

Contested Codes: The Social Construction of Napster

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In the 5 years since its inception, some interpretations of the software program known as Napster have been inscribed into laws, business plans, and purchasing decisions while others have been pushed to the fringes. This article examines how and why certain assumptions about Napster have gained greater currency while others have not. Our analytical approach involves an examination of discourse about Napster in several arenas—legal, economic, social, and cultural—and is informed by a conceptualization of Napster as an ongoing encounter between, rather than the accomplishment of, inventor(s), institution(s), and interest(s). While we recognize the value of empirical examinations of Napster’s impact on firms and markets, as well as the proscriptive advice which it supports, we opt here for providing a contextualized understanding of the technology that complements rather than substitutes for empirical analyses of it.

Keywords digital music, downloading, file-sharing, Internet, music industry, Napster, social construction

In the 5 years between the commercialization of the World Wide Web (c. 1995) and the demise of so many Internet-enabled business models (c. 2000), two works on the social, cultural, and economic implications of technological innovation—Clayton Christensen’s *The Innovators Dilemma* (1997) and Lawrence Lessig’s *Code: And Other Laws of Cyberspace* (1999)—offered insightful, if slightly

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antithetical, perspectives for understanding the phenomenal rise and fall of the file-sharing program that would be known as Napster.

Applying Christensen’s framework, Napster could be understood as the archetypal example of a “disruptive” innovation: a new entrant gaining market share from incumbents in an established industry (recorded music) by applying a few capabilities developed in another arena and/or for other purposes (e.g., Internet file-sharing and chat) to address an underserved or overlooked demand. Almost clairvoyantly, Christensen’s model seemed to have predicted the dilemma that would be faced by the entrenched record labels either to disrupt themselves—and give away lucrative margins—or be disrupted.

In the long run, however, Napster’s ultimate domestication and containment at the hands of the recording industry, lawmakers, artists, and the courts—and absorption in late 2000 by the media conglomerate Bertelsmann—suggests that the technology may not have been truly “disruptive” in a permanent sense. Here, Lessig’s thesis that cyberspace, far from being immune to centralized control, is fast becoming a tightly *regulated* and even *hegemonic* environment might be the more fitting of the two models. *Code* reminded us that even though law may not wield the same power on the Internet as it does in the physical world, other forces such as markets, norms, and architectures can and often do regulate in its place. These forces, Lessig warned, were increasingly serving entrenched commercial interests, and constraining the realm of the possible in terms of breakthrough innovations.

The contrast between Christensen’s and Lessig’s theories, as applied through the Napster case study, is not so much evidence to their contraposition as to the tension between “dynamic” and “constrained” that is inherent whenever you peer inside technology’s black box. Technologies, as Claude Levi-Strauss observed of even the most basic tools, are the glue “betwixt and between” the concrete and

the conceptual. (Levi-Strauss, 1966) Technologies may be said to be “flexible” in the sense that they do not have any single definitive use; although a tool may have been created initially with a particular set of goals, values, or objectives in mind, not all users will be equally bound by these concepts, or will even agree as to what the “definitive” uses were originally intended to be. And so there is always a dialogue that occurs between the craftsman and the objects in his repertoire to “discover what each of them could ‘signify.’” Levi-Strauss observes, for example, that a cube of oak could serve as a wedge one day, and as raw material for constructing a pedestal another day. And yet, despite this innate flexibility, “the possibilities always remain limited by the particular history of each piece and by those features which are already determined by the use for which it was originally intended or the modification it has undergone for other purposes.” Ultimately, the user’s actions are constrained by the physical reality of what tools are available, as well as the conceptual category through which the user perceives the particular “job” at hand.

In this essay, we unpack a few of the many preordained conceptual categories implicit in how “the technology” known as Napster was understood by several of its key constituencies. At the peak of the cultural fascination with Napster in 2000–2001, “the technology” was, indeed, a tool with many different possible uses and meanings, carrying forth an even wider range of beliefs, tensions, and anxieties that were varyingly technical, social, cultural, economic, legal, and political in nature. Far from the singular “game-changing” instrument many portrayed it to be, Napster’s significations were contested on public as well as private grounds—in boardrooms, courtrooms, chat rooms, and even the halls of Congress—and ultimately resolved, or at least stabilized, within, across, and through a much broader system of entrenched interests and power.

Our approach examines Napster’s path from “interpretive flexibility” (Orlikowski, 1992) to rhetorical stabilization (consensus meaning) by looking thematically across several overlapping dimensions—legal, economic, social, and cultural. This approach is designed to avoid defining “the technology” according to any one of these traits, or implying that “it” followed a preordained trajectory from invention, to adoption, to social impact. Our focus is on Napster’s “context of practice” as a tool deployed according to the need, customs, values, goals, and prior associations of its various user (interpretive) communities (Fish, 1989). This approach enables us to understand “the technology” as an ongoing encounter, rather than the accomplishment of any one inventor, team of inventors, dominant institution, or rule of law.

Our approach is not intended to provide proscriptive management advice, at least not directly. While there is value in other research that has tried to determine the “impact of Napster on” a particular market or industry, we

believe that a broad-based contextual understanding is necessary both as a foundation for such research and in its own right. Our approach allows us to document how popular, or vernacular, theories mobilize around a tool or technologies to reveal its “true” qualities. This is not simply about deconstructing a seemingly “disruptive” occurrence to reveal its partial, subjective, and fleeting nature, but also about demonstrating how and why certain (subjective) meanings increasingly take on the status of truth, while other (equally subjective) meanings are pushed farther and farther out to the fringes. More than “merely” theoretical, the process of collectively making sense out of “the technology” ultimately structures and reinforces consumer behavior as well as regulatory and management decision-making. In only the past 5 years, dominant interpretations of Napster have not only emerged, but also have been inscribed into laws, business plans, and purchasing decisions, in effect determining what “tools”—precedents, myths, data sets, prior objects, capabilities—are to be available in the future.

