

# Place and Cyberspace

Mark A. Lemley†

## INTRODUCTION

For cyberlibertarians, the other shoe is rapidly dropping. In a curious inversion, those who argued less than a decade ago that cyberspace was a place all its own—and therefore unregulable by territorial governments<sup>1</sup>—are finding their arguments and assumptions used for a very different end. Instead of concluding that cyberspace is outside of the physical world, courts are increasingly using the CYBERSPACE AS PLACE metaphor to justify application of traditional laws governing real property to this new medium. Dan Hunter's excellent article<sup>2</sup> explains how and why this is happening with uncanny accuracy, pointing to the power of metaphor in influencing legal thinking and the particular strength of metaphor in making the new

---

© 2003 Mark A. Lemley.

† Professor, School of Law, University of California, Berkeley (Boalt Hall); of counsel, Kecker & Van Nest LLP. Thanks to Ann Bartow, Dan Burk, Jim Chen, Stacey Dogan, Susan Freiwald, Rose Hagan, Dan Hunter, Orin Kerr, Raymond Ku, Doug Lichtman, Mike Madison, David McGowan, Pam Samuelson, Peter Swire, Phil Weiser, and participants in a faculty workshop at Boalt Hall and the Telecommunications Policy Research Conference for comments on an earlier draft.

1. See, e.g., David R. Johnson & David G. Post, *And How Shall the Net Be Governed? A Meditation on the Relative Virtues of Decentralized, Emergent Law*, in COORDINATING THE INTERNET 62 (Brian Kahin & James H. Keller eds., 1997); David R. Johnson & David Post, *Law and Borders—The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996); David G. Post, *Governing Cyberspace*, 43 WAYNE L. REV. 155, 159 (1996); David G. Post, *Anarchy, State, and the Internet: An Essay on Law-Making in Cyberspace*, 1995 J. ONLINE L. art. 3, ¶ 34 (1995), at <http://www.wm.edu/law/publications/jol/articles/post.shtml>. Johnson and Post would undoubtedly be appalled by the use to which their CYBERSPACE AS PLACE metaphor is currently being put. See David G. Post, *Against "Against Cyberanarchy"* (2003) (draft working paper, on file with author) (arguing that the Internet is different than the physical world).

2. Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CALIF. L. REV. 439 (2003) [hereinafter Hunter, *Cyberspace as Place*]. Hunter's work builds on the pathbreaking analysis of Maureen A. O'Rourke, *Property Rights and Competition on the Internet: In Search of an Appropriate Analogy*, 16 BERKELEY TECH. L.J. 561 (2001), and Jonathan J. Rusch, *Cyberspace and the "Devil's Hatband"*, 24 SEATTLE U. L. REV. 577, 591-92 (2000). It is also part of his broader project on cognitive science and thinking about law. See, e.g., Dan Hunter, *Reason Is Too Large: Analogy and Precedent in Law*, 50 EMORY L.J. 1197 (2001). For other work along similar lines, see Maureen Ryan, *Cyberspace as Public Space: A Public Trust Paradigm for Copyright in a Digital World*, 79 OR. L. REV. 647 (2000); Alfred C. Yen, *Western Frontier or Feudal Society?: Metaphors and Perceptions of Cyberspace*, 17 BERKELEY TECH. L.J. 1207 (2002).

seem familiar.<sup>3</sup> He also quite correctly observes that reliance on the CYBERSPACE AS PLACE metaphor is leading courts to results that are nothing short of disastrous as a matter of public policy.<sup>4</sup> Finally, he concludes that there is no way for the Internet to escape the firmly entrenched spatial metaphor, either by substituting another metaphor or by eschewing metaphors altogether.<sup>5</sup> Already, he concludes, the idea of cyberspace as a place is too well-established in our minds.<sup>6</sup> The result is a paper that is both extraordinarily important and profoundly depressing.

---

3. Hunter, *Cyberspace as Place*, *supra* note 2, at 460-72. As Post puts the problem, "[t]hese are new things . . . and thinking about new things is hard because we only really can understand old things." David G. Post, "The Free Use of Our Faculties": Thomas Jefferson, *Cyberspace*, and the Language of Social Life, 49 *DRAKE L. REV.* 407, 411 (2001); see also Harmeet Sawhney, *Information Superhighway: Metaphors as Midwives*, 18 *MEDIA, CULTURE & SOC'Y* 291, 291-92 (1996). For analogous work on the role of metaphor in law in another context, see Thomas W. Joo, *Contract, Property, and the Role of Metaphor in Corporations Law*, 35 *U.C. DAVIS L. REV.* 779 (2002).

4. Hunter, *Cyberspace as Place*, *supra* note 2, at 509-13.

5. *Id.* at 514.

6. *Id.* at 452-54; see also Michael J. Madison, *Rights of Access and the Shape of the Internet*, 43 *B.C. L. REV.* (forthcoming Apr. 2003). Hunter cites ample evidence of the use of the metaphor by courts and commentators. He is certainly correct that it seems pervasive. In addition to the many examples he cites, see Ivan K. Fong, *Law and New Technology: The Virtues of Muddling Through*, 19 *YALE L. & POL'Y REV.* 443, 458-59 (2001) (discussing examples from trademark metatagging and computer program source code). There are, to be sure, other metaphors that have been offered in the Internet context, though many of them are at root about place. See, e.g., Ruseh, *supra* note 2, at 577 (noting the many comparisons of the Internet to the "frontier" or the "Wild West"); Yen, *supra* note 2, at 1207 (criticizing the Western metaphor and comparing the Internet to a feudal society); cf. Sawhney, *supra* note 3, at 304 (noting the multiplicity of transportation-related metaphors for the Internet: superhighway, pipeline, and so on). Most notably (and perhaps ironically, given his role in developing the CYBERSPACE AS PLACE metaphor), David Post analogizes the Internet to a language. See Post, *supra* note 3, at 409. But these alternative metaphors have not caught on as the CYBERSPACE AS PLACE metaphor has.

Indeed, even those whose main message is to warn of the dangers of centralizing control over the Internet fall back on spatial metaphors to help make their point. See, e.g., LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* (1999) (framing his argument in terms of the "architecture" of the Internet); Lawrence Lessig, *Architecting Innovation*, 49 *DRAKE L. REV.* 397 (2001) (same); John Perry Barlow, *A Declaration of the Independence of Cyberspace* (Feb. 8, 1996), at <http://www.eff.org/~barlow/Declaration-Final.html> (referring to "the global social space we are building" in declaring cyberspace to be unregulable, and suggesting to nations that cyberspace "does not lie within your borders").

Ironically, Tony Arnold has suggested that real property itself should be reconceived along more Internet-based metaphorical lines, as a "web of interests." Craig Anthony Arnold, *The Reconstitution of Property: Property as a Web of Interests*, 26 *HARV. ENVTL. L. REV.* 281 (2002).

Personally, my inclination is to resist the idea that we cannot think through new problems for ourselves without reliance on imperfect analogies to the ideas of the past. Thus, I would be happiest in a world in which we looked to context and effect, not metaphor, to help us decide what to do. Orin Kerr has argued that this may still be possible, pointing to a minority of courts that take what he calls an "external" perspective on the Internet—looking at the Internet as it actually exists rather than how its users perceive it. Orin S. Kerr, *The Problem of Perspective in Internet Law*, 91 *Geo. L.J.* (forthcoming Mar. 2003); cf. Michael Boudin, *Antitrust Doctrine and the Sway of Metaphor*, 75 *Geo. L.J.* 395, 404 (1986) ("Eventually, through repeated use, a metaphor is likely to exhaust itself."). I think there is value in that approach, because it may help courts to reach results that are based on physical-world consequences rather than perceived similarities. But for purposes of this article, I will accept Hunter's conclusion that metaphor will continue to influence our treatment of the Internet.

In this Essay, I do not challenge Hunter's argument that the CYBERSPACE AS PLACE metaphor is rampant, nor his conclusion that judicial use of the metaphor has had pernicious consequences. Rather, I focus on the logical steps that courts seem to miss as they move from metaphor to decision. In Part I, I explain why the CYBERSPACE AS PLACE metaphor is not a particularly good one. In Part II, I suggest some ways courts might take account of the differences between the physical world and the Internet. In Part III, I observe that even if one accepts the CYBERSPACE AS PLACE metaphor *in toto*, it need not follow that everything in this new place must be privately owned. Nor must it follow that private-ownership rights include complete rights of exclusion. My conclusion is somewhat more optimistic than Hunter's. While acknowledging the dangers of the CYBERSPACE AS PLACE metaphor and the fact that courts have already started down the wrong road, I suggest that courts and commentators who think seriously about the nature of the Internet still have ample room to make reasoned policy decisions. Though metaphor can mislead us, we need not be its slaves.

## I

### "THE INTERNET IS JUST LIKE A PLACE"

#### A. *No, It Isn't*

We speak of the Internet in spatial terms,<sup>7</sup> and in certain respects users may experience some aspects of the Internet as a physical place. But even a moment's reflection will reveal that the analogy between the Internet and a physical place is not particularly strong.

