

PROPERTY RIGHTS AND COMPETITION ON THE INTERNET: IN SEARCH OF AN APPROPRIATE ANALOGY

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ABSTRACT

Reasoning by analogy is a time-honored method of legal development. However, recent litigation exposes the weakness of applying legal principles developed in the “bricks and mortar” world by analogy to cyberspace. Using recent court decisions that discuss who may access a website and by what means, this Article illustrates how results can change depending on the analogy the court adopts. The Article argues that rather than searching for analogies, courts and legislators could more profitably devote their energies to understanding how the Internet differs from physical space, evaluating whether those differences call for new legal rules, and considering the conflicting policy interests implicated. Real property rules may have unintended anticompetitive consequences if transplanted to cyberspace. Indeed, a systematic evaluation of the policy interests implicated supports more flexible property rules governing access to and use of websites than those rules governing access to traditional real or personal property.

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† Professor of Law, Associate Dean for Administration and Graduate Programs, Boston University School of Law. I would like to thank Mark Lemley, Tom Jorde, and Dan Rubinfeld for inviting me to the “Beyond Microsoft: Antitrust, Technology, and Intellectual Property” Conference. I would also like to thank Stacey Dogan, Jane Ginsburg, Keith Hylton, Mike Meurer, Henry Monaghan, Mark Nadel, and my research assistants, Scott Katz and Tamarah Belczyk, for their help, my co-panelists at the conference—Dan Burk, Mark Lemley, Jay Monahan, and Debra Valentine—for their helpful comments and suggestions, and James Molloy for his support.

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I. INTRODUCTION

Historically, the law has accorded the owners of many types of property certain exclusive rights. Because the underlying economic and other policies justifying these grants of rights vary in strength depending on the type of property, the particular bundle of rights varies. For example, the owners of real property generally enjoy more expansive exclusionary rights than the owners of personal property, including intellectual property.¹

1. The real property owner has a right to exclude any person who would cross his or her property's boundaries regardless of the presence or absence of harm, and subject to limited defenses such as necessity. See Frona M. Powell, *Trespass, Nuisance, and the Evolution of Common Law in Modern Pollution Cases*, 21 REAL EST. L.J. 182, 185-88 (1992) (summarizing the trespass cause of action); see also JOHN G. SPRANKLING, UNDERSTANDING PROPERTY LAW § 30.02, at 486 (2000) (noting that although the original right to exclude was "virtually absolute" and the trespass cause of action "extraordinarily broad," in recent years the right to exclude "has been curtailed for reasons of public policy"). In contrast, a successful trespass to chattels action requires that the plaintiff prove harm. See Susan M. Ballantine, Note, *Computer Network Trespasses: Solving New Prob-*

The various property regimes have traditionally coexisted fairly comfortably with each other and with antitrust law. Indeed, American competition law presupposes a system of private property as the model under which economic incentives will produce the most efficient and desirable marketplace outcomes.² Antitrust law generally tolerates harm to the competitive process that may seem to arise when property owners exercise their lawfully obtained rights.³ It may, however, intervene by requiring a property owner to deal with others when that owner has obtained and abused a monopoly position,⁴ or the property itself has become an essential facility.⁵ In the past, these interventions have been relatively rare, and

lems with Old Solutions, 57 WASH. & LEE L. REV. 209, 234 (2000) (summarizing the trespass to chattels cause of action). Before being entitled to an intellectual property right, the owner of an intangible work must meet certain statutory requirements. *See, e.g.*, 17 U.S.C. § 101 (1994) (granting copyright only in original works of authorship fixed in a tangible medium of expression); 35 U.S.C. §§ 101-103 (1994) (considering only new, useful, and nonobvious processes, machines, manufactures, compositions of matter, and improvements thereto to be within the scope of the patent law). The intellectual property rights, once granted, are subject to a number of limiting doctrines and defenses. *See, e.g.*, 17 U.S.C. § 107 (1994) (setting forth the fair use defense in copyright law); *see also infra* Part II.C (discussing how copyright law and real property law would approach the question of access to a website differently).

2. *See* Ian J. McPherson, Comment, *From the Ground to the Sky: The Continuing Conflict between Private Property Rights and Free Speech Rights on the Shopping Center Front Seventeen Years after Pruneyard*, 16 N. ILL. U. L. REV. 717, 718 (1996) (noting that private property rights are essential to the functioning of an economy based on capitalist theory and citing JAMES W. ELY, JR., *THE GUARDIAN OF EVERY OTHER RIGHT: A CONSTITUTIONAL HISTORY OF PROPERTY RIGHTS* (1992)).

3. Under antitrust law, a property owner may generally refuse to deal with others. In the absence of any purpose to create or maintain a monopoly, the [Sherman A]ct does not restrict the long recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal; and, of course, he may announce in advance the circumstances under which he will refuse to sell.

United States v. Colgate & Co., 250 U.S. 300, 307 (1919); *see also infra* Part III.B.2 (discussing situations in which antitrust law may impose an affirmative duty to deal).

4. *See, e.g.*, *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985) (holding the monopolist Aspen Skiing's behavior in refusing to continue a joint marketing arrangement with a smaller competitor to be exclusionary conduct); *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951) (holding that a newspaper publisher's refusal to accept advertising from parties who also advertised on a radio station was intended to destroy the radio station as a competitor, and was an illegal attempt to monopolize interstate commerce for local advertising).

5. *See, e.g.*, *United States v. Terminal R.R. Ass'n*, 224 U.S. 383 (1912) (holding that owners of bridge and terminal facilities essential to rail access must make them available to all users on reasonable terms); *see also* Phillip Areeda, *Essential Facilities:*

almost always controversial,⁶ in part because doctrines in property law itself (particularly intellectual property law) limit the scope of exclusive property rights, helping to ameliorate the anticompetitive effects that might otherwise sometimes attend their exercise.⁷

As information has migrated to the Internet, courts, in addressing claims of unauthorized access to websites and the use of data thereon, have searched for an analogy to help them define property rights in websites. Results vary depending on what analogy the court adopts, and whether it focuses on the website itself or the tangible server on which that site resides. The analogy the court adopts also has competitive consequences that, because of the particular characteristics of the electronic me-

An Epithet in Need of Limiting Principles, 58 ANTITRUST L.J. 841 (1989) (criticizing the doctrine and examining its evolution).

6. The widely publicized antitrust actions against Intel and Microsoft illustrate the controversy that can attend antitrust actions, particularly when intellectual property rights are involved. *See Intergraph Corp. v. Intel Corp.*, 195 F.3d 1346 (Fed. Cir. 1999) (reversing a lower court's finding of an antitrust violation by Intel, and suggesting that exercising intellectual property rights cannot constitute an antitrust violation); *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30 (D.D.C. 2000) (holding Microsoft liable for violations of the Sherman Act); *see also* Agreement Containing Consent Order, *In Re Intel Corp.*, No. 9288, 1999 F.T.C. LEXIS 38, 41-44 (Mar. 17, 1999) (setting forth the terms of a consent decree that Intel signed with the Federal Trade Commission addressing the same conduct as alleged in the *Intergraph* case); *United States v. Microsoft Corp.*, 97 F. Supp. 2d 59 (D.D.C. 2000) (setting forth the remedial order, including mandatory disclosure of certain technical information); George Leopold & Brian Fuller, *Industry Mulls API Impact of Microsoft Divestiture*, ELECTRONIC ENGINEERING TIMES, June 12, 2000, at 6 (citing Microsoft's contention that the remedial order "is unfair confiscation of our intellectual property, and [] goes far beyond any issue in th[e] case"). Microsoft further argues that "[t]he government has made plain that it contemplates a wholesale transfer of proprietary information about Microsoft's operating systems to competitors on a royalty-free basis, a radical step that will undermine Microsoft's incentives to innovate." Mary Jo Foley, *Microsoft Ruling: Devil in the Details*, ZDNET NEWS, June 7, 2000, at <http://www.zdnet.com/zdnn/stories/news/0,4586,2584068,00.html>.

7. For example, the common law doctrine of misuse limits the copyright or patent holder's ability to expand the scope of its intellectual property right. *See, e.g., Lasercomb Am. Inc. v. Reynolds*, 911 F.2d 970, 975-77 (4th Cir. 1990) (explaining the evolution of patent misuse in the course of adopting an analogous principle in copyright law). The statutory doctrine of fair use in copyright provides certain infringers with a defense against copyright infringement and is often employed when market defects prevent pro-competitive licensing from occurring. *See* 17 U.S.C. § 107 (1994); Wendy J. Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors*, 82 COLUM. L. REV. 1600 (1982) (explaining how fair use can be conceptualized as a response to market failure); Lydia Pallas Loren, *Redefining the Market Failure Approach to Fair Use in an Era of Copyright Permission Systems*, 5 J. INTEL. PROP. L. 1 (1997) (building on Gordon's work and emphasizing different ways in which markets may fail).

dium, may be magnified when compared to the effects of property rights in the "real" world. This raises the question of whether antitrust law, or at least competitive concerns, should influence the structure of property rights on the Internet more explicitly than they have in tangible space.

For example, consumers benefit from the availability of comparison-pricing information. In the conventional retail context, the real property right to exclude includes the rights to ban those who would gather comparison-shopping data from entering a retail establishment, and to remove them from the premises once the owner detects their activity.⁸ The impact on competition is, however, probably minimal, because it is difficult for the storeowner to detect the offensive conduct.

Should the same right to exclude apply on the Internet? The Internet decreases costs of information exchange, making it likely that consumers shopping in cyberspace will fare better than their real world counterparts in obtaining comparison-pricing data. Rather than driving around town to find the lowest price, consumers can sit at their computers and search different sites for the best deal. However, it is by no means costless for them to access and search each e-commerce website offering products of interest. Consumers would likely enjoy significant cost-savings and competitive benefits if they could travel to one or a few websites that aggregate the product and pricing information of many competitive suppliers.⁹

Do these benefits sufficiently offset the costs these aggregators impose on e-commerce sites in the course of obtaining the relevant information? In other words, does the same cost-benefit equation that supports a broad property right to exclude in real space hold on the Internet?

Answering these questions is essential to formulating a sensible property rights regime on the Internet, and requires an understanding of the technical details involved in the aggregation process. Aggregator sites generally obtain the relevant information either directly from e-commerce sites or from other aggregators. They may travel to such sites each time consumers enter queries or periodically through the use of software tools,

8. See, e.g., *Culhane v. State*, 668 S.W.2d 24 (Ark. 1984) (upholding the use of a criminal trespass statute to prosecute comparison shoppers asked to leave the premises of a retail store); *Mosher v. Cook United, Inc.*, 405 N.E.2d 720 (Ohio 1980). However, in July 1996, in an unrecorded decision, a Virginia judge dismissed trespassing charges against an individual who was copying down prices of television sets at a Best Buy store in Reston, Virginia. See Mark S. Nadel, *Maximizing Consumer Benefits from E-Commerce Competition: Emerging Obstacles & Policy Options*, 14 HARV. J. L. & TECH. (forthcoming 2001) (manuscript at 50-51, on file with author).

9. See Nadel, *supra* note 8 (manuscript at 23) ("The emergence of 'aggregators' . . . would appear to be in the public interest.").

and record the data automatically or manually—all without having any agreement with the sites they access and use. Alternatively, aggregators may seek more or less formal agreements with such sites. The more formal contracts would likely contain provisions detailing what uses the aggregator may make of the licensor's trademark and content, as well as clauses addressing warranties, limitations of remedies, and payments between the aggregator and licensor.¹⁰ Regardless of whether or not the aggregator has an agreement with the sites it indexes, its activity uses the system resources of the indexed sites. This burden is part of the cost to be weighed against the competitive benefits arising from the aggregator's activities.

Should the law allow website owners to exclude "unlicensed" aggregators from their sites? It may be significantly easier for a website owner to monitor and detect the activity of aggregators than it is for the owner of a bricks and mortar store to find and eject comparison shoppers. Unless the market will encourage website owners to license access to their sites and data to aggregators efficiently, the competitive impact of a broad exclusionary rule may be much greater in cyberspace than in real space. Or is this concern sufficiently mitigated both by consumers' abilities to use Internet navigation tools to comparison shop on their own, and by the existence of antitrust law to police those anticompetitive excesses that do occur?

This Article considers the question of whether or not aggregators should be able to obtain product and pricing information without first securing permission from the sites that they search. It argues that the law needs a framework informed by competitive concerns to help define property rights on the Internet appropriately. Part II begins by providing some factual background on the technologies that individuals and commercial entities use to navigate through and exploit the power of the Internet. It then describes the claims that e-commerce sites are raising against certain

10. Brief of Amici Curiae Reed Elsevier et al. at 13, *eBay, Inc. v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000) (No. 00-15995) (9th Cir. filed July 12, 2000) [hereinafter Brief of Amici Curiae Reed Elsevier et al.]. The brief explains that eBay enters into lengthy agreements with its licensees governing, inter alia,

the way in which its licensees can "deep link" to the eBay site; the default display of eBay content on the licensee's site; the protection and use of eBay's intellectual property and advertisement content; basic compensation provisions . . . ; restrictions on assignments and sublicenses; provisions governing termination and renewal of licenses; limitations on warranties for consequential damages; and provisions governing the cessation of services during emergencies.

Id.

uses of web technology. Using recent court decisions, it then demonstrates how the analogy that a court uses influences its decision, and how building analogy on top of analogy can result in the creation of new law that bears little resemblance to prior causes of action. Part III considers what competition policy could add to the debate over access to websites and use of their product and pricing information. It also discusses how antitrust law may be deployed to ensure that such data is available to consumers, at least at some point in time. It concludes, however, that antitrust law will likely not generally find a violation when publicly available sites block the access of certain visitors, including aggregators. Part IV takes a broad policy perspective, considering how different areas of law provide insights that can help in constructing an appropriate rule that defines property rights on the Internet in a procompetitive way. It proposes alternative common law and statutory approaches to addressing the question of unwanted access to websites. The Article concludes by arguing that a statutory approach is preferable, and that Congress has already considered legislation that could serve as a framework for implementing the statute suggested here.

II. NAVIGATING THE INTERNET: FROM HYPERLINKING TO DATA AGGREGATION

A. The Evolution of Tools Enabling E-Commerce

The Internet's architects conceived of and implemented the network as a decentralized tool.¹¹ Their primary goals were to help ensure that the nation's computers could withstand a nuclear attack, and to enable researchers both to share their results and avoid wasteful duplication.¹² Over time, developers created networking protocols that enabled communication across networks, allowing users on different systems to "talk" to each other and exchange files.¹³ But the lack of any index into the mass of in-

11. For a brief history of the Internet, see Michael A. Geist, *The Reality of Bytes: Regulating Economic Activity in the Age of the Internet*, 73 WASH. L. REV. 521, 525-30 (1998); Maureen A. O'Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 MINN. L. REV. 609, 615-19 (1998) and sources cited therein.

12. See Geist, *supra* note 11, at 526-27 (describing these goals and how they were implemented using the technology of packet switching, and by the use of a distributed network in which nodes are connected in many different ways). This technology implements a level of security, and makes it more likely that a message can reach its destination even if one or more nodes is disabled. *Id.* at 527.

13. See *id.* at 528 (explaining the Transmission Control Protocol/Internet Protocol (TCP/IP) that allows different networks to exchange data); Michael J. Schmelzer, Note, *Protecting the Sweat of the Spider's Brow: Current Vulnerabilities of Internet Search*

formation residing on these many different computers made it difficult for a user to find data of interest.

The answer to this problem evolved over the years,¹⁴ culminating in the now familiar World Wide Web.¹⁵ The web employs protocols that help to make the dispersed body of information available on the Internet look like a unified body of knowledge.¹⁶ In particular, programmers may write their websites to provide for one or more hyperlinks ("links") to other locations within the same site or elsewhere on the Internet.¹⁷ A link may transfer the user to the home page or an internal page of another's site. A link to an internal page of another's site is called a "deep link." Links appear as pointers on the website and are often presented in highlighted text or as a graphical symbol. Hyperlinks make it easier for users to find and travel to other sites of interest.

Technically, when a user clicks on a link, the user's computer sends a request to the server on which the desired document resides.¹⁸ That com-

Engines, 3 B.U. J. SCI. & TECH. L. 12, ¶ 4 & n.5 (1997) (discussing the file transfer protocol or "ftp").

14. See Schmelzer, *supra* note 13, ¶ 4 (describing how "[t]he ability to transfer files led to the development of large file archives accessible to anyone connected to the Internet"). Schmelzer also describes how tools, including "Archie" and "Gopher," developed to track archives and provide an interface into the Internet. See *id.* ¶¶ 5-6. He also notes, however, that "archive access [] required some technical sophistication." *Id.* ¶ 6.

15. Tim Berners-Lee, a researcher at the European Organization for Nuclear Research (CERN), is generally credited with creating the World Wide Web. See generally Robert Wright, *The Man Who Invented the Web*, TIME, May 19, 1997, at 64-68.

16. See O'Rourke, *supra* note 11, at 621-22 (explaining the web's technical features, including hypertext mark-up language ("HTML"), hypertext transfer protocol ("HTTP"), and the uniform resource locator ("URL")). Web protocols continue to evolve. For example, extended markup language ("XML") may eventually replace HTML as the language of choice for writing web documents.

In late 1998, many seasoned tech observers suggested that XML . . . would swiftly and smoothly unseat the current HTML . . . as the way Web pages are created, distributed and experienced. It's still an extremely promising set of technologies and is farther along than it was even a year ago. Yet XML is far from ready to take over the Web.

Jimmy Guterman, *Final Debug: Standards Slow XML Development Process*, CHI. TRIB., Jan. 27, 2000, 2000 WL 3644500.

17. [HTML] use[s] hyperlinks to enable users to click on highlighted text and immediately "jump" to a new document. By applying the hyperlinks protocol to the Internet, users could transparently jump between documents on the same computer or on a computer located at the other end of the world—hence the label, World Wide Web.

Geist, *supra* note 11, at 529; see O'Rourke, *supra* note 11, at 621.

18. For a summary of the technical details involved in hyperlinking, see O'Rourke, *supra* note 11, at 632.

puter decides whether or not to respond favorably to the query. It honors the request by sending a copy of the document to the user's computer, while the original remains on its server.¹⁹ In other words, the user who clicks on a link starts a chain of events that uses resources of both his or her own system and those of the linked system. Commentators sometimes refer to this process as employing "pull" technology: The user "pulls" a copy of desired content from the linked site rather than having that site's server "push" content indiscriminately to the user who may or may not be interested in it.²⁰

Web browser software, like Netscape Navigator or Microsoft Internet Explorer, provides an easy-to-use interface to the web.²¹ Browsers often contain hyperlinks to popular sites. To assist users who do not know the address (Uniform Resource Locator, or "URL") of the site they wish to visit, browsers also usually offer their own search capability or hyperlinks to the websites of search engines. For example, Netscape's home page allows a user to conduct a search by using Netscape or by hyperlinking to

19. Calling what the linked server sends a "copy" is a bit of a misnomer. The linked server sends a stream of bits back to the linking user's browser that "reads the code and assembles the page on the user's computer screen." Rebecca Quick, *How a Link Works*, WALL ST. J., July 2, 1997, at B6; *see also* Dan L. Burk, *The Trouble With Trespass*, 4 J. SMALL. & EMERGING BUS. L. 27, 41 (2000) (noting that no "material copy" moves between the linking and linked servers and that the Copyright Act, which defines "copy" with reference to a tangible object, has difficulty dealing with Internet transmissions).

20. *See* Burk, *supra* note 19, at 45; Jerry Kang, *Cyber-Race*, 113 HARV. L. REV. 1130, 1148 (2000) ("'Push' communications arrive at the receiver without any special effort on the part of the receiver to obtain that particular communication item. . . . By contrast, 'pull' communications require more focused effort by the receiver to retrieve particular information. Surfing the Web is a common example of pull technology."); *see also* Brief of Amici Curiae Law Professors at 7, *Bidder's Edge, Inc. v. eBay, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000) (No. 00-15995) (9th Cir. filed June 22, 2000) [hereinafter Brief of Amici Curiae Law Professors] (discussing "pull" technology and noting that "servers on the Internet are passive and do not deliver information to a consumer's computer unless that information is requested"). The author provided comments on and signed this brief in support of Bidder's Edge, Inc. She received no compensation for this activity.