SHARED AUTHORSHIP

Frequently, the Napster phenomenon has been framed as an object lesson in how Web-based, information and communication technology can challenge long and widely held notions about economic competition and industrial organization (e.g., Samuelson & Varian, 2002). Under the assumptions of industrial economics, as industries grow and mature, and as their products become more homogeneous (less differentiated), there are increasing returns to scale, as well as a concomitant concentration of capacity and market power in the hands of relatively fewer and ever larger players (Oster, 1999; Porter, 1998). Napster was supposed to change all of that by permitting almost anyone to reproduce and distribute digital content (music, videos, software, etc.) at close to zero marginal cost over highly decentralized peer-to-peer computing architectures. This led many to speculate that Napster would force a radical rethinking of the economic logic underlying the production and distribution of musical recordings (Zhang, 2002), would help to reconfigure the recording industry value chain along more highly decentralized and self-organized lines similar to the P2P architecture itself (King, 2000), and would facilitate the entry of new players in the industry applying business models and performing functions and roles that had no antecedents in the offline world (Cringley, 2002).

Oddly, the same self-organizing notions are rarely used to account for Napster’s existence. Rather, Napster’s creation story has often been told with just one actor, Shawn Fanning, whose transformative genius wholly envisioned and produced the technical artifact that made decentralization possible. Consider the following example from *Time* magazine (Greenfeld, 2000a):

At dawn, Fanning lay on the brown carpet in the shadow of a converted bar counter, consumed by the idea. He had been awake 60 straight hours writing code on his notebook computer. In his daze, the idea appeared to him as something tangible—a hard, shiny piece of black metal—that he had to forge and form so that it became usable, so that the hard black metal was transformed into a friendly tool, so that the 0s and the 1s, the Windows API protocols and Unix server commands were all somehow buffed and polished and worked to a fine, wonderful, simple application. That was his idea. And it was big and frightening and full of implications, and it filled him up, this 18-year-old college dropout sprawled on the floor of his uncle's office, in what used to be a restaurant, across the street from the breaking waves in Hull, Mass.

The narrative depicts the creation as an event, unified temporally by sleepless nights, and situated spatially in one dingy room. The holistic setting resonates with the inventor's teleological intent—to transform culture and society.

The trouble is, if we imagine Fanning just a few months earlier, as a freshman surrounded by peers in a Northeastern University dormitory during the 1998–1999 academic year, and meanwhile as an active member of several online communities, the picture changes dramatically. By Fanning's own admission, "his" idea was derivative of the Internet relay chat rooms (IRC) he frequented at the time. The design problem he set out to solve was not his own, either. The problem, as he later recalled, was actually framed by one of his peers: "My roommate often complained about the unreliability of [Internet sites such as MP3.lycos.com and Scour.com], finding that links to sites would not work, and the index would become out of date because the indexes were updated infrequently."¹

Nor did Fanning suddenly assume sole authorship when he left college to devote himself to the project. Quite to the contrary, the closer "his" concept came to "thing-ness," the more social it became. In mid-1999, he partnered with Sean Parker, a like-minded 20-year-old programmer he had met through IRC, to develop the beta release of the software—only then was it formally named "Napster."² Fanning and Parker modified the beta version with help from several early adopters.³ A web site called Betanews announced the release of Napster 2.0 Beta 2 on July 22, 1999, then an improved Beta 3, two weeks later. In August, the program was featured on Download.com, which Fanning and Parker considered Napster's mass-market debut. But whether or not Napster actually "worked" depended on whom you asked. On Slashdot.com, a message board known for its population of Linux enthusiasts, community members complained about the application's technical glitches, aesthetic design, and "untrustworthy" code (Slashdot.com, 1999). Meanwhile, many general audiences expressed concern that sharing files over the sys-

tem would compromise the security of their PCs, rendering their hard drives open to unwelcome visitors.

Although the "auteur" paradigm would present Napster as the product of a unified, teleological event, clearly the "working" of the machine was not wholly determined by Fanning's design. In the court case that ensued, lawyers for the Recording Industry Association of America in fact argued, quite convincingly, that Napster's "success" owed more to loopholes left open by 1998's Digital Millennium Copyright Act (DMCA) than to the genius of its creators (Shirky, 2001).⁴ The lawyers presented as evidence an e-mail message written by Sean Parker during Napster's early development stages to demonstrate the degree to which design and legal issues were related:

Users will understand that they are improving their experience by providing information about their tastes without linking that information to a name or address or other sensitive data that might endanger them, especially since they are exchanging pirated information.⁵

Clearly the inventors were, at least to some degree, working in relation to the laws, even if their intention was to break them.

From this brief example, we begin to see already how the context under which the founders worked constituted a "technological frame" (Bijker, 1990) that constrained certain outcomes, but also established the "language" that enabled new meanings to arise. As an approach to understanding the innovation process, Bijker's notion of technological frames (defined broadly to include "exemplary artifacts as well as cultural values, goals as well as scientific theories, test protocols as well as tacit knowledge") provides a practical alternative to Kuhn's more academic model wherein "invention" was understood to occur at the mystical point when theoretical contradictions in a dominant paradigm are suddenly realized (Kuhn, 1962). The case of Napster illustrates Bijker's point quite clearly in the sense that "the technology" emerged gradually from interactions between and within social groups with different degrees of inclusion in multiple overlapping frames, as opposed to there being a single theoretical breakthrough. Shawn Fanning was obviously an innovator with a much lower degree of inclusion in the music industry's technological frame than the record labels' R&D departments.⁶ While working from his college dorm room, and later his uncle's basement, Fanning was distanced from the record industry's social, cultural, and cognitive constraints. To be sure, Fanning, Parker, and the community of early adopters did all work under the same generalized legal, economic, and technical conditions as the recording industry. The crucial difference was that, based on their involvement in other spaces, such as online communities, Fanning and company's immediate goals were much more personal and

utilitarian—to provide a tool to help themselves and other enthusiasts find and discuss music on the Internet.