As a technical matter, of course, the idea that the Internet is literally a place in which people travel is not only wrong but faintly ludicrous. No one is "in" cyberspace. The Internet is merely a simple computer protocol, a piece of code that permits computer users to transmit data between their computers using existing communications networks.<sup>8</sup> There were computer networks before the Internet that similarly relied on telephonic exchange of data.<sup>9</sup> The real genius of the Internet was that its simple, end-to-end design allowed many different people to write different programs that everyone can use by adopting the same simple communications protocol.<sup>10</sup>

---

7. See Hunter, *Cyberspace as Place*, *supra* note 2, at 453-54 (citing copious examples).

8. See Josh A. Goldfoot, *Antitrust Implications of Internet Administration*, 84 VA. L. REV. 909, 920 (1998) ("At best, 'cyberspace' is a convenient term describing a set of communications achieved through the Internet.").

9. For a discussion of the prevalence of private "bulletin board systems" in the late 1980s and early 1990s, see, for example, Debra B. Burke, *Cybersmut and the First Amendment: A Call for a New Obscenity Standard*, 9 HARV. J.L. & TECH. 87, 91-92 (1996).

10. On the importance of the end-to-end design of the network, see Mark A. Lemley & Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925, 928 (2001); J.H. Saltzer et al., *End-to-End Arguments in Systems Design* (Apr. 8,

Technologically, anyone can transmit data onto the network. Whether that data arrives at a particular location depends on whether the user at the destination has configured her computer to accept data in that particular form and from that particular source. If so, the data—email, a request to download information, an MP3 file, or a virus—is read by the recipient computer. But regardless of the form that the data takes, it is data and not people traveling.<sup>11</sup> Data have been traveling on wires and through the airwaves for centuries at the behest of humans, but no one believes the television, the telegraph, or the telephone are “places” within which people travel.<sup>12</sup>

The idea of cyberspace as a physical place is all the more curious because the instantiation that most resembles travel to the casual user, the World Wide Web, is in fact much more like a traditional communications medium. People may speak of “visiting” websites, but of course they don’t actually do any such thing. They send a request for information to the provider of the website, and the provider sends back data: the web page itself. Because this process is automated, and because most website owners make their web pages available to anyone, it may appear that one has simply gotten to a page by clicking a button. But in fact the page’s creator voluntarily sends it to the web user, a fact which should have significance in a number of the Internet property cases.<sup>13</sup>

The CYBERSPACE AS PLACE metaphor seems instead to act at some more conceptual level. Even if we understand somewhere in the back of our minds that we are not really going anywhere, perhaps when we access the Internet it seems so much like we are in a different physical space that we accept cyberspace as a “real” or physical place. There are two problems with this description. First, most users of the Internet surely do not experience it as anything remotely resembling a physical place. While William Gibson wrote beautifully of the visual representations of computer code in cyberspace,<sup>14</sup> it is probably no accident that he did his writing on a manual

---

1981), available at <http://web.mit.edu/Saltzer/www/publications/endoend/endoend.pdf>, reprinted in *INNOVATION IN NETWORKING* 195 (Craig Partridge ed., 1988).

11. Cf. *Voyeur Dorm, L.C. v. City of Tampa*, 265 F.3d 1232 (11th Cir. 2001) (holding that a live sex show broadcast over the Internet from a house in Tampa did not violate a local zoning ordinance prohibiting adult entertainment because the entertainment was not physically provided at that location but sent to remote users); *Access Now, Inc. v. Southwest Airlines, Co.*, 227 F. Supp. 2d 1312 (S.D. Fla. 2002) (holding that a website is not a “public accommodation” because it is not a physical place).

12. Indeed, the analogy to the telephone is more exact than it might at first appear. Most Internet users even today access the Internet through a dial-up modem, which takes data from a computer and converts it to analog sounds that are sent over a telephone line just like the human voice. For these users, the technical reality of Internet communication is essentially identical to telephonic communication. Only what is being “said” and the way it is perceived differ.

13. See *infra* notes 30-31 and accompanying text.

14. See WILLIAM GIBSON, *MONA LISA OVERDRIVE* (1988); WILLIAM GIBSON, *COUNT ZERO* (1986); WILLIAM GIBSON, *NEUROMANCER* (1984) [hereinafter GIBSON, *NEUROMANCER*]; cf. NEAL STEPHENSON, *SNOW CRASH* (1992) (offering a similar spatial conception of “the MetaVerse”).

typewriter.<sup>15</sup> Despite the utopian dreams of early cyberspace “pioneers,”<sup>16</sup> the Internet is hardly replete with black ICE<sup>17</sup> palaces and visual data structures. It is a medium that transmits mostly text, images, and (more recently) sounds, just as television does. People may speak occasionally of being “lost in” or “transported” by a television show, a movie, or even a book, but we hardly surrender our understanding that “television space” is merely a series of images transmitted to us. Nor do we think that when catalogs or letters are delivered to our door we magically enter a store or a friend’s house.

Second, what’s really different about the Internet is interconnection, the fact that links can “take” us from one web page to another. We aren’t limited to visiting the stores in our town or reading only the mail that comes to us. With a click of the mouse we can see information offered on billions of web pages by millions of people and companies from all over the world. Further, we can move from a page in Switzerland to one in Swaziland merely by following a link. Perhaps it is this automatic connection to pages that come from distant lands that makes us feel as though we are traveling through cyberspace. But if so, it is surely the supreme irony of the cyberspatial metaphor. For it is precisely this automatic interconnection between data offered by different people in different places that makes the Internet so different from the physical world.<sup>18</sup> And indeed, it is this very interconnection that courts using the CYBERSPACE AS PLACE metaphor threaten to eliminate by treating the Internet “just like” the physical world.<sup>19</sup> In short, we may instinctively feel that cyberspace is a place, perhaps because we long to make new things seem familiar. But our instincts may mislead us here. Certainly it isn’t the way the Internet really works.

### B. *It’s Like a Place, Except . . .*

Perhaps Hunter is right, and we have already conditioned ourselves to think of the Internet in spatial terms to such an extent that there is no going back.<sup>20</sup> Even if this is true, it does not follow that we must blindly accept a one-for-one correspondence between cyberspace and the physical world. There are obvious differences between the way things work in the physical world and the way they work online. Here are just a few examples:

15. See, e.g., Interview with William Gibson, at <http://books.guardian.co.uk/authors/author/0,5917,96528,00.html> (last visited Sept. 29, 2002).

16. See, e.g., Michael Benedikt, *Cyberspace: Some Proposals*, in *CYBERSPACE: FIRST STEPS* 119 (Michael Benedikt ed., 1991); Marcos Novak, *Liquid Architectures in Cyberspace*, *id.* at 225; Alan Wexelblat, *Giving Meaning to Place: Semantic Spaces*, *id.* at 255.

17. Intrusion countermeasure electronics, in Gibson’s terminology. See GIBSON, *NEUROMANCER*, *supra* note 14, at 95; <http://burks.brighton.ac.uk/burks/foldoc/76/59.htm> (defining the term).

18. See Goldfoot, *supra* note 8, at 920.

19. See *infra* notes 24-29 and accompanying text (discussing these cases).

20. See Hunter, *Cyberspace as Place*, *supra* note 2, at 518-19 (suggesting that the cyberspatial metaphor is ineradicable). *But see* Kerr, *supra* note 6 (arguing that not all courts accept this metaphor).

- While in the physical world I can occupy only one place at a time, on the Internet I—or at least my data—can be everywhere at once (and indeed it is often hard to avoid doing so).
- Physical stores have spatial constraints that limit the number of customers who can enter the store. While there are some constraints on simultaneous usage of a website or the Internet itself, for most users and for most purposes bandwidth is effectively infinite.
- Physical places exist in proximity to one another, and human senses can perceive what is happening next door. In cyberspace, by contrast, there is no “next door.” Nor is there a public street or sidewalk from which one might observe behavior that occurs in a particular Internet space.
- The content of the Internet consists only of information, and information is a public good. A website is trivial to copy, and copying it does not deprive its creator of the use of the original site.<sup>21</sup> By contrast, chattels are much harder to copy, and real property is by definition impossible to duplicate. In order to make use of someone else’s real property, I would have to deprive them of some control over it.

We may turn to the cyberspatial metaphor out of familiarity or ignorance, or even because we consciously decide that it resembles in certain ways what the Internet is or should be. But it is implausible to argue that the Internet is “just like” the physical world. At most, the Internet is like the physical world except in certain respects in which it is different.

## II GETTING TO “EXCEPT”

Courts can and should take the differences between the Internet and the physical world into account.<sup>22</sup> They can do so without rejecting the CYBERSPACE AS PLACE metaphor, simply by using the metaphor as a point of departure. But the departure—the recognition that the Internet is not just like the physical world, and that the ways in which it is different may matter to the outcome of cases—is critical.

---

21. Copying may have other pernicious effects, of course, particularly on incentives to create. Intellectual property protection exists not because information is like physical property (it isn’t), but because unrestrained copying leaves creators with too little incentive to develop new works. For a general discussion of this standard theory of intellectual property, see ROBERT P. MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 10-18 (3d ed. 2003).

22. See O’Rourke, *supra* note 2, at 561 (“[R]ather than searching for analogies, courts and legislators could more profitably devote their energies to understanding how the Internet differs from physical space, evaluating whether those differences call for new legal rules . . .”).

