muddle*, 1 J.L. ECON. & POL'Y 109 (2005); Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457 (2005); Richard Warner, *Border Disputes: Trespass*

the new right is a legal entitlement to “a right to exclude others from access to network-connected resources.”³ The cyberproperty right is generally conceived of as absolute. Other commentators have noted with alarm the extent to which courts have seemed to embrace arguments for cyberproperty.⁴

This article examines recent developments in both the doctrine and theory of the cyberproperty right. The first part of this article looks primarily at two seminal cases that might be considered bookends to the story of cyberproperty: *Thrifty-Tel, Inc. v. Bezenek*⁵ and *Intel v. Hamidi*.⁶ The *Thrifty-Tel* case is known as the starting point of cyberproperty. The *Hamidi* case is sometimes seen as concluding the story of cyberproperty, but in fact, it leaves cyberproperty doctrine largely an open issue.

The second part of this article, anticipating future struggles over the scope of cyberproperty rights, challenges two assumptions that act as theoretical and rhetorical engines driving arguments for cyberproperty. The first questionable assumption is that an interest in prohibiting others from interacting with networked computing machinery is properly seen as analogous to an interest in excluding others from entering into or using real or personal property. This assumption is generally coupled with a belief that the creation of new private property rights in “cyberspace” (that might be allocated by market mechanisms) is the best means of promoting the public goods. The second questionable assumption is that the social power of computer code should be understood as either equivalent to or interchangeable with the power of law. This reasoning generally seems to follow from Professor Lawrence Lessig’s claim that “code is law.”⁷

to Chattels on the Internet, 47 VILL. L. REV. 117 (2002). Student commentators have joined in the call for cyberproperty rights as well. See, e.g. Julie Beauregard, *Note, Intel Corp. v. Hamidi: Trespassing in Cyberspace*, 43 JURIMETRICS J. 483 (2003); J. Brian Beckham, *Casenote: Intel v. Hamidi: Spam as a Trespass to Chattels - Deconstruction of a Private Right of Action in California*, 22 J. MARSHALL J. COMPUTER & INFO. L. 205 (2003); Patty M. DeGaetano, *Intel Corp. v. Hamidi: Private Property, Keep Out -- The Unworkable Definition of Injury for a Trespass to Chattels Claim in Cyberspace*, 40 CAL. W. L. REV. 355 (2004); David M. Fritch, *Click Here for Lawsuit - Trespass to Chattels in Cyberspace*, 9 J. TECH. L. & POL'Y 31 (2004); Daniel Kearney, *Network Effects and the Emerging Doctrine of Cybertrespass*, 23 YALE L. & POL'Y REV. 313 (2005).

³ Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457, 496 (2005)

⁴ See, e.g., Dan L. Burk, *The Trouble with Trespass*, 4 J. SMALL & EMERGING BUS. L. 27 (2000); Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439 (2003); Mark A. Lemley, *Place and Cyberspace*, 91 CALIF. L. REV. 521 (2003); Michael J. Madison, *Rights of Access and the Shape of the Internet*, 44 B.C. L. REV. 433 (2003); Jane K. Winn, *Crafting a License to Know from a Privilege to Access*, 79 WASH. L. REV. 285 (2004).

⁵ 46 Cal. App. 4th 1559 (Ct. App. 1996).

⁶ 30 Cal. 4th 1342 (2003).

⁷ LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 6 (Basic 1999).

Both of those assumptions seem to drive arguments for cyberproperty and both need to be questioned. With regard to the first assumption, the legally salient features of computer code include features that should resist categorization as property—at least in traditional senses of that word. Even within “law and economics” approaches, there are abundant reasons to be skeptical of the desirability of treating digital information resources as analogous to traditional property. With regard to the second assumption, code is very much unlike law. Conflating technological powers of exclusion with law can have a tendency to confuse as much as illuminate the proper role of law in the digital environment.

I. Cyberproperty in Legal Doctrine

Debates over cyberproperty law are not simply debates over the wisdom of new legislative enactments. They are debates over the evolution and interpretation of the common law in a new technological context. Given that cyberproperty has grown through cases attempting to remedy cyberspatial harms with the “ancient” doctrine of trespass to chattels, it makes sense to start any discussion with a history of that legal doctrine.⁸

A. The Birth of Cyberproperty Doctrine

The first cyberproperty case is usually said to be *Thrifty-Tel, Inc. v. Bezenek*.⁹ This is because *Thrifty-Tel* was the first case to apply trespass to chattels doctrine to the operation of networked digital machines. *Thrifty-Tel* involved two teenagers (invariably described in all secondary literature as “hackers”¹⁰) who were attempting

⁸ *Ticketmaster Corp. v. Tickets.Com, Inc.*, 2003 WL 21406289, 3 (C.D. Cal. 2003) (“The trespass to chattels issue requires adapting the ancient common law action to the modern age.”); Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. Econ. & Pol’y 147, 148-149 (2005) (“ancient rules of trespass to chattels”).

⁹ See, e.g., Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2260 (2004); Dan L. Burk, *The Trouble with Trespass*, 4 J. SMALL & EMERGING BUS. L. 27, 28 (2000); Adam Mossoff, *Spam - Oj, What A Nuisance!*, 19 BERKELEY TECH. L.J. 625, 641 (2004); Steven Kam, *Note: Intel Corp. v. Hamidi: Trespass to Chattels and a Doctrine of Cyber-Nuisance*, 19 BERKELEY TECH. L.J. 427, 433 (2004); Laura Quilter, *Note: The Continuing Expansion of Cyberspace Trespass to Chattels*, 17 BERKELEY TECH. L.J. 421, 428-29 (2002).

¹⁰ Though the court also referred to the boys this way (see 46 Cal. App. 4th 1559, 1563-64) it should be noted that the term also has a more positive meaning. For in-depth discussions of what “hacking” might mean, see STEVEN LEVY, *HACKERS: HEROES OF THE COMPUTER REVOLUTION* 23-35 (1984) (explaining the generally licit origins of the term); E. Gabriella Coleman, *The Social Construction of Freedom in Free and Open Source Software: Hackers, Ethics, and the Liberal Tradition* (August 2005) (unpublished Ph.D. dissertation, University of Chicago) (on file with author); DOUGLAS THOMAS, *HACKER CULTURE* 10-11 (University of Minnesota Press 2002). It is quite possible that

to obtain “free” long distance service. Ryan and Gerry Bezenek, the “Bezenek boys,” had obtained a confidential phone number that allowed them to dial into a commercial long distance switching network.¹¹ The boys dialed into the network and then attempted to find a working access code by manual guessing. They manually punched in various six digit sequences (making 162 calls over several days) but this was to no avail: they failed to find a working number.

Frustrated, they turned to automation, using a computer program to dial and guess randomly at access codes.¹² Over a seven-hour period, they made 1,300 automated calls to the network. Roughly one new phone call was made every twenty seconds, followed by an automated random six-digit number guess. This also failed to produce a working account code. It succeeded, however, in tying up the small Thrifty-Tel switching network so completely that paying customers were unable to make use of it.¹³

Thrifty-Tel had known since the first manual calls that the Bezenek household was the source of the numerous failed access attempts. Rather than contact the Bezeneks, they went to state court and brought suit against the Bezenek boys’ parents. The trial court found the boys liable for fraud and conversion. Thrifty-Tel was awarded almost \$50,000 in damages and attorney fees¹⁴ Damages were based largely upon Thrifty-Tel’s uniform tariff schedule that charged thousands of dollars for every day of “unauthorized access” to its system.

The Bezenek parents appealed the decision. California Court of Appeals Justice Thomas Crosby, Jr. was faced with a doctrinal puzzle. The trial court had found that the Bezenek boys had committed conversion by appropriating Thrifty-Tel’s services. This seemed to be a legal error, because the existing law held that intangibles were generally not subject to the tort of conversion under California law.¹⁵ Justice Crosby noted that “Dean Prosser has cautioned against scuttling conversion’s tangibility requirement altogether.”¹⁶ Rather than venture into an open conflict with

the boys thought they were “phreaks” rather than hackers. See Michael Lee, Sean Pak, Tae Kim, David Lee, Aaron Schapiro, & Tamer Francis, *Electronic Commerce, Hackers, and the Search for Legitimacy: A Regulatory Proposal*, 14 BERKELEY TECH. L.J. 839 857 (1999).

¹¹ 46 Cal. App. 4th 1559, 1563-64.

¹² This type of “dumb” password guessing is generally described as a “dictionary attack.” See James Grimmelmann, *Regulation by Software*, 114 YALE L.J. 1719, 1743 (2005).

¹³ 46 Cal. App. 4th at 1564.

¹⁴ *Id.* at 1565.

¹⁵ Several years later, Judge Kozinski of the Federal Court of Appeals for the Ninth Circuit brushed away this doctrinal problem with the law of conversion. *Kremen v. Cohen*, 337 F.3d 1024, 1030 (9th Cir. 2003).

¹⁶ 46 Cal. App. 4th at 1565 (citing PROSSER & KEETON ON TORTS § 15, at 92 (5th ed. 1984)).

the leading treatise on torts, Justice Crosby concluded that the plaintiffs had made a successful claim of trespass to chattels (which they had not pleaded).

Trespass to chattels is sometimes described as an “ancient” tort,¹⁷ though it is not much more ancient than most other torts found in the common law. It seems somewhat antiquated today because it is so rarely encountered, having been rendered marginal by the historical expansion of the law of conversion. Trespass to chattels remains a potentially useful tort because it recognizes a more subtle form of injury than conversion recognizes.¹⁸ Where damages to personal property fall short of the “forced sale” damages found in conversion, trespass to chattels steps in to provide a cause of action.¹⁹

The term “trespass” in “trespass to chattels” simply denotes a legally cognizable form of unlawful injury, not a spatial “trespass” as that term is used in popular discourse. A trespass to chattels lies where there is intermeddling with or dispossession of personal property.²⁰ Unlike in the case of trespass to real property, a plaintiff claiming trespass to chattels must provide evidence of some actual damage or dispossession of the chattel by the plaintiff in order to bring a claim.²¹ So, for example, while brushing against another person’s car despite an explicit prohibition against doing so is generally considered a rude thing to do, it is not a trespass to chattels.²² The owner of the car is free to try to prevent others from touching the

¹⁷ See, e.g., Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL’Y 147, 148-149 (Winter 2005) (“the ancient rule of trespass to chattels”).

¹⁸ See generally Russ VerSteeg, *Law in Ancient Egyptian Fiction*, 24 GA. J. INT’L & COMP. L. 37, 61 & n.100 (1994) (comparing trespass to chattels with conversion).

¹⁹ In a claim of conversion, a successful plaintiff obtains, essentially, a forced sale of the chattel to the tortfeasor. A claim of trespass to chattels awards the plaintiff only those damages caused by the interference. To illustrate this difference: if a car were stolen and/or destroyed, a tortfeasor should be forced to pay the owner the full value of the car—this is conversion. If, on the other hand, a car or another chattel were merely scratched, compensation for cosmetic repairs would be warranted, but the forced sale of the entire car would provide the plaintiff with an unwarranted windfall. In such a case, trespass to chattels—called by Prosser and Keeton “a little brother of conversion” steps in to provide an appropriate remedy. *Thrifty-Tel* at 1566-67; PROSSER & KEETON ON TORTS § 14, at 85-86 (5th ed. 1984); *Intel v. Hamidi*, 30 Cal. 4th at 1350 (citing the treatise).

²⁰ See generally RESTATEMENT (SECOND) OF TORTS § 216-48.

²¹ PROSSER & KEETON ON TORTS § 14, at 85-86 (5th ed. 1984).

²² There is one interesting exception in the RESTATEMENT (SECOND) OF TORTS § 218, cmt. h. If one person uses another’s toothbrush, the chattel would seem to be “damaged” in some way, pursuant to prevalent social beliefs pertaining to hygiene and saliva-swapping. One imagines this should be true although the toothbrush has not suffered visible damage, and may very well be, from a logical and medical standpoint, be as good as new. Cf. McGowan, *Case for Consent* at 344 (discussing the toothbrush illustration and noting “the owner might *reasonably* feel less keen on using the chattel

car, of course, but the state will not become involved if those efforts fail. Compare this to the case of land, where spatial trespass can be found and enjoined by the state without regard to the possibility of some damage to the land.²³

There is a lively debate about the reasons for this interesting difference between real and personal property “trespass” regimes. Some commentators suggest the difference may be overstated or perhaps even an unwarranted American aberration from English common law.²⁴ But even those who feel this way acknowledge that the law currently treats the two forms of trespass differently.²⁵ The Prosser & Keeton treatise, relied upon by the court in *Thrifty-Tel*, explains that “the dignitary interest in the inviolability of chattels, unlike that as to land, is not sufficiently important to require any greater defense than the privilege of using reasonable force when necessary to protect them.”²⁶

Probably the most popular explanation for the difference seen between the law of trespass to land and chattels is that the state has a less significant interest in

again” (emphasis added)). The forced sale of conversion, however, would seem to be the preferred and appropriate legal remedy for the tort of toothbrush misuse.

Another Restatement illustration points out the rule of the damage requirement: a child pulling a dog’s ears does not trespass to the chattel. Oddly enough, this was a real case. Elaine Glidden, a child, pulled the ears of a dog named Toby. Toby bit her. Elaine’s mother sued and Toby’s owners claimed they were immunized from liability under the applicable statute because Elaine was engaged in tortious conduct at the time she was bitten. The court rejected this defense. See *Glidden v. Szybiak*, 95 N.H. 318 (1949) (“No claim was advanced at the trial that the dog Toby was in any way injured by the conduct of the plaintiff Elaine. Consequently she could not be held liable for a trespass to the dog.”); see also *CompuServe, Inc. v. Cyber Promotions, Inc.*, 962 F. Supp. 1015, 1022 (S.D. Ohio 1997) (briefly discussing the *Glidden* case).

²³ See Ellen P. Goodman, *Spectrum Rights in the Telecosm to Come*, 41 SAN DIEGO L. REV. 269, 326-27 (2004). Calabresi & Melamed’s theory of “property” rules as opposed to “liability” rules thus relies on a dichotomy that resonates with real property but seems less applicable to personal property. Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View Of The Cathedral*, 85 HARV. L. REV. 1089 (1972). For a concise summary of the theory and subsequent literature, see Ellen P. Goodman, *Spectrum Rights in the Telecosm to Come*, 41 SAN DIEGO L. REV. 269, 334-37 (2004). The theory has been applied to cyberproperty as well. See, e.g. Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2189 (2004); Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457, 498, 509-11 (2005).

²⁴ Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73, 76-77 (2003).

²⁵ See, e.g., McGowan, *Case for Consent*, at 35-56 (“[T]he law traditionally protected harmless invasions of chattels by giving owners a privilege to use self-help rather than by giving them a cause of action, which owners of land did have”); Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73, 76 (2003) (admitting that real property rules do not apply to chattels).

²⁶ PROSSER & KEETON ON TORTS § 14, at 87 (5th ed. 1984). An analogous summary of the distinction can be found in the RESTATEMENT (SECOND) OF TORTS § 218 cmt. e (“The interest of a possessor of a chattel in its inviolability, unlike the similar interest of a possessor of land, is not given legal protection.”).

protecting things from being touched. The state presumably would not want to hear cases about those who happen to, in public places, defiantly touch cars, umbrellas or dogs. The social cost of addressing such dignitary harms outweighs the social benefits that state intervention might provide.²⁷

On the trespass to chattels claim, Justice Crosby's opinion in *Thrifty-Tel* can be read as consistent with traditional doctrine. Indeed, *Thrifty-Tel* was ultimately understood as consistent with traditional California common law by a majority of the California Supreme Court.²⁸ The opinion explicitly acknowledged the requirement of injury to state a claim for trespass to chattels and the requisite damage was clearly evident—the switching network was overburdened by the boys' conduct to a point that the network could not be used by paying subscribers.²⁹

However, despite its fealty to traditional doctrine, *Thrifty-Tel* is generally known as the first “cyberproperty” case due to one rather confusing footnote.³⁰ Carrying forward his earlier concerns about the requirement of tangibility for conversion, Justice Crosby inscrutably noted in footnote six that the “trespass” alleged in the case was of an intangible variety. The need for this footnote was unclear—why should the tangibility or intangibility of the *means* of a trespass to chattels be relevant to the case? The switching network was clearly a tangible machine.³¹ This established the necessary tangibility. There was no recognized tangibility issue about the *means* of conversion or trespass to chattels.

²⁷ See generally Carol M. Rose, *The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and Ecosystems*, 83 MINN. L. REV. 129, 154 (1998) (describing how new property rights are inefficient in instances of high administrative costs and negligible social benefits); Ellen P. Goodman, *Spectrum Rights in the Telecosm to Come*, 41 SAN DIEGO L. REV. 269, 325 (2004) (highlighting the significance of administrative costs that could result from the application of property principles to disputes over spectrum rights).

²⁸ *Intel v. Hamidi*, 30 Cal. 4th 1342, 1353 (2003). However, it might be noted that Justice Janice Rogers Brown (now a member of the United States Court of Appeals for the District of Columbia Circuit) argued in dissent that *Thrifty-Tel* stood for the proposition, contrary to the traditional common law view, that any unauthorized use of a chattel was actionable as a trespass. *Intel v. Hamidi*, 30 Cal. 4th at 1384-85 (2003).

²⁹ Justice Crosby in fact reversed the trial court on the basis that the \$50,000 damage calculations were faulty because they were based upon uniform tariff rates. He instead required the plaintiff to prove “actual damages.” His opinion stated: “[S]urely [Thrifty-Tel] is able to produce evidence showing with reasonable certainty any damages caused by Ryan and Gerry in November 1991.” 46 Cal. App. 4th at 1564.

³⁰ *Id.* at 1567 n.6.

