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The Prospect of Reconciling Internet and Cyberspace

*Brett M. Frischmann**

I. INTRODUCTION

As the presentations and overall theme of this Conference indicate, there are interesting and important dynamics between law and technology. Law and technology are evolutionary systems, both of which are interdependent. In this Article, I will analyze the manner in which the emergence of the Internet and its evolution affect legal decision making. Specifically, I will focus on how perspectives of the Internet and the way in which it works affect legal analyses and outcomes.

Cyberlaw scholars have suggested that the outcome of many cyberlaw disputes depends significantly, if not entirely, on a judge's perspective of the Internet and how it works. Much of the debate among scholars focuses on figuring out which is the *right* perspective and which is the *wrong* perspective. Although the debate is not always explicitly framed in terms of perspectives—it may focus instead on the use of metaphors, for example—the problem of choosing a perspective creeps into the debate, one way or another, often confusing or even preempting normative analysis.

There are two dominant perspectives of the Internet.[1] First, we have the *external perspective*, which focuses on the Internet from the

* Assistant Professor of Law, Loyola University Chicago School of Law. This brief comment elaborates on the prepared remarks I presented at the Law Journal conference, *Technology and Governance: How the Internet Has Shaped Our Conceptions of Governance and Institutions*, in March 2003. I am currently working on a broader research paper, tentatively titled *Reconciling Internet and Cyberspace*, which refines and expands some of the ideas touched on in this comment. I thank Mike Carroll, Cynthia Ho, Mark Lemley, Orin Kerr, Mike Madison, David McGowan, David Post, and Charles Purcell for their helpful comments and conversations. I also thank Michelle Togut and Keith Pozulp for their research assistance. I welcome any comments at bfrisch@luc.edu.

1. *See* Orin S. Kerr, *The Problem of Perspective in Internet Law*, 91 GEO. L.J. 357 (2003) (observing that the two dominant perspectives of the Internet are the internal perspective and the external perspective).

outside.[2] From this external perspective, one perceives the Internet in terms of its technical *real-space* operations—the Internet is a global meta-network that serves as an open platform for the transmission of information among end users that connect computers to the network. Second, we have the *internal perspective*, which focuses on the Internet from the inside.[3] From this internal perspective, one perceives the Internet in terms of the applications it enables and the ways in which those applications affect end users; the technical operation of the network infrastructure may be largely irrelevant in terms of one's experience.[4] It is this internal perspective that leads to the conception of *cyberspace* as a sort of virtual reality.

For about a decade or so, scholars have argued about the merits of each perspective and which perspective legal decision makers should choose to adopt.[5] While this debate has proved useful for a number of reasons,[6] it is time to move beyond the "binary, zero-sum

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2. *Id.* at 360. Imagine a disinterested observer, who is *not* "logged on," describing how the Internet works. *Id.*

3. *Id.* at 359. Imagine an end user, who *is* "logged on," describing his or her experience when using the Internet. *Id.*

4. *Id.* at 360 ("The technical details of what the computers attached to the Internet actually do 'behind the scenes' don't particularly matter.").

5. The debate with David Johnson and David Post on one side and Jack Goldsmith on the other is perhaps the most famous example. This debate focuses on, inter alia, the existence of cyberspace as a descriptive matter and how, as a normative matter, society should regulate cyberspace. *See* Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199 (1998) [hereinafter Goldsmith, *Against Cyberanarchy*]; Jack L. Goldsmith, *The Internet and the Abiding Significance of Territorial Sovereignty*, 5 IND. J. GLOBAL LEGAL STUD. 475 (1998) [hereinafter Goldsmith, *Territorial Sovereignty*]; David R. Johnson & David Post, *Law and Borders—The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996); David G. Post, *Against "Against Cyberanarchy,"* 17 BERKELEY TECH. L.J. 1365 (2002); *see also* Paul Schiff Berman, *The Globalization of Jurisdiction*, 151 U. PA. L. REV. 311, 315 (2002) (discussing this debate); Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CAL. L. REV. 439, 447–48 (2003) (discussing this debate); Carl S. Kaplan, *Cyberlaw Journal: Finding Government's Role in a Global Network*, N.Y. TIMES ON THE WEB, *at* http://www.nytimes.com/library/cyber/law/071097law.html (July 10, 1997). Although this debate has not been framed explicitly in terms of perspectives, there is little doubt that the scholars were arguing vigorously for a choice of perspective.

6. I will elaborate on the reasons at greater length in my *Reconciling Internet and Cyberspace* piece. Articulating a comprehensive argument for recognizing cyberspace as a legitimate "space," at least in the minds of end users, has "freed our minds"—to use a concept from *The Matrix* movie—and allowed us to consider the manner in which technology is affecting existing regulatory and community structures. *Cf.* Kerr, *supra* note 1, at 359 (using the movie *The Matrix* to explain external and internal perspectives). "The social meaning of geographical space also includes the way in which an individual or community perceives those who are *outside* the community's topological or social boundaries." Berman, *supra* note 5, at 426–27. "Conceptions of jurisdiction become internalized and help to shape the social construction of place and community . . . [such that when] social conceptions of place and community change, jurisdictional rules do as well." *Id.* at 543.

debate."[7] In *The Problem of Perspective in Internet Law*, a piece that I rely on and am responding to in this article, Orin Kerr demonstrates the pervasiveness of these perspectives and observes that "[b]oth internal and external perspectives can appear perfectly viable depending on the circumstances, and courts and commentators switch between them frequently without even recognizing the change."[8] Kerr argues that "we need to be aware of the problem of perspective and develop tools that can help us *choose* between real and virtual understandings of the Internet when we apply law to it."[9]

While I agree wholeheartedly with Kerr that "we need to be aware of the problem of perspective,"[10] I do not believe that a *choice* should be made (by courts, legislators, academics, or anyone else) between an external perspective focused on the technical operations of the Internet and an internal perspective focused on end users' experiences. In fact, I believe that the perceived need to choose among perspectives is itself problematic. *Why should a choice be made?* As Kerr observes, "neither perspective holds an *a priori* claim to greater legitimacy."[11]

Both perspectives are descriptively valid and real, and both perspectives yield important insights about the facts of the Internet and the interests at stake in a legal decision. Choosing either perspective may lead to a partial view of the underlying facts in a given dispute (essentially, tunnel vision), which may effectively determine the outcome of a legal decision and bypass the difficult legal (normative) analysis that courts, legislators, and academics should undertake.[12]

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7. Viktor Mayer-Schönberger, *The Shape of Governance: Analyzing the World of Internet Regulation*, 43 VA. J. INT'L L. 605, 672 (2003) (referring to the debate over cyberspace governance). I am arguing for a step forward that reconciles the two perspectives by accepting both as descriptively valid. Accordingly, I reject the contention held by many scholars that "the metaphor of Cyberspace as a place was a model so far from the technology that it was useful only as a publicity tool." Timothy Wu, *When Law & the Internet First Met*, 3 GREEN BAG 2d 171, 177 (2000); *see also* Hunter, *supra* note 5, at 443 (similarly rejecting the common wisdom that "no one could be foolish enough to argue that cyberspace was a place").

8. Kerr, *supra* note 1, at 357.

9. *Id.* at 358 (emphasis added). Kerr proposes two tentative methods that courts might employ to choose between perspectives: (1) focus on the legal doctrine being applied to the facts and determine "whether the law is more closely attuned to external or internal concerns," *see id.* at 391, or (2) "appl[y] the perspective of the individual whom the law seeks to regulate," *id.* at 396–97. I discuss these methods in the context of the Fourth Amendment below. *See infra* note 43 (analyzing Kerr's application of these perspectives in the Fourth Amendment cases).

10. Kerr, *supra* note 1, at 357.

11. *Id.* (emphasis added).

12. Of course, the (mis)use of metaphors leads to precisely the same problem (which point I will develop fully in *Reconciling Internet and Cyberspace*). *See* GEORGE LAKOFF & MARK JOHNSON, METAPHORS WE LIVE BY 10 (1980) (noting that shaping a concept through the use of a metaphor can result in ignoring important aspects of the concept because they do not appear

Moreover, choosing a perspective may subtly substitute fact-finding for legal analysis and thereby mask important policy decisions in the rhetoric of metaphor and factual analogy.[13]

Here is how I think we should avoid choosing between perspectives: First, we should recognize that both perspectives provide valid and accurate renditions of the underlying facts;[14] second, we must carefully examine the sets of interests at stake in a given dispute; and third, we must engage in a principled application of relevant legal doctrines designed to address such interests.

In this Article, I primarily focus on the first step because I believe that taking the first step alone would be a significant and meaningful advancement. I illustrate through two examples how a choice of perspective can dictate the choice of rule or the path that legal analysis will take. As I have already noted, choosing a perspective is

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consistent with the metaphor); Hunter, *supra* note 5, *passim* (arguing that the cyberspace as place metaphor is descriptively accurate and that the normative question of whether to regulate cyberspace as a place is a distinct matter); Maureen A. O'Rourke, *Property Rights and Competition on the Internet: In Search of an Appropriate Analogy*, 16 BERKELEY TECH. L.J. 561, 580 (2001).

> It is not surprising that courts have been unable to settle on the appropriate analogy and cause of action reflecting one or more specific policies. The factual situation underlying the issues of who should have access to a website and by what means is unlike any with which courts have grappled in the past.

Id.; *see also* Mark A. Lemley, *Place and Cyberspace*, 91 CAL. L. REV. 521, 525 (2003).

> 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. 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.

Id.; Jonathan J. Rusch, *Cyberspace and the "Devil's Hatband,"* 24 SEATTLE U. L. REV. 577, 592 (2000) ("The perception of cyberspace as separate from real space also tends to encourage a belief that cyberspace is an actual jurisdiction separate from the polities that exist in real space and, therefore, should be governed in ways that traditional political processes cannot be trusted to handle."); Alfred C. Yen, *Western Frontier or Feudal Society?: Metaphors and Perceptions of Cyberspace*, 17 BERKELEY TECH. L.J. 1207, 1230–31 (2002) (arguing that when the western frontier metaphor is applied to determine the breadth of government regulation on the Internet, the metaphor's validity must first be analyzed).

