Fencing Cyberspace: Drawing Borders in a Virtual World

Maureen A. O'Rourke

Follow this and additional works at: https://scholarship.law.umn.edu/mlr

Part of the Law Commons

Recommended Citation

https://scholarship.law.umn.edu/mlr/1923

This Article is brought to you for free and open access by the University of Minnesota Law School. It has been accepted for inclusion in Minnesota Law Review collection by an authorized administrator of the Scholarship Repository. For more information, please contact lenzx009@umn.edu.
Fencing Cyberspace: 
Drawing Borders in a Virtual World

Maureen A. O’Rourke*

Introduction ................................................................................. 610
I.  An Introduction to the Internet and the 
World Wide Web ........................................................................ 615 
   A. Origins of the Internet ..................................................... 615 
   B. Development of the World Wide Web ......................... 619 
   C. Emergence of the Internet as a 
      Commercial Marketplace ............................................. 624 
      1. Development of the Marketplace ......................... 624 
      2. Web Business Models ............................................ 625 
         a. Advertising-Based Models ................................. 626 
         b. Subscription-Based Models .............................. 627 
         c. Cybershopping .................................................. 627 
         d. Emerging Web Revenue Models ..................... 629 
II. Navigating the Net Through Linking—The Technical 
Aspects and the Legal Challenges ........................................... 630 
   A. Types of Linking .......................................................... 631 
   B. The Legal Challenges to Linking .................................. 634 
      1. The Ticketmaster v. Microsoft Case: 
         The HREF Link ...................................................... 634 
      2. The Washington Post v. Total News Case: 
         The “Frame” ........................................................ 637 
      3. Discerning Litigation Trends ................................ 639 
III. Policy Considerations—Debating the Appropriate 
     Legal Rule for Linking .................................................. 640 

* Associate Professor of Law, Boston University School of Law (BUSL); 
B.S., Marist College; J.D., Yale Law School. Thanks to Bob Bone, Ron Cass, 
David Dana, Dan Freehling, Jane Ginsburg, Wendy Gordon, Keith Hylton, 
Mark Lemley, Fran Miller, Rob Merges, James Molloy, Pamela Samuelson, 
Michael Schmelzer, David Seipp, the BUSL Copy Center and Library staffs, 
my research assistant Kim Schmitt, and my family. Thanks also to all of the 
participants at the BUSL and Notre Dame Law School faculty workshops at 
which this paper was presented.
INTRODUCTION

In the last few years, the Internet has increasingly become a source of information even for the historically computer illiterate. The growing popularity of the Internet has been driven in large part by the World Wide Web (web). The web is a system that facilitates use of the Internet by helping users sort through...
the great mass of information available on it. The web uses software that allows one document to link to and access another, and so on, despite the fact that the documents may reside on different machines in physically remote locations. The dispersion of data that is the Internet is thus largely overcome by the web's ability to link related information in a manner transparent to the user. This has helped to make the Internet\(^3\) into a medium of mass communication and a vast commercial marketplace.

The distinction between the virtual space on which Internet information seems to reside, the physical location in which it actually resides, and the physical space from which the user accesses it has given rise to a new body of thought-provoking legal scholarship.\(^4\) This scholarship, still at a formative stage, discusses how law should—or should not—be applied in a world that seems to lack the physical territorial boundaries

2. See infra note 43.

3. Although the Internet and the web are not synonymous, "[t]o most users and businesses, the World Wide Web... is the Internet." ABA, WEB LINKING AGREEMENTS: CONTRACTING STRATEGIES AND MODEL PROVISIONS 1 (1997) [hereinafter WEB LINKING AGREEMENTS]. Cyberspace is a "shorthand way of referring to computer communications generally," including not just the Internet but also online services. I. Trotter Hardy, Property (and Copyright) in Cyberspace, 1996 U. CHI. LEGAL F. 217, 217. While the terms do have different meanings, unless the context indicates otherwise, this Article uses "cyberspace," "Internet," and the "web" interchangably.

4. See, e.g., BORDERS IN CYBERSPACE (Brian Kahin & Charles Nesson eds., 1997) (collecting articles regarding a variety of Internet issues); Frank H. Easterbrook, Cyberspace and the Law of the Horse, 1996 U. CHI. LEGAL F. 207, 210-14 (suggesting that legislative changes may be inadvisable to deal with cyberspace problems because technology is moving forward so quickly and contending that a better approach would be to enable bargains, in part by creating property rights to make bargains possible and creating bargaining institutions); I. Trotter Hardy, The Proper Legal Regime for "Cyberspace," 55 U. PITT. L. REV. 993 (1994) (discussing how to decide when cyberspace issues present new legal problems and suggesting a presumption of decentralization in rulemaking); Hardy, supra note 3, at 236-60 (arguing that a private property regime is appropriate in cyberspace); David R. Johnson & David Post, Law And Borders—The Rise of Law in Cyberspace, 48 STAN. L. REV. 1367, 1367-68 (1996) (arguing that territorial boundaries break down in cyberspace and that law will emerge for the cyberspace community to deal with the lack of physical borders); Henry H. Perritt, Jr., Property and Innovation in the Global Information Infrastructure, 1996 U. CHI. LEGAL F. 261, 263 (discussing challenges for Internet information providers and arguing that existing law with a few changes is sufficient); see also Lawrence Lessig, The Zones Of Cyberspace, 48 STAN. L. REV. 1403, 1403 (1996) (discussing Johnson & Post's work cited supra and stating that, while their work is important, the distinction between "real space law and cyberspace law... can[not] yet be sustained").
that historically have justified government's use of its regulatory and judicial powers.\(^5\) This discussion is particularly timely because a recent flurry of litigation\(^6\) strongly suggests that there is, at best, a lack of understanding as to what law governs the Internet and, at worst, broad disagreement as to what that law is.

In some respects, however, it is quite remarkable that this discussion is only now occurring. The scientific and educational communities have used the Internet for almost thirty years,\(^7\) yet it is only recently that disputes have entered the judicial system in a significant number. One might claim that this trend was inevitable as information of value became available on the Internet. However, valuable information, at least from a scientific perspective, has always been available there. Nonetheless, the virtual world has historically been litigation free, primarily governed by norms—or "netiquette"—rather than by resort to the judicial system.

It seems more likely that the rise in litigation may be attributed both to the increasing number of people accessing the Internet and its emergence as a commercial marketplace. As the number of Internet users went up dramatically over the years, it was inevitable that the number of disputes would also increase. Additionally, the Internet has evolved from its inception as primarily a research network into a full-blown commercial marketplace. While commercial traffic has exploded on the Internet, firms are continuing to search for a business model that will allow them to profit from Internet dealings.

One strategy is for firms to "fence" the information they make available on the Internet and to seek remedies through litigation from parties who breach those fences. Two primary means are available to firms for protecting their electronically

---

5. The leading article on this topic is Johnson & Post, supra note 4. There, the authors argue that existing law based on territoriality and physical borders will not work in borderless cyberspace. They instead suggest that cyberspace will be largely self-regulating, drawing an analogy to the development of the Law Merchant in commercial law. See id. at 1387-91.


7. See infra Part I.A (describing the Internet's development).
distributed information—technology and the law.\textsuperscript{8} Technologies such as password access and encryption may function like virtual barbed wire, denying access to the unauthorized. Copy protection technologies may limit use once access has been granted. At the same time, both public and private law may be used to replace or to supplement technological fences. The public intellectual property law and the private law of contract and tort may regulate both access and use of information.

This Article suggests that, while it is important to discuss how law will eventually evolve in cyberspace, it is at least as important to fill a gap in legal thought by discussing not the boundaries between physical and virtual space but the boundaries between different sets of law. More specifically, scholars and legislators must consider the relationship between different branches of the public intellectual property law, particularly the relationship between copyright and trademark. Similarly, they must also consider the border between public intellectual property law and the private law of contract and tort, particularly misappropriation. A useful starting point for this discussion is a critical examination of two recently filed cases, \textit{Ticketmaster Corp. v. Microsoft Corp.}\textsuperscript{9} and \textit{Washington Post Co. v. Total News, Inc.}\textsuperscript{10} These cases highlight the need not only for an understanding of what legal rules govern behavior but also how they relate to each other.

Part I of this Article briefly describes the Internet and the web to provide the background information relevant to the legal issues involved. Part II focuses on the common Internet practices of linking and framing and summarizes the two recently filed cases that challenge those practices. Part III addresses the policy question of what the legal response to linking and framing should be. This analysis suggests that, despite tenable arguments for strong property rights in favor of information providers, other considerations, including First Amendment concerns, lead to the conclusion that linking and framing should generally be permissible without the prior consent of the information provider. Part IV considers the current law. It argues that the nature of the Internet suggests that

\textsuperscript{8} See Hardy, \textit{supra} note 3, at 223 (setting forth a nonexclusive list of four ways in which information providers protect against copying, including: "(1) entitlement-like protection; (2) contract-like protection; (3) state-of-the-art limitations; and (4) special-purpose technical limitations").

\textsuperscript{9} No. 97-3055 DDP (C.D. Cal. filed May 9, 1997).

\textsuperscript{10} No. 97 Civ. 1190 (PKL) (S.D.N.Y. filed Feb. 28, 1997).
copyright law will decline in importance in favor of unfair competition law, particularly trademark. It suggests that the borders of intellectual property law in cyberspace will increasingly be marked by trademark encroaching on areas usually governed by copyright. This analysis cautions that courts should be reluctant to use trademark law as a means to grant copyright-type rights and suggests that an expanded fair use doctrine in trademark law may be desirable.

Part V of the Article discusses the interface between public intellectual property law and the common law of contract and tort. It contends that contracts will increasingly govern information access and use but that public intellectual property law will both continue to govern large parts of the Internet and act as a limit on enforceable contractual provisions. In particular, it argues that boilerplate notices forbidding linking should be preempted by the Copyright Act, at least with respect to non-commercial uses. Finally, the Article argues that the common law doctrine of misappropriation, first enunciated in 1918, will often be employed in the electronic world as information providers attempt to protect their content from exploitation by others. This analysis suggests, however, that intellectual property law will often preempt such actions under the test recently announced by the Second Circuit in NBA v. Motorola, Inc.

The Article concludes, in Part VI, by synthesizing the legal analysis to predict how the Internet will develop. It suggests that the Internet is likely to evolve from its current open form of unrestricted access with information use governed primarily by norms and public law to a system that encompasses both open and closed areas. The closed areas are likely to be characterized by use and access restrictions maintained and enforced through technological restrictions and public and private law. The Article contends that this situation is not undesirable because it should maximize both the quality and

11. See International News Serv. v. Associated Press, 248 U.S. 215, 239-40 (1918) (holding that International News Service’s practice of copying AP’s news constituted unfair competition). The court indicated that “defendant ... is endeavoring to reap where it has not sown” and “appropriating to itself the harvest of those who have sown.” Id. The court further found that “[t]he transaction [in this case] speaks for itself, and a court of equity ought not to hesitate long in characterizing [such conduct] as unfair competition in business.” Id.

12. 105 F.3d 841 (2d Cir. 1997). See infra notes 383-87 and accompanying text.
quantity of information available on the Internet without un-
duly restricting access. Thus, the law as currently consti-
tuted—with certain caveats and adjustments—is generally
well suited to deal with the Internet.

I. AN INTRODUCTION TO THE INTERNET AND THE
WORLD WIDE WEB

A. ORIGINS OF THE INTERNET

Today's Internet began evolving in the late 1960s as part
of the Department of Defense's (DOD's) ARPANET\(^{13}\) project. The DOD sought both to enable and ensure the availability of
computer communication between the government and govern-
ment-funded researchers.\(^{14}\) ARPANET's system developers
necessarily set it up as a network to enable communication
among physically remote users who might be using different
machines.\(^{15}\)

In the same way that two or more computers may link to-
gether to form a network, two or more networks may link together
to form a larger network. As the ARPANET evolved, more and
more computers and networks from academia and the business

\(13.\) See John T. Delacourt, Recent Developments, The International Im-
pact of Internet Regulation, 38 HARV. INT'L L.J. 207, 235 n.59 (1997) ("The In-
ternet evolved from the Advanced Research Project Agency Network
(ARPANET), a computer network created in 1969 by the Department of De-
fense.") (quoting Richard Raysman & Peter Brown, Policies for Use of the In-
ternet, N.Y. L.J., Nov. 14, 1995, at 3); see also JOHN R. LEVINE & CAROL
BAROUDI, THE INTERNET FOR DUMMIES 11-12 (1993) ("ARPA
stands for
Advanced Research Projects Agency, the branch of Defense in charge of handing
out grant money . . . . [T]he agency is now known as DARPA.").

\(14.\) See LEVINE & BAROUDI, supra note 13, at 11-12 (noting that the goals of
the ARPANET project included linking government and researchers together
and protecting the system against disruption); Delacourt, supra note 13, at
218 n. 59 ("ARPANET was designed to function as a decentralized national
communications network that permitted computer-to-computer communica-
tions across vast distances and was intended to withstand nuclear attack.")
(quoting Raysman & Brown, supra note 13, at 3); see also ACLU v. Reno, 929
the origins of the Internet and noting that it intentionally incorporated re-
dundancies in linking to allow it to reroute messages to ensure that communi-
cation continued even if particular links were disabled).

\(15.\) See Reno, 929 F. Supp. at 830 (using the term "network" to refer to a
linked group of computers"); IBM DICTIONARY OF COMPUTING 454 (10th ed.
1993) (defining "network" as, inter alia, "[a]n arrangement of nodes and con-
necting branches" or "[a] configuration of data processing devices and soft-
ware connected for information interchange").
community connected to it. In 1983, to address concerns regarding increased usage and the need to protect sensitive information, the DOD split the system into two parts—ARPANET for the scientific community and MILNET for the military.\(^{16}\) This linking of two networks was the beginning of the Internet, which is nothing more—or less—than a global "network of networks."\(^{17}\) In 1986, the National Science Foundation (NSF) set up its own network (NSFNET) complete with a high-speed communications backbone as the hardware linking its machines together.\(^{18}\) NSFNET eventually connected to ARPANET and, in 1990, NSFNET's backbone largely replaced that of the ARPANET.\(^{19}\)

The Internet itself is a network of networks linked together through routers and communications protocols that enable anyone connected to it to communicate with anyone else also so connected despite differences in machinery and physical location.\(^{20}\) Estimates of the number of people connected to the Internet vary,\(^{21}\) but it is accurate to say that the Internet pro-

17. See id. (relating how ARPANET and MILNET were linked to form "the first internet, a network of networks"). The term "network of networks" is often used to define the Internet. See, e.g., Reno, 929 F. Supp. at 830; Levine & Baroudi, supra note 13, at 8; Maureen A. O'Rourke, Proprietary Rights in Digital Data, Fed. Bar News & J., Aug., 1994, at 511; Michael J. Schmelzer, Note, Protecting the Sweat of the Spider's Brow: Current Vulnerabilities of Internet Search Engines, 3 B.U. J. Sci. & Tech. L. 12, at ¶ 4 (1997).
18. See Pfaffenberger, supra note 16, at 38 (describing how the NSFNET was created to further scientific communication and began by connecting five supercomputer centers).
19. See id. (stating that the "ARPANET backbone was decommissioned, and its remnants were incorporated into NSFNET").
20. See Perritt, supra note 4, at 286 (noting that the Internet networks connect through routers recognizing a communications protocol called TCP/IP and "sharing a common name and address space" and that communication can be achieved by connecting to an Internet router).
21. See, e.g., Reno, 929 F. Supp. at 831 ("Estimates are that as many as 40 million people around the world can and do access the . . . Internet. . . . That figure is expected to grow to 200 million Internet users by the year 1999."); Gwenn M. Kalow, Note, From the Internet to Court: Exercising Jurisdiction Over World Wide Web Communications, 65 Fordham L. Rev. 2241, 2244 (1997) ("Approximately thirty to sixty million individuals currently have access to the resources found on the Internet and that number is expected exceed [sic] one hundred million by 1998."); see also Judy Leand, The Mouse That Roared, Sportstyle, Feb. 1997, at 46 (reporting that the number of "Internet users increased from 38 million in 1994 to 56 million in 1995," 140 million in 1996, and is estimated to reach 200 million users in 1999); Can the Internet Change Customer Services? Pharma Delegates Seminar, Comline
vides a means by which millions of users may communicate with each other and access a mass of information contained on computers linked to the Internet.\textsuperscript{22}

Two characteristics that distinguish the Internet from other communications media are its decentralization and its openness. The system was initially designed to be decentralized to guard against the disruption of communication flowing through it.\textsuperscript{23} It continued to be so as large numbers of independent computer and network operators connected to it.\textsuperscript{24} Simply stated, there is no central organization charged with regulating or administering the Internet. To the extent that regulation occurs, it does so at the point at which a user gains access to the system. For example, many organizations that provide Internet access have contractual agreements or policy statements regulating use of their systems.\textsuperscript{25} Additionally, informal norms of "netiquette" that have developed over the years have, historically, effectively governed the conduct of online relationships.\textsuperscript{26}
The decentralization of the Internet's administration is in part responsible for its openness. Anyone with a PC and a modem can access the Internet simply by connecting to a computer or network already linked to it. A user may obtain Internet access through a variety of organizations. Many universities, corporations, libraries, commercial on-line services, and Internet service providers (ISPs) offer Internet access—some for a fee, others free of charge.

Once connected to the Internet, users have a wide variety of communication methods available to them as well as a wealth of information that they may access. Electronic mail (e-mail) is probably the most popular use of the Internet, allowing users to correspond with each other much more quickly than through the conventional mail. Newsgroups are also a popular use of the Internet. A newsgroup is like a discussion group and is usually dedicated to a particular topic. Users interested in the topic may post commentary on it and read and respond to the comments of others.

---

27. See Reno, 929 F. Supp. at 832 (describing hardware requirements for accessing the Internet).

28. See id. at 832-34 (listing organizations that provide Internet access including those set forth in the text). While Internet access may seem free to the user, "[i]n fact, each host machine that serves as an Internet site has to pay a fee for the privilege. Institutions recoup those fees as well as other costs associated with use of host machines by passing them on, even if the costs are not immediately evident because they may be borne by a particular unit of the institution, rather than directly by those who use the machine for Internet services." Pamela Samuelson & Robert J. Glushko, Intellectual Property Rights for Digital Library and Hypertext Publishing Systems, 6 HARV. J.L. & TECH. 237, 244 (1993).

29. See Kenneth S. Dueker, Trademark Law Lost in Cyberspace: Trademark Protection for Internet Addresses, 9 HARV. J.L. & TECH. 483, 483 n.3 (1996) ("E-mail is the most widely used tool on the Internet.") (citation omitted); Richard S. Zembek, Jurisdiction and the Internet: Fundamental Fairness in the Networked World of Cyberspace, 6 ALB. L.J. SCI. & TECH. 339, 344-45 (1996) ("E-mail is by far the most widely used service on the internet.").

30. See Paul Zarins, Reports of ASIL Program: What's Online in International Law, ASIL NEWSL., Nov. 1994, available in LEXIS, Lawrev Library, Intlr File ("Usenet newsgroups are electronic discussion groups for which messages called news articles are available on selected host computers instead of being sent directly to an individual e-mail address."); see also Long, supra note 23, at 1181 (describing Usenet as "a network of thousands of special interest groups that boasts millions of readers").

31. See Long, supra note 23, at 1181 ("On the Usenet, a user 'subscribes' to a group, and then is able to send (and read) messages to other subscribers in that group, just as one would thumbtack messages onto a physical bulletin board. For instance, a user may subscribe to the 'misc.legal' group and post a message debating a recent Supreme Court case. Usually within seconds,
The Internet uses a standard method for file exchange, enabling users on different computers to share files. It thus opens up a wealth of data to Internet users. However, that mass of data lacks value if users cannot locate the information they desire with relative ease. Accordingly, users began to develop file archives and indices to those archives, attempting to bring some order to the dispersed information. A number of systems eventually developed with that purpose. Of these, the web is probably the most widely used and has also become the basis for developing an Internet commercial marketplace.

B. DEVELOPMENT OF THE WORLD WIDE WEB

Tim Berners-Lee, the web's founder, did not set out to solve the Internet's navigational problems. Instead, Berners-Lee simply wanted to solve a technical problem that he faced while working as a consultant for six months at CERN, the European physics laboratory. The CERN computer system has been described as "labyrinthine" because data was dispersed over a number of machines that did not always interact. In 1980, Berners-Lee developed a program called Enquire that took advantage of the capabilities of hypertext by every user on the Usenet is able to read and respond to that posting.

32. See Schmelzer, supra note 17, ¶ 4 & n.5 (noting that the ability to move files from computer to computer was one of the goals of the ARPANET and stating that the standard exchange means is the file transfer protocol (ftp)).

33. See id. ¶ 5-6 (explaining Archie, a system that periodically queried known archives to obtain a list of available files, and Gopher, a unified interface into Archie and other Internet resources).


37. See Feizabadi, supra note 35 (noting that, at CERN, "as with other institutions, data was stored and manipulated in isolated machines with practically no interaction or connectivity").

38. Hypertext is a "system for linking information (usually text files) to-
allowing him to link to documents on scattered CERN machines simply by clicking on a word contained in a document.39

By the time Berners-Lee returned to CERN in 1989, the Internet had become firmly established and, in fact, in 1990, CERN was the largest European Internet site.40 At that time, however, the Internet "was essentially a bare-bones infrastructure... There were ways to retrieve data, but no really easy ways, and certainly nothing with the intuitive, neural structure of hypertext."41 Berners-Lee proposed a distributed hypertext system to link CERN's resources,42 and that system eventually evolved into the web—a hypertext system for navigating the Internet, which derives much of its value from its ability to link related documents.43

gether in a structured fashion. The information can be linked based on a variety of criteria, including connections based on the similarity or relatedness of subject matter." WEB LINKING AGREEMENTS, supra note 3, at 50.

39. See Feizabadi, supra note 35 (describing the development of Enquire and noting that at that time, Berners-Lee "had only been marginally exposed to the... concept of hypertext"); see also Wright, supra note 36, at 66 (explaining that Enquire served as Berners-Lee's "personal memory substitute").

40. See PFaffenberger, supra note 16, at 55; see also Feizabadi, supra note 35 (noting that the Internet and its communication protocol were introduced at CERN in 1984 and contending that CERN was the "largest Internet site in Europe" by 1989).

41. Wright, supra note 36, at 66.

42. See PFaffenberger, supra note 16 at 55-56. Specifically, the objectives of the project were:

[(i)] to provide a common (simple) protocol for requesting human readable information stored at a remote system, using networks [;]
[(ii)] to provide a protocol within which information can automatically be exchanged in a format common to the supplier and the consumer [;]
[(iii)] to provide some method of reading at least text (if not graphics) using a large proportion of the computer screens in use at CERN at that time [;]
[(iv)] to provide and maintain at least one collection of documents, into which users may (but are not bound to) put their documents. This collection will include much existing data... [;]
[(v)] to allow documents or collections of documents managed by individuals to be linked by hyperlinks to other documents or collections of documents[;]
[(vi)] to provide a keyword search option, in addition to navigation by following references, using any new or existing indexes. ... The result of a keyword search is simply a hypertext document consisting of a list of references to nodes which match the keywords [;]
[(vii)] to use public domain software wherever possible, or interface to proprietary systems which already exist [; and]
[(viii)] to provide the software for the above free of charge to anyone.

Id.