³¹ If processing power were understood as a chattel, this would trigger the same “tangibility” concerns found in the doctrine of conversion. See Laura Quilter, *Note: The Continuing Expansion of Cyberspace Trespass to Chattels*, 17 BERKELEY TECH. L.J. 421, 437-38 (2002) (“While computers are

By analogy, a claim based upon theft or destruction of a claimed intangible chattel *interest* (destroying a person’s *pride* in a car or their “earning power”) would raise considerable problems if one is concerned about curtailing the harms addressed by property law. The *means* that one might use to damage a chattel, on the other hand, would not seem to be relevant. Partial destruction of another person’s car by an intangible laser beam or by a tangible sledge hammer should reasonably produce the same type of tort liability.

An investigation of *means* of trespass, however, might have been proper if the case had involved a trespass to real property. A plaintiff claiming real property trespass in California (and many other jurisdictions) must prove a tangible *means* of spatial intrusion. Throwing a rock on someone’s lawn will give rise to a claim for trespass to real property. On the other hand, the transmission of noise, smoke, or light cannot form the basis for a claim of trespass to real property in California—those types of spatial “intrusions” are considered under the law of nuisance.³²

The standard cyberproperty history thus recounts how *Thrifty-Tel* created cyberproperty doctrine when, in footnote six, the court inexplicably cited a series of real property cases in a case involving trespass to chattels. Justice Crosby placed two different forms of “trespass” in uncomfortable proximity to one another by stating:

[T]he California Supreme Court has intimated migrating intangibles (e.g. sound waves) may result in trespass, provided they do not simply impede an owner’s use or enjoyment of property, but cause damage. In our view, the electronic signals generated by the Bezenek boys’ activities were sufficiently tangible to support a trespass cause of action.³³

Obviously, this was a confusing amalgam of two kinds of trespass—but so what? This entire footnote was irrelevant to the ultimate holding. At most, this footnote inexplicably analyzed the tangibility of trespass *means* in a case involving a

undoubtedly chattels, it is questionable whether electronic networks and computer processing power also qualify as chattel.”); Orin Kerr, *Cybercrime’s Scope: Interpreting ‘Access’ and ‘Authorization’ in Computer Misuse Statutes*, 78 N.Y.U.L. REV. 1596, 1609-10 (noting that early applications of common law to computer access crimes were theoretically inconsistent, but generally found property interests to exist in intangibles); *People v. Johnson*, 560 N.Y.S.2d 238 (1990) (finding the possession of a long distance access code to be a possession of “stolen property” under New York law).

³² *San Diego Gas and Electric Company v. Superior Court*, 13 Cal.4th 893, 935-37 (1996); *Wilson v. Interlake Steel Co.*, 32 Cal.3d 229, 232-34 (1982). See generally PROSSER & KEETON ON TORTS § 13, at 71 (5th ed. 1984) (distinguishing between trespass by the “invasion of tangible matter” and the intentional introduction of “smoke, gas, noise, and the like,” which are covered by the law of nuisance); STOEBOCK & WHITMAN, THE LAW OF PROPERTY § 7.1, at 412 (3d ed. 2000) (citing contradictory authorities on whether invasions by “dust and smoke” constitute a trespass).

³³ *Id.* at 1567 n.6.

trespass to chattels. Nothing in the footnote abrogated the requirement of damage—the court specifically (in the quoted text above) *required* evidence of damage. The footnote was unfortunate and confusing, but in light of the greater context of the case, it was clearly not Justice Crosby’s intent to spur a doctrinal revolution.

Even so, many scholars and lawyers see *Thrifty-Tel* as the starting point for cyberproperty doctrine. The notion of cyberproperty was that electronic interactions might be prohibited in the *absence* of damage, and electronic equipment owners might be given the near-absolute³⁴ right to exclude that is granted to owners of real property.³⁵ That reading of *Thrifty-Tel* was a highly questionable spin on *Thrifty-Tel* at the time it was decided, but it would become an increasingly accepted reading in subsequent years.

B. The Expansion of Cyberproperty

Professor Dan Burk summarized post-*Thrifty-Tel* developments in 1999 in a highly influential article.³⁶ He noted that the decision gave rise to a line of subsequent cases establishing what appeared to be a nascent cyberproperty right to prohibit electronic contact in the same manner that one could enjoin trespass to real property. Burk blamed *Thrifty-Tel* for the expansion: “the *Thrifty-Tel* version of trespass follows the form of trespass to chattels, and yet has the substance of trespass to land.”³⁷ In Burk’s words, *Thrifty-Tel* “essentially reversed several hundred years of legal evolution, collapsing the separate doctrines of trespass to land and trespass to chattels back into their single common law progenitor, the action for trespass.”³⁸ He surmised that “the cause of action masquerading in these cases as ‘trespass to

³⁴ Even real property rights are not so “absolute” as they are often claimed to be. See Carol M. Rose, *Canons of Property Talk, or, Blackstone’s Anxiety*, 108 YALE L.J. 601 (1998); *State v. Shack*, 277 A.2d 369 (N.J. 1971).

³⁵ Examples of this reading can be found in scholarly commentary. See Maureen A. O’Rourke, *Property Rights and Competition on the Internet: In Search of an Appropriate Analogy*, 16 BERKELEY TECH. L.J. 561, 589 (2001) (“Drawing on this precedent, a developing line of cases in the personal property context has held electronic signals to be sufficiently tangible to state a cause of action in trespass to chattels.”); Adam Mossoff, *Spam -- Oy, What A Nuisance!*, 19 BERKELEY TECH. L.J. 625, 641 (2004) (“The defendant in *Thrifty-Tel* was found liable for trespass to chattels solely because he gained unauthorized access to plaintiff’s computer network.”).

³⁶ Dan L. Burk, *The Trouble with Trespass*, 4 J. SMALL & EMERGING BUS. L. 27 (2000).

³⁷ Dan L. Burk, *The Trouble with Trespass*, 4 J. SMALL & EMERGING BUS. L. 27, 38 (2000).

³⁸ *Id.*; Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 487 (2003).

chattels’ is in fact a novel, hybrid form of a property right whose parameters have yet to be properly defined.”³⁹

As stated above, this might not have been what *Thrifty-Tel* was, but by the time Burk was writing it was what *Thrifty-Tel* had become. A string of cases noted by Burk had already extended the purported “trespass” logic of footnote six in *Thrifty-Tel*.⁴⁰ These cases involved defendants engaged in the practice of sending massive numbers of commercial email messages—in other words, these were cases about “spamming.” They were generally brought by the internet service providers who received and processed the unwanted email messages. The most famous of these cases was *CompuServe v. Cyber Promotions*, which relied, in finding a trespass to chattels, upon the logic of the *Thrifty-Tel* decision.⁴¹

Sending hundreds of millions of email messages to servers tended to disrupt machine performance in ways that were largely analogous to the disruptions created by the Bezenek boys in *Thrifty-Tel*. It is understandable that courts looked to and relied upon *Thrifty-Tel* to enjoin spamming.⁴² But the courts considering these “spam” cases were perhaps somewhat more cognizant that they were employing and adapting a common law doctrine in an attempt to solve a new problem that legislatures had been slow to address. Although the mail servers were inevitably impaired by the activities, the courts were not always very careful in spelling out exactly what type of impairment was essential to stating a claim of trespass to chattels.⁴³ Fixing the spam problem seemed to be a higher priority than doctrinal precision. As a result, the strange ambiguity found in the *Thrifty-Tel* footnote was not removed—it was increasingly, at least implicitly, endorsed.

³⁹ Burk was highly critical of “electron trespass.” Other scholars were not quite as hostile, but largely agreed with Burk that the *Thrifty-Tel* line of cases were suspect. See, e.g., Maureen A. O’Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 MINN. L. REV. 609 (1998); Maureen A. O’Rourke, *Shaping Competition on the Internet: Who Owns Product and Pricing Information?*, 53 VAND. L. REV. 1965 (2000); Niva Elkin-Koren, *Let the Crawlers Crawl: On Virtual Gatekeepers and the Right to Exclude Indexing*, 26 U. DAYTON L. REV. 179, 203–06 (2001).

⁴⁰ See, e.g., *CompuServe, Inc. v. Cyber Promotions, Inc.*, 962 F. Supp. 1015, 1025-27 (S.D. Ohio 1997); *Cyber Promotions, Inc. v. America Online, Inc.*, 948 F. Supp. 436, 447 (E.D. Pa. 1996); *Am. Online, Inc. v. Nat’l Health Care Disc., Inc.*, 121 F. Supp. 2d 1255, 1279-80 (N.D. Iowa 2000); *Am. Online, Inc. v. LCGM, Inc.*, 46 F. Supp. 2d 444, 451-52 (E.D. Va. 1998); *Am. Online, Inc. v. IMS*, 24 F. Supp. 2d 548, 550-52 (E.D. Va. 1998); *Hotmail Corp. v. Van\$ Money Pie Inc.*, 47 U.S.P.Q.2d (BNA) 1020, 1025 (N.D. Cal. 1998).

⁴¹ See, e.g., *CompuServe, Inc. v. Cyber Promotions, Inc.*, 962 F. Supp. 1015, 1021, 1022 (S.D. Ohio 1997).

⁴² See, e.g. *id.*

⁴³ See Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2178-81 (2004) (querying the basis for claims of damage in cyberproperty decisions).

By 2000, cyberproperty had progressed past these commercial spam cases to a more general right to freedom from all forms of electronic “intrusion” on the Internet. That year featured three important cyberproperty decisions, all of which involved plaintiffs seeking injunctions against unauthorized access to websites: *eBay v. Bidder’s Edge*,⁴⁴ *Register.com v. Verio*⁴⁵ and *Ticketmaster.com v. Tickets.com*.⁴⁶ Two of these cases, *eBay* and *Ticketmaster.com*, were litigated in California federal district courts, and thus applied the same California common law precedents utilized in *Thrifty-Tel*. Unfortunately, the decisions in these cases did not settle the issue of cyberproperty conclusively.

The *eBay* case gained considerable publicity, and is perhaps still the most popular case involving trespass to chattels found in law school casebooks today. At issue was an attempt by eBay to prohibit another company from conducting regular queries of its online auction data. eBay brought suit in federal district court, under a theory that the querying constitute a trespass to its server system. Though the queries did not overwhelm the computer system as in *Thrifty-Tel*, they did use a significant percentage of the company’s resources.

At the district court level, eBay was awarded an injunction against the defendant company, Bidder’s Edge, on the basis that there was a significant chance that other companies would attempt to replicate the aggregation activities of Bidder’s Edge.⁴⁷ An appeal was filed, but the case was settled before it could proceed to the Ninth Circuit.⁴⁸ The *eBay* may be so appealing as a case for class discussion simply because it is so ambiguous—commentators have disagreed about exactly what precedent the *eBay* case established and what portion of the opinion might be regarded as dicta.⁴⁹

⁴⁴ *eBay, Inc. v. Bidder’s Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

⁴⁵ *Register.com, Inc. v. Verio, Inc.*, 126 F. Supp. 2d 238 (S.D.N.Y. 2000), *aff’d by* 356 F.3d 393, 404 (2d Cir. 2004) (citing the Restatement and noting how “The district court found that Verio’s use of search robots, consisting of software programs performing multiple automated successive queries, consumed a significant portion of the capacity of Register’s computer systems.”).

⁴⁶ *Ticketmaster Corp. v. Tickets.com, Inc.*, 2000 U.S. Dist. LEXIS 12987 (C.D. Cal. Mar. 7, 2000); *Ticketmaster Corp. v. Tickets.Com, Inc.*, 2000 U.S. Dist. LEXIS 12987 (C.D. Cal. 2000).

⁴⁷ *eBay, Inc. v. Bidder’s Edge, Inc.*, 100 F. Supp. 2d 1058, 1066 (N.D. Cal. 2000). (“Where, as here, the denial of preliminary injunctive relief would encourage an increase in the complained of activity, and such an increase would present a strong likelihood of irreparable harm, the plaintiff has at least established a possibility of irreparable harm.”).

⁴⁸ See Troy Wolverton, *eBay, Bidder’s Edge end legal dispute*, CNET NEWS, March 1, 2001, available online at: <<http://news.com.com/2100-1017-253443.html>>.

⁴⁹ See, e.g., Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2178-79 (2004) (noting how “different portions of the opinion focus on different possible harms” and concluding

The *Ticketmaster.com*⁵⁰ case, decided at roughly the same time, was less well publicized, but was understood as an unequivocal loss for the cause of cyberproperty rights. In *Ticketmaster.com*, an injunction sought against a company that engaged in unauthorized, non-damaging website access. The injunction the plaintiff company sought was denied not once, but twice.⁵¹ The status of trespass to chattels with regard to website access in California was thus in limbo, with two federal district courts taking opposite paths.

The doctrinal zenith of cyberproperty arrived in the 2001 case of *Oyster Software, Inc. v. Forms Processing, Inc.*, a third federal district court case, also set in California.⁵² Just as in the prior cases about websites, the plaintiff claimed that the defendant had committed trespass to chattels because the defendant had accessed its website in violation of the plaintiff's instructions not to do so.⁵³ The defendant moved for summary judgment on this claim, stating the plaintiff had not claimed damage to the chattel.

the court “relied both on Bidder’s Edge’s use of a portion of eBay’s servers and on the potential for harm to eBay’s servers if other replicated Bidder’s Edge’s activities.”); Mark A. Lemley, *Place and Cyberspace*, 91 CALIF. L. REV. 521, 528 & n.27 (2003) (stating that the requirement of actual injury was the actual holding of the case, but that the dicta of inherent injury via use was the reasoning relied upon by subsequent courts).

⁵⁰ *Ticketmaster Corp. v. Tickets.com, Inc.*, 2000 U.S. Dist. LEXIS 12987 (C.D. Cal. Mar. 7, 2000); *Ticketmaster Corp. v. Tickets.Com, Inc.*, 2000 U.S. Dist. LEXIS 12987, *16-17 (C.D. Cal. 2000).

⁵¹ *Ticketmaster Corp. v. Tickets.com, Inc.*, 2000 U.S. Dist. LEXIS 12987 (C.D. Cal. Mar. 7, 2000) (denying trespass claim on the basis of copyright preemption and noting “In addition, it is hard to see how entering a publicly available web site could be called a trespass, since all are invited to enter.”); *Ticketmaster Corp. v. Tickets.Com, Inc.*, 2000 U.S. Dist. LEXIS 12987, *16-17 (D. Cal. 2000) (“A basic element of trespass to chattels must be physical harm to the chattel (not present here) or some obstruction of its basic function (in the court’s opinion not sufficiently shown here).”). Judge Hupp would, three years later, revisit the issue a third time in the case. See *Ticketmaster Corp. v. Tickets.com*, 2003 U.S. Dist. LEXIS 6483 (C. D. Cal. 2003) (“This approach to the tort of trespass to chattels should hurt no one’s policy feelings; after all, what is being attempted is to apply a medieval common law concept in an entirely new situation which should be disposed of by modern law designed to protect intellectual property interests.”)

⁵² *Oyster Software, Inc v Forms Processing, Inc.*, 2001 US Dist LEXIS 22520; 2001 WL 1736382 (N.D. Cal. Dec. 6, 2001).

⁵³ The plaintiff was upset that the defendant has copied certain information made available on the website. That information was meta-data contained in the website’s HTML file—data which can be read easily by anyone viewing a webpage. See generally, *Search Engines, HTML, and Trademarks: What’s the Meta For?*, 86 VA L. REV. 835, — (2000) (describing HTML metadata). While the access to the webpage was presumably allowed, the defendant’s copying of the meta-tags was considered “unauthorized” because it was claimed to be a violation of the contractual terms posted on the website. *Oyster Software, Inc v Forms Processing, Inc.*, 2001 US Dist LEXIS 22520 (N.D. Cal. Dec. 6, 2001).

The district court disagreed. Based upon its reading of the progeny of *Thrifty-Tel*, and most importantly of *eBay, Inc. v. Bidder's Edge*,⁵⁴ the court concluded that the requirement of damage to the chattel had now been removed in California and that the “defendant's conduct was sufficient to establish a cause of action for trespass... simply because the defendant's conduct amounted to ‘use’ of Plaintiff's computer.”⁵⁵ Proof of damage to the chattel, according to the court, was no longer required to state a trespass to chattels claim. Simple lack of plaintiff authorization (in this case, contained in a website's terms of use) was deemed sufficient.

Oyster Software made it clear that whatever *Thrifty-Tel* might have meant when decided, it had indeed given birth to something new in the law. The court in *Oyster Software* had embraced cyberproperty.

C. Intel v. Hamidi

Two years later, the California Supreme Court decided the case of *Intel v. Hamidi*.⁵⁶ This was the first decision of the state's highest court on the common law question of the scope of trespass to chattels in the digital environment. The facts of the case were substantially different from those in either *Thrifty-Tel* or *Oyster Software* because the allegedly trespassory activity was the transmission of email. This raised the specter, again, of “spam,” the bane of the Internet era. However, the email messages at issue in *Hamidi* were not truly “spam” according to most popular definitions of that word—they were non-commercial messages targeted to a particular audience and containing a pointed message.⁵⁷

Ken Hamidi was a former employee of Intel Corporation. Hamidi had sent, over the course of two years, six short textual emails to a list of over 30,000 Intel employees. The emails were sent on behalf of an organization called FACE-Intel (“Former and Current Employees of Intel”) and were highly critical of the company.⁵⁸ According to the California Supreme Court:

⁵⁴ 100 F.Supp.2d 1058 (N.D. Cal. 2000).

⁵⁵ *Oyster Software, Inc v Forms Processing, Inc.*, 2001 US Dist LEXIS 22520; 2001 WL 1736382 (N.D. Cal. Dec. 6, 2001).

⁵⁶ *Intel v. Hamidi*, 30 Cal. 4th 1342 (2003).