13. *See* Hunter, *supra* note 5, at 474.

14. I should note that Kerr seems to advocate taking this step, *see* Kerr, *supra* note 1, at 357, but in the end, he argues that courts should develop tools for choosing between perspectives in different contexts, *see supra* note 9 (detailing the two methods Kerr proposes to aid in choosing between perspectives).

problematic because it may act as a shortcut that substitutes fact-finding for legal analysis without a principled basis for doing so.[15]

I address the second step in some detail in the discussion of the evolving common-law doctrine of trespass to chattels and its application in cyberlaw disputes. The second step requires us to examine what interests are at stake in a given dispute. Cyberlaw disputes tend to involve the following types of interests: (1) physical, tangible assets like computer network facilities, routers, and servers; (2) intangible information assets ranging from copyright-protected expression to public domain data; and (3) relational assets like goodwill and trust and community values—in other words, assets based on relationships among people. Of course, we may be able to identify other interests, but these three categories should suffice for our purposes. Legal doctrines tend to focus on a particular set of interests. (For example, property law focuses on physical, tangible assets.) Courts applying traditional legal doctrine or developing new doctrine in cyberlaw cases should appreciate the connections (or links) between the three types of interests made possible via the Internet.[16]

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15. Choosing to adopt a perspective may lead to path dependence. Path dependence is often thought of in terms of relative switching costs: taking an action today may effectively set the path for future action because the costs of changing paths become prohibitive. *See* Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 641, 643 (1996) (stating that path dependence occurs when a system that was once efficient fails to change not because of its current efficiency but because of the costs associated with change); Stuart Minor Benjamin, *Stepping into the Same River Twice: Rapidly Changing Facts and the Appellate Process*, 78 TEX. L. REV. 269, 307 n.154 (1999). Benjamin noted that:

> Many commentators, in fact, have suggested that path dependence—the condition obtaining when initial developments (e.g., how to design and control a network) will have a significant effect on later developments (e.g., how the network is used) by rendering some otherwise plausible later developments unlikely because of the cost of starting anew—applies particularly well to fast-changing fields like telecommunications and cyberspace.

Id. (citing Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479, 597–98 (1998)); Joel P. Trachtman, *Cyberspace, Sovereignty, Jurisdiction, and Modernism*, 5 IND. J. GLOBAL LEGAL STUD. 561, 576–79 (1998) (noting that "there are transition costs, based on path dependence or network externalities, that form barriers to change"). With respect to the adjudication of a particular dispute, choosing to view the facts through the lens of one perspective—perhaps as a means for understanding "what is happening"—may lead the decision maker down a particular decision path. Although the alternative perspective may paint a different, factually-valid picture, and the collage created by taking both perspectives together may create an even more complicated factual puzzle, the switching costs may be too great, and the decision maker may be locked in to a chosen perspective.

16. For example, as discussed in the latter half of this Article, courts applying the trespass to chattels doctrine in cyberlaw disputes should appreciate the fact that, in contrast with traditional trespass to chattels cases, all three types of interests noted above are at stake. In particular, see

The third step, which I touch on only briefly in this Article, may be the most difficult because it requires us to reconsider (and perhaps recalibrate) the balancing of interests struck by existing law, and/or to consider complex intersections among different areas of the law.[17]

With respect to the first task, it is well understood that law develops to protect and balance particular sets of interests in factual context, and that evolving technology can change the factual context and thereby unbalance previously struck balances (e.g., consider copyright law in the digital age).[18] With respect to the second task, it may be less understood that a change in factual context may bring into relief complex intersections between traditionally independent areas of the law.[19] It is critical for those evaluating and applying law and for those creating new law to understand and fully appreciate changes in factual context. Recognizing the validity and utility of both the external and internal perspectives may engender such an appreciation; whereas choosing one perspective over the other may simply lead to tunnel vision.

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infra notes 97–98 and accompanying text (arguing that the traditional trespass to chattels doctrine cannot be applied in a vacuum due to the three interests at stake in cyberlaw disputes).

17. I address the third step only briefly in this Article but consider it in significant detail in my *Reconciling Internet and Cyberspace* paper. I should note, however, that whether such analysis will be necessary depends, of course, on the particular dispute.

18. Copyright law provides only the most obvious example of the unbalancing of previously-struck balances by the changed factual context of the Internet. *See, e.g.*, Jeffrey L. Dodes, *Beyond Napster, Beyond the United States: The Technological and International Legal Barriers to On-Line Copyright Enforcement*, 46 N.Y.L. SCH. L. REV. 279, 287 (2002–03) (claiming that the "Internet allows infringement of nearly all forms of copyrighted materials"); Lawrence Lessig, *Law Regulating Code Regulating Law*, 35 LOY. U. CHI. L.J. 1, 4 (2003) (observing that changes in technology alter the policy balance struck in laws protecting intellectual property); John R. Therien, *Exorcising The Specter of a "Pay-Per-Use" Society: Toward Preserving Fair Use and the Public Domain in the Digital Age*, 16 BERKELEY TECH. L.J. 979, 983–84 (2001). Therien observed that:

> Congress recognized, however, that the indiscriminate legal reinforcement of TPSs [technical protection systems] favored digital media producers over users and therefore potentially threatened otherwise permissible access to—and traditional fair use of—copyrighted materials for valuable endeavors like education. Congress, sensing that it was shifting the balance of intellectual property law too far toward copyright owners, added a complex set of exceptions to the general ban on circumvention.

Id; *see also* Johnson & Post, *supra* note 5, at 1367 ("Cyberspace challenges the law's traditional reliance on territorial borders; it is a 'space' bounded by screens and passwords rather than physical markers."); David McGowan, *Website Access: The Case for Consent*, 35 LOY. U. CHI. L.J. 341, 353–58 (2003) (suggesting that technology has "undermined" the balance of interests reflected in traditional trespass to chattels doctrine).

19. *See infra* note 98 and accompanying text (noting intersection of trespass to chattels with intellectual property and First Amendment law).

II. DISCUSSION

Judges have always faced the difficult but necessary task of applying constitutional, statutory, and common law to facts involving complex technologies.[20] In such cases, courts generally must determine what the relevant facts are and then apply the appropriate law to those facts. As Kerr observes, the emergence of the Internet poses a problem for courts because the Internet can generate two distinct sets of facts, one set based on the external perspective and the second set based on the internal perspective.[21] Thus, as Kerr aptly explains, the *Internet's facts* may depend on the lens or perspective we choose.[22] The following chart summarizes Kerr's elaboration of the two perspectives and how they relate to each other.

Perspective	**External**	**Internal**
Viewpoint	"[A]n outsider concerned with the functioning of the network in the physical world . . . ."[23]	"[U]ser who is logged on to the Internet and chooses to accept the virtual world of cyberspace as a legitimate construct."[24]
View of the Internet	"[T]he Internet is simply a network of computers located around the world and connected by wires and cables. The hardware sends, stores, and receives communications [in the form of digital ones and zeroes] using a series of common protocols. Keyboards provide sources of input to the network, and monitors provide destinations for output. When the	"[A] computer connected to the Internet provides a window to a virtual world that is roughly analogous to the physical world of real space. The user can use her keyboard and mouse to go shopping,

20. For simplicity, I will focus on judicial decision making in this paper and postpone consideration of the broader problem of perspective as it relates to the link between descriptive and normative analyses.

21. *See supra* note 8 and accompanying text (noting that, when analyzing Internet cases, courts choose between two perspectives that both appear viable).

22. Kerr, *supra* note 1, at 362 (explaining that the two perspectives lead to different factual versions of the Internet).

23. *Id.* at 360.

24. *Id.* at 359. For the purposes of this paper, I will use Kerr's definition of the internal perspective. However, I believe a better definition would leave open the possibility that an end user does not accept the cyberspace construct when describing his or her experience. In other words, it is sufficient to focus simply on end users' perceptions of their experiences and to leave open the empirical question of whether end users employ the virtual reality construct in particular circumstances. I am developing this broader view in my *Reconciling Internet and Cyberspace* paper.

Perspective	External	Internal
	Internet runs properly, trillions of zeros and ones zip around the world, sending and receiving communications that the computers connected to the network can translate into commands, text, sound, and pictures."[25]	send mail, visit a chat room, participate in an online community, or do anything else she can find online."[26]
View of the Other Perspective	"[T]he fact that Internet users may perceive that they have entered a virtual world of cyberspace has no particular relevance. These perceptions reflect the fact that software designers often garnish their applications with icons, labels, and graphics to help novices understand and use them—for example, by writing e-mail programs so that e-mail looks and feels like postal mail. These superficialities have no deeper meaning from the external perspective. What matters is the physical network and the technical details of how it works, not the easily manipulated perceptions of Internet users."[27]	"The technical details of what the computers attached to the Internet actually do 'behind the scenes' don't particularly matter. What matters is the virtual world of cyberspace that the user encounters and interacts with when he or she goes online."[28]

25. *Id.* at 360 (citing Reno v. ACLU, 521 U.S. 844, 849 (1997), and PRESTON GRALLA, HOW THE INTERNET WORKS 6–7 (1999)).

26. Kerr, *supra* note 1, at 360. Many constraints of the real world seem less important. For example, geographical borders lose their meaning to those surfing cyberspace. *See, e.g.*, Johnson & Post, *supra* note 5, at 1370. In fact:

> The rise of the global computer network is destroying the link between geographical location and: (1) the *power* of local governments to assert control over online behavior; (2) the *effects* of online behavior on individuals or things; (3) the *legitimacy* of a local sovereign's efforts to regulate global phenomena; and (4) the ability of physical location to give *notice* of which sets of rules apply.

