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Intellectual Property Law

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Consumer Rights Management

Balancing the Rights of Consumers and Creators in the Digital Age

Introduction: Engines of Change

When the automobile was introduced into American life at the turn of the 20th Century, it was considered something of a rich city man's toy, a vehicle for showing wealth rather than moving people. Considering its rapid speed, loud noise, and pretentious nature, the car was initially rejected as a nuisance by many, especially rural citizens and farmers.[1] Obviously, over time, the car won them over. Interestingly, however, many farmers did not adopt the car solely as a transportation device. No, the killer application (in the old, not-software use of that term) of the car for rural America was the internal combustion engine itself. In the days when electricity was still not widespread, especially outside of the cities, the car's engine was a devastatingly convenient way to bring automated power out to the countryside. As such, for years farmers would routinely park their newly purchased car outside their house, pop open the hood, and connect the engine to all manner of household items: butter churner, grinder, saw, pump, and even a washing machine.[2] Suddenly, the car was not an ostentatious toy for city slickers; it was a pragmatic tool for the practical farmer. It was this unintended, unpredicted use of the automobile that opened up the market to the entirety of America, which of course changed the country in any number of ways. The engine of change brought by the automobile was therefore, appropriately enough, the engine itself.

These innovative uses of the car have died out, mostly because all of the above devices are themselves automated now; electricity has come to every home. Innovation most certainly did not die out because of any resistance to it. After all, the automobile companies were more than happy to learn that they had gained an entire new customer base at no extra cost to themselves. At the turn of the 20th Century, then, open usage of a purchased product was considered socially acceptable, and even financially advantageous. In other words, once a product was bought, the consumer was free to do with that product as he willed. He could of course simply use it as the manufacturer intended he use it, or he

1 Kline, Ronald, and Pinch, Trevor, "Users as Agents of Technological Change: The Social Construction of the Automobile in the Rural United States," in *Technology and Culture*, Vol. 37 No. 4 (Oct. 1996), John Hopkins UP, p. 768

2 *Ibid.*, p. 775

could do something wholly different. He could even, as in the case of the car, take it apart and restructure it into what was effectively an entirely new machine – even combining it with other machines, from other manufacturers, to make one superior product himself. This was a right of the consumer that went unquestioned. There were of course some restrictions on those rights: the user could not reverse engineer the car, build his own factory, and start selling carbon copies without permission. But in the free consumer culture at the turn of the last century, these were merely a few restrictions on what could *not* be done; so long as he avoided those few actions, he could do as he willed.

The culture, and the law-as-practiced, at the turn of the 21st Century is quite a bit different. By its very nature, the digital revolution has practically cried out to consumers to be used in unexpected, unintended ways. However, instead of being accepted and even encouraged as before, in many cases today such uses are frowned upon or litigated against. Manufacturers claim that the consumer has violated their rights when a product is not used in the proscribed manner. And to be perfectly fair, the manufacturers are not always incorrect. Piracy and copycat products are a valid concern and one the producers have a right to try to defend against. The trouble comes from the preventative measures digital producers are now taking to stop illegal behavior before it starts: namely, by severely restricting what *can be done at all* with their products. The culture has shifted from one of consumer freedom (with a few restrictions) to consumer restriction (with a very few freedoms). Obviously, this has stifled creativity and innovation. Much worse, however, it has completely changed the way that consumers approach their products, and altered how they are even allowed to consume them. At the very least, the culture of the 20th Century allowed us to use our own purchases, *in their intended manner*, however we wished. In the modern age of Digital Rights Management (DRM), even our ability to use content as we *should* use them is being dictated to us – and it is illegal to do otherwise.