⁵⁷ See, e.g., *The Long Arm of Cyber-reach*, 112 HARV. L. REV. 1610, 1623 (1999) (“Although Intel raises some of the same concerns as commercial spamming cases such as *CompuServe*, it is a case of first impression because the challenged speech is not commercial spam, but instead is speech of public concern that lies at the heart of First Amendment protection.”).

⁵⁸ Hamidi created the recipient address list using an Intel directory on a floppy disk anonymously sent to him. *Intel v. Hamidi*, 30 Cal. 4th 1342, 1349 (2003).

The messages criticized Intel's employment practices, warned employees of the dangers those practices posed to their careers, suggested employees consider moving to other companies, solicited employees' participation in FACE-Intel, and urged employees to inform themselves further by visiting FACE-Intel's Web site.⁵⁹

Intel instructed its employees not to reply to Hamidi's messages and attempted (with only partial success) to block the messages from reaching their recipients. Without employing any complicated technical countermeasures, Hamidi evaded most of Intel's attempts at blocking. Because Intel's email system and policies (like most all company email systems and policies) allowed individual employees to make personal use of their email accounts and to receive messages from previously unknown senders, Hamidi simply sent new FACE-Intel messages from new email accounts on new computers. Though old addresses might be blocked, pursuant to the default settings on the Intel mail servers, messages from new addresses were generally passed through to Intel employees.

In March 1998, after Hamidi sent a fifth message to Intel employees, Intel contacted Hamidi by letter and demanded that he stop attempting to communicate with Intel employees via their Intel email addresses. The letter warned that if he did not, he would be subject to a lawsuit. In a reply letter, Hamidi stated that he would not be intimidated and that he had a First Amendment right to speak with Intel's employees. Several months later, he sent a sixth FACE-Intel mailing.

Intel then brought suit against Hamidi, proceeding on a *Thrifty-Tel* theory of trespass to chattels.⁶⁰ In the early stages of the trial court proceeding, Hamidi lacked counsel and proceeded *in propria persona* against Intel's lawyers. Intel conceded that there was no damage to its chattels as a result of Hamidi's mailings, however, it claimed that it had suffered damage due to the time it had spent trying to block the messages from FACE-Intel. It also claimed it had lost employee productivity due to the contents of Hamidi's communications. The trial court found this sufficient. In

⁵⁹ *Intel v. Hamidi*, 30 Cal. 4th at 1349.

⁶⁰ Intel included a claim of nuisance as well, but later dropped this cause of action. *Intel v. Hamidi*, 30 Cal. 4th at 1350. Several commentators, starting with Burk, have suggested that some new formulation of nuisance law might be the most apposite common law real property doctrine to protect a putative cyberproperty interest. See Burk, *supra* note ____ at 53 (“[T]he correct property theory might be nuisance to web sites, rather than trespass.... Of course, the law of nuisance applies to real property, not to chattels. But this property distinction has proven no obstacle to courts thus far...”); Adam Mossoff, *Spam—Oy, What a Nuisance!*, 19 BERKELY TECH. L.J. 625, 629 (2004) (arguing for the application of nuisance law to prohibit unsolicited commercial email).

1999, a permanent injunction was entered prohibiting Hamidi from “sending unsolicited e-mail to addresses on Intel’s computer systems.”⁶¹

Hamidi appealed. In 2001, a majority of the judicial panel for the Court of Appeals affirmed the permanent injunction.⁶² The majority cited the rather inscrutable language from footnote six of *Thrifty-Tel* and declared “We agree.”⁶³ The appellate panel was explicit about its willingness to endorse the modification of traditional trespass to chattels doctrine, explaining how “[t]he common law adapts to human endeavor” and how “the [trespass to chattels] tort has reemerged as an important rule of cyberspace.”⁶⁴

Much like the court in *Oyster Software*, decided at the same time, the *Hamidi* Court of Appeals majority relied on *eBay* and *Thrifty-Tel* for the proposition that damage was no longer a requirement of trespass to chattels. Mere electronic contact with computing equipment was deemed sufficient “use” to support injunctive relief.⁶⁵ As Dan Hunter has noted, the language of the majority’s opinion was especially interesting because it seemed to embrace real property metaphors not just at a doctrinal level but also at a deeper conceptual level, likening Intel’s mail system to a type of real property in the “place” of cyberspace.⁶⁶

Hamidi had argued, consistently with his original claim, that any injunction issued would violate his free speech rights under the federal and state constitutions.⁶⁷ These claims were rejected by the majority of the appellate panel. The Court stated that the cases cited by Hamidi “differ from the present case in that Hamidi was enjoined from trespassing onto Intel’s private property.”⁶⁸ Thus, by analogizing

⁶¹ *Intel v. Hamidi*, 30 Cal. 4th at 1350 (2003).

⁶² *Intel v. Hamidi*, 94 Cal.App.4th 325, 329 (2001).

⁶³ *Id.* at 334.

⁶⁴ *Id.* at 329, 300.

⁶⁵ *Id.* at 335; *Intel v. Hamidi*, 30 Cal. 4th at 1350 (“The majority [in the appellate decision] took the view that the use of or intermeddling with another’s personal property is actionable as a trespass to chattels without proof of any actual injury to the personal property.”).

⁶⁶ Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439, 487-88 (2003) (“[The majority] had characterized Hamidi’s actions as ‘invading [Intel’s] internal, proprietary email system,’ and characterized Hamidi’s use of the system as ‘entry’... [T]he court was conceiving the chattels-based tort in real-property terms.”)

⁶⁷ See *Pruneyard Shopping Center v. Robins*, 447 U.S. 74 (1980); *Golden Gateway Center v. Golden Gateway Tenants Association*, 26 Cal.4th 1013 (2001). See generally Dawn C. Nunziato, *The Death of the Public Forum in Cyberspace*, 20 BERKELEY TECH. L.J. 1115, 1165-66 (2005) (discussing the *Hamidi* case in the context of free speech and state action doctrines).

⁶⁸ *Id.* at 338.

cyberspace to a place and the digital transmission of email to a physical entry “onto” Intel’s property, the appellate court avoided addressing free speech issues by avoiding the question of state action. Instead, it privileged what amounted to a new “cyberproperty” interest over the assertion of a constitutionally protected interest in speech.

Justice Kolkey dissented from the appellate panel decision. Unlike the majority, he cited *Thrifty-Tel* not for the creation of cyberproperty rights, but for the proposition that “California cases have consistently required actual injury as an element of the tort of trespass to chattel.”⁶⁹ Citing Dan Burk’s article, he explained how “the extension of the tort of trespass to chattel to the circumstances here has been condemned by the academic literature.”⁷⁰ Justice Kolkey also argued that Intel’s claim of loss of productivity was inadequate to state a claim of trespass to chattels. If this were the case, he said: “then every unsolicited communication that does not further the business’s objectives (including telephone calls) interferes with the chattel to which the communication is directed simply because it must be read or heard, distracting the recipient.”⁷¹ Justice Kolkey’s opinion argued not just that cyberproperty rules were an errant interpretation of legal doctrine—they were also a questionable way to regulate communicative activities.

Hamidi petitioned the California Supreme Court and review was granted. In a 4-3 decision, the California Supreme Court reversed the appellate panel. Joining the dissenters (without a separate opinion) was Chief Justice Ronald M. George. Justice Kathryn M. Werdegar, writing for the majority, divided her analysis into three sections: 1) an explanation and application of the traditional doctrine (reversing on the basis that there had been no allegation of damage); 2) a consideration and rejection of arguments for adaptation of the doctrine to remove the requirement of damage in the electronic context; and 3) an explanation (in dicta) that any injunction against Hamidi would be subject to constitutional scrutiny as a limitation on free speech rights.

The first section of the opinion provided the basis for reversal. In that section the Court re-affirmed the rule established prior to *Thrifty-Tel* that some damage or impairment to the chattel in question was required to bring an action for trespass to chattels.⁷² Intel had relied on the case law that had evolved from *Thrifty-Tel*—

⁶⁹ *Id.* at 345.

⁷⁰ *Id.* at 349.

⁷¹ *Id.* at 348.

⁷² *Id.* at 1347:

precedent that was not binding before the California Supreme Court.⁷³ Notably, though, the majority of the California Supreme Court did *not* overrule most of these cases, but instead explained and distinguished them. The many cases involving bulk commercial email were distinguished on the basis that the transmissions in those cases “both overburdened the ISP’s own computers and made the entire computer system harder to use for recipients.”⁷⁴ Hence, the facts of the cases provided evidence of “damage” to the chattel by the impairment of the functioning.

With regard to the statement in *eBay* that use of any portion of a computer’s processing power amounted to a trespass to chattels, the Court made clear that this should have been considered dicta and stated that if *eBay* were read to create a new cyberproperty right, it “would not be a correct statement of California or general American law on this point.”⁷⁵ In essence, the majority decided that trespass to chattels doctrine should retain its traditional character by continuing to require a demonstration of damage to the chattel by a plaintiff.⁷⁶

In Section II of its opinion, the court expressly considered “whether California common law should be extended to cover, as a trespass to chattels, an otherwise harmless electronic communication.”⁷⁷ In this section, Court considered arguments made by Dan Burk, as well as further developments of those arguments by

The consequential economic damage Intel claims to have suffered, *i.e.*, loss of productivity caused by employees reading and reacting to Hamidi’s messages and company efforts to block the messages, is not an injury to the company’s interest in its computers... any more than the personal distress caused by reading an unpleasant letter would be an injury to the recipient’s mailbox, or the loss of privacy caused by an intrusive telephone call would be an injury to the recipient’s telephone equipment.

See also id. at 1359 (again noting the detachment of the injury from any concern about the chattel).

⁷³ The dissenting justices in *Hamidi* faulted the majority for misreading prior cyberproperty cases. Given the *de novo* standard of review, however, this is obviously somewhat beside the point. *Accord* Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164 (2004) (“eBay involved a federal district court applying California law, a subject on which the California Supreme Court has the last word; and, of course, the *Hamidi* court was free to reject the interpretation of Ohio law reflected in the *CompuServe* case.”).

⁷⁴ *Id.* at 1348.

⁷⁵ *Intel v. Hamidi*, 30 Cal. 4th at 1350 (discussing language in *eBay, Inc. v. Bidder’s Edge*, 100 F.Supp.2d 1058, 1071 (N.D. Cal. 2000)).

⁷⁶ *See, e.g.*, Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73, 76-77 (2003) (noting that the “standard American legal view” is that “deliberate trespasses to chattels that [result] in neither damage to, nor removal of, the chattel” are not actionable.); Ronnie Cohen & Janine S. Hiller, *Towards a Theory of Cyberplace: A Proposal for a New Legal Framework*, 10 RICH. J.L. & TECH. 2 (2003) (stating the *Hamidi* decision “returns the tort of trespass to chattels to its common law roots.”).

⁷⁷ *Intel v. Hamidi*, 30 Cal. 4th at 1360.

Professors Dan Hunter,⁷⁸ Mark Lemley,⁷⁹ and Lawrence Lessig.⁸⁰ The language quoted from Hunter, Lemley, and Lessig consisted of opinions that essentially sided with Burk's arguments. The consensus was that the creation of property-like rules of absolute exclusion and mandatory bargaining would have a stifling effect on the free flow of information on the Internet.

The court also addressed arguments to the contrary advanced by Professor Richard Epstein, who had drafted an amicus brief in support of Intel. Epstein, building in part on his similar efforts in the *eBay* case, had written passionately in favor of the judicial creation of a new common law cyberproperty right. Among other things, Epstein had argued that the basis for a cyberproperty right might be found in common rhetorics used to describe digital environments.⁸¹

Epstein pointed the court to the recurrent observation in cyberlaw writing (most thoroughly investigated by Dan Hunter) that cyberspace was conceptualized as a place.⁸² He then transformed this into a claim that because cyberspace was understood to be like a place, it should be legally regulated like a place. The *Hamidi* majority, however, explicitly rejected Epstein's argument:

Professor Epstein suggests that a company's server should be its castle, upon which any unauthorized intrusion, however harmless, is a trespass. Epstein's argument derives, in part, from the familiar metaphor of the Internet as a physical space, reflected in much of

⁷⁸ Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439 (2003).

⁷⁹ Professor Mark Lemley wrote the amicus briefing for a group of law professors supporting *Hamidi*. See Mark A. Lemley, *Brief Amicus Curiae of Law Professors Supporting Reversal in Intel v. Hamidi*, July 25, 2002, available at <http://www.law.berkeley.edu/institutes/bclt/pubs/lemley/intelvhamidi.pdf>. He had authored a similar brief in the case of *eBay v. Bidder's Edge*. See Mark A. Lemley, *Brief Amicus Curiae of Law Professors in Support of Appellant in eBay Inc. v. Bidder's Edge, Inc.*, June 22, 2000, available at <http://www.law.berkeley.edu/institutes/bclt/pubs/lemley/bedgeami.pdf>.

⁸⁰ Lawrence Lessig had mentioned and briefly critiqued arguments made by Richard Epstein in the *eBay v. Bidder's Edge* litigation. LAWRENCE LESSIG, *THE FUTURE OF IDEAS* 170-71 (2001).

⁸¹ Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73, 82-83 (2003):

Common language speaks of internet 'addresses,' for, of course, individuals and firms occupy private 'sites' along the internet 'highway.' It also speaks of the 'architecture' of the internet, which may direct and influence conduct in both real and virtual 'space.' [C]yberspace looks and functions more like real property than chattels. If one is forced to choose between the two sets of rules, then manifestly the real property rules offer a better fit.

⁸² Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439 (2003).

the language that has been used to describe it: “cyberspace,” “the information superhighway,” e-mail “addresses,” and the like. Of course, the Internet is also frequently called simply the “Net,” a term, Hamidi points out, “evoking a fisherman's chattel.” A major component of the Internet is the World Wide “Web,” a descriptive term suggesting neither personal nor real property... Metaphor is a two-edged sword.⁸³

Section II ultimately purported to be inconclusive. The Court stated that it was “discuss[ing] this debate among the *amici curiae* and academic writers only to note its existence and contours, not to attempt its resolution.”⁸⁴ However, Section II of the opinion showed that the majority was well aware of theoretical debates about cyberproperty and aware of its power to expand the scope of the common law doctrine. Its explication of the academic debates made clear that it ultimately sided with the arguments of Burk and similar commentators opposing the expansion of cyberproperty rights.

Finally, in Section III, the majority responded to critiques by two dissenting justices with “some clarifications.” The dissenters had argued for an expansion of the doctrine and opined, like the prior appellate majority, that the First Amendment was inapplicable to the case because the tort of property trespass, if established, trumped any solicitude for speech interests.⁸⁵ The majority disagreed, again rejecting metaphorical readings of cyberspace and stressing the fact that the case did not involve a spatial intrusion:

Hamidi himself had no tangible presence on Intel property, instead speaking from his own home through his computer. He no more invaded Intel's property than does a protester holding a sign or shouting through a bullhorn outside corporate headquarters, posting a letter through the mail, or telephoning to complain of a corporate practice.⁸⁶

⁸³ *Intel v. Hamidi*, 30 Cal. 4th at 1360-61. Epstein has objected to this characterization of this argument. See Part II.A. *infra*.

⁸⁴ *Id.* at 1363.

⁸⁵ This approach has been adopted by prior courts. See e.g. *Cyber Promotions v. America Online*, 948 F. Supp. 436 (E.D. Pa. 1996) (rejecting the application of First Amendment claims to the corporate email servers of AOL).

⁸⁶ *Intel v. Hamidi*, 30 Cal. 4th at 1364-65. The court continued “That a property owner may take physical measures to prevent the transmission of others' speech into or across the property does not imply that a court order enjoining the speech is not subject to constitutional limitations.” *Id.* at 1365.

Having rejected the notion that spatial property rights should trump Hamidi's speech rights, the majority stated that Hamidi would have a constitutional defense against the issuance of an injunction on the facts of the case: "the use of government power ... by an award of damages or an injunction in a private lawsuit, is state action that must comply with First Amendment limits."⁸⁷

Thus, the three section of the majority opinion in *Hamidi* refuted cyberproperty claims in three ways. According to the majority, cyberproperty claims were 1) doctrinally incorrect pursuant to common law precedent, 2) misguided (or at least highly questionable) as an instance of common law evolution, and 3) subject (at least in the case of email) to First Amendment defenses. For these reasons, the *Hamidi* decision is often seen as the California Supreme Court decisively ending the cyberproperty story that began in the wake of *Thrifty-Tel*.

D. Cyberproperty Post-*Hamidi*

Yet the story of the cyberproperty extension of trespass to chattels law has not ended—indeed it has probably just begun. While California was properly understood as the birthplace and the proving grounds for most all the important decisions regarding cyberproperty, it is only one state among fifty. Other states will likely be called upon to consider anew the issue of cyberproperty.

When other state courts read the *Hamidi* decision, they will find two vigorous dissenting opinions. Justice Janice Rogers Brown wrote an opinion expressing a pronounced commitment to the sanctity of private property rights.⁸⁸ She concluded her dissent from the majority opinion by arguing that: "The principles of both personal liberty and social utility should counsel us to usher the common law of property into the digital age."⁸⁹

Justice Richard M. Mosk⁹⁰ seemed fully willing to embrace the cyberspace analogies to real property ownership that were rejected by the majority by stating that "[Hamidi's] action, in crossing from the public Internet into a private intranet, is more like intruding into a private office mailroom, commandeering the mail cart, and

⁸⁷ *Intel v. Hamidi*, 30 Cal. 4th at 1364.

⁸⁸ *Intel v. Hamidi*, 30 Cal. 4th at 1385 (Brown, J., dissenting) ("Those who have contempt for grubby commerce and reverence for the rarified heights of intellectual discourse may applaud today's decision, but even the flow of ideas will be curtailed if the right to exclude is denied.").

⁸⁹ *Intel v. Hamidi*, 30 Cal. 4th at 1385 (Brown, J., dissenting).