INTERPRETIVE FLEXIBILITY

The notion of technological frames helps us not only to understand the early stages of an artifact's "invention" in a very practical and realistic way, but also to account for how and why objects can take on multiple and contradictory meanings within a culture. Perhaps nowhere is the problem of multiple meanings more apparent than in the court disputes over how to apply existing regulations to new technologies. Legal briefs debating the record labels' earliest proposed injunction against Napster provide an especially lucid example of how various discursive communities deploy objects according to their own interpretive principles. These documents, many of which predate and contradict the narratives later espoused by the mainstream press, depict an object whose functions, as well as meanings, were uncertain. By no means "merely" rhetorical or theoretical, the fate of these indeterminacies would directly shape legal precedent, public norms, and the future viability of "the technology."

The Recording Industry Association of America's complaint over "contributory" and "vicarious" copyright was filed in U.S. District Court on December 8, 1999. This in effect reified two discursive communities: plaintiff and defendant. Plaintiffs were comprised of 18 affiliates from the five major record companies, claiming also to speak for the interests of major artists and music retailers. The defendant, Napster, Inc., at this time was a startup company backed by a small handful of private investors, claiming also to speak on behalf of amateur artists and a few tens of thousands of users. Because the courts' objective was to mediate between the legal entities named in the case, we focus too (for now) on their particular arguments to demonstrate Napster's interpretive flexibility (Orlikowski, 1992).

We may start by considering what might seem a straightforward question: In purely "literal" terms, what *was* Napster? Napster's lawyers maintained that Napster was an Internet service provider (ISP) like AOL or AT&T, offering "the transmission, routing, or providing of connections for digital online access" (*A&M Records, Inc. v. Napster, Inc.* No. 99-5183). To them, "the technology" was a physical link in the chain between one Napster client and another. Data traveled through the system—which included the entire network of individual users' browsers, but not the whole of their hard drives—without modification or direction from the service provider. By contrast, the plaintiffs, rejecting the notion that users were part of the system, argued that the relevant data did not travel "through" the Napster system at all. To them, Napster was a "listing service" that offered a search engine, directory, index, and links. While granting that, technically, the software did

perform search engine-like functions, Napster's attorneys insisted that the system was, nevertheless, *primarily* an ISP.

Taxonomy matters here because it affects how "the technology" will be regulated. Under the DMCA, ISPs were protected from contributory copyright infringement liability if they acted expeditiously to remove offenders from their service. Listing services received no such dispensation. Similarly, Napster advanced the claim that computers were "home recording devices" like the videocassette recorder (VCR) or the digital audiotape (DAT) recorder—and thus protected by the 1992 Audio Home Recording Act—to which the RIAA responded that a "general purpose computer" was nothing like the VCR due to its other potential uses. For our purposes, the point is that, while there may be tangible differences between ISPs and listing services, or between digital audio recording devices and computers, these differences are the product of interpretive operation rather than inherent in the technical coding. Furthermore, even if we were to define the new artifact in relation to an earlier one, the antecedent would still be discursively defined, despite whatever consensus meaning it may have accrued over the years, and this "translation" must still be decoded.

Courts recognize they are ill-equipped to pass judgment on new technologies; their decisions are largely, and sometimes quite awkwardly, constrained by precedent and laws that may no longer apply (*Sony Corp. v. Universal Studios, Inc.* 464 U.S. 17 1984).⁷ Yet when Napster filed a motion for summary adjudication under the DMCA's safeharbor provisions for ISPs, the district court was charged with making just such a ruling. The decision by Judge Marilyn Patel was to deny the Napster motion on two separate grounds: first, that Napster was not entirely an ISP because MP3s traveled "through" the Internet—from user to user—and not "through" Napster's proprietary system; second, that even if Napster was an ISP, the company did not meet the requirement for the DMCA safeharbor provision because it had failed to post its copyright compliance policy online. Later, in granting the RIAA's injunction against Napster, Judge Patel called the program a "monster," which was in a sense suggestive of her ongoing frustration with having to classify this abomination of a technology (*A&M Records, Inc. v. Napster, Inc.* No. 99-5183).⁸

The debate over Napster's literal qualities was accompanied by conflicting theories of "literary" interpretation. What was the relation between Napster-the-company and Napster users? Were producers and users independent agents, or were they intimately joined in acts of defiance by the common text? Attorneys for the defense submitted that "there is nothing that resembles an agency relationship" (*A&M Records, Inc. v. Napster, Inc.* No. 99-5183).⁹ Users created and named the MP3s, chose which files from their collection, if any, they wanted to share,

executed downloads from other users, and decided to what end those downloads would be used in the future. Napster, Inc., merely provided the software. Conversely, the plaintiffs charged that Napster was not just an object, but an ongoing one-to-one relationship. Although Napster Inc. claimed that users performed all the necessary steps, the RIAA charged that Napster in some sense also acted upon its users. Under this view, the RIAA argued that Napster “provides its users” with access to proprietary music, an index of all MP3 music files available for copying, and specific information about the quality and download speed of the sound recordings. Although Napster, Inc., believed that its users were the ones who did the providing, the RIAA believed that the software was so “fully integrated” into the experience that the user in a sense became *its object*.

While acknowledging that these and other opposing interpretations served self-interested goals in the courtroom (how could they not?), we maintain that the courtroom struggle exhibited and made public contrasting ways of knowing that were deeply ingrained in the plaintiff and defendant’s respective “technological frames.” People like Fanning, who had grown up using Internet relay chat (IRC), were comfortable with the idea of community-driven systems. Likewise, Napster’s Silicon Valley investors, who equated “eyeball accumulation” with profits, were quick to buy into the idea of a business whose sole value-added contribution was as a “viral” marketing community for music lovers. The record labels, who were culturally and financially invested in selling contained goods, were much less comfortable with decentralized marketing and distribution. These were the same companies who had sued the manufacturers of cassette and digital audio tape recorders, and before that radio, when these technologies first appeared on the marketplace. Cassettes and DATs introduced new, more portable formats through which music could be sold, but also enabled consumers to reproduce copies at little cost. Radio helped stimulate consumers’ interest in recorded music, but also provided a medium where songs could be freely accessed by all comers at the cost of a few inconveniences (e.g., advertisements, waiting for your song to play). Even with a subscription fee, Napster combined the worst of all possible worlds—a “monster” as Judge Patel put it—because consumers could get unlimited, on-demand access, maintain permanent copies, and freely distribute them to friends at no cost (by e-mail or otherwise). But because of the Internet’s scale, and by virtue of the fact that copying could occur at essentially zero marginal cost, and without any quality loss, Napster was also an entirely different beast.¹⁰

