

Fair Use and Digital Rights Management: Preliminary Thoughts on the (Irreconcilable?) Tension between Them

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Digital rights management (DRM) technologies are aimed at increasing the kinds and/or scope of control that rights-holders can assert over their intellectual property assets. In the wake of the Digital Millennium Copyright Act's (DMCA) ban on the circumvention of DRM technologies used to control copyrightable works, DRM restrictions are now backed up with the force of law. In essence, copyright owners now have the ability to write their own intellectual property regime in computer code, secure in the knowledge that the DMCA will back the regime with the force of law.

It's not surprising that in light of these developments many have expressed alarm that DRM technologies may be used by copyright owners to erode capabilities that had previously been permitted to the public by copyright law under the "fair use" doctrine (or its cousins, such as first sale or limited term).

What is the nature of the tension between DRM (as backed by the DMCA) and fair use? Is the tension irreconcilable? If so, which should give way?

I. Fair Use: What's It Good For?

While the "four factor test" set out in Section 107 of the Copyright Act¹ is widely known (at least in legal circles), the role of fair use in the copyright system is somewhat less settled. Attention to three aspects of fair use "in the real world," however, are worth considering in some detail here:

- (1) a wide variety of activities depend upon fair use for legitimacy;
- (2) the ambiguous, case-by-case nature of the doctrine is central to its role in mediating between new technologies and copyright; and
 - (3) fair use has served as a catalyst for innovation and a buttress for

See 17 U.S.C. 107.

¹ In determining whether a challenged activity qualifies as a fair use, courts employ a multi-factor balancing test, including a consideration of:

the purpose and character of the use, including whether it is commercial or noncommercial:

^{2.} the nature of the work (e.g., factual works are entitled to less protection than purely creative works);

^{3.} the amount and substantiality of the portion of the work used;

^{4.} the effect of the use upon the potential market for the work.

competition.

A. Activities that Rely on Fair Use

In any discussion of fair use, it is important to keep in mind the full range of activities that depend upon fair use for legitimacy. Often legal commentators are tempted to restrict their discussion of fair use to the uses that have been tested in published court decisions. This mistake can lead to a crabbed view of the doctrine

First, consider the reach of copyright law in the absence of fair use. The Copyright Act, by its terms, grants to owners dominion over the reproduction, public performance and display (a term of art that includes transmissions to the public), and distribution of a work, as well as a monopoly on the creation of derivative works.

Given the broad scope of the Copyright Act, copyright would intrude into everyday life in innumerable ways were it not for the fair use doctrine and other exceptions. The First Amendment, privacy priorities, and common practice would not be able to tolerate a copyright law lacking a fair use "safety valve."

Fair use serves a crucial role in limiting the reach of what would otherwise be an intolerably expansive grant of rights to copyright owners. Were it not for the fair use doctrine, each of the following activities would be infringing:

whistling a tune while walking down the street (public performance)

cutting out a *New Yorker* cartoon and posting it on your office door (public display)

photocopying a newspaper article for your files (reproduction)

quoting a line from *The Simpsons* in an email to a coworker (reproduction)

reverse engineering of computer code (reproduction)

"time-shifting" a radio or television program (reproduction)

playing an excerpt of Roy Orbison's "Pretty Woman" in a copyright law course (public performance)

quoting from a novel in a review (reproduction)

If they are to preserve fair use in its traditional form, DRM technologies must leave room for these unauthorized uses of copyrighted works, as well as myriad other commonplace uses that have not been tested in court.

B. Ambiguity as a Feature, not a Bug

Many DRM vendors express frustration with the imprecision surrounding fair use. Often they exclaim, with some exasperation, "Define fair use for me, and we'll express it in the 'business rules."

Unfortunately, fair use cannot be defined with precision. The statutory

four factor test, for example, includes concepts like "effect on the market" and "commercial/noncommercial"—concepts that are not easily expressed in precise "business rules." The problem is especially vexing once you recognize that "fair use" has changed over time, and that it is vital that it continue to be able to evolve.

The fair use doctrine operates as a "safety valve" not just for free expression, but also to mediate the tension between copyright and new technologies. As new technologies develop, courts generally have the first opportunity to apply copyright law to them, with Congress lagging behind. This spares the public, technologists, and copyright owners from having to apply to Congress for a legislative solution for each new technology that is developed. In this way, the fair use doctrine plays an important role in preserving a space for innovation and consumer experimentation, while leaving the final word to Congress.

Under this regime, the normal evolution of fair use proceeds thus: a technologist or other creative person makes some use of another's work that she believes to be fair. If the rights-holder agrees, the use continues. If the rights-holder disagrees, she can call upon the courts intervene and rule on the use. If, however, the use is frustrated from the outset by a DRM measure (the circumvention of which is unlawful under the DMCA), there is no opportunity for this process to unfold. Fair use is limited to those uses that the courts have previously affirmed, and new uses cannot evolve.