⁹⁰ This was Justice Richard Mosk of the Court of Appeal for the Second District sitting by designation. His father, Justice Stanley Mosk, was a well-known justice on the California Supreme Court who passed away in 2001.

dropping off unwanted broadsides on 30,000 desks.”⁹¹ Justice Mosk thought there was sufficient doctrinal support for a finding that the harm alleged by Intel was cognizable.⁹² However, citing to Justice Cardozo’s *Nature of the Judicial Process*, he also argued that an extension of the common law was warranted in light of technological developments.⁹³

These strong judicial intuitions in favor of cyberproperty will likely find new voices. A recent case, *Sherwood 48 Associates v. Sony Corporation of America*,⁹⁴ illustrates the potential for the reconsideration of cyberproperty in other jurisdictions. In the *Sherwood 48* case, the defendant Sony had used digital images of certain buildings in Times Squares in order to create the 2002 summer blockbuster *Spider Man*.⁹⁵ Sony didn’t use the unaltered images of the buildings, however, but revised their appearance by replacing existing advertisements with those of Sony’s partners. The building owners brought suit. The primary claims in the case were based in trademark law and were ultimately dismissed. However the plaintiffs had also claimed that Sony had committed a trespass to their buildings by taking measurements with lasers. The federal district court seemed perplexed by these claims: “trespass? — bouncing a laser beam off a building to create a digital photograph? Light beams bounce off plaintiffs’ three buildings day and night in the city that never sleeps.”⁹⁶

Of course, according to the earlier district court ruling in *Oyster Software*, non-damaging electromagnetic contact with tangible property actually *could* provide the basis for a claim of trespass to chattels. And perhaps for this reason, the Federal Court of Appeals for the Second Circuit reversed the district court’s dismissal of the trespass to chattels claim.⁹⁷ The Second Circuit, citing to *Hamidi*, stated

This case presents an unsettled question of New York state law, to wit, whether a trespass is committed under New York law when a party’s physical contact with another party’s personal property diminishes the value of that property without damaging that

⁹¹ *Intel v. Hamidi*, 30 Cal. 4th at 1386 (Mosk, J. dissenting).

⁹² *Intel v. Hamidi*, 30 Cal. 4th at 1388 (Mosk, J., dissenting).

⁹³ *Intel v. Hamidi*, 30 Cal. 4th at 1393.

⁹⁴ 2002 U.S. Dist. LEXIS 13947 at *3 (S.D.N.Y. July 31, 2002).

⁹⁵ For an interesting description of the suit, and ruminations on similar “digital alteration” issues, see Rebecca J. Brown, *Genetically Enhanced Arachnids and Digitally Altered Advertisements: The Making of Spider-Man*, 8 VA. J.L. & TECH. 1 (2003).

⁹⁶ *Id.*

⁹⁷ See *Sherwood 48 Assocs. v. Sony Corp. of Am.*, Civ. No. 02-9100 2003 U.S. App. LEXIS 20106 (2d Cir. Sept. 29, 2003).

property.... A New York court should determine whether physical damage to the Buildings in this case is a prerequisite to a trespass claim.⁹⁸

While the plaintiffs apparently settled their claims, the Second Circuit's decision demonstrates that it remains quite possible that a state judiciary in New York, Virginia, Illinois, or elsewhere may ultimately decide to reject the *Hamidi* majority's reasoning.

Even if other states choose to follow the *Hamidi* majority, it is uncertain how much the *Hamidi* decision limits to the expansion of cyberproperty doctrine. One might argue that the decision effectively preserved more of the novel cyberproperty theory than it rejected.⁹⁹ Only *Oyster Software*, the most extreme enunciation of the cyberproperty concept was singled out as completely inconsistent with California doctrine.¹⁰⁰ Other cases in the shadow of *Thrifty-Tel* were considered consistent with the holding because the plaintiffs had demonstrated "substantial impairment" to the computing equipment in question.¹⁰¹ In the *Hamidi* case, Intel admitted that the electronic contact at issue caused *no* damage to its systems. Will any future cyberproperty plaintiffs be inclined to make that same concession? Is it so difficult, as a practical matter, for a potential plaintiff to claim something slightly different?

While a complete absence of damage to the computer equipment is obviously insufficient under *Hamidi*, the definition of impairment to computing equipment is not perfectly clear. Depending on where one sets that threshold, the *Hamidi* case may actually leave ample room for the expansion of cyberproperty. For instance, in a recent case in the Northern District of Illinois, a court relied upon the *Thrifty-Tel* line

⁹⁸ 2003 U.S. App. LEXIS 20106 at *7-8. Accordingly, the state law claim of trespass to chattels was then dismissed by the federal district court without prejudice. See *Sherwood 48 Assocs. v. Sony Corp. of Am.*, 2004 U.S. Dist. LEXIS 700 (S.D.N.Y. Jan. 18, 2004).

⁹⁹ A student commentator has suggested that the *Hamidi* decision was primarily significant for the extent to which it adopted the novel logic of the *Thrifty-Tel* line of cases. See Steven Kam, *Note: Intel Corp. v. Hamidi: Trespass to Chattels and a Doctrine of Cyber-Nuisance*, 19 BERKELEY TECH. L.J. 427, 438 (2004) ("The court thus adopted the changes imposed upon trespass to chattels by federal district courts in California... If the California Supreme Court wished to repudiate the trend towards breadth in trespass to chattels, it could have done so. It instead embraced the prior decisions...").

¹⁰⁰ *Id.* at 1357 n.5 (distinguishing the case by saying: "[W]e do not read *eBay*... as holding that the actual injury requirement may be dispensed with, and such a suggestion would, in any event, be erroneous as a statement of California law.").

¹⁰¹ See e.g. *CompuServe, Inc. v. Cyber Promotions, Inc.*, 962 F. Supp. 1015; *Hotmail Corp. v. Van\$ Money Pie, Inc.*, 1998 U.S. Dist. LEXIS 10729 (N.D.Cal., Apr. 16, 1998); *America Online, Inc. v. IMS*, 24 F. Supp. 2d 548 (E.D.Va. 1998); *America Online, Inc. v. LCGM, Inc.*, 46 F. Supp. 2d 444 (E.D.Va. 1998); *eBay, Inc. v. Bidder's Edge*, 100 F.Supp.2d 1058 (N.D. Cal. 2000).

of cases and the decision in *Hamidi* in allowing a trespass to chattels suit to proceed against a defendant company that had installed “spyware” on the plaintiff’s computer.¹⁰² The court stated:

Simply put, plaintiff alleges that Spyware interfered with and damaged his personal property, namely his computer and his Internet connection, by over-burdening their resources and diminishing their functioning.¹⁰³

From a doctrinal perspective, this is consistent with the holding in *Hamidi*. But what, exactly, is the damage alleged? Almost all forms of electronic interaction with a computer system use *some* resources and thereby diminish *some* functioning. The line that must be crossed with respect to “functional harm or disruption” is not clear.¹⁰⁴ The *Hamidi* opinion essentially invites lower courts to consider these issues on a case-by-case basis. If the *Thrifty-Tel* zeitgeist has not faded, we might well predict that cyberproperty will eventually arrive back at something virtually approaching the rule in *Oyster Software*.¹⁰⁵ On the other hand, if *Hamidi* is given teeth, the requirement of “functional harm” may come to be what Justice Mosk claimed it was in dissent—a requirement of a total system crash in order to state a claim.¹⁰⁶ Between those two extremes lies a broad field of possibilities.

So it seems that cyberproperty doctrine is at an interesting crossroads that may lead to several possible futures.¹⁰⁷ Given the range of possible futures, it is important to note how several legal commentators have recently argued in defense of cyberproperty rights and criticized the *Hamidi* decision as misguided.¹⁰⁸ Other state

¹⁰² *Sotelo v. Direct Revenue Holdings, LLC*, 384 F. Supp. 2d 1219 (N.D. Ill. 2005).

¹⁰³ *Sotelo v. Direct Revenue Holdings, LLC*, 384 F. Supp. 2d 1219, 1231 (N.D. Ill. 2005).

¹⁰⁴ *Intel v. Hamidi*, 30 Cal. 4th at 1360.

¹⁰⁵ See, e.g., *Register.com, Inc. v. Verio, Inc.*, 126 F. Supp. 2d 238 (S.D.N.Y. 2000), *aff'd* by 356 F.3d 393, 404 (2d Cir. 2004) (finding that trespass to chattels was established where the district court made a determination that “a significant portion” of the recipient machine’s “resources” were used).

¹⁰⁶ *Intel v. Hamidi*, 30 Cal. 4th at 1386 (Mosk, J., dissenting) (“[T]he majority leave Intel, which has exercised all reasonable self-help efforts, with no recourse unless [Hamidi] causes a malfunction or systems “crash.”); Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73 (2003).

¹⁰⁷ Jane K. Winn, *Crafting a License to Know from a Privilege to Access*, 79 WASH. L. REV. 285, 286 (2004) (stating that the *Hamidi* decision is “unlikely to staunch the flow of controversy” over cyberproperty claims).

¹⁰⁸ Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164 (2004); Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73 (2003); Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL'Y 147 (2005); Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047 (2005); David McGowan, *Website Access: The Case for Consent*, 35 LOY. U. CHI. L.J. 341 (2003); David McGowan, *The Trespass Trouble and the Metaphor Muddle*, 1 J.L. ECON. & POL'Y 109 (2005); Julie

supreme courts considering the expansion of cyberproperty may look to such scholarly arguments for guidance in applying the ancient doctrine of trespass to chattels to the new frontier of the Internet.

II. Cyberproperty in Legal Theory

Many recent commentators have been solicitous of the concept of cyberproperty and critical of the *Hamidi* decision.¹⁰⁹ In Part I, I argued that the *Hamidi* decision was correct with regard to traditional legal doctrine. For the most part, cyberproperty proponents have not contested this. Instead, they claim that changes in common law doctrine to embrace cyberproperty would constitute an improvement.

From my perspective, contemporary arguments for cyberproperty are unpersuasive. They seem to rely, generally, on two fairly simple misconceptions. One is the assumption that “code is property” (or at least property-like) and the second is the assumption that “code is law” (or at least law-like). Both of these assumptions have some merit and history in cyberlaw scholarship. But they also have highly significant flaws when applied to cyberproperty, which I will examine below.

A. Decoding Digital Property

At the bottom of all cyberproperty claims is an intuition that the digital code present within a computer is easily analogized to a form of property. Richard Epstein and Trotter Hardy are two prominent examples of legal theorists who have pushed for the use of analogies to *real* property in support of claims for cyberproperty rights.¹¹⁰ Professor Hardy raised the possibility of “trespass to website” in 1996, the same year that *Thrifty-Tel* was decided.¹¹¹ Professor Epstein continues to argue in favor of “the extension of trespass to land rules to the Internet.”¹¹² He believes it is

Beauregard, *Note, Intel Corp. v. Hamidi: Trespassing in Cyberspace*, 43 JURIMETRICS J. 483 (2003); J. Brian Beckham, *Casenote: Intel v. Hamidi: Spam as a Trespass to Chattels - Deconstruction of a Private Right of Action in California*, 22 J. MARSHALL J. COMPUTER & INFO. L. 205 (2003); Patty M. DeGaetano, *Intel Corp. v. Hamidi: Private Property, Keep Out -- The Unworkable Definition of Injury for a Trespass to Chattels Claim in Cyberspace*, 40 CAL. W. L. REV. 355 (2004).

¹⁰⁹ See *supra* note 2.

¹¹⁰ I. Trotter Hardy, *The Ancient Doctrine of Trespass to Web Sites*, 1996 J. ONLINE L. art. 7 at ¶ 1; Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL'Y 147, 163 (2005).

¹¹¹ I. Trotter Hardy, *The Ancient Doctrine of Trespass to Web Sites*, 1996 J. ONLINE L. art. 7 at ¶ 1 (“Many of the words used to describe Web sites have a basis in real property: the word ‘site’ itself is one, as are such expressions as ‘home’ pages, ‘visiting’ Web sites, ‘traveling’ to a site and the like. This usage suggests that the trespass action might appropriately be applied to Web sites as well.”)

¹¹² Richard A. Epstein, *Intellectual Property: Old Boundaries and New Frontiers*, 76 IND. L.J. 803, 818

sound to conflate the interoperations of software with personal entries onto real property and he has strongly criticized the *Hamidi* majority for not doing so.¹¹³ While other cyberproperty proponents are not so bold in arguments for the conflation of real property and digital property, the claim does not always seem foreign to their logic.¹¹⁴

Dan Hunter and Mark Lemley have noted how some courts have actually accepted this “code is land” equation.¹¹⁵ However, most people, including most cyberproperty proponents, seem to agree that there must be some better justification for cyberproperty than the mere claimed metaphorical resemblance between cyberspace and real space.¹¹⁶

(2001) (discussing his arguments in the *eBay* case and stating “The position I take... is that the rules that govern ordinary space provide a good template to understand what is at stake in cyberspace”); Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL’Y 147, 163 (2005):

No one would argue that a person is under a duty to open his home or business to some kinds of speech but not others. It hardly makes a difference that Hamidi wants to enter Intel’s business by Internet or on foot. The unauthorized entry has long been regarded as a per se violation under ordinary trespass principles. There is no reason to back off that view here.

¹¹³ Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL’Y 147, 157 (2005):

Justice Werdegar’s fanciful use of etymology to break the parallel between physical and cyberspace is totally misguided. In one of the worst plays on words imaginable, she concocts a derivation for the term Internet that is false to its history and understanding.

¹¹⁴ See, e.g., Adam Mossoff, *Spam -- Oy, What A Nuisance!*, 19 BERKELEY TECH. L.J. 625, 644 (2004) (“When land is dedicated to commercial goals that are achieved only with computers, the interference with the use of these computers is *ipso facto* an interference with the use of the land.”); Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047, 1102 (2005).

[C]yberspace is neither a bad analogy nor a metaphor. Cyberspace is a descriptive term. It describes the degree to which some kinds of code act like spaces or objects. Taking this approach frees us to apply the developed body of property law to assist in solving inefficient allocations of rights on the internet.

Dan Hunter, a prominent critic of cyberproperty, has also been pessimistic that we can escape the spatial analogy in the context of cyberlaw. “[A]ttempts to supplant the CYBERSPACE AS PLACE metaphor are, I think, doomed to failure.” Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439, 516 (2003).

¹¹⁵ Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439 (2003); Mark A. Lemley, *Place and Cyberspace*, 91 CALIF. L. REV. 521 (2003).

¹¹⁶ David McGowan has defended those courts that Hunter and Lemley accuse of embracing metaphor claims of property in cyberspace on the basis that the opinions do no such thing, and to the extent that they do, the legal theory of property is no longer restricted to the concept of a physical thing—talk about property is instead properly understood as talk about the proper allocation

The first problem with suggesting that cyberspace is a place is that it is not. We might stop there. But we might further add, that even when cyberspace is perceived as place-like, it is often described as an importantly different kind of space.¹¹⁷ Finally, even were we to accept the fiction that there is a cyberspace, and ignore the many ways it is not like any other place that we call a place, there is a third problem: not all spaces are privately owned. Calling cyberspace a place does not lead inevitably to the conclusion that the best legal rule for cyberspace is one that mimics private land ownership. There are many real spaces (such as parks, highways, and oceans) that are not privately owned. Some very valuable real spaces, like beaches, are not spaces where the public is excluded.¹¹⁸

While cyberproperty proponents often pay some tribute to spatial metaphors, their core claims tend to be something less ambitious: a claim that cyberproperty regimes will promote greater efficiency.¹¹⁹ The “Chicago school” is known for its historic espousal of creating social benefits by legally recognizing new forms of private property rights and encouraging more efficient market transactions thereby.¹²⁰ Many cyberproperty proponents are essentially trying to map the theories of Harold Demsetz onto the *terra nova* of cyberspace—parceling out plots of private ownership in order to avoid the tragedies they fear will befall schemes based on common ownership. Harold Demsetz is called into the service of William Gibson.¹²¹

Harold Demsetz famously pointed out how land held in common would tend to be used inefficiently by rationally selfish individuals engaged in over-grazing and under-cultivating.¹²² He argued that legal privatization solved these problems and

of entitlements with some secondary relation to particular physical objects. See David McGowan, *The Trespass Trouble and the Metaphor Muddle*, 1 J.L. ECON. & POL'Y 109, 110-11 (2005).

¹¹⁷ Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV. L. REV. 501 (1999) (discussing various differences between “real space” and “cyberspace”).

¹¹⁸ Brett M. Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 MINN. L. REV. 917, 919 (2005); Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 752 (1986) (discussing the multiple forms of property that are beneficially held in common).

¹¹⁹ Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047, 1051 (2005) (“[A] theory of virtual property is critical to ensure efficient use of internet resources, lower search costs, and reduce negotiation costs that would otherwise prevent the flow of high-value resources to high-value uses.”); *id.* at 1094 (“[V]irtual property ought to be protected because it represents the best way of splitting up use rights so as to cause people to use it efficiently.”).

¹²⁰ Cf. Mark A. Lemley, *Romantic Authorship and the Rhetoric of Property*, 75 TEX. L. REV. 873, 897 (1997) (noting how property rhetoric in intellectual property discourse has been largely animated not by real property law, but by concepts popularized by the Chicago School law-and-economics movement).

¹²¹ WILLIAM GIBSON, *NEUROMANCER* 51 (1984) (describing “cyberspace” as a “consensual hallucination”).

