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The point of entry of a new product or new service is especially important for a successful economy. Entry creates the possibility of fresh competition with existing products. At least as important, we know that new products have been a critical source—if not *the* critical source—of new value, for both consumers and shareholders. In this paper, I want to consider how copyright law influences entry in digital distribution of music and video. The subject encompasses past and current successes in distribution—cable TV and the VCR—current and recent controversies—Napster and the pending cases addressing its successors—as well as possible next steps in distribution, such as web radio, interactive music services and the digital video recorder.

Much of the relevant distribution entry policy is set through copyright law. With some frequency, copyright law has important competition consequences, but the relevant inquiries in copyright may not track the issues that are of interest to competition law. Copyright law entry policy reflects an amalgam of statutory interventions—as part of the restructuring of the copyright statute in 1976 and then subsequently in a series of quite context-specific tailored statutes—and judge-made copyright law addressing third-party liability for copyright infringement and the doctrine of copyright misuse.

The copyright statutes reflect substantial path dependence, as well as the play of powerful interests. Fluke exclusions, such as that for sound recordings, result in the Digital Performance Right in Sound Recordings Act of 1995, a complex statute to be sure, but one that, especially after the Digital Millennium Copyright Act[1] gets done with it, creates substantial entry barriers for online radio. This is a space in which the key entry barrier—scarce spectrum—has been largely supplanted by the ready expansion of bandwidth and yet we have erected new legal entry barriers seemingly designed to strangle at birth the online radio entrants. We could have gobs of entrants in online radio—and to some extent do—but we have adopted policies that favor over-the-air radio with the consequence of minimizing this entry.

In contrast, for new devices that facilitate distribution—the VCR, Napster and the DVR—key features of the reigning copyright test are not sufficiently demanding of entrants. The *Sony*[2] test for contributory copyright infringement—whether the object in question is capable of substantial noninfringing uses—is far too weak and fails to take into account at all the scope of the infringing uses that will result. It is bad third-party copyright policy. *Sony* may fare better as a matter of independent entry policy and the flexible fair use doctrine of copyright law creates room for courts to operate in setting that policy in an economically sensible fashion.[3] We are at a point where the technology makes online distribution of music easy, as Napster and its followers make crystal clear. The hard part is creating an institutional framework that works: Institutional engineering is frequently more difficult than computer engineering.

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[1] P.L. 105-334 (October 28, 1998).

[2] Sony Corporation of America v. Universal City Studios, Inc., 464 U.S. 417 (1984).

[3] As Wendy Gordon emphasized early on. *See* Wendy J. Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the* Betamax *Case and its Predecessors*, 82 Colum. L. Rev. 1600 (1982).

In some ways, the core issue is one of articulating the scope of the rights held by the copyright holder. As currently configured, antitrust does a good job of imposing "don'ts"—don't collude, don't price fix—but has an undeveloped sense of when affirmative licensing obligations are required for individual firms. Antitrust typically affects entry through indirection—if you can't enter this way, maybe you will instead enter that way—or by trying to ensure that incumbents don't affirmatively block entry, through, for example, strategic entry barriers or the threat of predatory pricing.

Antitrust is on shakier ground when it turns to affirmative duties to deal by individual firms. The essential facilities doctrine proper is of dubious status[4] and the kissing cousin seen in *Aspen Skiing*[5] is hard to square with prior antitrust doctrine. That is not to say that *Aspen* is wrong—an issue I don't consider here, though many certainly think so[6]—but more that copyright seems to hold the comparative advantage on these issues. Whatever *Sony's* flaws, it ultimately should be understood as an effort at defining entry policy for the distribution of copyrighted works. The copyright misuse doctrine as it is now appearing in *Napster* is again about using copyright doctrine to articulate the scope of copyrights—and the corresponding permitted uses—and in so doing set policy for distribution entry.

More generally—ironically—antitrust deals poorly with monopoly. We know how it works: monopolies, if obtained legally, are fine, it is monopolization that is problematic. Antitrust really is not about calibrating the returns from an innovation or copyrighted work that results in substantial market power and monopoly profits. That is not to say that antitrust won't limit efforts to go beyond the core property rights of a patent or copyright,[7] but in many ways, that is all that antitrust will do. In contrast, copyright is precisely about making careful trade-offs between creation incentives and subsequent use rights. Notwithstanding casual statements, copyright is not about conferring monopoly, but instead copyright confers a defined set of property rights.

Three lines of demarcation are worth drawing. First, in focusing on copyright law, I leave for another day consideration of the important ways in which standard antitrust "don't" doctrines also set entry policy. For example, the DVD, which has emerged as one of the most successful product introductions in history, raises a number of interesting antitrust issues. Implementation of the DVD format standard required agreement among various possible competitors and in some basic sense reduced possible competition among those competitors. Two patent pools have facilitated actual implementation of the standard and both were blessed by the Antitrust Division.[8] We

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[4] Phillip Areeda, *Essential Facilities: An Epithet In Need of Limiting Principles*, 58 Antitrust L.J. 841 (1989).

[5] Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585 (1985).

[6] Dennis W. Carlton, *A General Analysis of Exclusionary Conduct and Refusal To Deal—Why* Aspen *and* Kodak *Are Misguided*, 68 Antitrust L.J. 659 (2001).

[7] *See, e.g.,* United States v. U.S. Gypsum Co., 333 U.S. 364, 400 (1948) ("Patents grant no privilege to their owners of organizing the use of those patents to monopolize an industry through price control, through royalties for the patents drawn from patent-free industry products and through regulation of distribution. Here patents have been put to such uses as to collide with the Sherman Act's protection of the public from evil consequences.")

[8] *See* December 16, 1998 Letter from Joel I. Klein, Assistant Attorney General, Department of Justice, Antitrust Division to Garrard R. Beeney (www.usdoj.gov/atr/public/busreview/2121.htm); June 10, 1999 Letter from Joel I. Klein, Assistant Attorney General, Department of Justice, Antitrust Division to Carey R. Ramos (www.usdoj.gov/atr/public/busreview/2485. htm). Note that in approving the patent pools, the Department did not address any antitrust issues that might be raised by the process of defining the DVD standard itself. *See id.* at n. 3 ("While your letter includes information concerning the process by which these formats were established, you have not requested, and this letter does not offer, an opinion on any competi-

are seeing entry in digital distribution in music through competing industry joint ventures, including press*play* and MusicNet, and in video-on-demand by Disney and Fox through movies.com, while Sony, Warner Bros., Universal, Paramount and MGM have aligned in movie*fly* (apparently italicized second syllables are key for online entry).[9]

These joint ventures raise many interesting antitrust issues. press*play* is a joint venture of Sony and Universal Music (the latter is part of the Vivendi entertainment empire). Is this price fixing in and of itself or is this protected under the new product rationale of *Broadcast Music*?[10] If other entrants, such as Napster, seek licensing rights to the music catalogues and are told to go away, do we have an impermissible group boycott?[11] Would these joint ventures foreclose access to enough of the relevant content to be troublesome, as occurred when the movie studios wanted to set up a pay cable channel, Premiere, to compete with HBO?[12] The music and video joint ventures have already attracted antitrust scrutiny from the feds[13] and Napster has raised antitrust issues in its pending case. Much of the key antitrust doctrine reflects antitrust days gone by and needs to be reassessed in the light of current antitrust and economics thinking.

Second, in the most abstract sense, questions regarding the right rules for access tap into a much larger set of issues. So if we ask under what circumstances should a distributional entrant have some mandatory access to copyrighted works, we are asking a question that parallels, in some ways, many recent controversies. So debates over open-access to broadband pipes by Internet service providers, the unbundling of telecommunications in the 1996 Telecommunications Act, or access to the electricity grid might be relevant here. These situations raise tricky questions in industrial organization theory, relating to how bottlenecks operate and the possibility of input or vertical foreclosure. As to all of these issues, it is critical to understand the terms under which voluntary access will be granted, the gap, if any, between that access and the amount socially desired, and the ability of government policy, if any, to close that gap. These are obviously very large issues, and instead here I focus on the role of the internal workings of copyright regarding access and what that means for distributional entry.

Third, there is nothing magical about music and video as compared to text, but the market seems to be telling us that an ebook is still a poor substitute for an old-fashioned paper book.[14] So while much of the analysis here should carry over to distribution of digital texts, it just doesn't seem like an important subject today. It is probably important to separate physical distribution from online distribution. The perfect reproduction that emerged as we switched from analog to digital is certainly a key contributor to change, but it is the ability to distribute these bits around the world instantly that, unchecked, would create severe pressure on the existing business models of the music and video industries.

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tive issues presented by the development of these formats or any other DVD-related format").

