I. METAPHOR AND THE LAW

"Metaphors in law are to be narrowly watched, for starting as devices to liberate thought, they end often by enslaving it." Judge Benjamin Cardozo

The use of metaphor in legal discourse is pervasive. The legal world has been described as a magical one in which “liens float, corporations reside, minds hold meetings, and promises run with the land.” Traditionally defined as “figure[s] of speech containing an implied comparison, in which a word or phrase ordinarily and primarily used of one thing is applied to another,” metaphors wield enormous power over thought and behavior. Some psychology and linguistic scholars have even asserted that all knowledge and understanding is metaphorical in nature.

5. See George Lakoff & Mark Johnson, Metaphors We Live By 3 (1980); Leary, supra note 4, at 2 (“All knowledge is ultimately rooted in metaphorical (or analogical) modes of perception and thought.”); George Lakoff & Mark Turner, More Than Cool Reason: A Field Guide to Poetic Metaphor xi (1989) (“Far from being merely a matter
Within the law, metaphors mold the framework of discourse, determining the scope of appropriate questions about and answers to various social and legal problems. Courts and commentators employ metaphors as heuristics to generate hypotheses about the application of law to novel, unexplored domains. Metaphors structure the way lawyers conceptualize legal events, as they infiltrate, consciously and unconsciously, legal discourse. Under the classic formalist view of common law analogy as syllogism, analogical reasoning from precedent begins with the establishment of a rule behind a case or group of similar cases. Judges then apply the rule fairly mechanically to the case at hand to yield a result that is understood through the background of precedent. In contrast to figurative literary metaphors, highly structured analogical, metaphorical mappings may be used to make persuasive, logical arguments. Like all metaphors, however, legal metaphors possess a paradoxical quality, embodied in the constant tension between the legal metaphor’s literal incongruence and metaphorical congruence with reality. Metaphors whose metaphorical congruence with reality is perceived as dominant, such as the “marketplace of ideas” metaphor in First Amendment jurisprudence and the “bundle of sticks” metaphor in Takings clause jurisprudence, will continue to have analogical value and will be perpetuated through judicial opinion and scholarly commentary. Conversely, legal metaphors perceived as having greater literal incongruence with reality, such as the slavery metaphor of African Americans as chattels, will lose their value and be discarded.
While metaphors aid humans in comprehending abstract concepts and legal doctrines, they also may limit human understanding by selectively highlighting various aspects of an issue while suppressing and marginalizing others. Commentators have warned that the unreflective use of metaphors can lead lawyers to take for granted the “realities” that metaphors enable. A bad metaphor can also simply lead to bad decision making. Cass Sunstein argues that the “marketplace of ideas” metaphor has turned the right to free expression into a degraded form of commerce. When we are unconscious of the suggestive power of language, our imagination risks becoming confined by the metaphorical images that have been applied in the past, or more ominously, by the images that others presently select for us for the future.

When courts encounter new technologies not yet anticipated by the law, their reliance on analogical reasoning plays a profoundly important role in the application of proper legal rules. Courts, however, have demonstrated a bad track record in adopting the appropriate analogies or metaphors for these new technologies. In *Olmstead v. United States*, for example, a Federal Bureau of Investigation wiretap was used to obtain evidence of approximately seventy people who were engaged in a conspiracy to transport and sell liquors in violation of the Eighteenth Amendment (National Prohibition Act of 1919). The Court, finding that the wiretaps were made without having to physically trespass on private property because the phone wires were not part of Olmstead’s house or office, ruled that the Fourth Amendment had not been violated, as there had been no literal physical inva-
When new technologies have entered the market, courts have similarly struggled in analogizing them to older technologies — one only needs to look at the legal confusion surrounding the analogizing (or lack thereof) of the telephone to the telegraph. By failing to adopt appropriate metaphors in regulating new technologies, courts risk creating bad law. Although these mistakes can be corrected over time, they can cause harm in the intervening years. Additionally, judicial rejection of analogizing altogether may prove to be equally detrimental, as *sui generis* regimes governing new technologies have historically failed to preserve existing fundamental rights and liberties.

This paper seeks to explore the evolution of metaphorical inferences as applied to the Internet within legal commentary and judicial opinion. Three metaphors in particular will be examined (though this is not an exhaustive analysis by any means): the information superhighway, cyberspace, and the Internet as “real” space. Given the Internet’s ongoing evolution as an unstable and ever-changing technology, courts and commentators have faced perpetual difficulty in mapping metaphors to it. Changing social constructions of the Internet as necessitated by its evolving underlying technological architecture have supported, or conversely eroded, a particular metaphor’s literal congruence with reality. The purpose of this paper is not to normatively assess what metaphor (if any) *ought* to be applied to the Internet in legal analysis, rather it is to make transparent the different conceptions of the Internet courts and commentators are *sub silentio*

---

18. *Id.*

19. See Ethel de Sola Pool, *Technologies of Freedom* 100 (1983); City of Richmond v. S. Bell, Tel. & Tel. Co., 174 U.S. 761, 776 (1899). For other early judicial examples of technological analogizing regarding the telephone and telegraph, see Northwestern Tel. Exch. Co. v. Chicago, M. & St. P. Ry. Co., 79 N.W. 315, 317 (Minn. 1899) (“The rule is well established that in applying the principles of the common law or in construing statutes the telephone is to be considered a telegraph . . . .”); Hudson River Tel. Co. v. Waterliet Turnpike & Ry Co., 32 N.E. 148, 149 (N.Y. 1892) (applying statutes authorizing telegraph transmission to telephone); Attorney Gen. v. Edison Tel. Co., 6 Q.B.D. 244 (1880) (same); see also Duke v. Cent. New Jersey Tel. Co., 21 A. 460 (N.J. 1891) (The telephone is a “novel method of accomplishing the object for which telegraphs were erected . . . .”). But see Chicago Tel. Co. v. Postal Telegraph-Cable Co., 120 N.E. 795, 799 (Ill. 1918) (Carter, J., dissenting) (“Telegraph companies are as distinct from telephone companies as a railroad company is distinct from a steamboat company.”).