Granted, technological changes in the last two decades have drastically altered the landscape of

intellectual property infringements, oftentimes creating situations that the original writers of copyright law could never have anticipated. Flawed though IP law may be these days, artists (and the corporations who fund them) do have some basic right to make money off of their creations and prevent others from unfairly stealing or using those works. But in a free and open society, the very idea of restricting people's actions and choices so far that it becomes simpler to list what one *can* do instead of what one *cannot* do should be revolting. Instead, it has largely been accepted as a necessity against the ubiquity of peer-to-peer software and the like. It was a knee-jerk reaction to a sudden unanticipated problem. And as most knee-jerk reactions do, it did not work quite as intended, introducing of host of new problems in place of the old ones. To return us from a culture of consumer restrictions to consumer rights, then, the law most go through radical though not total changes from where it stands today. In brief, whereas the law currently places no restrictions whatever on what the manufacturer can program its DRM to do, the law should now be changed to severely limit the manufacturer's restrictive powers. Restrictions that control *which products* we can use our content on must be abolished; a safety standard must be implemented to protect our computers from poorly-coded DRM; and copy-limitations must be relaxed, a little bit in the case of most programs, but fully in the case of music. To understand why more fully, we must look at both the initial problem and its reaction in more depth, and finally analyze the broader impact that restrictive measures have had on society.

The P2P Dilemma

The problem is generally considered to have started, at least as the massive issue it is today, with the remarkable rise of Napster in 1999. Napster was an elegantly simple method of transferring digital files from one computer to another, mainly music files like MP3s. The dependent technologies for such a service were only a capacity to network two computers together, even across vast physical spaces, and a method of translating analogue sound into digital files. When both of those dependencies

became common, it was only a matter of time before peer-to-peer (P2P) file-sharing was created. P2P systems are generally considered a revolution in how content can be distributed. Effectively, these systems allowed for two things, previously either impossible or very difficult for the average consumer to do: they allowed nearly instantaneous transfer of product across any geographical distance, and they allowed for an infinite number of copies of the product to be made at no effort or loss to the original consumer. The former is universally regarded as a wonderful thing and is almost certainly the reason why iTunes is the biggest seller of music in the United States. It is the latter that has caused concern for big corporations everywhere, since it strikes directly at the heart of copyright – namely, who has the right to copy. People could suddenly get whatever album they wanted, for free. Major record labels believed they were being stolen from, sued Napster, and won.

The previous sentence, seemingly innocuous, actually contains in it a massive paradigm shift that often goes unnoticed. Namely, what do these corporations mean by "stolen?" The very idea of copyright was initially created to make sure unlicensed sellers could not make money off of other people's books, and yet consumers have legally, and rightly, been able to sell old books off to a used book store. The same holds with music. Copyright infringement was thus something to be leveled against disreputable organizations that had the resources to massively copy and distribute other people's content; a single consumer was not a problem. Individual users have previously not been beholden to copyright restrictions, which is why I can make a photocopy of something in a book I own without violating any laws. Used books, or photocopied text, were not "stolen." It is a matter of scale: individuals selling small numbers of somebody else's product has traditionally been allowable, but major (usually illicit) organizations selling large numbers has not been. The Internet brought an end to the old rules, allowing the individual to become a massive distributer. And thus, what used to be legal was now stealing, or so argued the manufacturers.

The question is how to deal with these technologies of mass-copying. The first action was to

litigate, both against Napster and its biggest users in a two-pronged attack designed to scare people away from ever using P2P again. Though the corporations won the case, the strategy effectively failed: P2P networks have sprung up like weeds across the Internet, and worse, their different architectures allow for different defenses that Napster was unable to use in its case.[3] Given the increasing difficulty of litigating against individual networks, and the increasing number of networks, it rapidly became apparent that this technique for holding P2P in check would simply not work in the long-term, or even short-term. Even while still struggling with this issue, another rose up. It had become clear what the ever-profitable youth culture wanted: immediate digital access to their music. Spurred to action by the runaway success of Napster, the major labels realized they should be making their albums available on the Internet as well. But how? If they just put MP3s out there, those files could just as easily be thrown onto evil P2P networks and the cardinal sin of capitalism would transpire: money would be lost.

