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Alfred C. Yen

*Boston College Law School, alfred.yen@bc.edu*

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A Preliminary Economic Analysis of Napster: Internet Technology, Copyright Liability, and the Possibility of Coasean Bargaining

By Alfred C. Yen

I. Introduction

This Article offers a preliminary economic analysis of whether it is desirable to hold Napster, Inc. liable for copyright infringement committed by Napster users. The Article does so because the recording industry’s recent lawsuit against Napster, Inc. offers a prominent example of the claim that the efficient production and distribution of copyrightable subject matter require broad injunctive relief against providers of certain

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1 Napster, Inc. is a corporation whose principal business is the operation Napster. Napster itself is an Internet based service that combines software distributed to users and a directory of users. This combination allows a Napster user to search for and download MP3 music files from the computers of all other Napster users who are logged on to the Napster system. For a more detailed explanation of Napster and the Napster system, see infra notes 28-33 and accompanying text.


4 This Article proceeds on the assumption that copyright liability against Napster, Inc. would result in an injunction against Napster, Inc. as well as damages. It does so because the recording industry has requested an injunction and the District Court has already granted such an injunction. See supra note 3, infra note 5. Additionally, courts generally grant injunctive relief against copyright infringers even though such relief is not mandatory under the copyright code. See 17 U.S.C. §502 (providing that courts “may” grant injunctive relief); Mark A. Lemley and Eugene Volokh, Freedom of Speech and Injunctions in Intellectual Property
Internet technology. If this argument is accepted, profound consequences for the Internet’s development may follow because copyright liability against Napster will give the recording industry significant control over Napster and - by application of precedent - other similar technologies. Such control could prove undesirable because the recording industry may not efficiently develop and exploit technology like Napster. This drag on the Internet’s development could be warranted if leaving Napster alone would substantially diminish the supply of recorded music. However, if that supply is not at risk, it may be wiser to leave Napster alone.

The importance of the Napster case has its roots in the very operation of the Internet. The Internet is a vast network of linked computers that share information with one another. This makes it simple for Internet users to do things that copyright holders want money for. Modern technology allows the inexpensive digitization of almost any form of copyrighted material. Texts, images, music, sound recordings, and even movies quickly find their way onto the Internet, where potentially millions of people can download them for personal use. A loud debate has ensued, finding its way onto the front pages of national newspapers and magazines.
On one side of the debate are copyright holders, who see the Internet as both a threat to their profits and an opportunity to control practically every use of copyrighted material. The Internet threatens copyright holders because the widespread, unauthorized availability of copyrighted work may interfere with copyright holders’ ability to get paid for use of their works.\(^\text{10}\) At the same time, however, Internet technology offers copyright holders the tantalizing prospect of achieving complete, or nearly complete, control over their works. It is now becoming possible to place reasonably secure “digital locks” around any sort of Internet content.\(^\text{11}\) Those who want to see the material must then pay a license fee for access, even if the material in question is otherwise in the public domain.\(^\text{12}\) The ability of computers to monitor and charge for literally millions of such transactions means that copyright holders could conceivably raise revenue from practically every use of copyrighted material.

On the other side of the debate are various consumer and Internet user groups, as well as makers of electronic and computer equipment. Consumers and users have argued that the Internet provides no excuse for altering a fundamental balance between copyright holders and consumers.\(^\text{13}\) The mere fact that technology makes it easy to charge for uses that previously had been enjoyed for free does not mean that copyright law should be amended or interpreted to so provide. Instead, copyright should allow users to use files on the Internet in ways analogous to free uses in real space.\(^\text{14}\) Indeed, some would even challenge the very applicability of copyright to the Internet.\(^\text{15}\) Electronic and computer


\(^\text{12}\) See Jonathan Zittrain, *supra* note 11, at 1202-1221 (describing how technological measures can control access to material in a way that makes copyright unnecessary); Eric Schlachter, *supra* note 11, at 40. See also 17 U.S.C. §1201 (prohibiting circumvention of digital locks without regard to whether the “work” in question is copyrighted).

\(^\text{13}\) See Julie Cohen, A Right to Read Anonymously: A Closer Look at "Copyright Management" in Cyberspace, 28 Conn. L. Rev. 981 (1996) (analyzing effect of copyright management schemes on freedom of thought and expression); Jessica Litman, *Revising Copyright for the Information Age*, 75 OR. L. REV. 19 (1996) (describing how the so-called “White Paper” altered important aspects of copyright law in the name of adapting those principles to the Internet); Joseph Liu, *Owning Digital Copies*, WM. & MARY L. REV. __ (forthcoming 2001) (arguing that traditional notions about how works should be accessed and used should not be abandoned in favor of complete control by copyright holders).


equipment manufacturers might not go quite this far, but they still contend that restricting the availability and use of Napster could slow technological progress.\footnote{See Amicus Curiae Brief of the Consumer Electronics Association, Digital Future Coalition, and the Computer & Communications Industry Association in Support of Reversal at 2-4, (9th Cir. 2000), A&M Records et al. v. Napster (Nos. 00-16401 and 00-16403), available at http://www.napster.com/pressroom/legal.html (arguing that an injunction against Napster would threaten technology used by consumers to gain access to information and potentially discourage further development of such technology).}

Copyright holders have responded with organized efforts to protect their interests. They have already successfully lobbied Congress for amendments to the copyright law that make it illegal to circumvent digital locks.\footnote{See 17 U.S.C. §1201 (prohibiting circumvention of technological measures that control access to copyrighted works).} They have also expanded the targets for copyright litigation to include providers of the technology that makes such sharing possible. For example, Internet Service Providers (“ISPs”) have found themselves defending lawsuits over the behavior of their users.\footnote{See Marobie-FL Inc. v. National Ass’n of Fire Equip. Distrub., 983 F. Supp. 1167 (N.D. Ill 1997); Religious Tech. Ctr. v. Netcom On-Line Communication Servs., 907 F. Supp. 1361 (N.D. Cal. 1995).}

These suits may signal profound change in the way copyright operates in our society. Although the copyright code does not explicitly provide a right of action against one party for copyright infringement committed by another, courts have created such causes of action under the judge-made doctrines of vicarious and contributory liability.\footnote{Shapiro, Bernstein & Co. v. H.L. Gree Co. 316 F.2d 304 (2d Cir. 1964) (holding department store vicariously liable in copyright for behavior of its concessionaire); Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259 (9th Cir. 1996) (holding swap meet propietor vicariously and contributorily liable for behavior of booth renters); Gershwin Publ’g Corp. v. Columbia Artists Management, Inc., 443 F.2d 1159 (2d Cir. 1972) (holding manager contributorily liable for behavior of artist). See also Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 434-442 (1984) (recognizing causes of action in contributory and vicarious copyright liability, but refusing to find liability against manufacturer and seller of video recorders).} Nevertheless, it is probably safe to say that these doctrines did not heavily influence the development of copyright law before the rise of the Internet. The vast majority of important copyright cases before then involved claims against the person or entity that actually committed the alleged infringement.\footnote{Sony, supra note 19, is perhaps the lone exception. That case raised issues quite similar to those involved in suits against Internet technology providers. In Sony, movie producers claimed liability against Sony for making and selling technology that made the copying of television programs possible. For purposes of this Article, it is interesting to note that the Supreme Court found against copyright owners in Sony despite claims that doing so would seriously undermine the movie industry. For example, Jack Valenti, president of the Motion Picture Association of America, has been quoted saying that the video cassette recorder "is to the American film producer and the American public as the Boston Strangler is to the woman alone." Adam Liptak, Is Litigation the Best Way to Tame New Technology?, The New York Times, September 2, 2000 (Art & Ideas/Cultural Desk). Perhaps tellingly for the dispute over Napster, those claims of doom have proven unsubstantiated. See also Diane Lenheer Zimmerman, ___________ , __ U. Dayton L. Rev. __ (2001) (discussing the relationship between uncontrolled photocopying, copyright royalties, and the publication of academic journals).}
By contrast, the Internet age is full of claims for vicarious and contributory infringement against Internet technology providers. Copyright holders and Internet Service Providers seemed ready for protracted litigation before striking a compromise in the Digital Millennium Copyright Act of 1999. Since then, various members of the entertainment industry have filed suit against Scour and Napster, Inc., two companies which provide technology that facilitate the sharing of copyrighted files on the Internet. These developments make perfect sense because the Internet makes infringement easy to commit and Internet users are not attractive targets for suit. They may be difficult to identify or find, and their pocketbooks often are not deep enough to pay for monetary judgments.