20. See Zechariah Chafee, Jr., *Free Speech in the United States* 381 (1941) (failing to analogize to old technologies in the context of the First Amendment led to “censorship of . . . the motion picture and the radio.”); Mutual Film Corp. v. Indus. Comm’n, 236 U.S. 230, 244 (1915) (stating that films were “motion pictures” rather than a traditional method of expression, and thus not subject to First Amendment protection), *overruled by* United States v. Paramount Pictures, Inc., 334 U.S. 131, 166 (1948).

employing, and the various sociological, technological, and ideological conceptions of the world that support them.

II. THE INTERNET AS CONDUIT: THE INFORMATION SUPERHIGHWAY

As the first face of the Internet presented to most Americans, the “information superhighway” metaphor shaped much of the early thinking about the Internet. The following features characterize the metaphor: (1) suitability for state involvement, (2) ephemerality of information, and (3) low degree of exceptionalism. E-mail seems to be the metaphor’s paradigmatic instantiation.

Suitability For State Involvement

From its very introduction into public consciousness in early 1994, probably by Al Gore,22 the “information superhighway” was a government project.23 The ties to the Internet’s early history as a military experiment are clearest in this metaphor.24 Highways are built by the state to serve the automotive needs of the people, subject to state and (indirect) federal regulation.25 If the Internet is a highway, then

23. See, e.g., Peter B. White, Online Services and “Transactional Space”: Conceptualizing the Policy Issues, International Association of Media and Communication Research (AIERI/IAMCR/AIECS) Conference (Aug. 1996), available at http://dpub36.pub sbg.ac.at/ectp/WHITE_P.htm (“The information superhighway can be seen as marginalizing [sic] some groups and privileging others, it can ignore and destroy neighborhoods and emphasize the needs of commercial and government traffic.”); Michael R. Curry, Cyberspace and Cyberplaces: Rethinking the Identity of Individual and Place, International Association of Media and Communication Research (AIERI/IAMCR/AIECS) Conference (Aug. 1996), available at http://dpub36.pub sbg.ac.at/ectp/CURRY_P.HTM, Calvert, supra note 22, at 549 (“There is a danger that we are drawn to a metaphor because we find it easy to understand and think readily of the good that it evokes while ignoring the bad to which it may lead. We have swallowed up whole the information superhighway metaphor in the United States, with all the benefits it implies and that are heaped upon it by politicians.”).
25. See, e.g., South Dakota v. Dole, 483 U.S. 203, 206 (1987) (holding that it is constitutional for Congress to reduce funding to state’s highway program by 5% if it failed to raise its drinking age to 21). The Court found that “the condition imposed by Congress is directly related to one of the main purposes for which highway funds are expended — safe interstate travel.” Id. at 208.
government can regulate it for the safety of those who pass on it.\textsuperscript{26} 
Age restrictions seem particularly appropriate under this metaphor; with adult verification requirements being analogized to the drivers’ licenses of the real world, access to the Internet is a privilege that is only conferred on the mature.\textsuperscript{27} Some commentators also suggest that the metaphor is an embodiment of the favoring of commerce over the public good.\textsuperscript{28}

\textbf{Ephemerality of Information}

The highway metaphor connotes a \textit{transfer} of information.\textsuperscript{29} Though cars use the highway to travel the distance between two destinations, no one “lives” or “resides” on the highway; in fact, one of the first rules of driving is never to stop your car while on the road. What is not intuitively obvious is that the information superhighway is itself an account of \textit{space}, but \textit{not place}, in the sense that:

\begin{quote}
[S]pace implies vectors of direction, velocities and time variables. Accordingly space can only be conceived in terms of movement — if place is defined in terms of stability, then space carries dynamic connotations . . . . [T]he city street, geometrically defined as a place, is transformed into a space by pedestrians, bicyclists, and motorists, using the street.\textsuperscript{30}
\end{quote}

\textsuperscript{26} This regulation is not without limits, however, as a string of dormant commerce clause cases suggest. \textit{See, e.g.}, Kassel v. Consol. Freightways Corp., 450 U.S. 662, 669–70 (1981); So. Pac. Co. v. Arizona, 325 U.S. 761, 783 (1945). If we adopt the superhighway metaphor, these cases suggest that state regulation that protects beyond federal regulation of the Internet may be unconstitutional if seemingly protectionist. \textit{See generally} Kenneth D. Bassinger, \textit{Note, Dormant Commerce Clause Limits on State Regulation of the Internet: The Transportation Analogy}, 32 GA. L. REV. 889 (1998).

\textsuperscript{27} But see Calvert, \textit{supra} note 22, at 555 (arguing “that the information superhighway metaphor suggests that the government is little more than the highway patrolman who busts the occasional speeder who takes advantage of the open roads.”).

\textsuperscript{28} See Calvert, \textit{supra} note 22, at 545 (“It should come as no shock that a metaphor developed to provide a framework for communications regulation springs from the commerce-based, transportation heritage of the highway system. Commerce-based policies and regulations have always been imposed — superimposed, really — on non-print media in the United States.”).

\textsuperscript{29} Cf. Calvert, \textit{supra} note 22, at 556 (“The highway metaphor suggests travel and point-to-point communication.”); Symposium, \textit{Theories and Metaphors of Cyberspace: Introduction}, at \url{http://pespmc1.vub.ac.be/cybspasy.html} (Apr. 9–12, 1996) (“[A]n example of such metaphors for global networks functions is the ‘information superhighway’ which emphasizes the speedy channels along which information moves.”).