And thus came DRM. It seems an ingenious solution at first: digital content can be sold through authorized venues, and the buyer can listen to it as often as she likes, but she cannot share it with anybody. To be specific, typically DRM limits either the number of uses a product has, or the number of times it can be copied. In music's specific case, there is no limit on use but there is most certainly a limit on copies. For example, the iTunes music store, the largest seller of music in the United States, allows only five copies of a song to be made. But this is no longer a distinctive element of the music industry: though Napster was specifically built for music, later P2P systems have been file-blind, allowing for *any* kind of digital content to be transferred across the web. All major digital creators now either come up with their own home-brew DRM software, or license in somebody else's. Outside of the Free Software movement, this has become standard. So, where's the problem? I can still listen to my music, and the corporations (and, in a perfect world, the artists) get their money, so

3 Both the "Betamax defense" (taping on a VCR is legal) and the "Safe Harbor defense" (as stated in the Digital Millenium Copyright Act) were voided in the specific case of Napster; these defenses have proven more resilient in litigation against modern P2P networks. See Douglas, Guy, "Copyright and Peer-To-Peer Music File Sharing: The Napster Case and the Argument Against Legislative Reform," in *Murdoch University Electronic Journal of Law*, Vol. 11 No. 1 (Mar. 2004). http://www.murdoch.edu.au/elaw/issues/v11n1/douglas111.html, retrieved 06/02/2008

everybody wins, right? Right?

Rights

In the 1970s, men of great renown, with names like Kool DJ Herc, Grandmaster Flash, and Grand Wizard Theodore, invented "turntablism." Clubs and their DJs around the globe suddenly started doing more with their vinyls than just switching them at the end of the song. This was a revelation in how we could approach our music, using nothing more than the tools at hand. Suddenly, songs could be 'recomposed' on the fly, to great effect and excellent dancing. In the 1980s, vinyls became obsolete in the face of first cassette tapes and later Compact Discs. The immediate, obvious benefits of the cassette/CD were size and the ability to easily jump through parts of a song or album. The later, less obvious benefit was the Sony Walkman and its competitors. Suddenly, we could listen to our music *wherever we wanted*. Walking the dog, riding a bike, going to school – at long last, we could have our own soundtrack. In the 1990s, "laptop" computers started entering the market. Suddenly, our precious digital content – business documents, homework, even the entire Internet – were available to us whenever we needed them. All we had to do was copy over all of our files, and, of course, the programs to read them.

In all three of these cases, an innovative use of new or existing technology added something to our lives, be it artistic or practical. Yet all three rely on one key principle: the right to move content, even copyrighted content. This has traditionally been an unchallenged right of the consumer. Ever since vinyls were invented, a consumer could bring a record to a friend's house and listen to it on their player. Turntablists needed to move records from player to player, club to club, and manipulate the data on those discs (in this case, by actually manipulating the discs themselves); portable CD players would play any CD that anybody brought to them; people could put their files and programs on all of their machines, so they could always access what they have already paid for. It was the consumer's

right to use a product once purchased, with very few limitations and essentially freely, that allowed for these other innovations to exist at all. Had there been restrictions on how the purchased content could even be used in the first place, these alternative uses would not have been possible. For example, if a cassette or CD could only be used in a household player (which was the original idea), then portable players and even car players could never have been created. Philips created and owned the rights to the cassette, but it was rival Sony who took the leap and created the original Walkman. Nobody contested Sony's right to create a product specifically tailored to a rival's product – in fact, Sony and Philips combined forces a few years later to jointly create the CD.[4]