When the problem is viewed in this light, it becomes clear that the ambiguity of the fair use doctrine is not a bug, but a crucial feature. If DRM systems are to preserve fair use, they must somehow preserve its ambiguity, its ability to evolve and embrace as yet unrealized uses of copyrighted works. A consideration of technologies past, present and future, and their collisions with the fair use doctrine, illustrates the virtues of ambiguity in fair use.

1. The Past: the VCR

In 1976, Universal City Studios and the Walt Disney Company sued Sony, seeking to have the Betamax VCR impounded as a tool of piracy. In their view, there were virtually no noninfringing uses of the VCR, since home taping of television was thought to violate the copyright owner's reproduction right. The Supreme Court in 1984 disagreed, ruling that home taping of television programs for later viewing ("time-shifting") constituted a fair use.

Two aspects of the Betamax case are important for our purposes. First, most copyright scholars at the time felt that home taping should *not* constitute fair use. In particular, it was unprecedented for a court to find a use to be fair where (1) the copyist reproduced the entirety of a work and (2) did so for a purely consumptive, nontransformative purpose. So, had you considered the shape of the fair use doctrine in 1976, you would probably have concluded that time-shifting was not a fair use. The Supreme Court in 1984 *evolved the doctrine* in response to the new possibilities created by the VCR.

Second, if copyright owners had been able to impose DRM technology on the VCR in 1976, the Supreme Court would have been denied the opportunity to evolve fair use. While the state of DRM technology was more primitive in 1976, there were already efforts by motion picture studios to control video content. For example, during the Betamax case, the motion picture studios argued to the court that Sony should build a sensor into every VCR that would detect "no copy" signals that would be embedded into television broadcasts, thereby enabling copyright owners to mark their movies as "not for copying." Had this DRM solution been adopted, the Supreme Court would have been denied the opportunity to address time-shifting, leaving this activity under the exclusive control of copyright owners.

2. The Present: MP3 and Ditto.com

More recent examples reinforce the importance of permitting fair use to evolve in response to new technologies. The development of PC technology and the MP3 music format has given music fans a wide variety of new capabilities. As a result, electronics manufacturers have begun offering new categories of music products, including MP3 jukeboxes, home music servers, and Internet radio receivers. Each of these technologies, however, depends upon copying lawfully-obtained digital music, an activity that, unless considered fair use (or otherwise privileged under the law), would infringe copyright.

The Internet has similarly spawned innovative services that have called on courts to evolve fair use jurisprudence. For example, copyright litigation recently erupted over Ditto.com, a search engine that catalogs photographs and other images that can be found on the Internet. Prior court decisions regarding fair use provided only ambiguous guidance. The Ninth Circuit Court of Appeals recently concluded that the reproduction of images involved in this activity should be considered a fair use.

Had DRM technologies blocked these unauthorized experiments from arising in the first place, the opportunity to further develop the fair use doctrine would never have presented themselves. The public would never have had the benefit of these new technological capabilities, or would only have received them if copyright owners could be persuaded to authorize them.

3. The Future: DTV

With these earlier examples in mind, we can better understand the threat that DRM technologies pose to the future of fair use. If fair use is to continue to evolve, to create space for free expression, innovation and new uses of copyrighted works, DRM technologies must somehow accommodate the ambiguity of fair use. Unless the public has the opportunity to experiment with new technologies, courts will not have the opportunity to test them against the fair use doctrine. If innovators and consumers are presumptively barred from experimenting without copyright owner authorization, fair use will become increasingly irrelevant. After all, how useful is a right to time shift analog television in a world where all broadcasts are digital and protected by DRM technologies?

This is not a hypothetical question. An inter-industry group called the Broadcast Protection Discussion Group (BPDG) is currently drafting standards for mandatory DRM systems for digital broadcast television (DTV). While these systems may attempt to preserve time-shifting as defined by the Supreme Court in the 1984 Betamax decision, they will fail to protect the full range of *future* fair uses that will be made possible by DTV. What those fair uses might be is difficult to imagine in advance, just as time-shifting was difficult to imagine in the era before VCRs. Nevertheless, unless DRM technologies make room for these future fair uses, fair use will have lost much of its ability to protect the public's side of the copyright bargain.

C. Fair Use, Innovation and Competition

Fair use has repeatedly been invoked to prevent copyright owners from misusing their copyrights in order to stifle legitimate marketplace competition. For example, courts have concluded that intermediate reproductions of software made in the course of reverse engineering can qualify as fair uses. The fair use doctrine thus operates to limit copyright in order to preserve competition.

The fair use doctrine also plays an important role by providing a reservoir of incentives to spur innovation. For example, where the public is permitted to use copyrighted works freely, a powerful incentive arises to develop technologies and services that help the public get the most from media content.