[9] All of which have more information available at the to-be-anticipated web addresses.

[10] Broadcast Music, Inc. v. Columbia Broadcasting System, Inc., 441 U.S. 1 (1979).

[11] Northwest Wholesale Stationers, Inc. v. Pacific Stationery and Printing Co., 472 U.S. 284 (1985).

[12] United States v. Columbia Pictures Industries, Inc., 507 F. Supp. 412 (S.D.N.Y. 1980).

[13] Anna Wilde Mathews, *U.S. Probes Movie-Industry Ventures for Possible Antitrust Problems on Web*, The Wall Street Journal, December 21, 2001; Matt Richtel, *U.S. Inquiry Is Under Way on Online Music Business*, The New York Times, October 16, 2001.

[14] Electronic distribution may work well for some texts, such as academic work. The author may not be seeking to sell the work and it may be short so that it would not be bound anyhow. Old contracts are creating uncertainty about ownership rights for electronic versions of works and that may be slowing the process as well. *See* Random House, Inc. v. Rosetta Books LLC, 150 F. Supp.2d 613 (S.D.N.Y. 2001), aff'd, 2002 WL 373276 (2nd Cir. Mar. 8, 2002).

Section I of the paper discusses six reason why online distribution matters. Section II examines *Sony* before looking at Napster and new litigation over the DVR, and then turns to the Digital Performance Right in Sound Recordings Act of 1995, as amended by the Digital Millennium Copyright Act, and what it means for entry for web radio. Section III concludes.

I. Why Online Distribution Matters

Online distribution introduces six key changes:

1. as a new medium, online distribution adds to the existing set of versioning opportunities for producers;
2. distributional bottlenecks are weakened and gatekeeping roles minimized;
3. sellers receive direct, detailed information about consumer preferences;
4. bundling and packaging opportunities are greatly expanded;
5. pay-per-view or pay-per-listen is easier to implement; and
6. it is possible to devolve control over distribution through peer-to-peer distribution.

As this list suggests, identifying winners and losers here isn't straightforward. The loss of control over distribution in (6) puts pressure on producers and distribution intermediaries. The weakening of distributional bottleneck may make it easier for producers to get to market.

A. Versioning

Most copyrighted works are delivered in multiple versions. Books are frequently released in sequence, moving from hard cover to trade paperback to mass paperback. Even before the rise of the VCR and the DVD—which each created an additional versioning opportunity—movies were versioned through separate sequential distributions in first-run and second-run theaters. *Interstate Circuit*,[15] an antitrust classic, was precisely about the respective roles of first- and second-run theaters. Online distribution adds another versioning mechanism.[16]

B. Distributional Bottlenecks and Gatekeepers

Second, online distribution changes the role that bottlenecks and, perhaps, more accurately, gatekeepers, play in preventing content from getting to consumers. Consider broadcasting regulation, where spectrum limits for over-the-air distribution, last-mile limits for cable distribution and limits on orbital slots have driven the approaches to regulation. So we impose an elaborate must-carry regime on cable out of a concern that cable providers will deny carriage to over-the-air broadcasters, thereby weakening them, and thereby pushing more TV viewers away from free consumption over the air to fee consumption over cable.[17] When satellite dishes start to sprout on neighborhood houses, we grow concerned that satellite carrier decisions will distort competition between likely-to-be-favored network broadcasters and independent broadcasters and impose a

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[15] Interstate Circuit, Inc. v. United States, 306 U.S. 208 (1939).

[16] For more on versioning generally, see Carl Shapiro and Hal R. Varian, Information Rules ch. 3 (Harvard Business School Press, 1999) and on the consequences of the VCR for sequential distribution, see David Waterman, *Prerecorded Home Video and the Distribution of Theatrical Feature Films*, in Video Media Competition: Regulation, Economics and Technology (ed. Eli M. Noam 1985).

[17] *See* Turner Broadcasting System, Inc. v. Federal Communications Commission, 512 U.S. 622 (1994) and Turner Broadcasting System, Inc. v. Federal Communications Commission, 520 U.S. 180 (1997) ("Turner II") (upholding after remand must-carry obligations imposed under sections 4 and 5 of the Cable Television Consumer Protection and Competition Act of 1992).

"carry one, carry all" rule on satellite carriers.[18] The FCC's recently overturned limits on the number of viewers a cable system can reach and the extent of its vertical integration again reflect an effort to control the gatekeeping roles usually associated with bottlenecks.[19]

In these situations, physical limits result in gatekeeping roles for content. The owner of a TV station chooses which content to broadcast to its viewers, the cable operator assembles a group of channels that it presents in packages to its customers. These distributional bottlenecks need not result in gatekeeping roles, as we could have open leased-access regimes, but the Supreme Court has made clear that Congress need not avoid gatekeeping roles in creating broadcast regulations that survive First Amendment scrutiny.[20]

In contrast, at least given the current design of the Internet, although there certainly are bandwidth limits and therefore genuine physical constraints, no one serves as a gatekeeper for content distributed over the Internet. So consider online radio, where "radio" takes on a completely different meaning. With online distribution, traditional over-the-air stations can extend their signals by taking tehm online and making them available to anyone, anywhere. No more late night fiddling with the dial hoping to pick up amidst the static distant stations from home; instead stream and listen at will.

Perhaps more importantly, anyone can enter and stream "radio" over the network. Take a quick look at the "Station Finder" in the "Radio Tuner" in the Windows Media Player. You will find hundreds of Net-only radio stations, which in turn slice and dice the world of music into extremely thin niches. This is not quite personalized radio—think WPKR, the radio station devoted to the music that Randy Picker likes—but it is far from the possible limits on diversity that limited spectrum space might create.

If we turn to physical distribution of content and in particular music CDs, if the record companies act as an important distribution gatekeeper—bands have to get through the companies to get CDs in stores—for new bands, online distribution takes the record companies entirely out of the distribution loop. Nothing prevents a band from posting its music on the Internet, and devoted fans can download that music directly. Before the Internet, distribution of CDs was the trick; with the Internet, direct distribution can happen immediately.

Garageband.com is an example of this kind of entry. Launched in October, 1999 by a former Netscape tech guy, a money guy, and a former member of the Talking Heads, Garageband was planned as a bricks-and-clicks record entrant. Bands could post their songs on the site, so long as they first rated five songs already posted. Listeners could download songs and also review them. If all went well, Garageband would become an online music community. Garageband also planned to sign acts and sell CDs, and indeed, to induce more posting of songs, planned to award a contract to the site's top-rated band. Of course, entry doesn't necessarily equal success: as of March, 2002, the Garageband website was "temporarily" dark, in part because of the difficulty of offline distribution of CDs.

Gatekeeping issues arise for radio as well. The notorious history of payola in the record business—the practice of paying radio stations to play tunes—resulted in intervention by the

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[18] *See* Satellite Broadcasting and Communications Ass'n v. Federal Communications Commission, 275 F.3d 337 (4th Cir. 2001) (upholding rule imposed in Satellite Home Viewer Improvement Act of 1999).

[19] *See* Time Warner Entertainment Co. v. Federal Communications Commission, 240 F.3d 1126 (D.C. Cir. 2001).

[20] *See Turner II*, *supra* note 17, at 221-22; *see also* Time Warner Entertainment Co. v. Federal Communications Commission, 93 F.3d 957, 968-971 (D.C. Cir. 1996) (rejecting challenge of facial unconstitutionality under the First Amendment of leased access requirements of the Cable Communications Policy Act of 1984).

FCC, rules that still apply today, at least nominally.[21] At one level, the practice is straightforward: spectrum is scarce, radio stations are gatekeepers, and they sell space to producers. The practice is widely condemned, though music is one of the rare goods for which you really do get to try it before buying. So you can certainly not listen to bad songs on the radio, and these days, at Borders and other sellers, it is easy to sample songs before buying. In any event, online distribution should reduce the direct gatekeeping role played by over-the-air radio stations, though there still remains the question of getting the consumer's attention. That may explain why the independent radio promoter system emerged after payola was officially killed off, and why it is such big business today.[22]

C. Customer Access and Information

The Internet provides unprecedented access to customer habits and decisions. This ranges from the controversial possibility of tracking consumers as they move from site to site to the more mundane, such as having a direct relationship between sellers and consumers. Of course, *some* seller has always had a direct relationship with consumers, typically a retailer. The change is that online distribution makes it possible for artists to have direct relationships with their fans and certainly makes it possible for the record companies to push beyond retailers to direct sales with customers.