Id.; *see also, e.g.*, Yen, *supra* note 12, at 1225–26 ("For them, the absence of conventional geographical borders in cyberspace removes territory as a justification for sovereign jurisdiction."). In cyberspace, one can speak nearly instantaneously to crowds dispersed across the globe. *See id.* at 1226 ("Individuals in cyberspace can visit an infinite number of people and places because everyone is simply a few mouse clicks away."). For example, the panel members' ability to speak at the Conference to crowds was limited in the real world not only by distance, but also by physical barriers and the strength of our vocal chords; in cyberspace, such constraints disappear.

27. Kerr, *supra* note 1, at 360.

28. *Id.*

Okay, so there are two ways of looking at things—so what? What is the problem? In addition to explaining the existence of these two perspectives, Kerr considers what he calls the "Problem of Perspective." This problem is that a choice of one perspective over the other often will be outcome-determinative when it comes to the legal analysis. Again, I agree with Kerr that this is a problem. Kerr uses a number of examples to illustrate the outcome-determinative nature of choosing a perspective. I'll borrow his first and simplest example to illustrate the point.

A. Fourth Amendment Protection of E-mail Messages

> Imagine that *A* sends an e-mail to his friend *B*. Two police officers learn about the e-mail and believe that it might reveal a nefarious criminal conspiracy. The officers agree that they should try to obtain a copy of the e-mail to prove the conspiracy. They confront a legal question: what kind of legal process must they follow in order to obtain the e-mail? Does the Fourth Amendment require them to obtain a search warrant? Or can they obtain the e-mail with less process than a search warrant? The answer depends largely upon whether they apply an internal or external perspective of the Internet.[29]

Assume each police officer adopts a perspective to determine what legal process the Fourth Amendment requires. The police officer that adopts the internal perspective asks herself: What do end users subjectively expect when they send e-mail? The officer may reasonably conclude that end users perceive e-mail as the online equivalent of postal mail, given her awareness of things like "You've got mail"[30] and similar attributes of e-mail programs designed to reinforce this belief.[31] Of course, this is a factual question, and the officer may lack the information necessary to make an accurate factual finding as to what end users subjectively believe. I should note that at this point, the officer is not applying the law, i.e., the Fourth Amendment test developed in *Katz v. United States*;[32] the officer is simply asking

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29. *Id.* at 365.

30. *See* Am. Online, Inc. v. AT&T Corp., 243 F.3d 812, 815 (4th Cir. 2001) ("[I]n connection with its e-mail service, AOL advises its subscribers that they have received e-mail by displaying the words 'You Have Mail,' by playing a recording that announces, 'You've got mail,' and by depicting an icon of a traditional mailbox with the red flag raised.").

31. *See* Kerr, *supra* note 1, at 360 ("These perceptions reflect the fact that software designers often garnish their applications with icons, labels, and graphics to help novices understand and use them—for example, by writing e-mail programs so that e-mail looks and feels like postal mail." (citing NATHAN J. MULLER, DESKTOP ENCYCLOPEDIA OF THE INTERNET 87–95 (1999))).

32. Katz v. United States, 389 U.S. 347, 352–53 (1967).

herself: *What are the facts? What happens when an end user sends an e-mail?* One answer, based on the internal perspective, is that an end user sends the cyberspace equivalent of postal mail. As Kerr observes, this characterization of *what happens* (standing alone, without reference to the external perspective) would lead the officer to reason toward a legal conclusion as follows:

> [T]he Fourth Amendment places the same restriction on government access to e-mail that it places on government access to ordinary postal mail. . . . [A]ccessing a suspect's [postal] mail ordinarily violates the suspect's "reasonable expectation of privacy," and . . . therefore the officer must first obtain a warrant. Because e-mail is the equivalent of postal mail, the officer will conclude that the Fourth Amendment requires him to obtain a warrant before he can access the e-mail.[33]

The police officer that adopts the external perspective reaches a different result. This officer similarly asks herself: *What are the facts? What happens when an end user sends an e-mail?* The facts look quite different, however. Focusing on how the Internet operates, the second officer sees that when *A* sends an e-mail to *B*, *A* instructs her Internet Service Provider ("ISP") to send the e-mail to *B*'s ISP, and during the delivery process, both ISPs make copies of the e-mail. As Kerr observes, this characterization of *what happens* (standing alone, without reference to the internal perspective) would lead the officer to reason toward a legal conclusion as follows:

> *A* sent a copy of the e-mail communication to a third party . . . disclosing the communication to the third party and instructing it to send the communication to yet another third party . . . . [W]hat process does the Fourth Amendment require to obtain information that has been disclosed to a third party and is in the third party's possession? . . . [T]he black letter rule [is] that the Fourth Amendment permits the government to obtain information disclosed to a third party using a mere subpoena. The officer can simply subpoena the [ISP] to compel [it] to produce the e-mails. No search warrant is required.[34]

This is a relatively simple example. The point of using the example is to illustrate how a choice of perspective can be outcome-

33. Kerr, *supra* note 1, at 365–66 (footnote omitted).

34. *Id.* at 367 (footnote omitted). The Supreme Court has held numerous times in various different contexts that the Fourth Amendment does not protect information revealed to third parties. *See* Smith v. Maryland, 442 U.S. 735, 743–44 (1979); United States v. Miller, 425 U.S. 435, 443 (1976); Couch v. United States, 409 U.S. 322, 335 (1973); Hoffa v. United States, 385 U.S. 293, 302 (1966). Yet the Supreme Court has not so held in the context of e-mail, and, as discussed below, the Internet context differs from these other contexts in important ways.

determinative. Choosing a perspective leads to a distinct set of facts and consequently to a choice of legal rule.[35]

35. Another interesting example, which I consider in detail in *Reconciling Internet and Cyberspace*, arises in a case recently decided by the Supreme Court, *United States v. Am. Library Ass'n*, 123 S. Ct. 2297 (2003). The case involves a First Amendment challenge to the Children's Internet Pornography Act ("CIPA"), which requires libraries that receive federal funding to provide their patrons with Internet access and use filtering software to prevent patrons from viewing visual depictions of obscenity, child pornography, or, in the case of minors, material that is harmful to them. The district court accepted plaintiffs' argument that providing Internet access in a library created a designated public forum and, applying strict scrutiny review, held that CIPA was facially invalid. Am. Library Ass'n v. United States, 201 F. Supp. 2d 401, 407, 411 (E.D. Pa. 2002), *rev'd*, 123 S. Ct. 2297 (2003).

The parties' Supreme Court briefs reflected two competing perspectives on the provision of (filtered) access to the Internet in public libraries. The government argued that when libraries filter access to the Internet, they are simply deciding what content to bring into the library and make available to its patrons. Brief for the United States at 22, United States v. Am. Library Ass'n, 123 S. Ct. 2297 (2003) (No. 02-361), *available at* LEXIS 2002 U.S. Briefs 361. Taking an external perspective, the government suggested that the Internet is simply another means for bringing content into the library, perfectly analogous to ordinary, traditional book collection decisions; from this perspective of the facts, patrons send a request for information, and the library simply filters what may be brought into the library. *Id.* Content-based decisions of this sort have long been part of the public library function, are essential to the management of the library's property (government property), and were never intended to create a public forum (technically, a designated public forum). *Id.*; *see also* Transcript of Oral Arguments at 3, *Am. Library Ass'n* (No. 02-361) ("Libraries are simply exercising their discretion as to the content their libraries will contain . . . and to how their library resources will be used."), *available at* http://www.supremecourtus.gov/oral_arguments/argument_transcripts/02-361.pdf (last visited Sept. 21, 2003).

Taking the internal perspective, the American Library Association and ACLU argued that libraries are providing end users with access to a vast public forum, a virtual sea of information. When libraries provide Internet access, they open "a portal to the nearly unlimited expression available in cyberspace," involving a "virtually unlimited number of speakers on a virtually unlimited number of topics." Brief for the American Library Association at 19, 22, *Am. Library Ass'n* (No. 02-361), *available at* 2003 WL 21699050. End users are given access to something that exists outside of and apart from the library. *Cf. id.* at 20 (citing Reno v. ACLU, 521 U.S. 844 (1997)). The case provides an excellent example of a situation in which the outcome of the case seems to turn in large part on the Supreme Court's choice of perspective because the choice determines the level of scrutiny to apply. Under the government's perspective of what happens when a library provides Internet access, rational basis scrutiny applies because Internet access is available on government property and the government is not creating a public forum, but under the libraries' perspective, strict scrutiny applies because the government has created a designated public forum. Of course, the problem of perspective is that both perspectives are valid and accurate. Providing access to the Internet is both content collection and a "portal" to an unlimited number of speech forums in cyberspace.

The Supreme Court reversed the district court decision and held that CIPA was constitutional. The plurality opinion adopted the external perspective of the facts proposed by the government, expressly stating that the Internet "is 'no more than a technological extension of the book stack.'" *See Am. Library Ass'n*, 123 S. Ct. at 2305 (quoting S. REP. NO. 106–141, at 7 (1999)). In fact, the only rationale the Court provided for applying rational basis scrutiny was viewing the provision of filtered Internet access as perfectly analogous (rather than partially analogous) to the provision of collected books, *id.* at 2303–05, under which ultimately the Court found the CIPA constitutional, *id.* at 2309.