21. Like indexing tools, web browser software developed over time. *See* Geist, *supra* note 11, at 529-30 (identifying the development of Mosaic, a "more stable and advanced" browser than earlier efforts, as a key to fomenting widespread interest in the Internet); O'Rourke, *supra* note 11, at 625 (citing Mosaic as encouraging both Internet use and the development of software firms providing web navigational tools).

another search engine.²² The browser generally displays the URL of the site displayed on the screen.

Search engines often work by using automated software tools called “robots” or “spiders” to “crawl” the web, extracting information to use in building a searchable database.²³ Such automated tools allow the engines to amass information more quickly than a manual approach that would require entering each link into the browser and following its path. Search engines create their own databases indexing the contents of the web to speed their response times to users’ queries. When a user enters a query, it is much more efficient for the search engine to scan its database for matches to search terms than for it to search the millions of web pages in real-time.²⁴

Spiders employ the same web protocols as any browsing individual would in following links to sites: They request information from the linked site and receive a copy of it if the queried server honors their request. Unlike individual users, spiders engage in “automated browsing.” They “traverse[] the Web’s hypertext structure by retrieving a document, and recursively retrieving all documents that are referenced. . . . In reality [spiders] are implemented as a single software system that retrieves information from remote sites using standard Web protocols.”²⁵ This repetitive searching often imposes a burden on the linked sites’ servers exceeding that generated by an individual who uses a browser to link to the site.²⁶

Search engines differ from individual users in other ways. When a person clicks on a link, his or her computer receives a copy of the requested page that is displayed on the screen but seldom intentionally downloaded

22. See Netscape, at <http://home.netscape.com> (last visited Apr. 6, 2001) (allowing users to search by using Netscape Search or hyperlinking to AltaVista, Ask Jeeves, Excite, Google, GoTo, HotBot, LookSmart, or Lycos Search).

23. See O’Rourke, *supra* note 11, at 623-24 (discussing how search engines work and citing authorities); Schmelzer, *supra* note 13, ¶ 11.

24. See O’Rourke, *supra* note 11, at 623-24.

25. Martijn Koster, *Robots in the Web: Threat or Treat?*, at <http://info.webcrawler.com/mak/projects/robots/threat-or-treat.html> (1997); see also Schmelzer, *supra* note 13, ¶ 11 (“Spiders search recursively, putting pages into their databases, then adding all the pages to which the first page points, and then endlessly adding all the subsequent pages.”).

26. See generally Koster, *supra* note 25. Note, however, that when large numbers of individuals each seek to access a particular site, they can cause that site’s servers to crash under the combined load. See, e.g., Dean Takahashi, *Bells and Whistles: Multimedia can make a Web site come to life; Or kill it*, WALL ST. J., Nov. 22, 1999, at R58 (discussing how a webcast of a lingerie fashion show “generated so much traffic that it brought down the victoriasecret.com Web site” because the site lacked the bandwidth to transfer video files to “its vast Internet audience”).

to the hard drive.²⁷ In contrast, spiders retain a copy of the information from which they extract the data they need to build their databases.²⁸ The search engine periodically sends its spiders out to crawl the web and return to update its database.

One type of search engine is a data aggregator. Aggregators come in all shapes and sizes, including “shopbots” that offer comparative pricing information. For example, the Bidder’s Edge shopbot gathered product and pricing information from online auction sites, offering consumers the ability to compare the prices of items at many auction sites by traveling only to Bidder’s Edge.²⁹ The mySimon.com shopbot more broadly gathers data on products and prices from e-commerce sites rather than only from auction sites.³⁰

For a number of reasons, websites may not welcome spiders. They may object to the burden that any spider inevitably places on their sys-

27. Web browsers may store data on the user’s hard drive to speed data retrieval. See Burk, *supra* note 19, at 44 (citing I. Trotter Hardy, *Computer RAM “Copies”: Hit or Myth? Historical Perspectives on Caching as a Microcosm of Current Copyright Concerns*, 22 U. DAYTON L. REV. 423, 426-27 (1997)).

28. Bidder’s Edge, a site that employed a spider to search auction websites, described the process as follows:

Bidder’s Edge created its database by causing an automatic robot periodically to “crawl” or “spider” the category or index pages on the Web sites of the numerous on-line auction sites that Bidder’s Edge tracks. The robot reads information about auction items only from the same index pages that end-users see, and places that information in a buffer which then transforms the information into a JAVA page string. Bidder’s Edge then uses its proprietary HTML parsing technology on the JAVA page string to strip out graphics and other irrelevant information such as full length descriptions of the items for auction. Bidder’s Edge then uses a pattern matcher to cull out information that is already included in its database. New information is normalized and categorized, to allow different item listings from different sites to be listed together on the Bidder’s Edge database.

Bidder’s Edge’s Answer to First Amended Complaint and Bidder’s Edge’s Counterclaims for Monopolization, Attempted Monopolization, Unfair Competition, and Interference With Contractual Relations ¶ 92, *eBay, Inc. v. Bidder’s Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000) (No. 99-21200) [hereinafter Bidder’s Edge’s Answer to First Amended Complaint].

29. See Bidder’s Edge, at <http://www.biddersedge.com/home.jsp> (last visited Nov. 27, 2000). Bidder’s Edge ceased operation on Feb. 21, 2001, citing “market and financial conditions.” See *A Message to Our Users*, at <http://www.biddersedge.com> (last visited Feb. 19, 2001).

30. See mySimon, at <http://www.mysimon.com> (last visited Apr. 6, 2001).

tems.³¹ Moreover, spiders that are not well-written can cause the searched site difficulty in processing their requests; this can result in a degradation in performance for all who access the site while the spider is active.³² Spiders also can occasionally come across information that the website would rather not share.³³ Finally, because a spider does not search in real-time, its database may contain and report out-of-date information to users who, in turn, may blame the indexed site for the error rather than the spider.³⁴

At the same time, though, spiders perform a service for both users and the sites that the spiders index. Users benefit from the availability of more information at lower cost, enabling them to make purchasing decisions that more accurately reflect their needs. Bidder's Edge, for example, aggregated data from more than one hundred auction sites containing over five million items.³⁵ Theoretically, a consumer could visit each of those one hundred sites individually and compare prices. Practically, however, most consumers' patience would run out after searching far fewer sites. Data aggregators allow consumers to visit one site that provides more complete information than the consumer would obtain on his or her own.

31. See Maureen A. O'Rourke, *Shaping Competition on the Internet: Who Owns Product and Pricing Information?*, 53 VAND. L. REV. 1965, 1979-81 (2000) (discussing the overburdening problem as alleged in the *eBay* case); see also *infra* Part II.C.2.

32. See Koster, *supra* note 25 (describing problems, including repeated retrievals and identical robot runs, that can arise when a spider is not well-written); see also Stephen T. Middlebrook & John Muller, *Thoughts on Bots: The Emerging Law of Electronic Agents*, 56 BUS. LAW. 341, 364 (2000) (citing eBay's Answering Brief that stated, the "use of robots is problematic" because they "consume the processing and storage capacity of a system, thus making that portion of the system's capacity unavailable to the system owner or other users. Robots can swamp computer systems with their repetitive rapid-fire requests, and by accident or design often have caused harm to computer systems.").

33. See What's a Bot?, at http://botspot.com/bot/what_is_a_bot.html (last visited Apr. 6, 2001).

34. See O'Rourke, *supra* note 31, at 1979 n.58 (citing sources stating that search engines can be inaccurate and quoting eBay).

Bidder's Edge copies the eBay category listing pages only periodically.

The auctions on eBay are ongoing and the items listed, number of bids and the price of any item are subject to change at any time. The auction listings which appear on Bidder's Edge, therefore, frequently do not accurately reflect the current state of the auction on eBay and those listings can in fact be dramatically incorrect due to staleness.

Id. (citation omitted).

35. See *eBay, Inc. v. Bidder's Edge, Inc.*, 100 F.Supp. 2d 1058, 1061 (N.D. Cal. 2000) (citing statistics as of March 2000); see also Bidder's Edge's Answer to First Amended Complaint, *supra* note 28, ¶ 91 (giving statistics as of January 2000 when Bidder's Edge indexed about seventy sites in two thousand categories with six million items).

At the same time, the indexed sites benefit from the organization that spiders bring to the web. By making it easier for users to find sites of interest, spiders increase the chances that users will travel to and patronize the indexed sites.

Perhaps recognizing that there are both pros and cons associated with spiders, Internet denizens (or “netizens”) generally follow certain “netiquette,” or customs, when spidering. For example, a site that does not wish all or part of its content to be accessed by spiders can employ a “robot exclusion.” A robot exclusion is a message contained in a text file available on the site’s server that specifies what part or parts of the site should not be visited by spiders.³⁶ A spider’s compliance with the standard is voluntary but “there is considerable public pressure for [it] to comply.”³⁷ But is this public pressure enough to ensure that search engines will use spiders in the least intrusive way, and in a manner guaranteeing that the benefits from the spiders’ activities exceed the costs? And should the law give some effect to this private ordering and/or impose some requirements of its own? For example, the law could enforce a rule under which a spider cannot crawl a site that has not “licensed” it to do so.

Besides or in addition to using a robot exclusion, a site can block a spider’s queries.³⁸ A site may be able to detect a spider’s activity because the spider generates an unusually large volume of requests compared to a “normal” user. Once the site uncovers the spider’s presence, it can identify the hardware address from which the spider originates, and refuse to process queries coming from that address.³⁹ However, a spider can evade such blocks by changing the address from which it sends its queries.⁴⁰ Should the law encourage this high-technology game of cat and mouse in which the indexed site takes steps to prevent crawling, the spider defeats them, and so on?

All of the questions that spider use raises are difficult in part because search engines, including aggregators, and individuals using browsers all utilize the same basic web technology. They differ in the burden they im-

36. See Koster, *supra* note 25 (describing how to implement the exclusion); Middlebrook & Muller, *supra* note 32, at 345 (noting that a website owner can indicate which bots may access a website and what pages they may visit by adhering to the Standard for Robot Exclusion).

37. Koster, *supra* note 25, at fig.1; Middlebrook & Muller, *supra* note 32, at 345 (stating that there is a “‘gentleman’s agreement’ as to how bots should operate”).

38. See O’Rourke, *supra* note 31, at 1984-85 (describing the use of so-called “Internet Protocol” or “IP” blocks).

39. *Id.* at 1984.

40. *Id.* at 1985. The spidering site may use a proxy server with a different address to route its requests. See *id.*

pose on the servers of the sites they visit, the means by which they access those sites, their commercial purpose or lack thereof, and how they use the information once gained. Should these distinctions lead to different legal results, and will one rule suffice to govern access to and use of websites as well as the *means* of access and use? As the Internet has developed as a commercial center, litigation raising these questions has increased without producing firm answers. A brief analysis of the claims raised by litigants shows how both they and the courts are still struggling to find the appropriate analogy to use in addressing these questions.

B. Litigation Involving Aggregators of Product and Pricing Information

1. Ticketmaster Corp. v. Tickets.com, Inc.⁴¹

Ticketmaster, the online and real world ticket seller, recently sued Tickets.com, a data aggregator.⁴² Tickets.com is a website that sells tickets to some events, but mainly offers information about where a user can buy tickets.⁴³ It obtains at least some of that information by using spiders to search, copy, and extract data from the websites of ticket sellers.⁴⁴ When users request tickets to an event, Tickets.com ostensibly searches the database it has built that contains this information and provides users with hyperlinks directly to the page on the site that offers the desired tickets.⁴⁵ In

41. 2000 U.S. Dist. LEXIS 4553 (C.D. Cal. Mar. 27, 2000).

42. Ticketmaster's First Amended Complaint for Injunctive Relief and Damages, Ticketmaster Corp. v. Tickets.com, Inc., 2000 U.S. Dist. LEXIS 4553 (C.D. Cal. Mar. 27, 2000) (No. 99-07654) [hereinafter Ticketmaster's First Amended Complaint].

43. *Ticketmaster*, 2000 U.S. Dist. LEXIS 4553, at *3.

44. [U]pon information and belief, Tickets.com also uses . . . "spiders" to systematically invade and search the Ticketmaster Web Site every business day, copy verbatim Ticketmaster Event Pages, and extract event information for almost every event identified on the Ticketmaster Web Site. Tickets.com also stores these verbatim copies of Ticketmaster Event Pages on its own computers and in its computer database for use on the Tickets.com Web Site without Ticketmaster's consent. Through the use of its "spiders," Tickets.com "hits" Ticketmaster's Web Site thousands of times virtually every day.

Ticketmaster's First Amended Complaint, *supra* note 42, ¶ 39.

45. Tickets.com engineered its web site to enable a consumer to be unknowingly deep-linked to Ticketmaster Event Pages when he or she clicks a link from the Tickets.com Web Site in order to provide tickets to live entertainment events for sale . . . The Unauthorized Deep-Links to the Ticketmaster Event Pages completely bypassed many web pages on the Ticketmaster Web Site, including, but not limited to, the Ticketmaster Home Page.

many cases, that site is Ticketmaster's, and the relevant page is deep within the Ticketmaster site.⁴⁶

Ticketmaster's complaint contained a number of claims.⁴⁷ It alleged that the unauthorized crawling constituted copyright infringement, breach of contract, misappropriation, and trespass. In particular, Ticketmaster alleged that Tickets.com (1) infringed Ticketmaster's copyrights by downloading and reproducing its web pages while crawling,⁴⁸ (2) breached the contract to which it had agreed by accessing the site by making commercial use of the site's contents,⁴⁹ (3) misappropriated Ticketmaster's valuable information by unlawfully acquiring it at little or no cost to itself,⁵⁰ and (4) committed trespass by searching Ticketmaster's website, taking its information, and deep linking.⁵¹

In its order on the defendant's motion to dismiss, the court stated that "hyperlinking [(including deep linking)] does not itself involve a violation of the Copyright Act . . . since no copying is involved."⁵² However, the court allowed the copyright infringement claim to survive, noting that the alleged crawling involved "actual copying . . . in the making of thousands of copies taken from Ticketmaster's interior web pages for the purpose of extracting the factual data carried thereon and using it to publish its own

Id. ¶ 50.

46. *Ticketmaster*, 2000 U.S. Dist. LEXIS 4553, at *3-4.

47. Included among these claims was an allegation of unfair competition under section 43(a) of the Lanham Act (15 U.S.C. § 1124 (1994)). Ticketmaster argued that Tickets.com's deep linking implied an association between the two sites. Ticketmaster's First Amended Complaint, *supra* note 42, ¶¶ 88, 92, 96 (alleging false designation of origin, confusion as to sponsorship or affiliation, reverse passing off, and false advertising). In its minute order refusing to grant a preliminary injunction, the court found that the facts did not support a finding of a Lanham Act violation because Tickets.com did not pass itself off as Ticketmaster and, in fact, employed a legend that essentially told the user he or she would be transferred to another broker's site to purchase tickets. *See Ticketmaster Corp. v. Tickets.com, Inc.*, No. CV99-7654, 2000 U.S. Dist. LEXIS 12987, at *18 (C.D. Cal. Aug. 10, 2000) (unpublished minute order) [hereinafter *Ticketmaster Motion For Preliminary Injunction*] (noting also that there was no evidence of reverse palming off). This Minute Order is not a published opinion and the court stated that it did not intend to make "pronouncements of legal significance." *Id.* at *4. Theoretically, trademark law could affect the legality of spidering and linking by placing limits on the manner in which the spider displays its results or employs links. However, it did not form the gravamen of the complaint, and this Article therefore does not focus on it.

48. *Ticketmaster's First Amended Complaint*, *supra* note 42, ¶ 76.

49. *See id.* ¶¶ 16, 83.

50. *Id.* ¶ 106.

51. *Id.* ¶ 114.

52. *Ticketmaster Corp. v. Tickets.com, Inc.*, 2000 U.S. Dist. LEXIS 4553, at *6 (C.D. Cal. Mar. 27, 2000).

version containing the factual data.”⁵³ In its later denial of a preliminary injunction, however, the court indicated that it would likely excuse this copying as fair.⁵⁴

The court initially dismissed the breach of contract claim, granting Ticketmaster leave to amend if it could show that Tickets.com knew of the contract and at least impliedly agreed to its terms.⁵⁵ Ticketmaster amended its complaint by explaining in further detail why Tickets.com should be bound by the terms and conditions of use that were offered at Ticketmaster’s site.⁵⁶ Nevertheless, the court remained skeptical: “The contract theory lacks sufficient proof of agreement by defendant to be taken seriously as a ground for preliminary injunction.”⁵⁷

53. *Id.* at *5.

54. Ticketmaster Motion For Preliminary Injunction, *supra* note 47, at at *12-13 (analogizing to a case in which a competitor reverse engineered a video game console to obtain uncopyrighted information to use in creating a version of the system running on a PC).

Reverse engineering to get at unprotected functional elements is not the same process as used here but the analogy seems to apply. The copy is not used competitively. It is destroyed after its limited function is done. It is used only to facilitate obtaining nonprotectable data—here the basic factual data. It may not be the only way of obtaining that data (i.e., a thousand scribes with pencil and paper could do the job given time), but it is the most efficient way, not held to be an impediment in [another case].

Id.

55. *Ticketmaster*, 2000 U.S. Dist. LEXIS 4553, at *8. The court distinguished Ticketmaster’s attempt to contract from shrinkwrap licensing, and noted that Ticketmaster does not

make you click on “agree” to the terms and conditions before going on . . . Further, the terms and conditions are set forth so that the customer needs to scroll down the home page to find and read them. Many customers instead are likely to proceed to the event page of interest rather than reading the “small print.” It cannot be said that merely putting the terms and conditions in this fashion necessarily creates a contract with any one using the web site.

Id.

56. Ticketmaster’s Second Amended Complaint for Injunctive Relief and Damages ¶¶ 81-88, *Ticketmaster Corp. v. Tickets.com, Inc.*, 2000 U.S. Dist LEXIS 12987 (C.D. Cal. Aug. 11, 2000) (No. 99-07654) [hereinafter *Ticketmaster’s Second Amended Complaint*] (explaining that the Ticketmaster home page contains links to the terms and conditions of use that are easily accessible, alleging that Tickets.com opened and reviewed the pages with those terms, and that it knew that by accessing the pages it became bound by the terms).

57. Ticketmaster Motion For Preliminary Injunction, *supra* note 47, at *18.

The trespass as originally alleged was to the website, and thus virtual in nature. The complaint stated, "Tickets.com's acts of systematically invading Ticketmaster's personal property, namely the Ticketmaster Web Site, to search and take information for its own commercial display and use, and engineering its Unauthorized Deep Links to Ticketmaster constitute improper trespass onto Ticketmaster's property, namely, the Ticketmaster Web Site."⁵⁸

In its order on the motion to dismiss, the court held both the trespass and misappropriation claims to be preempted by the Copyright Act because

[t]he essence of each claim is the invasion and taking of factual information compiled by Ticketmaster. To the extent that state law would allow protection of factual data . . . this cannot be squared with the Copyright Act. In addition, it is hard to see how entering a publicly available web site could be called a trespass, since all are invited to enter.⁵⁹

After the court's decision on the motion to dismiss, Ticketmaster dropped its misappropriation claim and reworded its trespass claim to sound more like trespass to chattels rather than trespass to a website. Ticketmaster alleged that Tickets.com "used, accessed and intermeddled with and continues to use, access and intermeddle with Ticketmaster's computers and computer systems for Tickets.com's own commercial benefit."⁶⁰ It emphasized that this use and access continued even though (1) Ticketmaster notified spiders that they were unwanted visitors (presumably through the use of a robot exclusion header), (2) Ticketmaster specifically notified Tickets.com that it did not want Tickets.com to access and use the Ticketmaster website, and (3) Ticketmaster had taken technological steps to block Tickets.com's access (which Tickets.com then circumvented).⁶¹ Before the *Ticketmaster* court could rule on the plaintiff's motion for a preliminary injunction, however, the District Court for the Northern District of California relied on a trespass theory in entering a preliminary injunction against a data aggregator's use of spiders in the case of *eBay, Inc. v. Bidder's Edge, Inc.*⁶²

58. Ticketmaster's First Amended Complaint, *supra* note 42, ¶ 114.

59. *Ticketmaster*, 2000 U.S. Dist. LEXIS 4553, at *10-11 (citations omitted).