SOCIAL AND CULTURAL MEANINGS

It is important to note that the debate over “the technology” was not just a contest between competing legal and

economic theories. In the broader social sense, the dispute was also underpinned by a need to discursively define “Napster users” as a cultural category. During the summer of 2000, the Napster demographic could be represented as wholly integrated members of society (“music fans”), external threats (“pirates”), or both. While Napster was popular with college students, especially young men, surveys by commercial and noncommercial research organizations suggested that most Napster users were actually between the ages of 25 and 49, and that the highest correlation predictor was not age, but rather online tenure, with the majority of Napster users having been online more than 2 years (Pew Charitable Trust, 2000). Nevertheless, as is often the case with new technologies, “adolescent” served as a metonym for Napster users as a whole.

In the trial context, for instance, Nancy Jay’s report for the RIAA, on which the District Court based its finding of fact, focused exclusively on college students. This emphasis on the “underaged” subset of users was echoed and extended beyond the courtroom by the press. A March 2000 article in *Fortune* magazine observed,

No wonder teens are smitten. Since launching last September, Napster has been the buzz of college dorms and high school locker rooms around the country. Napster claims its user base grows between 5% and 25% daily (daily!). As of early March some five million people had downloaded the software. And why wouldn’t teens flip for Napster? Mixing music and hanging out in a chat room sounds like a teen’s dream. As one 15-year-old user, Sarah Gunther, puts it: “I love Napster. I’m never buying a CD again.” (Kover, 2000)

While this observation came in the article’s fifth paragraph, *Newsweek* published a cover story three months later that was even more direct about the assumption that teens were the demographic force behind the Napster phenomenon. In the lead paragraph, which opens with the sentence, “Meet the Napster Generation,” technology writer Steven Levy introduces the reader to Rachel, 14, who says that teenagers use Napster because they “don’t have much money” and therefore “don’t think it’s anything bad.” By way of contrast, Levy goes on to quote a 50-year-old Napster user who is morally conflicted over the program and feels he has “gotta stop” (Levy, 2000). As one industry consultant commented: “Every time a 42-year-old figures out how to lock something up, a 14-year-old is going to figure out a new program” (Greenfeld, 2000b).

The mythologizing of the child inventor by the press helped situate “the technology” within this rhetoric of adolescence. Shawn Fanning was often stereotyped as a liminal teen—auteur, outcast, hacker, drop-out, loner. Coupled with the story of Jon Johansen, the Norwegian teenager whose DVD encryption code was also being prosecuted under the DMCA, the Napster narrative expressed, on the one hand, a dystopian case for adult supervision, but, on the

other hand, a utopian promise that young “computer wizards” would pave the way for the future (Harmon, 2000).

On the utopian side, *Newsweek's* “Napster Generation” cover story celebrated the magnitude of Fanning’s personal achievement. The article noted that Fanning’s family had been on welfare at one point, that Shawn and his siblings were briefly shipped to a foster home, and that he later “applied to only two [colleges] because he didn’t have the \$40 application fee—he was too proud to ask his uncle for the money.” Shawn Fanning was a real-life Horatio Alger character, a white middle-class boy who made good in the business world by the courage of his convictions. *Time* magazine’s creation story was no less sensational in noting that, while writing code in his uncle’s basement, “[Fanning] didn’t need friends, family, financing—he almost went without food.”

The youth as inventor-hero was deeply rooted in the cultural imagination. Recent examples of innovators mythologized as twenty-something whizzes include Steve Jobs, Tim Berners-Lee, and Jerry Yang—not to mention Bill Gates, who was 19 when he left college to start Microsoft (Stewart, 2000). At the turn of the century, the youthful pioneers of radio were similarly valorized by the popular culture. In 1907, as Susan Douglas notes, the *New York Times Magazine* ran a cover story on 26-year-old Walter J. Willenborg, under the headline, “New Wonders with ‘Wireless’—And by a Boy.” Douglas argues that the fascination with Willenborg, and others like him, captured a cultural redefinition of white middle-class American boyhood—from a time of physical prowess into one where young men channeled their virulence into mechanical and electrical tinkering, preparing themselves for useful positions in an industrialized society (Douglas, 1987). The amateur operators, many of whom built their own wireless transmitters and receivers, pleased their elders with their technological know-how—even while using “the technology” to misbehave, disrupting businessmen’s conversations, or perhaps challenging the authority of the U.S. Navy officers with whom they also shared the airwaves (Douglas, 1987, pp. 191–192). These playful teens, Douglas suggests, were substantial innovators, producing unforeseen technical solutions, and inventing new uses for the medium. However, their behavior went from being celebrated by the mainstream press in 1907, as a useful and appropriate past-time for middle-class boys, to being condemned as reckless by adult society just a few years later. Following the public outcry over the Titanic’s unsuccessful distress calls, the federal government in 1912 regulated against amateur use of the airwaves, imposing harsh penalties on “malicious interference” and other favorite pastimes.

There was a similar ambivalence toward Napster’s inventor-hero, but this ambivalence was not divided the way Douglas suggests the amateur operator debate began, in

1907, in tension between the pro-amateur mainstream press and the anti-amateur corporate interests, perhaps because these two sides had become so intertwined during the intervening years (Bagdikian, 1997). The ambivalence toward Shawn Fanning was *internal* to much of the press’s rhetoric. This was captured by *Time's* October 2000 cover story depicting him as an average middle-class teen, wearing a T-shirt, Red Sox cap, and headphones, along with an ambiguous grin, headlined by a part-question-part-statement: “What’s Next For Napster.” Interestingly, there was also another young white male on this cover, grinning in the upper-right corner, above the tagline: “Inside a Teen’s Stock Scam.” These two young whizzes were promising and frightening at the same time, perhaps precisely *because* they were a “monster” hybrid of both exoticized otherness and idealized sameness (Hebdige, 1979).