¹²² See Harold Demsetz, *Toward a Theory of Property Rights*, 57 Am. Econ. Rev. Papers & Proc. 347

promoted more efficient and productive uses.¹²³ Many cyberproperty advocates seem confident that this abstract framework is effective not just with regard to claims about the social benefits obtainable through the privatization of land, but also with regard to privatizing the right to send electron between networked computers. As Julie Cohen has noted previously, there appears to be a peculiar ideology of “cybereconomics” in play here, something as befitting Gibson’s phrase “consensual hallucination” as cyberspace itself.¹²⁴

Statements about “cyberproperty” often seem to rely on a hallucination of real property laws rather than a rich understanding of property doctrine and how it operates in practice. The exclusive rights recognized in *Oyster Software* were much more extreme than any analogous rights that currently exist in real property law¹²⁵ Richard Epstein readily concedes this point,¹²⁶ but among other cyberproperty proponents, one senses a conviction that calling a thing real property entitles its owner to an absolute right to exclude others. This is not so, as Michael Carrier has recently discussed at length.¹²⁷ To treat an entitlement as something analogous to traditional tangible property might invite the creation of numerous limitations on the extent of that right.¹²⁸

(1967); see also Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL'Y 147, 164 (2005) (“[T]he creation of any commons will chill the incentive to invest.”); Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047, 1065-67 (explaining Demsetzian theory and applying it to virtual property claims).

¹²³ Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 DUKE L.J. 1, 27-28 (2004)

¹²⁴ Julie E. Cohen, *Lochner In Cyberspace: The New Economic Orthodoxy Of "Rights Management*, 97 MICH. L. REV. 462, 466 (1998) (“The cybereconomists’ debt to the social ideology of *Lochner* runs deep. Their proposals turn out to be grounded in identical beliefs about the conceptual primacy of private property and private ordering and the illegitimacy of ‘redistributive,’ market-distorting legislation.”); see also Brett M. Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 MINN. L. REV. 917, 932 & n. 47 (2005).

¹²⁵ See Carol M. Rose, *Canons of Property Talk, or Blackstone’s Anxiety*, 108 YALE L.J. 601, 631 (1998) (“[P]roperty may be much more porous and changeable than is suggested by the assertion of simple exclusive dominion.”).

¹²⁶ See Richard A. Epstein, *Intellectual Property: Old Boundaries and New Frontiers*, 76 IND. L.J. 803, 804-05 (2001) (noting that Blackstone’s “sole and despotic dominion” is an “exaggeration” and that “the old, tangible property” is exceedingly complicated in terms of entitlement structures); cf. *id.* at 819 (stating that in the case of cyberproperty, “There may well be a place for Blackstone’s sole and despotic dominion after all.”)

¹²⁷ Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 DUKE L.J. 1, 25, 52 n.216 (2004); see also Mark A. Lemley, *Place and Cyberspace*, 91 CALIF. L. REV. 521, 532-33 (2003).

¹²⁸ Michael Carrier has observed this in his provocative response to the increasing “propertyization” of the term “intellectual property.” See Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 DUKE L.J. 1 (2004). While Carrier sympathizes with those who wish to resist the expansion of intellectual property laws by avoiding the label of “property,” he believes that

But even if we decided that “cyberproperty” should be treated like a form of property, this would not mean that the traditional property rules and traditional limitations on rights would work in this context. If we wish to call the 1’s and 0’s flowing through networks a form of property, we need an approach that is sensitive to the obvious differences between the way bits and land behave.¹²⁹ As Lord Blackstone once noted, there are important practical differences between optimal ways to treat things like land and things like water, and these practical differences make themselves known in the law.¹³⁰

The phenomenon of digital communication is a *tertium quid* in property law if ever there was. The electronic interplays that are captured under the rubric of “cyberproperty” rights are far, far different things than the rich soil of the paradigmatic Blackacre, than the valuable cattle¹³¹ that constituted wealth during ages past,¹³² than the water,¹³³ than the air,¹³⁴ and than most any past form of “property.”

the adoption of property rhetorics might open avenues to a desired weakening, rather than a feared strengthening, of private powers.

¹²⁹ Cf. David McGowan, *The Trespass Trouble and the Metaphor Muddle*, 1 J.L. ECON. & POL’Y 109 (2005) (“[Cyberproperty critics claim] that ‘property rules’ have some unique or intrinsic relation to tangible things like dirt or disk space. Academic analysis of property abandoned this notion long ago. For many years, the dominant use of the term ‘property’ has referred to how people must deal with each other relative to some resource rather than to the resource itself.”).

¹³⁰ As Blackstone put it:

For water is a moveable wandering thing, and must of necessity continue common by the law of nature... But the land, which that water covers, is permanent, fixed and immoveable: and, therefore, in this I may have a certain substantial property; of which the law will take notice, and not of the other.

2 WILLIAM BLACKSTONE, COMMENTARIES 18; see also Richard A. Epstein, *Intellectual Property: Old Boundaries and New Frontiers*, 76 IND. L.J. 803, 805 (2001) (discussing Blackstone’s views of water and noting that “The pressing question is to decide which analogies work across fields and which do not, both in litigation and legislative reform.”).

¹³¹ As many teachers of first-year property law inform their students, the term “chattel” is thought to derive from the Old French word for cows. 2 SIR FREDERICK POLLOCK & FREDERIC WILLIAM MAITLAND, *THE HISTORY OF ENGLISH LAW BEFORE THE TIME OF EDWARD I* 151 (S.F.C. Milson ed., Cambridge Univ. Press 1968) (2d ed. 1898).

¹³² See generally Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 DUKE L.J. 1, 29-30 (2004); Mark A. Lemley, *What’s Different About Intellectual Property*, 83 TEX. L. REV. 1097 (2005); Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutionary Impulse*, 78 VA. L. REV. 149 (1992).

¹³³ Blackstone’s comments about water have found new purchase in the debate over cyberproperty. Mark A. Lemley, *Place and Cyberspace*, 91 CALIF. L. REV. 521, 538 (2003) (using Blackstone’s language to suggest the Internet is, in some ways, like flowing water); Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL’Y 147, 157 (2005) (predicting that “we can be confident that this [water] metaphor will fall stillborn from the press”).

¹³⁴ Ellen P. Goodman, *Spectrum Rights in the Telecom to Come*, 41 SAN DIEGO L. REV. 269, 272, 364

There are probably many ways to explain the close relation between cyberproperty claims and the roots of some strands of “law and economics” discourse, but I want to observe one connection that might seem unlikely. One of the most well-known formational moments in the rather brief history of cyberlaw was an address made in 1996 by Judge Frank Easterbrook of the Federal Court of Appeals of the Seventh Circuit to a conference on the “Law of Cyberspace.” Judge Easterbrook’s address was titled “Cyberspace and the Law of the Horse.”

The conventional story of that day portrays Judge Easterbrook as a cynic and a spoiler attempting to throw a wet blanket on the whole enterprise of cyberlaw. Easterbrook told the assembled forward-thinking legal scholars to just go home and give up on this “cyberlaw” project.¹³⁵ Judge Easterbrook’s essay, recording his remarks, is almost always cited as a “but see” source in law review footnotes when an author needs to indicate that someone famously sought to cabin irrational enthusiasm about the novelty and importance of cyberlaw.¹³⁶

Judge Easterbrook certainly did say some rather harsh things about the value of interdisciplinary law and technology scholarship. He warned, for instance, that: “Beliefs lawyers hold about computers, and predictions they make about new technology, are highly likely to be false. This should make us hesitate to prescribe legal adaptations for cyberspace. The blind are not good trailblazers.”¹³⁷ In a way, I would agree with Easterbrook. “Cybereconomic” arguments stand a great chance of being improvident, given all the unknown factors and dimly understood forms of social value that can be found at, in, and through computer networks.¹³⁸

Yet strangely, Judge Easterbrook, speaking in 1996, was perhaps the earliest *proponent* of cyberproperty.¹³⁹ He explicitly advised judges to “create property rights,

(2004) (describing the conflict of analogies in spectrum law).

¹³⁵ Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207 (“We are at risk of multi-disciplinary dilettantism, or, as one of my mentors called it, the cross-sterilization of ideas. Put together two fields about which you know little and get the worst of both worlds.”); Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV.L.REV. 501 (1999) (responding to Easterbrook by defending the study of cyberlaw).

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¹³⁷ 1996 U. CHI. LEGAL F. 207, 207.

¹³⁸ Cf. Brett M. Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 MINN. L. REV. 919, 928, 932 (2005) (suggesting that economics theories may support commons-based approaches to Internet resource management).

¹³⁹ 1996 was certainly a banner year for cyberproperty law. The *Thrifty-Tel* case, Trotter Hardy’s essay on trespass to websites, and Easterbrook’s statements were all published that year. This was also the year of John Perry Barlow’s “Declaration of Independence of Cyberspace” and David Johnson & David Post’s famous article “Law Without Borders.” David R. Johnson & David Post, *Law and Borders—The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996); John Perry Barlow, *A*

where now there are none... to make bargains possible.”¹⁴⁰ He meant this advice to apply specifically to the context of the Internet. Thus, according to Easterbrook himself, there was something new in cyberspace: property. And the judiciary should do something innovative: recognize it, so that the market might distribute it to more efficient uses. Easterbrook clearly believed that generating new cyberproperty rights and privately allocating through contractual transactions would lead to a better (more efficient) arrangement of Internet resources.¹⁴¹ He stated “we need to bring the Internet into the world of property law.”¹⁴²

The particular kind of new cyberspace property that Judge Easterbrook had in mind that day was the domain name.¹⁴³ In subsequent years, courts and legislatures followed his advice: domain names are now generally recognized as a (somewhat peculiar) form of property right. The story of domain names has been told before, but it is worth recounting as a foil to the story of trespass to chattels laid out in Part I. Unlike the case with trespass to chattels, there is not much concern today with regard to the fact that domain names are property. Rather, recent law review articles busily chart the interesting possibilities that flow from this classification. One such possibility is the prospect of judgment creditors seizing and selling the domain names of debtors.¹⁴⁴

To understand how this came to be, it may be worth briefly recounting how domain names came to be viewed as property. Domain names originated with some fairly straightforward connections to spatial territories. Physical jurisdictions were “mapped” onto the domain name system beginning in 1983. That was the time of the initial creation of various country-coded top-level domains (such as .uk for the United Kingdom).¹⁴⁵ With regard to certain top-level domains, such as the celebrated “dot-com,” new domain names were not keyed to territorial sovereigns, but were handed out by private companies tasked with that role through a process that looked

Declaration of the Independence of Cyberspace (Feb. 8, 1996) available online at <<http://www.eff.org/barlow/Declaration-Final.html>> (last visited _____).

¹⁴⁰ Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 212.

¹⁴¹ 1996 U. CHI. LEGAL F. 207, 212-13.

¹⁴² *Id.* at 212-16.

¹⁴³ *Id.* at 212 (“Property rights in domain names is an example of what I have in mind.”)

¹⁴⁴ See, e.g., Alexis Freeman, *Internet Domain Name Security Interests: Why Debtors Can Grant them and Lenders Can Take them in this New Type of Hybrid Property*, 10 AM. BANKR. INST. L. REV. 853, 854 (2002) (“After establishing that a domain name is property of the bankruptcy estate, and that a domain name registrant has a transferable property interest in a domain name, this article will discuss how a creditor may obtain and enforce a security interest in a domain name.”); Juliet M. Moringiello, *Seizing Domain Names To Enforce Judgments: Looking Back To Look To The Future*, 72 U. CIN. L. REV. 95, 97 (2003) (“[C]ourts should allow judgment creditors to seize and sell domain names.”).

¹⁴⁵ Peter K. Yu, *The Origins of ccTLD Policymaking*, 12 CARDOZO J. INT’L & COMP. L. 387, 390-92 (2004) (describing the early history of ccTLD’s).

very much like a law of first possession.¹⁴⁶ In 1994, individuals could register whatever domain names they wanted on practically a first-come, first-serve basis.¹⁴⁷

As Judge Easterbrook noted, “That led to people storing up domain names”¹⁴⁸ But this explosion in registrations didn’t occur until fairly late in the 1990’s. Even in 1994, the company tasked with registrations reported that only two or three people were in charge of approving domain name requests and that in 1993 they had processed about 300 registrations a month.¹⁴⁹ In 1994, a *Wired* journalist, Joshua Quittner, published an article in *Wired* with a subtitle stating: “Right Now There Are No Rules to Keep You from Owning a Bitchin’ Corporate Name as Your Own Internet Address.” To prove his point, he registered the domain name *www.mcdonalds.com* and then sold it back to McDonalds Corporation, after informing them that the World Wide Web might be worth their attention.¹⁵⁰

This all changed in short order when what amounted to a virtual land grab gave way to more formal and predictable distributional rules that were rooted in the logic of trademark law. This happened at roughly the same time that Judge Easterbrook delivered his address. Judge Easterbrook opined that “[a]ppropriation of names and trademarks would not be tolerated in the rest of the commercial or political world; why so for Internet addresses?”¹⁵¹ Trademark holders agreed and began bringing suits against people like Quittner for registering what they asserted were *their* domains. The practice of registering a domain that corresponded with the trademark of a third party was branded as “cybersquatting,” a term obviously built upon an analogy to real property.¹⁵²

¹⁴⁶ Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 212. See also Joseph William Singer, *Approaches to Teaching Property: Starting Property*, 46 ST. LOUIS L.J. 565 (2002) (explaining first possession and first capture theories of property rights); Anupam Chander, *The New, New Property*, 81 TEX. L. REV. 715, 723-34 (2003) (describing the first-come, first-serve policy).

¹⁴⁷ See Margaret Jane Radin & R. Polk Wagner, *The Myth of Private Ordering: Rediscovering Legal Realism In Cyberspace*, 73 Chi.-Kent. L. Rev. 1295, 1298-1306 (1998) (describing the historic evolution of the domain name system). In fact, there were apparently *some* refusals to register domain names in some cases, but it is unclear on what basis refusals to register were made. See Joshua Quittner, *Billions Registered: Right Now There Are No Rules to Keep You from Owning a Bitchin’ Corporate Name as Your Own Internet Address*, WIRED, Oct. 1994, at 50-51.

¹⁴⁸ 1996 U. CHI. LEGAL F. at 212.

¹⁴⁹ *Id.*

¹⁵⁰ Joshua Quittner, *Billions Registered: Right Now There Are No Rules to Keep You from Owning a Bitchin’ Corporate Name as Your Own Internet Address*, WIRED, Oct. 1994, at 50-51.

¹⁵¹ 1996 U. CHI. LEGAL F. at 212.

¹⁵² See Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73, 83 (2003) (noting the connotations of “cybersquatting”); Anupam Chander, *The New, New Property*, 81 TEX. L. REV. 715, 726-27 (2003)

Two 1996 opinions condemned the practice of cybersquatting as a violation of trademark law.¹⁵³ Three years later, Congress created a regulatory solution, the Anti-Cybersquatting Consumer Protection Act (“ACPA”), statutorily forbidding cybersquatting within the framework of trademark law.¹⁵⁴ The ACPA allowed for plaintiffs to proceed “in rem” to recover domain names, legislatively reifying the notion that domain names were a form of virtual property.¹⁵⁵

Other members of the judiciary have shared Easterbrook’s sentiments about “proptertizing” the mixture of computer code and contract law that creates a domain name.¹⁵⁶ For instance, in the Ninth Circuit case of *Kremen v. Cohen*,¹⁵⁷ the plaintiff alleged that the defendant had stolen the domain name “sex.com” by filing a fraudulent transfer document with the domain name registrar. Rather than approach the claim as a matter of contract law, Judge Kozinski wrote for the Ninth Circuit in a decision that equated a plaintiff’s original ownership of a domain name with a personal property interest.¹⁵⁸ Hence the problem of intangibility in the tort of conversion (which led to the *Thrifty-Tel* decision) was waved away without a backward

(same).

¹⁵³ See *Panavision Int’l. L.P. v. Toepfen*, 938 F. Supp. 616 (C.D. Cal. 1996); *Intermatic Inc. v. Toepfen*, 947 F. Supp. 1227 (N.D. Ill. 1996).

¹⁵⁴ See Pub. L. No. 106-113 (1999), which effectively provided a new cause of action (generally sounding in trademark and placed within the trademark statutes) under which the cybersquatting claims could be brought. See 15 U.S.C. § 1125(d). Cybersquatting is generally doing exactly what Quittner did in 1994—buying a domain name that rightfully belongs to someone else with the intent to sell it for a profit. The difficult question is in trying to decide who is entitled to “own” a particular name where there are multiple legitimate candidates. See, e.g., *Virtual Works v. Volkswagen*, 238 F.3d 264 (4th Cir. 2001) (holding that the registration of the domain name “vw.net” was in “bad faith” in large part because the registrants, Virtual Works, were aware of the existence of that “VW” was a Volkswagen trademark); *Nissan Motor Co. v. Nissan Computer Corp.*, 378 F.3d 1002 (9th Cir. 2004) (pitting earlier registrant Uzi Nissan against the better-known car company).

¹⁵⁵ See 15 U.S.C. § 1125(c)(1)-(3) (2004); but cf. Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047, 1055 n.30 (2005) (suggesting that the ACPA’s statutory placement in trademark law undermines the property analogy).

¹⁵⁶ See Dan Hunter, *Culture War*, 83 TEX. L. REV. 1106, 1107-1110 (2005) (explaining the ascendancy, in the late twentieth century, of economies based on intangible interests); Carol M. Rose, *Romans, Roads, and Romantic Creators: Traditions of Public Property in the Information Age*, 66 LAW & CONTEMP. PROB. 89, 95 (2003) (noting how intellectual property law subverts the expectations that some classes of things are inherently incapable of private ownership).

¹⁵⁷ 337 F.3d 1024 (9th Cir. 2003).