60. Ticketmaster's Second Amended Complaint, *supra* note 56, ¶ 113.

61. *See id.* ¶¶ 113-14.

62. 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

2. eBay, Inc. v. Bidder's Edge, Inc.

eBay, the online auction site, had sued Bidder's Edge, an aggregator that collected data from a number of auction sites about what products were up for auction and at what price.⁶³ Unlike Tickets.com, which sells tickets to some events, Bidder's Edge did not auction items.⁶⁴ It simply provided information to consumers about alternatives.⁶⁵ Bidder's Edge obtained its data through the use of spiders.⁶⁶ eBay, which had entered into agreements with certain aggregators under which they paid for the privilege of indexing, objected to Bidder's Edge's method of obtaining data from the eBay site.⁶⁷ It sued Bidder's Edge under a number of theories, one of which was trespass to personal property.⁶⁸ eBay claimed that Bidder's Edge committed a trespass when it "used, accessed and intermeddled with . . . eBay's computer systems" without eBay's authorization and over its objection.⁶⁹

In entering the preliminary injunction, the court cited a case holding electronic signals sent over long distance lines to be tangible enough to support a claim of trespass to chattels.⁷⁰ If those signals were tangible, the court reasoned, then the ones sent by Bidder's Edge would also "likely" be so.⁷¹ In labeling Bidder's Edge's access "unauthorized and intentional,"⁷² the court focused on the computer servers rather than the website:

63. See eBay's First Amended Complaint, eBay, Inc. v. Bidder's Edge, Inc., 100 F. Supp. 2d 1058 (N.D. Cal. 2000) (No. C-99-21200) [hereinafter eBay's First Amended Complaint].

64. See eBay, 100 F. Supp. 2d at 1061.

65. See *id.* (noting that the Bidder's Edge "web site contained information on more than five million items being auctioned on more than one hundred auction sites. [Bidder's Edge] also provides its users with additional auction-related services and information" (citations omitted)); see also *supra* note 35.

66. See eBay, 100 F. Supp. 2d at 1062-63.

67. See *id.* at 1067.

68. Other theories included violation of the Computer Fraud and Abuse Act ("CFAA") and misappropriation. See eBay's First Amended Complaint, *supra* note 63, ¶¶ 40, 42, 44; see also O'Rourke, *supra* note 31, at 1991-92 (discussing the viability of a CFAA claim to address unlicensed spidering, suggesting that plaintiffs may have difficulty meeting the monetary damages requirements, and arguing that the CFAA should not be used to address developing e-commerce issues that do not involve hacking).

69. eBay's First Amended Complaint, *supra* note 63, ¶¶ 31-33.

70. eBay, 100 F. Supp. 2d at 1069 (citing Thrifty-Tel, Inc. v. Bezenek, 54 Cal. Rptr. 2d 468, 473-74 (Cal. Ct. App. 1996)). In *Thrifty-Tel*, a child used a home computer to access a long-distance telephone company's confidential codes and make unauthorized calls. *Thrifty-Tel*, 54 Cal. Rptr. 2d at 471. The child's activity overburdened the system and denied subscribers access to phone lines. *Id.* The Court of Appeals held that the child's activity constituted trespass. *Id.* at 473.

71. eBay, 100 F. Supp. 2d at 1069.

[Bidder's Edge] argues that it cannot trespass eBay's web site because the site is publicly accessible. [Bidder's Edge's] argument is unconvincing. eBay's servers are private property, conditional access to which eBay grants the public. eBay does not generally permit the type of automated access made by [Bidder's Edge]. In fact, eBay explicitly notifies automated visitors that their access is not permitted. . . .

Even if [Bidder's Edge's] web crawlers were authorized to make individual queries of eBay's system, [Bidder's Edge's] web crawlers exceeded the scope of any such consent when they began acting like robots by making repeated queries.⁷³

The court found injury sufficient to state a claim for relief because Bidder's Edge's use of eBay's system capacity, however minimal, foreclosed eBay's use of that same capacity.⁷⁴ In addition, the court held that the trespass claim was not preempted by copyright law, distinguishing itself from the *Ticketmaster* court: "eBay asserts a right not to have [Bidder's Edge] use its computer systems without authorization. The right to exclude others from using physical personal property is not equivalent to any rights protected by copyright and therefore constitutes an extra element that makes trespass qualitatively different from a copyright infringement claim."⁷⁵

3. *Epilogue to Ticketmaster*

In August 2000, the *Ticketmaster* court entered a minute order denying a preliminary injunction. The court discussed the recent *eBay* injunction, noting that in its earlier decision on the motion to dismiss, it had not considered the "invasion of the computers by spiders," but rather had passed on "the taking of factual information from a public source."⁷⁶ It found the *eBay* decision convincing:

72. *Id.* at 1070.

73. *Id.* (citations omitted).

74. *Id.* at 1071; *see also infra* Part II.C.2-Part II.D (discussing how this approach varies from traditional trespass to chattels harm requirements).

75. *eBay*, 100 F. Supp. 2d at 1072.

76. *Ticketmaster Motion For Preliminary Injunction*, *supra* note 47, at *15. In an unpublished disposition, the Ninth Circuit affirmed the district court's denial of a preliminary injunction, stating, "We cannot say that the district court abused its discretion here." *Ticketmaster Corp. v. Tickets.com, Inc.*, No. 00-56574, 2001 U.S. App. LEXIS 1454, at *2 (9th Cir. Jan. 22, 2001) (noting also that "[t]his disposition is not appropriate for publication and may not be cited to or by the courts of this circuit except as may be provided by 9th Cir. R. 36-3").

The computer is a piece of tangible personal property. It is operated by mysterious electronic impulses which did not exist when the law of trespass to chattels was developed, but the principles should not be too different. If the electronic impulses can do damage to the computer or to its function in a comparable way to taking a hammer to a piece of machinery, then it is no stretch to recognize that damage as trespass to chattels and provide a legal remedy for it.⁷⁷

However, the court found that Ticketmaster had not shown the functioning of its servers to be obstructed, or a likelihood that “dozens or more parasites [would] join[] the fray, the cumulative total of which could affect the operation of [Ticketmaster’s] business.”⁷⁸ Additionally, the court emphasized that Tickets.com was not directly competing with Ticketmaster, and that customers benefit from the referrals that Tickets.com provides.⁷⁹

C. Why the Analogy Matters

The first *Ticketmaster* decision (regarding the motion to dismiss) and the *eBay* holding show how courts emphasize different factors depending on whether they focus on the website as in the former case, or the tangible server on which it resides as in the latter.⁸⁰ A court’s focus determines what the relevant causes of action are, which, in turn, influence the policy basis forming the metric for decision. 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.

Traditionally, if a person were to break into a locked box to steal and copy the uncopyrighted white pages telephone directory listing, state law

77. Ticketmaster Motion For Preliminary Injunction, *supra* note 47, at *15-16.

78. *Id.* at *17. The *eBay* court had expressed concern that allowing unlicensed spidering would cause large numbers of aggregators to use spiders to search the eBay site, crippling that site’s ability to respond to so many requests. *See infra* note 149 and accompanying text (discussing this concern).

79. [T]he showing here is that the effect of T[ickets].Com’s taking of factual data from [Ticketmaster] is not to operate in direct competition with [Ticketmaster]—it is not selling the data or the tickets. While [Ticketmaster] sees some detriment in T[icket].Com’s operation (possibly in the loss of advertising revenue), there is also a beneficial effect in the referral of customers looking for tickets to [Ticketmaster] events directly to [Ticketmaster].

Ticketmaster Motion For Preliminary Injunction, *supra* note 47, at *17.

80. *See infra* note 134 (discussing why it may be helpful to view the site and the server separately even though the site cannot exist without the server).

could police the act of breaking and entering even though the copying itself would not violate the Copyright Act. Is a website more like a publicly accessible space or a locked box? The former analogy would lead a court to allow access, while the latter would not. However, even if a court finds a site to be generally accessible, it must further address whether the particular means of access are appropriate.

These issues of access raise the question of the relevance of the tangible server on which the website resides. Even if the law views the site as a public space, entry into that space uses the tangible personal property and resources of the server's owner. Is the server also a public space or is it personal property akin to a locked box such that one must seek the owner's permission before accessing it? If it is the latter, how can the law reconcile placing restrictions on access to the server when copyright law would allow and even encourage access to and use of the factual information on a site that resides on that server and is viewed as a public space? In the Internet context, where access is synonymous with copying as well as use of the server, the question is how to reconcile all of the competing policy considerations.

The following discusses in more detail what the results are under different analogies and how those results reflect particular policy perspectives. It concludes that the *eBay* court adopted a new rule that blends the elements of trespass to real property and trespass to chattels. In so doing, the court created a new tort that a site can use to stop any unwanted access, not just crawling. After discussing *eBay* and its progeny, the Article analyzes what policies besides those animating the *eBay* decision should be relevant in allocating property rights on the web. It then sets forth a balancing test that courts may use to address undesired access. The test reflects the view that it is best not to focus on one analogy, but rather to recognize the validity of different policies and to weigh them in a systematic way.

1. *Focus on the Website*

a) *The Website as a Book*

The *Ticketmaster* court focused on the website, labeling it "publicly available."⁸¹ One can infer from this description that the court considered the Internet to be akin to a public library. Websites are like books in the library that patrons are free to browse. This analogy finds some support in the language used to describe websites. They are comprised of "pages,"

81. *Supra* note 59 and accompanying text.

and one who posts a website is said to “publish” it, with the act of placing information on the site termed “publishing.”⁸²

If a court accepts this analogy, it, like the *Ticketmaster* court, is likely to give short shrift to a trespass claim based on entering a publicly accessible website. This approach shifts a court’s focus away from the question of what constitutes permissible access or means of access to a publicly available site to what constitutes legitimate uses of the information available at the site. The laws that govern the permissible use of information are federal copyright law and state common law on misappropriation.

i) The Federal Law Claim of Copyright Infringement and Its Policy Basis⁸³

The copying involved in hyperlinking, including deep linking, probably does not constitute copyright infringement.⁸⁴ Although the *Ticketmaster* court was incorrect in stating that no copying is involved in linking,⁸⁵ what copying does occur is done by the linked server rather than the linking, and is likely impliedly licensed because the link is the *raison d’être* of the web.⁸⁶ Furthermore, there is technically no distinction between a link to the home page and a deep link. Copyright law has never given copyright owners the right to control the manner in which one in legitimate possession of the work views it.⁸⁷ The copyright owner does not have the

82. O’Rourke, *supra* note 11, at 622 & nn.54-55.

83. Plaintiffs may also allege various trademark claims when spidering occurs. However, the Lanham Act addresses primarily the permissible display of the spider’s results and whether deep linking causes source or sponsorship confusion. It is unlikely to serve as a basis for enjoining the spider’s activity unless the aggregator’s means of display suggests some relationship between it and the sites that it indexes. Trademark dilution too, is an unlikely legal route for banning the spider’s activities because competitive concerns counsel against using that doctrine to prevent others from using the genuine name to refer to the product. This Article therefore does not concentrate on trademark issues.

84. See O’Rourke, *supra* note 11, at 658-62; *supra* note 52 and accompanying text.

85. See *Ticketmaster Corp. v. Tickets.com, Inc.*, 2000 U.S. Dist. LEXIS 4553, at *6 (C.D. Cal. Mar. 27, 2000).

86. See O’Rourke, *supra* note 11, at 661-62 (arguing also that the copyright doctrine of fair use may shelter “unlicensed” linking).

87. See 17 U.S.C. § 106 (1994). Exclusive copyright rights include the right to (and to authorize others to) reproduce, prepare derivative works, distribute, and, in certain cases, publicly perform and display the copyrighted work. *Id.* These enumerated rights do not include a right of the copyright owner otherwise to control use of the copyrighted work. Note, however, that the Digital Millennium Copyright Act does give the copyright owner new rights to control access to its work. See 17 U.S.C. § 1201 (Supp. IV 1998). Under this new law, a copyright owner could control the manner in which a user views

right to stop one who has bought a book from starting his or her reading with the last chapter, or to prevent a home video-taper from fast-forwarding past the commercials in a recorded television program. Likewise then, there is also probably no copyright right to prevent deep linking. More explicitly using the library analogy, the *Ticketmaster* court described hyperlinking as “analogous to using a library’s card index to get reference to particular items, albeit faster and more efficiently.”⁸⁸

As the *Ticketmaster* court also noted, spiders, unlike individuals using their browsers, engage in wholesale copying.⁸⁹ However, a growing line of precedent holds that copying as a step in extracting uncopyrightable information may be excused as fair.⁹⁰ Product and pricing information is factual in nature, and unlikely to be protected by copyright. Copying to extract it, particularly as a step in producing a new product like a comparison shopping service, is therefore likely to be excused as fair.⁹¹

Since the enactment of the Digital Millennium Copyright Act (“DMCA”) in 1998, the Copyright Act has addressed access to copyrighted material as well as the scope of exclusive rights therein.⁹² Under the DMCA, it is illegal to “circumvent a technological measure that effectively controls access to a work protected” by copyright.⁹³ But only those access control measures that “require[] the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work,” are protected against circumvention.⁹⁴ Most e-commerce websites, including Ticketmaster and eBay, contain some copyrighted material in addition to their uncopyrighted product and pricing information. However, they do not use access control measures protected by the DMCA, in part because such steps would discourage entry by wel-

the work by using access controls. The textual discussion assumes that no such access controls are in place.

88. *Ticketmaster*, 2000 U.S. Dist. LEXIS 4553, at *6.

89. *See id.* at *5-6.

90. *See, e.g., Sony Computer Entm’t, Inc. v. Connectix*, 203 F.3d 596 (9th Cir. 2000) (holding copying to understand how to create a system that runs Sony Playstation games on a PC to be fair); *Atari Games Corp. v. Nintendo of Am.*, 975 F.2d 832 (Fed. Cir. 1992) (holding that the intermediate copying involved in reverse engineering a computer game system could be excused as fair when the copying was a step in obtaining uncopyrighted interface specifications to produce compatible games); *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1514 (9th Cir. 1992) (agreeing with the *Atari* court and labeling its holding as “consistent” with *Atari*).

91. *See O’Rourke, supra* note 31, at 1986-88.

92. 17 U.S.C. § 1201 (Supp. IV 1998).

93. *Id.* § 1201(a)(1)(A).

94. *Id.* § 1201(a)(3)(B).

come as well as unwanted visitors.⁹⁵ Finally, it is unclear whether the DMCA may constitutionally protect access designed to extract *uncopyrighted* information.⁹⁶

Under the Copyright Act then, the aggregator is unlikely to be liable for infringement for linking to a site, copying its information to extract uncopyrighted data, or allowing users to link to the site. To the extent that copyright law has spoken about permissible means of access to digital works, it would allow the use of spiders as long as they are not engaged in circumventing an access control protected by the DMCA.

That copyright law would lead to this result is not surprising given its underlying policies. The Copyright Act seeks to solve the public goods problem inherent in the provision of information by granting authors certain exclusive rights in their "original works of authorship."⁹⁷ These rights are not absolute, however, because further progress depends on the ability of second generation creators to utilize raw material without incurring liability for infringement. In striking a balance between the rights of first and second generation creators, copyright law does not extend protection to factual information because such information is the core raw material that others need to use to further progress.⁹⁸ Thus, copyright law is

95. See O'Rourke, *supra* note 31, at 1989-91 (explaining why the steps that eBay took to keep Bidder's Edge from using a spider to index the eBay site are not technological measures protected against circumvention under the DMCA).

96. See generally Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354, 414-29 (1999) (discussing constitutional implications of the DMCA and its impact on free speech).

97. 17 U.S.C. § 102(a) (1994). References to copyright as addressing the public goods problem are numerous. See, e.g., William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326 (1989).

98. Notwithstanding a valid copyright, a subsequent compiler remains free to use the facts contained in another's publication to aid in preparing a competing work, so long as the competing work does not feature the same selection and arrangement. . . .

It may seem unfair that much of the fruit of the compiler's labor may be used by others without compensation. As Justice Brennan has correctly observed, however, this is not "some unforeseen byproduct of a statutory scheme." It is, rather, "the essence of copyright," and a constitutional requirement. The primary objective of copyright is not to reward the labor of authors, but "[t]o promote the Progress of Science and useful Arts." To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work.

Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 349-50 (1991) (citations omitted) (holding that facts are not protected by copyright because they are not original).

unlikely to prohibit the aggregator's activities because the aggregator is engaging in an end use of information that the copyright law actually intends to foster.

The digital environment, with its ease of copying and ability to produce "perfect" copies, threatens the historic copyright balance. The DMCA responds to this by requiring copyright law to respect certain access controls.⁹⁹ But the DMCA neither changes the traditional rule that facts are not protected by copyright nor protects a publicly available website from access by unwanted visitors.

ii) The State Law Claim of Misappropriation and Its Policy Basis

The state common law cause of action in misappropriation can offer some protection to uncopyrighted information, although such protection must be carefully tailored to avoid copyright preemption. Recall that the *Ticketmaster* court held the misappropriation claim preempted because it essentially alleged the taking of factual information.¹⁰⁰

In *NBA v. Motorola, Inc.*,¹⁰¹ the Second Circuit enunciated the elements of the misappropriation claim that it believes would survive copyright preemption:

(i) a plaintiff generates or gathers information at a cost; (ii) the information is time-sensitive; (iii) a defendant's use of the information constitutes free-riding on the plaintiff's efforts; (iv) the defendant is in direct competition with a product or service offered by the plaintiffs; and (v) the ability of other parties to free-ride on the efforts of the plaintiff or others would so reduce the incentive to produce the product or service that its existence or quality would be substantially threatened.¹⁰²

Aggregators such as Tickets.com and Bidder's Edge are likely to survive this test. The lack of direct competition between the aggregator and the sites it indexes would be fatal to the misappropriation claim. Also, reporting product and pricing information is unlikely to cause an e-commerce site to stop selling its wares, although the site might argue that the burden unlicensed spiders impose on its system could threaten its very existence. Generally, however, whatever "free-riding" spiders engage in is not the sort that misappropriation law is designed to protect.

99. See *supra* notes 93-94 and accompanying text.

100. See *supra* text accompanying note 59.

101. 105 F.3d 841 (2d Cir. 1997).

102. *Id.* at 845.

Misappropriation law responds to a potential market failure actually created by the Copyright Act. It is often an expensive undertaking to gather and market facts, often in database form. The Copyright Act, by refusing to protect facts, may offer insufficient protection to allow factual database creators to recoup their investments.¹⁰³ A narrowly tailored misappropriation doctrine can allow such creators to obtain relief against those who pirate their databases. Avoiding conflict with the goals of the Copyright Act, including encouraging second-generation authorship, accounts for misappropriation law's focus on whether there is competition between the plaintiff and defendant and free-riding to such an extent that the plaintiff's business is substantially threatened.

Misappropriation law would not enjoin an aggregator from offering product and pricing information from another site because the aggregator may potentially augment demand for the underlying site. Any usurping of demand occurs not because the aggregator offers the same product but because the indexed site is not the low-cost provider. Neither misappropriation law nor copyright law explicitly takes into account the "free-riding" of the spider on the system resources of the sites it visits.