### A. Courts Misled by Metaphor

Hunter correctly points out that several courts have made the mistake of overlooking the differences between the Internet and physical space in a variety of contexts.<sup>23</sup> In particular, courts applying the doctrine of trespass to chattels to email and website access<sup>24</sup> have shown a remarkable lack of sensitivity to these differences. As Dan Burk has observed, while these courts nominally apply the doctrine of trespass to chattels to cyberspace, they are in fact using the different and more expansive doctrine of trespass to real property.<sup>25</sup> They ban third parties from “entering” a website without

23. Hunter, *Cyberspace as Place*, *supra* note 2 at 486-88.

24. For courts applying the doctrine of trespass to chattels to the Internet, see, for example, *Am. Online, Inc. v. Nat'l Health Care Disc., Inc.*, 174 F. Supp. 2d 890 (N.D. Iowa 2001); *Oyster Software, Inc. v. Forms Processing, Inc.*, No. C-00-0724, 2001 WL 1736382 (N.D. Cal. Dec. 6, 2001); *Register.com, Inc. v. Verio, Inc.*, 126 F. Supp. 2d 238 (S.D.N.Y. 2000); *eBay, Inc. v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000); *CompuServe Inc. v. Cyber Promotions, Inc.*, 962 F. Supp. 1015 (S.D. Ohio 1997); *Intel Corp. v. Hamidi*, 114 Cal. Rptr. 2d 244 (Cal. Ct. App. 2001), *review granted*, 43 P.3d 587 (Cal. 2002). *But see* *Ticketmaster Corp. v. Tickets.com, Inc.*, No. CV 99-7654, 2000 WL 525390 (C.D. Cal. Mar. 27, 2000) (refusing to apply the doctrine of trespass to chattels to the Internet in the absence of proven harm); *Express One Int'l, Inc. v. Steinbeck*, 53 S.W.3d 895 (Tex. App. 2001) (finding no cause of action for conversion of information posted online, because information was not property). Not surprisingly, more claims are coming. *See, e.g., Homestore Files Lawsuit Against Bargain Network* (discussing a suit by Homestore.com against Bargain.com for collecting real estate listings from its site and making them available to bargain.com users), at [http://www.rebuz.com/retech02/0402/homestore\\_files\\_lawsuit\\_against\\_.htm](http://www.rebuz.com/retech02/0402/homestore_files_lawsuit_against_.htm) (last visited February 21, 2003).

Many commentators have discussed the application of trespass to chattels to the Internet. Most are critical, especially of cases that apply the doctrine to websites rather than spam and that disregard the requirement of damage. *See, e.g.,* Dan L. Burk, *The Trouble with Trespass*, 4 J. SMALL & EMERGING BUS. L. 1 (2000); Edward W. Chang, *Bidding on Trespass: eBay, Inc. v. Bidder's Edge, Inc. and the Abuse of Trespass Theory in Cyberspace Law*, 29 AIPLA Q.J. 445 (2001); Bridget A. Clarke, *When Not to Pour Spam into an Old Bottle: Intel v. Hamidi*, J. INTERNET L., Nov. 2001, at 19; Niva Elkin-Koren, *Let the Crawlers Crawl: On Virtual Gatekeepers and the Right to Exclude Indexing*, 26 U. DAYTON L. REV. 179 (2001); Seth F. Kreimer, *Technologies of Protest: Insurgent Social Movements and the First Amendment in the Era of the Internet*, 150 U. PA. L. REV. 119, 145-47 (2001); Maureen A. O'Rourke, *Shaping Competition on the Internet: Who Owns Product and Pricing Information?*, 53 VAND. L. REV. 1965 (2000); O'Rourke, *supra* note 2; Maureen A. O'Rourke, *What the Future Holds: Policy Choices in the Global E-Marketplace*, 7 ROGER WILLIAMS U. L. REV. 151, 152 (2001) [hereinafter O'Rourke, *Future*]; Laura Quilter, *The Continuing Expansion of Cyberspace Trespass to Chattels*, 17 BERKELEY TECH. L.J. 421 (2002); Susan M. Ballantine, Note, *Computer Network Trespasses: Solving New Problems with Old Solutions*, 57 WASH. & LEE L. REV. 209 (2000); Steve Fischer, Note, *When Animals Attack: Spiders and Internet Trespass*, 2 MINN. INTEL. PROP. REV. 139 (2001); R. Clifton Merrell, Note, *Trespass to Chattels in the Age of the Internet*, 80 WASH. U. L.Q. 675 (2002); Yochai Benkler, *Through the Looking Glass: Alice and the Constitutional Foundations of the Public Domain* 234 (2002) (draft working paper, on file with author). But a few are more favorable. *See, e.g.,* Trotter Hardy, *Property (and Copyright) in Cyberspace*, 1996 U. CHI. LEGAL F. 217; I. Trotter Hardy, *The Ancient Doctrine of Trespass to Web Sites*, 1996 J. ONLINE L. art. 7, at [www.wm.edu/law/publications/jol/95\\_96/hardy.html](http://www.wm.edu/law/publications/jol/95_96/hardy.html); Richard Warner, *Border Disputes: Trespass to Chattels on the Internet*, 47 VILL. L. REV. 117 (2002); *cf.* John D. Saba, Jr., *Internet Property Rights: E-Trespass*, 33 ST. MARY'S L.J. 367 (2002) (suggesting that trespass is appropriate only in certain circumstances).

25. *See* Burk, *supra* note 24, at 34 (arguing that because courts addressing the issue in cyberspace have ignored the damage requirement of trespass to chattels, they are actually applying the trespass to

permission, sometimes on the grounds that the third party will fill up the site,<sup>26</sup> and sometimes because they assume that Internet bandwidth, like real property, should be inherently inviolate.<sup>27</sup> An even more serious problem is the judicial application of the Computer Fraud and Abuse Act ("CFAA"),<sup>28</sup> which was designed to punish malicious hackers, to make it illegal—indeed, criminal—to seek information from a publicly available website if doing so would violate the terms of a "browsewrap" license.<sup>29</sup>

These courts have failed to understand how the Internet is different from the physical world. They have not understood that no one "enters" websites. Rather, defendants in these cases merely sent requests for information to a web server that the plaintiff itself opened to the public, and the plaintiff's own server sent information in return.<sup>30</sup> They have not understood that the requests for information that Verio or Bidder's Edge sent did not exclude others from using the site. They have not understood that cases

---

land tort); see also Hunter, *Cyberspace as Place*, *supra* note 2, at 483-88 (arguing that courts' application of the CYBERSPACE AS PLACE metaphor has contributed to the conflation of the trespass to land and trespass to chattels torts); O'Rourke, *supra* note 2, at 595-97 ("By piling analogy on top of analogy and mixing real and personal property causes of action, the court has created a broad property right without ensuring that the policies on which analogous rules are based translate equally well into this new context."). For an explicit argument that real property is the right analogy, see Susan M. Ballantine, *Computer Network Trespasses: Solving New Problems with Old Solutions*, 57 WASH. & LEE L. REV. 209, 212 (2000); Brief of Amicus Curiae of Reed Elsevier Inc. et al. at 6-10, *eBay Inc. v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000) (No. 00-15995), available at <http://www-personal.umich.edu/~rmann/e-commerce%20page/Epstein%20Brief.PDF> (on file with author).

26. E.g., *eBay*, 100 F. Supp. 2d at 1064-66.

27. Cf. *id.* at 1071-72 (articulating an alternative theory to its holding of likely injury to eBay's servers: that any use of eBay's servers inherently deprives eBay of its property). While the discussion of inherent injury in *eBay* was clearly dictum, it is this dictum and not the court's holding that actual injury was likely that courts have pointed to in subsequent cases. See, e.g., *Oyster Software*, 2001 WL 1736382, at \*12; *Register.com*, 126 F. Supp. 2d at 250; *Intel Corp.*, 114 Cal. Rptr. 2d at 252.

28. 18 U.S.C. § 1030 (2000).

29. See, e.g., *EF Cultural Travel BV v. Explorica, Inc.*, 274 F.3d 577 (1st Cir. 2001); *Register.com*, 126 F. Supp. 2d 238; see also Hunter, *Cyberspace as Place*, *supra* note 2, at 475-83. It is worth noting as an aside that browsewrap licenses are of dubious validity as a matter of contract law. Unlike clickwrap licenses, where the party to be bound expressly assents to the terms, there is no express agreement in a browsewrap case. Indeed, there is not even the fiction of assent a minority of courts have used to justify shrinkwrap licenses. As a result, no court to actually consider the enforceability of browsewrap licenses under contract law has found them enforceable. See, e.g., *Specht v. Netscape Comms. Corp.*, 150 F. Supp. 2d 585, 596 (S.D.N.Y. 2001) ("Defendants' position, if accepted, would so expand the definition of assent as to render it meaningless."), *aff'd*, 306 F.3d 17 (2d Cir. 2002); *Ticketmaster Corp. v. Tickets.com, Inc.*, No. CV 99-7654, 2000 WL 525390 (C.D. Cal. Mar. 27, 2000); *Westcode, Inc. v. RBE Elecs.*, No. CIV.A. 99-3004, 2000 WL 124566 (E.D. Pa. Feb. 1, 2000). Even *Register.com* enforced the terms of use in the CFAA and trespass contexts only because it was clear that the defendant was aware of the terms. Given this, it is truly startling that courts seem willing to find violations of a criminal statute where they would not even find breach of contract.