¹⁵⁸ *Id.* at 1030. Judge Kozinski stated: “Like a share of corporate stock or a plot of land, a domain name is a well-defined interest... [L]ike other forms of property, domain names are valued, bought and sold, often for millions of dollars, and they are now subject to in rem jurisdiction.” *Id.*

glance.¹⁵⁹ The *Kremen* decision, as Judge Kozinski noted, was consistent with the “in rem” provisions of the ACPA.¹⁶⁰

Legal scholars like Anupam Chander have since defended the equation of domain names with property interests, rather than with contracts or technologies.¹⁶¹ Says Chander: “What are domain names anyway?... [E]ven though domain names involve both technology and contract, domain names are better understood as a new form of property arising in the Information Age.”¹⁶²

How does the story of domain names relate to the broader notion of cyberproperty rights? In this regard, it is worth considering the recent work of Professor Joshua Fairfield, one proponent of cyberproperty. Fairfield is an advocate of Demsetzian theory and a critic of the *Hamidi* decision.¹⁶³ Fairfield argues that when computer code functions in ways that create rivalrous and persistent property-like interests, property concepts might well be employed to step in and resolve disputes where intellectual property concepts currently fail to reach.¹⁶⁴

Fairfield adds an interesting twist to his argument, however. In his view, virtual property rights should be theoretically *disconnected* from private rights in computer chattels.¹⁶⁵ The domain name story recounted above actually is much more consistent with Fairfield’s vision than it is with the more standard cyberproperty vision that connects the right with a more expansive property interest in chattel ownership. The legal modifications made to the domain name system have so far intruded upon the default rights that certain private actors have with regard to the way certain bits and bytes are arranged on their computers.

Fairfield argues that the owner of a virtual property may or may not be the proper owner of either the computer on which that code resides or the owner of the

¹⁵⁹ *Id.* at 1030. Most commentators to address the issue so far have seemed bullish about scrapping the tangibility requirement in conversion law. *See, e.g.*, Richard A. Epstein, *The Roman Law Of Cyberconversion*, 2005 MICH. ST. L. REV. 103 (2005) (noting that the case raises “the question of whether domain names lose their status as a protectable form of property given their irreducibly intangible nature” but quickly concluding “I shall not dwell on this issue at any length because Kozinski's point seems largely irrefutable.”).

¹⁶⁰ 337 F.3d 1024, 1030 (9th Cir. 2003).

¹⁶¹ *See, e.g.*, Anupam Chander, *The New, New Property*, 81 TEX. L. REV. 715 (2003).

¹⁶² *Id.* at 771; *accord* Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047, 1052 (arguing that online property rights are needed to balance regimes based on pure contract).

¹⁶³ Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047 (2005).

¹⁶⁴ *Id.*

¹⁶⁵ Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047, 1075, 1078 (2005).

intellectual property rights to the software that gives rise to the virtual property. His arguments map well to the legal result in *Kremen*—where the domain name “owner” had neither IP rights to the code in question, nor owned the relevant chattels on which the code resided.

Again, note the important difference here between Fairfield’s view and the view of other cyberproperty proponents. Even standing firmly within a traditional Chicago school economic framework, as Fairfield does, one can find reasons to agree with the *Hamidi* majority, at least insofar as it refused to extend the doctrine of cyberproperty to protect the owners of *chattels*. In other words, Easterbrook may have been right that there is a place for new property-like rights “in cyberspace” generally. According to Fairfield, however, locating those property rights exclusively in the hands of chattel owners is not efficient.

Fairfield also carefully limits his claim to online resources that are coded as “rivalrous,” meaning that they will not have value when possessed by multiple parties.¹⁶⁶ While this is true of domain names (an address is not an address if it is shared), the information on a typical website does not satisfy Fairfield’s requirement. With regard to typical information resources, a broader critique to be made of the dubious benefits of privatization.

One can find the critique of privatizing digital information, oddly enough, coming from within the Chicago school. Saul Levmore, the current dean of the University of Chicago Law School, recently noted that the entire Demsetzian story of privatization might be viewed with justifiable skepticism, telling a story of capture by private interests rather than a story about the natural evolution toward efficiency.¹⁶⁷ Even if the claims of Demsetz were descriptively valid with regard to the historic evolution of private property rights in land, information resources are likely to work in different way than land resources.¹⁶⁸ Just as, according to Blackstone, land and

¹⁶⁶ Joshua A.T. Fairfield, *Virtual Property*, 85 B.U.L. REV. 1047, 1052-53 (2005).

¹⁶⁷ Saul Levmore, *Property’s Uneasy Path and Expanding Future*, 70 U. CHI. L. REV. 181, 188-89 (2003) (“[T]he picture is much less sanguine than the one usually painted with the commons receding in the background and hard-working tillers of land dominating the foreground.”); see also Robert P. Merges, *Intellectual Property Rights and the New Institutional Economics*, 53 VAND. L. REV. 1857, 1868 (2000) (describing how interest group capture rivals Demsetzian spontaneous evolution as an explanatory theory illumination the creation of new property laws); Ellen P. Goodman, *Spectrum Rights in the Telecosm to Come*, 41 SAN DIEGO L. REV. 269, 278 (2004) (describing the difficult debates over whether property is a fit model for the use of electromagnetic spectrum).

¹⁶⁸ Arguably, one can also see this trend away from (blunt) property rights in intellectual property law. See Brett M. Frischmann, *Evaluating the Demsetzian Trend in Copyright Law* (November 6, 2005), available online at <http://ssrn.com/abstract=855244>; Joseph P. Liu, *Regulatory Copyright*, 83 N.C. L. REV. 87, 92 (2004) (describing how copyright has transitioned from a property rights regime toward

water should be treated by different legal regimes, the optimal structure of software and information regimes are likely to be somewhat different.¹⁶⁹

Many claims of cyberproperty would seem to assume that the information and computer code present on networked systems can be made more socially beneficial through the creation of legal regimes of exclusion. Yet with regard to the best resource model for software development, Levmore calls “appealing” the claim that non-proprietary models enable more efficient production and have been responsible for “sustained and impressive innovation.”¹⁷⁰ If one couples these impressions with Fairfield’s arguments, it would seem hardly a radical notion that we might do well to be skeptical of any blind faith in the efficiency of new cyberproperty rights placed in the hands of chattel owners.¹⁷¹ One might find an “anti-commons” property regime emerging in cyberspace, but one need not do so in order to reject calls for the expansion of trespass to chattels doctrine.¹⁷² One simply need question the original conviction that privatizing resources is always the best way forward.

As has long been noted, all privately created value does not merit the label of property.¹⁷³ When Easterbrook spoke, there seemed to be a conventional wisdom

a regulatory regime); Robert P. Merges, *Intellectual Property Rights and the New Institutional Economics*, 53 VAND. L. REV. 1857, 1875 (2000) (explaining contemporary reactions against the ‘statutorification’ of intellectual property law).

¹⁶⁹ The obvious economic issue with the generation of cyberproperty rights is the increased transaction costs created by legal entitlements and the resultant decrease in greater network benefits that stem from free information flow—this issue was noted by the court in *Hamidi. Intel v. Hamidi*, 30 Cal. 4th at 1363. But there are many other significant economic angles one might use to critique cyberproperty enthusiasm. I have found the works of Henry Smith and Brett Frischmann particularly enlightening in trying to think through cyberproperty economics. Smith’s work reveals the complexity of the issue and some of the shortcomings of common economic assumptions. See Henry Smith, *Self-Help and the Nature of Property*, 1 J.L. Econ. & Pol’y 69, 71, 97-101. Frischmann’s work is more directly relevant to the economic debates. Explaining the economic dimensions of infrastructures and commons, Frischmann challenges common assumptions associated with faith in privatization as a remedy. See, e.g., Brett M. Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 MINN. L. REV. 917, 919, 926-27 (2005) (explaining the benefits of open access to certain resources); *id.* at 928 (stating that information and Internet resources are examples of nontraditional infrastructure resources).

¹⁷⁰ Saul Levmore, *Property’s Uneasy Path and Expanding Future*, 70 U. CHI. L. REV. 181, 185 (2003).

¹⁷¹ Brett M. Frischmann, *An Economic Theory of Infrastructure and Commons Management*, 89 MINN. L. REV. 919, 928, 936 (2005) (advocating, from an economic efficiency perspective, for open access regimes with regard to Internet infrastructure resources).

¹⁷² Dan Hunter has argued that expansive cyberproperty rights will create an anti-commons arrangement. See Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439 (2003). On the concept of the anti-commons generally, see Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621, 675 (1998).

¹⁷³ See *INS v. AP*, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting):

among those who set Internet policy that the law was far too lax in creating and protecting property rights on the Internet. It was believed that if new and strong online property rights were not created, the Internet would prove to be a barren wasteland.¹⁷⁴ Yet the resulting years have shown that in the absence of strong property protections, the Internet has become socially productive in ways that have transformed society and defied any conventional economic wisdom.

As David Post said (five years ago) “Cyberspace keeps growing and growing; more and more stuff keeps appearing in new guises and new shapes; there are more and more people trying to give me information to place in my computer than I have room for.”¹⁷⁵ This description seems equally apt today. In the absence of cyberproperty rights, the feared tragedy of the commons in cyberspace has turned out to be largely a comedy, disproving the conventional Demsetzian wisdom of the need for privatization.¹⁷⁶ As David Post once summarized the problem, perhaps we need to restrain the urge of law-makers and legal scholars to “fix” things that are not broken. And perhaps we should be doubly hesitant when those people who seem most eager to do the fixing are those who are most committed to theories that the unbroken things are disproving.¹⁷⁷

B. Decoding “Code is Law”

In the past section, I proposed that computer resources may constitute an exceptional type of legal object, making the extension of the laws of real and chattel property to their protection ill-advised. In this section, I want to argue against a second type of exceptionalism. My concern is that, to some extent, the well-known argument (well-known in cyberlaw circles, at least) that “code *is* law.” My sense is that this belief has also played some part in animating calls for cyberproperty.

“Code is law” is popularly associated with law professor Larry Lessig, and particularly with his 1999 book *Code and Other Laws of Cyberspace*.¹⁷⁸ As Lessig

[T]he fact that a product of the mind has cost its producer money and labor, and has a value for which others are willing to pay, is not sufficient to ensure to it this legal attribute of property.

Of course, further complicating this is the fact that the law inevitably creates value when it recognizes a thing as property—leading to the traps of tautological reasoning. See Felix Cohen, *Transcendental Nonsense and the Functional Approach*, 35 Colum. L. Rev. 809, 815 (1935).

¹⁷⁴ David G. Post, *His Napster's Voice*, 20 TEMP. ENVTL. L. & TECH. J. 35 (2001).

¹⁷⁵ David G. Post, *His Napster's Voice*, 20 TEMP. ENVTL. L. & TECH. J. 35, 43 (2001).

¹⁷⁶ See generally Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 717-20 (1986)

¹⁷⁷ See David G. Post, *His Napster's Voice*, 20 TEMP. ENVTL. L. & TECH. J. 35, 43 (2001).

¹⁷⁸ LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 6 (Basic 1999) (“*Code is law.*”)

acknowledges, however, the idea was initially sketch in another book, *City of Bits*. *City of Bits* was written in 1995 by William Mitchell, Dean of the Architecture and Planning School at the Massachusetts Institute of Technology.¹⁷⁹ In his book, Mitchell attempted to generally describe the digital “architectures” created in cyberspace.¹⁸⁰ Mitchell suggested that “on the electronic frontier, code is the law.”¹⁸¹

City of Bits was an influential text in the cyberlaw community—within a few years of its publication, legal scholars including Lessig, Ethan Katsch, Joel Reidenberg, and James Boyle were busy grappling with the implications of code replacing law.¹⁸² However, it was Lessig’s book that provided the most thorough investigation of the concept and brought the notion that “code is law” to prominence among legal scholars. The impact of “code is law” among some legal scholars has been substantial. Professor Polk Wagner, for instance, has stated that “code is law” is the “most significant principle to emerge from the academic study of law on the Internet.”¹⁸³

Yet despite the importance of the concept, many commentators seem less than sure what “code is law” means.¹⁸⁴ Those who endeavor to explain the slogan, in fact, generally describe the claim as its opposite—that code is *not* law, but something as powerful and significant as law.¹⁸⁵ A quote from Anapum Chander exemplifies how “code is law” is most commonly framed by those familiar with Lessig’s writing: “As Lawrence Lessig informs us, markets, architecture, and social norms can regulate

(emphasis in original)).

¹⁷⁹ WILLIAM MITCHELL, *CITY OF BITS* (1994); LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 6 & n.7 (“In much of this book, I work out Mitchell’s idea...”).

¹⁸⁰ Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439, 442, 455, 500 (2003) (using Mitchell’s work to inform arguments about the spatial claims made of cyberspace).

¹⁸¹ WILLIAM MITCHELL, *CITY OF BITS* 111 (1994).

¹⁸² See, e.g., Joel R. Reidenberg, *Governing Networks and Rule-Making in Cyberspace*, 45 EMORY L.J. 911 (1996); Lawrence Lessig, *Reading the Constitution in Cyberspace*, 45 EMORY L.J. 869 (1996); M. Ethan Katsch, *Software Worlds and the First Amendment: Virtual Doorkeepers in Cyberspace*, 1996 U. CHI. LEGAL F. 335; James Boyle, *Foucault in Cyberspace: Surveillance, Sovereignty, and Hardwired Censors*, 66 U. CIN. L. REV. 177 (1997); Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553 (1998).

¹⁸³ R. Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457, 459 (2005).

¹⁸⁴ See e.g., Orin S. Kerr, *The Problem of Perspective in Internet Law*, 91 GEO. L.J. 357, 369-71 (2003) (questioning the meaning of the phrase); Tim Wu, *When Code Isn’t Law*, 89 VA. L. REV. 679, 681 (2003) (“what it really means remains extremely vague”); Joseph H. Sommer, *Against Cyberlaw*, 15 BERKELEY TECH. L.J. 1145, 1195-96 (2000) (arguing that if code is law, so are airports).

¹⁸⁵ For instance, Polk Wagner generally stresses the operative *differences* between law and software as modalities of regulation, noting how law and software are *not* equivalents. *Id.* at 459, 461, 474.

behavior, sometimes as well as or better than law.”¹⁸⁶ So, in other words, code (the word “architecture” stands in for “code” in the previous sentence) is like law, but opposed to law. In a later summary of his intent, Lessig explains that he meant the equation of code and law as a poetic provocation.¹⁸⁷ He states:

[C]ode controls behavior as law might control behavior: You can't easily rip the contents of my DVD because the code locks it tight. The code functions as a law might function: Telling the user what she can and cannot do.¹⁸⁸

Yet while locks and laws control behavior, locks are, of course, not laws. As James Grimmelmann explains, “code is law” is therefore a somewhat misleading slogan.¹⁸⁹ For Lessig, code is digital “architecture” that does the work of law, but is not law *qua* law.¹⁹⁰ Most scholars working out “code is law” concepts today, like James Gibson,¹⁹¹ James Grimmelmann,¹⁹² Polk Wagner,¹⁹³ and Tim Wu,¹⁹⁴ agree with Lessig that code is challenging legal ordering. Yet they mostly distance themselves from the phrase “code is law” by stating that code is actually *not* law—which, it turns out, is what Lessig was saying.

It might be asked, then, given the sophistication of his discussions of the interplay of code and law, why Lessig decided to emphasize the misleading slogan “code *is* law” when he actually saw code as something that threatened to undermine the rule of law.¹⁹⁵ There are several good reasons why Lessig pushed “code *is* law,” but the most obvious answer is the political context in which *Code* was written.

¹⁸⁶ Anupam Chander, *The New, New Property*, 81 TEX. L. REV. 715 (2003) (citing *Code* at 87).

¹⁸⁷ *Id.* at 990 (2000) (“I meant [“code is law”] originally in a metaphorical sense...”).

¹⁸⁸ See Lawrence Lessig, *Symposium: Cyberspace and Privacy: A New Legal Paradigm? Foreword*, 52 STAN. L. REV. 987, 990 (2000).

¹⁸⁹ James Grimmelmann, *Regulation by Software*, 114 YALE L.J. 1719, 1727 (2005). Grimmelmann notes that the phrase, while pithy, has forced many who have benefited from Lessig’s insights to rhetorically reject his equation. *Id.*

¹⁹⁰ James Grimmelmann, *Regulation by Software*, 114 YALE L.J. 1719, 1721, 1726 (2005).

¹⁹¹ See, e.g., James Gibson, *Re-Reifying Data*, 80 NOTRE DAME L. REV. 163 (2004).

¹⁹² See, e.g., James Grimmelmann, *Regulation by Software*, 114 YALE L.J. 1719 (2005).

¹⁹³ See, e.g., Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457 (2005).

¹⁹⁴ See, e.g., Tim Wu, *When Code Isn’t Law*, 89 VA. L. REV. 679 (2003).

¹⁹⁵ See Lawrence Lessig, *The Law Of The Horse: What Cyberlaw Might Teach*, 113 HARV. L. REV. 501, 543 (1999) (“Law, I have argued, is vulnerable to the competing sovereignty of code. Code writers can write code that displaces the values that law has embraced. And if the values of law are to survive, law might well have to respond.”); Lawrence Lessig, *Law Regulating Code Regulating Law*, 35 LOY. U. CHI. L.J. 1, 1 (2003) (looking at how “law and technology interact”).

Lessig wanted his readers to take his claims about the threats posed by the unconstrained social regulatory powers of software more seriously. His “code is law” rhetoric was a rhetoric designed with a particular political agenda in mind and a particular audience. Conflating code and law created a challenge to certain important political stakeholders.