In summary, the library analogy leads a court to focus on areas of law like copyright and misappropriation that primarily govern use of information rather than access to it. These laws uphold the policy encouraging the free flow of information that Congress has decided does not merit copyright protection. A court would likely enjoin pirating to protect the investment in gathering and marketing such information, but would actively seek to encourage value-added uses.¹⁰⁴

b) The Website as Real Property—The State Law Claim of Trespass and Its Policy Basis

Rather than analogizing the web to a giant library, a court may liken it to real property, with the Internet as the highway and websites as parcels of land adjacent to that highway.¹⁰⁵ The language of the web itself fosters

103. See generally Jane C. Ginsburg, *No "Sweat?" Copyright and Other Protection of Works of Information After Feist v. Rural Telephone*, 92 COLUM. L. REV. 338 (1992).

104. Note, however, that a range of value-added uses are within the copyright owner's exclusive rights under the category of "derivative works." See 17 U.S.C. §§ 101, 106 (1994) (defining derivative works and according copyright owners the exclusive right to prepare and authorize preparation of such works). Of course, the right to prepare derivative works is not implicated here because the information is not protected by copyright.

105. See Brief of Amici Curiae Reed Elsevier et al., *supra* note 10, at 2 (arguing that the Ninth Circuit should adopt such an analogy in addressing the appeal of the preliminary injunction entered by the District Court in the *eBay* case).

such an analogy. Web “sites” each have an “address” that users may “visit” or to which they may “travel.”¹⁰⁶ Once a court adopts this analogy, the focus shifts away from considering what a visitor may do with the information retrieved, and towards determining who may permissibly access the site.

The law generally gives owners of real property the right to exclude others from entrance, regardless of whether or not the intruder causes harm.¹⁰⁷ By analogy, website owners should have the right to exclude others under a trespass cause of action even if their entry does not harm the site in any way. In other words, the *Ticketmaster* complaint had it close to correct the first time around when it alleged that Tickets.com’s searching of, taking information from, and deep linking to the Ticketmaster site constituted trespass.¹⁰⁸

Matters become only slightly more complex if the law analogizes an e-commerce site to a publicly accessible bricks and mortar retail store. In the conventional retail context, the public at large is a business invitee, with each member possessing a revocable implied license to enter and remain on the store’s premises.¹⁰⁹ A comparison shopper, however, may be excluded from entry because he or she exceeds the scope of the license.¹¹⁰ A

106. Common language speaks of Internet “addresses,” for, of course, individuals and firms occupy private “sites” along the Internet “highway.” It also speaks of the “architecture of the Internet which may direct and influence conduct in both real and virtual “space.” Reference is common to “cybersquatters.” . . . The blunt truth is that an Internet Site is fixed in its cyberspace location; to move from one address to another risks the loss of its customer base, just like any ordinary store runs the risk of losing its customers when it changes locations.

Id. at 6-7 (citations omitted).

107. See PROSSER & KEETON ON THE LAW OF TORTS 67 (W. Page Keeton ed., 5th ed. 1984) (outlining the historical cause of action in trespass).

108. See *supra* note 58 and accompanying text.

109. See *Mosher v. Cook United, Inc.*, 405 N.E.2d 720, 721 (Ohio 1980) (labeling a comparison price shopper a “business invitee” subject to the property owner’s right to revoke the shopper’s license at will).

When a business . . . is open to the public, a person who enters the facility, at a reasonable time and in a reasonable manner, has the implied consent of the owner to be there, and so long as the person engages in no acts inconsistent with the purposes of the business or facility, there is no trespass. . . . Such an invitation, however, presupposes that the conduct of persons coming there will be in keeping with the purpose of transacting business.

25 AM. JUR. 2D *Trespass* § 48 (1989 & Supp. 2000).

110. See AM. JUR. 2D *Trespass* § 48, *supra* note 109; see also *Culhane v. State*, 668 S.W.2d 24, 26-27 (Ark. 1984) (explaining that “Wal-Mart invites the public to come to

court may construe the license as extending only to entering the store with the intent to shop and make purchases, not to obtain comparative pricing information.¹¹¹ Even if the comparison shopper were entitled to enter, the store would have the right to eject him or her, if not for exceeding the scope of the license, then simply because it may revoke whatever license exists at will—for any reason or for no reason at all.¹¹²

By analogy to real property law then, a site can exclude a spider from entry or eject it once on the site, either because the spider exceeds the scope of the implied license to visit or simply because the site does not want it to enter. Further, sites can make what may be implicit explicit by defining the terms of the invitation.¹¹³ They may post notices banning spiders, or ask visitors to agree to terms and conditions that would prohibit such activity. Any entry by a spider would exceed this now express license.

There are some difficulties, however, with the real property analogy. The first arises from analogizing the electronic signals sent by spiders to the physical entry of a comparison shopper into a retail store. Because the law has never dealt with access to websites before, resort to analogy as a traditional means of doctrinal evolution is a plausible approach. But the analogy of electronic signals to physical invasions overlooks the traditional judicial approach addressing intangible invasions of property. Usually, although not uniformly, the courts have applied a nuisance standard to intangible invasions that, unlike trespass, balances costs and benefits before holding the intruder liable.¹¹⁴ Indeed, the *Ticketmaster* court, by

its store to shop and make purchases . . . Wal-Mart certainly can prohibit a competitor from remaining in the store not to enjoy a constitutional right but solely to gather information enabling the competitor to take business away from Wal-Mart.”).

111. See *supra* note 110 and sources cited therein. But see also *supra* note 8 (noting the Virginia case in which the court dismissed a trespass claim against a customer who was recording pricing information).

112. See *Cook United*, 405 N.E. 2d at 722 (“Appellee was . . . entitled to revoke appellant’s license for any purpose, reasonable or not . . .”).

113. One way to define the terms explicitly is to notify a visitor that its access is unwanted. See *Register.com, Inc. v. Verio, Inc.*, 126 F. Supp. 2d 238 (S.D.N.Y. 2000) (addressing a case in which Verio used a robot to access Register.com’s database to extract information, and holding that Register.com’s filing of a lawsuit was sufficient notice to Verio that its robot was unwelcome such that any further access would constitute trespass to chattels). *Ticketmaster* and eBay also notified Tickets.com and Bidder’s Edge, respectively, that their access was unwanted.

114. See *Adams v. Cleveland-Cliffs Iron Co.*, 602 N.W.2d 215, 219 (Mich. Ct. App. 1999) (explaining that “[t]raditionally, trespass required that the invasion of the land be direct or immediate and in the form of a physical, tangible object”); AM. JUR. 2D *Trespass* § 59, *supra* note 109 (stating, “Generally, all intangible intrusions such as noise are

emphasizing that consumers benefit from readily available pricing information and that Tickets.com's activities imposed minimal costs on Ticketmaster, seemed to have just such a test in mind.¹¹⁵ This is a nuisance, rather than a trespass, approach.¹¹⁶

However, some courts have eroded the traditional rule, effectively eliminating the requirement that a tangible object must intrude on the real property for its owner to maintain a trespass claim.¹¹⁷ Drawing on this precedent, a developing line of cases in the personal property context has held electronic signals to be sufficiently tangible to state a cause of action in trespass to chattels.¹¹⁸ These cases have dealt largely with the transmission of spam (unsolicited bulk e-mail),¹¹⁹ and the signals sent by spiders are essentially indistinguishable from the signals that spammers send. A court could complete the circle—personal property law analogizing to real property law and back again—by holding the signals tangible enough to support a trespass claim premised on invading the website.

Yet, this still does not make the spider a trespasser. Courts that have removed the requirement that the real property invasion be tangible have simultaneously changed other elements of the cause of action in trespass to real property.¹²⁰ For example, some have imposed a requirement that the plaintiff prove harm when the invasion is intangible.¹²¹ As one court

dealt with as nuisance cases, not trespass," and distinguishing those cases from ones involving particulates and polluting matter); *see also* Burk, *supra* note 19, at 32-33, 53 (noting the textual proposition and arguing that a nuisance standard could appropriately address access to websites).

115. *See supra* notes 78-79 and accompanying text.

116. Professor Burk was the first to recognize and emphasize this point. *See* Burk, *supra* note 19, at 33.

117. *See Adams*, 602 N.W.2d at 220-21 (discussing developments in trespass law and citing cases).

118. *See, e.g., Thrifty-Tel, Inc. v. Bezenek*, 54 Cal. Rptr. 2d 468, 473 n.6 (Cal. Ct. App. 1996) (holding electronic signals used to gain unauthorized access to a computer to be "sufficiently tangible to support a trespass cause of action").

119. *See, e.g., Am. Online v. LCGM, Inc.*, 46 F. Supp. 2d 444 (E.D. Va. 1998); *Am. Online v. IMS*, 24 F. Supp. 2d 548 (E.D. Va. 1998); *CompuServe Inc. v. Cyber Promotions, Inc.*, 962 F. Supp. 1015 (S.D. Ohio 1997).

120. *See generally Adams*, 602 N.W.2d 215 (tracing the evolution of trespass law).

121. The courts that have deviated from the traditional requirements of trespass, however, have consequently found troublesome the traditional principle that at least nominal damages are presumed in cases of trespass. Thus, under the so-called modern view of trespass, in order to avoid subjecting manufacturing plants to potential liability to every landowner on whose parcel some incidental residue of industrial activity might come to rest, these courts have grafted onto the law of trespass a requirement of actual and substantial damages.

noted, after all of these adjustments are considered, the real property cases involving intangible invasions are, “‘in reality, examples of the tort of private nuisance or liability from harm resulting from negligence,’ not proper trespass cases.”¹²² It is difficult to see how the spider could be a trespasser even under the more modern cause of action because the spider’s entry does not harm the website.

A second difficulty with the analogy is that it disregards the web’s technology, and, in so doing, ignores problems of copyright preemption.¹²³ When a linker seeks access to a website, the linked server grants or denies access by either sending or refusing to send the relevant bits to the linker for its web browser to assemble. These bits reside in the linker’s random access memory (“RAM”) and appear on the screen in assembled form. If “accessing” is synonymous with “copying,” then the Copyright Act is the exclusive rule of decision under its preemption section.¹²⁴ There is simply no room for a state law “trespass to a website” cause of action.

A third problem with the real property analogy is quite similar to the second. The linked server has the ability to refuse to honor a request for a document. Sending the page could be construed as its consent to the linker’s visit. To employ the same real property analogy, the linker “knocks” on the front door (in the case of a link to a home page), or the side door (for a deep link), and the linked server decides whether or not to open the door by granting access. If it allows the visitor “in,” then the only actionable trespass that could occur would be if the visitor goes beyond its authorized access once on the site. But any additional access (assuming the site does not use internal access control measures) can also only occur as a technical matter with the visited site’s approval. Thus, the claim reduces to one that would practically have to sound in unauthorized use of the information—a topic governed by copyright law.

Treating websites as real property and using state trespass law to regulate access to them raises yet another interesting copyright preemption issue. Under the DMCA, Congress has ostensibly spoken about what access

Id. at 220.

122. *Id.*

123. See 17 U.S.C. § 301(a) (1994) (providing for the Copyright Act to preempt state law that would otherwise govern subject matter within the scope of the Act and provide rights equivalent to the Act).

124. See I. Trotter Hardy, *The Ancient Doctrine of Trespass to Web Sites*, 1996 J. ONLINE L. art. 7, §§ 10, 13 (explaining preemption under the Copyright Act, the technical details of linking, and noting that if RAM copies are considered “copies” within the meaning of the Act, “then quite possibl[y] a trespass action would be preempted”).

controls should be respected.¹²⁵ It would indeed be anomalous if state trespass law were to provide more extensive protection against access for the purpose of extracting *uncopyrighted* data than the DMCA would for copyrighted information.¹²⁶

In summary, a traditional trespass to real property action applied by analogy to websites is unlikely to be successful in preventing spiders' entries. Even if a court is willing to hold the electronic signals to be a tangible invasion, it is then likely either to treat the case as a nuisance suit or as a trespass suit in which the plaintiff must prove harm to recover. There is no harm to the website itself that occurs from a spider's access. Under a nuisance standard, an aggregator might not be enjoined because its benefits may exceed its costs.¹²⁷ Finally, a court may hold the cause of action preempted by copyright law, which, as already noted, would permit the spider's activities.

That a traditional trespass to real property action would not prevent a spider's entry is consistent with the policy basis supporting the cause of action. A number of policies explain trespass. A landowner often has an attachment to the land that would cause him or her to respond to an intrusion with an act of physical violence.¹²⁸ A strong exclusionary rule deters the would-be trespasser and prevents this violence from occurring. This policy concern is, of course, not implicated in the "virtual" trespass context where the invasion is impersonal.

Economics also supports the trespass cause of action. The right to exclude gives real property owners an incentive to improve their property by allowing them to recoup their investments.¹²⁹ *Amici* in the *eBay* case argue that this rationale supports applying real property trespass principles applicable to tangible intrusions to a spider's conduct:

125. See 17 U.S.C. § 1201(a) (Supp. IV 1998).

126. The more interesting question is whether Congress has the power to control access to copyrighted works and, if so, under what constitutional clause(s). This issue is beyond the scope of this Article which is intended simply to point out that Congress has ostensibly made a judgment about what access controls the law should respect.

127. See *infra* Part IV.

128. See SPRANKLING, *supra* note 1, § 30.01, at 486 ("Another important—but distinctly secondary theme—is that the trespass doctrine minimizes the risk of violence.").

129. See *id.* at 485-86 (explaining the utilitarian rationale for trespass law); see also Brief of Amici Curiae Reed Elsevier et al., *supra* note 10, at 2-3 (arguing that affording the right to exclude to real property owners is "critical to encouraging owners to improve their real estate, for they will not do so if they know their improvements can be used at will or expropriated by any other person").

[W]eb site owners cannot protect their equipment in the same fashion as holders of ordinary chattels. The computer equipment is already on land for safekeeping but its usefulness requires connection to the outside world. . . . [T]he only way to preserve the integrity of web sites is to allow owners to enjoin outsiders from using them, subject to the same limitations that are applied to trespasses to land.¹³⁰

The same rationale might translate to the Internet. Giving sites the ability to regulate access allows them to monitor performance and to plan the appropriate level of equipment purchases to handle the anticipated server load. It may also encourage them to establish sites in the first place or to improve their sites' content, once posted. Because a site has incentives to generate traffic, it will not arbitrarily or anticompetitively exclude another from entry even under a broad exclusionary rule. Moreover, the excluded party can always gain access by reaching agreement with the site.

This argument, however, is incomplete because it fails to account for copyright law's policies. Because the website contains information, the copyright law provides the incentive structure that balances the public's interest in encouraging the copyright owner to improve the site against its interest in having others use the site's information in producing yet more works of authorship. Copyright law, as well as state misappropriation law, govern "free-riding" on the information gathered by another. Further, even if this were not the case, it is difficult to see how incentives for improvement of the website would be adversely affected by a harmless intrusion.

Transaction cost economics also provides a policy basis for trespass law. The costs to locate and negotiate with the owners of clearly delineated real property are low, allowing parties to reach mutually beneficial agreements without the clumsy hand of the state setting the terms of the bargain.¹³¹

Transaction costs would seem, at least at first glance, to be lower in cyberspace than in real space. The website address sets an identifiable boundary, the owners of many sites (particularly those involved in e-commerce) are readily ascertainable, and a spider would only have to seek permission from one site at a time. However, transaction costs may not be as low as they seem. Bidder's Edge indexed over one hundred sites.¹³² While many would not object to Bidder's Edge's activity, some would,

130. Brief of Amici Curiae Reed Elsevier et al., *supra* note 10, at 7.

131. *See id.* at 3-4.

132. *See supra* note 65 and accompanying text.

and Bidder's Edge would not know in advance which sites fall into which category.¹³³ As a result, it may seek an agreement from each site before indexing. Thus, the transaction cost argument does not clearly support a broad property right to exclude.

This latter policy basis of trespass does, however, indicate that transaction costs are relevant in deciding whether real property rights should apply on the Internet. The question—to which this Article later returns—is how to square the policies of trespass with those of other causes of action like copyright infringement and misappropriation as well as competitive concerns.

2. *Focus on the Server—The State Law Cause of Action in Trespass to Chattels and Its Policy Basis*

Rather than focusing on the website, a court may choose to concentrate on the tangible server on which the site resides.¹³⁴ In that case, the relevant cause of action would be one in trespass to chattels like that which both eBay and Ticketmaster alleged.

To succeed in a trespass to chattels action, the plaintiff must prove that another, without authorization, dispossessed the plaintiff of a chattel or used or intermeddled with its use.¹³⁵ Intermeddling is defined as “intentionally bringing about a physical contact with the chattel,”¹³⁶ and liability will lie for any such contact that is “harmful to the possessor’s materially valuable interest in the physical condition, quality, or value of the chattel,” or that deprives the possessor “of the use of the chattel for a substantial time.”¹³⁷ More generally, liability arising from *any* deprivation of use (whether by intermeddling or actual use) accrues only if “the possessor is

133. The robot exclusion may help to alleviate these problems. *See infra* Part IV (discussing how the law might take the robot exclusion into account).

134. Of course, the website cannot exist without the server on which it resides. Distinguishing between the two to determine the appropriate substantive result might seem akin to drawing a line between the printed word and the book in which it appears, a generally unprofitable inquiry. The copyright owner can control access to the book and its contents by, for example, putting the physical book in a locked box. The server owner, in contrast, has opted to make the website publicly available although it resides physically on the server that is not publicly accessible. This dichotomy between access and the physical embodiment of the information accessed makes discussing the website and server separately a more profitable inquiry than in the case of conventional hard copy publications.

135. *See* RESTATEMENT (SECOND) OF TORTS § 217 (1965) (“A trespass to a chattel may be committed by intentionally (a) dispossessing another of the chattel, or (b) using or intermeddling with a chattel in the possession of another.”).

136. *Id.* § 217 cmt. e.

137. *Id.* § 218 cmt. e.

deprived of the use of the chattel for a substantial time.”¹³⁸ As noted above, courts have held electronic signals to be tangible enough to support a trespass to chattels claim.¹³⁹

In the case of spidering, though, there is no harm to the condition, quality, or value of the chattel. The server still functions as intended and retains whatever value it had before the spider began its activity.¹⁴⁰ The harm that the *Ticketmaster* court was looking for—taking a hammer to the server itself or a colorable imitation thereof—simply does not exist.

The most tenable allegation is that harm occurs because the server’s owner is deprived of its use. To the extent the server is busy processing unwanted requests from the spider, it is unavailable to process other, desired inquiries. Still, however, two questions remain under a traditional trespass to chattels claim: (1) whether the owner is deprived of the server’s use for a substantial time; and (2) whether that deprivation of use causes damage.

According to the *Restatement (Second) of Torts*, the substantiality of time must be such that “it is possible to estimate the loss caused thereby. A mere momentary or theoretical deprivation of use is not sufficient [to trigger liability in trespass] unless there is a dispossession.”¹⁴¹ Bidder’s Edge’s queries took up less than two percent of eBay’s system’s capacity.¹⁴² Is this substantial? In an absolute sense, it seems not, although it is measurable. As the *Restatement* asserts, however, the question of substantiality is relevant to the question of whether or not a court can reliably measure damages. There was no evidence that Bidder’s Edge’s queries caused other desired requests to go unanswered or even to suffer a delay in being processed.¹⁴³ The *eBay* court could find no service disruption that occurred because of Bidder’s Edge’s activities nor any maintenance expense attributable to them.¹⁴⁴ It rejected eBay’s real property analogy that compared spiders to an army of robots invading a retail store: “[F]or the

138. *Id.* § 218(c).

139. *See supra* note 118 and accompanying text.

140. *See Burk, supra* note 19, at 35-36 (noting that the physical contact of “impinging electrons” does not cause damage to the machinery, that the equipment is simply receiving and processing signals that it was designed to process, and reviewing and criticizing courts’ focus on other measures of damage as sufficient to state a trespass to chattels claim).