The basic policy argument in favor of imposing vicarious or contributory copyright infringement on the providers of Internet technology is quite straightforward. Copyright infringement is rampant on the Internet. Such infringement, if allowed to continue, will damage copyright’s economic incentives for the production of new works. This will in turn kill off the supply of those works, leaving society worse off. The surest way to avoid such catastrophe is to force those who provide Internet technology to pay for those copyright losses. These providers will then have the incentive to stop copyright infringement on the Internet. To the extent that this cannot be accomplished, technology providers will behave as insurers by passing the cost of damages along to their customers, thereby raising compensation for the victims of copyright infringement.

If this argument proves successful, copyright law will enable copyright holders to assert plausible claims against a wide variety of as yet unknown providers of Internet technology. Consider how the advent of enterprise liability in tort law has forced all manufacturers to reckon with the ways customers might misuse new products, even if manufacturers sincerely do not believe that their behavior is responsible for the injuries caused by misuse. Something similar could happen with copyright law. Technology that makes the Internet easier to use will invariably make copyright infringement easier to commit because the Internet operates by making copies. Why not make those technology providers reckon with the infringement their technology facilitates?

It is beyond the scope of this Article to examine all of the fascinating implications that will arise if the Internet drives copyright law in the direction of broad enterprise liability. It is, however, possible to provide a preliminary examination of one important component of the argument made by those favoring such liability. The basic economic

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23 See Working Group Report, supra note 21, at 117-18 (arguing that such liability is desirable and the Internet Service Providers can spread costs among users). See also Alfred C. Yen, Internet Service Provider Liability for Subscriber Copyright Infringement, Enterprise Liability, and the First Amendment, 88 GEO. L. J. 1833 (2000) (contending that such liability is undesirable and not consistent with the application of enterprise liability in tort law).
argument for extending liability against Internet technology providers treats providers of Internet technology like polluters of copyright-based businesses. Just as landowners downstream from chemical plants become victims of discharge into rivers, copyright holders become the “victims” of “pollution” (i.e. infringement) that results from the provision of Internet technology. In both cases, the defendants (Internet technology providers and chemical plants) get characterized as enterprises imposing external costs on their neighbors (copyright holders and downstream landowners). Basic economics therefore requires the internalization of these external costs for the proper functioning of our market based economy. Accordingly, failure to insure payments to copyright holders by extending copyright liability to Internet technology providers will result in the underproduction of copyrighted works.24

This Article questions the persuasiveness of the analysis described above by analyzing the economic ramifications of the Napster case. As will be shown in the pages that follow, Internet technology providers like Napster, Inc. confer both external costs and benefits on copyright-based businesses. Moreover, copyright-based businesses themselves confer economic costs and benefits on Internet technology providers. The Article then applies some basic economic principles derived from the Coase theorem to show that Napster probably does not, at least in the long run, threaten the efficient supply of music to consumers. Courts should therefore be very cautious about extending copyright liability against technologies like Napster, especially injunctive relief, in the absence of more information.

II. A Description of Napster and the Copyright Claim against it

24 This Article confines itself to the economic aspects of the Napster question. In so doing, it recognizes that there may be other bases on which to decide the question of Napster Inc.’s liability. First, one could state that question of Napster Inc.’s liability is clearly settled by existing positive law. However, this Article takes the position that the question is far from settled as a matter of positive law. See infra notes 34-39 and accompanying text.

Second, one could resolve Napster’s liability with non-economic concepts sounding in non-utilitarian justice and equity. According to the conventional jurisprudence of American copyright law, justice and equity do not provide the rationale for copyright’s existence. Instead, copyright exists for the utilitarian purpose of promoting the progress science and art. See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 reh’g denied 465 U.S. 1112 (1984) (characertizing copyright as “intended to motivate the creative activity of authors and inventors by the provision of a special reward”); Mazer v. Stein, 347 U.S. 201, 219, reh’g denied 347 U.S. 949 (1954) (“The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare…”). This utilitarianism drives parties to frame copyright policy arguments in economic terms, even though such relentless utilitarianism may not be descriptively or normatively correct. See Alfred C. Yen, Restoring the Natural Law: Copyright as Labor and Possession, 51 OHIO ST. L. J. 517 (1990) (arguing that noneconomic theories of natural law are descriptively part of American copyright’s development and normatively required as a backdrop to economic theories of copyright); Wendy J. Gordon, An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory, 41 STAN. L. REV. 1343 (1990).

25 See Robert Cooter & Thomas Ulen, LAW AND ECONOMICS, 2D ED. 38-40 (1997) (describing the effects of externalities on the efficient production of goods). See also infra notes 40-46 and accompanying text (illustrating uninternalized externalities can interfere with the efficient production of goods).
The story of Napster begins with MP3. Before MP3, the sheer size of digital music files made their transfer over the Internet cumbersome.\textsuperscript{26} MP3 offered compression that diminished the size of music files, thereby making it practical to send music over the Internet. Not surprisingly, the wide availability of music on the Internet quickly followed the wide availability of MP3. This wide availability did not, however, make it easy for consumers to find the music they desired because individual Internet sites generally offered only a few songs apiece. A user looking for a specific song might have to search dozens of Internet sites before finding the desired music, or even fail in the search completely.\textsuperscript{27}

Napster software offers a partial solution to this problem by allowing its users to search the directories of all other users simultaneously, and then download the desired MP3 files.\textsuperscript{28} Napster users who log on to the Internet automatically communicate with a server maintained by Napster, Inc. That server keeps track of all Napster users who happen to be logged on at a given time and the MP3 files that they have made available for sharing.\textsuperscript{29} A user looking for James Taylor’s “Fire and Rain” need only type the title or artist, and Napster returns a listing of Napster users who have that MP3 file available for downloading. A click of the mouse sends a command from the user’s computer to the computer containing the desired file, and the file is then copied and sent to the requesting user. Napster also allows its users to communicate directly with one another through a “chatting” function.\textsuperscript{30}

Napster’s obvious value is its ability to greatly speed the location and retrieval of MP3 files. Its ease of use makes it popular among Internet music lovers, with approximately 36 million people having signed up for the service.\textsuperscript{31} Of course, the recording industry finds such widespread copying of music files most threatening. It fears that Internet users will get all of their music from Napster without paying for the privilege.\textsuperscript{32} Not surprisingly, the recording industry has sued Napster in copyright,

\begin{itemize}
  \item \textsuperscript{26} See Lauren Willoughby, \textit{Technology Doesn’t have to be Scary}, Gannett News Service, April 13, 2000 (available at 2000 WL 4397758) (reporting that use of MP3 compression reduces downloading time for a 2 minute song from 1 hour to about 5 minutes over a 56k modem).
  \item \textsuperscript{27} See Karl Taro Greenfield, \textit{Meet the Napster}, Time Magazine, October 2, 2000 at 60, 63 (referring to Napster’s creation in response to difficulties associated with finding MP3 files on the Internet.)
  \item \textsuperscript{28} Order of the District Court, at C5-C7.
  \item \textsuperscript{29} Id.
  \item \textsuperscript{30} Order of the District Court, at C2, C11.
  \item \textsuperscript{31} Andrew Morse, \textit{Judging Napster}, THE STANDARD, October 27, 2000. Available at <http://www.thestandard.net/article/display/0,1151,19760,00.html> (visited October 30, 2000).
  \item \textsuperscript{32} It is not presently clear what Internet users in fact get all of their music from Napster without paying, as studies of CD sales in Napster’s wake conflict. Napster, Inc. argues that CD sales have actually risen, so no loss to the recording industry exists. The recording industry has countered with its own study showing that sales of CDs near college campuses are down, precisely the area where Napster’s heaviest users exist. \textit{Compare} Motion for Preliminary Injunction at 26-31, A&M Records, Inc. v. Napster; Opposition of Defendant Napster, Inc. to Plaintiffs’ Motion for Preliminary Injunction at 28-32; \textit{Study: Napster Fans Still Buy CDs}, AD AGE, August 7, 2000 available at <http://www.adage.com/interactive/daily/archives/20000807/id20000807-16.html>; Lisa M. Bowman, \textit{Study: Napster Boosts CD Sales: Jupiter survey says people whose use services such as Napster are 45 percent more likely to buy music}, ZDNet News, July 21, 2000, available at <http://www.zdnet.com/zdnn/stories/news/0,4586,2605961,00.html?chkpt=zdnn000>; Anna Wilde
\end{itemize}
arguing for an injunction against Napster’s use in the unauthorized copying of copyrighted files and that Napster owes the recording industry royalties for each download made by a Napster user.\footnote{Notice of Joint Motion and Joint Motion of Plaintiffs for Preliminary Injunction at ii-iii, (N.D.Ca. 2000), A&M Records, Inc. et al. v. Napster, available at http://www.riaa.com/napster_legal.cfm (Case No. C-99-5183 MHP).}

The recording industry’s claim against Napster is not open and shut. The intuitive defense for Napster is that Napster itself commits no copyright infringement, and that responsibility for improper use of Napster rests solely with its users.\footnote{The recording industry can, however, point to two doctrines – vicarious liability and contributory liability - which may impose liability against Napster.} The recording industry can, however, point to two doctrines – vicarious liability and contributory liability - which may impose liability against Napster.