Having demonstrated that a choice of perspective can be outcome-determinative, Kerr then argues that courts must evaluate competing perspectives on how the Internet works and consciously decide between two distinct sets of facts: one based on physical reality, and the other based on virtual reality.[36] He concludes that "*the shape of Internet law hinges on our choice of perspective.*"[37]

I would hazard a guess that most other cyberlaw scholars would agree with this conclusion. As I noted at the outset, for more than a decade, there has been a rich and often contentious scholarly debate over the choice of perspective. Famously, David Johnson and David Post advocated the position that cyberspace should be recognized as a separate "place" independent and insulated from regulation of territorial sovereigns.[38] As a descriptive matter, Johnson and Post contended that cyberspace exists and that important differences between cyberspace and real space undermined the capacity of sovereign nations to regulate cyberspace.[39] As a normative matter, they argued that sovereign nations should not regulate cyberspace, even if they had the capacity to

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Interestingly, the Supreme Court noted that "'[W]e are wary of the notion that a partial analogy in one context, for which we have developed doctrines, can compel a full range of decisions in such a new and changing area.'" *Id.* at 2305 n.3 (quoting Denver Area Educ. Telecomm. Consortium, Inc. v. FCC, 518 U.S. 727, 749 (1996) (Breyer, J., plurality opinion)). Although the Supreme Court acknowledged the danger of "partial analogy in one context, for which we have developed doctrines," the plurality failed to see that its analysis merely rejected one partial analogy for another (*filtered Internet access* is analogous to *selected books collection*). *Id.*; *see also id.* at 2318–22 (Souter, J., dissenting) (relying on partial analogies as well—*access to unfiltered Internet content* is analogous to an *acquired book*, and thus, *filtering Internet content* is analogous "either to buying a book and then keeping it from adults lacking an acceptable 'purpose,' or to buying an encyclopedia and then cutting out pages with anything thought to be unsuitable for all adults"). *But see id.* at 2310–12 (Breyer, J., plurality opinion) (suggesting that neither strict scrutiny nor rational basis scrutiny apply because of the special circumstances and describing the circumstances in terms of (1) CIPA "directly restrict[ing] the public's receipt of information . . . through limitations imposed . . . upon two critically important sources of information—the Internet as accessed via public libraries" and (2) CIPA being a "'selection' restriction (a kind of editing) [that] affects the kinds and amount of materials that the library can present to its patrons").

36. Kerr, *supra* note 1, at 361–62. I agree with Kerr that it is better for courts (and commentators) to make conscious decisions about a choice of perspective and to make such decisions explicitly than for courts (and commentators) to rely inadvertently on a single perspective or to shift inadvertently from one perspective to another depending on which perspective supports a particular outcome. I think that it would be even better if courts refused to choose between perspectives and instead recognized the validity and utility of each perspective.

37. *Id.* at 362 (emphasis added). There is quite a bit more to Kerr's piece than I have described here.

38. Johnson & Post, *supra* note 5, at 1378–81.

39. *Id.* at 1370 ("Cyberspace radically undermines the relationship between legally significant (online) phenomena and physical location. The rise of the global computer network is destroying the link between geographical location and . . . the *legitimacy* of a local sovereign's efforts to regulate global phenomena . . . .").

do so.[40] On the other side of this debate, Jack Goldsmith, taking a decidedly external perspective, argued that there is no such thing as cyberspace and sovereign nations could and should regulate online activity.[41] This debate over whether sovereign nations could or should regulate the Internet/cyberspace has generated quite a bit of scholarship, much of which has moved beyond the question of sovereignty but nonetheless retained the underlying competition between perspectives.

I believe that we should move beyond this debate over choice of perspective. The debate has been extremely useful in the sense that it allows us to understand, appreciate, and differentiate the Internet and cyberspace. Differentiating between the Internet and cyberspace makes sense because the Internet and cyberspace are "real," but different. The Internet can be understood as the real-space physical and logical infrastructures that enable applications and content delivery, while cyberspace may be understood as the "virtual-world" experiences based on human beings' use of Internet-enabled applications and the consumption of content communicated across the Internet. Differentiation is one thing, but I do not think that a choice needs to be made (by courts, legislators, academics, or anyone else) between Internet or cyberspace perspectives. In fact, I believe that making a *choice* is itself part of the problem.[42]

When there are two accurate perspectives regarding the underlying facts, courts should not choose between perspectives. First, both perspectives provide valuable factual information that should be factored into a decision. Second, the adoption of one perspective over

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40. *Id.* at 1390–91 ("[F]or online activities that minimally affect the vital interests of sovereigns, the self-regulating structures of Cyberspace seem better suited to dealing with the Net's legal issues.").

41. *See, e.g.*, Goldsmith, *Against Cyberanarchy*, *supra* note 5, at 1238–39. Goldsmith states:

> The skeptics have provided no reason to think that the differences between cyberspace and prior communication technology are so much greater than the differences between pre-and post-telegraph technology (which reduced communication time from weeks and months to hours and minutes), or between pre- and post-telephone technology (which also dramatically reduced the cost and enhanced the frequency and privacy of transjurisdictional communication) to justify the conclusion that governmental regulation will be nonefficacious.

Id.; *see also* Goldsmith, *Territorial Sovereignty*, *supra* note 5, at 476 ("The Internet is not, as many suggest, a separate place removed from our world. [T]he Internet is a medium through which people in real space in one jurisdiction communicate with people in real space in another jurisdiction.").

42. I acknowledge that Kerr does not advocate making a choice blindly. He similarly argues that both perspectives should be acknowledged as valid. However, he believes that ultimately a choice should be made. *See supra* note 9 (describing Kerr's proposed methods for choosing which perspective to adopt); *infra* note 43 (discussing Kerr's proposed methods for choosing a perspective in the Fourth Amendment context). This is where we disagree, as I explain below.

another can color the facts in a manner that effectively determines the outcome of the legal analysis. Of course, it is not surprising that the debate is focused on choosing perspectives. As lawyers, we all know that viewing the facts in a light most favorable to our client may have a significant effect on legal outcomes. And the choice of perspective in the cyberlaw context often has such an effect—it often can be outcome-determinative.

What is interesting about Kerr's e-mail hypothetical is that there is an overarching, single legal rule to apply: the Fourth Amendment.[43] The choice of perspective seems to make it easier to pick among subsidiary rules developed by courts in analogous factual contexts (e.g., context A: postal mail,[44] or context B: communication disclosed to a third party).[45] In this hypothetical (context C: e-mail), regardless of which perspective you choose or whether you choose a perspective at all, the interests at stake balanced by the law remain the same (privacy versus government investigation). Choosing a perspective means that the balance struck in an analogous context (A or B) will apply in the new context (C). Such a choice shortchanges the legal analysis in the sense that the adoption of a perspective leads to the adoption of a particular black letter rule based on a simple factual analogy, and without consideration of factual nuances present in context C and the underlying principles motivating the rules developed in contexts A and B. At a minimum, recognizing

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43. Interestingly, Kerr appears to be willing to choose a single overarching perspective for all Fourth Amendment cases. That is, applying his first method of choosing a perspective by looking to doctrine for direction, Kerr attempts to determine which perspective should apply in all Fourth Amendment cases—imagine what a sweeping evidentiary rule this would be! However, since Fourth Amendment doctrine does not indicate clearly that one perspective should be chosen, Kerr applies his second method of choosing a perspective by choosing the perspective of the entity being regulated by the Fourth Amendment—government officials. This outcome seems equally troubling both because of its breadth and because it excludes relevant facts from consideration. One problem with this latter approach to choosing a perspective is that it fails to account for the fact that the Fourth Amendment regulates *the relationship between government officials and citizens*. *See* U.S. CONST. amend. IV. The Fourth Amendment provides:

> The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

Id.

44. *See Ex parte* Jackson, 96 U.S. 727, 733 (1877). The Supreme Court held in *Jackson* that:

> No law of Congress can place in the hands of officials connected with the postal service any authority to invade the secrecy of letters and such sealed packages in the mail; and all regulations adopted as to mail matter of this kind must be in subordination to the great principle embodied in the fourth amendment of the Constitution.

Id.

45. *See, e.g.*, United States v. Miller, 425 U.S. 435, 443 (1976) (affirming that entrusting a third party with information destroys an expectation of privacy).

the validity of both perspectives as a factual matter provides a factual distinction or complication that allows us to consider whether a new balancing of interests makes sense. Because the hypothetical presents only a binary choice (reasonable expectation of privacy or not), the outcome in this new context (C) ultimately will be the same as that in an old, analogous context (A or B), but that does not mean that a choice between perspectives must (or inevitably will)[46] be made. *The analytical process matters.*

Both perspectives of the facts are partially accurate and relevant, and both reveal important insights regarding the underlying balance of interests at issue. From the internal perspective, we may find that users think of e-mail like postal mail.[47] This finding may indicate a strong subjective expectation of privacy.[48] From the external perspective, we may find that, due to the manner in which the Internet actually works, third parties who may access the contents have received and stored the e-mail.[49] This finding may render any subjective expectation of privacy held by end users unreasonable, perhaps on the theory that end users should know how the Internet actually works and not rely on the software features that generate and reinforce associations between e-mail and postal mail. Or perhaps it is perfectly reasonable for users to have a strong subjective expectation of privacy, given the highly technical nature of the manner in which Internet communications are handled.

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46. That the legal outcome in context C ultimately may be the same as the outcome in context A (or B), for example, does not necessarily mean that the internal (or external) perspective has been chosen; it means that the balancing of interests in context C is the same.

47. *See, e.g.*, Kerr, *supra* note 1, at 365–66 (discussed *supra* notes 30–33 and accompanying text); *see also* Note, *Keeping Secrets in Cyberspace: Establishing Fourth Amendment Protection for Internet Communication*, 110 HARV. L. REV. 1591, 1597 (1997) [hereinafter Note, *Keeping Secrets*] ("[C]ommentators discussing privacy in cyberspace often have compared e-mail to traditional postal mail.").

48. *See, e.g.*, Raphael Winick, *Searches and Seizures of Computers and Computer Data*, 8 HARV. J.L. & TECH. 75, 116 & n.212 (1994) (asserting that, as long as the electronic communication is "not accessible to the general public," then "the logic of Fourth Amendment case law protecting traditional mail should extend to electronic mail"); Note, *Keeping Secrets*, *supra* note 47, at 1597 ("Individuals retain a reasonable expectation of privacy in sealed first-class mail sent through the postal system . . . ."). *See generally Jackson*, 96 U.S. at 732–33.