43. There are many different definitions of the web. Professor Perritt de-
The web, as a distributed computing system, utilizes both client and server hardware and software. In a client/server model, a server stores information that more than one client machine may access. Client and server machines vary in size, although servers are usually larger and more powerful. A small network may have one server and many clients connecting directly to it. The Internet, as a network of networks, links together large numbers of both client and server machines. It makes the data residing on many servers available to many clients. Clients may access information on the server to which they are directly connected, as well as information residing on all those servers to which they are indirectly connected through the Internet.

There are three main technical underpinnings to the web that enable client-server communication. Hypertext markup language (HTML) is the language used to write web documents, and it allows for the use of pointers—also called hyperlinks or links. A pointer is usually text that is highlighted in some manner to set it apart from the rest of the document. When a user clicks on a pointer, a new document or a different part of the current document is accessed. The hypertext transfer protocol (HTTP) is the technical standard to enable communication between clients and a server. This protocol helps to

---

44. See Perritt, supra note 4, at 286-87 & n.106 (noting that the web reflects the client-server model of computer-program design).
45. See id.
46. See id.
47. See id. at 287.
48. See PFAFFENBERGER, supra note 16, at 63 (describing HTML as affording the author of a web document the ability to code the document so that "it looks good on-screen" when accessed by a browser that understands HTML); Perritt, supra note 4, at 287 n.108 ("Html is the protocol for tagging certain parts of a document published on the Web so that they show up in particular typefaces or styles, or so that they can be used as pointers to other information objects on the same or local servers.").
49. See Perritt supra note 4, at 287.
50. See Feizabadi, supra note 35; PFAFFENBERGER, supra note 16, at 59 (describing HTTP as "a standard way by which client Web applications ... establish a connection with a server, make a request for information, receive information ... from the server, and close the connection.")
present a seamless interface to the user as it allows different computer systems to communicate with each other. The dispersed information that constitutes the Internet thus looks to the user like a unified body of knowledge.\textsuperscript{51} The third piece of the system is the Universal Resource Locator (URL), which is the address of the document—the now familiar "www.name.organization" system of domain names.\textsuperscript{52}

Many organizations now operate web "sites" with a "home page" containing information about the site and links to further information deeper within the site or even located on a different site.\textsuperscript{53} If one thinks of a web site as a book, the home page is like the table of contents and introduction, and the other pages are like chapters that may be accessed by clicking on their entry in the table of contents.\textsuperscript{54} A party who operates a web site is a "publisher," and the act of placing information on a site is called "publishing."\textsuperscript{55}

To a certain extent, the web suffers from the same type of navigational problem as the Internet. Links within documents make it easier for a user to find additional documents containing related information. However, the user must find the initial document containing such links before it may realize this benefit of the web. In the first few years of the web's existence, a user had to know the URL of the site that it wanted to access. The user would enter the URL into its web browser, the soft-
ware interface to the web that takes a specified URL and then accesses the appropriate site.\textsuperscript{56}

One way that companies have attempted to make it easier for users to locate them on the web is to register their trademark or trade name as part of their web site address. For example, to find information about Compaq computer’s product line, the user has only to type in the intuitive address “www.compaq.com.” Domain names associated with a company’s trademark or trade name have thus become increasingly valuable commodities and, in fact, may qualify for trademark protection themselves.\textsuperscript{57}

Search engines and web indices have also arisen to help users find web sites of interest. Many browsers now provide links to search engines. The search engine takes a user’s query and returns a list of web sites that the user may find interesting. An index provides a list of links to sites that relate to the particular topic in which the user is interested. The user may then select one or more sites to explore.

Fully automated products called spiders\textsuperscript{58} have also emerged to provide search services.\textsuperscript{59} A spider is software with two parts. One part performs a function called “harvesting,” allowing the spider to search the Internet for web sites and build a database with information about such sites.\textsuperscript{60} The second part is the query component, which takes the user’s query, searches the database, and returns a list of sites and other in-

\textsuperscript{56} See Pfaffenerberger, supra note 16, at 50 (stating that “[a] browser is a program that runs on the computer you’re using [and] lets you browse the Internet in search of web documents,” and noting that server software is also necessary to use the web); Philip E. Ross & Nikhil Hutheesing, Along Came the Spiders, FORBES, Oct. 23, 1995, at 210, 214 (defining web browser as “merely a window into the Web; it doesn’t have any search functions”).

\textsuperscript{57} See Alan J. Hartnick, Copyright & Trademark on the Internet, N.Y. L.J., Feb. 21, 1997, at 5 (stating that domain names can qualify for trademarks and discussing the Trademark Office’s practice, as of Feb. 12, 1996, of registering domain names); see also infra text accompanying notes 287-292 (discussing the Panavision case on domain-name squatting).

\textsuperscript{58} See Ross & Hutheesing, supra note 56, at 210.

\textsuperscript{59} Id. at 213 (noting that Yahoo!, one of the first web indices, initially employed human indexers to build a database for its software to search, but that Yahoo! currently uses the electronic means of a spider).

\textsuperscript{60} See Schmelzer, supra note 17, ¶ 11 (describing “harvesting”); see also Ross & Hutheesing, supra note 56, at 211 (“The best spiders now at work are capturing and indexing a million documents a day.”).
formation designed to help the user find the desired information.\textsuperscript{61}

For example, a user interested in finding out information about summer events in Boston may enter a query in plain English—such as “Boston summer events”—into a search engine. The search engine will return a list of the URLs of sites that may contain relevant information. The user may access a particular site by clicking on its entry in the list. This helps to decrease the user's search costs in locating information. It also helps to make the web a viable commercial marketplace by making it easier for potential customers to locate product information.

C. **EMERGENCE OF THE INTERNET AS A COMMERCIAL MARKETPLACE**

1. Development of the Marketplace

   The technical evolution of the Internet is better documented than its development into a commercial marketplace. When the Internet was almost exclusively a research network, access seemed free, and unrestricted use of information was the norm. This custom was backed up by the NSF's acceptable use policy, which restricted traffic on the network to noncommercial purposes.\textsuperscript{62}

   The NSF's acceptable use policy, however, applies only to traffic on the NSFNET backbone.\textsuperscript{63} To avoid the acceptable use policy, a number of ISPs formed the Commercial Internet Exchange (CIX), a grouping of regional networks connected by a CIX router that became functional in 1992.\textsuperscript{64} Additionally, the

\begin{itemize}
  \item \textsuperscript{61} See Schmelzer, supra note 17, ¶ 12 ("For each web page matching the user's criteria, the query component of a typical spider returns [its URL, ... a brief summary of that page's contents, and a clickable link to that page. Along with the list of matches, the typical spider also returns advertising.").
  \item \textsuperscript{62} See The NSFNET Backbone Services Acceptable Use Policy (visited June 18, 1997) <http://198.77.4.68/lynx_dev/nsfnetac.html> [hereinafter NSFNET Use Policy] ("NSFNET Backbone services are provided to support open research and education in and among US research and instructional institutions, plus research arms of for-profit firms when engaged in open scholarly communication and research. Use for other purposes is not acceptable."); see also Lance Rose, NETLAW: YOUR RIGHTS IN THE ONLINE WORLD 56 (1995) (describing how the Internet is being commercialized and privatized).
  \item \textsuperscript{63} See NSFNET Use Policy, supra note 62.
  \item \textsuperscript{64} See PFAFFENBERGER, supra note 16, at 40 (describing how regional ISPs joined to set up a backbone for commercial use and dating the establishment of the backbone at 1991); About the Commercial Internet eXchange (visited June 18, 1997) <http://www.cix.org/CIXInfo/about-cix.html> (explaining
federal government began to reduce its funding for many basic Internet functions such that "by 1995, most of the traffic on the Internet involved unsubsidized facilities and private traffic."\(^65\)

The commercialization of the Internet coincided with the development of the web and web navigational tools. The first web software was released in 1991.\(^66\) In 1993, the National Center for Supercomputing Applications (NCSA) released Mosaic, a user-friendly browser that the NCSA provided for free over the Internet.\(^67\) Mosaic's widespread availability and ease of use contributed to its rapid growth, leading to at least two noteworthy developments: (i) an increase in the number of Internet users; and (ii) the growth of a private web software industry providing navigational tools.\(^68\) These developments coupled with the low cost of establishing a web site made the web an attractive marketplace for businesses because it enabled them to reach a large target audience at minimal expense compared to costs associated with traditional marketing channels.\(^69\)

2. Web Business Models

Despite the obvious attractiveness of the web as a commercial marketplace, businesses have struggled to find a way to make money from web-based activities.\(^70\) Revenue models

---

\(^{65}\) PFAFFENBERGER, supra note 16, at 40 ("In 1995, [NSF] withdrew its subsidy of the NSFNET, which was subsequently decommissioned."); see Burk, supra note 1, ¶ 8 (stating that the NSF gradually withdrew from managing the Internet such that "by early 1995, NSF's sole duty will be to fund a few Network Access Points... to act as data traffic exchanges"); Perritt, supra note 4, at 286 (noting that the withdrawal of funding by the federal government for "basic communication and traffic management functions" resulted in more private traffic).

\(^{66}\) See PFAFFENBERGER, supra note 16, at 57 (giving the timeline of web development and noting that in 1991, web software was released first on CERN machines and then on the Internet).

\(^{67}\) See id. at 143-44.

\(^{68}\) See id. at 144-45 (observing that "[t]he widespread availability of Mosaic on the Internet led to the web's explosive growth," and describing the founding of Netscape by former NCSA programmers); see also id. at 57-58 (setting forth a timeline of significant events in the life of the web, which demonstrates increasing traffic after the release of Mosaic and Netscape Navigator).

\(^{69}\) See id. at 615 (noting that "there is evidence that web marketing is more successful than marketing in other media").

\(^{70}\) See generally Don Clark, Facing Early Losses, Some Web Publishers Begin to Pull the Plug, WALL ST. J., Jan. 14, 1997, at A1 (describing some no-
on the web may be broadly classified into three categories: (i) advertising-based models; (ii) subscription-based models; and (iii) "cybershopping."^71

a. Advertising-Based Models

Many web publishers use advertising as their primary source of revenue, with varying degrees of success. Under an advertising-based revenue model, web sites generate revenue by charging companies to advertise at their site.^72 The rate that the web site owner may charge varies depending on how many users see the ad.^73 From the advertiser’s perspective, the effectiveness of the ad is usually measured by how many viewer’s “click-through” (or link) from the web site displaying the ad to the web site of the advertiser itself.^74

The Internet Advertising Bureau (IAB) has estimated that $267 million of ad revenue was generated in 1996 and $129.5 million in the first quarter of 1997 alone.^75 According to the IAB, advertisers are increasingly accepting the web as a viable medium for marketing their products and “more and more publishers now view advertising as the revenue model of choice.”^76 However, the pool of advertising money is limited and historically has been distributed primarily to a few large

---

^71. See Schmelzer, supra note 17, ¶ 13 (listing “subscriptions, advertising, and enabling the purchase of goods and services” as examples of web revenue models); see also Eric Schlachter, The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could Be Unimportant on the Internet, 12 BERKELEY TECH. L.J. 15, 24-30 (1997) (describing ways in which content providers support free access and distribution of information available at their sites by selling advertising, sponsorships, goods and services).

^72. See Schmelzer, supra note 17, ¶ 18 (noting that often users obtain free access to web sites but see advertising along with the site’s content).

^73. See Catharine P. Taylor, Banner Year, WIRED, Mar. 1997, at 120, 120 (“Advertising is conventionally priced on an impression basis according to cost per thousand, or CPM, meaning that marketers pay when computer users see an advertising banner, even if they don’t click through to the [advertiser’s] Web site.”) CPM prices range from $120 for a widely viewed site to $6 for less popular sites. Id.

^74. See id. at 122. But see id. (suggesting that that paradigm may need to be changed).


^76. Id.
This concentration may mean that only the largest publishers trading on already established brand identities—or trademarks—will dominate web publishing.

b. Subscription-Based Models

In contrast to advertiser-supported sites that users may usually access for free, under a subscription-based model the user must pay a fee to access the site. This model has met with only limited success as users are accustomed to accessing and using information for free on the Internet. The Wall Street Journal’s on-line paper had about 600,000 subscribers when it was available for free. That number dropped to 50,000 after it instituted a subscription charge. Microsoft recently abandoned plans to charge an annual fee for access to its web political publication, stating that it recognized people’s unwillingness to pay for on-line content.

c. Cybershopping

A popular use of the web is cybershopping, in which companies use the web as a marketing tool. In one model of cybershopping, the web site owner derives revenue from the sale of

---

77. In 1996, over 900 companies sought $300 million in web advertising dollars with the ten largest publishers receiving two-thirds of the money. See Clark, supra note 70, at A8. This concentration has continued in 1997. See Internet Advertising Bureau Revenue Reporting, supra note 75 (noting that 63% of advertising revenues for the first quarter of 1997 went to the top ten publishers but contending that this demonstrates that “advertising revenue is being spread more evenly across the top 50 online publishers,” since, in the first quarter of 1996, the top 10 publishers accounted for 75% of advertising revenues).

78. See Schmelzer, supra note 17, ¶ 18 (noting that users may not pay for accessing or using a web site and analogizing that model to the one supporting commercial television); see also Schlachter, supra note 71, at 25 (“The television broadcasting model is consistent with the contention that Internet users will not be required to pay for intellectual property, and that the production of intellectual property can be entirely supported by advertising.”).

79. See Schmelzer, supra note 17, ¶¶ 14-15 (stating that “[u]nder the subscription-based revenue model, only authorized users who have paid a subscription fee have access to a web site’s services” and also describing the pay-per-view model in which users pay only for specific content).

80. See Clark, supra note 70.

81. See id.

82. See id. (quoting a web announcement by Michael Kinsley (the magazine’s editor): “Right now there are too many people who are too damned cheap ... er, we mean ... too engaged by the novelty of the medium to pay extra for content.”); see also Slind-Flor, supra note 1, at A1 (noting that the Internet community resists paying for content).
its products on-line.\textsuperscript{83} The web thus functions as a distribution mechanism supplementing those that the company may already have.\textsuperscript{84} Cybershopping has not yet realized its potential, perhaps in part because of concerns about the security of credit card and other information customers transmit with their order.\textsuperscript{85} The firms that have been most successful are selling items that are easy to ship and that may not be readily available locally.\textsuperscript{86} Some analysts suggest that web shopping will evolve to focus primarily on digital products that can be ordered and shipped right over the web itself.\textsuperscript{87}

Currently, the web primarily functions as another advertising outlet for many firms rather than as another distribution channel.\textsuperscript{88} A user accesses the web site, sees product information, and then orders the product in a conventional manner.\textsuperscript{89}

\textsuperscript{83} See, e.g., TM Online Takes You Out to the Ball Game (visited July 23, 1997) <http://www.ticketmaster.com/jackpot/baseball/> (providing schedules of major league teams and allowing visitors to order tickets online); Welcome to Lands' End (visited June 20, 1997) <www.landsend.com> (allowing visitors to the site to order products from Lands End, a direct-mail company).

\textsuperscript{84} Some companies sell only over the web. See Hogan, supra note 70, at 190-91 (describing the success of amazon.com, a cyberbookstore).

\textsuperscript{85} See Pfaffenerberger, supra note 16, at 616 (stating that "[o]n-line shopping hasn't arrived—yet" and noting that it is unclear whether the reason for the failure of on-line shopping to reach its potential is a lack of security or some other factor); Lori Hawkins, Commerce on Internet to Rise in '96, Forecast Says, AUSTIN AM.-STATESMAN, Jan. 11, 1996, at C1 (predicting that electronic commerce would increase in 1996 and quoting Nick Miller of Price Waterhouse: "Commercial exploitation of the Internet has been stalled because of security issues.... As security systems emerge and consumers become more confident, ordering a sweater from Eddie Bauer or software from Egghead will be a real possibility for people."); see also Jon G. Auerbach, Software Developer to Unveil Coupons for Use on Internet, WALL ST. J., June 24, 1997, at B13 (noting that direct Internet sales "were a relatively small $530 million in 1996"). For discussions of the security concerns of transacting over the Internet, see, for example, Michael Fromkin, Trusted Third Parties in Electronic Commerce, 75 OR. L. REV. 49 (1996) (discussing how communications may be attacked and how web transactors will need a means by which to authenticate the identity of the person with whom they're interacting); Rustad & Eisenschmidt, supra note 34 (discussing a wide range of security issues on the Internet).

\textsuperscript{86} Pfaffenerberger, supra note 16, at 616.

\textsuperscript{87} See Tom Steiner-Threlkeld, The Buck Starts Here, WIRED, Aug. 1996, at 133, 135 (discussing the marketing of digital products over the Internet).

\textsuperscript{88} See Schmelzer, supra note 17, ¶ 19 (noting that a site may be an advertisement); Auerbach, supra note 85, at B13 (stating that there is a "much larger market of sales promoted by the [Internet]" than there is a market for direct sales) (emphasis added).

\textsuperscript{89} See, e.g., Hogan, supra note 70, at 192-94 (explaining the www.allonetribedrum.com site, which offers Native American drums for sale);
The cost of advertising on the web is relatively low compared to other media, and it can be quite effective for certain advertisers. Many firms combine both product information and the ability to order on-line or conventionally to maximize consumer choice.

d. Emerging Web Revenue Models

New web revenue models are emerging almost daily. For example, Microsoft is planning sites that will link users to other commercial sites for a variety of services including travel bookings and automobile sales. Microsoft intends to support these services through advertising and transaction fees. "Microsoft hopes to get a 'vig,' or vigorish, on every transaction over the Internet that uses Microsoft's technology." For example, Microsoft operates a Carpoint site to help users purchase automobiles. Auto-By-Tel pays Microsoft a fee for Microsoft's directing Carpoint users to Auto-By-Tel's network of dealers. Auto-By-Tel in turn makes money by charging the dealers in its network a monthly membership fee. Microsoft's

All One Tribe Drum (visited June 20, 1997) <http://www.allonetribe.com/#order> (giving information on how to order a drum by phone or e-mail and giving a fax number but not providing for direct ordering from the web site); Sears: Products & Services (visited July 23, 1997) <http://www.sears.com/prod/fprod.htm> (showing sales items as they appear in the printed circular).

90. See PFAFFENBERGER, supra note 16, at 615 (asserting that costs of advertising on the web are small in comparison to traditional media and relating anecdotes of web success stories); Schlachter, supra note 71, at 25 ("[T]he results obtainable from on-line advertising can be so compelling that certain advertisers have strong incentives to choose Internet advertising over other media.").

91. For an example of a site that allows the user to order on-line and also allows the user to click on "other ways to order by phone, fax, or mail," see Our Internet Store (visited June 20, 1997) <http://www.landsend.com>.

92. See David Bank, Microsoft Moves to Rule On-Line Sales, WALL ST. J., June 5, 1997, at B1 (explaining how Microsoft is setting up "Sidewalk" sites for many cities to serve as entry ports to an "array of [Microsoft] commercial sites that already includes Expedia for travel services, Carpoint for automobile sales, Cinemania for movies and Music Central for compact disks").

93. See id. (noting that Microsoft plans to make money from advertising and also through sales and distribution charges).

94. Id. "Vigorish is a slang term used by bookmakers that means, roughly, the profit made for bringing bettors together." Id.

95. See supra note 92 (describing the commercial services Microsoft already offers).

96. See Bank, supra note 92, at B1 (noting that Auto-By-Tel pays Microsoft for referrals, but not explaining how the payment system is set up).

97. See id. (noting that Auto-By-Tel charges its membership monthly fees ranging from $500 to $1500).
ultimate goal is to eliminate middlemen like Auto-By-Tel and, instead, to function as the gateway that connects users to the appropriate supplier, with suppliers paying Microsoft for directing business to them—a new commission-based revenue model.98

None of the web revenue models has yet proven to be a resounding success. However, the advertising-based model currently dominates and that model, along with the commission-based model, depends heavily on information about how many users are linking to a particular site. Such information helps to set advertising rates and commission fees. Recent events have demonstrated that, depending on the business model they have adopted, web site owners may want to control who links to their sites. The legal issue then is one of defining what the law with respect to linking should be: Should the default rule be one that requires a linker to seek permission before linking to another page or should it be one that allows linking without permission?

II. NAVIGATING THE NET THROUGH LINKING—THE TECHNICAL ASPECTS AND THE LEGAL CHALLENGES

The power of the web lies in its ability to link related documents. A particular web site’s value is largely determined by how many people access it—the cyberspace equivalent of “foot traffic.”99 Generally, there are two ways for users to access web sites: directly by typing in the site’s URL or indirectly by linking from another site or search engine.100 Until recently, the practice of linking was largely welcomed by web site owners.101 The more parties that access a site, whether directly or

98. See id. (discussing Microsoft’s ability to undercut competitors and explaining that Auto-By-Tel has decided to end the partnership because Microsoft is setting up its own dealer network). An on-line stock brokerage service currently pays Microsoft to direct customers to it with the brokerage firm charging investors a fee on each trade. See id. The president of the brokerage service assumes that Microsoft will eventually want to collect those fees: “[Microsoft] learn[s], assimilate[s], cop[ies] . . . . Once [it] get[s] done with all the other blips on the radar screen, you become the blip.” Id.


100. See Richard Raysman & Peter Brown, Dangerous Liaisons: The Legal Risks of Linking Web Sites, N.Y. L.J., Apr. 8, 1997, at 3 (describing the basic structure of web sites and hypertext links).

101. See, e.g., Paul Andrews, Competition on the Web Just the Ticket for
indirectly, the higher the advertising rate the web site's owner may charge and the more revenue the web site's owner may generate from sales of its own products available at the site. Also, until recently, there was not much question that access to a site by linking was impliedly authorized by the owner's placement of material on the web without restriction.

Two recently filed cases have questioned the validity of linking under both copyright and trademark law. In *Ticketmaster Corp. v. Microsoft Corp.*, Ticketmaster sued Microsoft for trademark dilution and unfair competition under the Lanham Act for Microsoft's linking to parts of the Ticketmaster web site without Ticketmaster's permission. In *Washington Post Co. v. Total News, Inc.*, the Washington Post and other news agencies sued Total News for common law misappropriation, copyright and trademark infringement, and trademark dilution for the manner in which Total News linked to their sites.

A brief review of these cases supports the contention that copyright law will become less important as firms turn to both federal actions under the Lanham Act and common law misappropriation claims in attempting to regulate linking conduct. To understand why this is the case, however, first requires an acquaintance with the technical aspects of linking.

A. TYPES OF LINKING

The most basic type of link, and the subject of the *Ticketmaster* case, is the Hypertext Reference Link (HREF). An HREF link is usually a bit of text within a web document that is highlighted or otherwise set off from the rest of the text.

---

102. See Freeling & Levi, supra note 99 ("For sites that hope to generate advertising revenues, the more visitors, the greater the potential payoff.").
103. No. 97-3055 DDP (C.D. Cal. filed May 9, 1997).
105. See Ticketmaster Corp. v. Microsoft Corp., No. 97-3055 DDP (C.D. Cal. filed May 9, 1997).
107. Id.
108. See Raysman & Brown, supra note 100 (calling HREF links "the most fundamental hyperlinks").
109. See id. (listing coloring or formatting like underlining as ways to set off an
When a user clicks on the HREF link (or pointer), the computer stops displaying what is currently on-screen, connects to the linked site, and displays the content at that site. Technically, when the user clicks on the pointer, the user's machine sends a request to the server on which the document to be linked resides—the copyright owner's server. That machine then sends a copy of the document to the user's machine where it will be displayed on the screen for the user to browse and perhaps download. The original remains on the copyright owner's server.

A pointer may link to another location on the same page, a different page within the same site, or to a different site remote from the linking site. The web's organization is thus recursive, as a particular web page may contain links to a number of other web pages that in turn contain links to other web pages (or back to the original linking page), and so on. HREF links are "one-at-a-time" links in that the user accesses only one site at a time. When the user leaves the current site by linking to another one, the content of the linked site and its URL replace the content and URL of the linking site on the user's screen.