Courts have held defendants vicariously liable for another’s copyright infringement when the defendant has “the right and ability to supervise” the primary infringer and “a direct financial interest in the exploitation of copyrighted materials.”\footnote{Courts have held defendants vicariously liable for another’s copyright infringement when the defendant has “the right and ability to supervise” the primary infringer and “a direct financial interest in the exploitation of copyrighted materials.”} On the one hand, this standard arguably applies to Napster because Napster could, at least in theory, block the transfer of copyrighted files or terminate the access of users who commit infringement.\footnote{On the one hand, this standard arguably applies to Napster because Napster could, at least in theory, block the transfer of copyrighted files or terminate the access of users who commit infringement.} Additionally, Napster profits from such infringement because

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\footnote{Success of a contributory or vicarious liability claim against Napster, Inc. requires a finding that the behavior of Napster users constitutes copyright infringement. Napster, Inc. has argued that Napster users do not commit infringement when they download files from each other. \textit{See} Opposition of Defendant Napster, Inc. to Plaintiffs’ Motion for Preliminary Injunction, at 1, 5-8 (N.D. Ca. 2000), available at http://www.riaa.com/napster_legal.cfm (Case No. C-99-5183 MHP); Reply Brief of Appellant Napster, Inc., at 3-11 (9th Cir. 2000), available at http://www.riaa.com/napster_legal.cfm (Appeal Nos. 00-16401 and 00-16403). Without taking a position on this issue, this Article assumes that at least some Napster users commit copyright infringement.}


\footnote{The possibility of such blocking is hotly contested in the Napster litigation. The plaintiffs argue that Napster could store the titles of copyrighted songs in a database that could be compared against the titles of a given user’s files. If a match occurs, Napster’s server could then refuse to list those files as available for downloading. Brief for Plaintiffs/Appellees, at 18-19. Napster’s defenders argue that Napster users can easily circumvent such efforts by misspelling the titles of songs in a recognizable way. This would make the songs available for downloading, and presumably Napster would again be in court as a copyright defendant. \textit{See} No. C 99-5183 MHP No. C 00-0074 MHP, Opinion of the Court (“Defendant must \textit{insure} that no work owned by plaintiffs which neither defendant nor Napster users have permission to use or distribute is uploaded or downloaded on Napster.” (emphasis added)).}

This problem might be even worse for recordings of works, like Beethoven’s symphonies, which themselves are in the public domain. For these works, the title itself (i.e. “Beethoven’s 5th Symphony”) does not conclusively establish the existence of copyright in the file being transferred. The underlying work (the symphony) is in the public domain, and although the recording of the work might be subject to copyright, it is also possible that the recording has itself fallen into the public domain, perhaps through the
customers download Napster software specifically for the purpose of committing infringement. On the other hand, this standard arguably does not apply to Napster because the control mentioned above is highly burdensome and impractical, short of closing down the entire Napster service. 

Furthermore, Napster does not charge for its software or service, so perhaps Napster has no direct financial interest in its users’ behavior.

Courts will also hold defendants contributorily liable if they know that another person is committing copyright infringement and provide material assistance. Here, Napster knows that at least some of its users commit copyright infringement, and the provision of MP3 file listings arguably constitutes material assistance. However, the Supreme Court has held that contributory and vicarious liability cannot be imposed on a defendant when the defendant is merely selling technology which “is merely capable of substantial noninfringing uses.” Napster can of course be used to exchange MP3 files which are in the public domain or copied with the consent of the copyright holder. Perhaps those uses are sufficient enough to relieve Napster of all copyright liability.

For purposes of this Article, it is sufficient to note that the conflicting interpretations of contributory and vicarious liability are plausible enough that the outcome of litigation against Napster is unclear. Policy arguments may therefore have a significant role in deciding the case. Perhaps the most prominent of these arguments is the claim that copyright liability against Napster is necessary to protect the supply and distribution of recorded music. The Article will now turn to an explanation and appraisal of this claim.

III. The Economic Basis of Copyright and the Usual Case against Napster

A. Welfare economics

A fundamental tenet of modern welfare economics is the normative desirability of voluntary behavior and exchange under so-called “perfect market” conditions. The
conditions of the perfect market include: an absence of transaction costs, perfect competition (i.e. the complete absence of monopoly), complete access to all relevant information, and the internalization of all external costs and benefits. When these conditions exist, voluntary behavior is considered desirable because rationally self-interested individuals will naturally put their abilities and resources to their highest and best use. In this felicitous state of affairs, government intervention is considered economically undesirable because the economy will be “efficient.” In other words, voluntary transactions will naturally maximize society’s output based on the available resources.

Of course, things may be different if perfect market conditions do not exist. For example, if bargaining is costly, economically desirable transactions may not take place. Thus, if a coal mine could sell coal to a factory at a profit of $100/ton, but the cost of bargaining is $110/ton, the sale will not take place even though the factory apparently values the coal more than the mine does. The loss of the sale implies a $100 loss in overall social welfare. Monopolies similarly involve a loss of social welfare because monopolists hold down supply in order to raise prices. Finally, economic actors that experience uninternalized externalities may over or underestimate the economic costs and benefits of their behavior and produce more or less or a desired good. The classic example of this is a plant that does not pay the costs of pollution visited upon neighboring landowners. Such a plant perceives its cost of activity as less than its actual cost to society. Hence, its profits are artificially inflated and it produces more of its product than is economically desirable.

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Ulen, supra note 25, at 37-38 (1997) (describing the socially optimal nature of general equilibrium under perfect conditions).


The economic analysis presented here, and indeed most conventional economic analysis, depends on a crucial assumption about human behavior, namely that people are rational welfare maximizers. When combined with the further assumption that the things people value can all be exchanged for money, the assumption about rational welfare maximization means that people work for monetary gain. See COTER AND ULEN, supra note 25, at 10-11 (portraying economic actors as rational maximizers); Nicholas Georgescu-Roegen, Choice, Expectations, and Measurability, 68 Q. J. ECON, 503, 505-510 (1954) (defining the traits of the rational economic actor); H. VARIAN, MICROECONOMIC ANALYSIS 152-155 (1978) (presenting basic assumptions about consumer preferences).

For example, resources gravitate towards the use that values them most because a perfectly functioning market sends accurate signals about the value that can be generated with those resources. The absence of transaction costs ensures that those who initially hold desired resources will sell them to people who value them most. Thus, if lumber is of greatest value in building houses (presumably because profits in that business are high), lumber dealers will find that home builders will offer the highest price for lumber. Lumber dealers will then sell their stock to home builders as long as home builders continue to offer the best price. Lumber dealers will in turn offer more to those who own forests in an effort to satisfy the high demand for housing.


See Cooter and Ulen, supra note 25, at 38, 250 (describing behavior of monopolists and effect on economy); HARVEY ROSEN, supra note 40, at 51 (1995) (same).