Like all metaphors, this account makes something visible (the transient nature of information),\(^31\) while at the same time rendering something else invisible (that the information continues to exist after a particular transfer).

**Low Degree of Exceptionalism**

The information superhighway analogy obscures much that is special about the Internet, in that communication conduits are familiar. Accordingly, the metaphor would lead us to believe that the rules that govern telephones or mail are appropriate for the Internet.

**Commentators and Courts**

The information superhighway metaphor seems to have reached its peak in 1996 and has declined ever since. A quote from a somewhat late (1998) commentator captures the metaphor’s emphasis on the Internet’s low exceptionality and suitability for state involvement:

> Software can be transported to a computer user through the interstate telephone lines of the world wide web, just as it can travel the interstate highways in the back of a truck to a computer store and the eventual end user. In this manner, the Internet and more traditional means of transportation, such as highways, serve the same purpose of moving goods across state lines.\(^32\)

While some commentators realized the dangers of the low exceptionality implication,\(^33\) these same commentators failed to realize that the metaphor also obscures the reality that Internet information is not

---


\(^{32}\) Bassinger, supra note 26, at 905; see also Patricia Diaz Dennis & Gary M. Epstein, *The Future of Telecommunications*, in 12th Annual Institute on Telecommunications: Policy and Regulation 139, 199 (1994) (“Through digitization, the Information Superhighway can carry any type of ‘freight’ in the form of bits — be they voice, video, or data — from the source to the user.”) (quoting United States General Accounting Office, Information Superhighway: Issues Affecting Development (Sept. 1994)).

\(^{33}\) See, e.g., White, supra note 23 ("[T]he superhighway metaphor . . . could encourage us to ignore how and why information superhighways are different from highways built of concrete and steel.").
ephemeral. The remarks of one legal commentator in 1994 are particularly representative: "[h]aving access to the Internet means having access to send and receive electronic mail, to upload and download files, and to subscribe to the Usenet, a network of thousands of special interest groups that boasts millions of readers." That the average person’s conception of the “Internet” in 2002 is more likely to concentrate on the “web” and not Usenet or e-mail is both a function of change in architecture — the advent and growth of browser technology (making the information superhighway metaphor literally incongruous) — and that newer metaphors have displaced the “information superhighway” metaphor. Adoption of this metaphor also dictated what sub-metaphors would be used and what the dominant cyberlaw issues would be. Some commentators even suggested that the information superhighway metaphor was facilitative to one concept of community (the so-called “global village: which in some ways is a product of the Internet), but devastating to the local communities that pre-existed it.

Some judicial opinions also applied this metaphor to the Internet (though not nearly as ubiquitously as legal commentators). In Brookfield v. West Coast Entertainment, the Ninth Circuit adopted wholesale the highway analogy, opining:

Using another’s trademark in one’s metatags is much like posting a sign with another’s trademark in front of one’s store. Suppose West Coast’s [the defendant] competitor (let’s call it “Blockbuster”) puts up a billboard on a highway reading — “West Coast Video: 2 miles ahead at Exit 7” — where West Coast is really located at Exit 8 but Blockbuster is located at Exit 7.

34. Id. (finding that the main difference from real highways is “instantaneity” — that with “traditional superhighways . . . it takes time to traverse distance, but with ’information highways’ we have a new kind of distance which takes no time to traverse”).
35. Long, supra note 24, at 1181.
36. See supra note 10 and accompanying text.
37. A good example is repeated analogies to “caller ID” on the telephone, and the corresponding focus on the legality of Internet anonymity. See Long, supra note 24, at 1185–1212.
38. See, e.g., Calvert, supra note 22, at 562 (“As more people jump on the metaphorical information superhighway to communicate with faceless people they have never met, they also abandon those in their local communities. Their time is consumed by pseudo-social online endeavors, not by face-to-face personal interaction. They abandon existing geographic communities rich with physical interaction . . . for electronic ones that often are more akin to fan clubs and special interest groups than they are to communities.”).
39. Brookfield Communications, Inc. v. West Coast Entm’t Corp., 174 F.3d 1036, 1064 (9th Cir. 1999).
To give another example, the Southern District of New York, in deciding whether a law against transmitting harmful material to minors violated the Commerce Clause, observed:

The courts have long recognized that railroads, trucks, and highways are themselves “instruments of commerce,” because they serve as conduits for the transport of products and services. The Internet is more than a means of communication; it also serves as a conduit for transporting digitized goods . . . which can be downloaded from the provider’s site to the Internet user’s computer . . . . The inescapable conclusion is that the Internet represents an instrument of interstate commerce, albeit an innovative one . . . [and] impels traditional Commerce Clause considerations.40

Both cases emphasize commerce, a lack of exceptionalism, and in the latter quote, a presumption of (federal) government regulation.41

Judicial rejection of the information superhighway metaphor, however, became increasingly uniform after 1996. For example, in Bihari v. Gross, where the plaintiffs sought to preliminarily enjoin the defendants from using their names in the domain names or metatags of any of their websites, the Southern District of New York rejected an analogy to real space highways in the “confusion of initial interest

---

40. Am. Libraries Ass’n v. Pataki, 969 F. Supp. 160, 173 (S.D.N.Y. 1997) (citations omitted) (emphasis added); see also Cyberspace Communications v. Engler, 55 F. Supp. 2d 737, 752 (1999) (involving a similar law, and reaching the same result finding, “the chilling effect on Internet communications outside of Michigan greatly outweighs any putative benefit inside Michigan. The Act, and other state statutes like it, would subject the Internet to inconsistent regulations across the nation. Information is a commodity and must flow freely. On this basis alone, the Act may be preliminarily enjoined as a violation of the Commerce Clause.”). Arguably the metaphor is even more dominant in Engler, where the court observes, “[l]ike the nation’s railways and highways, the Internet is by nature an instrument of interstate commerce. Just as goods and services travel over state borders by truck and train, information flows freely across state borders on the Internet.” Id. at 744 (citations omitted).