Retailers are understandably nervous about this, and indeed have resisted other efforts by the record companies to establish direct ties with consumers. As just one example, in January, 2000, the National Association of Recording Merchandisers ("NARM"), the trade association for music retailers, brought a private antitrust action against Sony alleging, among other things, that the "enhanced" CD was an impermissible tie between the music on the CD and extra non-music content on the CD that included hyperlinks to Sony's websites. These links made it possible for a listener to click and buy another CD directly from Sony's website. NARM had a clear view of Sony's activities:

> By coercing NARM retailers to carry its CDs with Buy Now Links and/or other bundled products soliciting NARM retailers' customers to shop at Sony-related sites, Sony is misappropriating the valuable consumer information and data relating to those customers who activate the Buy Now Links or act upon the bundled solicitation products. In effect, Sony forces retailers to give it access to each of their customers who buys a CD with Buy Now Links.[23]

This seems to presuppose a natural order about the ownership of consumer information, but in any event, it makes clear the possibilities that exist with online distribution.[24]

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[21] For discussion, *see* Kerry Segrave, Payola in the Music Industry: A History, 1880-1991 (McFarland & Co., 1994); R.H. Coase, *Payola in Radio and Television Broadcasting*, 22 J. Law & Econ. 269 (1979); Note that Coase suggests that concentration in the record industry may have been exacerbated by the payola rules. *See id.* at 317.

[22] See Eric Boehlert, Record Companies: Save us from ourselves! , Salon, March 13, 2002 (www.salon.com/ent/feature/2002/03/13/indie_promotion/index.html).

[23] NARM Complaint ¶ 57 (www.narm.com/news/lawsuits/NARMvSony.pdf).

[24] NARM eventually dropped its lawsuit, *see* www.narm.com/Content/NavigationMenu/Public_Affairs/NARM_Sony_Lawsuit/sony.htm, after the Department of Justice filed an amicus brief in the case arguing that NARM had not made out an appropriate tying claim (*see* www.usdoj.gov/atr/cases/f9400/9467.htm). *See also* the testimony of Mike Ferrace, Senior Vice President, Digital Business, Tower Records, before the U.S. Senate Committee on the Judiciary, "Online Entertainment: Coming Soon to a Digital Device Near You," Apr. 3, 2001 ("OK. My suppliers have the right to get into retailing. Tower isn't afraid to compete with retailers. We think we're pretty good. But we don't think it's fair to let these companies use their

D. Bundling

Digital distribution changes bundling and packaging opportunities. Bundling, in the form of block booking, has long been an important issue for antitrust and copyrighted works. A distributor insists that an exhibitor take one film to receive a second. In *Paramount* itself, the practice involved licensing groups of films as a block before they were actually produced.[25] Selling sight unseen before films have been made, of course, is a different practice than insisting that two films be taken together when both can be easily evaluated independently, but in any event, the Supreme Court condemned the practice in *Paramount*, and at least nominally, block booking is still treated as a *per se* violation of the Sherman Act.[26]

Bundling issues work differently in different areas. Broadcast is different from physical delivery of content media. Broadcast media are essentially all about packaging. The days of the Big Three broadcast networks with three packagers are long gone. A quick perusal of the FCC's annual report on the status of competition in video[27] makes clear how video channels package themselves. You want sports? 6 flavors of ESPN, 2 for Fox sports. Game shows? The Game Show Network. Ethnic interests? ART (Arab Radio & Television), CTN (Chinese TV Network), National Jewish TV and quite a few more. Sex? Food? History? Science? *Boating*? There are one or more channels devoted to each.

The dramatic move of TV broadcasting from over-the-air distribution to cable and satellite distribution—of 102 million TV households in the US, 88 million, or roughly, 86%, receive their TV from something other over-the-air sources[28]—has expanded packaging opportunities for TV content entrepreneurs.[29] Online distribution of video would continue this trend but would change it in important ways as well.

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power over us to steal our customers and ultimately steal our business. Retailers need rules that protect competition. I'm speaking just for Tower today, but if you ask Pam Horovitz at NARM, which is the association that represents music retailers, she'll tell you that all retailers just want a level playing field that let's them decide how to market and sell music. That's what I think our government wants also.") (www.senate.gov/~judiciary/print_testimony.cfm?id=198&wit_id=270).

25 *See* United States v. Paramount Pictures, Inc., 334 U.S. 131, 156-58 (1948).

26 *See* United States v. Loew's, Inc., 371 U.S. 38 (1962) (finding block booking violation under *Paramount* in licensing movies for TV exhibition); MCA Television Ltd. v. Public Interest Corp., 171 F.3d 1265, 1278-79 (11th Cir. 1999) (affirming lower court's ruling of *per se* violation under *Paramount* for TV syndicator's licensing practices). The economic literature on block booking is extensive. *See* George J. Stigler, *United States v. Loew's Inc.: A Note on Block-Booking*, 1963 Supreme Court Review 152 (emphasizing price discrimination basis for block booking); Roy W. Kenney and Benjamin Klein, *The Economics of Block Booking*, 26 J. Law & Econ. 497 (1983) (emphasizing that films were pre-sold before production and treating block booking as a form of average-pricing used to control "oversearching" by film exhibitors and consequent over-rejection of films); F. Andrew Hanssen, *The Block Booking of Films Reexamined*, 47 J. Law & Econ. 395 (2000) (rejecting oversearching rationale); Roy W. Kenney and Benjamin Klein, *How Block Booking Facilitated Self-Enforcing Film Contracts*, 47 J. Law & Econ. 427 (2000) (arguing that reputational capital limits explain, in part, form of efficient block booking contracts).

27 *See* Federal Communications Commission, *In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 8th Annual Report, Appendix D (released Jan. 12, 2002) (hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-01-389A1.pdf).

28 *Id.* at p. 95 (Table C-1).

29 And also explains why it may be sensible to end traditional TV broadcasting and re-allocate the freed-up spectrum to other uses. *See* Thomas W. Hazlett, *The U.S. Digital TV Transition: Time to Toss the Negroponte Switch*, AEI–Brooking Joint Cener for Regulatory Studies, Working Paper 01–15, November, 2001 (papers.ssrn.com/abstract_id=292655).

The idea of a channel fundamentally is about receiving a particular package of video content at times set by the broadcaster. Many current versions of per-per-view video still offer content selected by the broadcaster, but the choice of receiving the content is made by the viewer in selecting and paying for that particular content. The idea of a channel still applies in many ways, as channels may specialize in the content that they push for selection.

For example, in alternative version of VOD, subscription VOD ("SVOD"), users pay a monthly fee for access to a package of content. In many cases, this is another example of versioning. So HBO runs an HBO-on-demand program, but the content is just re-broadcasts of HBO content, and indeed, you cannot buy access to HBO-on-demand unless you already subscribe to HBO.[30] This is just one approach to time-shifting content. Indeed, in some ways, consumers can home-brew a version of SVOD by combining standard push broadcasting, whether over-the-air, via cable or via satellite—with a sophisticated digital video recorder ("DVR"), such as TiVo or ReplayTV.

In the full-blown version of video on demand, all video content is available at all times to be "pulled" by the viewer and paid for. If I am really paying per view, the channel vanishes. Websites may specialize in the content that they present, but, absent legal restrictions, content aggregators will jump in and repackage the offerings by presenting different views of the offered content. This is precisely what we have seen in the online auctions market, where auction aggregation sites have emerged to present at one spot auctions offered by eBay, Amazon, Yahoo and others.[31]

For video distribution, online distribution is first and foremost about the unbundling of the channel and the ability to convert channels to pay-per-view payment. Online distribution of video is also a direct substitute for video tapes or DVDs, especially if coupled with a storage medium, such as a VCR, or more naturally, with a DVR. Bundling issues don't loom particularly large for physical video media such as tapes or DVDs.

Turn from video to music and consider bundling and how online distribution might matter. Radio, whether broadcast over-the-air, more recently, over satellite or over the Net, involves the same packaging issues as video. Radio is at a more primitive point than video. Cable dramatically expanded TV offerings, adding channels and allowing the specialization described above—a move from broadcasting to narrowcasting—and we have repeated that with satellite TV. In contrast, although recently there has been entry in the satellite radio field—XM Radio being a prominent example—and cable packages often come with pure music channels, most radio is delivered through the air. As discussed above, online radio has the capacity to change that dramatically and in so doing alter the bundles of music presented to listeners and increase radio diversity.[32]

Consider physical distribution of music, until now, CDs and cassettes. This is essentially a pull process rather than the push process of broadcast. Physical distribution of pre-recorded music has always been about bundling, about selecting a mix of songs for a CD. The choice between singles and CDs, the number of singles to release, this is all about selecting bundles. For physical media delivery, online music distribution is a bigger move away from offline music distribution than online video is from offline video, Compatibility with players makes a CD-single the same size as a multi-song CD, but 14 CD singles take dramatically more floor space at Tower Records.