See Cooter and Ulen, supra note 25 at 38-40 (describing how externalities affect efficiency).
The existence of imperfect market conditions may justify government intervention in the economy. If, as was the case in the illustration provided above, transaction costs are larger than the benefits available in voluntary exchange, government action to lower transaction costs, assign rights to the appropriate parties, or craft a suitable liability rule may make sense.\textsuperscript{47} However, if the transaction costs are not large enough to prevent desirable exchange, no intervention is necessary. This means that economists constantly face the difficult problem of measuring just how serious market imperfections are. For purposes of this Article, it is important to understand that market imperfections are not, in and of themselves, a complete justification for interfering with the economy. A judgment that the relevant market imperfections meaningfully distort the economy is also required. If market imperfections alone were enough to justify intervention, then all aspects of our economy would be heavily regulated, because perfect

\textsuperscript{47} See Robert Cooter and Thomas Ulen, \textit{supra} note 25, at 84-93 (describing how government can help lower transaction costs); Guido Calabresi and A. Douglas Melamed, \textit{Property Rules, Liability Rules, and Inalienability: One View of the Cathedral}, 85 HARV. L. REV. 1089 (1972) (analyzing the pros and cons of injunctions and damages when enforcing property rights).


The arguments made in favor of liability rules and divided entitlements have implications for intellectual property regimes. If Professors Ayres and Talley are right, it may be better to avoid the use of injunctions when enforcing intellectual property rights in favor of pure damage rules. This casts doubt on the normative desirability of the injunction requested by the recording industry. \textit{See} Ian Ayres and Eric Talley, \textit{Solomonic Bargaining, supra} at 1093-94 (suggesting that damage rules in the form of compulsory licensing schemes result in efficient trading of intellectual property rights). However, other analysts such as Professor Robert Merges retain their confidence in a traditional property rights scheme, at least in part because intellectual property holders will find it advantageous to voluntarily set up licensing schemes when transaction costs savings exist. \textit{See} Robert P. Merges, \textit{Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations}, 84 Calif. L. Rev. 1293 (1996); Robert P. Merges, \textit{Of Property Rules, Coase, and Intellectual Property}, 94 Colum. L. Rev. 2655, 2671-72 (1994) (criticizing compulsory licensing for the recording industry as “a suboptimal liability rule.”).

If courts wind up deciding that injunctions make less sense than damages in cases like Napster, a further challenge will be the construction of an optimal liability rule. Separate and apart from the question of whether a divided entitlement should be reflected in the damages recoverable against Napster, Inc., courts must also decide the degree to which positive externalities conferred by Napster on the recording industry offset the industry’s damage claims. This could significantly reduce the amount of money at stake in the litigation. \textit{See infra} notes 64-67 and accompanying text (describing benefits conferred by Napster on the recording industry).
market conditions never exist. Our society’s general reluctance to regulate economic transactions therefore reflects a default presumption against the significance of market imperfections.

B. An economic understanding of copyright and the Napster case

The foregoing sets the stage for an economic understanding of copyright. Economists generally classify the subject matter of copyright (i.e. books, music, recordings, etc.) into the category of “public goods.” Such goods have two economically relevant traits. First, they exhibit “nonexcludability.” This means that once the public good has been distributed, it is difficult to keep others from enjoying it. For example, if a musical recording has been produced and sold, it is easy for those who possess a copy of the recording to duplicate it and provide it to others. Second, public goods have the property of “nonrivalrous consumption.” This means that public goods may be enjoyed by an infinite number of people without diminishing their enjoyment by others. Thus, a given listener’s enjoyment of his favorite Beatles recording does not affect the enjoyment derived by others when they listen to the same recording. This stands in sharp contrast to private goods like apples. When an individual eats an apple, she precludes similar consumption by others.

The public goods characteristics of things like music and books have conflicting policy implications. Nonexcludability means that individuals will find it relatively easy to gain access to the works even if they have not paid for it. Creators and actual purchasers of music therefore confer an external benefit on a series of free riders. This suggests that creators of music and books will produce less than the socially desired amount because their profits are lower than they otherwise would be in the absence of free riders. This implies that some kind of government action to limit free riding may be necessary to correct the underproduction. Indeed, copyright’s statutory monopoly in favor of copyright holders is generally considered an example of the kind of government action that may be called for.

The creation of a monopoly for copyright holders is not, however, the end of the story for at least two reasons. First, nonrivalrous consumption suggests that a complete end to free riding may in fact be wasteful. If works like music and books can be enjoyed by an infinite number of people without degrading the experience of others, then there is no reason to limit access to existing works to those willing to pay the monopolist’s price. If those who do not pay are excluded for failure to meet that price, the enjoyment they would otherwise have experienced represents a loss to society at large – an unnecessary

48 See HARVEY ROSEN, supra note 40, at 53.
49 See Robert Cooter and Thomas Ulen, supra note 25, at 40 (describing public goods).
50 The government has two choices to correct the market failure in the provision of private goods. First, the government may subsidize the private provision of the public good, either directly or indirectly through the tax system. Second, the government may provide the public good itself and pay the costs of providing the service through revenues raised by compulsory taxation. Robert Cooter and Thomas Ulen, supra note 25, at 41.
loss given the fact that the foreclosed enjoyment could have been experienced without loss to others.\textsuperscript{51}

Second, copyright’s creation itself introduces a form of market failure. As noted earlier, monopolists generally create social loss vis a vis perfect market conditions because they suppress production in order to raise prices. Copyright holders are, of course, monopolists. To the extent that society gains from the existence of copyright, it also loses from copyright’s monopoly. This implies that the strength of copyright monopolies must be limited to ensure adequate competition in the marketplace.\textsuperscript{52}

The economics of public goods provides a framework for the construction and evaluation of copyright law. To the extent that external benefits conferred on free riders cause the underproduction of copyrightable subject matter, copyright law can be used to internalize those external benefits, thereby restoring the market’s ability to induce the appropriate production of copyrightable works. However, the creation of a copyright system does not necessarily imply the internalization of all external benefits because high levels of copyright protection may themselves be inefficient. Those responsible for shaping copyright law must always measure the relative costs and benefits associated with a given level of copyright protection. Limitations on copyright’s reach therefore exist in the term of copyright, the definition of copyrightable subject matter, the number of rights reserved to copyright holders, and specified excuses for otherwise infringing acts.\textsuperscript{53}

The foregoing shows how the economics of public goods can influence decisions about ambiguous points of copyright law. If one believes that the efficient production of copyrightable subject matter requires further elimination of free riding, the normative desirability of increasing copyright’s scope follows. If, however, one believes that the market already produces an efficient amount of copyrightable subject matter, the normative undesirability of increasing copyright’s scope follows.

These ideas apply to the Napster case. A common analysis favors holding Napster, Inc. liable in copyright to eliminate the free riding enjoyed by Napster users who download copyrighted files without permission. This particular perspective starts from the premise that copyright exists to internalize back to the recording industry the external benefits associated with the production and distribution of recorded music. To be sure, such internalization is not complete. Copyright explicitly provides for some free uses, and some infringers have always escaped detection or proven impecunious. Nevertheless, the provision of Internet technology such as Napster affects the copyright


\textsuperscript{52} See Robert Cooter and Thomas Ulen, \textit{supra} note 25, at 38, 123 -125 (describing behavior and effect of monopolists and need to limit monopolies associated with intellectual property); Glynn S. Lunney, Jr., \textit{supra} note 51, at 498 (describing need to limit strength of copyright monopolies).

\textsuperscript{53} See, e.g., 17 U.S.C. §102(b) (limiting the scope of copyrightable subject matter); 17 U.S.C. §106 (granting only specific rights to copyright holders); 17 U.S.C. §107 (codifying the fair use doctrine); 17 U.S.C. §110 (exempting certain performances and displays from infringement of copyright).
rights of the recording industry in two ways. First, it causes more uncompensated infringing to occur. Second, the difficulties associated with gaining compensation from Internet infringers means that Napster increases the percentage of copyright infringements that go uncompensated. Both damage the levels of internalization to which the recording industry believes it is entitled under the copyright law. Napster should therefore be held liable for copyright infringement to preserve the incentives that stimulate the efficient production of recorded music. Indeed, if such internalization is not maintained at levels existing before Napster, recorded music may no longer be produced.

IV. Reappraising the Economic Case against Napster

A. A basic Coasean insight

The usual case against Napster has its appeal. A significant body of literature holds that complete internalization of external benefits is necessary to ensure the efficient production of any desired good. According to this line of thought, uninternalized externalities mean that economic actors receive inaccurate price signals. Those actors then allocate their resources inefficiently. To the extent that the free distribution of Napster imposes losses on the recording industry (presumably through the uncompensated sharing of files by Napster users), the law should force Napster to compensate the recording industry for those losses in order to ensure the efficient production of recorded music. Failure to require this compensation would mean sending the recording industry a signal for an inefficiently low amount of music. Closer examination reveals, however, that such a conclusion may not be warranted.