41. By contrast, in Ford Motor Co. v. Texas Department of Transportation, the Fifth Circuit recently rejected a dormant commerce clause attack premised on Pataki and expressed skepticism about whether the “Internet falls among those types of commerce that ‘demand consistent treatment and are therefore susceptible to regulation only on a national level.’” Ford Motor Co. v. Tex. Dept’ of Transp., 264 F.3d 493, 505-06 (5th Cir. 2001) (citations omitted). While the variance in outcome of Ford Motor and Pataki can be explained by factual differences, what is more telling is the difference in attitude towards the Internet, reflecting the decline of the highway metaphor.
A similar (if less frank) rejection of the metaphor was also made by the Southern District of New York in *Universal Studios v. Reimerdes*:

Links bear a relationship to the information superhighway comparable to the relationship that roadway signs bear to roads but they are more functional. Like roadway signs, they point out the direction. Unlike roadway signs, they take one almost instantaneously to the desired destination with the mere click of an electronic mouse. Thus, like computer code in general, they have both expressive and functional elements... [and] are within the area of First Amendment concern.  

The *Bahari* and *Reimerdes* courts acknowledge Internet exceptionalism. The information superhighway is not like a regular highway. Its links are not like roads signs, for that conception ignores the instantaneousness of the Internet, and its structure is not like a mere conduit by which information travels to and fro, but instead embodies several destinations each with its own content.

---


43. *Id.* at 320 (internal citations omitted).

As more and more individuals were introduced to the Internet through web browsers in the mid-1990s, a plethora of new metaphors began to circulate in the popular press, at various academic symposia, and in legal writing, and began to displace the information superhighway metaphor. One particularly pervasive metaphor was “cyberspace,” which suggested that the Internet resembled geographic space. In stark contrast to the information superhighway metaphor outlined above, the “cyberspace” metaphor evokes three broad conceptual themes about the Internet: (1) unsuitability for government regulation, (2) the notion of a static, “borderless” place and (3) a high degree of exceptionalism. Each theme reinforces another theme.

Commentators and Courts

Coined by science fiction writer William Gibson in his groundbreaking novel *Neuromancer*, the term “cyberspace” connoted not only a “new” space, but a space so dramatically different from “real” space that it might be immune from traditional government regulation. The most well-known articulation of this argument, advanced by David R. Johnson and David Post in their seminal article, *Law and Borders — The Rise of Law in Cyberspace*, maintained that territorial governments cannot, and indeed should not, regulate the Internet.

46. Id. (quoting John Perry Barlow, 1991).
47. In 1996 the Internet celebrated its 25th anniversary, reached 40 million users, and companies like Netscape were the “darlings of high-tech investors.” Net Timeline, at http://www.pbs.org/internet/timeline/index.html (last visited Nov. 29, 2002).
48. Bolstering the cyberspace metaphor was the existence of various online, virtual communities, such as Multi-User Domains (“MUDs”) and MUD, Object Oriented (“MOOs”), in which members participated in “[t]raditional activities indicative of geographic communities, such as town meetings, exchanging information, discussing problems, coping, and informal chatting.” Patrick T. Egan, Note, *Virtual Community Standards: Should Obscenity Law Recognize the Contemporary Community Standard of Cyberspace?*, 30 SUFFOLK U. L. REV. 117, 131 (1996). For more on virtual communities, see Developments in the Law — The Law of Cyberspace: Communities Virtual and Real: Social and Political Dynamics in the Law, 112 HARY. L. REV. 1586 (1999).
49. This notion of place as one of stability is in contrast to the notion of space as a direction-oriented concept. See supra notes 30–31 and accompanying text.
This argument was explicitly premised on a number of vital assumptions concerning the Internet’s architecture, including the “absence of territorial borders in cyberspace,” and the ability of online parties to maintain their anonymity and hide their geographic location. As Post and Johnson stressed, location on the Internet could only be conceptualized within a “virtual space consisting of the addresses of machines between which messages and information are routed.”

Johnson and Post advocated “conceiving of Cyberspace as a distinct ‘place’ for purposes of legal analysis by recognizing a legally significant border between Cyberspace and the ‘real world.’” Treating the Internet as a separate “place” should come naturally, for the crossing into “[c]yberspace is a meaningful act” that is socially, and thus should be legally, cognizable. Related to this analysis was the concept of the Internet as a “frontier,” advanced by John Perry Barlow, co-founder of the Electronic Frontier Foundation. Barlow argued forcefully in his oft-cited 1994 article, *The Economy of Ideas*, that the Internet resembles “the 19th century American West in its natural preference for social devices that emerge from its conditions rather than those that are imposed from the outside.” The very concept of “outside” is meaningful, however, only if one takes literally the metaphoric proposition that the “electronic frontier” is indeed a place.