Contrast this to Apple's current music service. Apple's DRM service FairPlay, coming conveniently along with anything you purchase off the iTunes Music Store (with a few exceptions), does two things: it limits the number of copies you can make, as mentioned above, and it prevents the music from being played on anything but an Apple iPod of some flavor.[5] When I put a Philips cassette into a Sony Walkman, no one, including Philips, has a problem with it. But I cannot put a song purchased on iTunes into a Sony digital music player. This is truly an oddity. I can buy this song in a number of ways, but the method in which I listen to it is determined by the vendor, not because of technological, physical, or standards-based constraints, but because *Apple told me so*. Such was Apple's determination that when RealNetworks discovered a way to sell music that could actually play on an iPod, Apple quickly updated its software to render this impossible.[6]

This is a question of rights. What are the rights of the consumer, and what are the rights of the seller? In the United States, the consumer is allowed to do what they want with their own property within the bounds of the law. The law, specifically the Digital Millennium Copyright Act (DMCA),

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4 "How the CD Was Developed." BBC News: Technology, 17 Aug. 2007. http://news.bbc.co.uk/1/hi/technology/6950933.stm, retrieved 06/03/2008

5 Sharpe, Nicola F., and Arewa, Olufunmilayo B., "Is Apple Playing Fair: Navigating the iPod FairPlay DRM Controversy." *Northwestern Journal of Technology and Intellectual Property*, Vol. 5 No. 2 (Spring 2007), p. 335

6 Borland, John, "Apple fights RealNetworks' 'Hacker Tactics,'" CNET, Dec. 14 2004. http://news.cnet.com/2100-1027_3-5490604.html, retrieved 06/03/2008

states that corporations have a right to put protective measures on their digital content, and further, that the very act of circumventing DRM technology is illegal. Sadly, the DMCA does not put any limitations as to what the DRM itself may or may not do. This can be decided solely by the seller. Thus corporations have found they can dictate how we use our digital content at a level that would be considered outrageous if it were for a physical product. In Apple's case, the corporation tells the listener how and where their music can be listened to. If you buy a CD (assuming it does not come with DRM, which most do not), you can listen to it anywhere, however often you want, on a device made by anyone. I should reiterate here that even these free uses are bounded by the law: I cannot copy and then sell the music for my own profit, or claim the music is my own, or anything of that nature. My rights as a consumer are not infinite. But they should at least allow me to do as I wish with my own property. And whether Apple likes it or not, once I buy that song or that album, it becomes my property. This does not apply in the case of a rental service of course, since I am only leasing the product and thus do not own it. However, those who buy from the iTunes Music Store are not renting, they are purchasing. They are the owners of that content. At the very least, they should be permitted to access that content in the device of their choice.

This is the way that it *should* be, but because of a loophole in the DMCA, this is not promoted. The DMCA is meant to defend against mass-copying. Even in this context, it is problematic: what happens if I have more than five devices that I wish to listen to my music on? When a mother buys a CD for the whole family to enjoy, she can give that CD to her kids who can then listen to it on their Walkmans, or computers, or standalone players, or even a friend's house. If the same is done with an online music seller, this suddenly becomes impossible. Again, the basic rights of the consumer – to be allowed to consume! – is hindered by DRM. However, because the DMCA places no restrictions whatever on the nature of DRM technology, corporations have abused this loophole by placing constraints on how that content operates or can even be accessed. This is how Apple links its music

service solely to its iPod player, drawing antitrust concerns.[7] Apple is using the cover of copyright infringement defense in order to drive its own sales up in a manner that should not be allowed in a free society.

It only gets worse when we consider the laptop case: what happens when I have legally purchased a product, but want to be able to access it from both my desktop at home and my laptop on the road? For someone who is on the road a good portion of the time, this is essential. Yet most current DRM services only allow for one install-per-product, Adobe perhaps being the most infamous perpetrator here. Adobe is notorious not only for its one-install policy (very problematic for, e.g., photographers on the road who need Photoshop), but also for the way its program worms into your system so tightly, it can often mess up your computer at the OS level. Uninstalling can be a nightmare for the uninformed. From my own experience, I had a friend who used a Mac for a living, on which she is accustomed to deleting a program by simply dragging it to the trash bucket. She did this with an Adobe CS2 product, thus rendering it *completely impossible* for her to install, uninstall, or even use another CS2 product short of wiping her entire machine and reinstalling the OS.