As an initial matter, the argument for complete internalization of all externalities rests on the assumption that those externalities will disappear from all markets simultaneously. However, if that does not happen, there can be no assurance that eliminating externalities in one market alone will promote efficiency. Indeed, if the market for recorded music has perfect internalization while other markets do not, economic actors will incorrectly perceive more social value in the creation of music than in other endeavors. This will result in an inefficiently high production of recorded music.

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54 This proposition is accepted for the sake of argument, but it is in fact debatable because record industry sales are rising. See Despite Napster, CDs Booming, Reuters, <www.wired.com/news/print/0.1294.38490.00.html> (visited August 28, 2000) (reporting that CD sales have reached an all time high).

55 See Harold Demsetz, Toward a Theory of Property Rights, 57 AM. ECON. REV. PAPERS & PROC. 347, 356-359 (1967) (describing property rights can internalize externalities, relating such internalization to the promotion of economically efficient behavior, and suggesting that intellectual property operates the same way); Neil Weinstock Netanel, supra note 51, at 315 (“As a general rule, therefore, neoclassicism strongly favors a regime in which all economic value is subject to the rights of private property.”); PAUL GOLSTEIN, COPYRIGHT’S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX 236 (1994); Edmund W. Kitch, The Nature and Function of the Patent System, 20 J. L. & ECON. 265 (1977) (describing how exclusive ownership of various rights associated with patents encourage efficient behavior).

56 See Harold Demsetz, supra note 55, at 354-55 (describing how private property gives important economic signals to owners of private property); Glynn S. Lunney, supra note 51, at 493 (1996).

57 See Neil Weinstock Netanel, supra note 51, at 337.
Even if one chooses to overlook this complication, it still does not necessarily follow that the efficient allocation of resources requires the internalization of externalities. The notion that Napster, Inc. is a business imposing losses upon the recording industry calls to mind a well-analyzed hypothetical from nuisance law in which a brick kiln pollutes the air and diminishes the value of a neighboring laundry’s property and business. If the principle of internalizing all externalities really were of paramount importance, economists would quickly prescribe some kind of legal remedy for the laundry against the kiln.

Economists are, however, quite careful about recommending a legal remedy on behalf of laundries against their polluting neighbors. This caution exists because those affected by externalities can often place the proper economic signals in front of those who produce externalities. Thus, although it might seem as if brick kilns impose uninternalized (and therefore inefficient) losses on neighboring laundries, there may in fact be no efficiency loss.

This insight comes, of course, from the seminal article *The Problem of Social Cost* by Ronald Coase. In that article, Coase advanced the analysis supporting the now-famous Coase Theorem, which states that, under perfect market conditions, the initial allocation of a resource has no effect on its efficient allocation within society. Economists often apply this insight to nuisance cases, noting that a right of action on behalf of (for example) a laundry against a polluting brick kiln is equivalent to a property right that can be allocated to either the laundry or the kiln. If given to the kiln, the kiln operates with impunity. If given to the laundry, the laundry can sue the kiln for damages or an injunction. The Coase Theorem implies that, as long as perfect market conditions hold, the decision about whether to give the laundry a cause of action against the kiln does not affect the likelihood of an efficient outcome. This result occurs because the party that values more the right to pollute will, if necessary, buy it from the other.

The foregoing analysis suggests that there is no good reason to hold Napster, Inc. liable for copyright infringement. The Coase Theorem implies that the outcome of the Napster litigation will have no effect on the efficient production of recorded music because that litigation simply represents a struggle for initial control of Napster. Regardless of how courts decide the case, the party with the most efficient use for Napster will eventually manage to buy the necessary rights in a freely negotiated

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59 See Cooter and Ulen, *supra* note 25, at 82 (stating and discussing the Coase Theorem).
60 Guido Calabresi and A. Douglas Melamed, *supra* note 47, at 1111 (treating the existence and absence of injunction as equivalent for purposes of economic analysis).
62 If Napster, Inc. wins the case, it retains full control over Napster. However, if the recording industry gets its desired injunction, it will control Napster to the extent that its consent will be required to use Napster in violation of the injunction.
transaction. Deliberate assignment of Napster to any party therefore makes sense only if market imperfections seriously disrupt the process of negotiation and trade.

B. Does initial assignment of Napster affect the parties’ ability to bargain?

Deciding whether market imperfections significantly disrupt the efficient allocation of Napster starts by asking whether existing market conditions provide fertile ground for credible negotiations over Napster. If such negotiations seem likely, then the case for leaving Napster alone increases. However, if those negotiations seem unlikely, then there may be reason for intervening in the market.

i. The recording industry and Napster, Inc. have significant incentives to bargain with each other because profit maximizing strategies for both sides involve their mutual cooperation.

A person skeptical of the market’s ability to allocate Napster efficiently might argue that Napster, Inc. has no reason to bargain with the recording industry over Napster’s distribution and use because Napster maximizes its profits by bleeding the recording industry dry. If no injunction issues against Napster, Inc., the unauthorized copying of music will flourish. Demand for Napster will increase, and Napster, Inc. will profit while the recording industry’s revenues from record sales diminish. Napster, Inc. will eventually pocket a nice profit, but society will be left holding the bag because the Internet, with Napster’s help, will have destroyed the profits that make the production of recorded music possible. Thus, the only way to get Napster to negotiate with the recording industry is to give the recording industry an injunction against Napster. Napster would then be forced to negotiate a license fee with the recording industry, something that Napster will gladly do as long as the profits (i.e. social benefits) associated with Napster are large enough to compensate the recording industry for any losses.

There is some truth to this claim. An injunction against Napster would be one way of forcing Napster to demonstrate its value by raising enough money (presumably in the capital markets) to buy permission for its distribution from the recording industry. However, it does not necessarily follow that such an injunction is the only way to test Napster’s social utility or ensure the production of recorded music to meet consumer tastes. There is much to suggest that Napster and the recording industry will negotiate with each other in the absence of any injunction because profit maximizing strategies for both parties require their mutual cooperation. Accordingly, failure of such negotiations (i.e. Napster’s decision to act without the cooperation of the recording industry) would represent nothing more than a market decision about the superiority of Napster, Inc. as a producer and distributor of recorded music.

The key is the realization that there is much more to the economic relationship between Napster, Inc. and the recording industry than Napster, Inc.’s free riding on the recording industry’s content. Just as Napster, Inc. imposes external costs on the recording industry, the recording industry can impose substantial costs on Napster, Inc.
by harrassing Napster, Inc.’s customers. This could be done by bringing copyright infringement complaints against Napster users, complaints which will likely result in a number of injunctions, damage awards, and possibly criminal liability. The recording industry could bring additional pressure against Napster, Inc. by putting state of the art digital locks on all new recordings sold. This would effectively restrict the music that Napster users could share to those already in circulation. New – and presumably “big hit” – songs would become very scarce on the Napster system, decreasing its value to customers and reducing Napster, Inc.’s profits.

The possibility of mutually imposed costs alone may be enough to encourage Napster, Inc. and the recording industry to negotiate with each other. However, significantly greater incentives for such negotiation will likely arise from the mutual benefits that Napster, Inc. and the recording industry can confer on each other. While Napster, Inc. certainly benefits from the existence of recorded music, the recording industry also stands to benefit from Napster’s free availability. Napster distributes music widely and cheaply. It introduces new listeners to the recording industry’s products, thereby increasing demand for recorded music. Napster’s availability also increases demand for other products sold by the recording industry or affiliated companies. For example, Sony will sell more MP3 players, personal computers, and CD burners as people buy equipment to download and play MP3 files from the Internet via Napster. America Online, which has agreed to merge with Time-Warner, will gain new subscribers who desire Internet service precisely to download MP3 files via Napster. Indeed, those subscribers are particularly likely to demand more expensive, high bandwidth Internet service.