If code became law, the legislature and judiciary would perceive that their social power—the power of law to control society—was slipping in favor of the “coded” regulatory powers of companies like Microsoft and America Online. Another audience would also be disturbed by the equation: so called “cyber-libertarians” who seemed to believe that the best course of future action would be to keep the state away from cyberspace and to promote the freedom of technological power. Lessig thought this faith in the liberatory power of the “invisible hand” of markets and technology was, at base, naïve. He feared that a society governed largely by computer code and markets would ultimately fail to reflect the constitutional commitments found in our democratic system of government.¹⁹⁶

Lessig hoped that, by challenging both the government and the entrenched cyber-libertarians with “code is law,” he might convince them to be more proactive with lawmaking in response to the social transformations brought about by the Internet.¹⁹⁷ The power of law, he hoped, might counteract the perceived anti-democratic and unconstrained effects of software regulation, reading the constitution onto cyberspace, so to speak.¹⁹⁸

So “code *is* law” rather than “code is *not* law” was part of a calculated rhetorical move to throw to parties into each other’s conceptual orbit. And for many, this actually worked: an impressive feat in a book that was both informative and entertaining as well. The general reader of *Code* was led to realize that the choice confronted was not between sovereign or no sovereign, but between the sovereignty of government or the sovereignty of technological power. *Code*, unlike the majority of books published by legal scholars, was enthusiastically received, reviewed, and praised far outside the traditional confines of the legal academy. It certainly shaped

¹⁹⁶ Lessig’s views on this were put most succinctly in his concluding chapter, “What Declan Doesn’t Get,” where he criticized journalist Declan McCullough for failing to see the danger of removing the government completely from technological regulation. LAWRENCE LESSIG, *CODE* 231-34 (1999).

¹⁹⁷ *Id.*; James Gibson, *Re-Reifying Data*, 80 NOTRE DAME L. REV. 163, 196-97 (2004).

¹⁹⁸ Lawrence Lessig, *Reading the Constitution in Cyberspace*, 45 EMORY L.J. 869 (1996).

the way that many people think about the Internet and law today, and it captured and articulated some of the central features that make cyberlaw and cyberspace unique.¹⁹⁹

Yet, while I am comfortable praising *Code*, there are a few things about it that actually explain, I think, the expansion of cyberproperty. *Code* can be read as a fairly exceptionalist account of the social impact of particular technologies, and, in particular, an exceptionalist account that seems very comfortable with language that describes cyberspace as a “place” or “space.” There are really two issues here: the first is that the insistence in *Code* that cyberspace is a “space” rather than an automated process of information exchange. The “spatial” metaphors in *Code* are, as Dan Hunter notes,²⁰⁰ entirely consistent with the zeitgeist of the time it was written, but they tend to lead to a conflation of cyberspace with spatial property. This, I turn, is used as support for claims of cyberproperty.

The second issue is the trope found in *Code* of equating the power of code with the power of law. Lessig’s stated goal of replacing the “architectural” rules that flow from markets and technology with more democratically-oriented legal rules combines synergistically with the first issue to make cyberproperty doctrines seem like an appealing innovation. Rather than having non-democratic technology and the unconstrained power of markets regulating new spaces, *Code* can be read to suggest that we should look to new legal property rights to promote efficiency and justice.

To make my concern more clear, one should consider the brief treatment in *Code* of “trespass law in cyberspace.”²⁰¹ Lessig states that Harold Reeves, his former research assistant, proposed to him that “owners’ of space in cyberspace” should have “no legal protection against invasion.”²⁰² Reeves argued that instead, those wishing to protect “cyberspace” holdings should be required to rely on technologies of exclusion. Lessig’s reaction to this was that the idea was “a bit nutty” and “in the end, I think, wrong.”²⁰³

Consistent with his thesis in *Code*, Lessig advocated for the deployment of law as an ordering mechanism in this instance. He analogized the issue to the problem of a farmer wishing to protect land. The choices, he said, were between private fences

¹⁹⁹ See, e.g., LAWRENCE LESSIG, *CODE* 11-13 (1999) (discussing virtual worlds).

²⁰⁰ Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439 (2003).

²⁰¹ See LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 122-24 (1999).

²⁰² *Id.*

²⁰³ See LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 122 (1999). See also Harold Smith Reeves, *Comment, Property in Cyberspace*, 63 U. CHI. L. REV. 761 (1996).

and laws.²⁰⁴ According to Lessig, the correct solution would not depend wholly upon technology, but would mix some degree of private fencing and some degree of trespass law. “From a social perspective,” said Lessig, “we would want the mix that provides the optimal protection at the lowest cost.”²⁰⁵ This sounds rather close to the recent arguments of Polk Bellia and Patricia Wagner for the merits of cyberproperty regimes.²⁰⁶

Though Lessig’s more recent statements indicate that he opposes the expansion of cyberproperty,²⁰⁷ the above passage from *Code* seems to animate some contemporary arguments for cyberproperty. If technological blocking is tantamount, via “code is law,” to a legal right to exclude, then perhaps it would be wise to consider a legal regime of property-based exclusions as an alternative to technological power.²⁰⁸ Perhaps, as Lessig said earlier, some mix of legal and technological exclusion rules might be the optimal way to approach trespass law in cyberspace.²⁰⁹

We should, of course, consider whether the law should respond to new technologies. The law can provide a multitude of different responses to the technological blocking measures used by the owners of computer servers: it might offer legal alternative to the powers of exclusion, it might legally prohibit technological exclusion, and it might ignore the new technological power altogether. We cannot simply presume that one of these options is the correct course of action from the standpoint of optimal policy. Law and technology dance together in complicated ways, and they have been doing this dance for a long time.

Cars, for instance, are not laws. The ownership of a car gives the owner the technological ability to drive quickly and endanger the lives of others, but the law intrudes, to curbs the right to exercise technological power (via speed limits), to regulate who can exercise that power (by licensing), and to provide special civil

²⁰⁴ LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 122 (1999).

²⁰⁵ *Id.*

²⁰⁶ Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2194 (2004); R. Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457 (2005).

²⁰⁷ LAWRENCE LESSIG, THE FUTURE OF IDEAS 170 (2001) (“[W]hile my bias is with Burk, I don’t mean to deny the plausibility of a different regime.”); Mark A. Lemley, *Brief Amicus Curiae of Law Professors in Support of Appellant in eBay Inc. v. Bidder’s Edge, Inc.*, June 22, 2000, available at <http://www.law.berkeley.edu/institutes/bclt/pubs/lemley/bedgeami.pdf>.

²⁰⁸ Bellia and Wagner both acknowledge that law might be used to disable some blocking efforts, but both concentrate primarily on correlating law with technologies of exclusion, not intrusion.

²⁰⁹ This argument has been recently echoed by Polk Wagner. See *On Software Regulation*, 78 S. CAL. L. REV. 457, 498 (arguing for “more law and less software”).

penalties for failing to follow social directives regarding the use of the power (e.g. driving while intoxicated).

The battles between legal power and technological power began long before the creation of the Internet or the automobile.²¹⁰ Inventions are often sources of new laws, both common and statutory.²¹¹ New technologies confront society with questions of whether the shifts in power they create should be left unchecked or should be “remedied” by the state as a regulator. Indeed, we might go as far back as Hobbes, Bentham, or Locke (or beyond) to investigate the interplay of law and technology. The state itself is, arguably, is merely a response to what would be default or “natural” technological orderings.²¹² Justice Cardozo remarked, in an earlier day, about how the steamship, the telegraph, and the telephone had all changed both society and the law.²¹³

²¹⁰ Richard A. Epstein, *Before Cyberspace, Legal Transitions in Property Rights Regimes*, 73 CHI-KENT. L. REV. 1137, 1153-54 (1998) (“The question of whether new technology requires alternation of old rules is itself an old question that is insufficiently studied. It is not a new question that requires us to start from scratch.”) I should emphasize that Lessig’s own work is consistent with this. In his articles and books, Lessig often offers anecdotes about the history of technological transformations as entry points in order to view current cyberlaw problems—he clearly appreciates the similarity of computer code and other technologies.

²¹¹ *Id.*; see also Michael L. Rustad & Thomas H. Koenig, *Cybertorts And Legal Lag: An Empirical Analysis*, 13 S. CAL. INTERDIS. L.J. 77, 78 (2003) (noting a 1936 article in the *Duke Law Journal* describing how the common law of torts was adapting to the invention of the automobile); Keith Aoki, *(Intellectual) Property and Sovereignty: Notes Toward a Cultural Geography of Authorship*, 48 STAN. L. REV. 1293, 1333 (1996) (“Unquestionably, new technologies challenge legal paradigms.”); Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73, 75 (2003) (noting how new technology changes law).

²¹² In his argument for legal recognition of online property, I. Trotter Hardy characterizes Bentham as claiming that law operates in this way. See I. Trotter Hardy, *The Ancient Doctrine of Trespass to Web Sites*, 1996 J. ONLINE L. art. 7 at ¶31.

[B]entham was concerned that absent a law of property, individuals would try to use technological means (locks, guns, fences, etc.) to protect what they had amassed. It would be this sense of technological ownership that would be subject to a sense of insecurity because superior technological force could always overcome it. Legal protection would provide the security and sense of ownership that these technological means could not provide.

Of course, it isn’t clear how the technology of the gun differs from the “technology” of the stick and stone—hence we could draw these thoughts about law and technology all the way back to questions about law and the state of nature. Regarding the theories of Hobbes and Locke, see Richard A. Epstein, *The Theory and Practice of Self-Help*, 1 J.L. ECON. & POL’Y 1 (2005) (discussing how theories of law make presumptions about potentials for human behavior in the state of nature.)

²¹³ BENJAMIN CARDOZO, *THE NATURE OF THE JUDICIAL PROCESS* 61 (Yale University Press 1921).

However, in *Code*, Lessig seemed intent, for reasons described above, on setting code apart and resisting the conflation of code with other more “primitive” technologies. Lessig suggested that the architecture of code was somehow qualitatively new. At one point, he suggested that his argument was at risk if the reader thought the technology of code was similar to the technology of airplanes.²¹⁴

The early history of the airplane, however, is a wonderful story about the interplay of technology and law. Much like the early Internet, aviation saw substantial government involvement—and military involvement especially. The first extended manned flight of an airplane took place on December 17, 1903.²¹⁵ Less than five years after Kitty Hawk, the first United States military aviation casualty occurred when Orville Wright crashed his plane in a demonstration at Fort Myers, injuring himself and killing Lieutenant Thomas E. Selfridge of the U.S. Signal Corps.²¹⁶ The next year, the Wright brothers were awarded a military production contract.

In 1915, the United States National Advisory Committee for Aeronautics (the ancestor of NASA) was established in order to federally promote the progress of aviation science. By this time, small scale commercial air service had begun in the United States. Military warplanes were also in combat use across the European theatre.²¹⁷ Lawyers tagged right along with these developments. State legislatures quickly began to regulate the technology and practice of air travel. In 1921, less than two decades after Kitty Hawk, the legal regulation of the air had progressed far enough that Justice Cardozo, in *The Nature of the Judicial Process*, remarked upon “a body of legal literature that deals with the legal problems of the air.”²¹⁸

Five years later, and just a little more than two decades after Kitty Hawk, the Air Commerce Act of 1926 established comprehensive federal regulation for the new technology, which evolved, over time, into the regulatory apparatus we know as the

²¹⁴ LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 221 (1999) (stating that he expects lawyers to object that “Code is not law any more than the design of an airplane is law.”)

²¹⁵ T.A. HEPPENHEIMER, A BRIEF HISTORY OF FLIGHT 51-53 (2001). As Heppenheimer explains, the work of the Wrights really deserves to be placed in a much longer history of aeronautic aspirations and attempts (including those of Cayley, Lilienthal, and Langley)—but since this is a brief digression, I’ll just mention Kitty Hawk.

²¹⁶ HERBERT ALAN JOHNSON, WINGLESS EAGLE: U.S. ARMY AVIATION THROUGH WORLD WAR I 29 (2001).

²¹⁷ See THE AEROSPACE ENCYCLOPEDIA OF AIR WARFARE: VOLUME ONE 7-10 1911-1945 (1997).

²¹⁸ BENJAMIN CARDOZO, THE NATURE OF THE JUDICIAL PROCESS 61 (Yale University Press 1921); cf. Orin S. Kerr, *The Problem of Perspective in Internet Law*, 91 GEO. L.J. 357, 387 (2003) (noting that the problem of analogical reasoning with regard to technology is not specific to the Internet and discussing Justice Cardozo’s opinion in *McPherson v. Buick*, 217 N.Y. 382 (N.Y. 1916)).

Federal Aviation Administration. Aviation regulations now proscribe the technology of mechanized flight in minute detail.²¹⁹ While notions of striated airspace, licensing, and mandatory technologies may seem like common sense arrangements today, the policy of airplanes evolved through a process that demanded considerable judicial creativity. As property scholar John Cribbet has noted, however, there was nothing simple about the interplay of law and aviation technology. The airplane required “a wholly new concept to respond to developing technology,” one that looked to “a broader social framework.”²²⁰

This is what we have seen so far in the path of cyberlaw. An ever-growing body of software-specific federal and state legislation is being created in response to the spread of computer networks and software technologies—state laws lead and federal laws attempt to harmonize state experiments. For instance, computer hacking legislation was enacted long before “cyberlaw” *per se* was recognized as a legal subject.²²¹ The Department of Justice added a division specifically tasked with addressing computer crimes at roughly the same time William Mitchell published *City of Bits*.²²² Today, cyberlaw casebooks cut across a wide variety of disciplines, *e.g.*: intellectual property, speech torts, computer viruses, computer hacking, personal jurisdiction, and electronic contracting. “Spam,” the bane that, in part, gave birth to cyberproperty, is the subject of targeted legislation.²²³ It is safe to assume that cyberlaw in the future will continue to grow in size and significance, responding to the escalating power and social distribution of digital technologies.

In his most recent book, *Free Culture*, Lessig leads with a story about how airplanes changed the common law—and the law of trespass in particular. In *United States v. Causby*,²²⁴ Lessig notes how the Supreme Court eviscerated an ancient maxim

²¹⁹ See generally 14 C.F.R. 1 et al.

²²⁰ John Edward Cribbet, *Concepts in Transition: The Search for a New Definition of Property*, 1986 U. ILL. L. REV. 1.

²²¹ See Orin S. Kerr, *Cybercrime's Scope: Interpreting "Access" and "Authorization" in Computer Misuse Statutes*, 78 N.Y.U. L. REV. 1596, 1602 (2003) (“Computer crime statutes were first enacted in the late 1970s in response to perceived failures of preexisting laws to respond to computer misuse.”); Susan W. Brenner, *State Cybercrime Legislation in the United States of America: A Survey*, 7 RICH. J.L. & TECH. 28, P15 n.37 (2001), available at www.richmond.edu/jolt/v7i3/article2.html (listing state computer trespass laws).

²²² Michael Coblenz, *Intellectual Property Crimes*, 9 ALB. L.J. SCI. & TECH. 235, 242 (1999). The division has a web page at <http://www.usdoj.gov/criminal/cybercrime/>.

²²³ See Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003 (popularly known as “CAN-SPAM”), Pub. L. No. 108-187, 117 Stat. 2699 (codified as amended in scattered sections of 15 U.S.C., 18 U.S.C., 28 U.S.C., and 47 U.S.C.); Mark A. Lemley, *Place and Cyberspace*, 91 CALIF. L. REV. 521, 541 (2003).

²²⁴ 328 U.S. 256, 261 (1946).

of real property trespass law—the ownership of land from the depths to the heavens—in light of the social benefits provided by airplanes.²²⁵

So in the *Causby* story, we have a new technology, the airplane, rewriting the law of trespass. What was formerly understood as trespassory was now, with the adoption of new technology, understood as non-trespassory.²²⁶ Though Lessig does not note it, this story is the inverse, in many ways, of the arguments that are made for the creation of cyberproperty rights.

The proposition that code is simply this generation’s socially disruptive technology *du jour* doesn’t seem like much of a concession to demand from cyberlaw scholars. Indeed, it lends some promise that the enterprise of cyberlaw has roots in something deeper than the heady turmoil of the past ten years (that included a certain Internet stock bubble). If we see cyberlaw as an attempt to build an academic discourse around the way law responds to technological pressures and is shaped by technological change, we obtain a wealth of *Causby*-like precedents to draw upon.

In the context of cyberproperty, there is a particular danger in not seeing the connection between the interplay of law and code and the interplay of law and prior technologies. The equation of code with something “natural” was something that Lessig seemed intent on resisting in *Code*, for legitimate reasons. His fear was that such an approach would lull the public into an unwise complacency about a *status quo*. But with regard to cyberproperty, “code is law” rhetoric, when combined with cyberspace rhetoric, may actually make us overzealous with attempts to “fix” what is perceived as technology run rampant over legal ordering.

David McGowan and Richard Epstein have both endorsed language by the intermediate appellate court in *Hamidi* that suggested the denial of an injunction to Intel simply perpetuated “a wasteful cat and mouse game.”²²⁷ But if the law takes any

²²⁵ LAWRENCE LESSIG, FREE CULTURE 1-3 (2004). In particular, Lessig states that *Causby* rewrote the maxim: *cujus est solum, ejus est usque ad coelum et ad inferos* (“Whosoever owns the land, owns to the sky and to the bottom of the earth”), thus divesting the land-owners of their property rights in favor of the public interest in air travel. *Id.* This point about airplanes has been a popular one. See Saul Levmore, *Property’s Uneasy Path and Expanding Future*, 70 U. CHI. L. REV. 181, 192 (2003) (explaining the economic sensibility of this divestiture); Richard A. Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73, 75 (2003) (same). I rely on Epstein’s translation of the maxim.

²²⁶ As Larry Solum has noted, Lessig’s description of what happened in *Causby* is actually a bit off in some ways, but is correct enough where it matters. Lawrence B. Solum, *The Future of Copyright*, 83 TEX. L. REV. 1137 (2005); see also Lessig Blog, “this is very funny” available at: <http://www.lessig.org/blog/archives/003202.shtml> (responding to claims that he misrepresented the import of the case in the book).

²²⁷ Richard A. Epstein, *Intel v. Hamidi: The Role of Self-Help in Cyberspace?*, 1 J.L. ECON. & POL’Y 147,

given cat and mouse game seriously enough to intervene, it must ultimately choose between cats and mice—and the law is not always able to do this confidently. In such cases, we often leave new technologies alone, and the cats and mice are left to the survival of the fittest.