When DRM has the ability to destroy not only its own product but other important personal belongings, without the company who created it having any kind of responsibility, there is a serious problem. Of course, for some products, this is a fundamental risk: if I buy a propane tank, and do not use it correctly, I had better hope I have fire insurance (and probably health insurance). It is a question of reasonable responsibility on the part of the manufacturer. After all, propane tanks must pass certain safety standards before being sold legally, and thus only blatantly poor use by the consumer will result in a problem. Cases like Adobe, however, demonstrate that many software companies are not taking such appropriate measures, and are not being held accountable for it. Even if the DRM is fatally flawed, these companies are allowed to use them under the veil of defending themselves from

7 Sharpe and Arewa, p. 335

copyright infringement. Here we have another fundamental right of the consumer: to be sold products that are not dangerous, either to ourselves or to our property. This right, too, is endangered by restrictive technologies packaged unavoidably along with the product we want.

Managing Digital Rights Management

Finding a solution to the problems mentioned above must, by necessity, be a balancing act. For all the consumer rights I have been stressing, we must still remember the manufacturer's rights as well. Let us reiterate them clearly. The manufacturer should have a right to produce a product without having it copied, redistributed, or sold without its permission (limiting this, of course, to large-scale events; I can still legally, and rightfully, re-sell a CD I own to a used record store). The consumer should have a right to use her legally purchased content as she sees fit within the greater bounds of the law – in other words, the law should be defending a few manufacturer rights, as opposed to dictating terms to the consumer. The consumer should be defended by the law from dangerously defective products. At the moment, the law, as codified in the DMCA, allows manufacturers to bundle products and DRM technologies together, with no real restrictions as to what that DRM can do. Circumnavigating protective technologies is illegal under any circumstance.

To repair the problem, the law must make explicit what exactly a manufacturer can, or cannot, do with its DRM technology. First, the DMCA should be changed, or a new law should be enacted, so as to make it illegal to prevent a user from using a product on a device of their choice short of physical, technological, or standards-based constraints. This is specifically in reaction to music vendors such as Apple refusing to allow their songs to be played on other players, or competing vendors' songs being played on their own players. This use of DRM does not fall under manufacturer's rights, and goes against consumer's rights, and thus should be rounded out completely. Next, DRM should be held accountable to some kind of safety standard. Software that is egregiously dangerous to other programs

or entire operating systems is inexcusable. Other products I buy must pass safety standards before sale; software, though probably not a risk to life and limb, can nevertheless be a risk to my property, and so should also be held accountable to a standard in the same vein as physical products.

While these two points are fairly straightforward, far, far trickier is the issue of copying. As mentioned above, copying and reselling can be just in small circumstances (e.g., selling to a used book store), and unjust in large circumstances (e.g., printing many copies of someone else's novel without their permission). Previously, the separation dividing large from small was effort and cost; in the non-rivalrous world of the digital file, there is no extra effort or cost for the consumer to jump from small to large circumstances of copying. And here is the problem: in the Internet world, all it takes is one. If just one, or even a few, people can get around the DRM and post the content online, then any number of people can not only copy it themselves but then repost it for still more to download. Thus restrictive technology, limiting the rights of millions of consumers everywhere, still cannot really prevent anyone who wants to illegally download from just finding a DRM-free version online. Better technology will not fix this problem, because again, all it takes is for one 15-year-old in Sweden to figure out how to strip it, and the rest of the world will then have access to it. What copy-protection is really preventing is friend-to-friend swapping, F2F if you like. Not everyone may know how to use P2P services, but in a DRM-free world they could easily manually copy files from a friend's computer. DRM, at the least, will prevent this.