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[30] *See* HBO on Demand FAQs (www.hboondemand.com/cmp/faq.html#17).

[31] eBay, Inc. v. Bidder's Edge, Inc., 100 F.Supp.2d 1058 (N.D. Calif. 2000).

[32] As seems to be happening. *See* Benjamin M. Compaine & Emma Smith, *Internet Radio: A New Engine for Content Diversity* (Sloan Working Paper 4202-01, October, 2001) (papers.srrn.com/abstract_id=290293).

Put differently, inventory costs are much higher for single songs than they are for the groups of songs stored on a single CD.[33]

Online distribution changes all of this. There is no natural limit to the number of online singles that might be offered, and many different "albums" could be assembled from the same pool of music. This certainly has been possible even without online distribution—as late-night TV viewers know from the all too familiar "not-sold-in-stores" compilation CD hits of the insert-genre-of-choice-here[34]—but compiling and delivering a CD is clumsy and expensive compared to its online counterpart.

E. Pay Per View and Pay Per Listen

A switch to online distribution makes it easier to implement a pay-per-view or pay-per-listen pricing approach. Digital distribution lowers the transaction costs of implementing a pay-per-view pricing scheme or a more generalized metered pricing scheme for the use of copyrighted works. This is another angle on bundling, except this is unbundling over time.

Pay-per-view plays an important role for video but never has done so for music. Movie producers have always had one or more media for delivering a single viewing. Music companies have not had that opportunity, but online music distribution makes that possible. Video, of course, was originally all pay-per-view: buy a ticket, see a movie. See the movie again next week? Buy another ticket. Distribution of movies through TV changed this, but only importantly with regard to the precise means in which monies flowed to movie producers. It was still very much a one-view, one-payment system, but large payments would be made by broadcasters for the aggregated views of TV audiences.

For video, this system started to change with the emergence of the laser disk and then changed importantly with the rise of the VCR. Pricing policies for the VCR determined in part the structure of putting tapes into the hands of consumers. High purchase prices would require that tapes be shared among consumers and this would occur through a rental intermediary, such as Blockbuster. Low purchase prices would support direct purchase of videos by consumers.

To some extent, the structure of these markets is explained by the first-sale doctrine set forth in Sec. 109(a) of the Copyright Act:

> Notwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.

But it is easy to overstate the importance of this in explaining vertical structure. As the legislative history of the Copyright Act makes clear, the first-sale doctrine was designed to ensure that a third party faced no liability for copyright infringement when he or she acquired a particular copy of the work second hand. So if I rent a video from Blockbuster, I face no copyright issues. That is not to say that that rental creates no issues for Blockbuster, as the original sales contract between Warner and Blockbuster could bar Blockbuster from renting videos. Nothing in the first-sale doctrine alters whether that contract is fully enforceable.[35]

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[33] Indeed, the single appears to be dying. *See* David Bauder, *Retailers, fans wonder why industry is killing off single*, The Chattanooga Times Free Press, March 6, 2002, p. E1.

[34] Go to www.musicspace.com if you don't watch TV after 10:00 pm and would like to know more.

[35] The legislative history states that:

> Section 109(a) restates and confirms the principle that, where the copyright owner has transferred ownership of a particular copy or phonorecord of a work, the person to whom the copy or phonorecord is transferred is entitled to dispose of it by sale, rental, or any other means. …

In contrast, prerecorded music has always been a sales business. In part, this is a function of how consumers use music and video. For music, repeat play is the norm, while for adults at least, one or two viewings of a video usually suffices (small children, in contrast, can watch the same Barney tape running in an endless loop). This changes the copying incentives for video. You could rent a video and copy it with a second VCR, but just for watching, it usually isn't worth it. Ownership—or least ready access—has always been an important feature of music.

Rental of music—or pay-per-listen—has never been possible. The music rental market that started in the 1980s seemed more about facilitating copying than implementing anything like the rental structure we see for video, and was quickly squashed through legislation.[36] Now, as discussed below, entrants in online music distribution emphasize streaming, which is precisely a per-listen approach.[37]

F. Peer-to-Peer Distribution and the Loss of Distributional Control

As Napster and its successors make clear, online distribution makes it possible for consumers to go into distribution directly. Online distribution drives down the transactions costs of offline sharing, with dramatic consequences. Copies are close to perfect and can be shared almost instantly with anyone in the world. This distributional approach has many virtues. It takes advantage of distributed computing resources, with low marginal cost and robustness through substantial redundancy and makes consumer viral marketers. The problem, as it were, of course, is that this is not an *economic* model of distribution.

The recent lawsuits filed against SONICblue and ReplayTV[38] emphasize in part the new DVR's ability to distribute video programs to friends and family. The movie and TV producers fear that these advanced DVRs will drive down the cost of sharing video—no more clumsy VCR taping of *The Sopranos* for friends—and undercut a number of their revenue streams.

II. The Shape of Entry in Digital Distribution

The experience over the last quarter century demonstrates that new distribution entrants typically face substantial uncertainty about whether copyright law permits entry. For example, for

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> Thus, for example, the outright sale of an authorized copy of a book frees it from any copyright control over its resale price or other conditions of its future disposition. *This does not mean that conditions on future disposition of copies or phonorecords, imposed by a contract between their buyer and seller, would be unenforceable between the parties as a breach of contract*, but it does mean that they could not be enforced by an action for infringement of copyright.

1976 U.S. Code Cong. and Admin. News 5693 (emphasis added).

Note also that selling tapes to Blockbuster for subsequent rental may not be the best way to structure the relationship between studios and video stores. *See* Julie Holland Mortimer, *The Effects of Revenue-Sharing Contracts on Welfare in Vertically-Separated Markets: Evidence from the Video Rental Industry* (Working paper, Nov. 15, 2000) (finding that revenue-sharing contracts between studios and video retailers increased revenues relative to sales model).

[36] The Record Rental Amendments of 1984 added new Subsection 109(b) to the Copyright Act barring "rental, lease or lending" of records. *See* P.L. 98-450, 98 Stat. 1727 (Oct. 4, 1984). As noted in the legislative history, music rental outfits were renting records for a day or two, selling blank tapes, and advertising, "[n]ever, ever buy another record." See 1984 U.S. Code Cong. and Admin. News 2899.

[37] And the pay-per-view or listen technology is made even more powerful by the technology controls protected under the Digital Millennium Copyright Act, P.L. 105-334 (October 28, 1998).

[38] The complaints and other documents are available at www.eff.org/IP/Video/Paramount_v_ReplayTV/.

both cable TV and satellite TV, entrants did not know the conditions under which they would be able to get access to content. Empty pipes accomplish little, yet copyright law, along with communications law, determines whether entrants can easily find things to put in the pipes. For cable, early case law favored the copyright owners, but two key Supreme Court decisions[39] established that cable operators were more like viewers than broadcasters and therefore did not perform the works that they carried.[40] That regime lasted less than two years, as the Copyright Act of 1976 reset the rules for so-called secondary transmissions, treating some unauthorized transmissions as a copyright infringement but coupling that with a statutory mandatory licensing scheme.[41]

In this section, I want to focus on two cases of distribution entry. I will label the first devices, though it will be obvious immediately that this is a misnomer. This category really is about third-party copyright liability, and covers the VCR, Napster and its descendants and the DVR. The second case is online radio where the Digital Performance Right in Sound Recordings Act of 1995 ("DPRA") sets the relevant framework. I will also discuss briefly how the DPRA alters entry in interactive music distribution, though as noted at the beginning, the current versions of those services pose in the main interesting if somewhat more conventional antitrust questions.

A. Devices

1. Sony and the VCR

In *Sony Corporation of America v. Universal City Studios, Inc.*,[42] Universal Studios and Disney sued Sony for contributory copyright infringement caused by consumer copying of TV programs using a VCR, or, as the Court called it, a VTR, a video tape recorder. The Ninth Circuit reversed the lower court and found liability for contributory infringement. The VCR looms large not only for it role in defining the consumer electronics industry[43] but also in setting the framework for all recent discussions of third-party liability in copyright.

Third-party liability for copyright infringement turns first on finding the primary party liable for copyright infringement and second on finding a basis for extending that liability to the third party. Here, of course, that would mean liability for a consumer using a VCR to tape programs. Chasing individual consumers is time consuming and is a teaspoon solution to an ocean problem, hence the action by the studios against Sony.

The majority opinion in *Sony* addresses both issues, though a bit obliquely, and starts with the question of third-party liability. Third-party liability in copyright usually follows one of two theories, vicarious liability or contributory copyright infringement. Vicarious liability requires that the third party have some measure of control over the primary party and that the third party enjoy a direct financial benefit from the infringement. No knowledge of the actual infringement is required.[44] In contrast, contributory copyright infringement requires knowledge of the infring-

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[39] Fortnightly Corp. v. United Artists Television, Inc., 392 U.S. 390 (1968) and Teleprompter Corp. v. Columbia Broadcasting System, Inc., 415 U.S. 394 (1974).