49. *See* ACLU v. Reno, 929 F. Supp. 824, 834 (E.D. Pa. 1996) ("Unlike postal mail, simple e-mail generally is not 'sealed' or secure, and can be accessed or viewed on intermediate computers between the sender and recipient . . . ."), *aff'd*, Reno v. ACLU, 521 U.S. 844 (1997); Kerr, *supra* note 1, at 367 (discussed *supra* note 34 and accompanying text); Scott A. Sundstrom, *You've Got Mail! (and the Government Knows It): Applying the Fourth Amendment to Workplace E-Mail Monitoring*, 73 N.Y.U. L. REV. 2064, 2089 (1998) ("Copies of all incoming and outgoing e-mail pass through, and are usually stored on, a central computer on their way to the recipient. Employers could argue that employees disclose the contents of their e-mail messages because they are stored on computers over which the employer has control and access.")

Whether an end user's subjective expectation of privacy is objectively reasonable or legitimate in this context should *not* turn on the adoption of one perspective over the other. [50] While the internal perspective may support the analogy of e-mail to postal mail,[51] tempered perhaps by the analogy of cyberspace to "open fields,"[52] and the external perspective may support the analogy of e-mail to a telephone conversation,[53] all of these *partial analogies* (and the many others that we could develop) shed light on relevant facts and nuances that courts ought to take into account fully when applying the law. Factual nuances illuminated by both perspectives *should* complicate the analysis undertaken by courts.[54] Choosing a perspective, whether consciously or not, appears to be too blunt a method for screening facts for relevancy. Again, the point here is not to propose an answer to the question of whether sending e-mail gives rise to a reasonable expectation of privacy protected by the Fourth Amendment. The point is simply to show (1) that each perspective highlights different sets of relevant facts, (2) that a choice of perspective leads to tunnel vision, and (3) that the constitutional question is significantly more nuanced than either perspective standing alone would suggest.

While the Fourth Amendment hypothetical is useful for illustrating how a choice of perspective may be outcome-determinative, it does not

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50. As the Supreme Court noted in *United States v. American Library Ass'n*, "'[W]e are wary of the notion that a partial analogy in one context, for which we have developed doctrines, can compel a full range of decisions in such a new and changing area.'" United States v. Am. Library Ass'n, 123 S. Ct. 2297, 2305 n.3 (2003) (quoting Denver Area Educ. Telecomm. Consortium, Inc. v. FCC, 518 U.S. 727, 749 (1996) (Breyer, J., plurality opinion)). *But see supra* note 35 (discussing the Supreme Court's self-contradictory adoption of the external perspective).

51. *See* Kerr, *supra* note 1, at 359–60 (discussing the user's internal perspective of a virtual world when in cyberspace).

52. *See* R.A. Conrad, *Searching for Privacy in All the Wrong Places: Using Government Computers To Surf Online*, 48 NAVAL L. REV. 1, 38 (2001) ("The boundless nature of cyberspace is much more akin to 'open fields' than to the privacy of a home or office under this approach, which does not bode well for finding a reasonable expectation of privacy in e-mail.").

53. *See* United States v. Maxwell, 45 M.J. 406, 417 (C.A.A.F. 1996) (stating that Internet users have the same expectation of privacy in their Internet conversations as they would in telephone conversations in part because "the technology used to communicate via e-mail is extraordinarily analogous to a telephone conversation").

54. A few examples of such considerations include whether: (1) the conflict occurred in an employer-employee setting, *see* Sundstrom, *supra* note 49, at 2071–72; (2) the content was password protected, *see Maxwell*, 45 M.J. at 417; Charles N. Pede, *Driving 'Naked'; Privacy in Cyberspace; and Expansive 'Primary Purpose' Developments in Search, Seizure, and Urinalysis*, 1997 ARMY LAW. 20; (3) the e-mail service provider stores the e-mail on its own computers, *see Maxwell*, 45 M.J. at 416–17; (4) the e-mail was sent as an instant message, *see* Hunter, *supra* note 5, at 497; and (5) the e-mail was sent through a chat room, Hunter, *supra* note 5, at 496–97; *see also* United States v. Charbonneau, 979 F. Supp. 1177, 1183-84 (S.D. Ohio 1997) (finding that the defendant had no reasonable expectation of privacy in a message sent to a chat room).

present the situation where a choice of perspective leads to a myopic focus on one set of interests while excluding from consideration other important interests. To illustrate this situation, let's consider the evolving common-law doctrine of trespass to chattels and its application in cyberlaw disputes.

B. The Evolving Common-Law Doctrine of Trespass to Chattels[55]

A number of courts have breathed new life into the common-law doctrine of trespass to chattels by applying it to cyberlaw disputes concerning access to websites and computer systems.[56] Academics have critiqued this development primarily on three related grounds by arguing that:[57] (1) the courts improperly rely on the metaphor of cyberspace as place;[58] (2) courts improperly conflate trespass to land and trespass to chattels by effectively eliminating the actual damages element of the trespass to chattels cause of action;[59] and (3) courts are

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55. I further analyze the evolving doctrine of trespass to chattels in *Reconciling Internet and Cyberspace*. Brett M. Frischmann, Reconciling Internet and Cyberspace (2003), (unpublished manuscript, on file with author).

56. *See* Oyster Software, Inc. v. Forms Processing, Inc., No. C00-0724 JCS, 2001 WL 1736382, at *11–13 (N.D. Cal. Dec. 6, 2001); Register.com, Inc. v. Verio, Inc., 126 F. Supp. 2d 238, 249–50 (S.D.N.Y. 2000); eBay, Inc. v. Bidder's Edge, Inc., 100 F. Supp. 2d 1058, 1071–72 (N.D. Cal. 2000); Am. Online, Inc. v. LCGM, Inc., 46 F. Supp. 2d 444 (E.D. Va. 1998); Am. Online, Inc. v. IMS, 24 F. Supp. 2d 548, 550–51 (E.D. Va. 1998); CompuServe Inc. v. Cyber Promotions, Inc., 962 F. Supp. 1015, 1020–23 (S.D. Ohio 1997); Thrifty-Tel, Inc. v. Bezenek, 46 Cal. App. 4th 1559, 1563 (Ct. App. 1996); *see also* Ticketmaster Corp. v. Tickets.com, Inc., No. 99CV7654, 2000 WL 1887522, at *4 (C.D. Cal. Aug. 10, 2000) (discussing the application of the tresspass to chattels doctrine in *eBay* and distinguishing *eBay* from the facts and questions present in *Ticketmaster*).

57. For the most influential academic criticism of the application of trespass to chattels in cyberlaw disputes, see Dan L. Burk, *The Trouble with Trespass*, 4 J. SMALL & EMERGING BUS. L. 27, 48–49 (2000). *See also* Nina Elkin-Koren, *Let the Crawlers Crawl: On Virtual Gatekeepers and the Right to Exclude Indexing*, 49 J. COPYRIGHT SOC'Y U.S.A. 165, 171 (2001) (arguing that search engines are a political and economic asset, creating an efficient information economy). *But see* I. Trotter Hardy, *The Ancient Doctrine of Trespass to Web Sites*, 1996 J. ONLINE L. art. 7, *at* http://www.wm.edu/law/publications/jol/95_96/hardy.html; McGowan, *supra* note 18, at 360–66 (defending application of the doctrine and maintaining that, as a normative matter, a property rule should govern disputes over website access because such a rule facilitates private transactions and consequently an efficient allocation of resources).

58. *See* Hunter, *supra* note 5, at 443 (arguing that treating cyberspace as place creates "anticommons property").

59. The trespass to chattels cause of action consists of two standards, a conduct standard and a liability standard. The conduct standard indicates when a trespass to chattel occurs and the liability standard indicates when a trespasser may be held liable for his or her conduct. A plaintiff must satisfy both standards to maintain a cause of action.

Conduct standard: A trespass to chattels occurs when someone intentionally damages or interferes with the use of another's chattel. RESTATEMENT (SECOND) OF TORTS §§ 217–21 (1965). One interferes with the use of another's chattel by "dispossessing another of the chattel"

effectively creating a new intellectual property right.[60] Although the arguments are more nuanced, most of the academic criticism seems to build from the premise that courts are simply not understanding or fully appreciating the underlying facts of the dispute. The factual context of the Internet ("new context") differs from the factual contexts in which the trespass to chattels cause of action traditionally applies ("traditional context") and in which trespass to land applies ("land context"). The interests at stake in the new context are more varied than in the traditional or land contexts. The balance of interests struck in the traditional or land contexts might not be optimal in the new context because the interests at stake in each of the three contexts are different.[61] I agree with David McGowan that "normative analysis is needed."[62] Before proceeding with normative analysis, however, I suggest we reconcile the differing perspectives of the facts and determine what sets of interests are at stake when we apply trespass to chattels in this new context.

There are two types of trespass to chattels cases involving "computer systems," such as proprietary networks, servers, computers, and other computer/network resources at the "ends" of the Internet infrastructure.[63] In push cases (or spam cases), the defendant sends

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or "using or intermeddling with a chattel in the possession of another" without authorization. *Id.* § 217.

Liability standard: Liability depends upon a showing of actual damages, *see id.* §§ 218–20 and comments thereto, in all circumstances but one: for trespass to chattel by dispossession, an "action will lie although there has been no impairment of the condition, quality, or value of the chattel, and no other harm to any interest of the possessor." *Id.* § 218 cmt. d. In contrast with the trespass to chattels cause of action, trespass to land does not require a showing of actual damages to sustain a cause of action. *Id.* § 163. Intentional trespassory conduct alone is sufficient. *Id.*

The trespassory conduct in each of the cases cited above, *see* cases cited *supra* note 56, involved interference with the plaintiff's chattel, not dispossession, and thus each plaintiff should have been required to show actual damages to obtain relief. Much of the criticism of these cases has focused on whether plaintiffs were in fact required to show damages. Eliminating the damages element of the trespass to chattels cause of action based on unauthorized use or intermeddling effectively conflates either (1) trespass to chattels with trespass to land or (2) trespass by unauthorized use or intermeddling with trespass by dispossession. As seen below, the perceived conflation may be a result of choosing the internal perspective.