Building on Barlow’s earlier analysis, Post and Johnson concluded that regulation of this new place should be left to its inhabitants, who alone can “define legal personhood and property, resolve disputes, and crystallize a collective conversation about online participants’ core values.” Though territorial lawmakers would understandably feel threatened at first, they would soon adapt to this new order and learn to grant comity to the rules and institutions of cyberspace. *The Rise of Law in Cyberspace* was soon followed by a wealth of scholarly material debating the specifics of cyber-governance. Numerous academic symposia around the world discussed the legal contours of this new place, with very few rejecting

52. The law for the Internet “will not, could not, and should not be the same law as that applicable to physical, geographically-defined territories.” Id. at 1402.
53. Id. at 1371.
54. Id. at 1378.
55. Id. at 1379.
57. Johnson & Post, supra note 51, at 1367.
the initial metaphorical premise at the core of Johnson and Post’s arg-
ument.59 The cyberspace metaphor’s acceptance within legal acade-
mia was, and continues to be, quite large. Three hundred and sixty articles in the Westlaw “Journals and Law Reviews” database address
“[something] in Cyberspace.”60

As courts increasingly adjudicated Internet related cases in the mid-1990s, they also began to stress the Internet’s exceptional and novel nature, finding it to be “an entirely new means of information exchange,” where “analogies involving the use of mail and telephone are less than satisfactory.”61 Reno v. ACLU, the Supreme Court’s first opinion about the Internet, contained quite dramatic language adopting the metaphor of cyberspace as a novel place existing outside terri-
torial boundaries: “Taken together, these tools constitute a unique medium — known to its users as ‘cyberspace’ — located in no par-
ticular geographical location but available to anyone, anywhere in the world, with access to the Internet.”62 Numerous other courts also began to describe the Internet as transcendent of borders and potentially immune to real space regulation.63

The move from the information superhighway to the novel space metaphor is sharply illustrated by following the trajectory of courts’ attempts to apply the community standards prong of the test for ob-

---

59. There were, of course, some notable dissenters. See, e.g., Frank H. Easterbrook, Cy-
berspace and the Law of the Horse, 1996 U. CHI. LEGAL F. 207 (derisively labeling Internet law as the “Law of the Horse”); Lawrence Lessig, The Zones of Cyberspace, 48 STAN. L. REV. 1403 (1996) (disagreeing with the idea that there could be a total separation between real-law and Internet-law); Alex Kozinski, Keynote Colloquy Finding Justice In the Internet Dimension (An Interview Conducted by Seattle University School of Law Dean James E. Bond), 20 SEATTLE U. L. REV. 619, 620 (1997) (adopting a legal realist approach, Kozinski seemed to reject any analogizing: “Unfortunately, when people talk about the Internet, they tend to talk in terms of analogies or metaphors — the ‘information superhighway,’ the ‘global village,’ the ‘continuing conversation.’ I don’t think that these do much to advance the analysis. Indeed, they tend to hide what the real issues are.”)

60. Westlaw search done April 3, 2002. Before 1999, 193 articles dealt with “[some-
thing] in Cyberspace.” This search was inspired by a similar search done by Timothy Wu in his article When Law & The Internet First Met, GREEN BAG, Winter 2000, at 171. Notable article examples include Thomas R. Lee, In Rem Jurisdiction in Cyberspace, 57 WASH. L. REV. 97 (2000); Catherine J. Lanctot, Attorney-Client Relationships in Cyberspace: The Peril and the Promise, 49 DUKE L.J. 147 (1999); and Harold Smith Reeves, Property in Cyberspace, 63 U. CHI. L. REV. 761 (1996).


scenity laid down in *Miller v. California* to the Internet. The first court to consider the matter was the Sixth Circuit in *United States v. Thomas*. It found that in the transmission of allegedly obscene material, the appropriate “community” for the purposes of the *Miller* test is the geographical community in which the material was sent or received. This conclusion was premised on there being venue in either place because “venue for federal obscenity prosecutions lies ‘in any district from, through, or into which’ the allegedly obscene material moves.” The court supported its holding by citing *Hamling v. United States*, a case about the mailing of obscene materials that held that it is not unconstitutional to subject interstate distributors of obscenity to varying community standards. Relying on *Sable Communications v. FCC*, a case about dial-a-porn services, the *Thomas* court rejected the plaintiff’s claim that “the computer technology used here requires a new definition of community, i.e., one that is based on the broad-ranging connections among people in cyberspace rather than the geographic locale of the federal judicial district of the criminal trial.”

*Thomas* demonstrates how a technology’s architectural structure at a given point in time can compel a court to adopt a metaphor (the Internet as conduit) that is constrained in its broader applicability. Architecturally the case involved a Bulletin Board Service (“BBS”), which although not conduit-like to the same extent as e-mail services, was nonetheless much harder to conceptualize as a “space” than the web-based browser interfaces that would succeed it. The analogy to cases of dial-a-porn and mail distribution of obscenity (low degree of

---

64. 413 U.S. 15, 24 (1973) (holding that the test for obscenity was whether (1) “‘the average person, applying contemporary community standards’ would find that the work, taken as a whole, appeals to the prurient interest”; (2) it “depicts or describes, in a patently offensive way, sexual conduct specifically defined by the applicable state law”; and (3) “the work, taken as a whole, lacks serious literary, artistic, political, or scientific value.”).
65. 74 F.3d 701 (6th Cir. 1996).
67. Id. at 711 (citing Hamling v. United States, 418 U.S. 87, 106–07 (1974)).
69. *Thomas*, 74 F.3d at 711.
70. Id. at 705.
71. See also Curry, *supra* note 23. Curry argued that some view the case as:

A battle between two factions, with one group — the retrograde government, those who talk of the “Information Superhighway” — on a side that believes that we live in a world of increasingly beleaguered places, with every place now an off-ramp, facing trucks loaded with filth. On the other side, this argument goes, are the virtuous advocates of cyberspace, “the Web,” a “new place that is not a place.” Netizens, the story goes, live differently, live more elevated lives. In cyberspace different standards ought to apply; those who live “only locally” are somehow throwbacks, second wavers.