30. This fact distinguishes the trespass and CFAA cases I discuss here from true cases of unauthorized access, in which crackers exploit software bugs to gain access to a computer system or part thereof that the owner never intended to open to the outside world. It is this latter set of cases that the CFAA and other computer crime statutes were designed to deal with. See Orin S. Kerr, *The Troubling Trigger of Cybercrime* (2002) (draft working paper, on file with author) (noting the amorphous nature of "unauthorized access" under the CFAA).



of this sort were really efforts to control the flow of information to or from a site. Because they had land rather than information in mind, these courts forgot that the information at issue in these cases is a public good to which we have never applied the “inviolability” rules of real property.<sup>31</sup> The courts did not understand these things, and so they got the cases wrong, creating a general tort of stunning breadth.<sup>32</sup>

### B. Courts that Understand the Limits of Metaphor

But courts could understand these things—could get the cases right—even within the framework of the cyberspatial metaphor. In other contexts, courts have proven receptive to the idea that Internet law can both rely on a framework designed for the physical world and yet modify that framework to take account of the peculiarities of cyberspace.

Personal jurisdiction is one area where courts have demonstrated such agility. Rote application of personal jurisdiction rules and the metaphors of the physical world would lead inexorably to the conclusion that anyone who puts up a website is amenable to suit anywhere on the planet, on the theory that they have sent their “products” into each and every forum. While a few early cases took that position,<sup>33</sup> most courts quickly recognized its failings.<sup>34</sup> A number of courts developed an Internet-specific “interactivity” test for jurisdiction: passive websites didn’t confer jurisdiction wherever viewed, but interactive websites did.<sup>35</sup> This test has its problems, and courts have started to move away from it. The law seems instead to be moving towards a test that uses traditional standards for determining personal jurisdiction, but applies them with sensitivity to the nature of the Internet, recognizing that not every website is necessarily a purposeful

---

31. The fact that information is what is really at stake in these cases is most clear in *Intel Corp. v. Hamidi*, 114 Cal. Rptr. 2d 244 (Cal. Ct. App. 2001), *review granted*, 43 P.3d 587 (Cal. 2002), in which Intel objected to email from a former employee to current employees because of its content, and in *eBay v. Bidder’s Edge*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000), in which eBay filed a variety of intellectual property claims in an effort to get control over its uncopyrightable data before finally prevailing on the *trcspass-to-web-server* theory. See Chang, *supra* note 24, at 466 (“*eBay* transmogrifies cyber-trespass theory into a remedy that protects intellectual property interests, rather than personal property interests.”).

32. See Quilter, *supra* note 24, at 441 (“With trespasses as they have now been defined, and without a harm requirement, it would be difficult to conceive of anything that might *not* constitute a trespass; *trcspass* is effectively defined purely at the owner’s will and can encompass almost any kind of act.”).

33. See, e.g., *Inset Sys., Inc. v. Instruction Set, Inc.*, 937 F. Supp. 161, 165 (D. Conn. 1996). For criticism, see Dan L. Burk, *Jurisdiction in a World Without Borders*, 1 VA. J.L. & TECH. 3, ¶ 54 (1997).

34. See, e.g., *Cybersell, Inc. v. Cybersell, Inc.*, 130 F.3d 414 (9th Cir. 1997); *Bensusan Rest. Corp. v. King*, 937 F. Supp. 295, 301 (S.D.N.Y. 1996), *aff’d*, 126 F.3d 25 (2d Cir. 1997).

35. See, e.g., *Zippo Mfg. Co. v. Zippo Dot Com, Inc.*, 952 F. Supp. 1119, 1124-25 (W.D. Pa. 1997). For a discussion of these cases, see Michael A. Geist, *Is There a There There? Toward Greater Certainty for Internet Jurisdiction*, 16 BERKELEY TECH. L.J. 1345 (2001).

availment of the benefits of every forum state.<sup>36</sup> Thus, acceptance of the traditional due process framework for personal jurisdiction has not prevented courts from considering the practical differences between the Internet and the world that existed before its advent.

A second example concerns dormant commerce clause jurisprudence. The Supreme Court has repeatedly held that states are not free to regulate interstate commerce in a way that imposes undue and potentially conflicting burdens on those who sell products or services nationwide.<sup>37</sup> Most dormant commerce clause cases in the physical world have focused on intentional state efforts to burden out-of-state providers in order to benefit local ones.<sup>38</sup> On the Internet, by contrast, courts have applied the dormant commerce clause somewhat differently. On the one hand, courts are more likely to invalidate state regulation of the Internet under the dormant commerce clause because the inherently interstate nature of Internet communications burdens a larger class of people with understanding and complying with a multitude of regulations.<sup>39</sup> In fact, because a single web page is accessible in all fifty states, the burden of complying with inconsistent regulations is often greater than it is in the physical world.<sup>40</sup> On the other hand, it may be easier to comply with some sorts of state regulations because Internet communication is more malleable than are physical goods. Courts have taken this ease of compliance into account in determining that state

---

36. See, e.g., *ALS Scan, Inc. v. Digital Serv. Consultants, Inc.*, 293 F.3d 707 (4th Cir. 2002) (modifying the *Zippo* approach); *GTE New Media Servs., Inc. v. BellSouth Corp.*, 199 F.3d 1343 (D.C. Cir. 2000) (rejecting the *Zippo* approach); *Millennium Enters. v. Millennium Music*, 33 F. Supp. 2d 907 (D. Or. 1999) (rejecting the *Zippo* approach). Geist chronicles the rejection of the *Zippo* test in favor of a test based on purposeful availment of the benefits of doing business in the forum, coupled with a reliance on the jurisdiction in which the effects are felt in the case of intentional torts. See Geist, *supra* note 35, at 1371-80.

37. See, e.g., *Quill v. North Dakota*, 504 U.S. 298, 312 (1992); *City of Philadelphia v. New Jersey*, 437 U.S. 617, 626-27 (1978); *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 144-45 (1970). For a good discussion of the Internet cases, see Dan L. Burk, *Federalism in Cyberspace*, 28 CONN. L. REV. 1095, 1123-34 (1996).

38. This was arguably the effect of the regulations at issue in *Quill* and *Healy*. See *Quill*, 504 U.S. 298; *Healy v. Beer Inst.*, 491 U.S. 324, 336-37 (1989) (striking down a Connecticut statute that required beer merchants not to charge a different price in a neighboring state than they were in Connecticut).

39. See *Am. Library Ass'n v. Pataki*, 969 F. Supp. 160, 173-75 (S.D.N.Y. 1997) (striking down Internet anti-pornography statute on dormant commerce clause grounds); Burk, *supra* note 37, at 1131-32 (suggesting that states are limited in their ability to regulate Internet commerce because of the burdens this would place on out-of-state companies). But see *People v. Hsu*, 99 Cal. Rptr. 2d 184, 190 (Cal. Ct. App. 2000) (holding that a California statute that makes it a crime to transmit harmful matter over the Internet to a child does not violate the commerce clause); *Hatch v. Superior Court*, 94 Cal. Rptr. 2d 453 (Cal. Ct. App. 2000) (same); Jack L. Goldsmith & Alan O. Sykes, *The Internet and the Dormant Commerce Clause*, 110 YALE L.J. 785, 823 (2001) (suggesting that most state statutes won't raise dormant commerce clause problems).

40. See Burk, *supra* note 37, at 1132. In particular, it may be impossible for a website owner to comply with two inconsistent state regulations, since the same page will be viewed in both states, while an offline company could presumably ship different products to different states.

anti-spam statutes do not violate the dormant commerce clause<sup>41</sup> while striking down other statutes that reach too broadly.<sup>42</sup> They have, in short, adapted a constitutional doctrine based on the physical world to accommodate the somewhat different character of the Internet.

Freedom of speech is a third area where courts have demonstrated their ability to adapt to the virtual world. Government regulation of indecent speech on the Internet has been especially fertile ground for metaphorical debates. When Congress passed the Communications Decency Act in 1996, it sought to prevent Internet sites not only from disseminating constitutionally unprotected obscene speech, but also speech that was merely “indecent,” “lewd,” or “harmful to minors.”<sup>43</sup> Courts considered different analogies: was the Internet more like a bookstore or library, where the Constitution protects indecent speech, or like a radio or television broadcast in which otherwise protected speech could be forbidden?<sup>44</sup> In *Reno v. ACLU*,<sup>45</sup> the Court concluded that the Internet deserved full First Amendment protection, not the lesser protection afforded broadcast media. In so doing, the Court considered how well each metaphor actually applied to the Internet. It distinguished the Internet from broadcast media on five grounds: first, in broadcast, warnings could not protect listeners and viewers from undesired content, whereas on the Internet such warnings were effective; second, the risk of encountering indecent material by mistake online was remote; third, unlike the broadcast spectrum, Internet sites were not scarce; fourth, there was no extensive history of government regulation over the Internet; and fifth, the Internet did not share broadcast’s invasive qualities.<sup>46</sup>

The Internet was not entirely like either a bookstore or a television station, but the Court used both metaphors as points of departure. It considered how the particular characteristics of existing media were thought to justify different regulatory regimes, and compared the characteristics of the Internet to determine what level of regulation the Constitution should permit in what was clearly a new medium. Further, Justice O’Connor’s

---

41. See *Ferguson v. Friendfinders, Inc.*, 115 Cal. Rptr. 2d 258 (Cal. Ct. App. 2002); *State v. Heckel*, 24 P.3d 404 (Wash. 2001).