[40] *See* Fortnightly Corp, *supra* note 39, at 400-01.

[41] *See* 17 U.S.C. § 501, 17 U.S.C. § 111.

[42] 464 U.S. 417 (1984),

[43] *See* Alfred Chandler, Jr., Inventing the Electronic Century: The Epic Story of the Consumer Electronics and Computer Industries (Free Press, 2001).

[44] Fonovisa, Inc., v. Cherry Auction, Inc. 76 F.3d 259 (9th Cir. 1996).

ing activity and a material contribution to it.[45] No vicarious liability claim was before the Supreme Court,[46] so the case turned on contributory infringement.

How should the knowledge requirement apply here? Should it suffice that Sony knew, at least constructively, that some purchasers would use the VCR for unauthorized taping? The Court looked to Sec. 271(c) of the Patent Act for guidance:

> Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and *not a staple article or commodity of commerce suitable for substantial noninfringing use*, shall be liable as a contributory infringer.[47]

With this in hand, the Court announced its test for evaluating the VCR:

> The staple article of commerce doctrine must strike a balance between a copyright holder's legitimate demand for effective—not merely symbolic—protection of the statutory monopoly, and the rights of others freely to engage in substantially unrelated areas of commerce. Accordingly, the sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes. Indeed, it need merely be capable of substantial noninfringing uses.[48]

This is all somewhat awkward. The staple article of commerce doctrine starts with just that, a "staple" and it is hard to see how any new product could qualify. There are also some tricky jurisprudential issues. Congress enacted both the Patent Act and the Copyright Act and obviously chose to include this language in the former but not the latter so what business does the Court have in embracing this language in *Sony*? The response: third-party liability for copyright infringement has always been judge-made law, and nothing suggests that Congress in addressing these issues for patents intended to alter the evolutionary path of courts for contributory infringement in copyright. These are not my issues, at least not here. In any event, in *Sony* itself, the Court was able to find noninfringing uses through authorized taping and through unauthorized time-shifting protected as fair use.

It is hard to see how the substantial noninfringing use test is correct. Even without considering the question of alternative designs—an issue I pursue momentarily—just on a standalone basis, the test seems to have substantial problems. Think of any object really. The object generates $100 worth of social benefit and $1000 worth of social harm. On balance, this is clearly a terrible product, and if we forced the manufacturer to internalize the harm, it would never be produced. It instead we merely ask whether there are some beneficial uses, this product, and almost all others, will pass with flying colors.

We might fight about what counts as benefit and harm in the copying of copyrighted works, but that seem a separate question of how we should evaluate objects that copy. Give me your valuation of benefits and costs of copying: whatever it is, I think it unlikely that you favor manufacture if the costs exceed the benefits, yet that is precisely what *Sony* blesses. *Sony* certainly facilitates entry, but not in a way that is socially useful.[49]

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[45] Gershwin Pub. Corp. v. Columbia Artists Management, Inc., 443 F.2d 1159 (2d Cir. 1971).

[46] Sony, 464 U.S. at 435 n. 17.

[47] *Id.* at 440 n. 20.

[48] *Id.* at 442.

[49] Even the four dissenting justices, who take the majority to task for their test, stop short of embracing a

The design issue makes the point even more powerful. You could spend $5 to design the product to eliminate the social harm while still creating a $100 in social benefits. Should you spend the money to redesign? Again, the answer should be straightforward and with a sensible liability rule, would be. In contrast, *Sony* removes any reason to redesign to minimize copyright infringement.[50]

I find it difficult to justify *Sony* in these settings. Perhaps we need to play with the number a little bit, so try this. The VCR creates $100 in social value today and $1000 in harm today as before. The VCR also creates a 1 in 1000 possibility of $1,000,000 in social value tomorrow. Think of this as the possibility of social learning that might take place tomorrow if we take this step today. This is part of the nature of technology. On these numbers, ignoring discounting, now the VCR creates $1100 in social value against $1000 in harm, and we should want it. Of course, even if we made Sony liable for the harm they would still build it, unless Sony cannot capture a sufficient share of the social value it creates.

There is certainly good reason to think that is true, but I am not sure where we go with that. You could say that we need to shave down the liability that Sony bears to match the fact that it cannot capture the full share of the benefits that it creates, but this is a difficult process and there is certainly nothing in *Sony* itself that helps us assess this.

As framed by the majority and copyright doctrine, all of this goes to how we assess Sony's knowledge for the purpose of contributory copyright infringement. So, even if the costs and benefits of the VCR lined up in the way that I have described, for the doctrine, the question is one of Sony's knowledge, not the actual effect. Still, there should be some relationships between the two, and of course, knowledge isn't just imposed exogenously; copyright holders have every incentive to create knowledge in the third party through cease-and-desist letters and others means of direct notice.

The real question is how we should assess the harms of Sony's activity and that turns directly on whether the underlying activity itself is problematic. For the majority in *Sony*, this turned in part on the fact that some taping was authorized—Mr. Rogers said it was ok in his neighborhood[51]—but that seems a weak rationale, as certainly one copyright holder lacks any basis to consent for another.[52] The more important issue is unauthorized taping, and that takes us to the fair use doctrine embodied in Section 107 of the Copyright Act. [53]

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net test. Instead, they would find no liability for the producer "if a *significant* portion of the product's use [was] *noninfringing*." *Id.* at 491.

[50] In contrast, the dissenters were aware of the importance of a possible re-design of the VCR. They noted that the TV tuner built into the VCR, which facilitated taping of TV shows, was not necessary for playing pre-recorded tapes, such as movies from a video store. *Id.* at 492 n. 42. The dissent also considered the possibility that a VCR could recognize a special broadcast signal so as to jam the unauthorized recording of shows. *Id.* at 494.

[51] *Id.* at 445 and n. 27.

[52] And that undercuts the majority's conclusion that "Sony demonstrated a significant likelihood that substantial numbers of copyright holders who license their works for broadcast on free television would not object to having their broadcasts time-shifted by private viewers." *Id.* at 456.

[53] Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether he use made of a work in any particular case is a fair use the factors to be considered shall include —

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

Fair use is notoriously uncertain in application, but the legal drill is reasonably clear. The first step starts with the “purpose and character of the use, including whether such use is of a commercial nature.” The majority notes that had the Sony VCR been used for making copies for a commercial or profit-making purpose it would be presumptively unfair. So had an entrant made copies and set up shop selling those copies—another possible example of distributional entry—the first step of the fair use analysis would cut against a fair use.

Of course that was not the situation in *Sony*, which instead focused on time-shifting by consumers. As to the second factor, “the nature of the copyrighted work,” the works at stake in *Sony* are creative works and thus enjoy strong copyright protection. The third factor, the extent of the copying, works against fair use as well, as most consumers at least tried to copy entire programs.

That leaves the fourth step of the fair use analysis, namely “the effect of the use upon the potential market for or value of the copyrighted work.” Things get more interesting here. The producers raised a number of potential harms: tapers would fast forward over commercials and free TV is financed by commercial advertising, hence copying undercut the free TV business model; rating services would not count tapers, so viewing numbers would be artificially depressed; tapers would not watch reruns if they have their own copies at home, so rerun sales prices would drop; and others, including that tapers would not buy copies of the tapes they owned, reducing producers returns in a potential new market. The district court in *Sony* rejected these concerns, finding the evidence mixed or against the studios, and the Supreme Court ultimately upheld the district court’s findings. Of course, *Sony* was a 5-4 decision and therefore could easily have come out the other way

On its own terms, the fair use analysis seems at least contestable if not somewhat problematic. We might consider how it fares instead as de facto mandatory licensing policy. The Court defines the rights of the copyright holder in a way that facilitated distributional entry in a limited way. Of course, and this matters for the here and now, the Court did not address the question of whether I can tape and make copies for all my friends, even new “friends” in Russia that I have never met. The core situation really was me, couch potato at home, wanting to watch *Charlie’s Angels* at a different time.