Id.
exceptionalism) emphasizes the conduit metaphor of the information superhighway. From this perspective, it is not surprising the court views as outlandish the claim that there could be an online community; the BBS was just another conduit for transferring information, not a place where information, let alone people, reside (ephemerality of information).

When the Third Circuit confronted the Miller obscenity issue in ACLU v. Reno, it applied a remarkably different analysis than the Sixth Circuit. In finding that the Child Online Protection Act’s local community standards test for obscenity was unconstitutional, the court opined:

Unlike a “brick and mortar outlet” with a specific geographic locale, and unlike the voluntary physical mailing of material from one geographic location to another, as in Miller, the uncontorted facts indicate that the Web is not geographically constrained. Indeed, and of extreme significance, is the fact . . . that Web publishers are without any means to limit access to their sites based on the geographic location of particular Internet users. As soon as information is published on a Web site, it is accessible to all other Web visitors . . . . This key difference necessarily affects our analysis in attempting to define what contemporary community standards should or could mean in a medium without geographic boundaries.

Freed from the low exceptionalism of the conduit metaphor by adopting a metaphor of the Internet as novel space, the court rejected Sable and Hamling as appropriately analogous. The court distinguished the ability of defendants to control to whom they send obscene materials from their inability to control who accesses or visits their content on the web. Part of the change in holding is surely due to the evolution

72. 217 F.3d 162 (3d Cir. 2000).
73. Id. at 175 (internal citations omitted).
74. See id. at 175–76. The court also stated:

These cases, however, are easily distinguished from the present case. In each of those cases, the defendants had the ability to control the distribution of controversial material with respect to the geographic communities into which they released it. Therefore, the defendants could limit their exposure to liability by avoiding those communities with particularly restrictive standards, while continuing to provide the controversial material in more liberal-minded communities. For example, the pornographer in Hamling could have chosen not to mail unsolicited sexually explicit material to certain communities while
of the Internet’s architecture from a patchwork of BBSes to the web, but this change is coincident with a change in metaphor. The Internet’s technological development made the superhighway metaphor literally incongruous with reality, necessitating a new metaphor — cyberspace — that in turn dictated a new result.

IV. THE BIRTH OF THE "INTERNET AS REAL SPACE" METAPHOR

In sharp contrast to the utopian vision expressed by Barlow, Johnson, and Post, various commentators from the late 1990s to the present have increasingly argued that the Internet is not a mysterious place hermetically sealed from the real world. Viewing the Internet as synonymous with real space, these commentators have constructed a variety of metaphorical inferences; thus, the Internet can be “zoned,” interfered with, trespassed upon, or divided up into holdings similar to real property. One of the earliest and most vocal dissenters to the cyberspace as place metaphor was Professor Jack Goldsmith. In a series of 1998 law review articles, Goldsmith argued that the “Net is not a separate place, and Net users are not removed from our world.”

Goldsmith contended that Post and Johnson’s conception of the Internet as a novel space blinded the authors to various real world harms, such as defamation and copyright infringement, resulting from Internet self-regulation. At the heart of Goldsmith’s thesis was the claim that the Internet creates no unique problems that had not already been continuing to mail them to others . . . . By contrast, Web publishers have no such comparable control.

75. Id. at 176 (“Despite the ‘electronic medium’ in which electronic bulletin boards are found, Thomas is inapposite inasmuch as electronic bulletin boards, just as telephones, regular mail and other brick and mortar outlets, are very different creatures from that of the Web as a whole.”); see also Sørenssen, supra note 30 (discussing how the move to user-friendly web browsers has caused a change in metaphors to more “container” oriented space like chat “rooms”).

76. However, this new result is itself unstable since the Third Circuit specifically bases its holding on the fact that “[c]urrent technology prevents Web publishers from circumventing particular jurisdictions or limiting their site’s content ‘from entering any [specific] geographic community.’” Id. at 175. For changes in technology and law making this a possibility, see infra note 87.


78. Goldsmith, Regulation, supra note 77, at 1121–23. Additionally, Goldsmith argued that Post and Johnson ignored the spillover costs from incongruent trans-jurisdictional policies facilitated by domestic self-regulation. Id.
resolved by rules of jurisdiction and conflict of laws.\textsuperscript{79} It is worth noting that Goldsmith’s critique rarely questioned any of the underlying assumptions about the technical architecture of the Internet held by the early advocates of the cyberspace metaphor. It merely asserted that the notion of cyberspace ignores certain negative externalities that accompany self-regulation.\textsuperscript{80}

Later commentators, however, more explicitly and extensively challenged these assumptions. In his 1999 book \textit{Code and Other Laws of Cyberspace}, Professor Lessig observed that the Internet, an artificial environment, is all architecture (or code) and thus infinitely malleable, at least in theory.\textsuperscript{81} Lessig argued that, contrary to Barlow’s oft-recited mantra that cyberspace is “essentially and unavoidably, free,”\textsuperscript{82} the Internet’s architecture is born from the “very idea of control.”\textsuperscript{83} Thus, there is nothing inherent about the Internet that makes it a space divorced from traditional territorial boundaries, human values, or for that matter, government control. As Lessig deftly noted, “[a]ctivists concerned with defending liberty, privacy or access must watch the code coming from the Valley, West Coast Code — as much as the code coming from Congress, — call it East Coast Code.”\textsuperscript{84}