A second type of link, and the subject of the Total News case, is the "frame." Frames function much like the windows
that have become familiar to the many users of the Macintosh and Windows operating systems. A site that utilizes framing has the ability to bring up the entire contents or portions of one or more other sites that are "framed" within the linking site.\footnote{116} The user remains at the framing site, looking through windows into one or more linked sites.\footnote{117} Since framing divides the screen, usually only portions of the framed sites may be seen at any one time, although the user may scroll through the linked site to get a fuller picture of it.\footnote{118} Technically, framing is achieved by using certain HTML code in the linking document coupled with enabling code contained in the user's browser software.\footnote{119} The linked document is accessed in much the same way as with an HREF link. The user's machine sends a request for the document to be linked to the document owner's server, which makes a copy and sends it back to the user's machine. The contents of the linked site are not altered but their appearance is. The linking site's programming code directs the

\begin{footnotes}
\footnote{116}{See Matt Jackson, Linking Copyright To Homepages, 49 FED. COMM. L.J. 731, 739 (1997) ("A frame allows the author of A to create a 'window' within her page so that when a user follows a link to B, B appears within the window.").}

\footnote{117}{See Raysman & Brown, supra note 100, at 3 (stating that frames "allow viewers to look 'through' a site to another, without ever terminating the connection to the linking site").}

\footnote{118}{See Jackson, supra note 116, at 739 (elaborating on the functioning of frames).}

\footnote{119}{See generally Greg R. Notess, Negotiating Netscape's Frames, ONLINE, Sept. 19, 1996, at 65 (describing programming using the frame feature).}
\end{footnotes}
web browser to display the content in a frame rather than full-screen.

There are some notable differences between HREF links and frames. HREF links end the connection to the linking site and display the URL and entire contents of the new, linked site. In contrast, frames display the URL of the linking site and may incorporate only selected contents of the linked site. It is generally obvious to users that they have changed sites when they access an HREF link while it may not be at all obvious that information has been incorporated from other sites when a frame is activated. The Ticketmaster and Total News cases provide an ideal means to highlight these differences and assess their legal relevance because each case primarily involves a different type of link.

B. THE LEGAL CHALLENGES TO LINKING

1. The Ticketmaster v. Microsoft Case: The HREF Link

The first American case\textsuperscript{120} to base its claim on a challenge to an HREF link was filed in the spring of 1997 by Ticketmaster Corp. against Microsoft Corp.\textsuperscript{121} Microsoft had recently begun a strategy of setting up advertiser-supported web sites as

\textsuperscript{120} The first case to involve an HREF link was filed in Scotland. \textit{See} Jackson, supra note 116, at 733-34 n.7 (describing the Shetland Times suit against the Shetland News for linking to its site). The Shetland News "reproduced verbatim a number of headlines appearing in The Shetland Times. These headlines were hyperlinked to the [Times] Web site. Clicking on the headline took the reader directly to the internal pages on the [Times] site on which the related story was found." Martin H. Samson, \textit{Hyperlink at Your Own Risk}, N.Y. L.J., June 24, 1997, at 1. The court issued an "interim interdict" pending further litigation. \textit{Id.} The case, however, is of limited usefulness as it primarily turns on English law. \textit{But see} Jackson, supra note 116 (noting that, although the case turns on the specifics of English law, it points out that "the concern over links is becoming an increasingly important issue worldwide"). In the United States, the first case to include a claim based on an HREF link was \textit{Washington Post Co. v. Total News, Inc.}, No. 97 Civ. 1880 (PKL) (S.D.N.Y. filed Feb. 28, 1997). That case, however, focused primarily on framing. \textit{See infra} Part II.B.2.

\textsuperscript{121} \textit{Ticketmaster Corp. v. Microsoft Corp.}, No. 97-3055 DDP (C.D. Cal. filed May 9, 1997). Note that this filing refers to the "First Amended Complaint." An earlier complaint was filed in April. \textit{See} \textit{Ticketmaster Corp. v. Microsoft Corp.}, No. 97-3055 (C.D. Cal. filed Apr. 30, 1997). This Article refers to the First Amended Complaint, to which Microsoft has filed an answer. \textit{See} \textit{Ticketmaster Corp. v. Microsoft Corp.}, No. CV97-3055 RAP (ANx) (C.D. Cal. filed May 29, 1997)
city guides.\textsuperscript{122} For example, its "http://seattle.sidewalk.com" site, the subject of the litigation, contains information on that city, including guides to entertainment and restaurants as well as a menu setting forth events around Seattle, many of which require tickets for admission.\textsuperscript{123} These tickets were often available from Ticketmaster at its web site.\textsuperscript{124} The companies had negotiated for a mutually beneficial marketing deal involving linking their respective sites.\textsuperscript{125} However, no agreement was ever reached.\textsuperscript{126} Despite the lack of agreement, Microsoft included a number of links to the Ticketmaster site from Sidewalk.\textsuperscript{127} After the agreement with Microsoft failed to materialize, Ticketmaster entered into a licensing agreement with CitySearch, a competitor of Microsoft's.\textsuperscript{128}
Ticketmaster's complaint itself was quite brief, alleging six claims for relief.129 Interestingly, the complaint was based primarily on trademark claims, making no mention of copyright infringement.130 The complaint alleged that, by using Ticketmaster's trademarks and trade names on its web site, Microsoft was free-riding on Ticketmaster's name and marks and enhancing the value of its seattle.sidewalk.com site at the expense of Ticketmaster's site.131

Ticketmaster seemed to object primarily to three Microsoft practices. First, Microsoft linked deeply within Ticketmaster's site rather than to the home page. Ticketmaster alleged that this practice took Ticketmaster's content out of context and diverted advertising dollars from Ticketmaster to Microsoft.132 Second, in a related complaint, Ticketmaster claimed that the use of the Ticketmaster trademark and trade names generally on Microsoft's site allowed Microsoft to attract advertising dollars: "Microsoft has used Ticketmaster's property and goodwill to sell advertising on its own web site, thereby, in effect, rewriting the rules of commerce for its [sic] own benefit."133 According to Ticketmaster, "absent an agreement with the

129. See Ticketmaster, No. CV97-3055 DDP ¶¶ 24-37 (alleging causes of action for trademark dilution, unfair competition under section 43(a) of the Lanham Act, state law unfair competition, misleading statements, common law unfair competition and unfair business practices; and asking for declaratory relief).

130. See id. ¶¶ 24-27 (setting forth trademark counts).

131. See id. ¶ 19 ("Microsoft's commercial use and appropriation of Ticketmaster's name, marks and web site ... has enhanced the value of Microsoft's web site and business and diluted and diminished the value of Ticketmaster's web site and business."). "By creating advertiser supported pages on its web site consisting solely of Ticketmaster's live event information and services without Ticketmaster's approval, and by prominently offering it as a service to their users, Microsoft is feathering its own nest at Ticketmaster's expense. It is, in effect, committing electronic piracy." Id. ¶ 17.

132. See Brett Atwood, Ticketmaster, Microsoft In Legal Battle—Lawsuit Concerns Links Between Web Sites, BILLBOARD, May 10, 1997 (citing Alan Citron, Ticketmaster's senior Vice President of Multimedia: "It's one thing if they simply link to our home page, which more than 5,000 sites have done. ... But they are bypassing our home page and taking our content out of context, which we are not comfortable with. ... Microsoft is financially benefiting from ad sales on its site that accompany our content."); Ticketmaster Suit Targets Microsoft, supra note 125 ("By creating a link directly to Ticketmaster's ticket-buying pages, Microsoft is diverting customers from the vendor's Web pages that contain advertising content, Ticketmaster President and Chief Executive Frederic Rosen said. 'Why should they get the benefit of advertising (in Seattle Sidewalk) when the money is mine?' Rosen said.").

133. Ticketmaster, No. CV97-3055 DDP ¶ 18.
owner for use of a web site, web sites are for personal noncommercial use.” Finally, Ticketmaster had agreed with MasterCard to give that credit card prominence in its advertising. The complaint alleged that “Microsoft’s use of Ticketmaster’s name in connection with MasterCard, which use does not give MasterCard prominence, dilutes the value of that relationship.”


The first case to challenge the practice of framing was filed in February, 1997, by a group of plaintiffs operating online news sites. The plaintiffs, led by The Washington Post, sued Total News and others for the operation of a web site that used the plaintiffs’ trademarks as pointers and framed the plaintiffs’ sites when a user accessed them.

The Total News site is essentially a collection of links, “a one-stop emporium for the news junkie, provid[ing] access to nearly 1,200 media company sites.” When the user accesses a link, the contents of the linked site appear in a window, or “frame,” surrounded by the contents, including the advertising, of the Total News site. As is characteristic of framing, the Total News URL rather than the URL of the linked site continues to be displayed.

The plaintiffs sued under a number of theories, including copyright and trademark infringement and trademark dilution. The heart of the complaint, however, sounded in misappropriation. The primary basis of the plaintiffs’ objection to the defendants’ conduct was that Total News was free-riding on

---

134. Id.
135. See id. ¶ 21.
136. Id.
137. In May, Playboy filed suit against Web21 for Web21’s framing of Playboy’s content. See M.A. Stapleton, Playboy Settles Internet ‘Framing’ Trademark Case, CH. DAILY L. BULL., May 21, 1997, at 1. The suit was settled on the same day the defendant was served. See id.
the plaintiffs' newsgathering efforts because it sold advertising based on the plaintiffs' content rather than its own:

Defendants provide little or no content of their own. Instead Defendants have designed a parasitic website that republishes the news and editorial content of others' websites in order to attract both advertisers and users. Specifically, Defendants' website is designed to feature the content of Plaintiffs' and others' websites, inserted within a "frame" on the computer screen that includes Defendants' totalnews.com logo and URL as well as advertising that Defendants have sold. . . . Simply put, Defendants are engaged in the Internet equivalent of pirating copyrighted material from a variety of famous newspapers, magazines, or television news programs; packaging those stories to advertisers as part of a competitive publication or program produced by Defendants' and pocketing the advertising revenue generated by their unauthorized use of that material.1

Based on the complaint, the news organizations seemed to object primarily to Total News framing their sites with advertising that Total News had sold. Additionally, the plaintiffs also objected to Total News's use of their logos as the HREF linking symbol.142

The parties settled the litigation in June, 1997.143 Under the settlement, Total News agreed to stop framing the plaintiffs' sites.144 Total News is allowed to employ HREF links to the plaintiffs' sites, using "the names of the linked sites in plain text which may be highlighted" but not using the "Plaintiff's proprietary logos."145 Any plaintiff may revoke its permission to link on 15 days' notice but, interestingly,

[i]f Defendant refuse [sic] to cease linking upon notice, and any Plaintiff brings an action to enforce its rights under this subparagraph, it shall be an affirmative defense that Defendants' conduct

142. See id. ¶ 57 (alleging that defendants' use of plaintiffs' trademarks "caused consumers mistakenly to believe that some or all of the Defendants have an affiliation with Plaintiffs").
144. See Total News, No. 97 Civ. 1190 (PKL) (S.D.N.Y. filed Feb. 28, 1997) ¶ 3 ("[I]n particular, Defendants agree permanently to cease the practice of "framing" Plaintiffs' websites as that practice is described in the complaint in this case.").
145. Id. ¶ 4(a)-(b).
does not otherwise infringe or violate Plaintiff's rights under any theory of any intellectual property, unfair competition or other law.\textsuperscript{146}

While it is speculative to divine from a settlement what the parties thought the outcome at trial would be, one could infer that, at least, Total News believes that HREF links are allowable even without permission of the linked site.

3. Discerning Litigation Trends

Admittedly, two cases, one undecided and the other settled, make a small sample from which to draw inferences about how the law will evolve on-line. However, when those cases are considered against the backdrop of on-line revenue models, one may identify some trends with reasonable certainty.

For example, to a certain extent both cases are a product of building the web revenue model around advertising. Ticketmaster objected to Microsoft's bypassing its home page containing banner ads, while the plaintiffs in \textit{Total News} objected to Total News obscuring their advertising and framing their sites with ads from which Total News profited. As the competition for advertising dollars stiffens, more and more companies are likely to seek legal redress when they can make a tenable claim that other sites are diverting advertising dollars away from them.

Second, the lack of emphasis on copyright is notable. Ticketmaster made no copyright claim while the copyright claim appeared almost as an afterthought in the \textit{Total News} case, as count eight of a nine count complaint. Employing conclusory language, the plaintiffs asserted, “Defendants’ conduct violates several of the exclusive rights under 17 U.S.C. § 106 belonging to the Plaintiffs as owners of the copyrights in their respective content and websites.”\textsuperscript{147}

Third, the gravamen of both complaints was really unfair competition, although stated in different causes of action. Both cases alleged federal trademark dilution and violations of section 43(a) of the Lanham Act for a false implication of association between the plaintiffs and defendants. The plaintiffs in \textit{Total News} also claimed trademark infringement for the use of their trademarks and trade names as pointers on the Total News site and stated a common law misappropriation claim. Disputes over trademarks are likely only to increase because

\textsuperscript{146} \textit{Id.} ¶ 4(b).
\textsuperscript{147} \textit{Id.} ¶ 72.
establishing a brand identity is one way to attract users to one's site and thereby generate more advertising dollars.

The task for the law in assessing these claims is to weigh competing policies to determine when intellectual property rights should be implicated on the Internet. Once intellectual property rights are sorted out at the federal level, the analysis may turn to state causes of action to define how they may supplement or alter federal rights.

III. POLICY CONSIDERATIONS—DEBATING THE APPROPRIATE LEGAL RULE FOR LINKING

The issue in both the Ticketmaster and Total News cases is one of defining what constitutes permissible linking conduct in the absence of an agreement with the linked site. One way to approach this question is to consider the policy issues that linking implicates to assist in formulating the appropriate legal rule.

A. ARGUMENTS FOR A STRONG PROPERTY RIGHTS REGIME IN CYBERSPACE

The very term web "site" brings to mind the idea of property. And the term "property" in turn introduces notions of excludability, whether phrased in terms of trespass to physical property or infringement of intangible property protected by an intellectual property right. If a web site is considered property, the question arises as to the scope of the owner's right to exclude others from accessing it by linking. In the language of entitlements, the question is whether a linking site has an entitlement to include an HREF link and/or frame or whether the web site owner has an entitlement to stop linking conducted without its permission.

The classical framework set forth by Professor Calabresi and A. Douglas Melamed contends that property rules are most appropriate when transaction costs of bargaining are low. A number of commentators have argued that transaction costs in cyberspace are likely to be low relative to those of conventional media. In fact, in any one linking transaction, only two par-


149. See, e.g., Hardy, supra note 3, at 236-27 (noting that transaction costs are generally lower in cyberspace because of lower costs of communication and
ties are usually involved—the web site owners of the respective sites. However, a popular site may process many such transactions. For example, over 5,000 sites link to the Ticketmaster home page.\textsuperscript{150} This suggests that transaction costs, at least for processing requests for permission to establish an HREF link, are likely to be quite high in the aggregate for popular destination sites.

Fortunately, the debate about whether and to what extent a linker or web site owner should be entitled to property rights can be informed by reference to practices that have already evolved on the Internet as well as technological and other legal considerations. Thus, the theory of Calabresi and Melamed can be informed by how "law" has evolved over the Internet, helping to form a legal rule for linking.

B. \textit{Custom as a Source of Law—Netiquette}

When the Internet was still primarily a research network and even as it evolved into a medium of communication for a wide range of users via e-mail and newsgroups, disputes were mostly resolved outside of the judicial system by reference to the customs of the Internet. Netiquette is the set of informal norms that have largely governed the conduct of Internet communication.\textsuperscript{151} Netiquette is, quite simply, the custom of the Internet. Custom often serves as a source of law and, at least in some areas, commentators have suggested that it is desirable for the law to reflect what people actually do in practice.\textsuperscript{152} Thus, an understanding of netiquette helps to assess the desirability of selecting a particular set of rules.

\textsuperscript{150} See Atwood, supra note 132 (quoting Ticketmaster's senior Vice President of Multimedia as saying, "It's one thing if they simply link to our home page, which more than 5,000 sites have done," leading to the inference that Ticketmaster would not have complained if Microsoft linked to its home page without permission, as well as the inference that at least some of the over 5,000 linkers do not have permission).

\textsuperscript{151} See Slind-Flor, supra note 1 (calling netiquette "the social-contract etiquette of the Internet").

\textsuperscript{152} For example, Article 2 ("Sales") of the Uniform Commercial Code
The netiquette of linking suggests that it is permissible to use an HREF link to connect to a site without first seeking permission, although it is polite to send an e-mail to the web site's owner informing it of the newly established link. There are two reasons for this general rule. First, as noted above, the sheer volume of e-mail requests for permission may be quite onerous. The more popular the site, the greater the costs of processing linking permission requests.

The second reason for the norm is rooted in the openness of the Internet and the purpose of the web. The Internet's openness is one of its distinguishing characteristics, while the web was purposely designed to enable links. Historically, web publishers have designed sites knowing that others may link to them and that the norm of the Internet is information sharing. In fact, web site authors have chosen to publish on the web to exploit just these features of the Internet. Thus, the largely reflects its drafters' beliefs that law is revealed by the practices of concerned parties. See WILLIAM TWINING, KARL LLEWELLYN AND THE REALIST MOVEMENT 302-40 (1973); Richard Danzig, A Comment on the Jurisprudence of the Uniform Commercial Code, 27 STAN. L. REV. 621, 626 (1975) ("Article II frequently speaks as though courts should discover the law merchant from a careful, disinterested examination of custom and fact situations.").

153. See Arlene Rinaldi, The Net: User Guidelines and Netiquette (last modified Oct. 4, 1996) <http://www.fau.edu/rinaldi/net/web.html> ("It is not a requirement to ask permission to link to another's site, though out of respect for the individual and their efforts, a simple e-mail message stating that you have made a link to their site would be appropriate."); see also, WEB LINKING AGREEMENTS, supra note 3, at 2 (noting that while there is no consensus on whether permission to link is required, the assumption that no permission is required is "broadly held"); Jonathan Rosenoer, CYBERLAW: THE LAW OF THE INTERNET 10 (1996) ("Because the World Wide Web is, in essence, a protocol that exists only to link sites to each other, it is hard to see how anyone could claim the right to restrict site access only to those receiving specific permission to do so."); Dan Goodin, Aiming at the Heart of the Web, RECORDER, Apr. 30, 1997, at 1 ("Sites rarely ask for permission to link to another site."); Hartnick, supra note 101 (stating that as a matter of "common usage" no permission is required to link to another site). But see Web Issues (last visited October 18, 1997) <http://www.benedict.com/webiss.htm#can> ("Netiquette dictates that: Other Websites be told when you plan to link to them."); Guide- line for the House of Representative's Staff (last visited Aug. 1, 1997) <gopher://gopher.house.gov:70/OF-1%3a208%3ainternet%20etiquette> ("Don't point to other sites without asking first.").

154. See Rinaldi, supra note 153, at <http://www.fau.edu/rinaldi/net/permission.txt> (stating that as the author of her own web page to which thousands of others link, she would not want to manage e-mail from thousands of sites asking for permission to link); see also supra note 150 and accompanying text (noting that over 5,000 sites link to Ticketmaster).

155. See supra Parts II.A and II.B (discussing the purposes of the Internet and web).
Internet community has widely held the view that, by choosing to post a web site, the web publisher opts in to a system in which other documents may link to its site. It may opt out of that system by restricting access to its site through technological means.\footnote{156}

There is, however, some dissent within the Internet community as to the appropriate netiquette for HREF linking. This dissent focuses on the fact that a link may generate an association between the two sites that the linked site finds objectionable.\footnote{157} One of the most widely cited examples of this "unwanted association" effect is the "Babes on the Web" controversy.\footnote{158} Babes on the Web was a web site consisting of links to the home pages of certain women whose sites included their photographs.\footnote{159} The links were accompanied by a desirability rating.\footnote{160} When a number of women objected to their inclusion on the Babes on the Web site, the site's operator eventually removed the links to the objecting sites.\footnote{161} It is exactly such unwanted associational effects that have led some to suggest that netiquette requires a grant of permission before linking or, minimally, removal of the offending link upon objection by the linked site.\footnote{162}

In fact, linking agreements are common, at least among businesses,\footnote{163} and are likely only to increase.\footnote{164} While it is not

\footnote{156. \textit{See supra} note 153 (citing Rosenoer on the inconsistency of requiring permission to link to a web document); Raysman & Brown, \textit{supra} note 100, at 3 ("As a general rule, materials published on the Web may be viewed by the general pool of all Internet users unless affirmative steps are taken to limit access."); \textit{see also} infra Part III.C (delineating technological means by which a web publisher may restrict website access).}

\footnote{157. \textit{See} Web Issues, \textit{supra} note 153 (noting that the goodwill attached to a web site may be diminished by an association with an undesirable linking site).}

\footnote{158. \textit{See} id. (describing the operation of the website).}

\footnote{159. \textit{See} Dwight Silverman, \textit{Battling Over Babes in Cyberland}, HOUSTON CHRON., July 9, 1995, Bus., at 6 (describing the site and the Babes on the Web II site, which contains pointers to sites with photos of men).}

\footnote{160. \textit{See} id. (stating that women were ranked on a scale from "Babe-O-Rama" to "Babe-O-Matic").}

\footnote{161. \textit{See} id. (noting that, while initially the site operator refused to remove links on objection, he now does so).}

\footnote{162. \textit{See supra} note 153 (citing authorities arguing that permission to link is required).}

\footnote{163. \textit{See} Rebecca Quick, \textit{"Can't Get There From Here" May Be Web's New Motto}, WALL ST. J., July 2, 1997, at B6 (noting that linking agreements are beginning to proliferate); Raysman & Brown, \textit{supra} note 100, at 3 ("[L]inking agreements are common between the publishers of the Web sites who have a
clear that any agreement is legally required for an HREF link, businesses often use linking agreements to establish complementary business and marketing relationships, provide for reciprocal links, establish performance requirements, and clarify liability issues.165 Simply stated, the ability to link has value, but in the wide-open world of the Internet, it has been difficult to appropriate that value, "creat[ing] problems for commercial Web sites that want to use their content as an asset when striking deals with other sites."166 The historical view has been that linking is usually a symbiotic relationship. The ability of the linking site to link increases its value, and the linked site derives a benefit from the extra traffic generated by linking.167

The netiquette for linking to the interior of a site is not as established as that for linking to the home page. Web site owners may object to such linking primarily for two reasons. If the site owner rearranges the site's structure, older links may malfunction and users may blame the linked site's owner, adversely affecting its reputation. Others, like Ticketmaster, object because linking within the site bypasses the site owner's "logo- and ad-encrusted home pages," where advertising rates may be based on the number of hits to that home page.168

164. The ABA has recently published a book identifying issues involved in web linking agreements and including sample contractual terms. See web linking agreements, supra note 3. The ABA acknowledges that permission may not be required for linking with an HREF link but that a "web-link agreement that clearly sets forth the terms of the link is increasingly valuable" as intellectual property rights are implicated. See id. at 2-3.

165. See id. at iii-iv (listing the table of contents, which sets forth an overview of issues to be considered in a linking agreement, including the "Nature of the Relationship," "Duties and Rights," "Scope of License," "Payments/Revenues," "Performance Requirements," "Data Collection, Use, and Dissemination," and "Representations, Warranties, and Indemnification"); Raysman & Brown, supra note 100, at 3 ("[Linking] agreements are often used to maintain quality standards, performance criteria for the sites, [and] site availability [among other things].").