Although the Titanic disaster made the case for radio regulation in 1912, the argument for regulating the teenage body, in Napster’s case, had already been made. Adolescents’ media consumption habits were at the center of the 1996 Communications Decency Act, which made it illegal to allow anyone under 18 to gain access to “patently offensive” materials over the Internet. Although the Supreme Court later struck down this provision, the anxiety over teenagers’ consumption of “inappropriate” entertainment was reinvigorated in 1999 after several much-publicized high-school shootings, and became a central campaign issue in the 2000 presidential elections, just as Napster was gaining a particular appeal among fans of “alternative” music genres such as hip-hop, indie rock, punk, and electronica (Sinnreich, 2000).

Napster users also resonated as a symbol for pathologizing and criminalizing kids’ use of technology. The pathologizing of technologies, especially television and video games, as addictive substances resonated across a certain genre of front-page news stories with headlines such as “Napster Frenzy: Racing Against a Midnight Shutdown, Area Music Fans Scramble to Download Recordings” and “A Binge on Music at State U” (Beaupre, 2000). The criminalization of technologies was made even more explicit, not only by the RIAA and the district court judge who declared Napster use “wholesale infringement,” but also strangely enough by the Justice Department. As the keynote speaker to an October 2000 conference on teaching “cyber ethics” to children, Michael Vatis, the director of the FBI’s National Infrastructure Protection Center, noted that:

Incidents such as hacking into Department of Defense computer systems during deployment of troops to the Persian Gulf in February 1998; theft of proprietary software worth 1.7 million dollars from a NASA computer system responsible for space station operations in 1999; and denial of service attacks on CNN, Yahoo, Amazon.com, and Ebay in February

2000 are only three of the numerous examples of computer crimes initiated by individuals under the age of eighteen. [emphasis added] (Geide, 2000, p. 4)

People like MPAA head Jack Valenti likewise cast “Napster users” as a risk to the nation’s well-being, by connecting “Internet intruders” to the multi-billion-dollar global theft that, in 1998, resulted in the loss of “109,000 American jobs” in the software sector alone.¹¹ The problem for law enforcement, Vatis suggested, was not only the direct harm done by the youthful intruders themselves, but also the fact that these kids were indistinguishable from “a hostile foreign nation trying to steal secrets or shut down our military operations” (Vatis, 2000).

Vatis’s comments were part of an effort to educate the public about adolescents’ misuse of information technologies. As part of this outreach, Attorney General Janet Reno had recently announced the launch of Cybercitizenship.org, a web site designed, according to the Justice Department press release, “for parents and educators . . . to teach kids the right ways to use the Internet” (Reno, 2000).¹² Though the Napster injunction was still pending—and the trial had not even begun—the government-sponsored Cybercitizen web site, which also received funding from the RIAA, had a decidedly anti-Napster spin. Under a section titled “What is cyber crime?” the site coyly noted, “Recently, tools have surfaced that allow Web users to download and save music from the Internet for free—music that is copyrighted by artists and sold in stores. Taking tracks from the Internet is no different from stealing a CD or tape from a music store” (Rodger, 2000). These thinly veiled references were later toned down, and ultimately removed. Nevertheless, as of mid-2001, the site still noted that “children armed with computers can be dangerous and cause serious damage and harm, regardless of whether they are being mischievous or trying to intentionally commit cybercrimes.” (Cybercitizen.org, 2001)

To be sure, the construction of “Napster users” as adolescents was not singly motivated toward the criminalization of youth culture, as these signs were multilayered and flexible enough to serve several interests at once. While the RIAA branded as pirates Napster’s youthful founders and followers, the record labels refused to prosecute individual consumers until much later, preferring instead to portray individual users as being victimized by the technology. Similarly, Napster, Inc., shared with the RIAA, and with the broader culture, a complex and contradictory relationship toward youth culture. On the one hand, the company exploited its youth culture cachet by marketing its service as the “next MTV” and celebrating Shawn Fanning as the company spokesperson. This cachet was in many ways Napster’s core asset in the face of increased competition from other providers of similar services. In March 2000, then-CEO Eileen Richardson noted that an “underground feel” was part of what distinguished

her company’s product—“People love the fact that they can say, ‘Pssst. Have you heard about Napster?’” (Kover, 2000). A few months later, in his attempts to build a bridge to wider audiences, new CEO Hank Barry used the company’s youth appeal to naturalize “the technology,” noting, “The reality is that the next big thing is already being developed somewhere by some 17-year-old high school student. Technology will continue to evolve” (Philips, 2000). On the other hand, these same statements, made by middle-aged executives, can also be read as an objectification of Napster’s youth culture origins. The distinction between Napster’s management and Napster’s founders was made explicit in the disavowal of various incriminating e-mail correspondences uncovered during the litigation as the “legal characterizations of two 18-year-olds before the company had any professional management in place” (*Napster, Inc. v. A&M Records, Inc.* No. 00-16401).¹³ The narrative of Napster’s corporate culture was rewritten, as company statements and press releases started to embrace the *Time* and *Newsweek* creation stories that celebrated Shawn Fanning’s genius but were much more reticent toward teenagers in general. Gradually, and without much explanation, Sean Parker, the more anarchical of Napster’s cofounders, was expunged from corporate histories and sent back to college.

NAPSTER’S IMPLICATIONS: DISRUPTIVE OR HEGEMONIC?