141. RESTATEMENT (SECOND) OF TORTS § 218 cmt. i (1965).

142. *eBay, Inc. v. Bidder’s Edge, Inc.*, 100 F. Supp. 2d 1058, 1064 (N.D. Cal. 2000) (“According to eBay, the load on its servers resulting from [Bidder’s Edge’s] web crawlers represents between 1.11% and 1.53% of the total load on eBay’s listing servers.”).

143. *Id.* at 1065.

144. *Id.*

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."¹⁴⁵

A trespass to chattels action would also face the same questions discussed above in the context of trespass to real property. The chattel itself, the server, grants access simultaneously with making a copy, thereby raising the copyright preemption issue.¹⁴⁶ Further, the server decides whether or not to let the spider in, making access look consensual and trespass untenable.

The policy basis of trespass to chattels is essentially the same as that of trespass to real property. Trespass to chattels requires some showing of harm in part because the law views the owner's interest in inviolability to be greater in the case of real property than chattels. But the same policy concerns of protecting against violence and encouraging improvements to the chattel and consensual transactions are implicated. And the same question—how to fit these policy interests with others—is raised.

Amici's argument discussed above¹⁴⁷ has more force when a court focuses on the server. If a website cannot control entry, the burden on its servers may increase to a level that results in a severe degradation in performance. The server itself may not suffer tangible harm, but the incentive to invest in the site and to purchase more equipment may be impaired if the site cannot keep up with demand and has no ability to regulate access. This makes *amici's* point that the site should be able to control even "harmless" intrusions—no access is harmless because it uses the server's resources.

However, this ignores both the policy interest in affording access to uncopyrighted information, and that no one posts a website without expecting some users to travel to it, thereby imposing a burden on the site's servers. The relevant question may be what quantum of burden coming from a particular source is acceptable, rather than whether a property rule that allows a site to regulate access in its discretion is advisable.

Under a traditional analysis, in both the *Ticketmaster* and *eBay* cases, the spider's use seems to be something less than "substantial" as required by the trespass to chattels action. The element of damage also appears to be lacking. How then did the *eBay* court premise entry of a preliminary injunction on a trespass to chattels theory? It did so by mixing and match-

145. *Id.* at 1066.

146. *Supra* notes 123-24 and accompanying text.

147. *See supra* text accompanying note 130.

ing the requirements of trespass to real property and trespass to chattels, mutating them into a new tort that bears only some surface resemblance to traditional causes of action.

D. Mixing Metaphors

In addressing eBay's trespass to chattels claim, the *eBay* court seemed confused about what level of interference constitutes an actionable intermeddling:

Conduct that does not amount to a substantial interference with possession, but which consists of intermeddling with or use of another's personal property, is sufficient to establish a cause of action for trespass to chattel. Although the court admits some uncertainty as to the precise level of possessory interference required to constitute an intermeddling, there does not appear to be any dispute that eBay can show that [Bidder's Edge's] conduct amounts to use of eBay's systems.¹⁴⁸

The court thus adopted a theory of strict liability for any use of a chattel, regardless of whether or not the owner is deprived of its use for a "substantial" time.

In rejecting all of the items that *eBay* proffered as constituting damage, the court adopted its own two theories of harm. It argued, "If [Bidder's Edge's] activity is allowed to continue unchecked, it would encourage other auction aggregators to engage in similar recursive searching of the eBay system such that eBay would suffer irreparable harm from reduced system performance, system unavailability, or data losses."¹⁴⁹ This harm would likely be "a substantial impairment of condition or value" of the chattel.¹⁵⁰ The court did not explain why it substituted this possible future harm for the traditional requirement that the plaintiff show actual harm. Nor did it consider whether this potential harm was likely to materialize.

Alternatively, the court seemed to find harm from the mere act of access by a visitor unwanted by the eBay site—a kind of strict liability regime for unwanted, harmless intrusions. It said, "Even if, as [Bidder's Edge] argues, its searches use only a small amount of eBay's computer system capacity, [Bidder's Edge] has nonetheless deprived eBay of the ability to use that portion of its personal property for its own purposes. The law recognizes no such right to use another's personal property."¹⁵¹

148. *eBay*, 100 F. Supp. 2d at 1070.

149. *Id.* at 1066.

150. *Id.* at 1072.

151. *Id.* at 1071.

The result is a broad rule that would allow a site to obtain an injunction against all unwanted visitors. This right to exclude is broader than under real property law, which addresses intangible intrusions by using a nuisance balancing test or by requiring a showing of harm to sustain a trespass claim. It also departs from traditional trespass to chattels rules by abandoning an analysis of the substantiality of the time of deprivation and the requirement of harm. By piling analogy on top of analogy and mixing real and personal property causes of action, the court has created a broad property right without ensuring that the policies on which analogous rules are based translate equally well into this new context.

E. *eBay's Progeny—Register.com, Inc. v. Verio, Inc.*¹⁵²

This broad property rule has already been adopted by at least one court. In *Register.com, Inc. v. Verio, Inc.*, the defendant Verio used spiders to access the plaintiff's database to extract uncopyrighted names and contact information of customers who had registered domain names with Register.com.¹⁵³

Interestingly, the court implied that Verio's use of the spider prior to Register.com's filing of the lawsuit was not a trespass:

[I]t is clear since at least the date this lawsuit was filed that Register.com does not consent to Verio's use of a search robot, and Verio is on notice that its search robot is unwelcome. . . . Accordingly, Verio's future use of a search robot to access the database exceeds the scope of Register.com's consent, and Verio is liable for any harm to the chattel (Register.com's computer systems) caused by that unauthorized access.¹⁵⁴

Like the *eBay* court, the *Register.com* court rejected the plaintiff's evidence of harm.¹⁵⁵ It cited *eBay* for the proposition that any use of the computer system by one other than its owner causes harm by depriving the system's owner of the use of that capacity, however minimal.¹⁵⁶ The *Register.com* court also seemed to find harm in the prospect of many spiders

152. 126 F. Supp. 2d. 238 (S.D.N.Y. 2000).

153. *Id.* at 243.

154. *Id.* at 249. In contrast, the *eBay* court seemed to say that use of the spider to make repeated queries was unauthorized even before eBay objected. See *supra* text accompanying note 73.

155. See *Register.com*, 126 F. Supp. 2d at 249-50 (discussing how the defendant "thoroughly undercut" the plaintiff's testimony showing harm, rendering "Register.com's evidence of any burden or harm to its computer system caused by successive queries performed by search robots . . . imprecise").

156. *Id.* at 250.

from other sites searching Register.com if the court allowed Verio to do so without liability.¹⁵⁷

The *Register.com* case demonstrates the breadth of the *eBay* holding. Trespass occurs by accessing the system regardless of the nature of the information extracted—whether uncopyrighted product and pricing information, uncopyrighted contact information, or copyrighted information. Second, the decision should also remind policymakers generally that while reasoning by analogy is a traditional means of doctrinal evolution, so too is one court's adoption of another's precedent. The latter adoptions are likely to occur without in-depth analysis of the initial decision, much as the *Register.com* court uncritically followed the *eBay* court's guidance. This makes an immediate analysis of the *eBay* rule that much more important.

Under the *eBay* court's rule, a site can enjoin not only unlicensed use of spiders but also all unlicensed linking, effectively allowing a site to decide who can access it and through what means. Does this make sense? The link is the foundation of the web and the means by which consumers can navigate it easily and cheaply. Can we simply trust the market to give sites incentives to allow others to link to them? And are there other policy interests that the law should take into account? Prior to adopting any such broad property rule, the law should at least consider what competition policy and antitrust law would say because the definition of property rights affects the shape of competition. This Article therefore now turns to the question of what competition policy contributes to the discussion of how to define property rights in websites, with specific reference to product and pricing information.

III. COMPETITION POLICY AND ANTITRUST LAW

A. What Competition Policy Would Say

For many years, Sym's, one of the Northeast's leading discount retailers of clothing, used the catch phrase, "At Sym's, an educated consumer is our best customer."¹⁵⁸ The government's competition policy reflects, in only slightly more sophisticated words, this same basic idea.

In the Federal Trade Commission's ("FTC") *Plain English Guide to Antitrust Laws*, the agency tells consumers that they can play a role in keeping markets competitive by "research[ing] . . . alternatives, and

157. *Id.* at 250-51.

158. The company's current slogan is, "Commitment is always in fashion at Sym's." Syms.com, at <http://www.syms.com/www4/pbs.html> (last visited Apr. 6, 2001).

know[ing] the prices and product offerings of different retailers and manufacturers.”¹⁵⁹ The Supreme Court shares this view, and has found laws that restrict advertising and ban competitive bidding to be against the public interest because they withdraw information from consumers and hamper competition.¹⁶⁰ The Court has strongly affirmed the desirability of an informed public:

So long as we preserve a predominantly free enterprise economy, the allocation of our resources in large measure will be made through numerous private economic decisions. It is a matter of public interest that those decisions, in the aggregate, be intelligent and well informed. To this end, the free flow of commercial information is indispensable.¹⁶¹

However, while vigorous competition presupposes informed consumers, it also assumes a background set of private property rights. These rights may have a good deal to say about the permissible *means* by which a consumer becomes informed.

Recall the traditional real property rule discussed above that allows stores to ban those who would gather data for comparison shopping purposes from entry. If there is such a large competitive benefit from having consumers informed about product and pricing information, how does competition policy justify this rule? Perhaps accounting for it is simply not a practical concern. This broad right to exclude is largely theoretical in real space because stores have difficulty effectively distinguishing between those entering for “legitimate” reasons and those who are not. On the web, this ability can be more perfectly employed. Although aggrega-

159. *Keeping Markets Competitive*, at <http://www.ftc.gov/bc/compguide/keep.htm> (last visited Apr. 6, 2001), cited in Brief of Amici Curiae Law Professors, *supra* note 20, at 3; see also *Antitrust Enforcement and the Consumer*, at http://www.usdoj.gov/atr/public/div_stats/1638.htm (last visited Apr. 6, 2001) (explaining the benefits of antitrust law to consumers).

160. See O'Rourke, *supra* note 31, at 1978 (quoting *Bates v. State Bar of Ariz.*, 433 U.S. 350 (1977) and *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679 (1978)). In *Bates*, the Court held that a ban on advertising by attorneys violated the First Amendment. *Bates*, 433 U.S. at 383. In *Professional Engineers*, it held that an engineering association's ethical rule against competitive bidding violated the Sherman Act. *Prof'l Eng'rs*, 435 U.S. at 695-96; see also *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc.*, 425 U.S. 748 (1976) (holding that a statutory ban on advertising prescription drug prices violated the First and Fourteenth Amendments).

161. *Va. State Bd. of Pharmacy*, 425 U.S. at 765; see also *Bates*, 433 U.S. at 364 (“[C]ommercial speech serves to inform the public of the availability, nature, and prices of products and services, and thus performs an indispensable role in the allocation of resources in a free enterprise system.”).

tors can use technological means to try to hide their activities from e-commerce sites,¹⁶² they generate a large volume of requests. This makes it easier for e-commerce sites to discover their activity than for bricks and mortar stores to locate who is shopping for the best price or aggregating pricing data. As a result, granting a right to exclude spiders from websites makes banning the entry of comparison shoppers closer to a practical reality on the Internet than it ever has been in the real world: “eBay . . . has found in its trespass theory a perfect mechanism for preventing information-gathering.”¹⁶³ That this “more perfect” control over access may upset the traditional balance between competition policy and property rights suggests that the law should not automatically replicate the same property rights in cyberspace as in real space. Moreover, it certainly should be skeptical about granting even *broader* rights as the *eBay* court did.

However, consumers can still get product and pricing information in this new environment, and they can obtain it more cheaply than in traditional markets. Even under the *eBay* property rights regime, Internet markets may still be more competitive than in real space.¹⁶⁴ But this obscures another relevant comparison—between the Internet under the *eBay* rule and the Internet under alternatives. As noted above, if consumers seek information on their own, they will be less fully informed than if they use a shopbot. They will travel to the sites they know, reinforcing any market power a strong brand confers and the barrier to entry it can create.

Under the *eBay* decision, shopbots can use spiders to index sites with which they have agreements, and search sites with whom they lack such contracts in real-time like any other user.¹⁶⁵ Indeed, although Bidder’s Edge has since ceased operation, it did continue to operate ostensibly effectively for a time after entry of the preliminary injunction by conducting real-time searches of the eBay site.¹⁶⁶ Thus, the transference of real prop-

162. For example, Bidder’s Edge used proxy servers to try to avoid detection by eBay. See *eBay, Inc. v. Bidder’s Edge, Inc.*, 100 F. Supp. 2d 1058, 1061-63 (N.D. Cal. 2000) (explaining what a proxy server is and how Bidder’s Edge used them).

163. Brief of Amici Curiae Law Professors, *supra* note 20, at 7 n.4; see also Lawrence Lessig, *Cyberspace & Privacy: A New Legal Paradigm?*, 52 STAN. L. REV. 987, 997 (2000) (“[T]he [Internet’s] architecture is changing to make the Net more like real space—more like real space but threatening to regulate even more than real space.”).

164. *But see* O’Rourke, *supra* note 31, at 1969-74 (noting that certain characteristics of the Internet should bring markets closer to perfect competition but that, for a number of reasons, Internet markets may not yet be even as competitive as their bricks and mortar counterparts).

165. See *supra* Part II.B.2, Part II.D (discussing the court’s holding in the *eBay* case).

166. See *infra* note 196; see also *supra* note 29 (noting that Bidder’s Edge has ceased operations).

erty-like rights to websites should not meaningfully frustrate comparison shopping using the most effective tools.

However, this rationale raises some questions. First, it renders sites' objections to spiders based on the system burden they impose suspect. It is not at all clear that real-time inquiries by shopbots will be less burdensome to the queried system than using spiders.¹⁶⁷ Second, if an aggregator has to search in real-time, its response time to consumers may be degraded to a point that makes it an undesirable tool for comparison shopping, leaving consumers to do a less effective job on their own.¹⁶⁸ Third, the *eBay* court's rationale is broad enough to allow eBay the right to exclude even real-time searchers. As detailed above, the court essentially adopted a strict liability regime under which any unwanted access causes damage by using the visited site's resources.¹⁶⁹ All requests for information, whether by an individual or shopbot, impose such a burden. Real property rights give the site the ability to decide to whom it will grant admission, even in real-time.

The crucial question is whether a site would have an incentive to block information gathering for anticompetitive reasons. In other words, while the *eBay* rule may effectively give a site more perfect control over who may enter than a retailer in real space has, it does not raise policy concerns if sites have no practical incentive to exercise that control. Indeed, a second reason why competition policy is not generally unduly concerned with the property rule allowing stores to exclude those who would gather information, may be that competitive pressures force vendors to disseminate their product and pricing information.

Even a monopolist has incentives to disclose information. By definition, a monopolist controls the price from which it extracts its surplus.¹⁷⁰ If disseminating information would be value enhancing, allowing the imposition of a higher price, even a monopolist would do it.¹⁷¹ Moreover, the monopolist, like any other vendor, cannot sell to customers who are

167. See Bidder's Edge's Answer to First Amended Complaint, *supra* note 28, ¶ 110 (stating that real-time queries would "increase the load on eBay's servers [and] degrade the Bidder's Edge user experience, including by resulting in a long delay in display of the response to the search request").

168. See *id.*

169. See *supra* Part II.D.

170. See *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 391 (1956) ("Monopoly power is the power to control prices or exclude competition.").

171. See generally Nadel, *supra* note 8 (manuscript at 26) (noting that eBay should even consider functioning as an aggregator itself by including data about competitive options).

unaware of its existence. Withholding information then would, at first glance, seem to be an unlikely strategy.

Amici in the *eBay* case ostensibly make just this point, analogizing eBay to the dominant real-world auction houses:

Christie's and Sotheby's may occupy dominant positions as auction houses, but . . . [t]hey are under no duty to advertise their sales or to allow reporters or consumer affairs editors to enter their premises in order to spread the news about the auction to the four corners of the globe. . . . Quite simply, economic incentive works better than state force to secure the full dissemination of information. In order to attract owners to use their services, the auction houses reach out to the largest possible market. They advertise, use web pages, seek publicity and otherwise promote their sales. Yet at no point does the state step in to require auction houses to admit the media or auction aggregators onto their premises.¹⁷²

Amici's argument is that the policy interests, including concerns about competition, are the same in real and virtual space, thereby justifying an aggregator's liability under a modified real property cause of action like that adopted by the *eBay* court. Any concern over whatever additional practical ability a site has to exclude under such a rule is offset by at least two factors: (1) the competitive reality that encourages vendors to disclose relevant information; and (2) the need for strong property rights in the servers (and, by extension, the sites) to encourage companies to develop, maintain, and improve sites.¹⁷³

B. Antitrust Law's Impact

Are there circumstances in which sites would have an incentive to limit the dissemination of information? If so, can the law cost-effectively distinguish these situations, and what implications do they hold for the design of property rights on the Internet?

1. Bidder's Edge's Counterclaim

A good starting point for addressing these questions and analyzing the impact of antitrust law is the counterclaim that Bidder's Edge filed in

172. Brief of Amici Curiae Reed Elsevier et al., *supra* note 10, at 4. Of course, the analogy to Christie's and Sotheby's is somewhat ironic given those firms' widely publicized price-fixing activities. Reuters, *Judge Defers Action on Sotheby's Guilty Plea*, CNN.COM, at <http://www.cnn.com/2000/STYLE/arts/10/05/crime.sothebys.reut/> (Oct. 5, 2000).

173. Brief of Amici Curiae Reed Elsevier et al., *supra* note 10, at 22.

eBay's suit against it.¹⁷⁴ Bidder's Edge argued that eBay attempted to monopolize and, in fact, did monopolize the market for consumer to consumer online auctions as well as the market for information about consumer to consumer online auctions.¹⁷⁵ It alleged that eBay's exclusionary conduct included restrictive contractual provisions and interference with Bidder's Edge's relations with others.¹⁷⁶

Had the case not settled, one of Bidder's Edge's first hurdles would have been to show that the markets it defined were the relevant markets for antitrust purposes.¹⁷⁷ For example, if consumers view bricks and mortar auction houses and/or other fora as reasonable substitutes for eBay, then the relevant market may not be restricted to an online one.¹⁷⁸ Bidder's

174. Bidder's Edge's Answer to First Amended Complaint, *supra* note 28.

175. *Id.* ¶¶ 142, 143. Tickets.com ostensibly also included an antitrust counterclaim in its answer to Ticketmaster's complaint. See Ticketmaster Motion For Preliminary Injunction, *supra* note 47, at *3 (alluding to "the filing of an antitrust counterclaim by T[ickets.com]"). Tickets.com's answer, however, was filed under seal.

176. See Bidder's Edge's Answer to First Amended Complaint, *supra* note 28, ¶¶ 108-13, 119-25 (alleging that eBay sought to impose unacceptable contractual terms in a proposed license that would allow Bidder's Edge to use spiders to search the site, and that eBay interfered with Bidder's Edge's relationships with eBay Magazine and Cox Interactive Media). Bidder's Edge also alleged that eBay misused its source code copyright by attempting to use it to stop Bidder's Edge from publishing information that eBay knew was not copyrighted. *Id.* ¶¶ 126-33. Note that a monopolization claim under section 2 of the Sherman Act requires proof of "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen or historic accident." *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966). "[I]t is generally required that to demonstrate attempted monopolization a plaintiff must prove (1) that the defendant has engaged in predatory or anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous probability of achieving monopoly power." *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993).

177. A relevant market has two dimensions: (1) the relevant product market, which identifies the products or services that compete with each other, and (2) the relevant geographic market, which identifies the geographic area within which competition takes place. . . . The outer boundaries of a relevant market are determined by reasonable interchangeability of use. . . . Reasonable interchangeability of use refers to consumers' practicable ability to switch from one product or service to another.