Furthermore, the recording industry needs a product like Napster in order to realize the Internet’s full commercial potential. The Internet offers the recording industry the tantalizing possibility of monitoring and charging for every use of recorded music. Consider what might happen if the recording industry could get Napster, Inc. to share information about and access to every Napster user. The information represents a marketing bonanza about the listening habits of Internet users, and access to Napster users opens tantalizing possibilities for the sale of recorded music. Indeed, the more widespread Napster’s use becomes, the more attractive it is for the recording industry to

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63 See 17 U.S.C. §502 (authorizing courts to award injunctive relief to prevent copyright infringement); 17 U.S.C. §504 (providing for monetary damages as a remedy for copyright infringement); 17 U.S.C. §506 (defining certain types of copyright infringement as criminal offenses). See also Andrew Morse, If you Use Napster, You’re Being Watched, The Standard.com, November 21, 2000, available at http://www.thestandard.net/article/display/0,1151,20350,00.html (reporting that Emusic.com has created software to trace Napster users who make files downloaded from the Emusic.com website available on Napster, although the efficacy of such software is not yet known).

64 Although it is unwise to draw conclusions about cause and effect, record company sales have increased since Napster’s introduction. See supra note 52.

65 See Stephen Williams, Portable Music Players Fill the Walkman’s Shoes, Newsday, July 5, 2000 (available at 2000 WL 10022797) (reporting that Sony “is now cashing in big-time on the demand for portable audio players that connect to home PCs, and can reproduce digital music….”) 

negotiate for Napster, Inc.’s cooperation because the information and access available through Napster increases with the number of Napster users. At the same time, Napster becomes more valuable if more content becomes available for Napster users. Thus, Napster, Inc. also has significant reasons to get industry cooperation in the provision of future content.

The power of these incentives for negotiation becomes clear when one considers what would happen if Napster, Inc. refused to bargain. Suppose that Napster decides to go forward without negotiating with the recording industry. If recording industry advocates are right, the consequence of such behavior will be a decline in the production of recorded music. This, of course, is bad for Napster, Inc.. If no music is produced, Napster will not be valuable to potential users, and Napster, Inc.’s profits will drop.

Napster, Inc. would then have to figure out how to generate additional content for its network of users. One possibility would be to pay subsidies to record companies to encourage their continued production of music. The other would be for Napster, Inc. to create recorded music on its own. The choice would of course depend on whether the recording industry or Napster, Inc. meets consumer tastes in music more efficiently. If the recording industry does a better job of it, then Napster, Inc. would rationally prefer to subsidize them instead of developing its own production capacity. Of course, if record companies are worse at providing music than Napster. Inc., Napster, Inc. will prefer to go it alone. Indeed, when one considers the likelihood that the recording industry has numerous competitive advantages over Napster, Inc. in the production of recorded music, and when one further considers Napster, Inc.’s competitive advantages in distributing recorded music over the Internet, it becomes quite likely that Napster, Inc. and the recording industry will cooperate with each other without further intervention of copyright law. In short, there is little reason to fear that failure to enjoin Napster, Inc.

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67 Although Napster gets portrayed as offering an complete library of recorded music, a Napster user generally experiences something far less bountiful. At any given time, Napster’s offerings are limited by what other Napster users desire to make available when they are logged on. This means that the most popular music is freely available through Napster because large numbers of people will likely put it online. However, secondary tracks from CDs or less popular music can be very hard to find.

68 Of course, if Napster advocates are right, and record industry sales increase, then no one will complain and music will be produced.

69 As of the date of this writing (November 1, 2000), it appears as if Napster and the recording industry are moving towards the type of cooperation described by this Article. According to news reports from October 31, 2000 Bertelsmann AG (a major record company that owns BMG Music, one of the plaintiffs in the suit against Napster, Inc.) and Napster, Inc. have agreed to a strategic alliance. The deal apparently involves turning Napster from a free service to a secure subscription service that charges $4.95 per month. Bertelsmann will loan Napster, Inc. $30 to $50 million to finance the change and make its library of recorded music available to Napster users. In return, Bertelsmann will receive royalties and warrants for an undisclosed equity stake in Napster, Inc. Bertelsmann would dismiss its copyright action against Napster upon completion of the changeover. See Reuters, Bertelsmann Has Deal with Napster to Drop Lawsuit, October 31, 2000, available at <http://www10.nytimes.com/reuters/technology/tech-napster-dc.html> (visited November 1, 2000); Wall Street Journal, Bertelsmann, Napster Set Plans for Subscription-Based Service, Wall Street Journal, October 31, 2000; Lee Gomes, William Boston, Anna Wilde, Bertelsmann, Napster Make Peace, Agree on Music Sharing Service, November 1, 2000, available from <http://www.wsj.com/> (visited November 1, 2000). Although it is possible that the Bertelsmann deal reflects Napster’s willingness to bargain under the threat of imminent liability, it is equally possible that
will harm the production of music in the long run, or to believe that an injunction against Napster, Inc. will increase the likelihood of bargaining over Napster’s efficient allocation.

ii. The recording industry’s incentive to negotiate with Napster does not depend on complete protection from other file sharing technology.

Supporters of an injunction against Napster, Inc. may argue that the recording industry will find successful negotiation with Napster, Inc. pointless. Even if Napster, Inc. cooperates with the recording industry, new providers of Napster-type service will enter the market, posing new threats to the recording industry. Money spent in gaining Napster, Inc.’s cooperation would have been wasted, and a clear legal rule protecting the recording industry from Napster and its cousins would therefore be necessary.

This argument has some force, but only if the music industry plans to make Napster considerably less attractive to users and providers of Napster alternatives face low barriers to entry. Consider what would happen if the recording industry bought Napster and suppressed its distribution. In that case, consumers would obviously find Napster unattractive (because it no longer exists), and it would be easy for another software developer to write an equivalent program to Napster that would likely capture the market now occupied by Napster.

However, such an extreme scenario is quite unlikely. As noted earlier, the recording industry would likely profit from properly exploited Napster technology. Successful negotiations with Napster, Inc. imply a change in the use of Napster, but not its disappearance. The recording industry might charge consumers for Napster software or downloads, saturate Napster screens with advertisements, alter Napster in a way that inhibited the number of files a given user could copy, or keep detailed records of users’ behavior for marketing (or copyright enforcement) purposes. Each of these changes would make Napster less attractive to consumers, but it is not at all clear that the changes would open the door to a Napster competitor.

The “value added” of Napster is its ability to share all of its users’ music simultaneously. Many sites offer music files on the Internet, but most of those sites offer limited selections. Internet users who don’t have Napster often have to log on to multiple sites to find music that interests them. Napster speeds things up by making the selections on thousands of computers available to its users. This means that Napster’s value to consumers depends on the music available on its network. If the selections available are not what people want to listen to, no one will use Napster. Users therefore flock to Napster because it offers the music that people want. Moreover, as each new user joins Napster, the amount and variety of music available over the Napster network increases.

Bertelsmann decided to open negotiations because it felt that its chances of winning had diminished in the wake of an oral argument in which the 9th Circuit posed a number of unfriendly questions to the recording industry’s lawyers. Perhaps then the Bertelsmann deal illustrates this Article’s thesis that the mutual self-interest of Napster and the recording industry will lead to successful negotiations in the absence of a finding against Napster.
These so-called “network effects” mean that new entrants face very meaningful barriers to entry. If a new service wants to compete with Napster, it has to attract users. Napster, however, has a huge competitive advantage in the offerings it already provides, offerings that exist precisely because Napster already has users. Since the new service’s offerings would necessarily be less desirable than Napster’s (because the new service necessarily has fewer users), Napster’s users would be unlikely to switch, and new users would likely prefer Napster.

Napster’s considerable competitive advantage means that the recording industry has room to make Napster somewhat less attractive to users without opening the door wide to competitors. For example, if users value Napster’s considerable offerings at $100, and the smaller offerings of an upstart competitor at $10, the recording industry could charge users a $90 premium for access to Napster without losing its market share. Alternatively, the recording industry could sell ad space on Napster screens until the annoyance of those ads reached $90 per user.

The foregoing implies that negotiating for Napster’s cooperation will not prove futile as long as the recording industry intelligently exploits Napster’s already existing competitive advantages. In the unlikely event that Napster’s existing advantages prove insignificant, the music industry has still another important competitive advantage – its own library of music that does not already appear on Napster. Thus, if a Napster competitor somehow were able to pull together a library that rivalled Napster’s, the recording industry could simply add more files to the Napster network.