166. Atwood, supra note 132; see also Ticketmaster Corp. v. Microsoft Corp., No. 97-3055 DDP ¶ 12 (C.D. Cal. filed May 9, 1997) ("[A] link to Ticketmaster's web site is extremely valuable to other commercial web sites... and the addition of a link to Ticketmaster's site adds value to those other web sites by... allowing them to increase their viewership and, thus, their advertising revenue.").

167. See Quick, supra note 163, at B6 ("[A] link has normally been viewed as a favor: The more sites that contain a link to yours, the more potential traffic for you.").

The Internet community also lacks established norms to address framing, in part because framing is a relatively recent development. Netscape Communications, the market leader in web browser software, introduced framing technology in early 1996 as part of its Netscape Navigator Version 2 product.\textsuperscript{169} It is interesting to note that the Washington Post's web site itself frames other sites, although it is unclear whether the company first sought permission to frame others.\textsuperscript{170}

It seems, then, that netiquette generally supports freedom to use an HREF link. A separate norm may be arising among commercial entities to enter into linking agreements. As web revenue models evolve, pressure for the ability to control who links to a web site may increase, perhaps leading to new netiquette or separate norms for commercial and noncommercial linkers. Minimally, it seems likely that as businesses continue to attempt to make money from web-related activities, they may begin restricting access to their sites by building technological fences.

C. TECHNOLOGICAL CONSIDERATIONS

Web site owners who are concerned about unwanted linking do not have to depend solely on their legal rights to prevent it. Rather, they may employ one or more technological devices to stop such linking.

Perhaps the easiest way to protect a site is by requiring the user to enter a unique password to gain access.\textsuperscript{171} Another relatively simple solution is for the site owner periodically to change the page's URL manually, thus destroying the effectiveness of any links to the former URL.\textsuperscript{172} A more complex approach is that of dynamic paging, in which the web page is

\textsuperscript{169} See PFAFFENBERGER, supra note 16, at 144 (noting that at one point 80\% of people navigating the web did so with Netscape's Navigator and describing frames as one of the "pace-setting" features introduced in version 2.0 of Navigator); see also Hartnick, supra note 101 (stating that Netscape introduced framing and noting that "[o]ther Web browsers, such as Microsoft's Explorer, also can frame").

\textsuperscript{170} See Todd Woody, We've Been Framed, Nation's Newspapers Cry, \textsc{Legal Times}, Mar. 24, 1997, at 35 (describing the Post's framing practices).

\textsuperscript{171} See Raysman & Brown, supra note 100, at 3 (listing registration and password schemes as examples of technological means to limit site access).

\textsuperscript{172} See Schlachter, supra note 71, at 46 (calling this a "low-technology approach" to the problem).
built only when the user executes a certain program.\textsuperscript{173} The reference point of dynamic pages thus changes, giving linkers no fixed site at which to point.\textsuperscript{174}

There are also mechanisms that enable a site to prevent linking by some sites but not others. The programmer can write the web page's HTML code to recognize links from the undesired site and refuse to process them.\textsuperscript{175} Ticketmaster employed this technique when Microsoft failed to remove its links—Ticketmaster programmers blocked the links so that, when Microsoft Sidewalk users clicked on the Ticketmaster link, they received a message: "This is an unauthorized link and a dead end for Sidewalk."\textsuperscript{176} Additionally, at least one web site has employed technology to prevent linking to interior pages, thus preventing linkers from bypassing the ads on the home page.\textsuperscript{177} A site may also block spiders from indexing the site in the spider's database.\textsuperscript{178}

Similarly, there are technological means to prevent framing. For example, CNN, a plaintiff in the Total News case, used technology that caused the Total News frame to dissolve after a certain time period elapsed.\textsuperscript{179} The L.A. Times, another plaintiff in the case, employed technology that dissolved the

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{173} See id. (describing dynamic paging as involving the user executing "a program resident on the server").
\item \textsuperscript{174} See id.
\item \textsuperscript{175} See id. ("If the sysop desires to prevent a specific site from linking to a page, the sysop may code the page in such a way that it refuses browsers who access the site from the forbidden linking site.").
\item \textsuperscript{176} David Shaw, \textit{Fierce Battles Fought Over Web Guides for Arts, Sports}, \textsc{L.A. Times}, June 18, 1997, at A1 (describing how Ticketmaster blocked Microsoft's links).
\item \textsuperscript{177} Kristi Coale, \textit{Intellicast Smartens Up to Banner Bypass} (visited July 14, 1997) \texttt{<http://www.wired.com/news/technology/story/2844.html>} (describing how Intellicast wrote a procedure that accepts only links to the home page and returns a "file not found" message to links to interior pages). The company was, in part, driven by concerns over lost advertising revenue. \textit{Id.} "We are completely advertiser supported and our advertisers want to know that with each visit, we record an impression [an ad view]," said webmaster Jude LeBlanc. \textit{Id.} "Advertisers typically set goals for the number of impressions, or ad views, they want per month. ... This information is gathered by looking at server logs, which tell what pages, and subsequently, what ads, are projected." \textit{Id.}
\item \textsuperscript{178} See Schlachter, \textit{supra} note 71, at 46 (describing how sysops may prevent robots and spiders from providing links to their web pages); \textit{see also supra} text accompanying notes 58-61 (describing spiders).
\item \textsuperscript{179} Washington Post Co. v. Total News, Inc., 97 Civ. 1190 (PKL) ¶ 37(a) (S.D.N.Y. filed Feb. 28, 1997).
\end{enumerate}
\end{footnotesize}
frame if the user went beyond the Times home page and "clicked on certain additional hyperlinks within [the Times's] site."180

There are, however, at least three problems with using technological means to prevent linking. First, while these mechanisms may prevent unwanted access, they may also frustrate "legitimate" access. When the web publisher wants the broadest possible distribution of its content—for example, to increase advertising rates and/or product sales—any step that limits such access is at least somewhat undesirable. Second, while some of the technological solutions are relatively inexpensive, none is without cost. The more resources that a publisher must devote to building fences, the less it can devote to upgrading its site's content. Third, any technological means can be defeated. More sophisticated programs can defeat anti-linking measures. Web site owners could write new code to respond to such technological advances, and so on. As Professor Hardy has noted in a different context, "The problem with this scenario is that it constitutes a kind of wasteful 'arms race' of technological-protection schemes, with each side increasing its spending to outperform the other's technology."181 A particular web site's owner would have to decide if the benefits of investing in increasingly complex technological restrictions outweigh the costs.

D. FIRST AMENDMENT CONCERNS

Balanced against the drawbacks of giving a web publisher an incentive to build technological fences are the First Amendment rights of Internet users. In June, 1997, in ACLU v. Miller, a district court in Georgia granted a preliminary injunction against a Georgia statute that made it a crime for:

any person . . . knowingly to transmit any data through a computer network . . . if such data uses any . . . trade name, registered trademark, logo . . . or copyrighted symbol . . . which would falsely state or imply that such person . . . has permission or is legally authorized to use [it] for such purpose when such permission or authorization has not been obtained.182

180. Id. ¶ 37(c).
181. Hardy, supra note 3, at 251.
The statute was ostensibly aimed at limiting the ability to use trade names and trademarks as pointers.\textsuperscript{183}

The court stated that “plaintiffs are likely to prove that the statute imposes content-based restrictions which are not narrowly tailored to achieve the state’s purported compelling interest.”\textsuperscript{184} In a footnote, the court discussed the statute’s impact on linking:

A fair reading of [this] clause, as written, is that it prohibits the current use of web page links. The linking function requires publishers of web pages to include symbols designating other web pages which may be of interest to a user. This means that an entity or person’s seal may appear on hundreds or thousands of other web pages, just for the purpose of enabling the linking system. The appearance of the seal, although completely innocuous, would definitely “imply” to many users that permission for use had been obtained. Defendants have articulated no compelling state interest that would be furthered by restricting the linking function in this way.\textsuperscript{185}

This is the first court to indicate that linking may be considered speech and that restrictions on it may implicate First Amendment concerns.

The Supreme Court, in \textit{Reno v. ACLU},\textsuperscript{186} decided about the same time as \textit{Miller}, described the Internet as a “new marketplace of ideas”\textsuperscript{187} and the web as “a vast library including millions of readily available and indexed publications and a sprawling mall offering goods and services.”\textsuperscript{188} In the case, the Court held that there was no basis for “qualifying the level of First Amendment scrutiny” applicable to the Internet.\textsuperscript{189} The Court has traditionally “recognized special justifications for regulation of the broadcast media...[including] the history of extensive government regulation of the broadcast medium...the scarcity of available frequencies...and its ‘invasive’ nature.”\textsuperscript{190} These characteristics justifying lesser scrutiny simply are not present on the Internet. While \textit{Reno} did not address linking, it did indicate the Court’s acknowledgment of the Internet as an important medium of expression, deserving First Amendment protection.

\textsuperscript{183} Id.
\textsuperscript{184} Id. at *2.
\textsuperscript{185} Id. at *6 n.5.
\textsuperscript{186} Reno v. ACLU, 117 S. Ct. 2329 (1997).
\textsuperscript{187} Id. at 2351.
\textsuperscript{188} Id. at 2335.
\textsuperscript{189} Id. at 2344.
\textsuperscript{190} Id. at 2343.
The Miller and Reno views of the Internet make good sense. If the Internet is to realize its potential as a "marketplace of ideas," then restrictions on the ability to exchange those ideas seem inherently troublesome and worthy of further consideration. This in turn suggests that the intellectual property laws should, if possible, be interpreted to accommodate these First Amendment considerations.

E. PUTTING THE POLICY TOGETHER—A LIMITED PROPERTY RIGHT TO LINK

The temptation to place the entitlement with the linked web site's owner is strong. It is a simple matter for a linker to seek permission to connect to another site, and usually the linked site would not object to the connection. Thus, under a legal rule requiring permission to link, linking would continue much as it has in the past. Moreover, the wasteful technological "arms race" could be avoided by placing the entitlement with the linked web site's owner. Additionally, this assignment of rights seems consistent with Calabresi and Melamed's general theory that, "in the absence of certainty as to whether a benefit is worth its costs to society, ... the cost should be put on the party or activity best located to make such a cost-benefit analysis."191 There is some social benefit to the freedom to link but also some costs. Web site owners may build technological fences or otherwise adjust their content to deal with unwanted linking. The party in the best position to weigh these costs is probably the owner of the linked site because it may more accurately value its own goodwill and the cost of unwanted associations. As one lawyer has stated, "Links establish a connection between two businesses, and people really want to be able to control that. ... A lot of our clients get upset with pornography sites linking to them—they don't want that kind of connection. ... [T]his is an issue of who businesses want to have promoting them."192

This analysis is, however, an oversimplification. First, if the entitlement is placed with the owner of the linked site, it is doubtful that linking would continue as it has to date. If a linker must first request permission, its ability to employ the link will be at best delayed, frustrating the "marketplace of

192. Quick, supra note 163, at B6 (quoting Suzanne R. Jones, a partner in a Los Angeles firm specializing in intellectual property and computer law).
"ideas" that is the Internet. In other words, while the owner of
the linked site may be in the best position to weigh the costs of
unwanted linking, the owner likely fails to take into account
the social benefit of linking.

Second, existing netiquette suggests that web publishers
have calculated the costs and benefits of requiring permission
to link and have opted not to do so. The cost of processing the
huge number of requests simply outweighs the benefit of stop-
ping the few undesirable links. Moreover, the recent increase
in the number of linking agreements among businesses does
not necessarily mean that firms believe that permission to link
is required. Rather, businesses are often using linking agree-
ments to establish complementary relationships that would
otherwise not exist. These linking agreements may also simply
be a rational response by risk-averse entities to legal uncer-
tainty.

Third, the technological arms race could be avoided by
using the torts of trespass and conversion to protect technologi-
cal fences. If trespass and conversion were extended to deal
with intangible property, a linker who breaches the fence built
by a site would be liable to the site's owner. Accordingly, the

193. Generally, many states sustain actions in conversion and trespass
only for interferences with tangible property. See MELVILLE B. NIMMER &
DAVID NIMMER, NIMMER ON COPYRIGHT, § 1.01[B][1][i], at 1-35 to 1-36 (1997).
However, some courts have stated that "[e]lectronic signals generated and
sent by computer have been held to be sufficiently physically tangible to sup-
port a trespass cause of action." CompuServe Inc. v. Cyber Promotions, Inc.,
962 F. Supp. 1015, 1021 (S.D. Ohio 1997) (holding that the sending of unsolicited
e-mail may constitute trespass to computer equipment and citing authorities
suggesting that unauthorized access to a computer may constitute trespass).
See also I. Trotter Hardy, The Ancient Doctrine of Trespass to Web Sites, 1996
J. ONLINE L. art. 7 (suggesting that trespass may be used on the web and ex-
plaining why the trespass action may not be preempted by copyright law); Val
D. Ricks, Note, The Conversion of Intangible Property: Bursting the Ancient
(discussing conversion of intangible property).

In the context discussed in this Article, the action for trespass or conver-
sion would be based on unauthorized access, which is not one of the copyright
owner's exclusive rights. It could be analogized to a book owner's locking a
book in a cabinet. If an intruder broke the lock, the intruder would be liable
for trespass. The same analogy holds in the electronic context. The barrier to
access functions like a lock, and the intruder's act in breaking that lock should
constitute trespass. However, the act of accessing a site necessarily also in-
volves making a RAM copy. See infra notes 208-211 and accompanying text.
The right to reproduce the copyrighted work in copies is an exclusive right of
the copyright owner. Thus, it seems that a cause of action in trespass would
be preempted because it is attempting to regulate the same conduct as the
concern about the technological arms race may be unnecessary as these other legal doctrines may effectively limit it.

Additionally, as described in Part V.A below, a simple technology to limit linking is a contract. A user who manifests assent to a conspicuous contractual term limiting the ability to use a hyperlink on his or her web page is likely to be bound by that term. If the user violates that term, it would be liable for breach of contract, a claim unlikely to be preempted by copyright.

On the other hand, there is value in the ability to link. In the absence of legal constraints, there is every reason to expect that a market for linking rights would develop. The increase in linking agreements, while not dispositive, may suggest that this market is already evolving and that the netiquette of a research network should not bind an evolving commercial network. Unfettered linking may frustrate the evolution of this marketplace by placing limitations on the parties' negotiations. For example, Ticketmaster had agreed to display prominently MasterCard information at its site, but its ability to comply with this agreement was frustrated by Microsoft bypassing those ads.\textsuperscript{194}

Additionally, to date, the custom of free linking has assumed that the benefits to the two sites involved are equal. There is no particular reason, however, to think that this is so as a general matter. For example, the marginal benefit to a new search engine of the ability to link to a popular site like “www.ticketmaster.com” likely exceeds the marginal benefit to Ticketmaster of one more site linking to it in addition to the more than 5,000 sites already so linking. In such cases, the linking site is, at least in some sense, free-riding on the linked site’s content and reputation. A legal rule allowing linking

---

Copyright Act. See Hardy, \textit{supra}, ¶ 12 (stating that literally, the right at issue could be construed as “the right to control the reading of the information,” which is not one of the copyright owner’s exclusive rights, but noting that “reading” does involve copying under current law). Professor Hardy implies that a trespass action would be preempted unless the law is changed to hold that RAM copies are not sufficiently fixed to constitute copies under the Act. \textit{See id.} ¶¶ 14-15. However, a cause of action is not preempted if it contains elements that render it “qualitatively different” from a copyright cause of action. \textit{See infra} note 377. Arguably, the unauthorized access that incidentally involves copying is such an element. The interest that the plaintiff would be seeking to enforce—limiting access to its site—is different from the interest that copyright law would be upholding. Thus, the cause of action may not be preempted even if RAM copying qualifies as copying under the Act.

\textsuperscript{194} \textit{See supra} notes 129-136 and accompanying text.
without permission thus simply distorts the market that would otherwise evolve.

Particularly in the cases of links to interior pages and framing, web site owners may object because they lose control over the presentation of the site's content. The web site was set up with the expectation that it would be accessed through the home page, the virtual "front door." It was also set up with the expectation that the entire contents of the site would be displayed more or less full screen, rather than in a window. The ability of others to link within the site and to frame content impacts the advertising revenue of the linked site.

However, requiring permission to link "robs the Web of the thing it does best—provide the seamless and rapid availability of information."195 As Microsoft stated in its answer to Ticketmaster's complaint, "This easy access is an intended consequence of and fundamental to the nature of the World Wide Web."196 This echoes the netiquette that the act of posting a web site without restriction places the publisher in the web's mainstream where linking without permission is the norm. The mere fact that linking may frustrate a certain business model does not compel the conclusion that it should only take place with the permission of a web site owner. Business models are continuing to evolve and have, to a certain extent, already been premised on a norm of free linking.197

Moreover, the Internet is now an established communications medium with information exchange facilitated by linking. To impose a rule now that requires a site to seek permission before linking would frustrate expectations, including those held by authors of search engines and directories that often consist solely of links to other sites. Additionally, it would create a barrier to entry, particularly for smaller sites that have difficulty in being noticed.198 Essentially, one could view web publishers who advocate requiring permission to link as seeking to exert power in two markets—the market for the information posted on the web site itself and the market for providing access through indexing to that information.

195. Quick, supra note 163, at B6 (quoting Geoff Reiss, vice president of Starwave Corp.).
196. Ticketmaster Corp. v. Microsoft Corp., No. CV97-3055 RAP (ANx) ¶ 41 (May 28, 1997).
197. Cf. Schlachter, supra note 71, at 22-30 (explaining how information providers can make money while not charging for content).
198. See Quick, supra note 163, at B6.
The situation is comparable to Time magazine informing the Reader’s Guide to Periodical Literature that it did not want its articles referenced unless the Guide first obtained Time’s permission for a listing. Another analogy would be to ABC-TV complaining that the TV Guide’s ability to list its programming schedule diverts advertising dollars from ABC to TV Guide. The difference between these two examples and linking is the ease and immediacy with which a user can look at the document referenced by linking. The question, of course, is whether this easy accessibility should lead to a different substantive result. Logically, it should not. The address of a web site is public information which a site owner cannot prevent the linking site from publicizing. In the absence of hyperlinking, all a user would need to do to access the site is to type the address into its browser or simply “cut and paste” the address as published. In both cases, hyperlinking takes place, yet the user still accesses the new site as a result of the address publication on the original site. Hyperlinking simply makes this obviously legal means of accessing the new site somewhat easier.

Moreover, given the First Amendment concerns identified above, the boundaries of the market in which a publisher has a right to use its power should be defined narrowly. Also, the barrier to entry that would be erected by a requirement to seek permission before linking would operate almost like a prior restraint or undue burden on speech and should be discouraged absent a compelling interest.

This suggests that the entitlement to link should be with the linker, at least with respect to an HREF link to a home page. The issue of links deep within the site is more problematic. Such interior links bypass the introductory information and ads contained on the home page and present the site’s content out of context. While these policy considerations make the question a close one, the entitlement should still rest with the linker. If a publisher “opts in” to the web system, the publisher knows that other sites may link to any page and should design the site accordingly. Again, there would be no legal barrier to another site’s publishing the address of internal pages or to the

199. Cf. Pamela Samuelson, Fair Use for Computer Programs and Other Copyrightable Works in Digital Form: The Implications of Sony, Galoob, and Sega, 1 J. INTELLECTUAL PROP. 49, 115 (1993) (“[A] link user might analogize her navigation of the links to the print reader’s following a bibliographic path set forth in a copyrighted article which would, of course, not be infringing, for it would involve use of the knowledge in the article, not a reproduction of it.”).
user accessing those pages by entering the address into its browser. Hyperlinking simply saves the user a small quantum of time by removing the need for it to type the address into its web browser.

There would, however, be limits to this entitlement. For example, the web site owner remains free to erect technological barriers to entry and to seek redress for their breach. Moreover, merely stating that there is an entitlement to link says nothing about the permissible manner of linking. The boundaries of permissible conduct would be drawn by already existing principles such as those embodied in the Lanham Act. For example, despite the dicta in Miller, it is not at all clear that the freedom to link would include the freedom of the linker to use the logo of the linked site's owner as its pointer.

The frame at first glance seems to present more troubling questions. The issue that framing highlights is different from that of the HREF link. The HREF link is merely a pointer to an address that allows the user to travel to a different site and see another's content. The frame actually alters the display of that content, although it does not alter the content itself. If HREF links are a means of traveling the net, frames are a means of displaying the content. Frames are not inherently invidious, which suggests that the same rule should apply. The entitlement to frame should rest with the linking site. However, again, the manner in which a particular frame is used may implicate legal concerns. For example, if the information surrounding the frame misleads the viewer as to the source of the information, the linker may be liable for trademark infringement.

While a default rule giving an entitlement to link to the linking site may be desirable for the policy reasons discussed above, that rule will lack any force unless it is reflected in the law. The following analysis considers current law, contending that it will often arrive at the appropriate result but that certain adjustments may be desirable.

IV. PUBLIC LAW IMPLICATIONS OF LINKING—THE UNEASY FIT BETWEEN COPYRIGHT AND TRADEMARK

Neither copyright nor trademark law directly addresses the conduct involved in linking. The failure of conventional

200. Note that web browsers like Netscape Navigator frame the sites the user accesses. No one to date has challenged framing by web browsers.
law to address directly new technology is not remarkable since both the Copyright and Lanham Acts were drafted and revised before the Internet became a broad-based communications medium. However, one need not conclude that these laws must be revised or that they have no guidance to offer. Rather, addressing new contexts with old laws presents an opportunity to refocus on the policies underlying those laws. This analysis highlights the differing theoretical constructs of copyright and trademark law. It suggests that trademark law will become increasingly important in cyberspace at the expense of copyright, leading to the conclusion that courts should guard against using trademark to grant copyright-type rights. It argues that courts should place renewed emphasis on and consider expanding the trademark fair use doctrine in fitting copyright and trademark law together.

A. THE COPYRIGHT LAW OF LINKING

Copyright law's ultimate goal is to advance the public welfare by encouraging the production of creative works.\footnote{See, e.g., H.R. REP. No. 2222, at 7 (1909), reprinted in 6 LEGISLATIVE HISTORY OF THE 1909 COPYRIGHT ACT, at S1, S7 (1976) ("The enactment of copyright legislation by Congress under the terms of the Constitution is not based upon any natural right that the author has in his writings... but upon the ground that the welfare of the public will be served and progress of science and useful arts will be promoted by securing to authors for limited periods the exclusive rights to their writings.").} It achieves this goal by granting exclusive rights to authors whose works meet the statutory standards.\footnote{See id.; see also 17 U.S.C. § 102 (1996) (stating requirements for protection); id. § 106 (setting forth the exclusive rights of the copyright owner).} These exclusive rights provide an incentive to create because they enable the author to recoup a return on his or her investment in creating the work.\footnote{See generally William M. Landes & Richard A. Posner, An Economic Analysis of Copyright Law, 18 J. LEGAL STUD. 325 (1989); Wendy J. Gordon, Fair Use as Market Failure: A Structural Analysis of the Betamax Case and Its Predecessors, 82 COLUM. L. REV. 1600 (1982).} Copyright's interest is in preventing others from undercutting the statutory scheme by exercising one or more of the author's exclusive rights without permission.

An obvious threshold question is whether the use of an HREF link or a frame even implicates any copyright rights. Technically, in the case of both HREF links and frames, the copy is made by the copyright owner's server at the request of
the linking site. This conduct seems analogous to that of a magazine publisher receiving a subscription request from a customer and responding by sending the magazine. No one suggests that copyright rights are implicated in that act. What then is the argument that linking implicates copyright rights?