42. See *ACLU v. Johnson*, 194 F.3d 1149 (10th Cir. 1999) (striking down state law regulating indecent speech); *Am. Booksellers’ Found. for Free Expression v. Dean*, 202 F. Supp. 2d 300, 304 (D. Vt. 2002) (striking down an antipornography statute that punished conduct communicated on the Internet without regard to where it occurs); *PSINet, Inc. v. Chapman*, 167 F. Supp. 2d 878, 890-91 (W.D. Va. 2001) (same); *Cyberspace Comms. v. Engler*, 142 F. Supp. 2d 827, 831 (E.D. Mich. 2001) (indecent speech statute struck down); *Pataki*, 969 F. Supp. 160 (indecent speech statute struck down).

43. 47 U.S.C. § 223(a) (2000).

44. See, e.g., *FCC v. Pacifica Found.*, 438 U.S. 726 (1978). The special First Amendment rules for broadcast media have been devastatingly criticized on their merits, see for example, THOMAS G. KRATTENMAKER & LUCAS A. POWE, JR., *REGULATING BROADCAST PROGRAMMING* 203-36 (1994), but the law clearly treated the two media differently. *Id.* at 203.

45. 521 U.S. 844 (1997).

46. *Id.* at 867, 868-69 (distinguishing *Pacifica Found.*, 438 U.S. 726 (1978)).

concurrence suggested that the Court was sensitive not only to how the Internet differed from any of the existing media offered as analogies,<sup>47</sup> but also to how the nature of the Internet might change over time in ways that affected its regulability.<sup>48</sup>

In all of these cases, courts avoided becoming prisoners of the metaphors they used. They demonstrated their ability to adapt laws and metaphors constructed with the physical world in mind to take account of the rather different world of the Internet. In short, the brief history of Internet law to date suggests that courts are able to escape the confines of a metaphor when appropriate. The problem is therefore more limited than Hunter suggests: so far, courts have simply not succeeded in eescaping the confines of the CYBERSPACE AS PLACE metaphor. Hunter is right to worry about the consequences of this failure, but I believe he is wrong to suggest that it is global or inevitable.

### III

#### THE EQUATION OF PLACE AND PROPERTY

The Internet trespass cases make another mistaken conceptual leap. Courts have assumed not only that cyberspace is a place akin to the physical world, but further that any such place must be privately owned by someone who has total control over the property. This is a common

47. *Id.* at 889-90 (O'Connor, J., concurring). Justice O'Connor noted:

A minor can see an adult dance show only if he enters an establishment that provides such entertainment. And should he attempt to do so, the minor will not be able to conceal completely his identity (or, consequently, his age). Thus, the twin characteristics of geography and identity enable the establishment's proprietor to prevent children from entering the establishment, but to let adults inside.

The electronic world is fundamentally different. Because it is no more than the interconnection of electronic pathways, cyberspace allows speakers and listeners to mask their identities. Cyberspace undeniably reflects some form of geography; chat rooms and Websites, for example, exist at fixed "locations" on the Internet. Since users can transmit and receive messages on the Internet without revealing anything about their identities or ages . . . , however, it is not currently possible to exclude persons from accessing certain messages on the basis of their identity.

*Id.*

48. *Id.* at 890 (O'Connor, J., concurring). Justice O'Connor reasoned:

Cyberspace differs from the physical world in another basic way: Cyberspace is malleable. Thus, it is possible to construct barriers in cyberspace and use them to screen for identity, making cyberspace more like the physical world and, consequently, more amenable to zoning laws. This transformation of cyberspace is already underway.

*Id.* See also Lawrence Lessig, *Reading the Constitution in Cyberspace*, 45 EMORY L.J. 869, 886-89 (1996); Lawrence Lessig & Paul Resnick, *Zoning Speech on the Internet: A Legal and Technical Model*, 98 MICH. L. REV. 395 (1999). O'Connor's concurrence has been criticized as a rote application of the CYBERSPACE AS PLACE metaphor, however. See Goldfoot, *supra* note 8, at 920-21.

The issue of the Internet's changing nature returned in 2002, when the Court considered the constitutionality of the Communications Decency Act's successor statute, the Child Online Protection Act, 47 U.S.C. § 231 (2000). A fractured Court held that the statute's command to apply contemporary community standards to the Internet was not itself unconstitutional, although the Court remanded the case for consideration of other constitutional problems. *Ashcroft v. ACLU*, 535 U.S. 564 (2002).

assumption these days; it sometimes seems as though our legal system is obsessed with the idea that anything with value must be owned by someone.<sup>49</sup> But as any real property scholar will tell you, not all land is privately owned, and even privately owned land frequently does not fall totally within the owner's dominion.<sup>50</sup> To reach the results in cases like *eBay v. Bidder's Edge*,<sup>51</sup> *Register.com v. Verio*,<sup>52</sup> and *Intel Corp. v. Hamidi*,<sup>53</sup> a court must conclude not only that cyberspace is a place but also that a particular type of property law is appropriate for that place.

### A. *The Internet and Public Space*

Although we often think of physical space as privately owned, much of it is not. Our society could not exist without abundant public space. Not only would we be poorer if there were no parks, no wilderness, and no public libraries and museums, but the market economy would grind to a halt without the constant support provided by roads, bridges, airports, and the other infrastructure of modern government. And life as we know it would be impossible if we did not reserve the air and water as a public commons.<sup>54</sup>

Public spaces sometimes provide a subsidy to the poor: anyone can enter a city park, while a private garden would exist only if it could charge enough to be self-supporting. More importantly for our purposes, public

49. See, e.g., Jessica Litman, *Breakfast with Batman: The Public Interest in the Advertising Age*, 108 YALE L.J. 1717, 1725 (1999) ("There has been inexorable pressure to recognize as an axiom the principle that if something appears to have substantial value to someone, the law must and should protect it as property."). Rochelle Dreyfuss describes this instinct as "if value, then right." Rochelle Cooper Dreyfuss, *Expressive Genericity: Trademarks as Language in the Pepsi Generation*, 65 NOTRE DAME L. REV. 397, 405 (1990). The idea that there is an inherent connection between value and ownership is a pernicious one, as scholars have recognized. See, e.g., Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutory Impulse*, 78 VA. L. REV. 149, 167 (1992) ("A culture could not exist if all free riding were prohibited within it."); Mark A. Lemley, *The Modern Lanham Act and the Death of Common Sense*, 108 YALE L.J. 1687, 1715 (1999) (decrying this trend); Mark A. Lemley, *Romantic Authorship and the Rhetoric of Property*, 75 TEX. L. REV. 873 (1997) (same) [hereinafter Lemley, *Romantic Authorship*]. Cf. Mark Rose, *Copyright and Its Metaphors*, 50 UCLA L. REV. 1, 11-12 (2002) (arguing that the property metaphor tends to make copyright appear more absolute).

50. Indeed, Thomas Grey argued more than two decades ago that the concept of property as a "bundle of rights" meant that property interests were necessarily disaggregated and context-specific. Thomas C. Grey, *The Disintegration of Property*, in *PROPERTY: NOMOS XXII* 69 (J. Roland Pennock & John W. Chapman eds., 1980); cf. CAROL M. ROSE, *PROPERTY AND PERSUASION: ESSAYS ON THE HISTORY, THEORY, AND RHETORIC OF OWNERSHIP* 267-97 (1994) (discussing the role of metaphor in understanding property). On another axis, Dan Burk noted that property rules may be "muddy" in the sense that entitlement to relief is less than clear, and that this uncertainty can actually be a good thing. Dan L. Burk, *Muddy Rules for Cyberspace*, 21 CARDOZO L. REV. 121 (1999).

51. 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

52. 126 F. Supp. 2d 238 (S.D.N.Y. 2000).

53. 114 Cal. Rptr. 2d 244 (Cal. Ct. App. 2001), *review granted*, 43 P.3d 587 (Cal. 2002).

54. For a description of a world in which one company has monopoly control of the air we breathe, see *TOTAL RECALL* (Tristar Pictures 1990).

infrastructure serves a vital economic purpose. Roads, lighthouses, and indeed our system of government have some of the characteristics of a public good: it is difficult to exclude nonpaying users.<sup>55</sup> Further, coordination is important to the efficient use of this infrastructure. While it is possible to imagine privatizing all of the public infrastructure in our economy, from roads to a postal service to jails to courts,<sup>56</sup> it is not likely that the result will be both convenient and competitive. Imagine paying a different toll every time you turned a corner, navigating roads that only worked with certain types of cars, and living with police forces that obeyed no limits except those set by a private employer. For such a world to be theoretically efficient, we would need competitive choices in each of these areas. But the very fact of that competition would create dramatic inefficiencies in production and require a breathtaking number of transactions to “clear” the rights necessary to live one’s life. We have public space in the physical world not by accident, or because it is left over space that no one wants, but because it is a necessary part of a functioning system of property.<sup>57</sup>

So too with the Internet. Even the staunchest advocates of propertization on the Internet tend to take for granted all sorts of public “spaces” online. We assume that telephone companies will pass our data along on a nondiscriminatory basis,<sup>58</sup> even as we deregulate telephony<sup>59</sup> and resist any kind of nondiscrimination obligation for cable modems.<sup>60</sup> We assume that

---

55. As Ronald Coase has pointed out, public goods are sometimes provided privately. See R.H. Coase, *The Lighthouse in Economics*, 17 J.L. & ECON. 357, 374-76 (1974). But the fact that a public good can sometimes be provided privately, usually in some form of limited-commons arrangement, does not mean that private ownership is necessarily the most efficient form of provision.