60. The argument that courts are creating a new intellectual property right stems from the notion that server owners are not really exerting control over their chattel property, namely servers and similar computer systems. Rather, they are controlling access to and use of information that is not protected by any existing intellectual property law. I explain this a bit more below in the context of the external perspective. *See infra* notes 86–95 and accompanying text (applying the external perspective to the facts in *eBay, Inc. v. Bidder's Edge, Inc.*).

61. *Cf.* Burk, *supra* note 57, at 33 (noting that trespass to chattels and trespass to land "secure entirely different interests").

62. McGowan, *supra* note 18, at 358.

63. For ease of reference, I simply refer to servers, keeping in mind the variety of other resources at the "ends."

unwanted e-mail to end users that obtain e-mail from the plaintiff's server without the plaintiff's (or the end users') consent.[64] In pull cases (or web crawler or spider cases), the defendant employs a software robot to search for and retrieve information housed in the plaintiff's server.[65] Although both push and pull cases present interesting and important issues to consider, I will only discuss the pull scenario in this Article.

In *eBay v. Bidder's Edge*, perhaps the most famous pull case, Bidder's Edge used a software robot to gather pricing information from eBay's website.[66] Next, Bidder's Edge aggregated that information with pricing information it obtained from other auction websites and made the aggregated information available on the Bidder's Edge website.[67] On a trespass to chattels theory, where the chattel was the plaintiff's server[68] and the trespass was the defendant's unauthorized

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64. *See* Am. Online, Inc. v. LCGM, Inc., 46 F. Supp. 2d 444 (E.D. Va. 1998) (sending unsolicited bulk e-mail constituted trespass to chattels); Am. Online, Inc. v. IMS, 24 F. Supp. 2d 548 (E.D. Va. 1998) (same); CompuServe, Inc. v. Cyber Promotions, Inc., 962 F. Supp. 1015, 1020–23 (S.D. Ohio 1997) (same). *But see* Intel Corp. v. Hamidi, 71 P.3d 296 (Cal. 2003) (sending unsolicited e-mail does not give rise to a cause of action for trespass to chattels).

65. *See* Oyster Software, Inc. v. Forms Processing, Inc., No. C00-0724 JCS, 2001 WL1736382, at *11–13 (N.D. Cal. Dec. 6, 2001) (deciding not to dismiss trespass to chattels claim where defendant allegedly used a software robot to copy metatag information); Register.com, Inc. v. Verio, Inc., 126 F. Supp. 2d 238, 249–50 (S.D.N.Y. 2000) (unauthorized use of software robot to harvest information was trespass to chattels); eBay, Inc. v. Bidder's Edge, Inc., 100 F. Supp. 2d 1058, 1071–72 (N.D. Cal. 2000) (same).

66. *eBay*, 100 F. Supp. 2d at 1060-63. The court in *eBay* described the problems caused by software robots as follows:

> A software robot is a computer program which operates across the Internet to perform searching, copying and retrieving functions on the web sites of others. A software robot is capable of executing thousands of instructions per minute, far in excess of what a human can accomplish. Robots consume the processing and storage resources of a system, making that portion of the system's capacity unavailable to the system owner or other users. Consumption of sufficient system resources will slow the processing of the overall system and can overload the system such that it will malfunction or "crash." A severe malfunction can cause a loss of data and an interruption in services.

Id. at 1060–61 (footnote and citations omitted).

67. Professor McGowan goes over the case in more detail in his article in this Symposium. *See* McGowan, *supra* note 18, at 349–52.

68. To be clear, "capacity" is not a chattel, contrary to suggestions in the *eBay* decision. *See eBay*, 100 F. Supp. 2d at 1071. The court clarified that:

> eBay's claim is that BE's use is appropriating eBay's personal property by using valuable bandwidth and capacity, and necessarily compromising eBay's ability to use that capacity for its own purposes. . . . [I]t is undisputed that eBay's server and its capacity are personal property, and that BE's searches use a portion of this property. Even if, as BE argues, its searches use only a small amount of eBay's computer system capacity, BE has nonetheless deprived eBay of the ability to use that portion of its personal property for its own purposes.

use of the server, eBay obtained an injunction from the district court prohibiting Bidder's Edge from "using any automated query program, robot, web crawler or other similar device, without written authorization, to access eBay's computer systems or networks, for the purpose of copying any part of eBay's auction database."[69]

Critics of the district court decision emphatically argue that the court misunderstood the stakes of its decision.[70] By granting an injunction on the facts of *eBay v. Bidder's Edge*, the district court *effectively* treated the chattels at issue as the equivalent of land and *effectively* created a new intellectual property right. The district court did not expressly do either of these things. Although the court acknowledged that "an ongoing trespass of a computer system . . . is more akin to the traditional notion of a trespass to real property . . . than the traditional notion of a trespass to chattels," and that "applying traditional legal principles to the [facts of the] Internet can be troublesome,"[71] the court

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Id. Capacity is a technological and economic variable that, depending on the context in which it is used, may describe the data processing ability of a computer system, the data storage ability of a computer system, and/or the information carrying ability of telecommunications facilities. *See, e.g.*, ACADEMIC PRESS DICTIONARY OF SCIENCE AND TECHNOLOGY 353 (Christopher Morris ed., 2002) (defining capacity as "the maximum rate at which a computer system can process work"; "the total amount of data that a computer memory component can store."); NEWTON'S TELECOM DICTIONARY 149 (16th ed. 2000) (explaining the different capacity measurements for different facilities, such as data lines, switches, and coaxial cables). *See generally* MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 168 (10th ed. 2000) (defining capacity as "the potential or suitability for holding, storing, or accommodating" and also as "the facility or power to produce, perform, or deploy"). It is important to realize that the amount of capacity consumed by a particular user is potentially relevant to the measurement of damages. Like physical infrastructure resources, server capacity is not always rivalrously consumed; it is only "sometimes rivalrous[ly]" consumed, and it is renewable (absent a crash or other damaging incident). *Cf.* Brett Frischmann, *Privatization and Commercialization of the Internet Infrastructure: Rethinking Market Intervention into Government and Government Intervention into the Market*, 2 COLUM. SCI. & TECH. L. REV. 1, 25–29, *at* http://www.stlr.org/html/volume2/frischmannintro.pdf (2001) (analyzing Internet infrastructure as a sometimes rivalrous, renewable good).

69. *eBay*, 100 F. Supp. 2d at 1073.

70. *See, e.g.*, Lemley, *supra* note 12, at 527–29 (arguing that what was at stake was information rather than real property).

71. *eBay*, 100 F. Supp. 2d at 1067. Interestingly, the court makes this acknowledgment after stating the following:

> If eBay were a brick and mortar auction house with limited seating capacity, eBay would appear to be entitled to reserve those seats for potential bidders, to refuse entrance to individuals (or robots) with no intention of bidding on any of the items, and to seek preliminary injunctive relief against non-customer trespassers eBay was physically unable to exclude. The analytic difficulty is that a wrongdoer can commit an ongoing trespass of a computer system that is more akin to the traditional notion of a trespass to real property, than the traditional notion of a trespass to chattels, because even though it is ongoing, it will probably never amount to a conversion.

Id.

expressly maintained that it was applying the trespass to chattels doctrine to the facts of the case. As noted above, the academic criticism of *eBay* and related cases seems to build from the premise that courts are simply not understanding the underlying facts or fully appreciating the consequences of their decisions.

Based on its opinion, the *eBay* court does not appear to choose either an internal or external perspective of the facts.[72] Instead, the court alternates between perspectives, at times looking at the chattel (the server) from a virtual perspective and focusing on it as a "space" or "place" that end users visit and occupy,[73] and at times looking at the chattel from a real-space perspective and focusing on the server's technical operations and its capacity to handle, process, and respond to queries from other end users. To understand the implications of this inadvertent shifting between perspectives, let's consider what the facts look like from each perspective.[74]

According to the internal perspective, end users (including Bidder's Edge) visit eBay's auction website. In cyberspace, a website is a place of business—visiting an auction website in cyberspace looks like visiting an auction house in the physical world.[75] Auction houses have limited capacity to accommodate visitors (e.g., limited seats), and so do auction websites[76] because servers have finite capacity to accommodate

72. *See eBay*, 100 F. Supp. 2d at 1064–71. *But cf.* Hunter, *supra* note 5, at 482–88 (arguing that trespass to chattels has evolved poorly in the cyberspace context because courts have relied on the cyberpsace as place metaphor).

73. Although the court does expressly reject eBay's internal perspective "argument that BE's activities should be thought of as equivalent to sending in an army of 100,000 robots a day to check the prices in a competitor's store," the court's basis for rejecting the argument is that eBay's store is not a "brick and mortar" store and "[m]ore importantly, for the analogy to be accurate, the robots would have to make up less than two out of every one-hundred customers in the store, the robots would not interfere with the customers' shopping experience, nor would the robots even be seen by the customers." *eBay*, 100 F. Supp. 2d at 1065–66. This does not seem to be a rejection of the internal perspective altogether, but rather seems focused on the type of interference caused by the trespassory conduct.

74. While the court does not expressly adopt one perspective over the other and instead seems to oscillate between perspectives, *see, e.g.*, *id.* at 1070 (discussing the unauthorized use of eBay's chattel and referring to eBay's website, electronic database, server, and computer systems), Hunter and other critics of the *eBay* decision may be correct that the court *effectively* chooses the internal perspective (or cyberspace as place metaphor) and possibly in the manner advocated by Kerr. *See* Hunter, *supra* note 5, at 484; *cf.* Kerr, *supra* note 1, at 391 (suggesting that courts should look to the doctrine itself and determine "whether the law is more closely attuned to external or internal concerns").