This incentive explains the rapid innovation surrounding the VCR. To the extent time-shifting television was considered a fair use, electronics companies saw a market for devices that would allow consumers to get the most from time-shifting. The same incentive continues to drive the new "PVR" industry, led by TiVo and ReplayTV.

Similarly, the MP3 industry is fueled by the reservoir of incentives that arises from another activity considered to be a fair use: "space-shifting." Millions of Americans have a large music library of CDs. Technology companies have an incentive to develop devices that will help the music lover to get more value from the CDs she has already purchased. The Apple iPod, for example, emerged to meet that demand.

In other words, wherever an activity has been deemed a fair use (and often even before, so long as a company is willing to gamble that it will be deemed a fair use), innovation flowers as technology companies help the public to make the most of copyrighted works. Examples include the photocopier, the audio cassette deck, the CD-RW drive, the web browser, among others.

Of course, this is not the only road to innovation—innovation can also flow from activities that depend on authorization from copyright owners (e.g., DVD). But innovation generally proceeds most rapidly in an environment where copyright owners do not have a veto over new technologies, and where free competition between technologists is the rule.

Some may object that this view unfairly forces copyright owners to subsidize innovation. After all, part of the value of a VCR is rooted in the fact that

it can be used to make copies of copyrighted works without the payment of a royalty. To put it another way, consumers would pay less for a VCR if it could not record copyrighted works. While that additional incremental value certainly operates as an incentive for innovation, why should the VCR manufacturer capture it, rather than the copyright owners?

This argument neglects two important consequences that flow from innovation in a competitive marketplace. First, copyrighted works and the new technologies that interact with them are *complementary* products. For example, while the VCR may have encouraged some piracy in the short run, in the long run it vastly increased the value of "back catalog" films by creating a new market for them. So, if copyright owners are entitled to demand the portion of the VCR's value that is rooted in its ability to copy movies, then VCR manufacturers should be entitled to that portion of the value of Warner Bros. film vault that is rooted in video sales and rentals.

Second, it is worth remembering that, generally speaking, the "fair use portion" of a VCR's value does not end up in the pockets of the VCR maker. For example, JVC will not be able to increase the price of its VCR to capture the value that the recording function offers to consumers, because Sony (or any other VCR maker) would then be able to reduce the price of competing VCRs. To put it in economic terms, in most mass-market technology markets, price is relentlessly driven to marginal cost. Because the fair use value is not part of the marginal cost of production, technology vendors are unable to capture it in a competitive marketplace.

So who pockets the marginal value derived from copyrighted works? The public, in the form of lower technology prices and enhanced capabilities. Since copyright exists for the benefit of the public, this appears to be an appropriate result.

II. The Copyright Bargain Restruck: Trading Fair Use for DRM

In light of the purposes of fair use discussed above, it seems unlikely that any DRM technology (at least one that will be embraced by the copyright industries for their products) will be able to accommodate the full range of fair use.

If this is true, the question then becomes whether some quantum of fair use *should* be sacrificed in order to stem the disruption caused by new technologies to existing media company business models. Or, to put it more bluntly, should the public be required to give up some measure of fair use in order to solve the "piracy" problem?

A. What's in it for the Public? Quelling "Pirates."

In evaluating this question—whether the public should give up some quantum of fair use in order to quell digital infringement—it may be useful to remind ourselves of the purpose of copyright law.

Copyright law represents a bargain between the public and copyright owners. The public grants certain limited exclusive rights to copyright owners in

order to create an incentive for the production, and a marketplace for the distribution, of creative works.

In order to evaluate whether the law is serving this end, then, it may be helpful to imagine yourself as an advisor to the public. In Jessica Litman's words, imagine you are a lawyer, attempting to get for the public the best possible copyright bargain.

So what do DRM technologies (and the legal mandates that support them, like the DMCA) offer the public? Of course, DRM technologies are often touted as reducing copyright infringement (sometimes equated pejoratively with "piracy"). The public, however, has no direct interest in reducing infringement for its own sake. Why should the public be concerned about infringement?

Rampant piracy, so the argument goes, undermines the incentives that make it worthwhile to create new content. If, because of infringement, copyright owners cannot make a return on their investments in content creation, they will stop investing in new content (or the continued exploitation of old content, for that matter). Taken to the extreme, rampant infringement will result in the collapse of the music, movie and publishing industries, say copyright owners.

If you were the public's lawyer, you would likely treat this argument with some skepticism. While unlawful copying is (and always has been) a problem, no one is proposing that copyright law be eliminated. Accordingly, copyright-based incentives for continued production of creative works will remain. Nor is there any compelling empirical evidence that "piracy" is bringing copyright industries to their knees today. Band are still being signed, movies are still being "greenlighted," and writers are still receiving advances. In fact, 2002 promises to be for major movie studios the best U.S. summer box office season in history. Of course, the digital future poses serious challenges, but many of those challenges have not yet materialized in any economically substantial way. As the public's lawyer, you will be hesitant to give something up in the face of these claims, especially because you will remember the many other occasions where the copyright industries "cried wolf"—the VCR, cable television, the audio cassette, radio, the player piano.