The argument is based on the Copyright Act, current caselaw, and the way in which web browsers work. These considerations suggest that an HREF link implicates the copyright owner's exclusive right to reproduce the work in copies while the frame arguably implicates the exclusive right to prepare derivative works.

Under the Act, a copy is defined as a "material object... in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device." Recent caselaw has indicated that transitory storage in RAM qualifies as a fixation. The Clinton Administration, through its "White Paper" issued by the Working Group on Intellectual Property Rights, has indicated its belief that when a user accesses a file on an Internet server "a copy of at least the portion viewed is made in the

204. See Schlachter, supra note 71, at 45.

Most copyright experts generally believe that linking should not lead to copyright liability, because the mechanical operation of the hypertext link does not implicate one of the exclusive rights of copyright owners; a hypertext-linked URL is merely an instruction which is loaded into the user's browser software, and the browser software does all of the work from there. As a result, the server providing the hypertext link never makes a copy or otherwise processes any of the data from the linked site.

Id. (citation omitted); see also supra text accompanying notes 108-119 (explaining the technical aspects of linking).


206. HREF links and frames may also implicate the copyright owner's exclusive right to distribute copies of the work or to display the copyrighted work publicly. But see Jackson, supra note 116, at 748-52 (arguing that HREF links do not violate these rights).


user's computer. Without such copying into RAM ... no screen display would be possible. While this copy in RAM was made and sent by the copyright owner's server, it was initiated by the user. In some sense, it is unlike the magazine example in which the publisher actually processes the request. Users make the copy by downloading the web page from the server to their RAM for display on the screen.

Even if the copy in RAM does not implicate the copyright owner's exclusive rights, there is likely to be another copy on the user's hard drive. This will likely occur because web browsers often copy the contents of a web page onto the user's hard drive to allow quicker access to the page's contents as users switch back and forth between web sites. This copy may remain on the hard drive after the computer is shut off.

The exclusive right to prepare derivative works addresses conduct different from the exclusive right to reproduce. The Act defines derivative work as "a work based upon one or more preexisting works, such as a translation ... abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted." The copyright owner has the exclusive right to "prepare derivative works based upon the copyrighted work" and to authorize others to prepare such derivative works. Framing may implicate the copyright owner's exclusive right to prepare derivative works because it

209. WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE 37 (1995); see also Jackson, supra note 116, at 746 (reviewing one decision that made conflicting statements about whether browsing a document implicated the copyright owner's exclusive right of reproduction). Pamela Samuelson, Intellectual Property Rights and the Global Information Economy, COMM. ACM, Jan, 1996, at 23 (stating that authors of the White Paper consider browsing of digital works to implicate the right of reproduction because browsing requires the making of a temporary copy and noting that this contention is at odds with "plain statements in the Congressional reports").

210. This process is called "caching." See Schlachter, supra note 71, at 47 (explaining that "[caching is a loosely used term that generally refers to the process of making an extra copy of a file or set of files for more convenient retrieval"). Caching is important because it increases speed and reduces the infrastructure needed to keep the Internet running. Id.; see also Perritt, supra note 4, at 299-301 (discussing different types of caching and noting that it is widely used).

211. See Perritt, supra note 4, at 316 (noting that Netscape "preserves cached files after a Netscape session is terminated").


213. Id. § 106(2).
arguably takes the original work and recasts it in a different form.

Irrespective of which exclusive right is at issue, it is important to understand the legal distinction between direct and contributory infringement. The direct infringer is the party that makes the copy or creates the derivative work. In the case of both HREF links and frames, the party in the position of the direct infringer is the user, not the author of the linking web page. The web page author may be a contributory infringer if the author, "with knowledge of the infringing activity, induces, causes, or materially contributes to the infringing conduct" of the user.¹¹⁴ However, if the user is not an infringer or its infringement is excused, then the web site author cannot be a contributory infringer.¹¹⁵

1. The HREF Link

In assessing the copyright implications of an HREF link, most commentators have focused on the doctrine holding that a copyright license may be implied by conduct. They assert simply that the web page owner's act of placing the information on the web, knowing that the web is navigated by links, implies a license in favor of users that link to it.¹¹⁶ Thus, the user is not an infringer because he or she is licensed. Likewise, the author of the web page that incorporates the link cannot be a contributory infringer.

The use of an implied license to sanction an HREF link may represent a slight expansion of current copyright implied

¹¹⁴. Gershwin Pub'g Corp. v. Columbia Artists Mgmt, Inc., 443 F.2d 1159, 1162 (2d Cir. 1971) (footnote omitted). Note that under this definition the web browser supplier may also be a contributory infringer.

¹¹⁵. See NIMMER & NIMMER, supra note 198, § 12.04[A][3][a] at 12-86 to 12-87 ("[I]t would be more in keeping with traditional notions of third party liability to confine the inquiry into whether there can be culpable participation in an infringement to only those instances when such infringement has in fact occurred.") (footnotes omitted); Jackson, supra note 116, at 741-42 ("[T]here can be no contributory infringement without direct infringement.") (footnote omitted).

¹¹⁶. See ROSENOER, supra note 153; Freeling & Levi, supra note 99, at 55 (stating that the web site user has an implied license to view web information and that the act of posting information to an unrestricted web site is the basis for implying that license); Hartnick, supra note 101, at 5 ("Analytically, there is an implied license for the person or party creating a link so that users by linking may access material on the pointed site that may encompass copyrighted content."); see also Grogan, supra note 205, at 2-3 (discussing the use of the implied license doctrine to address certain web conduct).
license law. Most of the copyright implied license cases involve situations in which there was some type of relationship (often an employment one) between the licensor and licensee. In contrast, both the author of the web page containing the link and the user are likely to be strangers to the party owning the linked site. The basis for implying a license then is not any communication between the parties, but solely the conduct of the linked party in putting an unrestricted site on the web.

The case offering the best support for an implied license theory in this context is American Institute of Architects v. Fenichel. In that case, the court held that the plaintiff's act of placing a book of forms on the market impliedly authorized purchasers to use those forms privately. The court stated, "This conclusion follows from the nature of a book of forms. No one reads them as literature; their sole value is in their usability." The same arguments that supported a netiquette of not requiring permission to link also support implying a license under Fenichel. An unrestricted web site is placed on the market for others to view. Its value is not solely in its content, but also in its accessibility. Thus, Fenichel seems to support an implied license to use HREF links. The web site originator posts the site knowing that it will be readily accessible and, by not taking steps to limit access, accedes to the linking of others.

Nonetheless, this argument seems at odds with traditional notions of copyright. It has never been a requirement that the copyright owner take all possible steps to insulate the copyrighted material from infringement in order to qualify for protection. However, at least one commentator has noted that it

217. See, e.g., I.A.E., Inc. v. Shaver, 74 F.3d 768, 774-77 (7th Cir. 1996) (implying a license for preliminary drawings of an airport hanger where the architect prepared the drawings for a fixed fee and delivered them without warning that he would consider further use to be copyright infringement); Effects Assoc. v. Cohen, 908 F.2d 555, 558-59 (9th Cir. 1990) (implying a license to use special effects footage created at the defendant's request and delivered with the intent that the defendant copy and distribute it); Oddo v. Ries, 743 F.2d 630, 632-34 (9th Cir. 1984) (holding that a partner impliedly licensed the partnership to use portions of his previously published magazine articles that he incorporated into a manuscript written for the partnership).


219. See id. at 147.

220. Id.

221. See Schlachter, supra note 71, at 49 ("No other situation come [sic] to mind where a copyright owner's failure to use technological protective controls has the effect of diminishing their rights under copyright law.") (footnote omitted).
may be appropriate to interpret the rules differently in cyberspace. \footnote{222} He contends that

[i]f we want the Internet to work as it currently operates and as it can operate in the future, we must reduce the chilling effect of the threat of copyright litigation by changing the rules (or interpreting them differently) or placing some burden on intellectual property owners to "opt out" of the system by deploying technology controls. \footnote{223}

In some ways, this argument echoes the First Amendment concerns of the \textit{Miller} court. To facilitate the maintenance of the Internet as a true "marketplace of ideas," it may be appropriate, at least with respect to generic \texttt{HREF} links, to require web site owners to take technological steps to "opt out" of the system of free linking.

The question then arises as to whether the result under copyright law is any different if the user links directly to one of the site's interior pages. Site owners probably expect users to link first to the home page, the virtual "front door." Additionally, as discussed above, site owners may have legitimate concerns about users linking deeply within their sites. \footnote{224} This suggests that the web site owner does not grant an implied license to link to interior pages merely by placing the site on the web without restriction.

However, web site owners do place their sites on the web knowing that the URL of a home page functionally looks the same to a computer as the URL of an interior page. It simply specifies a different address. Additionally, many users add "bookmarks" to their web browsers to mark pages that they access regularly. A bookmark allows the user to travel directly to the marked page whether or not it is a home page. Thus, while initially the web site owner may expect entry though the home page, he or she knows that interior pages are likely to be accessed directly once bookmarked. The site owner can design the site intentionally to limit linking to such interior pages. These countervailing considerations indicate that, while the argument for an implied license is weaker in the context of links to interior pages than it is for links to the home page, it is still tenable.

While an implied license theory may support allowing linking without permission, the scope of the implied license is an open question. In most copyright implied license cases, the

\footnote{222. See id.}
\footnote{223. Id.}
\footnote{224. See supra text accompanying note 168.}
scope is defined by considering the communication between the parties.\textsuperscript{225} In the Internet context, there is usually no such communication.

In defining the scope of the implied license, it may be helpful to look to the fair use doctrine of copyright. Generally, fair use is an affirmative defense that excuses otherwise infringing conduct.\textsuperscript{226} Fair use might be used in two ways in assessing HREF links. Because of the lack of communication between the parties to provide a basis for objectively determining the scope of the implied license, it may be appropriate to turn to fair use as the statutory license granted in such situations. Second, fair use offers an alternative legal grounds for upholding linking without permission.\textsuperscript{227}

In assessing a claim of fair use, a court weighs the non-exclusive statutory fair use factors:

1. the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
2. the nature of the copyrighted work;
3. the amount and substantiality of the portion used in relation to the copyrighted work as a whole;
4. the effect of the use upon the potential market for or value of the copyrighted work.\textsuperscript{228}

While no one factor is dispositive, courts have often emphasized the first and the fourth.\textsuperscript{229} These factors most implicate the basic policy question of whether an author will have an incentive to create if infringements will be excused under fair use.

Even if the act of linking were an infringement, the ordinary user should be protected under fair use. The use is normally for noncommercial purposes, and it generally expands the market for the copyrighted work. Additionally, while the web page itself may be quite creative, it is also a work that must be accessed by some means in order to be read. Linking is one way to access it. Accessing the web page does make a copy of the whole work, but the fact that this one fair use factor weighs against the linker should not be dispositive.

\textsuperscript{225} See supra note 217 (citing implied license cases).
\textsuperscript{226} See NIMMER & NIMMER, supra note 193, § 13.05, at 13-149.
\textsuperscript{227} Note that this approach effectively equates the implied license and fair use inquiries.
\textsuperscript{228} 17 U.S.C. § 107(1)-(4) (1996).
Thus, copyright law is unlikely to offer meaningful redress to a firm that objects to an HREF link. The user’s act of linking should be protected by either an implied license or fair use. Because the user’s act is not infringing, neither is that of the linking site. However, to say that there is a right to link says little about what one can do with the information once it has been accessed. This is one way of characterizing the issue in the *Total News* case, where the crucial issue was whether a linking site may display the linked site in less than a full screen, “framing” it with content originating from the linking site.

2. The Frame

The exclusive right most likely to be infringed by a user employing a frame is the copyright owner’s exclusive right to prepare derivative works. This doctrine fits somewhat more comfortably in the electronic world than the exclusive right to reproduce the work in copies because an infringing derivative work does not have to be embodied in a copy. Obviously, in finding that a defendant has prepared an infringing derivative work, a necessary threshold question is whether the defendant’s work meets the statutory definition of “derivative work.”

*Paramount Pictures Corp. v. Video Broadcasting Systems, Inc.*, 231 which involved facts somewhat analogous to those in the *Total News* case, briefly addressed just that question. In *Paramount Pictures*, Paramount Home Video (PHV) distributed video cassettes of films to distributors who in turn marketed to retailers. 232 Some of the cassettes contained Pepsi commercials at their outset under a deal between PHV and Pepsi in which PHV agreed not to place other paid advertisements on the cassettes. 233 Video Broadcasting Systems, Inc. (VBS) sold advertising on the leader part of the tape of videos sold by or rented from retail stores. 234 “VBS charge[d] its advertising clients a fee for each videocassette upon which [an] advertisement [was] recorded. The video retail stores [were] in

---

230. *See supra* text accompanying note 212 (setting forth the statutory definition of “derivative work”).
232. *See id.* at 811.
233. *See id.* at 811-12.
234. *See id.* at 812.
Some of the ads, including one for Coca-Cola, overlapped the pre-recorded Pepsi ads.

Among other claims, Paramount sued for copyright infringement, claiming "that by adding the advertisements to the videocassette the defendants ... created unauthorized derivative works." In a brief analysis, the court held that the defendants' conduct constituted "unauthorized editing of a copyrighted work." Paramount Pictures, 724 F. Supp. at 819. The court distinguished its set of facts from those of three other cases. See id. Those cases deserve a brief mention because they present facts somewhat similar to those of Total News.

In WGN Continental Broadcasting Co. v. United Video, Inc., the Seventh Circuit held that United Video's act of substituting its own teletext for that supplied to it for retransmission by WGN constituted copyright infringement. 693 F.2d 622, 626 (7th Cir. 1982). The Seventh Circuit cited Gilliam v. American Broadcasting Cos., 538 F.2d 14 (2d Cir. 1976), to support its infringement finding. See WGN, 693 F.2d at 625. In Gilliam, the plaintiff writers objected to ABC's plan to broadcast edited versions of programs that the plaintiffs had licensed to ABC. See Gilliam, 538 F.2d at 17-18. The court held that unauthorized editing, if established, would exceed the scope of the license and infringe the plaintiffs' copyright. See id. at 21. The facts in Total News may be distinguished from those in both WGN and Gilliam. Total News did not substitute its ads in the same way that United Video did, and it did not engage in unauthorized editing as in Gilliam because Total News did not alter the content of the plaintiffs' sites.

The third case distinguished by Paramount Pictures was National Bank of Commerce v. Shaklee Corp., 503 F. Supp. 533 (W.D. Tex. 1980). In that case, the court, citing Gilliam, held that "the addition of advertising material to the text of a book ... was an infringement of the copyright if the addition was done without authority." Id. at 544. This case resembles Total News because Total News could be described as adding ads to the plaintiffs' sites in some way. It offers little guidance, however, because the crux of the issue in Shaklee was whether defendants had exceeded the scope of the license. See id. at 544 (noting that the contract required approval for the use of the plaintiff's name in connection with a commercial venture and that such approval was not obtained).

Paramount Pictures distinguished the cases by agreeing with Nimmer's characterization of them as involving decisions based on a moral rights theory. 724 F. Supp. at 819. The court cited his discussion, which notes that American copyright law has not adopted moral rights expressly. See id. The court further stated, "Aware of the role and stature of these decisions in the general field of copyright law, this court is reluctant to extend their holdings beyond their controlling facts." Id.; cf. Lee v. A.R.T. Co., 125 F.3d 580, 582 (7th Cir. 1997) (noting that "[u]ntil recently it was accepted wisdom that the United States did not enforce any claim of moral rights, even bowdlerization
fendants had not prepared a derivative work because "[w]hile defendants' advertisement is an original work, the court does not recognize the addition of it to a videocassette in any way recasting, transforming or adapting the motion picture. The result is not a new version of the motion picture [and therefore does not constitute a derivative work]."  

What then does qualify as a derivative work? More specifically, does Total News's act in surrounding the framed sites with advertising transform the sites so as to create a derivative work? The leading cases conflict. In *Mirage Editions, Inc. v. Albuquerque A.R.T. Co.*, the Ninth Circuit held that, where a seller removed prints from a book, mounted them on ceramic tiles, and resold them, the tiles constituted an infringing derivative work.

Both the authors of the leading copyright treatise and some courts have been critical of *Mirage*. For example, in *Lee v. Deck the Walls, Inc.*, an Illinois district court expressly disavowed it, holding that the defendants' conduct in mounting copyrighted notecards onto ceramic titles did not constitute the preparation of an infringing derivative work.

The *Lee* court stated that, in order for a work to constitute a "derivative work," it must itself be "independently copyrightable . . . [and] demonstrate the author's originality." The court stated:

"[T]he defendant purchased a copyrighted work, the purchaser made no alterations to the work itself, the purchaser did, however, "surround" the work with additional material, and the purchaser subsequently sold the work with the additions. Thus . . . the ceramic tiles do not rise to the level of an original work of authorship . . . . [Defendant] did nothing more than compete with [plaintiff] by reselling individual goods purchased from [plaintiff] in bulk. Competition is not infringement.

of a work was permitted unless the modifications produced a new work so different that it infringed the exclusive right under § 106(2)" and inviting comparison between the WGN and Gilliam cases).

240. 856 F.2d 1341 (9th Cir. 1988).
241. See id. at 1342-43.
242. See NIMMER & NIMMER, supra note 193, § 3.03, at 3-12-13 (arguing that the *Mirage* "court's analysis was in error").
244. See id. at 579-80.
245. Id. at 580-81 (citation omitted).
246. Id. at 582 (citation omitted).
In a very recent case involving facts similar to those in both the Lee and Mirage cases, the Seventh Circuit broke with the Ninth Circuit's approach, holding that where the defendant bought notecards and mounted them on ceramic tiles, it did not create an infringing derivative work. The court, while not holding that originality is required for the creation of a derivative work, did offer support for the district court's conclusion that the tiles were not original: "[The caselaw] show[s] that neither [plaintiff nor defendant] could have obtained a copyright in the card-on-a-tile, thereby not only extending the period of protection for the images but also eliminating competition in one medium of display." The court also stated that the tiles could not be derivative works because they did not transform the work in any way. It said that "[i]f mounting works a 'transformation,' then changing a painting's frame or photograph's mat equally produces a derivative work. Indeed, if [plaintiff] is right . . . then any alteration of a work, however slight, requires the author's permission."

Since Mirage, the Ninth Circuit has had occasion to address the derivative work question in the electronic context in Lewis Galoob Toys, Inc. v. Nintendo, Inc. In that case, Galoob had manufactured the "Game Genie," a device that, when inserted between the Nintendo home video game system (NES) and a Nintendo cartridge, altered certain features of Nintendo games as they appeared on the screen. In altering those features, the Game Genie did not change any of the data contained in Nintendo game cartridges. Instead, it worked by blocking certain data sent from a Nintendo cartridge to the NES and replacing that data temporarily with a new value.

The court held that the audiovisual displays produced by the Game Genie did not constitute derivative works because they "[d]id not incorporate a portion of a copyrighted work in

248. Id. at 581.
249. Id.
250. 964 F.2d 965 (9th Cir. 1992).
251. See id. at 967. The Game Genie changed the display of Nintendo's games by, for example, "increasing] the number of lives of the player's character, increasing the speed at which the character moves, and allow[ing] the character to float above obstacles." Id.
252. See id.
253. See id. (noting that the effects of the Game Genie were temporary).
some concrete or permanent form.” The court reconciled *Mirage* and *Galoob* by stating:

The ceramic tiles [in *Mirage*] physically incorporated the copyrighted works in a form that could be sold. Perhaps more importantly, sales of the tiles supplanted purchasers' demand for the underlying works. Our holding in *Mirage Editions* would have been much different if Albuquerque A.R.T. had distributed lenses that merely enabled users to view several artworks simultaneously... [T]he existence of a market does not, and cannot, determine conclusively whether a work is an infringing derivative work. For example, although there is a market for kaleidoscopes, it does not necessarily follow that kaleidoscopes create unlawful derivative works when pointed at protected artwork. The same can be said of countless other products that enhance, but do not replace, copyrighted works.254

In some ways, there are similarities between the Game Genie and the technique used in framing. In the same way that the Game Genie did not change any of the data contained in the Nintendo cartridges, the framing site does not change any of the data contained in the framed site. The framing site's HTML code simply displays the framed site in less than a full screen. Neither the HTML code nor the content of the framed site is changed. Also, like the kaleidoscope, the frame points at a protected work, displaying it in a different form. It is more a method of display than a transformation of the framed work. *Galoob* then offers support for the proposition that no derivative work is created when a user frames a site.255

In part, the lack of clarity of the cases addressing derivative works may be attributable to a lack of precision in defining the relationship between the first sale and derivative works doctrines. Under the first sale doctrine, an owner of a copy of a copyrighted work is entitled to sell or otherwise dispose of that copy without infringing the copyright owner's exclusive right to distribute copies of the copyrighted work.256 In other words, the monopoly rights of the copyright owner over distribution extend only to the “first sale,” not to the secondary market in used goods. However, the first sale doctrine by its terms does

---

254. *Id.* at 968-69.

255. *See* Samuelson, *supra* note 199, at 114 (“As was true with Galoob's Game Genie, the link document would contain no expression taken from the text of the author's being linked to. Because of this, a court deciding whether a link author had infringed the derivative work rights of authors of the documents to which he had linked would likely doubt that a derivative work had been created under the rationale given by the Ninth Circuit in *Galoob*.”).

not protect the reseller against infringement of the exclusive right to prepare derivative works.

The *Mirage* court held that the first sale doctrine shelters only sales of the particular copy that the defendant purchased, not modifications of that copy.\(^{257}\) In the *Lee* case, the court stated that if the initial sale is rightful, a resale "using a different method of display" is sheltered under the first sale doctrine.\(^{258}\) Echoing the *Lee* court, the Seventh Circuit, in addressing the claim that the tiles constituted derivative works, stated that one might suppose this is an open and shut case under the doctrine of first sale. . . . [The defendant] bought the work legitimately, mounted it on a tile, and resold what it had purchased. Because the artist could capture the value of her art's contribution to the finished product as part of the price for the original transaction, the economic rationale for protecting an adaptation as 'derivative' is absent.\(^{259}\)

If the Seventh Circuit had held the tiles to be derivative works, the defendant's resale would not have been protected under the first sale doctrine and the court would have "established through the back door an extraordinarily broad version of authors' moral rights, under which artists may block any modification of their works of which they disapprove."\(^{260}\) This seems particularly inappropriate given that the United States has historically been reluctant to adopt the concept of moral rights and, to the extent it has, has done so specifically in section 106A of the Copyright Act.\(^{261}\) Section 106A provides a limited right of attribution and integrity under a moral rights theory to authors of works of visual art.\(^{262}\) The historical reluctance to adopt moral rights coupled with the failure of section 106A to provide a moral rights basis for derivative works generally suggests strongly that no such basis was intended by

\(^{257}\) *See* Mirage Editions, Inc. v. Albuquerque A.R.T. Co., 856 F.2d 1341, 1344 (9th Cir. 1988).


\(^{259}\) *Lee* v. A.R.T. Co., 125 F.3d 580, 581 (7th Cir. 1997).

\(^{260}\) *Id.* at 583; *see also* supra note 238 (discussing cases which seem to have adopted a moral rights interpretation of what constitutes a derivative work).

\(^{261}\) 17 U.S.C. § 106A (1996) ("Rights of certain authors to attribution and integrity.").

\(^{262}\) *See generally* *id.* at (a) (providing the author with rights to claim authorship, to "prevent the use of his or her name as the author of any work of visual art which he or she did not create," to prevent certain distortions and destructions of the work and to prevent the use of his or her name in connection with such distortions or destructions).
Congress either in the Act as originally adopted or as amended by section 106A.