Network effects (Network Externalities) describe a type of good in which the utility derived from the good’s consumption increases with the number of other persons consuming the good. Micheal L. Katz and Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM. ECON. REV. 424 (May 1985); Peter S. Menell, *Tailoring Legal Protection for Computer Software*, 39 STAN. L. REV. 1329, 1340 (1987).

It appears as if the Bertelsmann deal with Napster, Inc. proceeds on this exact premise. If Napster, Inc. plans to charge users for Napster service, it must believe that the advantage of getting recording industry content and its already existing set of users will be enough to withstand competitive challenges from Napster rivals. See *supra* note 69 and accompanying text (describing the deal between Bertelsmann and Napster, Inc.).

It could be argued that recording industry efforts to add their own content to the Napster system will fail because rival services will quickly add those files to their systems. Napster competitors could acquire the files added by the recording industry in two ways. First, users of the rival system could upload these works on their own. Although some “leakage” of files from one system to another is possible, wholesale duplication of the “enriched” Napster library seems somewhat unlikely because users lack the incentive, and perhaps the resources, to take all of the files made available by the recording industry on Napster and make them permanently available on the Napster competitor. Thus, the competitive advantage enjoyed by the “enriched” Napster would likely persist in an economically meaningful way.

Second, the operators of the rival system could systematically upload material taken from the “enriched” Napster. Although this behavior would close the competitive advantage enjoyed by the Napster, it would probably constitute copyright infringement. A significant part of the case in Napster’s favor is the fact that Napster itself does not reproduce MP3 files and therefore does not commit copyright infringement. See *supra* note 34 and accompanying text. Once a Napster rival began uploading files taken from Napster onto its own system, the rival would itself be duplicating MP3 files, and a finding of copyright infringement would seem likely. See 17 U.S.C. 106 (reserving right of reproduction to copyright...
iii. Problems of transaction costs and free riding should not prevent the recording industry from negotiating.

Another possible complication is the fact that the recording industry is not comprised of a single entity. Five major firms presently dominate the production and distribution of recorded music, with a number of smaller firms also involved. This fragmentation raises the possibility that the recording industry will not be able to negotiate with Napster for two separate reasons. First, the cost of inducing Napster’s cooperation may be more than any single firm can afford, and the cost of reaching a deal acceptable to five separate firms may be large enough to dissipate any economic benefits gained by collective action. Second, if a single firm were to gain Napster, Inc.’s cooperation, all firms would enjoy the external benefits generated by the agreement between the first firm and Napster, Inc. (presumably in the form of reduced uncompensated copying of recorded music). This could create a free rider problem in which each firm that could negotiate with Napster, Inc. would hold back, hoping to benefit from another firm’s actions. Careful consideration shows, however, that neither of these possibilities is terribly likely.

The cost of inducing Napster, Inc.’s cooperation is probably not high enough to deter a firm with the assets of Sony or Time-Warner from acting. Napster, Inc. is a young company, and as yet has no profits. In fact, industry watchers have wondered how Napster, Inc. plans to make money. Any offer that puts Napster, Inc. on the road towards profitability would therefore be most attractive. Indeed, the outright purchase of Napster, Inc. seems well within the reach of a large entertainment conglomerate.

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74 The text refers to “a deal acceptable to five separate firms” instead of “a deal acceptable to the recording industry” because antitrust laws could complicate any heavily coordinated behavior by the 5 major recording companies. Although an examination of the issue is beyond the scope of this Article, it seems at least plausible that heavily coordinated behavior could be characterized as either price-fixing or an attempt to monopolize the market for Napster-type technology. It is interesting to note, however, that antitrust laws do not prevent the 5 major recording companies from coordinating litigation against Napster. If the negotiations contemplated here take place under the rubric of settling that litigation, the antitrust concerns might decrease.


Although Napster, Inc.’s financial statements are not public information, the venture capitalists who presumably now control the company have made an initial investment of $13 million.\(^7\) According to the District court, the venture firm’s share of the corporation is 20%, and if one further allows for a tenfold profit upon buyout, the purchase price of Napster might be as high as $515 million.\(^8\) This is a large sum of money, but hardly noteworthy in the modern era of internet mergers.\(^9\) Indeed, given the recording industry’s predictions of ruin at the hands of Napster, $515 million would seem a reasonable investment to ensure the recording industry’s continued profitability.\(^10\)

The recording industry’s dire prediction of ruin also makes it quite unlikely that transaction costs will undermine negotiations. For the first half of 2000, the recording industry shipped 420 million CDs, which translates into an annual volume of 840 million CDs. If one conservatively estimates the profit from each CD at $5, this translates into annual profits of over $4.2 billion.\(^8\) Since the recording industry is arguing that Napster will ruin this stream of revenue, it seems inconceivable that the cost of negotiations between 5 recording companies and Napster would exceed this amount.\(^10\) The recording industry’s already demonstrated ability to coordinate a lawsuit against Napster, Inc. further supports the likely accuracy of this analysis.

The problem of free riding by recording industry participants yields to a similar analysis. As an initial matter, it seems likely that enough is at stake to ensure coordinated action among recording industry firms if such action is desirable. Additionally, consider the economic benefits that will flow to the firm that buys Napster, Inc. That firm would likely become the dominant force in the distribution of music over the Internet because it would become the owner of all benefits presently enjoyed by Napster, control Napster’s

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\(^7\) No. C 99-5183 MHP No. C 00-0074 MHP, Opinion of the Court, at B4.

\(^8\) The range of possible valuations of Napster is quite clear from the litigation. The District Court adopted the recording industry’s assessment of Napster and estimated Napster’s worth to be between $60 and 80 million. Patel Opinion, at B4. In its opposition to the plaintiffs’ motion for preliminary injunction, Napster, Inc.’s lawyers estimated the company’s value to be in the $1.5 to 2 billion range. Opposition to Preliminary Injunction, at 34-35. Given the fact that Napster presently has no revenues, this latter valuation would seem a bit high, even by the lofty standards of the Internet stocks.


\(^10\) A rough idea of the value placed on the importance that entertainment firms place on their continued profitability is the money they spend protecting their interests in Washington, D.C. The entertainment industry - including television, music and movies - spent $29,685,424 in lobbying expenditures in 1998 and contributed $16,467,768 to political campaigns. \(<[^{http://www.opensecrets.org/pubs/lobby98/topind.htm.}>\). The Recording Industry Association of America spent $820,000 in lobbying expenditures in 1998 and contributed $244,260 to political campaigns. \(\text{http://www.opensecrets.org/pubs/lobby98/topind16.htm.}\)

\(^{81}\) See Eric Wieffering, *Local independent bands get online boost; Internet technology is cutting out the middle man _ record labels _ and bringing music to a computer near you*, Minneapolis Star Tribune, July 5, 1999, p. 1A (reporting that major label recording companies make as much as $12 per CD, and reporting the size of the recorded music business at $14 billion per year).

\(^{82}\) Of course, if the benefits to be gained from Napster’s cooperation are smaller than this, the analysis could change. However, if that is the case, it would also follow that Napster’s threat to the recording industry is also smaller than the recording industry claims it to be.
behavior, and have relations with all Napster users. The resulting marketing opportunities alone would be significant. More importantly, other firms desiring cooperation from Napster would now have to negotiate with that first firm, thereby assuring a stream of payments that would capture the value of any external benefits thrown off by the first firm’s acquisition of Napster. If anything, it would be rational for firms to race each other for the right to control Napster rather than sit back and wait for others to act.

iv. An injunction against Napster, Inc. will not lead to the efficient development of Internet technology.

Supporters of the case against Napster may argue that the desired injunction against Napster’s use will lead to the efficient development of Internet technology. Such an injunction would give considerable control over Napster to the recording industry because potential Napster users would have to get the recording industry’s permission before proceeding. The recording industry would then license Napster’s use while making sure that the benefits of such use outweigh any losses. If the independent operation of Napster is actually efficient, Napster should be able to pay for its freedom because the benefits of free Napster can be economically captured and paid to the recording industry.

83 These possibilities include advertising, consumer information gained, free benefits from competitors’ libraries, network effect creating dominance.