Also, as the public's lawyer, you will remember that incentives in the form of an airtight monopoly may not be as necessary as copyright owners would have you believe. In the 1995 National Information Infrastructure proceedings, for example, copyright owners claimed that the "information superhighway" would remain barren until they could be assured of strong copyright protection on the Internet. As it happened, the Internet became a vibrant place for new publishers—both noncommercial and commercial—without the assistance of Hollywood. In fact, when media companies finally joined the party (not because of increased copyright protection, but rather out of commercial necessity), some found that their content simply could not compete with the new kinds of media being created on the web.

A tough-minded lawyer for the public will also recall that creative content can proliferate even in the face of widespread infringement. For example, the software industry has long tolerated and thrived in a marketplace with much higher piracy rates than those faced by the music and movie industries. The film industry in India, the world's most prolific, manages to attract continued investment notwithstanding extremely high rates of true commercial piracy. So, as the public's lawyer, you will be skeptical of claims that content will not be made in the absence of ever-stronger copyright protections.

B. What's in it for the Public? More Choices & Lower Prices.

Some economically-minded DRM advocates claim that widespread adoption of DRM technologies will result in more products and lower prices for consumers. DRM systems, the argument goes, will permit copyright owners to engage in more refined forms of price discrimination, resulting in more products and lower prices. For example, a copyright owner who sells a DVD for \$30 today, may be willing to sell a "single-viewing" version for \$5. Until the DRM technology exists to support such a "single-viewing" version, however, the public can only obtain the \$30 DVD. In the absence of DRM, we all pay higher prices for products that include features we may not need (e.g., unlimited repeat viewings).

While this argument seems plausible, would you, as the public's lawyer, be persuaded? Some skepticism is certainly in order—so far, DRM systems that enable price discrimination have had only limited success in the marketplace. The DIVX format for DVDs, for example, proved unpopular. The MusicNet and pressplay music services have also been less than successful in the marketplace. In addition, the use of DRM technologies may not be necessary to induce reduced prices. For example, DVD prices have been falling rapidly, driven by Hollywood's desire to compete with video rental.

In addition, there is reason to question whether truly competitive price discrimination is likely to occur in the marketplace for copyrighted works. Many copyright industries show a high degree of concentration, giving rise to market distortions that may swamp the desirable aspects of price discrimination.

C. What Does the Public Stand to Lose?

As discussed above, DRM technologies backed by laws like the DMCA threaten to undermine fair use in a number of ways. As the public's lawyer seeking to get the best deal for your client, you will need to weigh these losses against the gains detailed by DRM advocates.

An erosion of fair use in favor of DRM comes with the following potential costs:

a reduction in freedom of expression, to the extent DRM interferes with review, commentary, scholarship, and parody;

a reduction in innovation, to the extent that DRM eliminates the reservoir of incentives that spur companies to develop technologies that interact with copyrighted works;

a reduction in innovation, to the extent that DRM depends on

legislative mandates (whether in the form of the DMCA, a mandate from the Broadcast Protection Discussion Group or the pending Hollings bill) that interfere with science and technology development;

an erosion of privacy, to the extent that DRM compromises user anonymity;

the "freezing" of fair use, to the extent that DRM systems will prevent courts from evolving fair use in response to new technologies;

undermining archives, libraries, and others who store and preserve our cultural heritage, to the extent DRM systems prevent free archiving of copyrighted content;

lessened competition, to the extent that DRM systems prevent companies from engaging in legitimate reverse engineering of competitors' products.

D. Is DRM the *Best* Deal for the Public?

As the public's lawyer, your goal is to get the best possible deal for the public. Do DRM technologies, backed government mandates, represent a good bargain for the public?

While it may be too early to draw final conclusions, it is plain that DRM technologies, backed by laws like the DMCA, pose a serious potential threat to fair use. While technical refinements may address or minimize some of the social costs that stem from an erosion of fair use, it is unlikely that they will entirely resolve the tension.

Accordingly, the problem becomes one, not of reconciliation, but of tradeoffs. A hard-nosed negotiator for the public will ask for concrete empirical evidence to support the promised benefits of DRM technologies, while demanding limiting principles to protect as much of the public's side of the bargain as possible.

Unfortunately, to date, Congress has failed to take up this challenge, leaving the public without a zealous advocate in the copyright arena. Instead, they have delegated copyright law to copyright owners and DRM vendors. Whether this will result in a good copyright bargain for the public remains to be seen.