So far we have sought to provide a few examples of how Napster’s “essence” was invariably caught up in a complex web of conceptual categories, relationships, business objectives, legal precedents, and cultural beliefs. Far from the “disruptive” event many have portrayed it to be, Napster was to an extent *predetermined* and *controlled* by this vast network of exogenous factors, many of which were tacit and unknowable even to its inventors. This however is not to suggest that new innovations are merely physical manifestations of old ideas; to the contrary, “successful” technologies are often powerful conduits for and expressions of new patterns of behavior, modes of interacting, and ways of thinking. As Turkle describes this relationship: “We construct our technologies, and our technologies construct us and our times. Our times make us, we make our machines, our machines make our times. We become the objects we look upon but they become what we make them” (Turkle, 1995). As much as it was “produced by” the intersection of socially situated technological frames, Napster as an object also helped to carry and open up new ways of thinking about industries, institutions, and sources of cultural production—as well as reinforce old ones. From board rooms to courtrooms to living rooms, “the technology” provoked a dialogue through which preconceived assumptions could be shown and debated—and, again,

Napster's "economic implications" were only a small part of the story.

Economic Implications

For obvious reasons, a key question in the Napster trial was that of whether the practice of downloading MP3s actually helped or hurt the market for copyrighted works. Napster, Inc., argued that its users' practice of "sampling" music as a way to inform purchasing decisions was a legitimate fair use, as this activity did not have any demonstrated harmful affect on the recording industry's property. The defense pointed to seven independent studies showing that Napster users were buying at least as much music, if not more music, than before they began using the service, and noted that record sales had actually been increasing since the RIAA filed suit.¹⁴ According to Napster's expert witness, 84% of Napster users downloaded music to determine whether they wanted to buy the CD, and, of that group, 42% had increased their music purchasing, 53.3% had stayed the same, and only 4.7% had decreased purchases. But the market research submitted by the RIAA's expert, Nancy Jay, told a different story. By her tally, 41% of respondents said that Napster decreased, or "displaced," music purchases, compared to just 8.4% who said Napster led them to increase their music purchases. The difference was that the Jay report classified as "displaced sales" statements such as "I can get free music" and "[Napster is] easier, better than a CD" whereas Napster, Inc., interpreted these same claims as "sampling" and "space-shifting."¹⁵ Thus Napster's "true" economic implications were as hard to predict, as they were subject to interpretation.

In reality, as much as the facts were contested, the court case dispute was underpinned by a set of shared assumptions which closely defined what purposes those facts ought to serve. For Napster, Inc. the dispute was not over whether companies who distribute music should remunerate copyright holders, but that Napster did. Napster's defense claimed that its system was already financially benefiting record labels, and if the amount of compensation was not sufficient, then a mandatory licensing arrangement should be imposed (Napster, 2001).¹⁶ Even more fundamentally, Napster, Inc., and the RIAA agreed that copyright was a necessary incentive to motivate artists to create, especially given that now on the Internet information goods could be easily copied and distributed at close to zero marginal cost. Without these incentives, "quality" music would never get produced, and the market would fail. Napster's proponents and detractors both operated under this basic dilemma, which economists refer to as a "public good" problem, and further agreed that "sampling" would improve market efficiency overall, making it possible to sell more music, to more consumers, in more formats, than before.¹⁷

The difference was a matter of implementation approaches. Napster, Inc., argued that Napster and Napster-like systems were natural tools for "viral" marketing. By contrast, industry executives like Warner Music's Paul Vidich saw the Internet as a cost-intensive added service area and an impediment to differentiating artists (*A&M Records, Inc. v. Napster, Inc.* No. 99-5183). This difference would be resolved over time. However, something much broader was at stake in the rhetoric of people like Time Warner President Richard Parsons, who said: "If we fail to protect and preserve our intellectual property system, the culture will atrophy . . . Worst-case scenario: The country will end up in a sort of cultural Dark Ages" (Philips, 2000). Thus we must consider too the question of social and cultural implications.

Social and Cultural Implications

Motion Picture Association head Jack Valenti championed the notion that by opposing Napster, entertainment companies were fulfilling a moral duty to artists and society. Valenti had spent the previous two decades pushing lawmakers to protect and expand the authorship rights of Hollywood artists and producers; during the 1982 Sony Betamax case, Valenti had famously testified that the video cassette recorder (VCR) was to the movie industry "as the Boston Strangler is to a woman alone" (*A&M Records, Inc. v. Napster, Inc.* No. 99-5183).¹⁸ As Napster's proponents were quick to point out, VCR rentals and sales had since then become one of the film industry's most lucrative markets. But it was Valenti's opinion that VCRs, digital audio tapes, and now Napster could choke cultural expression in other-than-economic ways. "Creative works do not spring from a void," he noted in the declaration he submitted to the Napster court. "The seed bed of this creativity lies within the imagination, artistry and ingenuity of a community of artists and craftspeople who provide Americans with most of what they read, hear and watch. . . . If we cannot protect what we invest in, create and own, then we really don't own anything."¹⁹ Consistent with Valenti's monologic opinion that "creativity" arises from a centralized community, as opposed to the mass culture, he insisted that this "seed bed" had to be preserved at all costs.

Many artists followed Valenti in regarding Napster as an affront to the creative process, depriving them of the very distinctiveness that made them "artists" to begin with. "Basically they're saying our art is worthless, it's free for the taking. . . . Music used to be a collectible, now it's a disposable," one industry agent was quoted as saying (Levy, 2000). Metallica's Lars Ulrich saw "the technology" as a sign of the cultural degeneracy of the masses. But in his public statements, Ulrich struggled to reconcile romantic notions about art's transcendent value with contemporary music's commercial status:

We are in the business of art. This is a walking contradiction if ever there was one. However, there is no denying it. On the artistic side, Metallica create music for ourselves first and our audience second. With each project, we go through a grueling creative process to achieve music that we feel is representative of Metallica at that very moment in our lives. We take our craft—whether it be the music, the lyrics, or the photos and artwork—very seriously, as do most artists. It is therefore sickening to know that our art is being traded, sometimes with an audio quality that has been severely compromised, like a commodity rather than the art that it is.²⁰

Sean “Puffy” Combs (a.k.a. Puff Daddy, P-Diddy) took Ulrich’s outrage even further when he depicted Napster as an act of violence against the artist’s person. “I couldn’t believe it when I found out that this Napster was linking thousands of people to the new Notorious BIG album, *Born Again*, a week before it even hit the streets,” Combs told the press. “This album is a labor of love from Notorious BIG’s friends to the man, his kids, the rest of his family, and everyone else whose lives will never be the same since BIG passed. BIG and every other artist Napster abuses deserve respect for what they give us” (Varanini, 2000).