56. For an innovative effort along these lines, see STEPHENSON, *supra* note 14.

57. For a discussion of a related problem, “anticommons” property, in which ownership in necessary inputs is too divided to permit efficient usage, see Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621 (1998); Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 SCI. 698 (1998). The anticommons problem can be solved either by making the property in question a public resource or by concentrating ownership in fewer hands. On the Internet, the latter option doesn’t seem realistic. A search engine needs to access billions of websites owned by tens of millions of different parties; there is no way to consolidate those rights. Cf. Carol M. Rose, *Romans, Roads, and Romantic Creators: Traditions of Public Property in the Information Age* (2002) (draft working paper, at 21, on file with author) (anticommons in intellectual property should be solved by granting limited public access rights), available at <http://papers.ssrn.com/abstract=293142>.

58. For a discussion of the question of nondiscriminatory carriage of Internet traffic, see James B. Speta, *A Common Carrier Approach to Internet Interconnection*, 54 FED. COMM. L.J. 225 (2002). For a discussion of Internet “peering” arrangements among providers, see Jay P. Kesav & Rajiv C. Shah, *Fool Us Once Shame on You—Fool Us Twice Shame on Us: What We Can Learn from the Privatizations of the Internet Backbone Network and the Domain Name System*, 79 WASH. U. L.Q. 89 (2001).

59. See Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

60. Thus far, the Federal Communications Commission has refused to compel cable companies to provide broadband Internet access on nondiscriminatory terms, though the Federal Trade Commission did require a form of such access as a condition of the AOL–Time Warner merger. See Daniel L. Rubinfeld & Hal J. Singer, *Open Access to Broadband Networks: A Case Study of the AOL/Time Warner Merger*, 16 BERKELEY TECH. L.J. 631 (2001). For discussion of the open access

no one will own the top-level domain names that we all use to communicate, even as we grant property rights in second-level domains.<sup>61</sup> We assume that the protocols that make up the Internet are free for the public to use, even as we permit the patenting of improvements to those protocols.<sup>62</sup> And we assume that search engines and other data collectors will enable us to cull information from the vast archive that we have collectively created, even as we begin to impose liability on search engines for finding things that we don't like.<sup>63</sup> In short, we rely on public "space" on the Internet, just as we do in the physical world. Indeed, even at this early stage in the Internet's development, public accessibility of its key features is so deeply ingrained that we simply take it for granted. Only when that accessibility is

---

issue, see Lemley & Lessig, *supra* note 10; Christopher S. Yoo, *Vertical Integration and Media Regulation in the New Economy* 19 YALE J. ON REG. 171 (2002); Jim Chen, *The Authority to Regulate Broadband Internet Access over Cable*, 16 BERKELEY TECH. L.J. 677 (2001); Phil Weiser, *Paradigm Changes in Telecommunications Regulation*, 71 U. COLO. L. REV. 819 (2000).

61. For a discussion of the domain name allocation process and its flaws, see A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 DUKE L.J. 17 (2000); Jonathan Weinberg, *ICANN and the Problem of Legitimacy*, 50 DUKE L.J. 187 (2000); Jonathan Weinberg, *ICANN as Regulator* (2002) (draft working paper, on file with author). See also Graeme Dinwoodie & Lawrence Helfer, *Designing Non-National Systems: The Case of the Uniform Domain Name Dispute Resolution Policy*, 43 WM. & MARY L. REV. 141 (2001); Kesan & Shah, *supra* note 58; Jessica Litman, *The DNS Wars: Trademarks and the Internet Domain Name System*, 4 J. SMALL & EMERGING BUS. L. 149 (2000); Timothy Wu, *Application-Centered Internet Analysis*, 85 VA. L. REV. 1163 (1999).

62. The Internet runs on a set of open, nonproprietary protocols in large part because the Internet Engineering Task Force ("IETF"), the standard-setting organization that controls the TCP and IP protocols, had a long-standing policy that it would not adopt proprietary standards. That policy has now changed. The World Wide Web Consortium ("W3C") also recently considered changing its policy to permit proprietary web standards, prompting a firestorm of criticism. See, e.g., Janice M. Mueller, *Patent Misuse Through the Capture of Industry Standards*, 17 BERKELEY TECH. L.J. 623, 629-30 (2002) (describing this debate); Wade Roush, *Web Tolls Ahead?*, 105 TECH. REV. 20 (2002). At this writing, the W3C appeared likely to adhere to its royalty-free patent-licensing policy. See Margaret Kane, *W3C Retreats from Royalty Policy*, CNET NEWS.COM (Feb. 26, 2002), at <http://news.com.com/2100-1023-845023.html>. Assertions by IBM and Microsoft of patents that allegedly cover ebXML and SOAP also caused huge controversy in the Internet standards community. See, e.g., David Berlind, *IBM, Microsoft Plot Net Takeover*, CNET ASIA, Apr. 11, 2002. IBM later backed down on its ebXML patent. See Email from Robert S. Sutor, Director, IBM e-business Standards Strategy, to the ebXML Joint Coordinating Committee (Apr. 18, 2002 18:27 EST), available at <http://lists.ebxml.org/archives/ebxml/200204/msg00004.html>. It remains to be seen whether the open nature of the Internet will survive this shift to proprietary standards. For an argument that the Internet is moving away from openness, see LAWRENCE LESSIG, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* (2001).

63. Plaintiffs have filed a number of suits challenging the propriety of linking to content or displaying search results. See, e.g., *Kelly v. Ariba Soft Corp.*, 280 F.3d 934 (9th Cir. 2002) (concluding that collecting images by a search engine to display in search results was fair use, but linking to the images on the searched site was illegal); Anick Jesdanun, *Lawsuits Nip at the Heart of the Web*, S.F. CHRON., June 10, 2002, at E1 (detailing more such claims); cf. *Yahoo!, Inc. v. La Ligue Contre Le Racisme et L'Antisemitisme*, 169 F. Supp. 2d 1181 (N.D. Cal. 2001) (refusing to enforce French criminal conviction of Yahoo! for serving as a clearinghouse in which others auctioned Nazi paraphernalia). For prescient discussion of this issue, see Edward A. Cavazos & Coe F. Miles, *Copyright on the WWW: Linking and Liability*, 4 RICH. J.L. & TECH. 3 (1997); Maureen A. O'Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 MINN. L. REV. 609, 631 (1998).

under attack do we even become aware of the baseline assumption of openness.

The cyberspatial metaphor, then, does not determine whether something will be privately owned. Courts that apply the metaphor still have a choice to make: is this the sort of space that should be public or private? On the Internet, there are good reasons to think that the balance should be tilted in favor of public space in many contexts.<sup>64</sup> The economic rationale underlying much privatization of land, the tragedy of the commons,<sup>65</sup> simply does not apply to information goods. It is possible to imagine physical bandwidth or server capacity being overconsumed, although the danger of that currently seems remote.<sup>66</sup> But it is not possible to imagine overconsumption of a nonrivalrous thing like data. My use of your data does not deplete it or prevent your use in the same way that my use of your land might.<sup>67</sup> From an economic perspective, the more people who can use information, the better.<sup>68</sup>

Further, some of the differences between the Internet and the physical world—notably the absence of physical proximity online—suggest that we should worry more about the consequences of privatizing online space. If an antique dealer kicks me out of their auction house, I can stand on the street outside, observe who enters and who leaves with a Chesterfield, and ask people to share information with me. If eBay kicks me off of their site, I have no similar power online. So even if the goal were to mimic the rights that private physical property provides in the online world, granting the equivalent of real property rights online wouldn't necessarily achieve

---

64. For an excellent argument for public space online, see Ryan, *supra* note 2, at 647-48.

65. See generally Garrett Hardin, *The Tragedy of the Commons*, 162 Sci. 1243, 1244 (1968).

66. See, e.g., Rose, *supra* note 57, at 13 ("On the Internet, problems of physical infrastructure and overcrowding are less apparent . . ."). It is significant that in none of the Internet trespass cases was there any real threat of such physical overuse. In *eBay*, the only case that focused significant attention on the issue, the use in question never consumed more than 2% of eBay's server capacity. *eBay, Inc. v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000). Subsequent cases posed even less of a threat. Indeed, the courts in *Register.com, Inc. v. Verio, Inc.*, 126 F. Supp. 2d 238 (S.D.N.Y. 2000), *Oyster Software, Inc. v. Forms Processing, Inc.*, No. C-00-0724 JCS, 2001 WL 1736382 (N.D. Cal. Dec. 6, 2001), and *Intel Corp. v. Hamidi*, 114 Cal. Rptr. 2d 244 (Cal. Ct. App. 2001), *review granted*, 43 P.3d 587 (Cal. 2002), all acknowledged that the defendant's conduct would not harm the servers or impose capacity constraints. They nonetheless found trespass to chattels because they followed *eBay*'s dictum in concluding that such harm need not be proven.