Am. Online, Inc. v. Greatdeals.net, 49 F. Supp. 2d 851, 857-58 (E.D. Va. 1999) (citations omitted).

178. See *id.*; see also *In re Municipal Bond Reporting Antitrust Litig.*, 672 F.2d 436, 442 (5th Cir. 1982) (holding that the relevant market for information about bond listings encompassed not only electronic means of obtaining the information but also the print medium because consumers treated the print and electronic data as reasonably interchangeable).

Edge's case would have been substantially enhanced if it could have shown that "the enhancement of the currency, or sheer immediacy, of information, beyond that available" offline is significant to consumers.¹⁷⁹ Under such circumstances, a court likely would not consider offline and online auctions to be reasonable substitutes. If the market that Bidder's Edge defined exists, then it is more plausible that a secondary market in information about what is traded there also exists. Indeed, when the *eBay* court refused to dismiss Bidder's Edge's antitrust counterclaims, it noted that "[i]t appears appropriate to consider these as separate markets because auction services are not interchangeable with information about auctions."¹⁸⁰

Because Bidder's Edge does not compete in the market for consumer to consumer online auctions,¹⁸¹ its main complaint appears to be that eBay is attempting to use its power there to monopolize or attempt to monopolize this second market in information as part of a scheme to reinforce its power in the first.¹⁸² The legal question is whether eBay has engaged in

179. *Municipal Bond*, 672 F.2d at 442.

180. *eBay, Inc. v. Bidder's Edge, Inc.*, 2000 U.S. Dist. LEXIS 13326, at *7 (N.D. Cal. July 25, 2000).

181. *See id.* (noting that Bidder's Edge's counterclaim was contradictory, alleging at one point that it participated in the consumer to consumer online auction market and at another that it did not, and adopting the view that Bidder's Edge does not compete in that market).

182. An antitrust plaintiff must suffer antitrust injury.

Actionable antitrust injury is an injury to competition rather than just competitors. . . . It requires proof "(1) that the alleged violation tends to reduce competition in some market and (2) that the plaintiff's injury would result from a decrease in that competition rather than from some other consequence of the Defendant's actions."

Louisa Coca-Cola Bottling Co. v. Pepsi-Cola Metro. Bottling Co., 94 F. Supp. 2d 804, 813 (E.D. Ky. 1999) (citations omitted).

It is unclear how Bidder's Edge, which does not compete in the market for consumer to consumer online auctions, would be damaged if eBay monopolized that market. The claim may be that if eBay monopolizes that market, the need for an aggregator service such as Bidder's Edge declines, decreasing Bidder's Edge's revenue. The *eBay* court emphasized that "the Ninth Circuit has rejected the argument that antitrust standing is limited to competitors or consumers," holding that the relevant fact is a causal relationship between the defendant's act and the plaintiff's harm. *eBay*, 2000 U.S. Dist. LEXIS 13326, at *6-7. "Thus, it appears that an allegation of market participation is sufficient to confer antitrust standing for pleading purposes." *Id.* Bidder's Edge participates only in the market for information about consumer to consumer online auctions.

exclusionary conduct without a legitimate business justification that has maintained or is dangerously likely to cause a monopoly.¹⁸³

Bidder's Edge claims that a number of contractual restrictions that eBay proposed to Bidder's Edge, and to which eBay actually agreed with other aggregators, constitute just such exclusionary conduct.¹⁸⁴ For example, eBay demanded that Bidder's Edge conduct real-time searches by keyword. Bidder's Edge complained that this approach would actually increase the load on eBay's servers while also degrading the Bidder's Edge user's experience by causing response time to increase.¹⁸⁵ Bidder's Edge also contended that under eBay's proposed terms, eBay auctions would have a competitive advantage because they would be listed first and displayed differently from results from other sites.¹⁸⁶ Bidder's Edge claimed

183. See, e.g., *Image Technical Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1209 (9th Cir. 1997) (citing *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985) and *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451 (1992)).

184. Bidder's Edge alleged that at least two aggregators entered into licenses containing the restrictive terms. Bidder's Edge's Answer to First Amended Complaint, *supra* note 28, ¶ 117 (stating that the press had reported agreements between eBay and iWatch and eBay and Auction Rover). In its decision on eBay's motion to dismiss the counterclaim, the court suggested that eBay's proposed license agreements with Bidder's Edge might be immune from scrutiny under the Noerr-Pennington doctrine. *eBay*, 2000 U.S. Dist. LEXIS 13326, at *4-5 (discussing the Noerr-Pennington doctrine which immunizes the filing of a non-sham lawsuit from antitrust scrutiny, noting that such immunity "extends to all 'conduct incidental to the prosecution of the suit,'" and stating that eBay's cease-and-desist letters and proposed contracts may fall within that category). The court also noted that Bidder's Edge may not have suffered antitrust injury because it did not agree to eBay's proposed terms. *Id.* However, it refused to dismiss the complaint because Bidder's Edge might be able to prove some set of facts sufficient to support its claim. *Id.* at *8-9. Generally, to have standing, a private antitrust plaintiff must show:

(1) that the acts violating the antitrust laws caused . . . the private plaintiff injury in fact . . . ; (2) that this injury is not too remote or duplicative of the recovery of a more directly injured person; (3) that such injury is 'antitrust injury,' which is defined as the kind of injury that the antitrust laws were intended to prevent . . . ; and, in a damage case, (4) that the damages claimed or awarded measure such injury in a reasonably quantifiable way.

2 PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION* ¶ 335, at 286-87 (2d ed. 2000) (citations omitted).

185. Bidder's Edge's Answer to First Amended Complaint, *supra* note 28, ¶ 110.

186. eBay's proposal also required that Bidder's Edge organize search results by auction site, rather than by auction closing time. . . This change typically would place eBay's results first, because eBay is the leading auction host and has the most listings. This change also would prevent the Bidder's Edge user from seeing the most time sensitive items first,

that “[b]y effectively precluding auction aggregators from displaying information regarding eBay auctions alongside information regarding other auctions[,] eBay has reduced competition in the on-line consumer to consumer auction market and among those, like Bidder’s Edge[,] who supply valuable information to auction consumers.”¹⁸⁷ In other words, Bidder’s Edge is arguing, at least in part, that even if eBay has an underlying property right to exclude Bidder’s Edge, eBay cannot condition access to its site on agreement to provisions that will restrict competition in other markets. Antitrust law usually evaluates such contractual restrictions under a rule of reason analysis.¹⁸⁸

The result of such an analysis would be heavily fact dependent. For example, it may be procompetitive to allow eBay to choose which aggregators should search in real-time and which by spidering. This approach allows eBay to monitor the burden on its systems more effectively, and requires the aggregators to internalize the costs they impose. But there are conflicting arguments regarding whether or not real-time searches are, in fact, less burdensome than spidering.¹⁸⁹

Compare this situation to suits in which plaintiffs have alleged that contracts giving the dominant supplier preferred shelf space in supermar-

an important factor for users concerned with obtaining the most competitive price by bidding at the last minute. In addition, eBay required that Bidder’s Edge display an eBay banner advertisement on every page of the Bidder’s Edge Web site that contains eBay search results, which because of eBay’s size would likely be every search. eBay also required that Bidder’s Edge include the special icons utilized by eBay to describe eBay buyers and sellers.

Finally, eBay demanded that Bidder’s Edge display information about eBay listings in a manner “identical to what a user would retrieve if they performed the same search on eBay.” This requirement would mandate that Bidder’s Edge abandon its own system of normalizing and categorizing information, and of using and listing only key information. It also would require that Bidder’s Edge search and list eBay information differently from every other auction site Bidder’s Edge tracks.

Id. ¶¶ 111-112.

187. *Id.* ¶ 118.

188. Allan J. Meese, *Farewell to the Quick Look: Redefining the Scope and Content of the Rule of Reason*, 68 ANTITRUST L.J. 461, 461 (2000) (asserting that courts “subject most types of contracts to full-blown scrutiny under the rule of reason”). However, the Supreme Court has held some price-setting and tying contracts to be unreasonable per se. *Id.* at 476. Also, the Court has endorsed an intermediate “quick look” test requiring justification for naked price and output restraints even in the absence of a detailed market analysis. *NCAA v. Univ. of Okla.*, 468 U.S. 85, 110 (1984).

189. *See supra* note 167.

kets violate the antitrust laws.¹⁹⁰ Bidder's Edge's claim is somewhat similar—that eBay is maintaining its monopoly in the consumer to consumer online auction market by controlling the display of information about its products. In the shelf space cases, courts have emphasized that such agreements, particularly if they are short in duration, easily terminable, and provide shelf space in proportion to market share, can be procompetitive.¹⁹¹ Courts are more likely to view a shelf space arrangement to be an anticompetitive restraint of trade if it is part of a plan to exclude competitors and “injur[e] competition without increasing efficiency.”¹⁹²

Because eBay *does* have a large percentage of the market,¹⁹³ the “shelf space” it is claiming online may simply reflect its proportionate share. However, the agreement may harm both consumers and competition. eBay's proposed agreement required that auction results be listed by site rather than by the most pertinent piece of information to consumers—auction closing time. Bidder's Edge argued that this requirement's practical effect would be to feature a large number of eBay listings first, helping to maintain eBay's monopoly power over auctions.¹⁹⁴ Consumers are unlikely to have either the time or the attention span to sort through to the next vendor as easily as they may scan a supermarket's shelves for alternatives.

The crux of the matter is that while a monopolist may have incentives to disclose information, it may also have incentives to stifle the flow of information about other options. The Internet may be one of the few, if not

190. See, e.g., *Louisa Coca-Cola Bottling Co. v. Pepsi-Cola Metro. Bottling Co.*, 94 F. Supp. 2d, 804, 806-07, 814-16 (E.D. Ky. 1999) (holding that Pepsi's Calendar Marketing Agreements under which retailers agreed to promote Pepsi and provide it with a certain amount of shelf space served procompetitive ends and did not violate section 1 of the Sherman Act); *Frito-Lay, Inc. v. Bachman Co.*, 659 F. Supp. 1129, 1132-36 (S.D.N.Y. 1986) (addressing Frito-Lay's program that encouraged stores to increase shelf space for Frito-Lay products at the expense of its competitors, and holding that the agreements did not violate section 1 of the Sherman Act, but might be evidence that Frito-Lay “subsidized the exclusion of competitors” under section 2).

191. See *supra* note 190 and sources cited therein.

192. *Frito-Lay*, 659 F. Supp. at 1136. In *Frito-Lay*, the court refused to dismiss monopolization and attempted monopolization claims based on allegations that Frito-Lay used profit guarantees to ensure shelf space for its products at the expense of its competitors. See *id.* at 1139.

193. See, e.g., *eBay, Inc. Is Sued by Bidder's Edge, Inc. on Business Tactics*, WALL ST. J., Feb. 8, 2000, at A12 (citing eBay as having eighty-seven percent of “daily Web auction traffic”); see also Bidder's Edge's Answer to First Amended Complaint, *supra* note 28, ¶ 134 (claiming that eBay has an eighty-five percent share in both the consumer to consumer online auction market and the market for information about those auctions).

194. See *supra* note 186.

the only, contexts in which it may be a viable strategy for a monopolist to create a barrier to entry by controlling the flow of its own product and pricing information. The incidental effect of maintaining the monopoly in the primary market may be to frustrate the comparison shopping sites that seek to provide the relevant information.

More specifically, aggregators provide more than data about what products are available at what sites. They also provide information about the *existence* of other sites. eBay has an established brand name that a new entrant generally lacks. The entrant cannot compete if users cannot find it, and users find sites by employing search engines or specialized search engines like Bidder's Edge. In fact, two major reasons why the Internet has not materialized into a perfectly competitive market are that consumers are imperfectly informed and search costs remain high.¹⁹⁵ When eBay refuses to provide its data, it makes aggregators' services less attractive. When eBay provides its data under terms that require a screen display advantageous to it, it makes it more difficult for consumers to find out not only that other sites offer the product (potentially at lower prices), but that those other auction sites exist at all.

Thus, using market power to control information and keep consumers uninformed about alternatives may be a plausible strategy if the goal is to erect a barrier to entry in the primary market. It is unclear whether acts taken pursuant to this strategy would rise to the level of exclusionary conduct sufficient to constitute an antitrust violation. Competitive sites can take a number of steps, including advertising, to make their presence known. Nevertheless, because consumers rely on search services, conduct directed toward making those services less valuable or dictating their display may cause marketplace inefficiencies.

However, other facts of the *eBay* case make it unlikely that eBay violated the antitrust laws. eBay was apparently willing to allow real-time searches of its database by Bidder's Edge in the absence of an agreement.¹⁹⁶ It is difficult to square this with Bidder's Edge's answer indicating that eBay was negotiating for restrictive contractual provisions to al-

195. O'Rourke, *supra* note 31, at 1972-74 (noting that search engines cannot index all of the web and that many consumers are unaware of the existence of comparison shopping tools, as well as a number of other reasons why the Internet has not evolved into a perfectly competitive marketplace).

196. See Steven Bonisteel, *Bidder's Edge Searches eBay Again*, NEWSBYTES, available at <http://www.newsbytes.com/pubNews/00/150308.html> (June 8, 2000) (noting that Bidder's Edge began conducting real-time searches of the eBay site after entry of the preliminary injunction, and that eBay initially indicated that it would not object to such searches).

low Bidder's Edge to conduct even real-time searches.¹⁹⁷ Perhaps some scrutiny from the Justice Department persuaded eBay that allowing this access was advisable.¹⁹⁸ Maybe eBay believed that its barriers to entry were erected too late to achieve its goal. Or it may be, as *amici* argue, that competitive pressures forced eBay to disclose its information.¹⁹⁹ Regardless, the underlying point remains. Scenarios exist in which a monopolist may use its power to control the flow of information in an anticompetitive and inefficient way.

Antitrust law's response to such behavior is linked to the definition of the underlying property right. This is starkly illustrated by a comment made by the *eBay* court in refusing to dismiss the Bidder's Edge antitrust counterclaims. It said, "If [Bidder's Edge's] automated crawling of eBay's web site is determined to be lawful, eBay's alleged blockage of [Bidder's Edge's] search activity may also provide a basis for an antitrust violation."²⁰⁰ In other words, if the initial property entitlement rests with Bidder's Edge, eBay's steps to exclude it are more likely to lack a legitimate business justification.

2. *Unilateral Refusal to Deal and Essential Facilities*

By negative inference, the quote above suggests that if the modified property right that the *eBay* court established is the governing law, it is not an antitrust violation to prevent spiders from accessing a site. Antitrust law generally respects the governing property rights regime. Nevertheless, aggregators may still seek relief under antitrust claims. For example, they may argue that a site like eBay may not unilaterally refuse to grant spiders reasonable access.

While a firm may generally refuse to deal with a competitor, section 2 of the Sherman Act imposes some limits.²⁰¹ Unfortunately, the law regarding refusals to deal is rather murky. Generally, courts analyze refusals to deal either by focusing on an intent to destroy competition or the existence

197. See *supra* notes 184-87 and accompanying text.

198. See John Schwartz, *Probe of eBay Hinges on Rights to Data*, WASH. POST, Feb. 5, 2000, at E1 (stating that the Justice Department began a preliminary investigation of eBay and its business tactics involving companies like Bidder's Edge); David Lazarus, *Justice Department Takes Closer Look at eBay's Bidness*, DENVER POST, Feb. 7, 2000, at C12.

199. See *supra* note 172 and accompanying text.

200. *eBay, Inc. v. Bidder's Edge, Inc.*, 2000 U.S. Dist. LEXIS 13326, at *5 (N.D. Cal. July 25, 2000).

201. 15 U.S.C. § 2 (1994).

of an essential facility.²⁰² The cases, for the most part, fall into three categories that involve: (1) an intent to destroy competition coupled with a change in behavior by the monopolist; (2) a monopolist leveraging its power from one market into another; or (3) a monopolist refusing to grant a competitor access to an essential facility.²⁰³

eBay's conduct might fit all three categories. It initially agreed to allow searching by Bidder's Edge under certain conditions, but later withdrew its consent. It may be attempting to leverage its power in the market for consumer to consumer online auctions into the market for information about such auctions because it would prefer that consumers not have information about lower-priced alternatives and the existence of sites offering those choices. Finally, Bidder's Edge might argue that eBay's website is an essential facility to which it must be granted access.

Certainly, one difficulty common to all of these claims is that eBay did not exclude Bidder's Edge from conducting real-time searches. Thus, consumers could still obtain competitive pricing information about eBay's offerings via Bidder's Edge. Bidder's Edge had access to eBay's product and pricing information, just not that access which it argued is the most efficient for it and for consumers. It is doubtful whether antitrust law would—or should—vindicate Bidder's Edge's interest in the most efficient way for it to obtain the information it seeks as long as consumers are still able effectively to acquire it.

If a site were to use its property right to the fullest extent by preventing even real-time searches, antitrust claims might be more likely to succeed because competition is more likely to be adversely affected. Such claims would still, however, likely encounter at least some difficulty. One problem is that the modified property right that the *eBay* court developed bears at least a surface resemblance to an intellectual property right. It is a right to exclude a spider from the site where access would essentially be synonymous with copying the site's information. While there is some dissonance in the area, the general rule is that the owner of an intellectual

202. See JULIAN O. VON KALINOWSKI ET AL., 2 ANTITRUST LAWS AND TRADE REGULATION §§ 25.04[3], 25-69 to 25-70 (2d ed. 2000) (stating that refusals to deal are generally analyzed under two theories: the intent test and the essential facilities test); Saul P. Morgenstern & Eamon O'Kelly, *Antitrust Enforcement in High Technology Industries: Keeping Cyberspace Safe for Innovators or Just Another Speed Trap on the Information Superhighway?*, 547 PLI/PAT 1009, 1028-29 (1999).

203. See James B. Kobak Jr., *Antitrust Treatment of Refusals to License Intellectual Property*, 606 PLI/PAT 447, 450 (2000) (setting up these classifications); see also *supra* notes 4-5 (citing the *Aspen Skiing* case that involved a behavior change and the *Terminal Railroad* case addressing essential facilities).

property right is free to refuse to license it without fear of antitrust liability.²⁰⁴ By analogy, eBay, even if a monopolist, may refuse to license access to its site. However, a court should be reluctant to accord the right established by the *eBay* court the same status as an intellectual property right. The intellectual property laws are premised on a power enumerated in Article I of the Constitution.²⁰⁵ In enacting laws pursuant to this power, Congress has considered how to balance competitive concerns with exclusive rights. In contrast, the property right announced by the *eBay* court lacks both a constitutional basis and an explicit statement of how that right accords with competition policy.

Although a court could conceivably use the essential facilities doctrine to grant Bidder's Edge access to the eBay site, it is unlikely to do so. Generally, the antitrust authorities primarily use the essential facilities doctrine to regulate natural monopolies that form a bottleneck or gateway into a second market.²⁰⁶ The consumer to consumer online auction industry is not a natural monopoly.

Some commentators have advocated use of the essential facilities doctrine in the software industry, where virtual network effects cause the market to bear some resemblance to a natural monopoly.²⁰⁷ A consumer

204. See *Intergraph Corp. v. Intel Corp.*, 195 F.3d 1346, 1362 (Fed. Cir. 1999) (“[T]he antitrust laws do not negate the patentee’s right to exclude others from patent property.”); *In re Indep. Serv. Orgs. Antitrust Litig.*, 989 F. Supp. 1131, 1141 (D. Kan. 1997) (holding that a patent holder need not show a legitimate business justification to avoid antitrust liability for a refusal to license), *cert. denied*, No. 00-62, 2001 U.S. LEXIS 1102 (Feb. 20, 2001). Other courts have adopted some version of a rebuttable presumption that the exercise of an intellectual property right is a valid business justification for such refusal. See *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147, 1188-89 (1st Cir. 1994) (suggesting that unlawful acquisition of a copyright or harm to consumers could suffice to overcome the presumption); see also *Image Technical Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1219 (9th Cir. 1997), *cert. denied*, 452 U.S. 1094 (1998) (stating that the presumption may be overcome by evidence showing that the protection of intellectual property rights is only a pretext to justify a refusal to license).