Despite the shock expressed by many artists over Napster, the circulation and appropriation of mass culture products at a grass-roots level was not exactly a new phenomenon. For many years, consumer technologies—across media platforms—had been supporting a movement toward a more “participatory” culture (Jenkins, 2002). Camcorders spurred the production of home movies and low-budget reality documentaries. VCRs enabled consumers to become video archivists and editors. Photocopiers (and later laser printers and desktop publishing applications) enabled hobbyists to become professional-style publishers. Portable devices, such as Gameboys, Walkmans, and cell phones, enabled consumers to carry media into their everyday lives, allowing them to create their own personal soundtracks and communication networks. The Internet captured, but also gave shape to, the culture’s increasingly interactive patterns of media consumption. Napster’s service, as well as sites such as MP3.com, allowed unsigned artists to circulate beyond the “garage” with transmission costs that were low even by independent radio and cable access channel standards. In the context of the Napster trial, this amateur movement might have even represented a legally significant “noninfringing use.” Indeed, Napster’s court briefs noted that, contrary to the assumption that popular culture had become centrally composed and produced by a handful of media companies, 98% of all recording artists were not signed to the “major” labels who were party to the lawsuit. The defense further noted that, as of July 2000, 17,000 artists had expressly authorized Napster users to share their music, compared to the only 2600 albums released in total by the Big Five in 1999 (*Napster, Inc. v. A&M Records, Inc.* No.

00-16401).²¹ The defense predicted, “As more and more artists use the Internet to break free of the major labels’ oligopoly, an ever increasing proportion of the materials shared using the Napster technology will have nothing to do with Plaintiffs.”²² For recording artist Chuck D, the fact that “popular music is traded alongside music by emerging artists and artists who have struggled outside of the mainstream,” made Napster a “truly democratic medium” (*A&M Records, Inc. v. Napster, Inc.* No. 99-5183).²³

The Internet not only blurred the cultural distinction between “amateur” and “professional,” but also complicated the categories “producer” and “consumer.” New technologies had given “amateurs” the tools to produce “professional” work, which could travel through cyberspace reaching audiences around the world. Now “the technology” was being used to facilitate consumers’ movement toward an even greater level of engagement with popular culture, as DJ’s, archivists, distributors, and critics. To Fanning and company, chat and one-to-one recommendation features were what “made” the system—file sharing, they claimed, was an afterthought. Likewise, in the rhetoric of the Napster community, the process of compiling a playlist was known as “sharing” as opposed to “collecting,” which is to say, it was seen in the context of a commons. Napster’s defense argued that this too was nothing new: Hundreds of artists, including the Grateful Dead and Metallica, had long permitted the digital taping of their live performances and the trading of these “bootlegs” among fans (*A&M Records, Inc. v. Napster, Inc.* No. 99-5183).²⁴ The difference was that cassette copies cost money, and take effort to make, whereas, as gangster rapper Ice-T put it, “this stuff comes through the computer clean” (Holson, 2000).

Political Implications

The discursive context also branded Napster consumers “participatory” in another sense: as subversives. Napster was adopted as a symbol of youthful rebellion, and in some sense it was true that consumption practices actually had the effect of “resisting” record companies, artists, the law, and, at times, Napster, Inc. Within 6 months of a district court judge’s declaring that Napster users were engaged in “wholesale infringement,” their ranks doubled. The RIAA-sponsored coalition “Artists Against Piracy” responded by running full-page newspaper advertisements with the tagline, “If A Song Means a Lot to You, Imagine What It Means to Us.” The implication was that producers had more valid claims to a song than consumers, or at least that there was a hierarchy of natural right, and that fans were simply freeloading. Music fans themselves took a different view. Echoing the arguments advanced by academic elites like Chomsky, McChesney, and Bagdikian, Napster users could be heard in message boards and quoted in magazine

articles complaining that industry concentration had led to restrictive trade practices (CDs were priced too high, niche genres were hard to access), and that it should be a right to download music purchased in one format into a new format. And so, while artists like Madonna complained about unreleased or unfinished tracks being leaked public, their fans persisted in trading them as collectibles.

Those who claimed that using Napster was a “political” act and not simply a matter of “getting something for nothing” may have found an unlikely ally in the form of presidential candidate Al Gore. In an interview published in October 2000, on the eve of the election and the height of the cultural fascination with Napster, Gore compared the American democratic system to, of all things, a “political version of Napster.” As Gore explained, “The secret of America’s success is to be found in our revolutionary decision to place our bets on the abilities inherent in all of the individuals who make up our country. . . . Our democracy, our constitutional framework, is really a kind of software for harnessing the creativity and political imagination for all of our people . . . dictatorships, communist countries, monarchies in the past all eventually collapsed because of their inefficiency in moving information and creativity to the places where it was needed . . . our democratic system made it possible for the average citizen to participate in the decision-making of this nation by processing the decision-making directly relevant to him or her in an individual congressional district or state” (Henig & Pontin, 2000).

CONCLUSION

By portraying Napster’s invention as a social process, as opposed to a one-time heroic event, and Napster’s “technology” as a contested space, subject to the interpretive discretion of its various user constituencies and critics, we hope to encourage journalists, academics, managers, and inventors to realize the subjective and fleeting nature of whatever dominant or “consensus” interpretations may exist in the moment. Following Bijker, we believe technology’s interpretive frame manifests itself in many ways: exemplary artifacts as well as cultural values, goals as well as scientific theories, test protocols as well as tacit knowledge (Bijker, 1990). Even more important, as Lessig’s work suggests, these interpretive maneuvers over time take root and “institutionalize” in the form of laws, business plans, and social norms, which in effect limit and determine what “tools”—precedents, myths, data sets, prior objects, capabilities—are available in the future. Thus retrieving “the technology” as a socially contested set of symbols, or codes, helps us to question what data we take as fact as well as gain access to a broader range of possible meanings and applications than might otherwise be available at a particular point in time.