In any given cat and mouse game, the mouse possesses a technology of escape and the cat possesses a technology of capture. By failing to intervene in the affairs of cats and mice, the law is refusing to take sides in the game. If something is “wasted” by the law’s lack of intrusion (and surely we start at a net *gain* by avoiding legal administrative costs), it isn’t clear who has the superior right to complain of this waste: the cat or the mouse? Should the law step in to “fix” here by de-clawing cats? Should it force mice to lie down on dinner plates? Ronald Coase once explained that property claims always involve two parties who can structure their entitlements in various ways.²²⁸ The problem for the law is not in seeing that there is a conflict, but in knowing where the optimal entitlement should lie—if it should lie at all.²²⁹ Just because we can identify, in technologies of website exclusion, two “powers” that are at odds, doesn’t mean that this is “problem” that the law is suited to fix.

To their credit, *Hamidi* critics and cyberproperty proponents Patricia Bellia and Polk Wagner don’t ultimately come down firmly on the side of either cats or mice—a.k.a. the property owners and the putative “trespassers.” They recognize that, in some instances, the law would be best to favor the trespassers and send the cats away.²³⁰ Bellia cautiously advocates for some “technology-displacing” laws.²³¹

151 (2005) (calling this “right on the money”); David McGowan, *The Trespass Trouble and the Metaphor Muddle*, 1 J.L. ECON. & POLY 109, 123 (2005); cf. Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457, 497 (2005) (favoring the creation of a new cyberproperty right because the current state of affairs is “complex, uncertain, and unstable.”).

²²⁸ Ronald Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1 (1960).

²²⁹ See, e.g., Mark Kelman, *Taking Takings Seriously: An Essay for Centrists*, 74 CALIF. L. REV. 1829, 1840-43 (1986) (discussing the problematic implications of Coasian reasoning for traditional liberal theorists).

²³⁰ For another argument along these lines see James Gibson, *Re-Reifying Data*, 80 NOTRE DAME L. REV. 163 (2004). Professor Gibson argues for “technological” responses to potential new laws protecting databases. Like Bellia and Wagner, Gibson is exploring the creation of technology-limiting rules as a means to address the usurpation of law by coded regulation. See *id.* at 171-72.

²³¹ Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2273 (2004). In fact, Bellia argues that the legal right to penetrate technological barriers is the “logical conclusion” of the “anti-enclosure” position regarding cyberproperty. Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2194 (2004).

To achieve an appropriate balance among the competing interests at stake in cyberproperty claims, we should look to a rule that demands adequate notice of the conditions of access and backs those conditions with property-rule protection, but is limited where necessary by technology-displacing rules.

Wagner puts this in a different way, calling for the consideration of “legal preemption,” which he explains is the “direct [legal] control of software-regulatory effects.”²³²

But from a doctrinal perspective, the arguments of Bellia and Wagner for *inversions* of the exclusionary rights associated with cyberproperty seem a bit strange. The very doctrinal premise of cyberproperty, as explained in Part I, resembles an argument for a private property right under the doctrine of trespass to chattels. To turn that doctrine on its head is an interesting aspiration, but how, at least under that cyberproperty doctrines, might a court deny a website or server “owner” the right to block incoming emails or to prevent visitors from getting access to files on a server? What is the criterion? The openness of Bellia and Wagner to notions of “technology-displacing law” and “legal preemption” goes a long way toward making their positions palatable to those who favor open access regimes, but it makes Bellia and Wagner, to some degree, not cyberproperty advocates, but simply advocates for some regulatory involvement in online access rights.

Their entertainment of legal trespassing rights also places Bellia and Wagner a considerable ideological distance away from the dissenting justices in the *Hamidi* case. Undoubtedly, a jurist agreeing with the dissenting opinion of Justice Brown would have a hard time justifying the prevention of cyberproperty “owners” from using exclusionary technologies to protect their putative cyberproperty assets. This would not be merely “licens[ing] a form of trespass,” but legally *mandating* it.²³³

Cyberproperty arguments are thus dependent upon two claims: the effectiveness of a freely exercised technological power *and* a faith in the normative correctness of the free exercise of that power. There is not just a sense of a wasteful cat and mouse game, in other words, but a conviction that the cats (the owners of digital computing equipment) should always win.

The analogy to a farmer’s fence, originally used by Lessig in passing, is worth returning to. We should see that what makes this argument seem cogent is that the (cyberspatial) fence is, in the reader’s mind, surrounding some (cyberspatial) farm. When we start with the notion that cyberspace is analogous to a land filled with private farms and farmers, a law granting the farmers an absolute right to exclude

²³² Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457, 463 (2005). James Gibson might label these anti-cyberproperty “technological” proposals. See James Gibson, *Re-Reifying Data*, 80 NOTRE DAME L. REV. 163, 167-170 (2004).

²³³ *Intel v. Hamidi*, 30 Cal. 4th at 1372 (citing *Roman v. U.S. Post Office Dept.*, 397 U.S. 728, 737 (1970)).

(either by fences or by law) does not seem very far beyond the pale. The notion of weighing legal and technological utility, appears, in that context, highly appropriate.

But stop a second and note: the appropriateness of cyberproperty in this analogy is not dependent upon our feelings about the fences (the code), but upon our intuition about the farm (the property). If a farmer's fence were placed somewhere else in the analogy—say, in the middle of a four-lane highway, or floating in the ocean or in the surf of a beach, or even on someone else's land—our confidence in the wisdom of providing legal alternative to the fence's exclusionary powers would disappear.

A farmer's fence is not a law, in other words, it is merely a technology. The same is true of code.

C. Cyberproperty's Statutory Cousins

In the prior two parts, I questioned two of the assumptions that seem to drive arguments for cyberproperty: the belief that the code on networked computers is akin to other forms of property and the belief that code is exceptionally law-like. While these beliefs have animated the development of cyberproperty, they have had influence in other areas of cyberlaw as well. The dangers of “code is law” and “code is property” are not limited to the issue of common law trespass to chattels. The confusion they represent permeates into other areas of law as well.

If one wishes to find statutory analogies to cybertrespass claims, the best statutory foil for cyberproperty is the Computer Fraud and Abuse Act (“CFAA”).²³⁴ But comparing the CFAA to cyberproperty raises complex issues of statutory interpretation.²³⁵ The relationship between common law cyberproperty and statutory

²³⁴ See Computer Fraud and Abuse Act (“CFAA”), 18 U.S.C. § 1030; Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457, 498 (2005) (listing the CFAA and trespass to chattels as two doctrines supporting the cyberproperty right); Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439, 483 (2003) (stating that trespass to chattels and computer trespass statutes are treated “interchangeably.”).

The legislative history of the CFAA, beginning in the early 1980s, abounds with the same rhetoric of virtual spatial invasion that is found in cases defending cyberproperty rights. Michael J. Madison, *Rights of Access and the Shape of the Internet*, 44 B.C. L. REV. 433, 479 (2003) (explaining the history and purpose of the CFAA).

²³⁵ Helpful discussions of the CFAA that touch on its relation to cyberproperty rights can be found in Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164 (2004); Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439 (2003); Orin Kerr, *Cybercrime's Scope: Interpreting 'Access' and 'Authorization' in Computer Misuse Statutes*, 78 N.Y.U.L. REV. 1596 (2003); Michael J. Madison, *Rights of Access and the Shape of the Internet*, 44 B.C. L. REV. 433 (2003).

foils can perhaps be better illuminated by discussing a case related to another statutory cousin of cyberproperty: the “anti-circumvention” provisions of the Digital Millennium Copyright Act (“DMCA”).²³⁶

These provisions of the DMCA ban the distribution and use of digital tools in order to, among other things, “circumvent a technological measure that effectively controls access to a work.”²³⁷ Like the CFAA, the DMCA can be understood to legally reify a technology of exclusion, prohibiting the circumvention of measures that effectively control access. And (again like the CFAA) the history of the DMCA reflects the same belief (by legislators) found with regard to judges in cyberproperty cases that computer code can create a type of digital “space” that makes analogies to trespass to real property justified.²³⁸

This is illustrated in the well-known DMCA case of *Universal City Studios v. Corley*.²³⁹ The case was initiated when several movie studios challenged the distribution of a decryption program, DeCSS, by “hackers” (as in *Thrifty-Tel*) who were using the algorithm to decrypt DVDs. The studios sought an injunction against the distribution of the code, alleging that it violated the provisions of the DMCA described above. The defendants relied on prior decisions equating software with speech and argued that the First Amendment protected their distribution of the decryption code.

The Second Circuit agreed that computer code could be classified as speech.²⁴⁰ The panel still upheld the injunction, however, on the basis that First Amendment protections for speech in code would need to be less broad, because computer code “combin[es] nonspeech and speech elements, i.e., functional and expressive elements.”²⁴¹ In support of the variant First Amendment standard for code, the Second Circuit cited to a prior Supreme Court case about radio broadcasting for the proposition that differences inherent in “new media” justify divergent standards for

²³⁶ 17 U.S.C. 1201 (2004).

²³⁷ 17 U.S.C. 1201(a)(1)(A) (2004).

²³⁸ Michael J. Madison, *Rights of Access and the Shape of the Internet*, 44 B.C. L. REV. 433, 500 (2003)

²³⁹ 273 F.3d 429, 445 (2d Cir. 2001) (“Communication does not lose constitutional protection as ‘speech’ simply because it is expressed in the language of computer code.”).

²⁴⁰ *Id.* at 449 n.25 (explaining that code is unlike other forms of technology because “it uses a notational system comprehensible by humans” and therefore “qualifies as speech.”).

²⁴¹ *Id.* at 451. The Second Circuit was responding to the fact that First Amendment doctrine requires courts to separate what is legally expressive “speech” from that which must be defined as non-expressive “conduct.” As Polk Wagner has stated, “The crux of the speech-conduct distinction is that while ‘speech’ is highly protected, ‘conduct’ is not.” R. Polk Wagner, *The Medium is the Mistake: The Law of Software for the First Amendment*, 51 STAN. L. REV. 387, 393 (1999).

First Amendment analysis—again suggesting that computer code was properly understood as a form of expressive media.²⁴²

The Second Circuit’s decision to uphold the injunction, however, made clear that it conceived of the law in this case as protecting a kind of cyberproperty right of exclusion that the DMCA had brought into being. In explaining the need for a prohibition against the dissemination of the code, the Second Circuit stated:

[W]e must recognize that the essential purpose of encryption code is to prevent unauthorized access. *Owners of all property rights* are entitled to *prohibit access to their property* by unauthorized persons. Homeowners can install locks on the doors of their houses. Custodians of valuables can place them in safes. Stores can attach to products security devices that will activate alarms if the products are taken away without purchase. These and similar security devices can be circumvented. Burglars can use skeleton keys to open door locks. Thieves can obtain the combinations to safes...

CSS is like a lock on a homeowner's door, a combination of a safe, or a security device attached to a store's products. DeCSS is computer code that can decrypt CSS. In its basic function, it is like a skeleton key that can open a locked door, a combination that can open a safe, or a device that can neutralize the security device attached to a store's products.²⁴³

So, according to the Second Circuit in *Corely*, the DMCA could be analogized to a statute making a disc a “home” that a CSS-like “security device” protects, or a “box” which a CSS-like “lock” holds shut.²⁴⁴

The *Corely* court actually makes real Lessig’s “code is law” equation in a way Lessig has recognized and lamented. The equation is truer, post-*Corely*, than it was

²⁴² *Id.* (citing *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367, 386 (1969)). What is interesting here is that code is framed a new form of “media.” Media-specific First Amendment analysis, in the abstract, would appear to be in keeping with past doctrine. See R. Polk Wagner, *The Medium is the Mistake: The Law of Software for the First Amendment*, 51 STAN. L. REV. 387, 397 (1999).

²⁴³ *Id.* at 452-53 (emphasis added).

²⁴⁴ This conception, although perhaps a bit perplexing, was not by any means a creation of judicial fancy. This was exactly what Congress thought it was doing in enacting the Digital Millennium Copyright Act provisions at issue in *Corely*—giving content owners the power to digitally lock and seal their digitally encoded intellectual property. See Michael J. Madison, *Rights of Access and the Shape of the Internet*, 44 B.C. L. REV. 433, 473 (2003) (noting how the Senate Report accompanying the final bill analogized the prohibited conduct to breaking and entering homes).

when it was first postulated.²⁴⁵ As noted above, Lessig had stated (in reference to earlier proceedings in the case) that code is law because “You can't easily rip the contents of my DVD because the code locks it tight. The code functions as a law might function: Telling the user what she can and cannot do.”²⁴⁶

Lessig's analogy of the locked box, with the CSS as lock, is entirely consistent with the court's description. But in *Corely*, applying the DMCA, the Second Circuit stated that Congress had transformed this technological power of software into a form of legal power. The encryption of the DVD *was* merely a technological lock prohibiting certain actions on the part of the user. A legal right to exclude is fashioned from a mere technological power.

As explained above, it is hard to see clearly how this type of “code to law” transformation follows from any past understanding of the proper relation of law and technology. Locks, fences, and other digital barriers may be instrumental in creating legal consequences in some cases—but generally they are simply private technologies used for private purposes, not to create new forms of exclusive property. In *Corely*, the Second Circuit read the DMCA as a law prohibiting the interference with the intended results of private software structures, effectively transforming code into law.²⁴⁷

Further, it is clear from the opinion that the transformation of code to law was accompanied by a willingness to envision digital code as creating a protected form of virtual space. The court explains that the plaintiff's actions are fairly analogized to a home or store owner making technological attempts to keep burglars and intruders out of her private space. The court's analogies to doors, locks, and unlawful intruders have little legal relevance unless one accepts that the owner of code (seen as someone other than the owner of the DVD) has the same legal right to prohibit “access” as is enjoyed by an owner of real property.

The court's spatial rhetorics in *Corely* serve the same rhetorical purpose they serve in the context of cyberproperty doctrine—it is through an analogy to private

²⁴⁵ Lawrence Lessig, *Law Regulating Code Regulating Law*, 35 LOY. U. CHI. L.J. 1, 7 (2003) (“The DMCA thus not only fails to balance the imbalance caused by changes in code; the DMCA plainly exacerbates it.”); LAWRENCE LESSIG, *FREE CULTURE* 3 (2004) (stating that “code is law” is now more true than it was in the past); James Gibson, *Re-Reifying Data*, 80 NOTRE DAME L. REV. 163, 199-202, 220 (2004) (describing the DMCA and CFAA as examples of “technological” statutes that intermix powers of law and software).

²⁴⁶ See Lawrence Lessig, *Symposium: Cyberspace and Privacy: A New Legal Paradigm? Foreword*, 52 STAN. L. REV. 987, 990 (2000).

²⁴⁷ Thus “code is law” becomes a truer statement than it once was.

property rights that an injunction is issued against an activity that is legally understood as a form of speech. The justification hinges on the trope of code as property, equating the power of DeCSS to decrypt with an invasion into real property.²⁴⁸

I mention the DMCA and the *Corely* case briefly here because I think the decision illuminates two important points. First, the issues of cyberproperty, while they may have originally derived primarily from the law of trespass to chattels, are emergent in other areas of law, particularly in new statutes designed to protect new forms of digital “property” rights.²⁴⁹ Second, it seems no coincidence that both the *Corely* case and the *Hamidi* case wrestled with the conflict between claims of free speech and private property.²⁵⁰ Digital networks are communicative networks and computers are symbolic, information-processing machines. The agenda of cyberproperty is, in large part, to take what might be seen as a form of speech and turn it into the stuff of private property. If law continues down this path, the conflict between claims of free speech and claims of private property rights will likely only intensify, as cyberproperty impulses give rise to new statutory enactments and extensions of common law doctrines.

²⁴⁸ See Michael J. Madison, *Rights of Access and the Shape of the Internet*, 44 B.C. L. REV. 433, 471-78 (2003) (discussing *Corely* and the DMCA).

And yet if one thinks about what is really happening in the case, the spatial rhetorics employed by the court seem deeply unstable. With an encrypted DVD, there is no inner sanctum where a private owner or private property resides. Rather, the full code constituting the movie is always perfectly and fully accessible on the disc. Encryption is a type of technology that hides visible things in plain sight. For instance, take this string of letters: B A K C E R A C L

In these letters I have “locked” information through a program of encryption. However, my lock is simple to break by using the following decryption program: the reader should proceed from first letter, to the last, and work back and forth inward. Freeing the coded object of “Blackacre” from the “safe” of my encryption using my “tool” of instruction was essentially what was happening, on a technological level, with the decryption program DeCSS. Does the mere intermediation of computing technology create a “space” that did not exist in my example?

²⁴⁹ James Gibson, *Re-Reifying Data*, 80 NOTRE DAME L. REV. 163, 240 (2004) (noting trends toward the expansion of such “technological” rights).

²⁵⁰ Polk Wagner, *On Software Regulation*, 78 S. CAL. L. REV. 457, 513 (2005) (“Private entitlements often raise troublesome questions about their relationship to public interests in free expression; as a general matter, society deals with such questions by broadly allowing private right holders to enforce their rights under neutral laws without raising First Amendment objections.”).

III. Conclusion

There is a danger created, as Judge Easterbrook put it, when lawyers attempt to be blind trailblazers. We have no reason to trust that creating broad legal rights of exclusion online will lead us to better social outcomes, and good reason to believe that cyberproperty rights might well, under the cover of private property, lead to significant harms.

The majority of the California Supreme Court in the *Hamidi* case got the issue of cyberproperty right by simply recognizing the need for caution in the evolution of the common law. As Richard Epstein once said: “In law, as in medicine, we should still remember that the basic principle is, *primum, non nocere*: first do no harm.”²⁵¹

²⁵¹ Richard A. Epstein, *Intellectual Property: Old Boundaries and New Frontiers*, 76 IND. L.J. 803, 827 (2001).