67. See, e.g., Rose, *supra* note 57, at 2.

68. A separate concern is the "public goods problem," which occurs when creators have insufficient incentive to develop new ideas because it is cheap and easy to copy what they have created. But this problem hardly justifies the application of real property models to the Internet. Intellectual property law is designed to deal with the public goods problem and already provides substantial incentives to develop new works. Indeed, because intellectual property protection is expanding day by day, see Lemley, *Romantic Authorship*, *supra* note 49, at 886-87, reliance on real property law as a supplement seems less appropriate today than ever before.



that goal. For example, in *eBay*,<sup>69</sup> the rights that the court granted eBay exceed anything it could have obtained offline.

This is not to suggest that there should be no ownership of Internet “spaces” at all. Rather, the point is that private and public spaces must co-exist on the Internet, just as they do in the physical world.<sup>70</sup> As a result, one cannot look at any given part of the Internet and assume that it must or should be private property. It might be appropriate to declare that space private, but it might not.<sup>71</sup>

### B. *How Private Is Private?*

Even were we to decide not only that the Internet is like a physical place, but also that it is a physical place that should be privately owned, that still wouldn't justify the results in the trespass cases. It is wrong to think of private property as a unitary phenomenon. Rather, to rely on a time-honored metaphor, property itself is a “bundle” of rights that attach to a particular piece of property. Which sticks are in the bundle and who holds them may vary from case to case. For example, the rights we normally grant to owners of intellectual property and owners of personal property differ in significant respects from the rights we give to owners of real property.<sup>72</sup> This is particularly important in the Internet trespass context both because the courts have nominally applied the law of personal rather than real property<sup>73</sup> and because the underlying issue in many of these cases was really one of intellectual property, not the sanctity of a website. Intellectual property rights are notably incomplete, limited in a variety of ways in order to advance the ultimate public good.<sup>74</sup>

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

70. Carol Rose suggests that the Internet might be divided into private and public spaces with very different characteristics, sharing different needs. Carol M. Rose, *The Several Futures of Property: Of Cyberspace and Folk Tales, Emissions Trades and Ecosystems*, 83 MINN. L. REV. 129, 154 (1998).

71. Many have argued for the creation of public space online, often on a public trust model. See, e.g., Maureen Ryan, *Cyberspace as Public Space: A Public Trust Paradigm for Copyright in a Digital World*, 79 OR. L. REV. 647 (2000); Molly S. van Houweling, *Cultivating Open Information Platforms: A Land Trust Model*, 1 J. TELECOMM. & HIGH TECH. L. 309 (2002). See generally LESSIG, *supra* note 62 (articulating the metaphor of the Internet as an “information commons”).

72. See, e.g., Chang, *supra* note 24, at 465 (“[T]he law has apportioned different bundles of rights to different types of property.”). For example, patents and copyrights expire. The law sometimes compels licensing of those rights at a mandated rate. And copyright, trademark, and trade secret laws prevent only some types of uses of protected work. Indeed, the differences are sufficiently great that there is a substantial debate over whether intellectual property is really property at all. See generally Stephen L. Carter, *Does It Matter Whether Intellectual Property Is Property?*, 68 CHI.-KENT L. REV. 715 (1993).

73. The doctrine of trespass to chattels traditionally required actual harm to the chattel, while trespass to land was actionable whether or not the owner's interest in the land was injured. See, e.g., Burk, *supra* note 24, at 32-37, 53-54.

74. The Supreme Court has repeatedly invoked the limited and instrumental nature of intellectual property rights, not hesitating to limit those rights when the public interest has so required. See, e.g.,

Physical resources are also subject to different rules depending on their nature. We have different sets of rights for air,<sup>75</sup> minerals, land, and water. Water is a particularly interesting analogy to the electrical charges that are at issue in the Internet trespass cases, as both flow according to the laws of physics. As Blackstone put it, water “is a movable, wandering thing, and must of necessity continue common by the law of nature so that I can only have a temporary, transient, usufructuary property therein: wherefore, if a body of water runs out of my pond into another man’s, I have no right to reclaim it.”<sup>76</sup> On one view, the Internet trespass cases are all about chasing down electronic “water” in order to reclaim it.<sup>77</sup>

Even within the narrower context of private land, not all rights are uniform. Private property is held in a variety of forms; the fee simple

Graham v. John Deere Co., 383 U.S. 1, 9 (1966) (“The patent monopoly was not designed to secure to the inventor his natural right in his discoveries. Rather, it was a reward, an inducement, to bring forth new knowledge.”); Mazer v. Stein, 347 U.S. 201, 219 (1954) (“The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare . . .”); see also Fogerty v. Fantasy, Inc., 510 U.S. 517, 524 (1994) (“The primary objective of the Copyright Act is to encourage the production of original literary, artistic, and musical expression for the good of the public.”); Feist Publ’ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 349-50 (1991) (stating that the “primary objective of copyright” is to promote public welfare); Stewart v. Abend, 495 U.S. 207, 224-25, 228 (1990) (noting the Copyright Act’s “balance between the artist’s right to control the work . . . and the public’s need for access”); Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 167 (1989) (noting the “careful balance between public right and private monopoly to promote certain creative activity”); Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984) (stating that the limited monopoly conferred by the Copyright Act “is intended to motivate creative activity of authors and inventors . . . and to allow the public access to the products of their genius after the limited period of exclusive control has expired”).

Various statutory provisions reflect this balancing. See, e.g., 15 U.S.C. § 1125(c)(4) (2000) (protections for news reporting and noncommercial use in federal dilution statute); 17 U.S.C. § 102(b) (2000) (idea-expression dichotomy); *id.* § 107 (fair use doctrine); *id.* § 108 (right to make library copies); *id.* § 110 (right to make certain miscellaneous copies and performances); *id.* § 117 (right to copy computer software); 35 U.S.C. § 112 (2000) (requirement of public disclosure of patents). And numerous commentators have alluded to it. See, e.g., 1 PAUL GOLDSTEIN, COPYRIGHT § 1.14, at 1:40 (2d ed. 1996); L. RAY PATTERSON & STANLEY W. LINDBERG, THE NATURE OF COPYRIGHT 120-22 (1991); Julie E. Cohen, *Reverse Engineering and the Rise of Electronic Vigilantism: Intellectual Property Implications of “Lock-Out” Programs*, 68 S. CAL. L. REV. 1091, 1198 (1995); Dennis S. Karjala, *Federal Preemption of Shrinkwrap and On-Line Licenses*, 22 U. DAYTON L. REV. (1997); Pierre N. Leval & Lewis Liman, *Are Copyrights for Authors or Their Children?*, 39 J. COPYRIGHT SOC’Y 1, 11 (1991); Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 967-68 (1990); Margaret Jane Radin, *Property Evolving in Cyberspace*, 15 J.L. & COM. 509, 515 (1996). These are only a few of the innumerable citations on this point.

75. It is, if you will forgive the expression, as “free as the air to common use.” See *Int’l News Serv. v. Associated Press*, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting).

76. 2 WILLIAM BLACKSTONE, COMMENTARIES \*18. For a cautionary amendment, see Richard A. Epstein, *Addison C. Harris Lecture Nov. 9, 2000*, 76 IND. L.J. 803, 805 n.14 (2001).

77. I don’t want to push this analogy too far. There are significant differences between water and information that would require greater elaboration than I can give here. My point is only that if we look to the physical world for analogies, the analogy to land is not necessarily the most apt.

absolute is only one extreme example.<sup>78</sup> Property may be held subject to reversionary interests, or only for a period of years, or without a right to make certain kinds of uses of the land.<sup>79</sup> Different parties may own land and the buildings thereon.<sup>80</sup> Parties may jointly own overlapping rights to use the same piece of property. Carol Rose and Elinor Ostrom have both written of “limited commons property,” regimes in which property is held in common by a subset of the general public or in trust for the benefit of a particular group.<sup>81</sup> Property interests of all sorts may be limited by easements or covenants, both those recorded with the property itself and those implied for some public purpose. And property interests are hardly immutable; the fundamental legal rights associated with ownership have changed over time.<sup>82</sup>

Remedies for incursions upon property interests also vary depending on the nature of the interests on both sides. While the normal rule is that property owners are entitled to injunctive relief, there are significant exceptions. In some cases, courts have permitted infringement of a property right to continue and required the interloper to pay damages to compensate the property owner.<sup>83</sup> Further, courts have not always concluded that an

78. For a discussion of those forms, see Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1 (2000).

79. See generally JESSE DUKEMINIER & JAMES KRIER, *PROPERTY* (4th ed. 1998).

80. For example, employees of Stanford University may buy houses on the Stanford campus, but the university owns the land on which the houses are built, and restrictive covenants prevent the houses from being resold except to other members of the Stanford community. Similarly, much of the land in Hawaii is owned not in fee simple, but in long-term leasehold interests. See, e.g., Eric Steven O'Malley, *Irreconcilable Rights and the Question of Hawaiian Statehood*, 89 GEO. L.J. 501, 506-07 (2001).