But as I said, this is a question of balance. No effective way of placing DRM onto a CD has yet been found without also disabling either a CD's basic functionality (being playable in players) or wreaking havoc on people's computers (as with the Sony Rootkit disaster, in which the DRM opened massive security holes into Microsoft Windows[8]). As such most CDs are still sold without DRM, and

8 One might also note that this is a DRM designed for Windows specifically; anybody with a Mac would still be DRM-free, thus voiding the entire point. For an extensive analysis of the Rootkit fiasco, see Mulligan, Deirdre K., and Perzanowski, Aaron K., "The Magnificence of the Disaster: Reconstructing the Sony BMG Rootkit Incident," *Berkeley Technology Law Journal*, Vol. 22 (2007).

since CD burning is a pervasive technology, F2F music sharing is still possible. As such, it is patently unfair to have the same content unrestricted in some cases (CDs) and restricted in others (digital downloads). To be fair to the average consumer then, who may want to do nothing more than save themselves a trip to the local record store, restrictive technologies are an inherent imbalance in the system. For all these reasons, in the case of music, the law should be altered so that no restrictions should be placed on any music file. The right to listen to our music how and when we want is an open right of the consumer that should not be tampered with; while mass-copying is a problem, due to its very nature only a handful of people need to be able to get around the system before the entire system becomes irrelevant. As this is the case in music, the law should be altered to fit the facts. Litigation against major violators of copyright infringement should still be allowed, since this is the real problem.

Which brings us to the broader concern of copy protection on other files, such as programs like Adobe products. The rules for them should be different than the rules for music. For one, unlike music, there are only limited options for how we can access a program. Music can be played in cars, computers, portable players, cell phones, Xboxes, whether they be ours or our friends'; what's more, when I play a song, anyone can listen to it. Music is inherently open and must be treated that way. Photoshop, by contrast, can only be used on a computer running Windows or the Mac OS, for technological and standards-based constraints. It is not by its very nature an open product; there is no functional analogy between a group of people listening to music and a group of people using a program. Nevertheless, people with more than one computer should be allowed to use their purchased product on all of them. As such, copy-restriction seems fair in a non-music case, but not when limited all the way down to one copy. Microsoft, of all companies, allows Office to be installed on up to three machines. This is a reasonable number. The most computers I know of one person owning is five, and even he does not use all of them. Families, of course, will have a few, but even then it will be a rare case in which a household has more than five or six computers. Thus, copy-restricting technologies for

programs should be mandated to allow at least a few – between three and six seems fair – copies to be made. Critically, there *must* be an effective mechanism for deauthorizing previous installs, so that if my computer breaks with my software installed on it, I can reinstall it on a new machine without difficulty.

If all these changes were enacted, the pendulum would swing dramatically towards consumer's rights over manufacturer's rights. Looser copy-restrictions would allow for some "piracy" on an F2F level. But then, this is where the pendulum has always been, and where we want it to be. I can buy a CD and sell it back to a used store, technically letting me make money off of somebody else's copyrighted work. But as long as these are small-level cases and not large ones, we accept this in our culture, and we should continue to do so. Enacting the above changes, effectively restricting what restrictive technologies are allowed to do, puts consumer's rights back into its proper position as the primary concern of product usage. The music piracy issue is a serious one, but as music's very nature decries restrictions, it must be tolerated as an exception. Again, this is already partly informed by practical reality: DRM has not slowed music piracy in the least. Frankly it has not stopped program piracy either, but as a reasonable use of restrictive technology can be found in their case – a larger number of copies allowed while being held to a safety standard – it can be permitted without too badly impinging on consumer's rights. From both a consumer's and a manufacturer's perspective, this may still not be a perfect balance. At the least, however, it would return us back towards that 20th Century culture of permitting the consumer the use of their product as they want to use it, and not as they are told to use it.