Since 1999, numerous scholars have built on Lessig’s analysis, rejecting the cyberspace metaphor by stressing the technical characteristics of the Internet. One commentator recently emphasized the “spacio-temporal” processes of the Internet, arguing that it is a “space through which events occur via electromagnetic waves” and similar to “other electromagnetic occurrences such as telephone conversations . . . fall[s] within the purview of states.”\textsuperscript{85} As Internet transmis-

\begin{thebibliography}{99}
\bibitem{80} Though Goldsmith does acknowledge in a later 1998 article that filtering technology, still “relatively new . . . and crude,” will play an increasingly important role in resolving the jurisdictional quandaries presented by the “‘borderless’ medium,” Goldsmith, \textit{Against}, supra note 77, at 1226, his primary focus refrains from critiquing the underlying technological background assumptions of the cyberspace metaphor.
\bibitem{81} See LAWRENCE LESSIG, \textit{CODE AND OTHER LAWS OF CYBERSPACE} 4–14 (1999).
\bibitem{82} Barlow, supra note 56.
\bibitem{83} LESSIG, \textit{supra} note 81, at 4–5. Lessig recognized as early as 1996 that the “[Internet] will be regulated by real space regulation to the extent that it affects real space life, and it will quite dramatically affect real space life.” Lawrence Lessig, \textit{The Zones of Cyberspace}, 48 STAN. L. REV. 1403, 1406 (1996).
\bibitem{84} Lawrence Lessig, \textit{The Code is the Law}, INDUS. STANDARD (Apr. 9, 1999), available at http://www.thestandard.com/article/0,1902,4165,00.html. Lessig’s emphasis on the Internet’s architecture as a source of potential control keenly repackages the suitability of the government regulation aspect of the information superhighway metaphor.
\end{thebibliography}
sions are sent and received in particular locations within the space time manifold, “carefully crafted laws” and technologies can regulate them. The increasingly pervasive use of trusted systems, filtering, and geographical pinpointing technologies on the Internet add credence to the claim that the Internet can be molded to coincide with very real territorial boundaries and legal jurisdictions. Other authors have argued upon technological grounds against the space-like aspect of the cyberspace metaphor. In a 2000 article, Professor Timothy Wu asserted that the Internet’s design as an end-to-end network, composed of many different applications performing many different functions, “breaks the metaphor of Cyberspace.” Because the Internet does not require every user to “log into one big world and interact with other users,” a crucial characteristic of most static communities, the cyberspace metaphor is misplaced.

Alternatively, some commentators have pointed to a variety of social, cultural, and economic factors that undermine the metaphorical congruence of the concept of the Internet as a distinct place. Professor Jonathan Koppell commented in a 2000 article that the “magical land called cyberspace” is nonexistent. Koppell argued that many describe the Internet as a separate, unique place to “avoid downgrading it to the status of a mere medium,” making it “more intriguing . . . rais[ing] issues of consciousness . . . and set[ting] us apart not

86. Id. at 822.
87. Trusted systems technologies are those that allow “‘authorized’ flows of information while flatly blocking ‘unauthorized’ uses” through a system of hardware and software. Jonathan Zittrain, What the Publisher Can Teach the Patient: Intellectual Property and Privacy in an Era of Trusted Privicitation, 52 STAN. L. REV. 1201, 1212 (2000). Such technologies are intended to secure content through blocking “perfect, instantaneous, and anonymous copying.” Id. at 1218. The use of such systems erodes the treasured anonymity of the Internet, a central characteristic of Post and Johnson’s vision. See, e.g., Julie E. Cohen, A Right to Read Anonymously: A Closer Look at “Copyright Management” in Cyberspace, 28 CONN. L. REV. 981, 985 n.10 (1996) (noting that such systems “could entail total loss of reader anonymity in cyberspace”). Similarly, the increasingly pervasive use of online profiling, through cookies and web bugs, has the potential to make an otherwise anonymous profile personally identifiable. See FED. TRADE COMM’N, ONLINE PROFILING: A REPORT TO CONGRESS 2–6 (2000). Finally, the increasing sophistication of geographical pinpointing technologies, such as those offered by eBorder, undermines the concept of the Internet as a borderless place immune to government regulation. See Virtsecure.net, https://209.75.42.23/Virtsecure/index.htm (last visited Nov. 8, 2002). The recent French judgment ordering Yahoo! to implement such technologies demonstrates their growing importance in accomplishing traditional governmental regulatory functions. See Ass’n Union des Etudiants Juifs de France v. Yahoo!, T.G.I. Paris, Nov. 20, 2000, Ord. réf., J.C.P. 2000, Actu., 2219, available at http://www.juriscom.net/txj/jurisfr/ct/ptiparis20001120.pdf.
88. Wu, supra note 60, at 174.
89. Id. Though MUDs are place-like, with their own governing rules for misbehavior, they are but one small part of the Internet.
just from our primitive ancestors but also from our recent ones. In turn, the erosion of the cyberspace metaphor’s congruence with reality can be connected to the increasingly ubiquitous — and thus commonplace — nature of the Internet. As the Internet becomes ever more a necessity in individuals’ daily lives by being used for working, shopping, and communicating, it becomes a more mundane and a less exceptional component of the real world, thus returning to an aspect of the conduit metaphor.

Similarly, the growth of Internet usage has undermined the traditional perception of the Internet embedded within the meaning of “cyberspace” held by many first-generation users who possessed a technical background. First-generation users attempted to preserve their own set of rules and procedures, restricting access to those users they deemed inferior because of a lack of computer expertise. Original cyberspace residents perceived themselves as a privileged class who spoke UNIX as if it were Latin, immune to law, and above the banalities of the real world. The barriers of technical knowledge thus restricted many from the Internet, resulting in a fairly homogenous and exclusive community that fostered the notion of the Internet as a “place” within the minds of many of its elite users. However, as the increasing commercialization and accessibility of the Internet has diversified its user base and diminished its exclusivity, this elitist embodiment of the cyberspace metaphor has become ever more incongruous with reality. Interestingly, the advent of web browser technology has eroded the cyberspace metaphor for this particular subset of Internet users.