Note also that little ties down the scope of the fair use doctrine, and in that sense Sony falls within the authority of the courts to define the scope of the rights of a copyright holder. The four-factor test in the statute merely lists “factors to be considered” and the legislative history of Sec. 107 emphasizes the open-ended and equitable nature of the fair use inquiry:

> Although the courts have considered and ruled upon the fair use doctrine over and over again, no real definition of the concept has ever emerged. Indeed, since the doctrine is an equitable rule of reason, no generally applicable definition is possible, and each case raising the question must be decided on its own facts. …
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> The statement of the fair use doctrine in section 107 offers some guidance to users in determining when the principles of the doctrine apply. However, the endless variety of situations and combinations of circumstances that can rise in particular cases precludes the formulation of exact rules in the statute. The bill endorses the purpose and general scope of the judicial doctrine of fair use, but there is no disposition to freeze the doctrine in the statute, especially during a period of rapid technological change. Beyond a very broad statutory explanation of what fair use is and some of the criteria applicable

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(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.

> to it, the courts must be free to adapt the doctrine to particular situations on a case-by-case basis.[54]

A sensible approach to fair use in this circumstances needs to reflect, as Gordon cogently argued two decades ago, the circumstances under which voluntary deals might take place; the social welfare in allowing the suggested use; and the diminished creation incentives, if any, that might result from broad fair use access.[55]

The extent to which distribution entry was facilitated can only be judged against what might have happened had *Sony* come out the other way. There are two paths to consider, the first theoretical and the second practical. As to the theory, consider the problem faced by a distribution entrant. If copyrights are widely held and we do not have a centralizing rights organization such as ASCAP or BMI, the entrant will face substantial transaction costs. (And, of course, even if we do have a copyright collective, we will face other sticky legal issues, as the half-century antitrust saga of ASCAP makes clear.[56]) Indeed, statutory licensing schemes are typically implemented to avoid the transactions costs of individualized negotiations with copyright holders.[57] If copyrights are narrowly controlled and if that control is tied to the current mode of distribution, copyright holders may be unwilling to license their copyrights to the entrant.

It is this possibility of content foreclosure that may stymie distribution entrants. As the MP3.com case makes clear, entrants can face substantial damages if they get the copyright question wrong.[58] In that context, the ability of Congress to impose a solution may help to mitigate potential hold-out problems and could operate as a brake on monopoly power of copyright collectives or individual rights holders. Copyright law proper pays no attention to the question of the relationship between control over copyrights and distributional market power, but the copyright choices clearly have direct consequences for the scope of entry in distribution.

As to the practical path, as the majority opinion notes, the copyright holders would have been willing to accept a compulsory license of their works for copying in exchange for a royalty on VCR sales.[59] That would track the approach seen for both cable and satellite TV, where we now have statutory licensing schemes. This would also parallel steps taken in many countries in Europe, which have introduced a combination of equipment and blank medium levies to create

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[54] H.Rep. No. 94-1476, p. 65-66, 1976 U.S. Code Cong. & Admin. News 5679-80.

[55] *See* Gordon, *supra* note 3, at 1601.

[56] The government first filed a criminal complaint against ASCAP in 1934, filed others complaints in 1941 for copyright pools as illegal restraints of trade, settled those complaints with a 1941 consent decree, *see* Broadcast Music, 441 U.S. at 10-11, and ASCAP has operated under one or more consent decrees since then. *See* United States v. American Society of Composers, Authors, Publishers, 2001-2 Trade Cases ¶ 73,474 (S.D.N.Y. 2001) (further amending final judgment arising from February 26, 1941 complaint); *compare* United States v. Broadcast Music, Inc., 275 F.3d 168 (2d Cir. 2001) (further proceedings as to BMI under consent decree entered to settle 1941 government complaint).

[57] *See, e.g.*, H. Rep. No. 94-1476 at 89, reprinted in 1976 U.S. Code Cong. and Admin. News 5704:

> The Committee recognizes, however, that it would be impractical and unduly burdensome to require every cable system to negotiate with every copyright owner whose work was retransmitted by a cable system. Accordingly, the Committee has determined to maintain the basic principle of the Senate bill to establish a compulsory copyright license for the retransmission of those over-the-air broadcast signals that a cable system is authorized to carry pursuant to the rules and regulations of the FCC.

[58] *See* UMG Recordings, Inc. v. MP3.com, Inc., 2000 Copy. L. Dec. ¶ 28,141 (S.D.N.Y. 2000) (suggesting on a rough calculation a possible infringement award of $118,000,000).

[59] Sony, 464 U.S. at 441 n. 21.

funds to compensate copyright holders. In fact, Germany introduced such a program as early as 1965.[60]

Indeed, it is interesting that we didn't see a statutory response to *Sony*—at least a direct response—as of course the cable distribution entrants also won first in the Supreme Court. It was only after the cable entrant's rights were established under the copyright law that they were recut in 1976 as part of the overhaul of federal copyright law. The indirect response to *Sony* appeared the next time this issue came to the fore in the form of the Audio Home Recording Act of 1992.[61] The AHRA required digital audio recording devices to come with a security scheme set out in the statute[62] and implemented an elaborate royalty scheme to compensate copyright holders for copying.[63]

2. Napster

This brings us to Napster. Napster is frequently described as peer-to-peer software for music sharing, but this slides over important details. Napster users downloaded its software from the napster.com website. When Napster users were online, Napster created a floating party for distributing music. Napster compiled a centralized listing of songs available from users for downloading from those users. Napster itself did not store songs centrally. Indeed, relying on the storage capacity of the users was one of the key ways that Napster lowered distribution costs. Napster did sit at the middle as an intermediary, as a matchmaker for individuals who want to swap songs.

A group of record labels sued Napster alleging third-party copyright liability. Again, third-party liability requires primary party liability coupled with one of the third-party theories, either vicarious liability or contributory copyright infringement. The Ninth Circuit focused initially on whether primary users would have a fair use defense under Sec. 107 of the Copyright Act.

Analysis of the second and third factors tracks *Sony*. We again are talking about creative works, the core of copyright, and most copying copies all of the work in question. Consider the first factor, the purpose and character of the use. Here the baseline matters. In *Sony*, the Court was working off of free TV as the baseline. I could have watched the show for free, and time-shifting allows me to do that at another time. In contrast, there is no free baseline for recorded music. Instead, the Ninth Circuit focused on music purchase as the baseline, saw downloading from Napster as a substitute, and therefore characterized the use as commercial, in that it saved the expense of purchasing the music.[64]

The analysis of the fourth factor, the effect of the use upon the potential market for or value of the copyrighted work, turned in part on what Napster's presence would do to the ability of the record companies to implement their own downloading markets. From the standpoint of encouraging entry in distribution, it is important to distinguish how entry affects preexisting markets from what it means for new markets.[65] It will almost always be the case, as the Ninth Circuit found in *Napster*, that if allowed to move forward as a protected fair use, the distributional entrant will make potential new markets less valuable for the incumbents. As the Ninth Circuit

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[60] *See* Tarja Koskinen-Olsson, Reprography and the Private Copy (www.kopiosto.fi/tiedotus/Reprogrphy.htm).

[61] P.L. 102-563 (October 28, 1992).

[62] 17 U.S.C. 1002(a).

[63] 17 U.S.C. 1003 – 1007.

[64] *See* Napster, 239 F.3d at 1015.

[65] For detailed discussion, *see* Jane C. Ginsburg, *Copyright and Control over New Technologies of Dissemination*, 101 Colum. L. Rev. 1613, 1619-20 (2001).

found "[h]aving digital downloads available for free on the Napster system necessarily harms the copyright holders' attempts to charge for the same downloads."[66]

The Ninth Circuit saw the issue but took the wrong lesson from it: "Moreover, the lack of harm to an established market cannot deprive the copyright holder of the right to develop alternative markets for the works."[67] In some ways, this misses the point. There is little reason for an outsider to innovate in distribution if it will be blocked at the moment that it needs content. If incumbents can deny access to the content and scoop up the innovation, they no longer need the entrant, and the entrant has little reason to innovate in the first place.

So as to new markets arising from new means of distribution, the fourth factor seriously misses the boat. The problem here in some sense is the weakness in property rights associated with the new market. Perhaps we want to say that only if an entrant can make a patent-worthy showing should it be able to obtain property-like claims on the new distribution market, but there is little reason to think that patent law has perfectly calibrated the rights that we need to encourage innovation.[68] Many ideas add value without being patentable.

How does the fourth factor fare with regard to preexisting markets? In the case itself, there was the usual battle of the expert studies on the question of whether Napster hurt or helped sales of prerecorded music. One could argue that, in any event, the copyright holder should be best situated to make that assessment and should have the power to do so. Copyright holders can give away free samples if they want to, and they didn't need Napster for that. The counter is to ask whether concentrated copyright holders have the right licensing incentives given their market power.