84 The recent deal between Bertelsmann AG and Napster, Inc. is certainly consistent with individual companies’ willingness to cut their own deals with Napster, Inc. See supra note 69 (describing Bertlesmann deal with Napster). See also Review and Outlook, Napster Agonistes, Wall Street Journal, July 19, 2000 (“If this argument succeeds and Napster looks ripe to stay in business, the next move is to open the bidding. And since the likely bidders include Time Warner AOL, Seagram and Bertelsmann, Mr. Fanning won’t end up on the breadline despite cutting short his college career.”). Further evidence of the plausibility of such an outcome exists in the fact that recording companies already seem anxious to invest in technology that facilitates the unauthorized copying of recorded music. Defendant’s brief, p. 22 n. 21. MP3.COM: One More Hurdle Cleared, BUSINESS WEEK, Sept. 4, 2000 at 54, available in 2000 WL 24484941; SEAGRAM CO.: Universal to Launch System That Sells Music Downloads; THE WALL STREET JOURNAL, Aug. 2, 2000 at A13, available in 2000 WL-WSJ 3038743; Don Clark and Martin Peers, Can the Record Industry Beat Free Web Music?, THE WALL STREET JOURNAL, June 20, 2000 at B1 available in 2000 WL-WSJ 3033577.

85 Even an injunction against the mere transmission or listing of copyrighted files on Napster would have the effect of giving the recording industry control of Napster, at least under current technology. In theory, Napster might operate independently by ensuring that all files listed on its system are there by permission of the relevant copyright holder. Such operation would be almost impossible now for two reasons. First, Napster lists whatever files its users choose to make available, and it is impossible to control users’ behavior well enough to comply with the strict terms of an injunction. Second, filtering out unlicensed files is possible only if the recording industry cooperates. Such cooperation would not likely be available absent a substantial economic bribe because withholding cooperation keeps Napster out of business. Thus, the recording industry would only allow Napster to operate after Napster agreed to terms satisfactory to the recording industry. This would be tantamount to controlling Napster’s use completely.

86 This result is analogous to the observation that an efficient result is reached when a single firm owns two enterprises that impose externalities on each other. This happens because the firm suffers all of the costs and benefits associated with each enterprise, and will combine the two enterprises in a way that maximizes the difference between benefits and costs. See ROBERT COOTER and THOMAS ULEN, supra note 25, at 80 (1997); HARVEY ROSEN, supra note 40, at 97-98 (1995)
This analysis, like the basic case against Napster, has its obvious appeal. However, the normative superiority of its prescription exists only if market conditions prevent those interested in Napster from negotiating with each other. This could happen if negotiation proves too costly, or if each party lacks enough information about the others to make an intelligent assessment of the entire situation. Neither of these possibilities seems likely with respect to Napster.

As noted earlier, transaction costs are probably not large enough to overwhelm the possibility of negotiation, particularly in light of the monetary stakes in recorded music. Similarly, it is doubtful that information about record companies or Napster is scarce. Although owners of companies generally know more about their businesses than outsiders do, the question here is whether the difference between the owners’ knowledge and outsiders’ knowledge is large enough to prevent intelligent negotiation. There simply is no reason to suspect that this condition exists in the case at hand.

Moreover, there are peculiar dangers associated with giving an injunction to the recording industry that erode possible efficiency gains. Consider again the effect of an injunction against Napster, Inc. Such an injunction would on its face apply only to Napster’s use, but its legal effect would be much broader because the principle established would apply to any other Napster-like technology. If a second Napster were to come along and prove successful, the recording industry would probably get a permanent injunction against use of such technology at summary judgment. This creates a de facto monopoly over Napster and all other Napster-like technologies in favor of the recording industry. This monopoly, like all others, would have anti-competitive effects that harm the efficient production of Napster-type technology. First, under basic economic principles, the recording industry would probably supply a less than efficient amount of Napster-type technology while charging inefficiently high monopoly prices for it.

Second, the recording industry’s monopoly would slow the rate of innovation on the Internet. Under normal competitive conditions, one would predict competition among multiple firms to develop or improve Napster technology. However, the recording industry’s ability to put a second Napster out of business without economic competition implies that Napster technology will evolve under the recording industry’s sole control. There is little reason to think that such a policy will prove optimal.

Third, an injunction against Napster would likely harm incentives for development of Internet technology. If the recording industry can veto Napster’s use, its associated profits will either have been completely transferred to its new owners, or its

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87 If market conditions permit effective negotiation, no efficiency gains can be anticipated because, under a basic Coasean analysis, two independent entities negotiate with each other to an efficient result. See supra notes 40-44 and accompanying text.
88 See supra notes 73-84 and accompanying text.
89 See Stefanie Olsen, Venture Capitalists wary as Napster lawsuits loom, http://news.cnet.com/news/0-1005-200-1724481.html, April 21, 2000 (visited August 1, 2000) (reporting the belief of some that the Napster litigation was brought for the purpose of deterring investment in Napster type technology).
new owners will enjoy payments from Napster’s original owners in exchange for dissolving the injunction. In either case, the economic return to Napster’s creators will fall, and potential creators of similar technology will be less likely to develop those products in the future.

Supporters of the case against Napster might have two responses here, neither of which seems persuasive. First, they might argue that Napster itself would use its copyright on software in a monopolistic way. This argument is at best partially true. Napster surely will behave monopolistically, but its copyright has narrower preclusive power than a recording industry injunction against Napster-type technology. The Napster copyright keeps others from copying Napster software, but it does not prevent independent development of software that performs the same function. By contrast, the law supporting the recording industry’s injunction applies to any software that performs Napster functions, and not just copies of Napster.

Second, they might further claim that Napster’s market leadership and competitive advantages from network effects will just as ruthlessly cut off future competition. This argument misses its mark for similar reasons. To be sure, Napster’s competitive advantages will make life hard for competitors. However, they do not stop competitors from entering the market. They merely create unfavorable economic conditions for new market entrants. By contrast, the recording industry’s injunction prevents market entry altogether, as new providers of Napster-type technology will likely be stopped from distributing their product altogether. In short, there is little reason to think that recording industry control over Napster will lead to a better cost-benefit analysis of Napster’s value, and real reason to think that such control would have inefficient anti-competitive effects.

V. Conclusion

This Article has cast doubt upon the claim that the efficient production of recorded music requires an injunction against Napster. The stakes in the Napster litigation are not whether recorded music will be efficiently produced and distributed, but who will control technology that disseminates recorded music. Ordinarily, a market economy such as ours relies on competition and negotiation to answer questions like this. If more than one firm wants to sell cars, those firms compete for the materials to make cars. And, if one firm can make more profitable use of another firm’s assets, we expect the first firm to negotiate a purchase of those assets.

If one looks at the Napster case from this perspective, Napster is nothing more than a resource to use in the production and distribution of recorded music. Since the object of a market economy is to identify the firm that can make the most efficient use of a given resource, the market should be allowed to identify the proper owner of Napster. This means letting firms negotiate with each other for control of Napster, with the firm...
willing to pay the highest price gaining the associated competitive advantages. Assigning control of Napster to the recording industry through an injunction therefore makes little economic sense unless it is necessary to create a meaningful likelihood of bargaining. The economic evidence analyzed here shows that, at the very least, there is no particular reason to believe that such an injunction is necessary or preferable to the status quo.

It would be tempting to generalize from the analysis provided here and claim that providers of Internet technology should never be held liable for copyright infringement committed by their users. However, such boldness would not be appropriate because the particular circumstances of the Napster case may not exist for other Internet technology providers. Even so, the arguments made here should have a real effect on the analysis of future cases because claims against Internet technology providers for user copyright infringement interfere with a basic preference for unregulated negotiation and exchange. Plaintiffs in these cases would like to overcome this preference by arguing that technical facilitation of copyright infringement necessarily damages the efficient production of copyrightable subject matter. This Article has shown that such arguments should be taken with a great deal of skepticism. It takes more than an assertion of facilitated copyright infringement to establish the normative desirability of vicarious or contributory copyright liability against Internet technology providers.

Courts should therefore approach copyright claims against Internet technology providers with great caution. They should particularly refrain from imposing copyright liability against Napster, at least for now. Plenty of time exists for the legal system to study the impact of Napster and similar technologies. If the arguments made in this Article prove incorrect and the production of copyrightable material begins to evaporate, Congress and the courts can easily implement corrective measures. By contrast, it will be difficult to recoup losses that will result from premature suppression of new Internet technologies, in part because it is impossible to identify technology that never gets developed. A wait and see attitude is far wiser than a hasty expansion of copyright liability.