205. See U.S. CONST. art. I, § 8, cl. 8 (“The Congress shall have the Power . . . To promote the progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”).

206. See Teague I. Donahey, *Terminal Railroad Revisited: Using the Essential Facilities Doctrine to Ensure Accessibility to Internet Software Standards*, 25 AM. INTELL. PROP. LAW ASS’N Q.J. 277, 308 (1997). A successful essential facilities claim requires proof of “(1) control of the essential facility by a monopolist; (2) a competitor’s inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility.” *MCI Comm. Corp. v. AT&T*, 708 F.2d 1081, 1132-33 (7th Cir. 1982).

207. See Donahey, *supra* note 206; Dennis S. Karjala, *Copyright Protection of Operating Software, Copyright Misuse, and Antitrust*, 9 CORNELL J.L. & PUB. POL’Y 161

might appear to be “locked in” (i.e., unlikely to switch to competitive alternatives) to eBay in the same way that a consumer may be locked in to Microsoft Windows. However, the cause and strength of the lock-in is different. Consumers use Windows because most applications run on it, causing most developers to write programs running on Windows. The operating system becomes more desirable as more developers write programs for it; this, in turn, causes more consumers to buy it and still more developers to write programs for it, and so on. This effect creates a barrier to entry that prevents competing operating systems from emerging.²⁰⁸ In contrast, consumers may shop on eBay simply because it has the widest selection of products or because they trust it to deliver. Its monopoly power makes it attractive to sellers and buyers alike because it ensures the largest market. Consumers are not technologically locked in to eBay as they are to Windows. Possession of monopoly power alone does not and should not transform a product, service, or website into an essential facility.

It is difficult to know whether antitrust law would be effective in policing anticompetitive behavior that could occur under an *eBay* property rights regime. Antitrust litigation is not a viable alternative for smaller sites that cannot afford lengthy court battles with uncertain outcomes. Moreover, market failure can occur even before a specific firm obtains monopoly power. The real question is whether the law can cost-effectively distinguish anticompetitive restrictions on access from procompetitive ones. *eBay's* modified property right coupled with the use of antitrust law to police abuses may be preferable to employing flexible rules that would intervene earlier in a market. Such flexible rules could be costly because they introduce uncertainty and may be error-prone as compared to more exacting antitrust scrutiny.

Nevertheless, it is useful to at least explore alternative property regimes to the one established by the *eBay* court. Competition policy sup-

(1999); Maureen A. O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479 (1995). *But see* David McGowan, *Regulating Competition in the Information Age: Computer Software as an Essential Facility Under the Sherman Act*, 18 HASTINGS COMM. & ENT. L.J. 771 (1996) (arguing against applying the essential facilities doctrine to operating system software).

208. [T]he applications barrier to entry protects Microsoft's dominant market share. This barrier ensures that no Intel-compatible PC operating system other than Windows can attract significant consumer demand, and the barrier would operate to the same effect even if Microsoft held its prices substantially above the competitive level for a protracted period of time.

United States v. Microsoft Corp., 87 F. Supp. 2d 30, 36 (D.D.C. 2000).

ports the broadest possible availability of product and pricing information. In turn, antitrust law presupposes that it fits with property law. It may have in the past, but the law now has the opportunity to confront the issue and to design property rights on the web with competitive—and other—interests explicitly in mind.

IV. INTEGRATING POLICY TO CUSTOM-DESIGN PROPERTY RIGHTS ON THE INTERNET

The litigation and policy review of Part II revealed that when a court changes its focus from the website to the server, it also changes the causes of action that are relevant to its decision. In turn, each cause of action emphasizes different policies. Part III showed that antitrust law focuses more on the conduct itself and its impact on competition and consumers than it does on searching for the appropriate analogy. Analyzing the policies represented by these different approaches and causes of action helps to identify principles that may inform the design of property rights on the web.

All of the causes of action discussed, in one way or another and to varying degrees, are concerned with defining the permissible limits of free-riding. What those limits are may differ between real space and cyberspace. Nevertheless, some consistent principles remain. Copyright law and misappropriation law, generally, view circulating product and pricing information as a desirable activity. Likewise, competition policy would favor easy availability of such information as long as the means of obtaining it do not threaten to reduce output.²⁰⁹ Thus, competition policy, like a state law misappropriation action, might find the burden on the server to be relevant if, by using spiders, the “free-rider” threatens the existence (output) of the site. But unlike real property law, it would be relatively unmoved by the mere fact of the spider’s “unlicensed” invasion.

However, the policy basis of trespass counsels that the law should be concerned not simply with the investment in collecting information, but also with the investment made to establish and maintain the hardware infrastructure supporting the website. Certainly, the burden that the spider’s invasion places on the system should factor into an analysis of the legality

209. See Herbert Hovenkamp, *Exclusive Joint Ventures and Antitrust Policy*, 1995 COLUM. BUS. L. REV. 1, 96-97 (stating, “free rider concerns do not become decisive simply because they can be articulated. . . . [O]ften practices that are labeled as free riding are nothing more than competition.”).

of the spider's conduct.²¹⁰ Perhaps surprisingly, trespass law may hold the key, if not to identifying what factors are relevant, then at least to establishing an approach a court should use in evaluating such claims.

Recall that part of the difficulty courts are having arises from the nature of the problem. Is the site a public space or a locked box, and how does the server factor into the analysis?

Recall also that trespass law evaluates intangible invasions under a nuisance standard rather than under a traditional trespass standard.²¹¹ Nuisance balances the costs and benefits of the invasion while trespass to real property states an almost absolute right to exclude.²¹² What accounts for this difference? Commentators sometimes say that trespass protects invasions that interfere with the exclusive right of possession while nuisance addresses activities that implicate the rights to use and enjoy one's property.²¹³ In other words, "[t]respass applies to relatively gross invasions by tangible objects[, while n]uisance applies to more indirect and intangible interferences."²¹⁴ The spider falls somewhere in between the two. It is an intangible invasion that is directly and intentionally targeted toward the visited site.

The disparity in the approaches of trespass and nuisance may be attributable to differences in transaction costs.²¹⁵ Low transaction costs that facilitate bargaining support the strong exclusionary rule of trespass; the higher the transaction costs, the less likely that market exchange will occur. In high transaction cost settings, nuisance may be a more appropriate rule if the gains from allowing a court to use a nuisance-like balancing test exceed the increased costs to determine who has what property rights.²¹⁶ Factors like difficulty in identifying parties, the sheer number of parties who must contract, the nature of the relationship between the parties, and whether one party has monopoly power influence the magnitude of transaction costs. Such considerations affect search costs and the probability of strategic bargaining, including holdout.²¹⁷ As noted earlier, it is not clear

210. See Nadel, *supra* note 8 (manuscript at 50-51) (labeling the problem of burdening the server nontrivial, and suggesting that government or trade associations should set guidelines for the level of contact that would prima facie constitute a nuisance).

211. See *supra* Part II.C.

212. See *id.*

213. Powell, *supra* note 1, at 185-88.

214. Thomas W. Merrill, *Trespass, Nuisance, and the Costs of Determining Property Rights*, 14 J. LEGAL STUD. 13, 14 (1985).

215. See *id.* at 20-34 (explaining why this is the case and how common law nuisance tests are consistent with the transaction cost account of nuisance and trespass).

216. See *id.* at 23-26.

217. *Id.* at 22.

which way transaction costs cut on the Internet. But the balancing approach of nuisance law may be an appropriate one in a context that implicates access not only to physical property but also to information—a context that implicates an entire set of policies that are not traditionally accounted for in trespass law.

Certainly, the answer to the question of whether a balancing test is best suited to define rights in a website is a close one. When other concerns are considered in addition to the economic analysis, the case for a nuisance-like balancing approach becomes stronger. In particular, both fairness and First Amendment considerations counsel against establishing the *eBay* regime as that which governs property rights on the Internet.

A. Other Concerns

1. Fairness and the Nature of the Medium

The *eBay* case essentially represents two competing visions of what conduct is acceptable on the Internet. Some complain that *eBay* “‘seems to want it both ways,’ by combining the high traffic of an open public site with the exclusivity of a private site.”²¹⁸ Under this view, *eBay* would have to erect some type of technological fence to keep out unwanted visitors.²¹⁹ In contrast, *eBay* contends that it is not fair for Bidder’s Edge to “steal the fruits of [its] labour.”²²⁰ At the heart of these conflicting views is a dispute about the nature of the Internet and the expectations of parties who use it for commercial purposes.

The Internet is rooted in a tradition of openness and information sharing, and the web is intentionally designed to facilitate this through linking. Thus, the “have its cake and eat it too” objection: *eBay* wants to take advantage of the existence of the network, its installed base of users, and even its linking technology, yet also retain the right to opt out of that system selectively. This strikes at least some as unfair.²²¹

Professor Burk has put this objection into economic terms. The Internet exhibits network effects—as each additional user joins the network,

218. Louise Kehoe, ‘Fair Use Policy’ for Web Content Needed: Court Ruling Impacts on Automated Crawlers, NAT’L POST, May 31, 2000, at C9 (quoting Munjal Shah, Chief Executive Officer of Andale, an auction business management service).

219. See *id.* (noting that sites can limit visitors by using registration and/or password protection, but also acknowledging that such measures may discourage desired visitors as well as the unwanted).

220. *Id.* (quoting an unnamed *eBay* source commenting on the district court’s entry of a preliminary injunction against Bidder’s Edge).

221. See *supra* note 218 and accompanying text.

the system's value increases to those already using it.²²² Thus, later users opt into a higher-valued system than earlier ones do.²²³ According to Burk,

[P]roprietization in a networked environment encourages the holder of the exclusive right to attempt to free-ride upon the external benefits of the network, while at-will avoiding contributions of such benefits to others. . . . For example, . . . [such a] calculus pertains in the case of eBay, which has profited from the easy and ubiquitous access to its auction service made possible by the open standards of the Internet. However, when the same open standards make possible added value generated by a service such as [Bidder's Edge], eBay suddenly opposes open access—unless of course it can capture that value.²²⁴

In other words, eBay wants to enjoy the benefits of the network without bearing its costs.

One might respond to this objection by noting that it would be naïve to suppose that the same “rules” that governed access and use of a research network would, or should, also apply to a commercial environment. Moreover, requiring a site to build a fence to keep out unwanted visitors is simply a waste of resources. Additionally, one might distinguish between access to the network itself and access to individual sites:

A regime of private property that prevented some people from gaining access to the net while allowing it to others would indeed spell the death knell of the Internet as a public institution. But Internet interconnections are not at stake here, for nothing in this case even hints at a right of eBay or any other private site owner on the Internet to exclude others from the information highway. Rather this case is about whether or not private property can coexist with public highways in cyberspace as it does on land.²²⁵

Put differently, stores in real space benefit from the existence of public highways that help to make their businesses accessible. This does not translate into an affirmative legal obligation for each store to admit all who exit the highway and try to enter the property.

222. See Michael L. Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AMER. ECON. REV. 424, 424 (1985) (noting that network effects occur whenever a consumer's utility associated with a good increases as others purchase it).

223. See Burk, *supra* note 19, at 51.

224. *Id.* at 51-52.

225. Brief of Amici Curiae Reed Elsevier et al., *supra* note 10, at 5.

But the cost-benefit equation that justifies particular property rules in real space may be different in virtual space. The installed base of users makes access to the Internet quite valuable for a commercial website; perhaps valuable enough to require it to purchase sufficient capacity to meet the demands on its servers, at least to some reasonable level. Certainly, because links are defining features of the web, site owners not only foresee but also *hope* that Internet users will link to their sites. Moreover, as the technological review revealed earlier, a link is synonymous with access that is granted by the linked site.²²⁶ This technology is more than mere formalism. Because linking is the distinguishing feature of the web, it is logical to conclude that the act of posting a website signals the poster's willingness to opt in to a system under which linking is permissible. Thus, the cost of placing an unrestricted site on the Internet is implicit agreement to at least some reasonable amount of linking activity to that site.

Thus, the fairness argument indicates that the issue is not whether linking requires permission; indeed, it does not. Rather, the issue to be addressed is how to define what a reasonable amount of linking to be expected from a single source is. The legal rule defining property rights on the Internet could safeguard the defining feature of the web while also protecting site owners from burdens on their servers that exceed reasonable expectations.

2. *First Amendment-type Concerns*

Enforcing private property rights in a civil trespass suit, even to regulate access to uncopyrighted information, is unlikely to constitute the state action required to implicate First Amendment concerns.²²⁷ Nevertheless, when designing a new property right, the policy interests represented by the First Amendment are useful in thinking about what rule is most desirable. The Supreme Court has held that the First Amendment protects commercial speech, and that there is a corresponding right of the public to receive such speech from a willing speaker.²²⁸ Although commercial

226. See *supra* notes 17-20 and accompanying text.

227. See ERWIN CHEMERINSKY, CONSTITUTIONAL LAW PRINCIPLES AND POLICIES § 6.4.4.3, at 403-08 (1997) (discussing the confusion in the cases over what conduct constitutes state action, including whether enforcement of a criminal trespass law is state action).

228. See *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc.*, 425 U.S. 748, 756 (1976) ("Freedom of speech presupposes a willing speaker. But where a speaker exists . . . the protection afforded is to the communication, to its source and to its recipients both."); *id.* at 758-70 (explaining the evolution of case law and logic in holding that the First Amendment protects even commercial speech.).

speech receives less First Amendment protection than political speech,²²⁹ the Court has also stated, “[a]s to the particular consumer’s interest in the free flow of commercial information, that interest may be as keen, if not keener by far, than his interest in the day’s most urgent political debate.”²³⁰

In the spidering context, there are two speakers—the site offering products for sale and the aggregator. Both sites are “willing” to speak to consumers, but the former is unwilling to speak to the latter. While consumers have a right to receive the speech of both, the real issue is whether the spider has a right to receive the information from the site engaged in e-commerce. In the context of bricks and mortar retailing, at least one commentator has suggested that efforts to obtain product and pricing information even by competitors are “precisely the kind of commercial communication that the Court . . . thought worthy of first amendment protection.”²³¹

The Court has generally held, however, that private property rights outweigh First Amendment rights.²³² For example, in *Lloyd Corp. v. Tanner*, the Court held that a mall could exclude those who would distribute handbills protesting the Vietnam War: “[T]his Court has never held that a trespasser or an uninvited guest may exercise general rights of free speech on property privately owned.”²³³ The Court has not addressed a claim that a criminal trespass statute may be constitutionally employed to bar those who would gather pricing data from entry into a retail store. Reading precedent to suggest that the First Amendment allows a store to ban a political activist protesting the Vietnam War while also requiring it to admit a person who gathers data would, at least at first glance, turn the traditional rule affording less protection to commercial speech on its head.

229. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 563 (1980) (“The Constitution . . . accords a lesser protection to commercial speech than to other constitutionally guaranteed expression.”).

230. *Va. State Bd. of Pharmacy*, 425 U.S. at 763.

231. Eric D. Placke, Note, *Culhane v. State and The Battle of The Blue Light Specials: A Right to Receive Commercial Information While On Another’s Property?*, 39 ARK. L. REV. 146, 151 (1985).

232. *See id.* at 153-58 (summarizing cases).

233. 407 U.S. 551, 568 (1972). The Court also noted the lack of any relationship between the distribution of handbills and the purposes for which the mall was built and operated. *Id.* at 564. The states, however, remain free to grant their citizens more extensive rights of free speech than the federal constitution guarantees without running afoul of the Takings Clause or violating the property holder’s own First Amendment rights. *See Pruneyard Shopping Ctr. v. Robins*, 447 U.S. 74 (1980) (upholding provisions in California’s constitution that allow individuals to exercise rights of free speech and petition on the property of a privately owned shopping center that invites the public to visit).

Following that logic, at least one state court has held that a state statute may be constitutionally interpreted to allow a store (Wal-Mart) to ban comparison shoppers (from K-Mart) from entry even though they may be engaged in commercial speech:

Wal-Mart invites the public to come to its store to shop and make purchases. [Supreme Court precedent] means that Wal-Mart could prohibit a person from exercising in its store what would be a protected right of free speech if asserted on a public sidewalk. That being true, Wal-Mart certainly can prohibit a competitor from remaining in the store not to enjoy a constitutional right but solely to gather information enabling the competitor to take business away from Wal-Mart.²³⁴

One dissenting justice argued, without analysis, that “[c]ompetitive pricing should be encouraged, not discouraged. . . . Incidentally, the action upheld here is a denial of appellants’ first amendment rights.”²³⁵

The facially anomalous result that the dissent would create could occur because the Court’s tests focus on balancing private property interests against First Amendment rights.²³⁶ The Court considers the extent of the impact of the expressive activity on private property to be relevant in striking such a balance.²³⁷ The spider is engaged in “the relatively passive, unobtrusive act of receiving and recording information already present in the communication milieu.”²³⁸ This is an invasion of significantly less moment than that of antiwar protesters or other political activists.

As Professor Lessig puts it,

We are changing [cyberspace] from a place where an innovator or creator was free to innovate; where much lived in the commons, and much was built on what was in the commons, to a place where to transact, or innovate, or create, or explore, one needs the permission of someone else first.²³⁹

Before “we” make this change, we should consider the impact of such legal fence-building on the ability to engage in communication to which

234. *Culhane v. State*, 668 S.W.2d 24, 26-27 (Ark. 1984).

235. *Id.* at 28 (Purtle, J., dissenting).

236. *See generally* Placke, *supra* note 231, at 149-58 (reviewing Supreme Court precedent).

237. *See id.*

238. *Id.* at 159.

239. Lessig, *supra* note 163, at 997.

First Amendment interests attach even if state action is not involved.²⁴⁰ First Amendment tests tell us that balancing private property rights against speech interests is appropriate. In defining a test for access on the web where that access controls the flow of information rather than simply access to real or tangible personal property, an approach that balances interests rather than one that grants strong rights to exclude may be preferable.

B. Formulating a Sensible Rule

1. A Common Law Approach

Elsewhere, I have argued that courts should use the model of nuisance law placed against the backdrop of misappropriation law in determining whether or not a site owner should be able to enjoin access.²⁴¹ This approach, while addressing claims of unauthorized access, acknowledges that the question of what constitutes permissible access cannot be wholly divorced from the question of what constitutes permissible use of the information extracted. Under this nuisance/misappropriation model, the relevant factors for a court to consider include: “(i) the burden to the objecting site of processing unwanted requests; (ii) whether the site loses revenue on which it depends for its existence as a result of the access; and (iii) the cost to the objecting site to gather the information the visitor is taking and eventually using.”²⁴² Additionally, courts should consider whether or not the parties are in direct competition, the purpose of the access, the type of information taken, whether less intrusive means exist for the accessing party to obtain that information, and the public benefit from allowing the activity to continue.²⁴³ This approach integrates the policy concerns just discussed by giving sites an ability to enjoin access that overburdens their resources, or that is associated with a use that entails a level of free-riding likely to decrease output. Generally, however, the test reflects the view that placing a site on the Internet indicates consent to a certain amount of access by both private and commercial users. The mere fact of a commercial purpose does not contaminate access. An unexpected and unreasonable burden on the visited site’s resources, and use of the information in direct competition, is what makes access and use objectionable.

240. See Benkler, *supra* note 96, at 414-29 (exploring in detail a number of legislative efforts that would effectively take information out of the public domain, and noting that these efforts threaten freedom of speech as well as diversity of speech).

241. See O’Rourke, *supra* note 31, at 2001-05.

242. *Id.* at 2001-02.

243. *Id.* at 2001-03.

In proposing a balancing test rather than strong property rights either to exclude or to access, my intent is to give courts some flexibility in dealing with emerging technologies. The test also accommodates different types of websites. For example, sites that rely on subscription revenue will be able to keep out those who have not paid to enter, while publicly available sites will have more trouble excluding visitors.