75. I acknowledge that this is virtual reality at its extreme.

76. Although the court did not focus exclusively on the website, its discussion often appeared to conflate server and website. *See eBay*, 100 F. Supp. 2d at 1064. Viewing the facts from an internal perspective makes it easier for courts to envision the defendant trespassing *on* or *in* the server because of the virtual connection to the website.

visitors.[77] Application of the trespass to chattels doctrine seems to flow from this view of the facts quite easily: unauthorized visitors are deemed trespassers because they are entering the website and using the resource without authorization, and this conduct causes harm to the chattel in the sense that limited (and valuable) "space" is consumed.[78]

Merely visiting an auction website does not cause harm per se; nor does visiting an auction house without permission.[79] Actual harm is not required in the auction house context because the applicable trespass doctrine is trespass to land, not trespass to chattels. Thus, we can see why academics have concluded that the trespass to chattels doctrine effectively morphs into trespass to land (as an auction website looks like an auction house, the damages requirement disappears).[80] This

77. That auction houses and auction websites both have finite capacity does not mean that capacity is scarce for either resource. There may be ample capacity for unauthorized visitors in both contexts. Contrary to the analysis in *eBay*, consumption of a "small amount of . . . capacity" does not necessarily deprive a property owner of her ability to use her property in either context —whether an auction house or an auction website. *See supra* note 68 (arguing that server capacity is not always rivalrously consumed and is renewable).

78. Although the court rested on its finding that eBay would likely prove that Bidder's Edge's unauthorized queries "diminished the quality or value of eBay's computer systems," *eBay*, 100 F. Supp. 2d at 1071, it remains unclear whether a plaintiff may rely on a showing of unauthorized use of a server alone to establish both trespassory conduct and harm. *See* Oyster Software, Inc. v. Forms Processing, Inc., No. C00-0724 JCS, 2001 WL 1736382, at *12 (N.D. Cal. Dec. 6, 2001) (holding that, under *eBay*, unauthorized use of a computer system is sufficient to establish a trespass to chattels cause of action); Register.com, Inc. v. Verio, Inc., 126 F. Supp. 2d 238, 250 (S.D.N.Y. 2000) (same). *But see* Ticketmaster Corp. v. Tickets.com, Inc., No. 99-CV 7654, 2000 WL 1887522 (C.D. Cal. Aug. 10, 2000) (holding that *eBay* requires more than negligible interference).

79. *Cf. eBay*, 100 F. Supp. 2d at 1065–66.

80. Perhaps there is an alternative explanation. There are hints in the opinion that the court was viewing capacity itself as a chattel and found that Bidder's Edge dispossessed eBay of its capacity, in which case a showing of damages would be unnecessary. Although this sounds ridiculous—capacity cannot be a chattel because it is a descriptive variable about a chattel (whether a computer server or a water bucket), see *supra* note 68 for a discussion of the concept of capacity and the *eBay* court's alluding to capacity as chattel. The court's analysis of the damage element suggests some confusion:

> Although eBay does not claim that this consumption has led to any physical damage to eBay's computer system, nor does eBay provide any evidence to support the claim that it may have lost revenues or customers based on this use, eBay's claim is that BE's use is appropriating eBay's personal property by using valuable bandwidth and capacity, and necessarily compromising eBay's ability to use that capacity for its own purposes.

eBay, 100 F. Supp. 2d at 1071 (footnote omitted). By characterizing eBay's "bandwidth and capacity" as "valuable" and suggesting that Bidder's Edge's use of bandwidth and capacity "necessarily compromis[ed] eBay's ability to use that capacity," the court seemed to be treating capacity as the chattel, rather than the server. *Id.* The court continued:

> [I]t is undisputed that eBay's server and its capacity are personal property, and that BE's searches use a portion of this property. Even if, as BE argues, its searches use only a small amount of eBay's computer system capacity, BE has nonetheless deprived eBay of the ability to use that portion of its personal property for its own purposes.

conflation of trespass to chattels and trespass to land is problematic because it unravels carefully constructed walls between doctrines.[81]

Yet, if you take the internal perspective seriously, you might think that there is no problem with the morphing of chattels to land because we are talking about *virtual land.* You might argue that "trespass to *land in cyberspace*" is equivalent to "trespass to *chattels in the real space*" because *land in cyberspace* is just *real-space chattel,* the server.[82] If one strictly adheres to an internal perspective of the facts, this seems to make sense because it is "space" on the server that is being used without authorization and causing harm to the plaintiff, who owns the server and website.

This line of reasoning—premised on strict adoption of the internal perspective and the facts isolated by this perspective—breaks down, however, because "land in cyberspace" is not just "chattels in real space." *The factual premise is flawed:*[83] "land in cyberspace" is really

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> The law recognizes no such right to use another's personal property. Accordingly, BE's actions appear to have caused injury to eBay and appear likely to continue to cause injury to eBay.

Id.; *see also Register.com, Inc.*, 126 F. Supp. 2d at 250 ("[E]vidence of mere possessory interference is sufficient to demonstrate the quantum of harm necessary to establish a claim for trespass to chattels."). Under this alternative explanation, the problem is not that "chattel becomes land" but rather that a new possessory interest in capacity is created and given legal protection. *See* Lemley, *supra* note 12, at 528 & n.27 (noting that the *eBay* court's discussion of inherent injury was dictum).

81. *See, e.g.*, Burk, *supra* note 57, at 33. As discussed previously, eliminating the damages element of the trespass to chattels cause of action based on unauthorized use or intermeddling effectively conflates either (1) trespass to chattels with trespass to land or (2) trespass by unauthorized use or intermeddling with trespass by dispossession. *See supra* note 59. While scholars have focused on the former view based perhaps on the belief that courts have been adopting an internal perspective of the facts, the latter view also seems to fit as well. To the extent that courts view server capacity itself as a chattel, then unauthorized use of the server constitutes trespass by dispossession. Of course, as noted previously, server capacity is not a chattel. *See supra* note 68.

82. *Cf.* Intel Corp. v. Hamidi, 71 P.3d 296, 309 (Cal. 2003). The California Supreme Court noted that:

> Professor Epstein suggests that a company's server should be its castle, upon which any unauthorized intrusion, however harmless, is a trespass.
>
> Epstein's argument derives, in part, from the familiar metaphor of the Internet as a physical space, reflected in much of the language that has been used to describe it: "cyberspace," "the information superhighway," e-mail "addresses," and the like. . . . "[C]yberspace" itself has come to be known by the oxymoronic phrase "virtual reality," which would suggest that any real property "located" in "cyberspace" must be "virtually real" property. Metaphor is a two-edged sword.

Id.

83. *Cf. id.* (rejecting the factual premise underlying Epstein's argument, stating, "The plain fact is that computers, even those making up the Internet, are—like such older communications equipment as telephones and fax machines—personal property, not realty."). Note that *Hamidi* and other push cases are factually distinguishable (and should be distinguished) from pull cases,

a virtual construct derived from, among other things, applications running on your computer and information provided by the server.[84] While the server and your computer are real-space chattels, the information and applications are not. Critically, we do not get this far if we view the facts exclusively from the internal perspective. We need to take into account facts brought into focus by the external perspective.[85]

According to the external perspective, the facts look a bit different. Bidder's Edge and eBay are end users. Bidder's Edge, hooked up at "one end of the Internet" with its computer system, sends requests for data to eBay, hooked up at "another end of the Internet" with its computer system; the eBay system receives the Bidder's Edge requests and responds by sending the information requested by Bidder's Edge.[86] Viewed in this light, a query sent to eBay is a communication between end users—a request for information—just like any other Internet communication. Application of the trespass to chattels doctrine does not seem to flow from this view of the facts quite so easily.

Assuming for purposes of argument the validity of the *Thrifty-Tel v. Bezenek* holding that "electronic signals" are "sufficiently tangible to support a trespass cause of action,"[87] and that eBay did not authorize Bidder's Edge to send multiple, repeated queries to eBay's computer system,[88] let's consider whether the conduct of Bidder's Edge constitutes an interference with eBay's possessory interest in its server.

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especially pull cases involving commercial websites. In the context of pull cases, the internal perspective brings into relief the fact that both site owners and visitors treat websites as business premises, in terms of investment decisions and commercial relationships, for example. The internal perspective does not yield the same factual insights in the push context.

84. The *eBay* court alluded to this point. *See eBay*, 100 F. Supp. 2d at 1065 n.11.

> The phrase "brick and mortar" is often used to designate a traditional business when contrasting it with a predominantly, or entirely, on-line business. The phrase appears to refer to the historical reliance on conducting commerce within the context of a physical space made from materials such as brick and mortar, as opposed to the modern trend toward conducting commerce in a cyberspace made from computer programs.

Id.

85. The external perspective reminds us that we are talking about a number of complementary resources—Internet infrastructure (physical and logical), computer systems at the "ends" of the infrastructure, applications running on those systems, and information sent back and forth by those systems across the infrastructure.

86. *See, e.g.*, Lemley, *supra* note 12, at 523–24 (describing Internet communication "as a technical matter").

87. Thrifty-Tel, Inc. v. Bezenek, 54 Cal. Rptr. 2d 468, 473 n.6 (Ct. App. 1996). For a critique of the possible ramifications of "electronic tresspass," see Burk, *supra* note 57, at 34.

88. For purposes of this comment, I leave aside the issue of authorization, which is an important issue for publicly accessible websites. For the court's analysis of authorization, see *eBay*, 100 F. Supp. 2d at 1070–71.

Putting aside interference by dispossession and interference by intermeddling, as did the *eBay* court, we are left asking whether Bidder's Edge interfered with eBay's possessory interest in its server by unauthorized use. The *eBay* court concluded that there was no dispute that the conduct amounts to use of eBay's computer systems. While intuitively this seems to make sense—of course, Bidder's Edge *used* eBay's server when it searched the website and gathered information—it may be worth more careful consideration. How exactly is Bidder's Edge using eBay's system? What really happens technically? If a query sent to eBay is just a request for information, a communication between end users, it seems less intuitive and less obvious that Bidder's Edge is using the eBay system.[89]

Viewing the facts from the external perspective makes the communication between end users look like a telephone call (at least for purposes of analyzing whether one end user is using the other's chattel when the end users communicate).[90] Suppose a Bidder's Edge employee calls an eBay employee on the telephone, the eBay employee answers the phone, the Bidder's Edge employee asks the eBay employee a question, and the eBay employee answers the question. Has Bidder's Edge *used* eBay's telephone (the chattel)? I think the answer must be no.[91] Should the answer change if we substitute "computer system" for "employee"? In other words, should the automated nature of the communications alter our conception of use? Probably not, unless someone is capable of exercising dominion over the use of

89. *Cf.* Lemley, *supra* 12, at 528–29 (stating that by requesting information, Bidder's Edge did not exclude others from using eBay's cite and arguing that this information is a public good to which "inviolability" of property law is inapplicable).