Courts have also adopted the “Internet as real space” metaphor. One of the earliest and most explicit examples can be found in Justice O’Connor’s prophetic concurring opinion in *Reno v. ACLU*, where she announced that “[c]yberspace undeniably reflects some form of geography; chat rooms and web sites, for example, exist at fixed ‘locations’ on the Internet,” thus making it “possible to construct barriers in cyberspace and use them to screen for identity, making cyberspace more like the physical world . . . .” O’Connor’s analogy to a physical world divided by territorial boundaries was critical to her

---

91. Koppell, supra note 90, at 16.
92. See Wu, supra note 60, at 173–74.
93. Id. at 174.
94. Id.
95. See Sørenssen, supra note 30 ("While the earlier users of [the] Internet could be said to constitute an elite group, the rapid transformation of the Internet from an exclusive form of communication to one among many consumer goods has resulted in a democratization of its clientele.").
97. Id.
desired application of zoning laws to the Internet, similar to those restricting access to adult movie theaters, which the Court had previously upheld.98

Though Justice O’Connor’s vision has not been adopted wholesale by the judiciary, it nonetheless has had a certain resonance. There have been a variety of cases invoking metaphorical inferences to the concept of the Internet as real space. In a series of early cases regarding whether Internet Service Providers (‘‘ISPs’’) could be found liable for the conduct of their users, parties compared ISPs to such entities as telecommunications carriers99 and newsprint publishers.100 The crime of computer trespass naturally evokes a sense of illegal, unauthorized “access” into a system, bringing to mind a network’s geographic, spatial qualities.101 The real space metaphor is also increasingly apparent in Internet trespass to chattels cases, in which courts have found the use of crawling robots,102 spam,103 and even simple e-mail,104 to constitute a “trespass” that interferes with the plaintiff’s proprietary interest in the computer system. In Intel Corp. v. Hamidi, for example, the court found a trespass even though no tangible harm was caused to Intel’s chattel. Characterizing the defendant’s actions as “invading” Intel’s “proprietary e-mail system,”105 the Hamidi decision strongly portrays the Internet’s architecture in real property terms. Many courts no longer view the Internet as a “borderless frontier” intrinsically disconnected from territorial boundaries. Rather they have at least begun to investigate whether the ever-advancing architecture of the Internet is indeed capable of being accurately linked to real space.106

100. See Cubby, Inc. v. CompuServe, Inc., 776 F. Supp. 135, 139 (S.D.N.Y. 1991). Interestingly, these analogical mappings bring to mind the conduit metaphor, resuscitated by decisions emphasizing the real space characteristics of the Internet. See also supra note 39 and accompanying text (Brookfield’s comparison of metatags to billboards also represents a real space conception of the Internet.).
101. See, e.g., Computer Fraud and Abuse Act (“CFAA”) of 1986, 18 U.S.C. § 1030 (1996); Register.com, Inc. v. Verio, Inc., 126 F. Supp. 2d 238, 251 (S.D.N.Y. 2000) (finding that Verio’s “scraping” of WHOIS data from Register.com’s public website constitutes an “unauthorized access” to the website and thus computer trespass under the CFAA); EF Cultural Travel BV v. Explorica, Inc., 274 F.3d 577 (1st Cir. 2001) (finding competitor’s use of “scraper” program to glean prices from tour company’s website in order to facilitate systematic undercutting of those prices to have “exceeded authorized access” under the CFAA).
105. Id. at 250.
106. See, e.g., PSINet Inc. v. Chapman, 167 F. Supp. 2d 878, 891 (W.D. Va. 1999) (‘‘While some advancement has been made since American Libraries Ass’n was decided, it
V. THE DEATH OF METAPHOR?

What is the place for metaphor in legal analysis of the Internet? Are the older metaphors for the Internet dead? This paper concludes with a tentative theoretical analogy to the theory of idealism in jurisprudence: legal ideals, such as the strict liability theory (as opposed to the fault theory) of tort, are attempts to fit and justify a pattern of underlying rule material (cases, statutes, etc.). Likewise, Internet metaphors are good so long as they fit and justify not only underlying legal material, but also the architecture of the Internet. Changes in architecture or legal rules threaten a metaphor. Thus, the information superhighway metaphor is “literally incongruent,” as it no longer fits either the architecture of the Internet or the legal decisions that have developed thereunder. This does not mean that the metaphor is erased, rather it is localized. An analogy to an observation by Ronald Dworkin may be helpful. When the basis for a judicial decision has gone out of style but has not been explicitly overruled, the case retains its enactment force in that it is still good law, but none of its gravitational force, as it is no longer proper to appeal to the logic of the case as a ground for future decisions. Thus, while the strict liability theory at one time fit and justified much of tort law, changes in visions of the world and legal decisions make that no longer true, so the strict liability ideal has been unseated in favor of the fault ideal. Although the strict liability theory no longer has gravitational force over all of tort law, it may still exert gravitational force in a localized area, for instance worker’s compensation. Thus, the ideal is not erased but localized. Similarly, the Internet metaphors of yesteryear are not erased in the coming age, but are instead localized. For example, the information superhighway metaphor and its implications may still be appropriate for e-mail. The current state of affairs of the Internet is then not the “death of metaphor” but is instead the realization that no overarching metaphor can characterize the entire Internet or comprehensively integrate localized metaphors.

remains technologically infeasible for a Web site operator to limit access to online materials by geographic location . . . [D]ue to the current status of geographic filtering technology on the Internet, section 18.2-391 violates the Commerce Clause.’); ACLU v. Reno, 217 F.3d 162, 166 (3d Cir. 1999).