At least one problem with any balancing test is that it creates uncertainty, which can be a barrier to the very commerce that it is intended to foster. Sites like Ticketmaster may deal with that uncertainty by using private contracts to control access to and use of their websites. Two questions thus arise: (1) can the balancing test be made more certain; and (2) should parties be permitted to regulate terms of access by contract?

a) Making the Balancing Test More Certain

The addition of a safe harbor rule would help to make results more predictable.²⁴⁴ For example, the law could give legal effect to the private ordering of netiquette by holding that a spider must respect the robot exclusion or be liable for unauthorized access. Indeed, the robot exclusion header may have evolved as a cheap way for sites to opt out of a default rule favoring open access, and to indicate explicitly when they are willing to grant access only upon agreement.

However, because the robot exclusion is so simple to implement, sites may use it, like the *eBay* trespass tort, selectively and inefficiently. Rather than giving the header conclusive effect, the law could allow a spider to assert a defense of misuse to respond to claims of unauthorized access. Like copyright and patent misuse, “trespass misuse” could prevent enforcement of the robot exclusion under circumstances in which the indexed site has engaged in anticompetitive behavior. Private ordering like netiquette can sometimes be inefficient because it fails to account for externalities such as the benefits to competition from the availability of product and pricing information. The defense of misuse would allow a court to introduce such considerations.

Alternatively, because linking is the language of the web, using a robot exclusion would not automatically grant a website a safe harbor against unwanted linking by a spider or others. Instead, the law might more appropriately develop some standard of reasonableness.²⁴⁵ For example,

244. See Nadel, *supra* note 8 (manuscript at 51) (stating that while “[n]uisance law might work” to police access to websites, “leaving these issues to ad hoc judgements by general law judges does not appear to be the most efficient alternative”).

245. See *supra* note 210 (citing Nadel as suggesting that government or trade associations determine a reasonable level of congestion).

while a linker may be entitled to link, it should owe a duty of ordinary care to the site to which it links. Breaching that duty through such acts as imposing an extraordinary burden on the linked site's system or corrupting its data should lead to liability. Even in such cases, however, if the public benefit from the particular access and use is large, courts should consider whether a non-injunctive remedy would be appropriate. For example, a court could order the linking party imposing an excessive burden to pay the aggrieved site damages sufficient to increase that site's capacity.

When a site mounts higher fences than the robot exclusion, like the access controls respected by the DMCA, the test should be different to account for the enhanced investment in limiting access. However, circumventing such a control to obtain uncopyrighted information should not automatically lead to liability because policy interests favor the use of such information. Rather, as I have suggested elsewhere, the burden should shift to the linker who has broken the technological fence to show that the balance weighs in its favor.²⁴⁶

The balancing test would likely weigh in favor of both Bidder's Edge and Tickets.com. The burden on the indexed sites is low, consumers benefit from the easy availability of product and pricing information, the aggregators and the sites they index do not directly compete, and the contractual terms proposed by the site owners overreach. That real-time searches may be a less intrusive means for the aggregators to obtain their information would likely not be enough to tip the balance in favor of the indexed sites.

b) Regulating Terms of Access by Contract

Of course, one way for indexed sites to avoid the uncertainty of the balancing test is for these sites to contract with members of the public and enforce the terms of those contracts. For example, Ticketmaster prohibits commercial use of its information,²⁴⁷ while eBay requires users to agree to terms that forbid the use of robots and indexing even by manual means.²⁴⁸ Because access beyond the home page can be conditioned on an objective manifestation of assent—the click—a contract offers a perfect and inex-

246. See O'Rourke, *supra* note 31, at 2003.

247. See *supra* Part II.B.1.

248. See *eBay User Agreement* ¶ 7, at <http://pages.ebay.com/help/community/png-user.html> (last visited Apr. 6, 2001) ("Our web site contains robot exclusion headers and you agree that you will not use any robot, spider, other automatic device, or manual process to monitor or copy our web pages or the content contained herein without our prior expressed written permission.").

pensive means of control for a site to set the terms of access, especially when compared to sophisticated technological measures.²⁴⁹

I have argued that private contracts should generally be respected, even when boilerplate (or, more pejoratively, “contracts of adhesion”).²⁵⁰ But I have also recognized that not every means of contract formation or every contractual term will or should be enforceable.²⁵¹ Rather, courts must continue to apply traditional contract law to determine whether the parties have formed a contract and, if so, what it says.

There are many different ways in which a site can present a user with a clickwrap contract. The issue the law must address is what forms of assent are sufficient for contract formation. For example, in *Register.com, Inc. v. Verio, Inc.*, the court held that a website visitor’s act of submitting a query can constitute assent to the site’s terms of use when those terms are “clearly posted . . . [and t]he conclusion of the terms paragraph states, ‘[b]y submitting this query, you agree to abide by these terms.’”²⁵² Ostensibly also relevant to the court’s finding of assent was the failure of the party accessing the site (Verio) to “argue that it was unaware of these terms . . . [Instead, Verio argued] only that it was not asked to click on an icon indicating that it accepted the terms.”²⁵³

At least since the development of a mass-market in goods, and likely before, the law has recognized that an act—and sometimes even a failure to act—can constitute assent to a contract.²⁵⁴ The law balances the ideal of fully informed assent against the commercial reality that makes obtaining such assent prohibitively expensive, particularly in the context of mass-

249. See *Register.com, Inc. v. Verio, Inc.*, 126 F. Supp. 2d 238 (S.D.N.Y. 2000) (upholding a contract inferring assent from continued use of a site).

250. See Maureen A. O’Rourke, *Copyright Preemption After the ProCD Case: A Market-Based Approach*, 12 BERKELEY TECH. L.J. 53 (1997) (offering qualified support for a Seventh Circuit opinion upholding a restriction against commercial use of uncopyrighted information, and arguing that terms that are more restrictive than copyright law should be conspicuous); O’Rourke, *supra* note 207, at 535 (arguing that boilerplate provisions against decompilation in shrinkwrap licenses should be respected unless the supplier has near-monopoly power); O’Rourke, *supra* note 11, at 687-97 (arguing that boilerplate provisions against linking should often be preempted).

251. See *supra* note 250 and sources cited therein.

252. *Register.com*, 126 F. Supp. 2d at 248.

253. *Id.*

254. See, e.g., U.C.C. § 2-201(2) (2000) (binding a merchant to a contract set forth in the confirmatory memo sent by another merchant if the recipient fails to make a timely objection to the memo’s contents); *id.* § 2-207(1)-(2) (providing that a contract may be formed even though the acceptance contains additional terms, and generally incorporating those terms into the contract if they are not material alterations of the bargain and both parties are merchants).

market, faceless transactions. Thus, the law has gone so far as to hold that shrinkwrap contracts accompanying software may be enforceable, even though the consumer may become aware of the terms after purchase (if at all).²⁵⁵ One might defend such holdings by arguing that the mass-market for pre-packaged software could not have developed in the absence of this method of contract formation.

Electronic technology makes it much cheaper for Internet vendors than traditional bricks and mortar merchants to place the terms of access and use in front of the user, and to obtain an objective manifestation of assent—the click—before providing the user with whatever the product may be. The same “pay now, see terms later” rule that may make some sense in the mass-marketing of goods and software in the physical world is not cost-justified in cyberspace. In the electronic context, the user should be presented with the terms above the button indicating assent, rather than provided with the option to indicate agreement without ever viewing the relevant terms.²⁵⁶ That not all users will read the terms, making any assent less than fully informed, is irrelevant. By adopting a rule that requires providing the terms before allowing access as a condition of their enforceability, the law would increase the probability that consumers will be aware of the terms without imposing prohibitive costs on vendors.

Thus, a simple legend stating that continued use of a site constitutes agreement to terms that are buried elsewhere should not be an enforceable contract. Nor should the Register.com contract be enforceable. It is inexpensive to require Register.com to include a button specifically indicating that clicking on it constitutes assent to the terms just presented. Such a button makes it more likely that consumers will read the terms and under-

255. See, e.g., *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147 (7th Cir. 1997), *cert. denied*, 522 U.S. 808 (1997); (enforcing an arbitration provision in a boilerplate contract accompanying a computer); *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996); *M.A. Mortenson Co. v. Timberline Software Corp.*, 998 P.2d 305 (Wash. 2000) (following *Hill* and *ProCD* in holding a shrinkwrap license enforceable); *Rinaldi v. Iomega Corp.*, No. 98C-09-064, 1999 WL 1442014 (Del. Super. Ct. Sept. 3, 1999) (holding a warranty disclaimer included inside computer Zip drive packaging to be enforceable); *Westendorf v. Gateway 2000, Inc.*, No. 16913, 2000 WL 307369 (Del. Ch. March 16, 2000) (upholding an arbitration provision shipped with a computer); see also *Brower v. Gateway 2000, Inc.*, 676 N.Y.S.2d 569 (N.Y. App. Div. 1998); *Levy v. Gateway 2000, Inc.*, 1997 WL 823611 (N.Y. Sup. Ct. Oct. 31, 1997). But see *Klocek v. Gateway, Inc.*, 104 F. Supp. 2d 1332 (D. Kan. 2000) (rejecting *Hill* and *ProCD*).

256. See Maureen A. O'Rourke, *Progressing Towards a Uniform Commercial Code for Electronic Commerce or Racing Towards Nonuniformity*, 14 BERKELEY TECH. L.J. 635, 651-53 (1999) (arguing that rules that allow imposition of terms after the buyer has paid the price make less sense online where technology enables the seller easily to provide the terms of sale up front).

stand the import of the click. Consumers are less likely to assume that merely entering a query indicates agreement to detailed terms. Moreover, the contract should not be formed if the user does not click. Many spiders can enter a site without ever clicking the assent button.

If a contract is formed, the next task is to define its terms. In the click-wrap context, the contract will consist of the terms offered by the site, as long as contractual doctrines like unconscionability or other law do not forbid their inclusion. As I have argued generally, a term may be unconscionable if it hinders the competition enabled by the free flow of ideas.²⁵⁷ Others have put this in more elegant terms, proposing a doctrine of “public interest unconscionability” that would explicitly incorporate competitive considerations into the unconscionability analysis.²⁵⁸

If the contract survives scrutiny under this analysis, the next question is whether copyright law or the Constitution preempts the contract’s terms. Under section 301 of the Copyright Act, copyright law is the exclusive rule of decision regarding “all legal rights . . . that are equivalent to any of the exclusive rights within the general scope of copyright. . . .”²⁵⁹ Courts interpret this language to mean that the non-copyright cause of action must contain an element rendering it “qualitatively different” from a copyright action.²⁶⁰ Copyright law generally does not preempt the terms of negotiated contracts because they contain the extra element of a promise or confidential relationship.²⁶¹ Where, however, the contract is nonnegotiated and mass-market in nature, the question devolves to asking the same types of questions as broached under the unconscionability inquiry. Is it reasonable to infer consent to a particular term given the relevant market conditions and the overall structure of the deal?

257. See O’Rourke, *supra* note 207, at 552 (noting that an example of flawed contractual consent would include that which obtains a result contravening competition principles); O’Rourke, *supra* note 250, at 80-85 (stating that economic and noneconomic concerns support a rule against enforcing contractual provisions protecting facts, but arguing that such concerns must be balanced against the interests of investors in recouping their investments).

258. J.H. Reichman & Jonathan A. Franklin, *Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Goods Uses of Information*, 147 U. PENN. L. REV. 875, 930 (1999) (“All mass-market contracts, nonnegotiable access contracts, and contracts imposing nonnegotiable restrictions on uses of computerized information goods must be made on fair and reasonable terms, with due regard for the public interest in . . . preservation of competition.”).

259. 17 U.S.C. § 301(a) (1994).

260. See O’Rourke, *supra* note 250, at 74 (describing § 301 preemption).

261. See O’Rourke, *supra* note 207, at 521-23.

The process of answering this question might be termed a “reverse” fair use analysis because the Copyright Act’s enumerated fair use factors that emphasize market conditions may provide guidance to the decision-maker. These factors may assist a court in determining whether a contract that expands a provider’s rights in information should survive preemption by copyright law.²⁶² It is a “reverse” fair use analysis because it does not assess market factors as an aid in determining whether an infringement should be excused as a traditional fair use inquiry does. Instead, it asks whether the copyright owner can use private contract to create greater rights in information than the Copyright Act would grant, effectively using private contract to set a lower bar for infringement liability than under the public law. For example, even if Ticketmaster’s prohibition against commercial use of its uncopyrightable data is enforceable under contract law, it may still be preempted by copyright law under certain circumstances. A reverse fair use analysis would consider such factors as: (i) “the purpose and character of the [breaching party’s] use, including whether such use” directly competes with Ticketmaster; (ii) “the [uncopyrighted] nature of the . . . work” which weighs in favor of accessibility and use; (iii) “the amount and substantiality of the portion used in relation to the . . . work as a whole; and” (iv) “the effect of the use upon the potential market for or value of the [un]copyrighted work,” including an analysis of the effects of the use on incentives to invest in gathering and marketing uncopyrighted information.²⁶³

Under the Constitution, a contractual term may be preempted if its enforcement would “stand as an obstacle to the accomplishment of the full purposes and objectives of Congress” in enacting a particular statute.²⁶⁴ A court might appropriately hold that a contractual term forbidding commercial use of uncopyrightable data frustrates the goals of copyright law. Copyright policy includes leaving some material unprotected to allow further creativity, even if another uses that material for commercial purposes. Private law, particularly if it is ubiquitous, cannot constitutionally function effectively to set at naught the public law’s goals.

While Ticketmaster’s contract rather clearly raises copyright questions, eBay’s is subtler because it addresses primarily the means of access rather than the use of the data. There is no copyright right to use spiders; thus, the preemption argument seems weaker because there is no right at

262. See O’Rourke, *supra* note 250, at 88-89 (explaining the concept of “reverse fair use” as first suggested by Professor I. Trotter Hardy).

263. 17 U.S.C. § 107 (1994) (setting forth the four fair use factors relative to copyrighted works).

264. *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941) (footnote omitted).

issue equivalent to copyright.²⁶⁵ However, a deeper analysis makes a preemption claim more tenable. Recall that on the Internet, access effectively equals copying.²⁶⁶ Therefore, banning the use of spiders is equivalent to prohibiting copying. Under this view, the contractual provision *does* implicate copyright rights and should therefore be assessed under a preemption inquiry.

2. A Statutory Approach

For a number of years, Congress has been considering legislation to protect databases against misappropriation. One proposed bill would be suitable for addressing spidering if it were more explicitly to govern what constitutes permissible means of access. Regardless, it can provide guidance to courts engaged in the balancing test outlined above.

Under section 102 of House Bill 1858, “[i]t is unlawful for any person or entity . . . to sell or distribute to the public a database that (1) is a duplicate of another database that was collected and organized by another person or entity; and (2) is sold or distributed in commerce in competition with that other database.”²⁶⁷ This legislation protects an uncopyrighted database against outright piracy, but not against value-added uses like those of Bidder’s Edge and Tickets.com.

Interestingly, the legislation contains a provision on misuse. A database proprietor may not rely on the statute’s protection if the proprietor has misused its right. In deciding whether misuse has occurred, a court may consider the following factors:

- (1) the extent to which the ability of persons or entities to engage in the permitted acts under this title has been frustrated by contractual arrangements or technological measures;
- (2) the extent to which information contained in a database that is the sole source of the information contained therein is made available through licensing or sale on reasonable terms and conditions;

265. See O’Rourke, *supra* note 31, at 2000 (arguing also that the contractual provision might be constitutionally preempted).

266. See *supra* Part II.A.

267. H.R. 1858, 106th Cong. (1999). The legislation defines “database” as “a collection of a large number of discrete items of information that have been collected and organized in a single place . . . through the investment of substantial monetary or other resources, for the purpose of providing access to those discrete items of information by users of the database.” *Id.* § 101(1). In turn, a “duplicate” is “substantially similar” to the original database “as a result of the extraction of information from such other database.” *Id.* § 101(2).

....

- (4) the extent to which access to information necessary for research, competition, or innovation purposes has been prevented;
- (5) the extent to which the manner of asserting rights granted under this title constitutes a barrier to entry into the relevant database market; and
- (6) the extent to which the judicially developed doctrine of misuse in other areas of the law may appropriately be extended to the case or controversy.²⁶⁸

While asserting a strong policy in favor of competition and innovation, the legislation does not specifically address access issues. However, if the legislation were enacted, its misuse provision may give those seeking access a potent weapon. For example, Bidder's Edge could argue that eBay has been guilty of misuse because its contractual provisions and blocking efforts have frustrated Bidder's Edge's efforts to engage in an act permitted by the statute. Moreover, eBay's conduct may be creating a "barrier to entry into the relevant database market."²⁶⁹ eBay might defend by arguing that its contracts are reasonable under the relevant market conditions. The parties would likely argue the *Ticketmaster* case along similar lines.

Congress should consider expanding House Bill 1858 to include more explicit guidance on what constitutes permissible access. It could statutorily implement the balancing approach discussed above. For example, the law could set standards as to what burden imposed by one visitor is unreasonable. It could also shift the burden of proof to the aggregator if the indexed site had made a significant investment in access controls. It might also incorporate the reverse fair use inquiry by adding a reference to fair use in its enumerated misuse factors. The balancing test would provide the default rule around which parties may contract. However, any contractual terms that limit access may be preempted if the website owner has misused the rights defined in the statute. In such cases, the balancing test would provide the rule of decision.

If Congress fails to act, courts, in adopting the balancing test under common law could nevertheless benefit from the proposed statute's approach. They could adopt the factors of misuse under the legislation as the considerations relevant to the trespass misuse discussed above.

Ultimately, however, the legislative approach is preferable because it allows interested parties to plead their cases before Congress and Congress, in turn, to engage in detailed studies before enacting a rule of deci-

268. *Id.* § 106(b).

269. *Id.* § 106(b)(5).

sion.²⁷⁰ Once enacted, the statutory wording and legislative history could provide guidance to courts that would lead to more uniform results throughout the United States than those under the common law approach of a court-by-court adoption of a balancing test.

V. CONCLUSION

The myriad of websites, information, and uses of information on the Internet poses problems for the law, which often seeks to apply one rule to an entire range of conduct. Additionally, the newness of the medium causes courts to search for analogies to guide decisionmaking. However, the application of real-world analogies to the particular characteristics of virtual space may lead to unintended consequences.

One example may be the use of trespass as the analogy governing access to websites. Using trespass to police those who would gather comparative pricing data may have stronger anticompetitive effects on the web than in the real world. This suggests that policymakers should accommodate competition policy in formulating property rights on the web.

The policies of competition law, intellectual property law, and First Amendment jurisprudence argue in favor of the broad availability of product and pricing information. However, economics warns that because parties who obtain such information on the Internet impose a burden on the sites they search, an unfettered right to gather such data may be inefficient. Thus, the best approach may be to balance a number of factors in determining whether access is permissible in a particular case. However, the drawbacks to a balancing test may be substantial, particularly from a cost perspective. One way to decrease those costs is for policymakers to adopt safe harbor rules that allow e-commerce sites to operate in an environment of at least some certainty.

Congress has been working on legislation that, with some adjustment, could provide an appropriate framework. In the meantime, courts should strive to adopt rules that keep the Internet the broad-based communication mechanism that it has been and that allow the Internet to realize its fullest

270. For example, the balancing approach argued that even when a linker imposes an unreasonable burden on the linked system, a court might order a damages remedy rather than an injunction. Congress is well placed to decide if the costs of the uncertainty this rule would create merit the benefits it offers. The situations in which a non-injunctive remedy would be appropriate may be so rare as to make a damages rule inadvisable. Congress is better equipped than the courts to make this decision because it can evaluate the aggregate data. Courts can only assess the information presented by the parties before them.

potential as something approaching a perfectly competitive marketplace. The result may be that sites have to bear some burdens on their servers, but this cost reflects only a part of the benefit that they derive from accessing the huge installed base of this emerging global marketplace.