This analysis suggests that no derivative work is created in the act of framing. The framing site accesses the framed site legitimately, surrounds it with additional material, and "resells" the resulting product. The framed web site owner can capture the value of its content in the original transaction in which its site is accessed. The economic rationale for protecting the framed site as a derivative work is as absent in this context as it was in the Seventh Circuit's case. Even if a derivative work were found, it may be appropriate to shelter the resale under the first sale doctrine. This shelter would have to be achieved by analogy since the first sale doctrine would not apply literally. Restraints on alienation are disfavored in law generally and, since preventing the resale would effectively create moral rights in the work that Congress never intended to grant, allowing the resale to proceed seems appropriate.

Another way to consider framing is to recognize that it is the user who frames the site, not the author of the framing web page. The framing web page merely "sells" the ability to frame the site in the same way that Galoob sold the ability to speed up Nintendo games. It does not sell the framed site in the same way that Albuquerque sold tiles with the copyrighted work on them. The rightful possessor of a copyrighted work may do with it as he or she pleases, subject to the copyright owner's exclusive rights. The scope of the copyright monopoly granted to the author of the framed web page does not extend to an exclusive right to control the manner in which that page is viewed by someone with rightful access to it.

In sum, there are three ways to analyze the frame. One argument is that it is simply a method of display and no derivative work is created; therefore the right to prepare derivative works cannot be implicated. A second analysis suggests that even if a derivative work is created, policy reasons support allowing the framing site to make its contents available to users. A third analysis contends that users are impliedly licensed to obtain a copy of the web page through an HREF link. Once they have that copy, they are free to do with it as they please, subject to the copyright owner's exclusive rights. Those rights do not extend to choosing the manner in which users must view the content.

263. See Jackson, supra note 116, at 753.
Even if framing were to implicate the exclusive right to prepare derivative works, it is unlikely that the framed site's owner would have any meaningful recourse against the publisher of the framing page. The direct infringer would, as in the case of the HREF link, be the user who prepares the derivative work. Although the user's conduct is unlikely to be sheltered by an implied license, it would probably be excused by fair use, thus insulating the publisher from liability for contributory infringement.

The implied license argument that supported freedom to employ HREF links is less useful in supporting freedom to frame. While anyone publishing on the web knows from the outset the manner in which the web operates—linking through HREF links—publishers arguably could not reasonably foresee the development of the frame. Since framing is a relatively new technology and has already been the subject of litigation, it is unlikely that even now an implied license to frame exists.

Fair use, however, is likely again to offer the user shelter. As with the HREF link, the use of the work is for a non-commercial purpose and it probably expands the market for the copyrighted work. In contrast, the second fair use factor may weigh against the user. The nature of the work is usually creative, and it does not have to be viewed through a frame. At first glance, the third factor would also seem to weigh against the user since the framed site is copied in its entirety. However, in the Galoob case, the court found that the fact that "the derivative works created by the Game Genie [were] comprised almost entirely of Nintendo's copyrighted displays [did] not militate against a finding of fair use." The Galoob court relied on wording from a Supreme Court case stating that "when one considers ... that [the device at issue] merely enables a viewer to see such a work which he had been invited to witness in its entirety free of charge, the fact that the entire work is reproduced does not have its ordinary effect of militating against a finding of fair use." In framing, the HTML code of the framing site "merely enables a viewer to see" the framed site—

264. See supra note 228 and accompanying text.
266. Id. (citing Sony Corp. v. Universal Studios, Inc., 464 U.S. 417, 449-50 (1984)). In Sony, the Court held that Sony was not guilty of contributory infringement for marketing video tape recorders which allowed TV viewers to tape broadcasts. 464 U.S. at 456.
albeit in a different format—"which he had been invited to witness in its entirety free of charge." Even if the second and third factors may argue against fair use, the first and fourth, which argue in favor of it, are likely to outweigh them.267

Therefore, copyright law seems to grant an implied license to the user to employ HREF links or, alternatively, fair use rights to use HREF links. It also seems to support a fair use right to employ frames. Because the copyright law shelters the user's conduct, it also shelters the linking web page publisher from liability for contributory infringement.268 This is not, however, to say that all linking is permissible. Rather, web publishers may be liable for trademark and unfair competition torts for the manner in which they link. The key issue is how to fit unfair competition law with the copyright law and policy that generally sanctions unfettered linking.

B. TRADEMARK IMPLICATIONS OF LINKING

Trademark law is based on a somewhat different rationale than copyright law. According to Professor McCarthy, "The policies of consumer protection, property rights, economic efficiency and universal concepts of justice underlie the law of trademarks."269 Trademark infringement law protects the public by prohibiting use of the same or similar marks when such use is likely to cause confusion or to deceive.270 It furthers economic efficiency by encouraging businesses to produce quality prod-

267. See supra note 229 and accompanying text.
268. See supra text accompanying note 215.
270. See 15 U.S.C. § 1114(1) (1996), which states in pertinent part:
Any person who shall, without the consent of the registrant —
(a) use in commerce any reproduction . . . or colorable imitation of a registered mark in connection with the sale . . . of any goods or services on or in connection with which such use is likely to cause confusion, or to cause mistake, or to deceive; or
(b) reproduce . . . or colorably imitate a registered mark and apply such reproduction . . . to labels, signs . . . or advertisements intended to be used in commerce upon or in connection with the sale . . . of goods or services on or in connection with which such use is likely to cause confusion or to cause mistake or to deceive shall be liable in a civil action by the registrant . . .
ucts and reducing consumer search costs. By protecting marks against confusing uses, trademark law helps consumers identify the manufacturer that is the source of a particular product which, in turn, allows consumers to assign responsibility for product defects. This encourages businesses both to invest in the development of symbols to identify their products and to produce quality products. Finally, by protecting marks through infringement liability, trademark law protects a business's investment or property right in a particular mark.

Both Ticketmaster and the plaintiffs in Total News primarily complained about the diversion of advertising dollars away from them to the linking sites. This alleged diversion was all the more galling to the plaintiffs because the defendants were using the ability to access plaintiffs' content to attract that advertising money. The complaints thus sounded much more in unfair competition than in copyright, as the allegation was essentially that the defendants "reap[ed] where [they had] not sown" by trading on the value of the plaintiffs' businesses and marks.

Both sets of plaintiffs charged the defendants with unfair competition under section 43(a) of the Lanham Act and trademark dilution under section 43(c). Additionally, the plaintiffs in Total News included a trademark infringement claim based on the framing of their sites by Total News. An analysis of these claims suggests that some adjustments should be made to trademark law to reconcile it with copyright law, which gen-

---

271. See McCarthy, supra note 269, § 2:3, at 2-3 ("Microeconomic theory teaches that trademarks perform at least two important market functions: (1) they encourage the production of quality products; and (2) they reduce the customer's costs of shopping and making purchasing decisions.").

272. See id. § 2.4, at 2-4 (discussing the quality-signaling function of trademarks).

273. See id.

274. See id. § 2:5, at 2-6 to 2-9.


276. See supra Part II.B.

erally permits linking. In particular, the trademark dilution and unfair competition claims should be interpreted narrowly when addressing HREF links. The dilution doctrine should not be extended to cover conduct like the defendants' in Total News and Ticketmaster. Also, courts should consider adopting a new fair use test to address the permissible uses of marks as hyperlinks under section 43(a).

1. Trademark Dilution

Federal trademark dilution is a relatively new doctrine—the Federal Trademark Dilution Act became effective in 1996.\(^\text{278}\) Section 43(c) of the Lanham Act now protects “famous” marks against dilution caused by “another person's commercial use in commerce of a mark or trade name.”\(^\text{279}\) Dilution is defined as “the lessening of the capacity of a famous mark to identify and distinguish goods or services, regardless of the presence or absence of (1) competition between the owner of the famous mark and other parties, or (2) likelihood of confusion, mistake, or deception.”\(^\text{280}\) Dilution may be enjoined under section 43(c).

There are two main types of dilution: blurring and tarnishment.

Dilution by blurring occurs when the ability of the mark to identify the trademark owner as the unique source of its goods is weakened by others' use of the mark on different, non-competing goods.\(^\text{281}\) For example, “Xerox ice cream” would dilute Xerox’s trademark for its copiers by blurring the distinctiveness of the mark. In contrast, a trademark is diluted by tarnishment when it is associated with inferior products or portrayed in an unfavorable light, leading the public to believe that the trademark owner's product lacks quality.\(^\text{282}\)

It is unclear which type of dilution Ticketmaster and the plaintiffs in Total News were alleging. The Ticketmaster complaint stated that “Microsoft's commercial use and appropriation of Ticketmaster's name, marks and web site... has enhanced the value of Microsoft's web site and business and diluted and diminished the value of Ticketmaster's web site

---

278. See Prager, supra note 275, at 121 (citing January 16, 1996 as the effective date of the Act).
280. Id. § 1127.
281. See Prager, supra note 275, at 123 (describing the way blurring weakens a trademark).
282. See id. at 124.
FENCING CYBERSPACE

and business ... depriving Ticketmaster of favorable advertising business and opportunities." As one commentator stated, "There's no mystery what Microsoft is trying to do here, which is suck the cachet out of Ticketmaster. ... They're saying, 'If you want Ticketmaster, go to Sidewalk.'"

The Total News complaint alleged that the use of the trademarks as hyperlinks and the framing of the plaintiffs' sites damaged "the business and goodwill symbolized by those trademarks. ... Plaintiffs have spent considerable resources to identify these trademarks to the public as the source of the Internet versions of the print publications with which the public already is familiar." The Total News complaint also sounded in diminishment. Reuters news service licensed its content to other web publishers who paid "for the right to display the Reuters mark and content. Defendants' unauthorized conduct diminish[ed] the value of the Reuters name and content to such legitimate licensees and the selling power of the mark and content to Reuters."

Neither complaint stated a traditional cause of action in dilution. There was no allegation that the defendants in either case had used the plaintiffs' marks on a different product and thereby blurred the distinctiveness of plaintiffs' marks. Likewise, there was no allegation that defendants' use of plaintiffs' marks had tarnished the marks by bringing them into disrepute.

However, courts have shown some willingness to go beyond the blurring and tarnishment rationales in cyberspace. Since the dilution provision of the Lanham Act was enacted, one of its primary uses has been to address domain-name disputes, including domain-name squatting. Domain-name squatting refers to a practice where a party registers a domain name (assigned on a first come, first serve basis) containing a trademark and seeks to sell it to the trademark owner later.

In Panavision International, L.P. v. Toeppen, Dennis Toeppen, a notorious cyber-squatter, had registered the do-
main names "panavision.com" and "panaflex.com." Both Panavision and Panaflex are trademarks of Panavision International. When users accessed Toeppen's panavision.com site, they would see a depiction of Pana, Illinois, from the air; at the panaflex.com site, the only content was the word "hello." While Toeppen's acts arguably fit within the dilution-by-blurring doctrine, the court stated that "Toeppen's conduct varies from the two standard dilution theories," but held that "Toeppen's conduct, which prevented Panavision from using its marks in a new and important business medium, has diluted Panavision's marks within the meaning of the statute.

Unfortunately, the meaning of the statute is less clear than the Panavision court indicated. Apparently, under that court's view, dilution extends to conduct other than blurring and tarnishment, but defining that conduct is a judicial function that will vary on a case-by-case basis. The legislative his-

288. In addition to "panavision.com" and "panaflex.com," Toeppen registered other business names, including:

- deltaairlines.com
- britishairways.com
- crateandbarrel.com
- ramadainn.com
- eddiebauer.com
- greatamerica.com
- neiman-marcus.com
- northwestairlines.com
- ussteel.com
- unionpacific.com

See Intermatic Inc. v. Toeppen, 947 F. Supp. 1227, 1230 (N.D. Ill. 1996). "Toeppen is what is commonly referred to as a cyber-squatter. These individuals attempt to profit from the Internet by reserving and later reselling or licensing domain names back to the companies that spent millions of dollars developing the goodwill of the trademark." Id. at 1233 (citations omitted). Arguably, cyber-squatting could be classified as dilution by blurring because users will now associate two different products with the same name, although they may not be confused at all about the source of either product:

"The harm caused by dilution is, for example, that the distinctiveness of the name [Intermatic] and the favorable association that accrued to it by virtue of [Intermatic's] commercial success would be undermined by the use of similar names in connection with other non-competing and non-confusing products." If Toeppen were allowed to use "intermatic.com," Intermatic's name and reputation would be at Toeppen's mercy and could be associated with an unimaginable amount of messages on Toeppen's web page. "It is the same dissonance that would be produced by selling cat food under the name 'Romanoff' or baby carriages under the name 'Aston Martin.'"

Id. at 1240 (citations omitted).

289. Id. at 1300 (noting that Toeppen first registered "panavision.com," and when Panavision refused to pay $13,000 to Toeppen for that domain name, Toeppen also registered "panaflex.com").

290. See id. at 1298.

291. See id. at 1300.

292. Id. at 1304.
tory does indicate that "[t]he [federal] definition of dilution is
designed to encompass all forms of dilution recognized by the
courts, including... blurring... tarnishment... and [] dimin-
ishment."293 Ticketmaster's claim seemed to be that Microsoft's
use of its marks diminished its ability to attract advertising
dollars. The plaintiffs in Total News alleged that Total News
had diminished their goodwill as well as the value of the
Reuters name in particular.

In Wedgwood Homes, Inc. v. Lund,294 the Supreme Court of
Oregon, interpreting the Oregon antidilution statute, stated:

"Justice Felix Frankfurter [has] termed the result of association of a
name with a product through use and advertising 'commercial mag-
netism.' The anti-dilution statute was designed to prevent poaching
on [the] commercial value of a distinctive trademark."...

We hold that where a tradename possesses the distinctive quality
of favorable associational value a second use may be enjoined under
the statute whenever this is proven to be necessary in order to pre-
vent the diminution of plaintiff's name as an advertising tool among
consumers of plaintiff's product.295

This diminution in value of the name as an advertising tool
seemed to be the gravamen of both the Ticketmaster and Total
News dilution claims.

However, there are salient differences between the Wedgwood
Homes case, traditional dilution doctrine, and the Ticketmaster
and Total News claims. The Wedgwood Homes case and the
traditional dilution-by-diminishment action is really simply
another type of blurring. In the Wedgwood Homes case and
under blurring generally, there are two products, one belonging
to the mark's senior user and the other to the mark's junior
user. The junior use of the mark, while it may not confuse the
consumer, diminishes the ability of the senior user to trigger
an immediate association between itself and the mark. Addition-
ally, neither linking claim is really based on the allegation
that the mark has been diminished in advertising to consum-
ers; on the contrary, the claim is that the mark is valuable in
advertising to consumers and that the defendants are using
the mark to divert money from the advertisers and away from the
plaintiffs.

294. 659 P.2d 377 (Or. 1983).
295. Id. at 383 (citation omitted).
It is not clear that a court would find these distinctions persuasive, however, particularly given the expansive use of dilution in cyberspace. The purpose of dilution law is primarily to further the goal of protecting the property rights of the trademark owner rather than to protect consumers against confusion. To a certain extent then, in assessing any dilution claim, a court is faced primarily with the question of defining the extent of the property right in a trademark that should be protected by law.

If the property right is defined to prevent HREF linking as trademark dilution, then the copyright law that generally stood for the proposition that HREF links are permissible may be frustrated. This result might be acceptable if trademark dilution law were upholding policies specific to the dilution doctrine. However, as already explained, hyperlinking does not implicate the dilution policies of protecting the trademark owner’s property rights against blurring or tarnishment. Holding the linker liable for dilution would not advance the goals of dilution law but would instead frustrate copyright policy. Therefore, courts should refrain from expansive readings of the dilution doctrine in this context.

2. Unfair Competition

Both the Ticketmaster and Total News cases included claims for relief predicated on the defendants’ alleged violation of section 43(a)’s prohibition against the use of:

any word, term, name, symbol, or device ... or any false designation of origin, false or misleading description of fact, or false or misleading representations of fact, which—(A) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection or association of such person with another person.

Essentially, Ticketmaster and the plaintiffs in Total News alleged that consumers were likely to believe that the defendants’ use of the plaintiffs’ trademarks as HREF links was

296. See Prager, supra note 275, at 124 ("Dilution does not hurt consumers; it hurts trademarks and their owners. Trademark dilution law seeks to protect the trademark owner’s rights in a mark itself ... ").


298. The act of framing the site with advertisements may also implicate section 43(a) concerns because it may look as if the advertisers and the linked site have some association. In fact, in the complaint, the plaintiffs in Total News alleged that one of Total News’s marketing strategies was to “expressly
pursuant to an agreement—that there was an affiliation or association between the owners and users of the marks that sanctioned the defendants' use of the particular trademarks in pointing to the plaintiffs' sites.\textsuperscript{299} The federal district court in the \textit{Miller} case gave some credence to this contention by stating, "The appearance of a [mark], although completely innocuous, would definitely 'imply' to many users that permission for use had been obtained."\textsuperscript{300}

The cases on false implication of association often involve defendants who attempt to profit from the plaintiff's mark by using it in a secondary market. In recent years, movie and television studios have increasingly derived revenue from licensing the use of their characters on merchandise.\textsuperscript{301} Like-

\begin{flushright}
\textsuperscript{299} See Ticketmaster, No. 97-3055 DDP \textsuperscript{327} ("Ticketmaster asserts a claim against Microsoft... with respect to Microsoft's falsely, deceptively and misleadingly representing its association, connection or affiliation with Ticketmaster and the operation of Ticketmaster's business in Microsoft's website and its advertising."); \textit{Total News}, No. 97 Civ. 1190 (PKL) \textsuperscript{47} ("Defendants' use of Plaintiffs' marks is likely to cause and has caused consumers mistakenly to believe that some or all of the Defendants have an affiliation with Plaintiffs, or that the totalnews.com website is sponsored or approved by the Plaintiffs, or that Defendants are otherwise associated with or have obtained permission from Plaintiffs.").
\textsuperscript{301} See Robert C. Denicola, \textit{Institutional Publicity Rights: An Analysis of the Merchandising of Famous Trade Symbols}, 62 N.C. L. REV. 603, 603-04 \& n.9 (1984) (stating that "[c]haracters from movies and television shows can be found on a limitless variety of otherwise commonplace merchandise" and noting that "[r]etail products marketed under merchandising licenses are measured in the billions of dollars"); Rochelle Cooper Dreyfuss, \textit{We Are Symbols and Inhabit Symbols, So Should We Be Paying Rent? Deconstructing the Lanham Act and Rights of Publicity}, 20 COLUM.-VLA J.L. & ARTS 123, 145-46 (1996) ("[T]here are now movies created principally for their merchandising

wise, sports teams are increasingly licensing their logos for use on clothing and other merchandise.\textsuperscript{302} The efforts of such parties in seeking to protect their respective revenue streams have given rise to some of the most expansive decisions regarding trademark protection.

For example, in the \textit{Warner Bros., Inc. v. Gay Toys, Inc.}\textsuperscript{303} case, Gay Toys was enjoined from producing a car that resembled the one used by the characters in the "Dukes of Hazzard" series.\textsuperscript{304} The district court had refused to grant the injunction, noting both that Warner Brothers failed to state a misappropriation claim and that "there is nothing...to suggest that purchasers are in any way concerned with who may manufacture the car, nor...that purchasers think plaintiff controls the quality of defendant's toy or in any other way 'sponsors' it."\textsuperscript{305} The Second Circuit reversed, stating that "Gay Toys deliberately...capitalize[d] on the demand created by the 'Dukes of Hazzard'...in order to divert business and increase its sales by misleading consumers as to the source and sponsorship of the [car]."\textsuperscript{306} The court presumed confusion as to sponsorship from evidence that children associated the car sold by Gay Toys with the car used in the series.\textsuperscript{307}

Cases like \textit{Gay Toys} suggest that the likelihood of confusion as to sponsorship or affiliation is less important to a finding of unfair competition than the fact of the defendant's capitalizing on the plaintiff's investment. Such rationale has supported decisions enjoining the marketing of T-shirts with the plaintiff's logo on them\textsuperscript{308} despite the fact that some courts contend "it would be naive to conclude that the name or emblem is de-
sired because consumers believe that the product somehow originated with or was sponsored by the organization the name or emblem signifies." 309 The cases conflict in this area for much the same reason that they conflict in defining derivative works. Courts simply disagree on the extent of the markets that plaintiffs should be able to control by virtue of their ownership of an intellectual property right. Decisions like Gay Toys that expansively interpret section 43(a)'s test of sponsorship confusion are, in fact, affording the plaintiffs a federal misappropriation remedy.

When a web publisher employs an HREF link, the text setting forth the link is usually in the form of the domain name of the site to be linked, or the trade name or logo of the company owning the linked site. The linking party is usually not confused as to the source of the respective sites, nor, when users travel to a different site, do they assume that the linked site controls the quality of the linking site. Certainly, though, the linking site does capitalize on the popularity of the linked site. Users may view the linking site as the gateway to the destination site, enabling the linking site to divert advertisers from the linked site. While the lack of confusion would seem to take the case out of section 43(a), because of courts' willingness to interpret that section broadly, if the plaintiff were to produce any credible evidence of likelihood of confusion, the court may hold the HREF linker liable.

However, the use of a mark as an HREF link presents a slightly different fact pattern than those involved in the garden variety section 43(a) sponsorship claims. Most trademark infringement and section 43 cases involve use of the plaintiff's trademark to identify the defendant's goods. In contrast, in both Ticketmaster and Total News, the defendant linkers used the plaintiffs' trademarks to identify the plaintiffs' web site, the genuine product.

The case most closely on point is New Kids on the Block v. News America Publishing, Inc. 310 In that case, the rock group "New Kids on the Block" sought to prevent certain newspapers from using their name to conduct a telephone survey on the topic of which "kid" was most popular. 311 Ostensibly, the group

---

310. 971 F.2d 302 (9th Cir. 1992).
311. See id. at 304 (noting that USA Today was surveying who was "the best on the block" and the Star was surveying "which kid is the sexiest").
was concerned that, because there was a charge for the phone calls, their fans would have less money to spend on the variety of authorized New Kids products.\textsuperscript{312}

The \textit{New Kids} court set forth a nominative fair use test for cases where "the defendant uses a trademark to describe the plaintiff's product, rather than its own."\textsuperscript{313}

\[\text{[A]}\] A commercial user is entitled to a nominative fair use defense provided he meets the following three requirements: First, the product or service in question must be one not readily identifiable without use of the trademark; second, only so much of the mark or marks may be used as is reasonably necessary to identify the product or service; and third, the user must do nothing that would, in conjunction with the mark, suggest sponsorship or endorsement by the trademark holder.\textsuperscript{314}

The court held that the newspapers had met that test since: (i) it was virtually impossible to identify the New Kids without using their name; (ii) the papers used only the group's name, not its logo; and (iii) the papers did not imply that the New Kids somehow sponsored or endorsed their polls.\textsuperscript{315}

While some courts\textsuperscript{316} and commentators\textsuperscript{317} have criticized the \textit{New Kids} test, it offers a good model for the use of trademarks as hyperlinks. The \textit{New Kids} test suggests minimally that linkers should be able to use the linked sites' domain name as an HREF link so long as they do not include any suggestion of affiliation with the linked site. It is difficult to identify a site without using at least its URL or address. Using an address as a hyperlink intrudes less on the linked site's trademark rights than would use of a fanciful logo. Additionally, so long as the linking site did not affirmatively represent itself as affiliated with the destination site, it would be insulated from

\begin{itemize}
  \item \textsuperscript{312} See \textit{id}. at 309 ("[A] dollar spent calling the newspapers' 900 lines... may well be a dollar not spent on New Kids products and services, including the New Kids' own 900 numbers.").
  \item \textsuperscript{313} \textit{Id}. at 308.
  \item \textsuperscript{314} \textit{Id}.
  \item \textsuperscript{315} \textit{Id}. at 308-09.
  \item \textsuperscript{316} See, e.g., National Fed'n of the Blind, Inc. v. Loompanics Enters., Inc., 936 F. Supp. 1232, 1240-41 (D. Md. 1996) (declining to follow \textit{New Kids} "because the \textit{New Kids} test is not the law of this Circuit, and because neither the statute nor Fourth Circuit case law portend its adoption").
  \item \textsuperscript{317} See, e.g., Derek J. Westberg, Note, New Kids on the Block v. News America Publishing, Inc: New Nominative Use Defense Increases the Likelihood of Confusion Surrounding the Fair Use Defense to Trademark Infringement, 24 GOLDEN GATE U. L. REV. 685 (1994) (contending that the \textit{New Kids} test is simply a restatement of already existing fair use doctrine and, as such, is likely simply to sow confusion in the area).
\end{itemize}
trademark challenges alleging that the act of linking itself implies an association.