81. See, e.g., ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* 23 (1990); Rose, *supra* note 70, at 154.

82. The clearest example is the enclosure movement, which Hunter references, see Hunter, *Cyberspace as Place*, *supra* note 2, at 500-09, in which the law went from recognizing the right of an animal owner to graze the animal on another's private but unfenced land to the opposite assumption. See, e.g., DAVID DARY, *COWBOY CULTURE: A SAGA OF FIVE CENTURIES* 308-10 (1981); R. Benjamin Brown, *Enclosing America: Creating Private Property Rights in the Nineteenth Century* (2001) (draft working paper, on file with author). Rusch notes the unchecked growth of fences, in which enterprising property owners fenced off lakes, roads, and other public resources in order to privatize them. Rusch, *supra* note 2, at 582-85. A number of scholars have referred to the unchecked growth of intellectual property rights as a “second enclosure movement.” See, e.g., Hannibal Travis, *Pirates of the Information Infrastructure: Blackstonian Copyright and the First Amendment*, 15 BERKELEY TECH. L.J. 777 (2000); James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain* (2003), at <http://www.law.duke.edu/pd/papers/boyle.pdf>.

83. In intellectual property law, for example, there are a number of compulsory licenses mandated by the copyright statute. See, e.g., 17 U.S.C. §§ 111, 114, 115, 119 (2000). In addition, the Supreme Court has on several occasions suggested that injunctive relief may not be appropriate against certain types of infringement. See, e.g., *New York Times Co. v. Tasini*, 533 U.S. 483, 505 (2001); *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 578 n.10 (1994). Courts have taken analogous action in cases involving real property. See, e.g., *Boomer v. Atl. Cement Co.*, 257 N.E.2d 870 (N.Y. 1970) (refusing injunction in nuisance case in favor of permanent damages where injunction would wreak social harm); *Raab v. Casper*, 124 Cal. Rptr. 590 (Cal. Ct. App. 1975) (ruling that damages but

unwanted incursion upon real property is illegal. Under the doctrine of trespass, physical intrusion onto the land is itself actionable. But under the true law of trespass to chattels—as opposed to the mutant version courts have applied to cyberspace—a trespass is not actionable absent evidence of harm to the chattel itself or to the owner's use of it.<sup>84</sup> And under the law of nuisance, certain more intangible intrusions onto private space—the playing of loud music next door, say, or the emission of pollutants—are only actionable if the harm they cause the property owner exceeds the benefits associated with the conduct.<sup>85</sup>

The nuisance cases are particularly instructive because they show that even in the context of real property, there is room to focus on the defendant's conduct. Nuisance law permits us to weigh the costs and benefits of exclusion. It is a standard rather than a rule. The balancing approach of nuisance law may be administratively more costly than an absolute rule,<sup>86</sup> but it is almost certainly the right approach when considering the creation of a fundamentally new right that would change the established patterns of behavior on the Internet.<sup>87</sup> In a nuisance analysis, the cyberspatial metaphor would not impel us inexorably towards an absolute right of exclusion. Rather, it would allow us to ask whether, in the context of the Internet, the defendant's conduct intrudes on some fundamental right we want to confer on the owner of a web server. Therefore, even if we accept the metaphor of cyberspace as real property, we are left with a variety of legal means to implement that idea. As Dan Burk has persuasively argued, conferring an absolute right to exclude has been the wrong choice as a policy matter in the Internet cases that have come up so far.<sup>88</sup>

In the Internet trespass cases, the defendants' conduct has fallen into two basic categories: attempts to acquire information and attempts to convey information.<sup>89</sup> *eBay*,<sup>90</sup> *Register.com*,<sup>91</sup> and *Oyster Software v. Forms*

---

not an injunction were available to an infringed-upon landowner from a neighbor who had in good faith begun building past the boundaries of his property).

84. See, e.g., RESTATEMENT (SECOND) OF TORTS § 218 cmt. e (1977).

85. See, e.g., Burk, *supra* note 24, at 51-54.

86. Cf. Edward Lee, *Rules and Standards for Cyberspace*, 77 *Notre Dame L. Rev.* 1275 (2002).

87. See Burk, *supra* note 24; O'Rourke, *Future*, *supra* note 24, at 161. More generally, I think it is fair to say that in uncharted areas rules require more justification than standards, precisely because it is hard to know what approach is optimal. The courts in the Internet trespass cases are effectively creating new legal doctrine. My inclination is to be cautious rather than bold in creating such a new right, and to give courts an opportunity to evaluate the consequences of the new claim. Cf. Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 *YALE L.J.* 357, 394-95 (2001).

88. Burk, *supra* note 24, at 51-54; see also Hunter, *Cyberspace as Place*, *supra* note 2, at 510-13.

89. Tim Wu suggests that we might distinguish between these two on the grounds that an attempt to acquire information from outside requires a different sort of conduct than an attempt to send information to the outside. See Wu, *supra* note 61, at 1176. But in both cases the defendant engaged in some affirmative conduct; the real question is whether the law should prohibit that conduct on the basis of its effects rather than its form. Accord Orin S. Kerr, *Are We Overprotecting Code? Thoughts on*

*Processing*<sup>92</sup> all involved efforts to download unprotected information from a publicly accessible website. It made little sense to enjoin this unexceptional conduct. Acquisition of information is normally a social good, so long as the information is available in a public place and is not itself protected by intellectual property law. In Burk's terms, access to eBay's public data by those who would promote competition was "locally objectionable but globally beneficial."<sup>93</sup> By contrast, the downloading of copyrighted songs, text, or software from a web page without authorization can have market-destructive effects. Similarly, the law should prohibit acquiring information from a nonpublic source by hacking into a private computer system. But we do not need a broad doctrine of trespass or even nuisance to reach that result. Intellectual property and computer crime laws already punish the improper acquisition of information, without also punishing socially beneficial uses.<sup>94</sup>

Dissemination of information can also be either good or bad, depending on the context. Dissemination of unprotected speech, such as obscenity, true threats, defamation, and false statements of fact, serves no social function and has great capacity for mischief. By contrast, dissemination of other kinds of information is generally desirable as a social matter, except when a recipient is overwhelmed with large quantities of undesired information. In cases like *Intel v. Hamidi*,<sup>95</sup> efforts to disseminate protected speech of relevance to a particular targeted audience deserve to be protected, even if a recipient like Intel does not like the message.<sup>96</sup> The *Cyber Promotions* cases,<sup>97</sup> by contrast, involved bulk, unsolicited commercial email that in many cases also falsely represented its source. While there is some speech value to spam, its social harm outweighs its value, and so it should probably be prohibited. But once again, we don't need a broad doctrine of trespass to reach this result. Statutes that prohibit spam,

---

*First-Generation Internet Law*, 57 WASH. & LEE L. REV. 1287 (2000) (suggesting that the law is wrongly regulating computer code based on its form rather than its function).

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

91. *Register.com, Inc. v. Verio, Inc.*, 126 F. Supp. 2d 238 (S.D.N.Y. 2000).

92. No. C-00-0724 JCS, 2001 WL 1736382 (N.D. Cal. Dec. 6, 2001).

93. Burk, *supra* note 24, at 52.

94. At least, they do if they are interpreted properly. Orin Kerr has pointed out that the CFAA has been interpreted too broadly because of its vague definition of unauthorized access to a computer. Kerr, *supra* note 30.

95. 114 Cal. Rptr. 2d 244 (Cal. Ct. App. 2001), *review granted*, 43 P.3d 587 (Cal. 2002).

96. See, e.g., *Hill v. Colorado*, 530 U.S. 703, 728 (2000) ("[T]he First Amendment protects the right of every citizen to 'reach the minds of willing listeners and to do so there must be the opportunity to win their attention.'"); Kreimer, *supra* note 24, at 147 ("[A] great deal will turn on the question of whether, in non-commercial cases, the courts will give priority to the metaphor of property rights in the servers or to" the First Amendment.).

97. *CompuServe, Inc. v. Cyber Promotions, Inc.*, 962 F. Supp. 1015 (S.D. Ohio 1997); *Cyber Promotions, Inc. v. Am. Online, Inc.*, 948 F. Supp. 436 (E.D. Pa. 1996).

obscenity, defamation and libel already exist, and they do not also punish desirable social conduct like Hamidi's.

In short, to call something property is only to begin the inquiry, not to end it. Our society has many different rules of property to account for many different situations. The rights and remedies we give to private property owners depend in part on the social value of allocating control to the property owner and the social value of the use that defendants make of that property. When we apply these principles to the Internet, we find that existing tort law already does a rather good job of punishing undesirable conduct. Adding a particular form of strong property protection into the mix threatens to deter a good deal of valuable use of the Internet without doing much more to stop bad uses.

### CONCLUSION

Metaphors exist to help us think through new problems by analogizing them to old ones. The *CYBERSPACE AS PLACE* metaphor can be valuable. Thinking about the Internet by reference to the physical world is fine, if for no other reason than that courts must apply a host of physical-world laws to the Internet. But blind application of the metaphor to reach a particular result obscures more than it illumines. The metaphor will serve its purpose only if we understand its limitations—the ways in which the Internet is not like the physical world. Courts must also understand that metaphor is no substitute for legal analysis. “Property” is a doctrinal tool that we use to create a just society. To reify it—to make it a talisman whose very invocation renders us incapable of thinking through the optimal social result—is to exalt form over substance. Choosing form over substance is rarely a good idea; and certainly not on the Internet, where the form itself is nothing but a metaphor.