In any event, the fourth factor makes no effort to ask the critical causal question, namely, would the works have been created even if this use were permitted. That should be the central question for social welfare, as conditional on creation, we want to maximize use. This may be a question with no ready answer, which may explain why copyright frequently avoids it. There is a natural tendency to say that any works that preexist a distributional innovation would have been created absent the right to control the works in the context of the innovation, as indeed they were created. This misses, of course, that the ability of the copyright holders to gain compensation may depend critically on whether allowed use for innovation distribution devices kills off the original market targeted by the copyright holder.

This is clearly what the court feared in *Napster,* perhaps with good reason. It is one thing to shape the pliable aspects of copyright law in a way that creates meaningful entry incentives for those with distributional innovations. But we step too far if we allow entrants to hijack wholesale the works of copyright holders. In *Sony*, had the tapers set up shop to sell the tapes, we presumably would have had a very different case. Licensing fees implemented as part of a statutory bargain may do a better job of making sure we avoid the financial extremes, avoiding the problem of no distribution entry while still ensuring meaningful returns to copyright holders. Of course, to be sure about that, we would need to have pretty good sense of how legislation emerges in the face of jockeying by interest parties.[69]

Note also that the extent to which a distributional entrant needs some access to existing copyright material almost certainly depends on the cost of implementing the innovation. Napster could have signed bands ala Garageband.com, though of course this forces the entrant to enter

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[66] *Id.* at 1017.

[67] *Id.*

[68] *See* Douglas Gary Lichtman, *The Economics of Innovation: Protecting Unpatentable Goods,* 81 Minn. L. Rev. 693 (1997).

[69] For a favorable view of this process, *see* Ginsburg, *supra* note 65, at 1630.

two markets simultaneously, increasing the difficulty of the undertaking. It is a standard move in strategic tying to tie goods together to force entry on a larger scope for the potential competitor.

The Ninth Circuit's approach to *Sony* in *Napster* bears comment. Again, for contributory copyright infringement, knowledge plus material contribution is the test. *Sony* said no knowledge if the device has a substantial noninfringing use, Napster can be used to download songs posted by copyright holders, hence no knowledge, yes? The Ninth Circuit avoids *Sony* by treating notice of infringing material and control as sufficing to show actual knowledge:

> We agree that if a computer system operator learns of specific infringing material available on his system and fails to purge such material, the operator knows of and contributes to direct infringement. Conversely, … [t]o enjoin simply because a computer network allows for infringing use would, in our opinion, violate *Sony* and potentially restrict activity unrelated to infringing use. … The record supports the district court's finding that Napster has *actual* knowledge that *specific* infringing material is available using its system, that it could block access to the system by suppliers of infringing material, and that it failed to remove the material.[70]

In some ways, this collapses the contributory copyright infringement analysis with that for vicarious liability for copyright infringement, though the Ninth Circuit found that Napster would be liable under that standard as well.[71]

The move here recognizes that the third party's ability to control the copyright infringement must be part of the analysis. It is not enough to wash your hands of the problem based on the substantial noninfringing uses test. Now in *Napster*, this analysis was easier to run. As noted before, Napster wasn't a true peer-to-peer system, but instead sat at the middle in providing the directory of available songs. That made its control more obvious and more direct.

The litigation over Napster's successors—Morpheus, Grokster and KaZaA—will turn in part on these questions of control, and may take the next step, which is to focus on the ability to design software to set the level of control. On October 2, 2001, the entertainment world—28 plaintiffs are listed—sued the next-generation Napsters for copyright infringement, both direct infringement and third-party infringement.[72] The motion of the defendants for summary judgment based on *Sony* was denied, and trial is now set for October 1, 2002.[73]

Finally, on remand in Napster, the case has turned to antitrust issues and the idea of copyright misuse. This is at a very early stage, so the actual facts of Napster's dealings with press*play* and MusicNet are unknown, though the lower court judge has seen enough to suggest that "[e]ven on the undeveloped record before the court, these joint ventures look bad, sound bad, and smell bad."[74] Copyright misuse doctrine itself is still undeveloped, but the key point of interest here is the way that the doctrine might evolve as another device for policing licensing decisions by copyright holders.

3. The Digital Video Recorder

Consider the most recent entrant into the home recording market, the digital video recorder or DVR. Two brands, TiVo and ReplayTV, are relatively well-known—or not, as the products have only been so successful. Think of a VCR with a hard drive and you get the basic idea. Re-

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[70] *See* Napster, 239 F.3d at 1021-22.

[71] *Id.* at 1023-24.

[72] Case documents are available at www.eff.org/IP/P2P/MGM_v_Grokster/.

[73] Electronic Frontier Foundation Press Release, *Court Sets Jury Trial in Morpheus Peer-to-Peer Software Case*, March 4, 2002 (www.eff.org/IP/P2P/MGM_v_Grokster/20020304_eff_pr.html).

[74] In re Napster, Inc. Copyright Litigation, Memorandum and Order of February 21, 2001, p. 23.

cording on tape is clumsy compared to recording on a digital medium, and the rapid drop in the cost of a gigabyte of storage has made it possible to switch from tape to bytes.

This brings with it natural possibilities, including superior programmability, the ability to "stop" live TV shows and then continue watching them without missing a beat and also the ability to skip commercials entirely. Updates to the DVR make it possible to record a show and share it with friends, assuming, of course, that they also have the same DVR.

Commercial skipping and sending shows to friends has attracted the attention of content producers, and indeed, a bunch a of the biggies—including Paramount, Disney, NBC, Showtime, ABC, CBS and Viacom—filed a complaint against SONICBlue, the producer of ReplayTV, alleging copyright violations.[75] Given *Sony*, the plaintiffs of course need to distinguish the analog VCR or litigate to the Supreme Court to get a second consideration of the issues in *Sony*.

The mere existence of the lawsuit gives some sense of the tax that uncertain copyright doctrines place on entry in distribution and the interaction of those doctrines with design decisions. For example, SONICblue has made an interesting choice in adding the "Send Show" feature to the ReplayTV 4000. This puts this DVR squarely in the midst of the Napster controversy and seemed likely to attract litigation attention, as indeed it did. (No lawsuit has been filed against the competing TiVo system, which lacks the sharing feature.)

Ignoring the sharing feature, and consider copying and commercial deletion. We see here another example of the way in which the move from analog to digital technology alters transaction costs and puts pressure on the preexisting business model. The DVR lowers the cost of deleting commercials relative to a standard VCR or even relative to an analog dual-head VCR. The plaintiffs are quite plausibly right in thinking that if we all had DVRs, the current financing model for free broadcast TV would be toast. That model is one that lives and dies on commercials, and absent making us want to watch commercials—as many advertisers clearly do—no watching of commercials means no free TV.

This makes clear that it is certainly possible that there is a shared interest in making it difficult to delete commercials. Indeed, deleting/watching commercials may very well be a classic prisoners' dilemma: I want *you* to watch and not me, but I can't influence your behavior, so with the DVR, neither of us watches, and free TV vanishes. Saying all of that, though, says nothing about whether SONICblue should have some duty to make sure that we watch the commercials, or more precisely, about helping us avoid the commercials.

The *Sony* approach of measuring the fair use right against the prior baseline would suggest that SONICblue should prevail on the copyright claims tied to commercial skipping. With old-fashioned VCR taping, if you wanted to avoid commercials, you needed to be handy with the remote and fast-forward over them—disclaimer: I have done this—or close your eyes and ignore them. The DVR commercial skipping feature is just a nicer version of these prior "rights."[76] That said, if we really take fair use analysis as open-ended economic analysis, the prisoner's dilemma problem of commercials and free TV suggests that we will not necessarily reach the best the joint

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[75] The amended complaint is available at www.eff.org/IP/Video/Paramount_v_ReplayTV/20011121_paramount_amd_complaint.pdf ("ReplayTV Amended Complaint").

[76] The plaintiffs, of course, believe otherwise:

> The unauthorized making of copies of television programming for the purpose of viewing with all commercials (and all public service announcements and all political advertisements) automatically deleted is not a fair use, and goes far beyond the narrowly circumscribed conduct discussed by the Supreme Court in the 1984 *Sony Betamax* decision.

ReplayTV Amended Complaint, *supra* note 75, ¶ 54.

outcome if we allow individuals to make choices on their own. Only something more collective would get us to preserving the commercials.

B. Web Radio

Turn next to web radio. Is radio a complement or a substitute for purchased music? This question, in one form or another, is a copyright classic. In this case, I would ask, perhaps more precisely, how does the availability of online distribution alter the relationship between radio and purchased music? Pre-net, the radio spectrum determined the number of possible radio stations, and the fixed number of radio stations set the competitive landscape which in turn drove the resulting amount of musical diversity. With the net, nothing physical limits the amount of radio diversity. With feedback between online stations and listeners, stations could be tailored quite narrowly.