This approach seems appropriate given that copyright law generally supported the use of HREF links. If section 43(a) were used to give an expansive interpretation of the plaintiff’s trademark rights to prevent the linking site from referring to another, copyright policy would be frustrated. On the other hand, when section 43(a) is truly protecting against confusion rather than merely functioning as copyright or misappropriation in disguise, it is protecting an interest different from that of copyright. The *New Kids on The Block* test balances the two. It allows linking to continue in support of copyright policies—as well as the trademark policy of reducing consumer search costs—but places limits on it, both to recognize the trademark owner’s rights and the policy of preventing consumer confusion. It therefore provides an appropriate model for courts to adopt in addressing the use of trademarks as hyperlinks.

3. Trademark Infringement

The section 43(a) claim of the plaintiffs in *Total News* addressed primarily the use of the plaintiffs’ trademarks as HREF links. These plaintiffs also brought a trademark infringement claim based essentially on Total News’s conduct in framing their sites:

Defendants’ unauthorized use of Plaintiffs’ marks in connection with advertisements that have not been approved by Plaintiffs for use on their respective sites—and indeed compete with the advertisers with whom Plaintiffs have contractual arrangements—is likely to cause confusion and mistake and to deceive consumers as to the source or origin of the content and advertising depicted at Defendants’ website. In addition, the manner in which Defendants cause Plaintiffs’ websites to appear within a window on Defendants’ site, together with those new and competing advertisements, and under the totalnews.com URL, is likely to cause confusion and mistake as to the source or origin of the content and advertising depicted at Defendants’ website.318

The *Total News* case, however, differs from the garden variety trademark infringement case. As in dilution cases, most trademark infringement cases involve two products—one bearing the senior user’s mark and the other the junior user’s. It is this second use of the mark that is alleged to lead to confusion as to source. In *Total News*, the product displayed was

---

the plaintiff's genuine publication, but the content was surrounded by ads that were not a part of the plaintiff's product.

Paramount Pictures Corp. v. Video Broadcasting Systems, Inc. \(^{319}\) involved somewhat similar facts. \(^{320}\) There, the court was assessing the claim that the defendants had infringed Paramount's trademark by

pass[ing] off their [advertising] under the plaintiff's name and [ ] deceiv[ing] the public into believing that the advertisements were produced or included in the videocassette bearing Paramount's trademark with plaintiff's authorization, sponsorship or consent. . . . Plaintiffs claims under the Lanham Act are built upon two types of alleged consumer confusion. First, whether an ordinary viewer of a videocassette, which was rented or purchased from a video retail store would likely believe that Paramount actually produced and recorded the defendants' advertisement. Second, whether the ordinary consumer under the same circumstances would likely believe that Paramount is connected with or has sponsored the defendants' advertisement.\(^{321}\)

The trademark infringement claim in Total News was based primarily on the first type of confusion.\(^{322}\)


\(^{320}\) Id. at 815. For a discussion of the facts of the case, see supra text accompanying notes 231-236. Other cases that may provide guidance in assessing the trademark infringement claim are the repackaging cases. In some sense, Total News's conduct could be viewed as taking the plaintiffs' products, repackaging them, and making them available using the plaintiffs' trademarks as source identifiers. In other words, the “package” is the Total News site that reproduces the plaintiffs' trademarks as hyperlinks. When a user opens the package by clicking on the trademark link, the contents of the plaintiffs' product appear to be the plaintiffs' newspaper and the ads sold by Total News rather than the “real” contents—plaintiffs' news along with ads sold by the plaintiffs. The cases on repackaging generally stand for the proposition that the repackager is usually “entitled to inform consumers through the plaintiff's name and mark” that the plaintiff's product forms the constituent ingredients of the defendants product. See Forstmann Woolen Co. v. Murray Sices Corp., 144 F. Supp. 283, 290 (S.D.N.Y. 1956) (holding that a garment manufacturer could inform its customers of the origin of constituent fabrics using the trademarks of the manufacturer of those fabrics). Such a use of the mark is neither trademark infringement nor unfair competition. See id. The repackager may, however, be required to disclose its identity and that the product has been repackaged. See MCCARTHY, supra note 269, at 25-55 (collecting repackaging cases and culling requirements from them). The repackager also may not be permitted to emphasize the original manufacturer's trademark. See id. Total News both prominently displayed the plaintiffs' trademarks and failed to indicate that their sites had been "repackaged." Arguably, however, people accessing the sites knew exactly what Total News was doing.


\(^{322}\) The plaintiffs in Total News did not allege that framing constituted trademark infringement because of a false implication of association between
The Paramount Pictures court considered a number of factors in assessing the likelihood of consumer confusion. It emphasized that "the best evidence of a likelihood of confusion . . . is actual confusion," asserting that it was particularly important to have such evidence in that case "because of the largely undeveloped nature of this type of advertising [on VCR tapes and] the relatively recent technological phenomenon of 'VCRs' in the home." The court also emphasized that it was not in a position to determine the level of sophistication of the cassette purchaser and concluded by stating, "[T]his court is frankly skeptical that viewers actually care whether Paramount is the source or sponsor of the advertisement, since it is equally likely that consumers would attach no more significance or association to the advertisement than those that inundate them daily on television and other advertising mediums."

At least one court has distinguished Paramount Pictures. In Bellsouth Advertising & Publishing Corp. v. Real Color Pages, Inc., a Florida district court granted a preliminary injunction to Bellsouth, enjoining Real Color Pages from inserting its tourist guide containing advertising and tourist information into Bellsouth's yellow pages. The injunction was based in part on the likelihood of Bellsouth prevailing on

---

323. See Paramount Pictures, 724 F. Supp. at 814 (stating the Tenth Circuit test for likelihood of confusion, which is derived from the Restatement of Torts test). The factors listed are:

(a) the degree of similarity between the designation and the trademark or trade name in
   (i) appearance;
   (ii) pronunciation . . . ;
   (iii) verbal translation . . . ;
   (iv) suggestion;
(b) the intent of the actor in adopting the designation;
(c) the relation in use and manner of marketing between the goods or services marketed by the actor and those marketed by the other;
(d) the degree of care likely to be exercised by purchasers.

Id. (citations omitted).

324. Id. at 816 (noting also that the "alleged inferior production quality of defendants' advertisements" was a factor suggesting that evidence of actual confusion was important in the case).

325. Id. at 817.


327. See id. at 786.
causes of action for trademark infringement and unfair competition.\textsuperscript{328} The \textit{Bellsouth} court distinguished \textit{Paramount Pictures} by noting that, in contrast to \textit{Bellsouth}, the parties in \textit{Paramount Pictures} marketed dissimilar products.\textsuperscript{329} The greater the similarity between products, the more likely that consumers will be confused. The real difference between \textit{Bellsouth} and \textit{Paramount Pictures}, then, was the fact that \textit{Bellsouth} and \textit{Real Color Pages} were competing for the same advertising dollars while \textit{Paramount Pictures} and VBS were not.

In \textit{Total News}, plaintiffs alleged that they competed for the same advertising money, making the case look more like \textit{Bellsouth} than \textit{Paramount Pictures}. \textit{Paramount Pictures}, on the other hand, argues for a cautious approach because of the novelty of the Internet. It may be—and, in fact, it probably is—the case that Internet users do not care who sponsors the ads on the sites they visit and they probably pay no more attention to Internet ads than to those on TV. However, when they watch CBS and see a commercial, they assume that the advertiser purchased time from CBS and that the ad is being broadcast by CBS. Similarly, when they see an ad on an Internet site, they assume that the ad originated with the site on which it appears to reside. Thus, the conduct in which \textit{Total News} engaged in framing the plaintiffs' site is likely to have infringed the plaintiffs' trademarks by confusing users as to source.

Moreover, this seems to be the right result. The plaintiffs directly competed for the same advertisers. \textit{Total News} effectively used the plaintiffs' marks to divert money to it and then repackaged its the product to make it look as if it came from the plaintiffs. Holding \textit{Total News} liable for trademark infringement would not frustrate the copyright policy that generally supported framing. Trademark law here is enforcing a policy unrelated to copyright—protecting consumers against confusion as to source.

C. A Recap: Putting Copyright and Trademark Law Together on the Internet

Generally speaking, copyright and trademark law protect different interests and have different statutory goals—copyright to encourage the production of creative works and trademark

\textsuperscript{328} See id. at 783.

\textsuperscript{329} See id.
to protect consumers against confusion. Ostensibly, the statutes should not conflict. However, in seeking to achieve their respective statutory goals both statutes, at least in part, protect property rights. It is this protection of property rights that generates the potential for conflict. For example, copyright law generally stands for the proposition that HREF links are permissible. Yet trademark dilution law or section 43(a) may frustrate HREF linking by making it a violation of the Lanham Act if the linker has not first obtained an agreement allowing it to link. Copyright law also stands for the proposition that the act of framing is not copyright infringement, but it may possibly constitute trademark infringement or unfair competition. An analysis of these two contexts reveals clearly both how trademark and copyright law may clash as well as how they may effectively work together.

In the case of the HREF link, holding the linker liable under either section 43(a) or section 43(c) would be based more on an expansive definition of the trademark owner’s property rights than protecting consumers against confusion. Further, holding the linker liable under the Lanham Act is at odds with another trademark goal—decreasing consumer search costs. The easier it is for the consumer to navigate the Internet, the lower the cost of seeking product information. To hold the linker liable looks very much like the grant of exclusive rights to the owner of the linked site. By extension, this functions as an exclusive right in the market for finding that site. This cause of action suddenly looks much more like copyright or misappropriation than it does trademark. Yet trademark was not intended to grant the monopoly that copyright law would deny. To hold the linker liable under trademark law is to use that law to forbid conduct where trademark policies are not really implicated.

330. See supra notes 201-203 and accompanying text (discussing the policy behind copyright law); notes 269-275 and accompanying text (discussing the policy behind trademark law).

331. Cf. Klieger, supra note 269, at 865 (contending that trademark dilution law “bestows upon senior users of particular marks a property right no less, and potentially much greater, than . . . copyright”).

332. See id. at 851-63 (arguing that trademark dilution law unjustifiably grants a property right in gross to the trademark owner to the detriment of competition).

333. See id. at 854.

334. See supra Parts IV.A-B (discussing the application of trademark and copyright doctrines).
In contrast, while an unadorned frame would pass muster under both copyright and trademark law, a frame surrounded by the framer’s ads would probably survive a copyright test but not a trademark analysis. This makes some sense. In holding the framer liable for trademark infringement in such cases, the Lanham Act is protecting the consumer against source confusion, a different interest than that protected by the Copyright Act.\textsuperscript{335}

In summary, copyright and trademark law generally fit well together. However, courts must guard against using trademark to function as copyright, not just in cyberspace but as a general rule. In particular, when courts are primarily enforcing the Lanham Act’s policy of protecting the trademark owner’s property rights, they should take a closer look to ensure that trademark is not being used as de facto copyright. If it is, courts should either defer to the copyright policy or attempt to reconcile the two as in \textit{New Kids on the Block}.

V. MUCH ADO ABOUT NOTHING? WILL CONTRACT AND MISAPPROPRIATION LAW REPLACE INTELLECTUAL PROPERTY LAW ON THE INTERNET?

The preceding analysis suggested that HREF links and frames should be permissible as a matter of copyright law and should implicate trademark concerns only in traditional cases of consumer confusion. Some commentators have suggested, however, that on the Internet, public intellectual property law will largely become irrelevant or be replaced by the private law of contract and tort.\textsuperscript{336} Some contend that the Internet will be characterized by free information\textsuperscript{337} while others fear that technological innovations like electronic contracting and metered billing will effectively eliminate intellectual property protections like fair use.\textsuperscript{338} In the case of linking, sites may contractually require permission before others link to them and/or

\begin{itemize}
  \item 335. See Klieger, supra note 269, at 851-63 (asserting that the primary policy that the Lanham Act should uphold is consumer protection).
  \item 336. See, e.g., Mark A. Lemley, Dealing with Overlapping Copyrights on the Internet, 22 U. DAYTON L. REV. 548, 548-49 (1997) (noting that some commentators suggest that copyright law is irrelevant when applied to the Internet).
  \item 337. See id.
  \item 338. See Samuelson & Glushko, supra note 28, at 251-52 (describing the “Xanadu” hypertext system, which would charge for all uses of a document, thus eliminating the concept of “fair use”).
\end{itemize}
seek a remedy for misappropriation when sites link without permission. The public law of intellectual property, including its fair use provisions, may fall into disuse.

However, intellectual property laws are likely to remain important for a large part of the Internet. Boilerplate notices against linking may be unenforceable as a matter of contract law or preempted by federal copyright law. Additionally, while the nature of cyberspace lends itself to claims of misappropriation, the Second Circuit's decision in NBA v. Motorola, Inc., if followed by other circuits, will likely render many such claims difficult to sustain.

A. ON-LINE CONTRACTING: THE ULTIMATE SHRINKWRAP?

The electronic era did not introduce the form contract, but it refined it into something of an art. For years, software publishers distributed software with boilerplate license agreements called "shrinkwraps." The enforceability of such contracts, while a subject of extensive academic debate, was rarely litigated. In 1996, in the only case that involved a truly "faceless" transaction between buyer and seller, the S-
enth Circuit in *ProCD, Inc. v. Zeidenberg*[^343^] upheld a shrinkwrap under both contract and copyright law.[^344^]

The particular shrinkwrap in *ProCD* accompanied a database of phone listings that the court assumed was not protected by copyright.[^345^] The terms of the shrinkwrap were more restrictive than those of the Copyright Act because they provided that the data could only be used for noncommercial purposes.[^346^] The defendant ignored this use restriction.[^347^] The court upheld the restriction as a matter of contract law under its interpretation of Wisconsin's implementation of the Uniform Commercial Code.[^348^] The court also emphasized policy considerations, stating that "[c]ompetition among vendors, not judicial revision of a package's contents, is how consumers are protected in a market economy."[^349^] Finally, the court held that the use restriction was not preempted by the Copyright Act because it created only rights between the parties that, by their nature, differed from the exclusive rights created by the Copyright Act.[^350^]

The result in the *ProCD* case is controversial.[^351^] Some critics disagree with the contractual holding because it subjects purchasers to terms to which they never agreed.[^352^] This lack of

[^343^]: 86 F.3d 1447 (7th Cir. 1996).
[^344^]: See id. at 1449.
[^345^]: See id.
[^346^]: See id. at 1449-50 (explaining the plaintiff's marketing strategy and noting that the use restriction applied to the search and retrieval software as well as the database).
[^347^]: See id. at 1450 (explaining that the defendant bought the product and ignored the use restriction by making "the latest information available over the World Wide Web, for a price, through his corporation").
[^348^]: See id. at 1451-53.
[^349^]: Id. at 1453.
[^350^]: See id. at 1454-55.
[^352^]: Cf. Lemley, *supra* note 351, at 901 n.151 (disagreeing with *ProCD* and describing the shrinkwrap license, as "a form of 'contract' which is unilaterally drafted by the intellectual property owner and is first made available to the purchaser only after the transaction is completed"). Professor Lemley further states that "the *ProCD* decision is at odds with the majority view, which re-
consent has historically been a basis for academic challenges to enforcing the shrinkwrap and contracts of adhesion generally.\textsuperscript{353} The on-line world of the Internet offers the potential, if not to solve this problem, then at least to alleviate it, by requiring the user to consent to the terms as a condition of access to a site.

With the shrinkwrap, users were bound by an act such as opening the package even though they might never see the license agreement. With an on-line contract, however, the publisher may post a contract and condition further access to the site on the user's assent to the terms. That assent may be manifested by hitting a particular key to indicate acceptance of the contract.\textsuperscript{354} The consent that seemed somewhat illusory in the shrinkwrap context may be less so in the on-line shrinkwrap context.

However, web site owners may seek to prevent linking through the even simpler expedient of a true electronic shrinkwrap by posting a notice prohibiting linking at the site. In other words, web site owners may post the electronic equivalent of a "No Trespassing" sign to give notice that they forbid linking.\textsuperscript{355} The user's conduct in continuing to navigate the site after seeing the notice may constitute acceptance. Web site owners may then enforce breaches of this condition of use. At least one web publisher has attempted to use just this strategy. Expert Pages, a publisher of a database of experts, sued a competitor for both breach of contract and trespass for violating a use restriction posted on the site.\textsuperscript{356}

\textsuperscript{353} See O'Rourke, supra note 351, at 66 n.69 (collecting articles which discuss the legal analysis of shrinkwrap licenses).

\textsuperscript{354} See Grogan, supra note 205, at 5; Gary H. Moore & J. David Hadden, \textit{On-Line Software Distribution: New Life for 'Shrinkwrap' Licenses?}, \textit{Computer L.}, Apr. 1996, at 5 (noting that the on-line world might lessen copyright preemption concerns because "the software vendor can structure the transaction so that the user must give a positive indication of assent").

\textsuperscript{355} Such a legend might also be analyzed by considering whether it negates any implied license that would exist in its absence. See Grogan, supra note 205, at 3-5.

\textsuperscript{356} See Expert Pages v. Universal Networks, Inc., No. 97-1542 SI ENE ¶ 36-43 (N.D. Cal. May 2, 1997) (contending that defendant violated the conditions of free access, including prohibition against use of the information on the web site for solicitation and that this conduct constituted breach of contract and also arguing that the defendants' actions of entering and using interior web pages in violation of the notice constituted trespass).
From a web publisher's perspective, this solution is ideal. It is less expensive to implement than the technological fences discussed earlier\(^{357}\) and allows for maximum control over linking. It is unclear, however, whether such a strategy would be enforceable as a matter of contract law.\(^{358}\) *ProCD*’s dicta does suggest that electronic contracts for software where the user sees the terms of sale only after accessing the software are enforceable.\(^{359}\) In *Hill v. Gateway 2000, Inc.*,\(^{360}\) decided after *ProCD*, the Seventh Circuit held that the purchasers of a computer were bound by a boilerplate provision contained in a contract that the purchasers could not see until they opened the box.\(^{361}\) The court characterized *ProCD* as holding that “terms inside a box of software bind consumers who use the software after an opportunity to read the terms and to reject them by returning the product.”\(^{362}\) Likewise, “by keeping the computer [beyond the period allowed for return], the [plaintiffs] accepted Gateway’s offer, including the arbitration clause.”\(^{363}\) Taken together, *ProCD* and *Hill* offer support for enforcing boilerplate legends against linking. Under their rationale, the web site publisher is free to “invite acceptance by conduct.”\(^{364}\) The

\(^{357}\) See supra Part III.C. Note, however, that a simple legend may be a less effective “fence” than a technological obstruction.

\(^{358}\) Presumably, if the linking site uses the link prior to seeing the notification, then the notification would not bind the linking site. This situation, however, is likely to be the exception rather than the rule. A site, certainly a commercial site, would not link to another site unless it knew the contents of the site to which it were linking. See Grogan, supra note 205, at 4 (noting that some legends, literally read, would forbid the very conduct in which the user must engage to see the legend).

\(^{359}\) The *ProCD* court, in dicta, states the following:

Much software is ordered over the Internet by purchasers who have never seen a box. Increasingly software arrives by wire. There is no box; there is only a stream of electrons, a collection of information that includes data, an application program, instructions, many limitations . . . and the terms of sale. The user purchases a serial number, which activates the software's features. On [defendant's] arguments, these unboxed sales are unfettered by terms—so the seller has made a broad warranty and must pay consequential damages for any shortfalls in performance, two "promises" that if taken seriously would drive prices through the ceiling or return transactions to the horse-and-buggy age.

*ProCD*, Inc. v. Zeidenberg, 86 F.3d 1447, 1451-52 (7th Cir. 1996).

\(^{360}\) 105 F.3d 1147 (7th Cir. 1997).

\(^{361}\) See id. at 1150-51.

\(^{362}\) Id. at 1148.

\(^{363}\) Id. at 1150.

\(^{364}\) Id. at 1149 (quoting *ProCD*, 86 F.3d at 1452).
user's conduct in continuing to navigate the site may constitute
its agreement to the restriction.

It is somewhat unclear whether a boilerplate legend would
be enforceable if states were to adopt the Uniform Commercial
Code's (UCC's) proposed Article 2B on "Licenses." Under the
April, 1997 draft of Article 2B, the restriction would likely be
governed under Section 2B-308, "Mass Market Licenses." Under
section 2B-308(a), "a party adopts the terms of a mass-
market license if the party agrees or manifests assent to the
mass-market license before or in connection with the initial use
of or access to the information." The accompanying com-
ments indicate some intent to reject the holding in Hill as
comment 2 states, "Unlike common law which leaves the idea
of assent undefined, this Article places significant restrictions
procedurally on the idea of manifesting assent. These restric-
tions ensure that the record be available for review and that
the assenting party make some affirmative indication of as-
sent."

However, other sections of the draft significantly limit the
rule stated in section 2B-308(a). Under section 2B-308(f), "an
obligation . . . disclosed on the product packaging or otherwise,
before payment of the license fee, or that was part of the prod-
duct description, becomes part of the contract without manifes-
tation of assent." A web publisher might successfully contend
that the legend is disclosed on the product packaging since the
product is the web site itself. Therefore, it would be enforce-
able even in the absence of the user's manifestation of assent.

Section 2B-308(b) may be the governing rule of decision in
light of the uncertainty of the applicability of the other sec-

365. See ALI, UNIFORM COMMERCIAL CODE ARTICLE 2B, LICENSES
(Discussion Draft 1997). Under the draft, a mass market license is defined as
"a standard form that is prepared for and used in a mass market transaction."
Id. § 2B-102(a)(24). A mass market transaction, with certain exceptions, in-
cludes the following:

[A] transaction in a retail market for information, directed to the
general public as a whole under substantially the same terms for the
same information, and involving a licensee that is an end user and
acquired the information in a transaction under terms and in a
quantity consistent with an ordinary transaction in the general retail
distribution.

Id. § 2B-102(a)(25).

366. Id. § 2B-308(a).

367. Id. § 2B-308 cmt. 2. The comment then suggests Hill v. Gateway
2000, Inc., 105 F.3d 1147 (7th Cir. 1997), as a comparison. See id.