90. *See, e.g.*, Lemley, *supra* note 12, at 524 n.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.

Id.; *see also* Intel Corp. v. Hamidi, 71 P.3d 296, 309 (Cal. 2003) (analogizing e-mail and telephone communications).

91. The *eBay* court did not view the query as a simple communication between end users. Instead, it viewed a query as a means of accessing eBay's private property. The court's analysis of whether the conduct of Bidder's Edge constitutes an interference with eBay's possessory interest in its server seems confused because the court refers not only to eBay's server and computer systems, which are chattel, but also to eBay's electronic database and website, which are not chattel. *eBay*, 100 F. Supp. 2d at 1069–70.

another's computer system,[92] which is not something that has been alleged in any of the trespass to chattels cases.

Ultimately, the external perspective focuses one's attention on a number of important differences between real space and cyberspace, the most important of which is the fact that "the content of the Internet consists only of information."[93] The academic critiques of *eBay* (and similar trespass to chattels decisions) hone in on this point—the case was *really* about access to information because it was information that Bidder's Edge requested from eBay and it was information that eBay sought to control.[94] *Effectively* treating servers (chattels) as the equivalent of land *effectively* creates a new intellectual property right because server owners may *effectively* control access to and use of information that is not protected by any existing intellectual property right.[95]

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92. Lemley, *supra* note 12, at 526 (noting that content on the Internet is a public good that is easily duplicated and used without deprivation, whereas chattels and real property are difficult, if not impossible, to duplicate, and use necessarily involves deprivation).

93. *Id.* Lemley lists the following examples of "obvious differences between the way things work in the physical world and the way they work online":

> • 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. 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.

Id. at 525–26 (footnote omitted). Of course, these differences are not so obvious if one chooses an internal perspective, and they have not been obvious to courts. *See, e.g., id.* at 527–29 (suggesting that courts have been misled by metaphors and have not understood the differences).

94. *See* Lemley, *supra* note 12, at 540–41 (stating that in Internet trespass cases, defendants attempt to either acquire or convey information).

95. *Id.* at 537 (suggesting that "in *eBay*, the rights that the court granted eBay exceed anything it could have obtained offline").

Thus, in addition to affecting legal analysis,[96] focusing exclusively on one perspective of the facts may obscure (or remove entirely) from consideration important interests at stake in a decision. The internal perspective focuses one's attention on the chattel owner's interest in the physical chattel *and* virtual business premises. The external perspective, on the other hand, focuses one's attention on the competing interests in intangible information assets. Neither perspective standing alone illuminates the full range of interests at stake.

Yet, taken together, the internal and external perspectives reveal important insights and raise important questions about the underlying balance of interests: on one hand, it is important that end users (including website owners) consider websites to be business premises. This finding may indicate that end users' expectations and investment decisions may be best served by treating "land in cyberspace" like land in real space, and it may also be relevant to community notions of what constitutes wrongful conduct. On the other hand, it is also important that websites are not the product of servers and computer systems alone, but rather they require another essential input: information. This fact counsels caution in creating property rights for websites because

96. This chart provides an abbreviated summary of the legal analysis:

Trespass to Chattels Standard	**Internal/ Cyberspace Perspective**	**External/Internet Perspective**	**Both Perspectives**
Unauthorized Use of Chattel?	*Chattel*: server/ website. *Use:* Entering website without authorization constitutes unauthorized use of site and its limited capacity. • Analogous to visiting auction house.	*Chattel*: server. *Use:* Sending unauthorized queries does not constitute unauthorized use. • Analogous to telephone call.	*Chattel*: server / website. Important link between server, information, website, and end users' expectations. *Use:* Both analogies fall short; use of server seems more plausible than telephone scenario suggests; end user expectations and community standards may be shaped by association of website with business premises.
Harm	If website is treated the same as business premises, then no real need to show harm (like trespass to land); consumption of valuable "space" constitutes harm.	If querying constitutes use, need to look at congestion-related harms.	May have congestion-related harm. Should loss of control over one's online business premises be sufficient? Are investment-based expectations undermined? Might the business owner suffer reputational harm among customers?

intellectual property and First Amendment doctrines already strike a balance among public and private interests in access to and control over the use of various types of information. Thus, a decision made with respect to websites ought to take into account the competing interests in controlling access to information assets.

At the outset of this Article, I suggested that the third step to reconciling Internet and cyberspace requires a principled application of relevant legal doctrines. This may require the application of a particular rule to a set of facts complicated by the nuances highlighted by the two perspectives. Or it may require consideration of complex intersections among traditionally independent areas of the law. Recognizing that legal doctrines have developed to address each type of interest as a separate, independent discipline, it may be necessary to adopt an interdisciplinary approach to reconcile intersecting areas of the law. While difficult, this has been done, for example, in the context of the intersection of antitrust law and intellectual property law, where federal courts have integrated antitrust considerations into intellectual property law through the common-law doctrines of copyright and patent misuse.[97] I intend to address this third step fully in *Reconciling Internet and Cyberspace*. Let me give a brief glimpse of where I am going in the context of trespass to chattels.

Once we accept that both perspectives are valid and recognize the three types of interests at stake, it becomes clear that we cannot apply traditional trespass to chattels doctrine in a vacuum. Other areas of the law, such as trespass to land, intellectual property, and the First Amendment,[98] are certainly implicated and should factor into any legal analysis. There are many ways that this could happen. For example, suppose a court were to follow Professor McGowan's advice and, in the context of applying the common-law doctrine of trespass to chattels, create a property rule for websites.[99] As noted above, such a rule would

97. *See* Brett Frischmann & Dan Moylan, *The Evolving Common Law Doctrine of Copyright Misuse: A Unified Theory and Its Application to Software*, 15 BERKELEY TECH. L.J. 865, 875 (2000) (arguing that "[c]ommon law misuse allows courts to develop rules that evolve dynamically" and "reconcil[e] . . . relationships between the related and interdependent bodies of antitrust, copyright, and patent law").

98. The idea of incorporating First Amendment considerations into state tort law is by no means novel; a First Amendment defense to state tort claims has been recognized in a number of contexts. *See, e.g.*, Hustler Magazine v. Falwell, 485 U.S. 46 (1988) (recognizing First Amendment defense to intentional infliction of emotional distress claim); N.Y. Times Co. v. Sullivan, 376 U.S. 254 (1964) (recognizing First Amendment defense to defamation claim).

99. *See* McGowan, *supra* note 18, at 367–87. I am not endorsing the creation of a property rule here. I am simply explaining how a court that accepted the validity of both perspectives and recognized the various interests at stake might proceed to reconcile the competing interests.

effectively provide exclusive rights over the server and some information not ordinarily protected by any intellectual property right.[100] Such a rule might be cabined by an equitable defense analogous to the copyright or patent misuse doctrine that protected against overreaching by website owners (i.e., owners seeking to exert control over information, or other resources, outside the scope of the website).

At the Conference, I noted that this might be an appropriate common-law method for reconciling the competing interests at stake. This route—property rule plus misuse defense—recognizes both perspectives as valid; recognizes the connection between website, server, information, and end users' expectations; and recognizes that the traditional trespass to chattels tort is being stretched to protect a traditional chattel (server) and traditional non-chattel (information) because these resources act as complementary inputs into the production of websites (virtual business premises).

III. CONCLUSION

Cyberlaw is about evolution—technological evolution, legal evolution, and the evolving relationship between law and technology. Cyberlaw disputes often involve novel facts and contexts because of rapidly evolving technologies. While the Internet infrastructure represents an amazing technological breakthrough and continues to evolve in significant ways, we must also be cognizant of the fact that Internet-enabled applications, content delivery mechanisms, and types of content are also evolving, as are the relationships among end users.

All of these "moving parts" make the facts of the Internet complicated, multifaceted, and context-dependent. The problem of perspective is, at first cut, about unconscious, inadvertent, or implicit choices of how to look at the facts. Orin Kerr persuasively makes this point.[101] Choosing a perspective can determine the outcome of a decision, and it would be better if such choices were made consciously and explicitly. But the true danger, as I have argued, is in the perceived need to choose a perspective, where both perspectives yield accurate but different renditions of the facts and provide important insights into the

100. *See supra* note 95 and accompanying text (noting the ramifications of affording the equivalent of property rights to servers); *see also* Intel Corp. v. Hamidi, 71 P.3d 296 (Cal. 2003) (declining to extend the common-law doctrine of trespass to chattels to electronic communications and create a property rule for computer servers).

101. *See* Kerr, *supra* note 1, at 357–58 (noting that courts and commentators switch between perspectives without ever realizing it).

interests at stake in a particular context and the connections (or links) between those interests.

To illustrate, let us return to the trespass to chattels example. Adopting an internal perspective of the facts, you might argue that we should treat trespassing on business premises the same, whether the trespass occurs in cyberspace or real space.[102] Adopting an external perspective of the facts, I might counter your argument by stating that your argument rests on the false premise that websites are business premises. And around and around we go, arguing about which is the right perspective and which is the wrong perspective. The problem with our debate is that both perspectives are descriptively valid, and the normative argument is an important one that deserves careful analysis.[103]

102. *Cf. eBay*, 100 F. Supp. 2d at 1065 (comparing ongoing trespass to business premises in cyberspace with ongoing trespass to business premises in real space).

103. *Cf.* McGowan, *supra* note 18, at 358–60.