Al Gore’s appropriation of “the technology” on the eve of his presidential bid quite aptly reflects three of the central themes to this essay. First, Napster did not spring from a void, but rather was constructed within a culture already attached to certain values and practices. Second, people used Napster as an organizing principle for widely diverse (and even opposing) issues—social, cultural, political, economic—in accordance with their own prior knowledge, interests, status, worldview, orientation, objectives. As we have shown throughout this essay, Gore was not alone in abstracting seemingly far-afield meanings from “the technology” to suit his own purposes. Third, Napster’s circulation around the culture mattered, even if no words in the Copyright Act were ever changed. The fact that a major party candidate could use Napster to flesh out his political values (even if he could not admit to actually “using” the system, as its legality was under review by the courts) speaks volumes about how quickly and pervasively it had attained legitimacy as the dominant alternative to the recording industry’s paradigm. Even more, the fact that a political candidate felt the need (consciously or unconsciously) to appeal to “Napster users” as part of his presidential bid emphasizes the point that, more than just a music distribution paradigm, “the technology” symbolically united a discursive community with the potential to wield power in a real social sense.

NOTES

1. *A&M Records, Inc. v. Napster, Inc.* No. 99-5183. Declaration of Shawn Fanning In Support of Defendant Napster’s Opposition to Plaintiff’s Motion for Preliminary Injunction. (N.D. Cal. July 26, 2000).

2. In the *Newsweek* account, Fanning and Parker were joined by a third collaborator, Jordan Ritter, 23 (Levy, 2000).

3. “A few early adopters provided feedback and helped us track down bugs in the software.” *A&M Records, Inc. v. Napster, Inc.* No. 99-5183. Declaration of Shawn Fanning In Support of Defendant Napster’s Opposition to Plaintiff’s Motion for Preliminary Injunction. (N.D. Cal. July 26, 2000).

4. As an example of an invention frame determined by the laws it was trying to circumvent: “The problem Shawn Fanning, Napster’s creator, set out to solve was a gap between what was possible with digital songs. . . and what was legal” (Shirky, 2001).

5. In the district court, this correspondence helped establish that the founders were directly aware from early on that their invention would be used for the illegal exchange of copyrighted works. Furthermore, Judge Marilyn Patel was not amused by the irony that Sean Parker was designated Napster’s DMCA copyright compliance officers, despite the fact that he himself used Napster to download copyrighted music files. *A&M Records, Inc. v. Napster, Inc.* No. 99-5183. Opinion (N.D. Cal. August 10, 2000).

6. As one of Fanning’s friends told *Time*: “Shawn could focus on problem solving—and there was no one to tell him he couldn’t do these things. There was no one who ever really understood what he was doing” (Greenfeld, 2000b).

7. Sound policy, as well as history, supports our consistent deference to Congress when major technological innovations alter the market for copyrighted materials. Congress has the constitutional authority and the institutional ability to accommodate fully the varied permutations of competing interests that are inevitably implicated by such new technology." *Sony Corp. v. Universal Studios, Inc.* 464 U.S. 17 1984.

8. The dilemma of how to classify Napster, if it were in part an ISP, but part not, lingered even after the Ninth Circuit's review of Patel's preliminary injunction. *Napster, Inc. v. A&M Records, Inc.* No. 00-16401. Opinion. (U.S. Court of Appeals for the Ninth Circuit) 2001.

9. Opposition of Defendant Napster, Inc. to Plaintiff's Motion for Preliminary Injunction. (N.D. Cal. July 26, 2000).

10. For an overview of the trade-offs between efficiency and control in the filmed entertainment industry, see Bettig (1996, pp. 79–115).

11. *A&M Records, Inc. v. Napster, Inc.* No. 99-5183. Declaration of Jack Valenti In Support of Plaintiff A&M Record's Motion for Preliminary Injunction. (N.D. Cal. July 26, 2000).

12. In a public letter to parents, released to coincide with the launch of cybercitizenship.org, Janet Reno wrote: "While most children know that it is wrong to break into their neighbor's house or read their best friend's diary, fewer realize that it's wrong to break into their neighbor's computer and snoop through their computer files. As children learn basic rules about right and wrong in the off-line world, they must also learn about acceptable behavior on the Internet. We need kids to understand that hacking is the same as breaking and entering—that being a hacker doesn't make them 'cool' or show their smarts—it makes them a criminal!" (Reno, 2000).

13. Appellant Napster, Inc.'s Opening Brief (U.S. Court of Appeals for the Ninth Circuit) 2001.

14. *Ibid.*

15. *Ibid.*

16. In February 2001, Napster Inc. made public its proposed settlement offer of \$1 billion over 5 years (Napster, 2001).

17. For a somewhat different view see, for example, the writings of the Electronic Frontier Foundation's John Perry Barlow (Barlow, 1994, 2000).

18. Opposition of Defendant Napster, Inc. to Plaintiff's Motion for Preliminary Injunction. (N.D. Cal. July 26, 2000).

19. Declaration of Jack Valenti In Support of Plaintiff A&M Record's Motion for Preliminary Injunction.

20. This statement was posted, among other places, on the RIAA's Web site. "Artist/Manager Quotes Regarding Napster," RIAA, available from: http://www.riaa.com/Napster_artist_quotes.cfm; Internet; accessed 1 May 2001.

21. Appellant Napster, Inc.'s Opening Brief. (U.S. Court of Appeals for the Ninth Circuit) 2001.

22. *Ibid.*

23. Declaration of Chuck D. In Support of Defendant Napster's Opposition to Plaintiff's Motion for Preliminary Injunction. (N.D. Cal. July 26, 2000).

24. Plaintiff's Memorandum of Points and Authorities in Opposition to Defendant Napster, Inc.'s, Motion for Summary Adjudication on the Applicability of the 17 U.S.C. 512(a) Safe Harbor Affirmative Defense. (N.D. Cal. March 27, 2000).

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