In the extreme case, I think that this pushes radio towards becoming more of a direct substitute for recorded music. To some extent, this turns on the roles that ordering and selection play. If I really want to hear songs in a particular order, radio doesn't work, since I have delegated sequencing to the DJ, as it were. If I don't care about order—and my guess is that many users have found the relatively new randomizing devices in CD players and the equivalent "shuffle" in the Windows Media player a great boon—then the only issue is whether the station is playing songs from the right pool, and with small enough niches of the sort permitted by net radio, we probably get better and better matches.

This process explains, at least in part, the shape of the Digital Performance Right in Sound Recordings Act of 1995 ("DPRA").[77] Some of the features in the Act are targeted to limit how online distribution might substitute for offline prerecorded music. That said, in many ways, the DPRA looks like an unholy alliance between music creators and analog broadcasters to limit competition from digital broadcasters by creating substantial entry barriers for them, all with the corresponding consequence of insulating record-company market power. This is especially so after the 1998 amendments in the Digital Millennium Copyright Act ("DMCA").[78]

The starting point is that the ability of analog radio stations to play prerecorded music over the air without paying royalties for use of the sound recordings was established through caselaw in the 1940s. Judge Learned Hand's opinion in *RCA Manufacturing Co. v. Whiteman*[79], rejected efforts by record producers to limit through broadcast by notices affixed to the records themselves.[80]

Passing legislation that might upset the apple carts of highly-motivated interests is difficult. The DPRA makes clear that it intended to leave in place existing arrangements allowing no fee play by over-the-air radio and instead just carved up the new medium, digital transmission.[81] The

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[77] P.L. 104-39 (November 1, 1995).

[78] P.L. 105-334 (October 28, 1998).

[79] 114 F.2d 86 (2nd Cir. 1940).

[80] The case mentions two legends, the simple "Not Licenses for Radio Broadcast," and the more complex: "Licensed by Mfr. under U.S. Pats. 1625705, 1637544, RE. 16588 (& other Pats. Pending) Only for Non-Commercial Use on Phonographs in Homes. Mfr. & Original Purchaser Have Agreed This Record Shall Not Be Resold Or Used for Any Other Purpose. See Detailed Notice of Envelope." Note that the case did not address potential contractual liability, *see id.* at 90, only that a third party was not limited by the legend.

[81] As the Senate Report puts it:

> … [T]he Committee has sought to address the concerns of record producers and performers regarding the effects that new digital technology and distribution systems might have on their core business without upsetting the longstanding business and contractual relationships among

new exclusive right for sound recordings set forth in Sec. 106(6) is limited to the right "to perform the copyrighted work publicly by means of a digital audio transmission." So old-fashioned radio transmissions are fully excluded, and digital entrants are quickly placed at a disadvantage relative to their analog competitors.[82]

There are an extraordinary number of twists and turns here,[83] including limitations on exclusive licensing for interactive music services, such as press*play* and MusicNet,[84] and limits on licensing to affiliated entities.[85] These obviously are direct restrictions on how digital entry occurs, but I will leave these for another day, as exclusivity limits pose tricky industrial organization questions.

Instead, focus on the direct competitive posture of online radio entrants with over-the-air radio broadcasters. Remember our starting point: we regulated radio in the Radio Act of 1927[86] because of interference among radio broadcasts. Spectrum turned out to be scarce and served as a natural limit on the number of broadcasters in a given area. Online radio should change all of that and make diversity limited only by the public's taste.[87]

The DPRA, as passed in 1995, seemed to create a level playing field for Internet radio, whether intentionally or not. The statute drew a number of lines, separating analog from digital; interactive services from noninteractive; subscription from nonsubscription; and broadcast from nonbroadcast. The new Sec. 114(d)(1) exempted "nonsubscription transmissions" from the new Sec. 106(6) right, and this would seem to cover squarely free web radio broadcasts.[88]

Once again, copyright law was setting the conditions of entry, but in this case, the "exemption" for webcasters would just have created parity for online and offline radio. The recording industry, speaking through the Recording Industry Association of America, took a different position, arguing that webcasters needed to secure rights to sound recordings. The recording industry won when the DMCA was passed in 1998. It stripped out entirely the exemption for nonsubscription transmissions[89] and folded webcasters into the statutory licensing scheme set out in Section

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> record producers and performers, music composers and publishers and broadcasters that have served all of these industries well for decades. Accordingly, the Committee has chosen to create a carefully crafted and narrow performance right, applicable only to certain digital transmissions of sound recordings.

S. Rep. 104-128, p. 13, 1995 U.S. Code Cong. and Admin. News 360.

[82] Do note that given the complexity of copyright, the over-the-air radio station might violate other rights, for example, those of holder of the copyright in the musical composition, but those copyrights are typically dealt with through direct licenses.

[83] *See* David Nimmer, *Ignoring the Public, Part I: On the Absurd Complexity of the Digital Audio Transmission Right*, 7 UCLA Entertainment L. Rev. 189 (2000).

[84] 17 U.S.C. 114(d)(3).

[85] 17 U.S.C. 114(h).

[86] 44 Stat. 1162.

[87] Of course, diversity is not free and standard economic theory suggests that under free competition, we may have too many entrants and too much product diversity. Empirical work suggests that this is precisely the case with radio. *See* Steven T. Berry & Joel Waldfogel, *Free entry and social inefficiency in radio broadcasting*, 30 RAND J. Econ. 497 (1999).

[88] For a confirming view, see Bob Kohn, *A Primer on the Law of Webcasting and Digital Music Delivery*, 20 No. 4 Ent. L. Rep. 4 (September, 1998).

[89] Sec. 405(a)(1), P.L. 105-304 (October 28, 1998).

114(f) of the Copyright Act. All of this was done, we are told, to eliminate “confusion” about the status of webcasters.[90]

This was not confusion, these are just old-fashioned entry barriers. Analog radio stations are protected from digital entrants, reducing entry in radio and diversity. Yes, this is done in the name of getting royalties to copyright holders, but, absent the play of powerful interests, that could have been done in a media neutral way.

And it gets worse. Over-the-air radio stations contended that the exemption for traditional radio broadcasting also applied when those stations went on the Internet. In December, 2000, the Register of Copyrights issued regulations to make clear that Internet broadcasting by radio stations did not enjoy the same exemption as traditional over-the-airwaves broadcasting.[91] So far, at least, these regulations have been upheld, preventing an additional gap between online and off-line music broadcasters.[92]

Bot only for a moment. On February 20, 2002, the Copyright Arbitration Royalty Panel issued its report recommending royalties for the statutory licenses for digital transmissions. The recommendation sets a rate twice as high for webcasters as it does for simultaneous Internet transmissions of over-the-air radio broadcasts: 0.14 cents per performance vs. 0.07 cents per performance. The difference further relatively burdens online entrants, and the absolute numbers may be fatal for most online stations.[93] The Librarian of Congress has until May 21, 2002 to decide whether to accept or reject the suggested rates.

Conclusion

Entry is almost certainly the most important issue in antitrust. Antitrust will play a role in setting the conditions under which entry in digital distribution takes place. This will give us a chance to revisit key issues regarding vertical integration and foreclosure and great cases of the antitrust past, such as *Paramount*.

Yet, in many areas, most of the interesting action on entry policy takes place elsewhere, and that is true for digital distribution. Copyright law, both judge-made and statutory, sets key features of the legal regime for digital distribution entrants. Some of this law is up-for-grabs, such as the third-party liability doctrine at work in *Sony*, and needs to be reconsidered. *Sony’s* third-party liability test does a poor job of rationalizing benefits and harms from entry, but *Sony* ultimately does a better job under copyright’s fair use doctrine as an instrument of entry policy.

Entry policy through statute is a dangerous business, and copyright has a mixed record. The modern structure of facilitating distributional entry by validating or conferring rights in copyright holders yet coupling those rights with statutory licenses has the virtue of mitigating the exercise of monopoly power and minimizing the transactions costs of negotiations. But settled arrangements can work powerfully against distribution entrants, as the entry barriers faced by online radio make crystal clear. At the very moment that scarce spectrum has ceased to matter—where diversity in radio can flourish—we have tilted the tables heavily against these new entrants by arbitrarily sticking them with copyright obligations not borne by their over-the-air counterparts.

[90] H. Rep. 105-796 p. 80, 1998 U.S. Code Cong. and Admin. News 656.

[91] Library of Congress, Copyright Office, *Public Performance of Sound Recordings: Definition of a Service*, 65 FR 77292 (2000).

[92] *See* Bonneville International Corp v. Peters, 153 F. Supp.2d 763 (E.D. Pa. 2001).

[93] See Amy Harmon, *Panel’s Ruling on Royalties Is Setback for Web Radio Services*, The New York Times, February 21, 2002.

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