368. Id. § 2B-308(f).
tions. Under that section, a term does not become part of the contract if the term creates an obligation or imposes a limitation that:

(1) the party proposing the form should know would cause an ordinary reasonable person acquiring this type of information in the mass market to refuse the license if that party knew that the license contained the particular term.\textsuperscript{369}

This "reason to believe may be inferred from the fact that the term is bizarre or oppressive... or from the fact that it eliminates the dominant purpose of the transaction. The inference is reinforced if the adhering party never had an opportunity to read the term, or if it is illegible or otherwise hidden from view."\textsuperscript{370} However, such terms may become party of the contract "if the party that did not prepare the form manifests assent to the term."\textsuperscript{371}

It is reasonable to assert that a person connecting to the Internet believes he or she is buying access to services like email and usenet as well as the ability to access the information available on the Internet. The user also expects to buy the ability to create a web page, creating links to others. This expectation is based on netiquette, the purpose of the web and copyright law. A boilerplate legend forbidding linking would arguably be a term that is so surprising as to be unenforceable under Article 2B unless the party accessing the web page separately assented to it.

Even if the restriction would be enforceable as a matter of contract law, it may still be preempted by the Copyright Act. Enforcement of notices against linking would effectively contract around the Act's fair use provisions. Again, \textit{ProCD} offers precedent for upholding contracts generally against preemption. In holding that the contractual use restriction was not preempted, the \textit{ProCD} court made much of the distinction between contractual rights and copyright rights:

\textsuperscript{369} \textit{Id.} \S 2B-308(b)(1).
\textsuperscript{370} \textit{Id.} cmt. 7.
\textsuperscript{371} \textit{Id.} \S 2B-308(c). \textit{See also id.} cmt. 9: At the heart... of the approach adopted here is the idea that unknown terms require some closer monitoring to avoid surprising and oppressive terms. If the party is made aware of and assents to the term, there is no room for argument about whether the term was unknown to it... Basically, if a party desires to use terms in its mass market forms that are possibly within the exclusion [of \S 2B-308(b)], and does not wish to risk unenforceability, that licensor must structure the transaction to obtain assent by the licensee to the particular term.
Contracts... generally affect only their parties; strangers may do as they please, so contracts do not create 'exclusive rights.' Someone who found a copy of [plaintiff's product] on the street would not be affected by the shrinkwrap license—though the federal copyright laws of their own force would limit the finder's ability to copy or transmit the application program.\(^{372}\)

In contrast, if the information is posted on a web site, there is no effective way in which "strangers may do as they please." Agreement to the restriction is a condition of access to the site.\(^{373}\) Accordingly, ProCD may offer indirect support for preemption. Although the court's general rule was against preemption of contractual provisions, the court did also state that "we think it prudent to refrain from adopting a rule that anything with the label 'contract' is necessarily outside the preemption clause: the variations and possibilities are too numerous to foresee."\(^{374}\) Possibly, an anti-linking notification on a web page is just such a variation.

The ProCD court's preemption holding was based on its construction of section 301 of the Copyright Act.\(^{375}\) Under that section, "all legal rights that are equivalent to any of the exclusive rights within the general scope of copyright... and come within the subject matter of copyright... are governed exclusively by [copyright law]."\(^{376}\) Generally, courts have interpreted this language to mean that any cause of action that contains elements that render it "qualitatively different" from a copyright cause of action is not preempted.\(^{377}\) In contractual cases, it is usually the promise of the parties that creates the particular obligation affecting copyright rights that makes the action qualitatively different from one sounding in copyright.\(^{378}\)

---

\(^{372}\) ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1454 (7th Cir. 1996).

\(^{373}\) Arguably, if a user modified the site and then distributed it, strangers could be unfettered by the contract. This possibility seems farfetched, however, as the legend would probably be technologically protected against modification.

\(^{374}\) ProCD, 86 F.3d at 1455.

\(^{375}\) See id. at 1453-55 (assessing the preemption of the contractual use restriction under section 301(a)).


\(^{377}\) See O'Rourke, supra note 351, at 74 (describing the preemption inquiry under section 301(a)).

\(^{378}\) See Maureen A. O'Rourke, Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms, 45 DUKE L.J. 479, 521-23 (1995) (discussing the "extra element" in breach of contract cases).
In the boilerplate license context, this assent must be inferred because it is usually not expressly given.\textsuperscript{379}

Preemption may also be constitutionally based. 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 statutory scheme.\textsuperscript{380} There is a dearth of caselaw on constitutional preemption of contractual clauses under copyright law since the enactment of section 301. This scarcity may be attributable to the fact that, in many cases, the policy considerations that a court assesses in determining whether an action is qualitatively different from copyright under section 301 are the same as it would assess in a constitutional inquiry.

There is substantial academic commentary and disagreement on the question of when a contract may be preempted either constitutionally or by section 301 of the Copyright Act.\textsuperscript{381} Elsewhere, I have argued that fair use should generally be considered an alienable right in the absence of market defects.\textsuperscript{382} Additionally, in an attempt to recognize the legitimate concerns of preemption advocates, I have suggested that one way to minimize the potential for certain market defects is to

\textsuperscript{379} See id. at 528-34 (discussing implied consent as an extra element).

\textsuperscript{380} See Hines v. Davidowitz, 312 U.S. 52, 67 (1941) (footnote omitted).

\textsuperscript{381} See, e.g., I. Trotter Hardy, Copyright, Contracts, and Preemption in a Digital World, 1 U. RICH. J.L. & TECH. 2 (1995) (arguing that contract is an important source of protection for intellectual property owners); Elkin-Koren, supra note 351 (arguing for preemption in the ProCD case); Charles R. McManis, Intellectual Property Protection and Reverse Engineering of Computer Programs in the United States and the European Community, 8 HIGH TECH. L.J. 25 (1993) (arguing for preemption of reverse engineering provisions in license agreements); O'Rourke, supra note 351 (analyzing the preemption problem in the ProCD case); O'Rourke, supra note 378 (arguing against preemption of decompilation provisions in software licenses); David A. Rice, Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering, 53 U. PITT. L. REV. 543 (1992) (arguing for preemption of clauses prohibiting reverse engineering under both patent and copyright law); see also Lemley, supra note 340, at 1232 (1995) (proposing that shrinkwrap terms that "impose[] a limitation on the licensee that is inconsistent with federal intellectual property law, or that deprive[] the licensee of a right or privilege granted the licensee under federal intellectual property law" should not become part of a mass-market license).

\textsuperscript{382} See O'Rourke, supra note 378, at 551 (suggesting that decompilation provisions in negotiated and nonnegotiated software licenses should not be preempted unless "the operating system provider has sufficient power effectively either (1) to engage in exclusionary practices to prevent cloning, or (2) to leverage that power into the application market").
make clauses that restrict rights that the Copyright Act would otherwise grant conspicuous.\footnote{383. See O'Rourke, supra note 351, at 85 (suggesting that a default rules analysis of preemption argues for such a rule).}

In both analyses, a key threshold issue was defining what customers thought they bought for the price they paid. This helps to assess whether it would be reasonable to infer the customer's consent to the particular boilerplate term. This inferred consent would provide the extra element to save the clause from preemption under section 301. Additionally, the policy considerations that would generally lead one to conclude that it was reasonable to infer such consent would militate against constitutional preemption. For example, customers usually buy the functionality of a software product, rather than the ability to decompile it.\footnote{384. See O'Rourke, supra note 378, at 516 (questioning whether the end user wants to purchase the right to decompile).} Thus, absent market imperfections, provisions against decompilation should not be preempted.\footnote{385. See supra note 382.} The ProCD case provides another example. There, for the price the defendant paid, he had no reasonable expectation that he bought the right to compete with ProCD in the commercialization of the database.\footnote{386. See O'Rourke, supra note 351, at 70 ("[T]he court implied that for the price the buyer paid, the buyer should have expected the use restriction.").} Therefore, again, preemption of the term would interfere with the efficient functioning of markets without any clear benefit for copyright policies.

Preemption of contractual terms seems particularly inappropriate in a world like the Internet, which is characterized by relatively low transaction costs and large numbers of alternative sources of information. Although historically users may have expected the right to link, the market would adjust to widespread contractual provisions against linking. The price an Internet access provider could charge would change to reflect the new set of contents on and terms governing the Internet. Users would agree to the restrictions given the new pricing structure. Thus, there seems little reason not to enforce boilerplate legends against linking.

Yet, there may be broader policy reasons for arguing for preemption as a constitutional matter. Historically, fair use has been used to sanction unlicensed uses of information when transaction costs are so high that consensual transactions will
not occur.\textsuperscript{387} The Internet, by decreasing transaction costs, threatens to eliminate the fair use doctrine unless some other theoretical justification underlies it.\textsuperscript{388}

Professor Merges recently argued that the elimination of fair use in cyberspace would be undesirable and further asserted that "[f]air use will revolve less around market failure, and more around the idea of favoring certain classes of users with a statutory privilege. In economic terms, the new foundation will represent a shift from emphasizing transaction costs to emphasizing redistribution, pure and simple."\textsuperscript{389} A rule that prevents parties from contracting around fair use, particularly in a situation where we would expect efficient markets to develop, does redistribute wealth and for no apparent economic reason.

However, there are reasons for redistribution other than purely economic ones. As already noted, the Internet has been recognized by the Supreme Court as an important medium of expression.\textsuperscript{390} While a market for linking may evolve, we should ask the questions: "[W]hich class(es) of users should be allowed to bypass the presumptive market; and . . . how much revenue should the copyright holder be forced to forego to serve the goals of fair use?"\textsuperscript{391}

A rule that preempts the enforcement of boilerplate legends requiring permission to link, at least in the consumer context, would not cost the copyright holder any revenue, nor, presumably, would it impact the web site owner's incentive to create the site. Given these considerations, along with the First Amendment implications of linking, it seems reasonable to assert that boilerplate legends against linking should be constitutionally preempted when a user wants to include a hyperlink to another site on its web page for noncommercial purposes. In

\begin{flushright}
\textsuperscript{387} See Gordon, supra note 203.

\textsuperscript{388} See Merges, supra note 149, at 130 ("[B]ecause . . . electronic exchange potentially eliminates . . . market failure for digital content, fair use law will significantly shrink, or an alternative basis for fair use will be rediscovered."). But see Mark A. Lemley, The Economics of Improvement in Intellectual Property Law, 75 Tex. L. Rev. 989, 1077-83 (1997) (discussing fair use as a doctrine that may protect "transformative" uses).

\textsuperscript{389} Merges, supra note 149, at 134.

\textsuperscript{390} See, e.g., Reno v. ACLU, 117 S. Ct. 2329, 2331 (1997) (defining the Internet as "an international network of interconnected computers that enables millions of people to communicate with one another in 'cyberspace' and to access vast amounts of information from around the world").

\textsuperscript{391} Merges, supra note 149, at 135.
\end{flushright}
other words, if a web site owner wishes to require permission to link, the burden should be placed on the owner to formulate a contract that both makes that restriction conspicuous and requires an affirmative act of assent to that term. Consent would not be inferred by the mere presence of a restrictive notice.

The same arguments against these legends could be applied in the commercial context as well. However, in that context, the copyright holder may be forced to forego revenue if the legend is unenforceable against sites linking for commercial reasons. Advertising dollars may be diverted from the linked to the "gateway" linking site. This may prove undesirable and may provide a policy reason against preemption in the context of commercial sites. Yet, because even the commercial linker simply points to a site and allows users to access it easily, furthering the copyright and First Amendment goals of dissemination of information, the argument for constitutional preemption is strong, even in a commercial setting. Similarly, as in the noncommercial context, the same conspicuous contractual provision requiring affirmative assent to link could be used to regulate linking conduct.

Finally, even the approach of requiring contractual terms limiting hyperlinking to be conspicuous and separately agreed to might be troublesome from a copyright perspective, particularly if such clauses become ubiquitous. They would begin to resemble copyright rights against the world rather than contractual rights between two parties. However, current evidence indicates that while electronic contracts are increasing, information providers are hesitant to employ them because they may discourage users from entering the site. This suggests that competition is working in cyberspace and that the law should be reluctant to preempt contractual provisions when it is clear that users are aware of and have agreed to them. However, if the terms do become standard, the law should be willing to take a closer look to determine whether they should be preempted.

B. MISAPPROPRIATION—THE LIMITS OF THE "HOT NEWS" DOCTRINE

Irrespective of whether site owners use contract in one way or another to limit linking, many are likely to bring causes of action in misappropriation when a linking site uses the linked

392. *See infra* note 410.
site's content in making money. These causes of action are even more likely to fall in a copyright preemption analysis than those sounding only in contract.

Both the Ticketmaster and Total News cases—and operation of the Internet itself—involve a measure of free-riding. The ability to incorporate links to other documents enables the linking site to free-ride in some measure on the content of the linked site. But does this free-riding constitute misappropriation? Many plaintiffs are likely to assert that it does. However, the Second Circuit's decision in NBA v. Motorola, Inc., interpreting the Supreme Court's 1918 decision in International News Service v. Associated Press, suggests that in most cases, it does not.

In Motorola, the Second Circuit addressed a claim by the NBA that Motorola's practice of transmitting data on NBA games still in progress via its pagers constituted misappropriation under New York law. The court noted that historically, technology has enabled "entrepreneurs ... to use the transmissions of others in one way or another for their own profit." The question, of course, is when does that use constitute a misappropriation that is not preempted by the Copyright Act? According to the court, the surviving "hot-news" INS-like claim is limited to cases where (i) a plaintiff generates or gathers information at a cost; (ii) the information is time-sensitive; (iii) a defendants' 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.

The court narrowed its definition of the claim that would survive preemption because it believed that "[a] broad misappropriation doctrine based on amorphous concepts such as 'commercial immorality'... is preempted... [as] virtually synonymous [with] wrongful copying and... [is] in no meaningful fashion distinguishable from infringement of a copyright." The elements of the claim as defined by the court that render it different from copyright are time-sensitivity, free-riding, and

393. 105 F.3d 841 (2d Cir. 1997).
394. 248 U.S. 215 (1918).
395. NBA, 105 F.3d at 843-44.
396. Id. at 845.
397. Id.
398. Id. at 851.
the threat to the existence of the plaintiff's product. The court contended that "INS is not about ethics; it is about the protection of property rights in time-sensitive information so that the information will be made available to the public by profit seeking entrepreneurs."  

A threshold question in conducting a Motorola misappropriation inquiry is defining the product allegedly misappropriated. Presumably, it would be the information contained on the linked web site. Generally, this information is gathered at some cost by the publisher, satisfying the first prong of the test. The information, however, is not always time-sensitive. Many Internet sites are updated infrequently. In contrast, both the Ticketmaster site and the sites of the plaintiff news publishers in Total News would probably be considered to contain time-sensitive information, thus satisfying the second prong of the test. Third, as already discussed, the ability to link does provide the linking site with the ability to free-ride on the information contained at the linked site. Nevertheless, it is difficult to see how that free-riding constitutes misappropriation since the linker simply directs the user to content that the plaintiff usually freely gives away.

Even if the linker's conduct is considered misappropriation, such claims are likely to founder on the fourth or fifth elements of the Motorola test. The fourth element is the existence of direct competition between the plaintiff and defendant. Often, a link functions simply as a pointer to related information. This seems to have been the case in Ticketmaster. Microsoft's product was a city guide that happened to contain information on local events, including where to buy tickets. Ticketmaster's product was event information as well as ticket sales. If users wanted to buy tickets, they had to go to the Ticketmaster site, either directly or by linking.

At first blush, it seems that the Total News site and the news organizations' sites were direct competitors. All of the sites offered the news of the day. However, a closer look at the products suggests a different conclusion. The Total News product was not the news. Instead, it was an index to the news. Also, the complaint was not really about the misappro-

399. See id. at 853. While the court makes this assertion, it is questionable whether, in fact, it is correct. See JANE C. GINSBURG, COPYRIGHT, COMMON LAW AND SUI GENERIS PROTECTION OF DATABASES IN THE U.S. AND ABROAD, 17-18 (1997) (on file with author).

400. Motorola, 105 F.3d at 853.
The misappropriation argument is thus derivative: "Defendants directly compete for advertising revenue with Plaintiffs, and Defendants' business—the sale of advertising space—depends entirely on the commercial value of the news and other material appearing on Plaintiffs' websites."\(^{401}\)

If the test for misappropriation is direct competition for the same advertising dollars, then almost any web site using the advertising-based revenue model and linking to another site on the same model misappropriates the linked site's content. In other words, the competition for Internet advertising dollars is fierce, and the market is segmented more by site traffic than it is by product. Thus, sites with noncompetitive information may compete for the same advertising dollars. The test then should perhaps be whether the plaintiff and defendant compete directly with each other in providing the particular information on the web and whether they compete for the same pool of advertising money. Total News may pass this test while Ticketmaster would not.

The final hurdle for a plaintiff in a misappropriation case is to demonstrate that the defendant's free-riding threatens the quality or very existence of the plaintiff's product. The court did not provide guidance as to how a plaintiff would go about proving such a threat.

In fact, it seems rather unlikely that linking generally would threaten the existence of the plaintiff's product because a generic HREF link actually enhances the use of the linked site and the market for its products. It is somewhat more tenable to argue that the free-riding involved in framing could threaten the plaintiff site's existence. However, it is unlikely that most plaintiffs would pass this final requirement given that (i) it is fairly inexpensive to publish a web site; (ii) the marginal cost of distributing the information on the web is near zero; and (iii) web publishers often derive revenue from ancillary services other than advertising.\(^{402}\)

---


402. See Schlachter, supra note 71, at 22-30 (explaining that the marginal cost of Internet distribution is near zero, that this low cost enables content providers to make information available for free, and that fixed costs are re-
FENCING CYBERSPACE

This is not to say, however, that misappropriation actions based on conduct on the Internet will never be successful, particularly since there is no assurance that courts outside the Second Circuit will adopt the Motorola test. Instead, it suggests that only a few misappropriation actions will survive a Motorola test in jurisdictions in which that approach is adopted. However, in cases where there is some confidential relationship between the parties conducting the electronic transaction, traditional misappropriation doctrine should still apply even in Motorola jurisdictions, and such a claim should survive a copyright preemption challenge. This is most likely to occur when the parties have entered into a true contract.

VI. THE "ZONING" OF THE INTERNET

The preceding analysis suggests that linking should generally be permissible under copyright law and that trademark law should be narrowly interpreted to limit linking only in cases involving consumer confusion. Additionally, it suggests that, while electronic contracts should generally be enforceable, boilerplate legends prohibiting linking should be preempted by copyright law, at least in a noncommercial setting. Finally, it concludes that many misappropriation actions are likely to be preempted by copyright law.

While the analysis focuses on the narrow issue of linking, it offers some insight into the broader question of how the Internet is likely to evolve over time. At a superficial level, the analysis demonstrates how legal arguments are entwined with an understanding of the technology and highlights the question of whether the state of technology should influence the selection of legal rules. At a deeper level, it predicts that the Internet is likely to evolve into a "zoned" system with both open and closed areas.403

When commercial web publishers post information, they consider the value of that information itself as well as the covered through other services in addition to advertising).

403. See Perritt, supra note 4, at 323-24 (discussing the "[f]uture of [open systems] and predicting the "merger of... open and closed architectures" as "new Internet technologies likely will permit certain features of [the approaches of closed systems] to exist alongside traditional open architectures in the Internet"); see generally Lessig, supra note 4, at 1408-11 ("[T]here is a movement to increase the sophistication of the architecture in cyberspace, to facilitate boundaries rather than borders. It is the movement to bring zoning to cyberspace... One alternative [for cyberspace] is an open space; the other closed [,although] these are [not] the only choices."
manner that they plan to profit from the availability of that information on the Internet. For example, a web site may contain product information. The site owner may seek revenue from product sales or sales of value-added services, but not from sales of the posted information itself. Instead, the site owner distributes that information for free because the broader the dissemination of the information, the higher the revenue realized on sales. In contrast, a web site that is the electronic equivalent of a magazine may seek revenue from subscriptions. There, the value of the site is based both on its content and the Internet's ability to reach a large number of customers. The information itself has value for which users are willing to pay.

When posting information, web publishers also consider what means are available to prevent others from using the information in an unauthorized manner. These means include both legal and technological protections. Intuitively, public intellectual property law would seem to provide the cheapest legal protection. Web publishers would not have to do anything more than meet the relevant statutory requirements for protection to obtain certain legal rights. It would probably be somewhat more expensive for site owners to protect their information through the private law of contract. Even if a boilerplate form were used, site owners would still have to expend resources to draft and post it. However, there may be enforcement advantages to using contract to supplement intellectual property protection because a breach of contract claim may simply be easier and cheaper to maintain than an action for infringement.

In addition to relying on public and private law to protect information, providers may also engage in self-help by building technological protections against unauthorized use. Technological fixes may or may not be more expensive than relying on public or private law. However, it seems likely that in many

404. See generally Hardy, supra note 3, at 221 (stating that companies may not be concerned about restricting the copying of advertising materials).

405. See generally id. (stating that, while companies may not object to the copying of their advertising materials, they "would certainly want to prevent the copying of its updating database—the means by which it stays in business").

406. See supra note 8.

407. See Hardy, supra note 3, at 247 (discussing technological means of detecting unauthorized access and stating that "we cannot be sure that the
cases, technology will in fact be a cheaper alternative since the more effective the technology, the less likely any litigation with its concomitant high costs, would occur.408

Obviously, the less valuable the information, the fewer the protections the site owner is likely to view as cost-effective. For example, the owner of the site containing product information is quite likely solely to rely on public intellectual property law to protect that information. In contrast, the more valuable the information, the more expense the site owner will be willing to incur to safeguard it. For example, the publisher of the electronic magazine may use both private contract and technological protections to safeguard against unauthorized access and use.

Consequently, the Internet is likely to evolve into a “place” characterized by both open and closed areas. The open areas are likely to contain less valuable information and be characterized by reliance on public intellectual property law. Inhabitants of the open areas, if they seek income at all, will probably derive it from value-added services rather than from content itself. The closed areas are likely to contain the most valuable information and be characterized by both contractual and technological restrictions. As fencing technology declines in cost, its use is likely to increase, leading to more partially closed areas of the Internet.409 However, ultimately, the market will determine which sites are open and which closed.410

---

408. See generally Lessig, supra note 4, at 1410 (noting the importance of engineers in determining the shape of the Internet since “[engineers write the code; the code defines the architectures, and the architectures define what is possible within a certain social space”).

409. See Hardy, supra note 3, at 235 (citing Professor Ellickson to support the proposition that “as the costs of drawing, monitoring, and preventing entry to property fall, one can predict an increase in the amount of ‘parcelization’ of property”) (footnote omitted).

410. See Grogan, supra note 205, at 5 (“Many sites will opt not to use contractual protections because requiring the user to assent to a contract is likely to discourage some users from using the site .... Any barriers that impede a user’s access to and utilization of the web site may reduce traffic to the site, with concomitant reductions in advertising revenues, electronic commerce sales, and other potentially profit-making activities emanating from such traffic.”). But see Lessig, supra note 4, at 1411 (“Individual choice might aggregate in a way that individuals collectively do not want. Individual choices are made within a particular architecture; but they may yield an architecture different from what the collective might want .... [A] perfect technology of control does not entail a perfect technology of justice, and it is this that commends a continual check.”).
The implication for lawmakers is largely a passive one. Regulators could force sites to be more or less “open,” but this seems particularly inappropriate in a new medium characterized both by rapidly changing technology and relatively low transaction costs. Instead, the better approach is one that allows the Internet to evolve against the backdrop of current law with the minor adjustments suggested above.

CONCLUSION

The Internet is still evolving as a medium of broad-based communication. While the law will undeniably have some role in the shape of the Internet, technology will largely determine its future direction simply because technology develops much faster than the law. The real challenge for the law will be in helping the Internet to realize its potential as the new “marketplace of ideas” in a manner that maximizes the quality and quantity of information available while recognizing the legitimate interests of both information consumers and providers.