Copyright vs. Free Speech

Bills are at the moment making their way through congress to bring the US into compliance with the conclusions of the World Intellectual Property Rights Organization (WIPO). These bills will cause sweeping changes in the nature and intent of copyright law, essentially altering the purpose of copyright law to protect the interests of corporations who profit from Intellectual property and revoking the fair uses of the general populace. These laws put the profits of transnational corporations above the promotion of science and the useful arts and both literally and effectively threaten the foundations of free speech.

Postscript: The Digital Millennium Copyright Act is now Public Law 105-304. The concerns expressed in this paper, including the criminalization of tools which can serve to defeat copyright protection, have been realized thanks to the 105th congress.

Introduction

I'm superdave of the dis.org crew, and today I'm going to explain a little bit in generally layman's terms about what copyright law is, where copyright law is today, where it's going, almost as we sit here, and some of the more troubling effects of the current directions, especially as they apply to encryption, privacy, and electronic communication and creation in general.

I'm not a lawyer and I don't even play one on TV though I will be talking about laws and their interpretation, in particular just because I think you should be able to publish westlaw's entire oeuvre on the net since it's all public domain source anyway, doesn't mean the DA or the Judge will agree.

Hopefully this will be general without being simplistic, after all, copyright law, like speed limits, makes us all criminals. But most states don't nail you with half million dollar fines and 5 years in jail for absent minded speeding.

What is Copyright?

Copyright is a concept created in Article 1 of the US constitution that reads:

> *To promote the progress of science and the useful arts* (useless arts are specifically excluded) *by securing for a limited time to authors and inventors the exclusive right to their respective writings and discoveries.*

It's clear that the framing fathers sought to maximize the public good by granting a copyright for the sole purpose of ensuring some fair income as either incentive or sustenance to the artist. But it is also clear that the intent was *not* to grant permanent and indefinite ownership of the intangible concept of Intellectual Property, Indeed as the United States' first patent examiner, Thomas Jefferson wrote:

> *"He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me."*

As copyright law has become increasingly slanted toward the author (or, more precisely to toward corporations like Disney but more on that later) it has grown increasingly out of sync with the original intent, leading Bert Boyce to write:

> *"Current copyright law... on it's face, in contradiction with the clearly expressed purposes of the authors of the basic law of the United States... A law that meets constitutional requirements should be able to demonstrate that the granting of exclusive rights in some way benefits the authors and does not impede the progress of science..."*

Nick Negroponte is more succinct: *"copyright law is totally out of date."*

Copyright is automatically granted to the author the moment his or her work is fixed in a tangible medium of expression, a definition that is being expanded to include electronic publication explicitly, but at the moment is hopelessly vague. Your web page probably is copywritten, your erotic IRC stanzas probably aren't. The court's reasoning is that your web page is intended to be fixed for a time and your chat messages are generally considered ephemeral.

Copyright grants the author exclusive rights to reproduction or exhibition of the protected work, excepting certain ill defined exceptions which fall under the term "fair use."

Copyright was originally granted for 14 years with a 14 year extension. The 1976 revision of article 17 extended the law to 50 years after the death of the creator, 75 years for corporations.

Sonny Bono, the ex-congressman who has risen from the grave to sponsor HR 2281 along with his wife, is the namesake of the most recent extension which grants 95 years to corporations and 70 posthumous years to individuals: keeps the flowers fresh.

The Sonny Bono Copyright Term Extension Act also clarifies just what is a not a public performance and therefore fair use: a living room less than 3500 square feet, or if larger than 3500 square feet the TV less than 55" diagonal, and no more than two TVs, and no more than 6 speakers in addition to the speakers built into the TV. It is not clear if woofers and tweeters are counted separately or together (is it drivers or cabinets or channels, Sonny? Get out the Ouija board).

This sort of thing is driven by Disney and other corporations holding valuable intellectual property, mostly in the entertainment industry. Their justifications are pretty lame, they can't just say "we wanna make more money" since that's pretty clearly not the only criterion for copyright. They come up with lame excuses like Marc Gershwin whining "someone could turn 'Porgy and Bess' into rap music." As if Porgy and Bess didn't come from African American musical traditions to begin with.

Clearly copyright law is insanely complex, and getting more so. The basic text of the law is unclear and years of contradictory rulings have done little to clarify it. New bills, in particular the No Electronic Theft Act (NET) and the World Intellectual Property Organization (WIPO) acts in the house and senate (HR 2281 and S 2037) really screw it up.

WIPO is an international body that has US representation and is in the process of defining uniform or at least non-conflicting intellectual property law among it's member nations.

Part of the reason for bothering to worry about this stuff, aside from avoiding a jail term, is that HR2281 in particular is a live document and, amazingly, the version released on July 22 addresses some of the concerns of civil liberties lobbying groups like the DFC, EFF, the ACLU, EPIC, and the

ALA. If you really want a safe harbor for yourself, you just going to have to get out your checkbook, but there has been some progress in the legislation to make it slightly less heinous.

Historical Limitations

Restrictions to copyright rights fall into 3 large categories:

Fair Use, which is the main constraint; First Sale, which carries certain rights for the purchaser; and library preservation, by which libraries are granted certain rights to ensure the preservation of cultural material, including archival duplication etc.

We'll consider the first two as generally useful.

First Sale: The principle of First Sale is that you have the right to sell a book used. You didn't lease the information in the book, you bought it, and you can sell it or give it away at your discretion without informing the author. The pre-digital era assumption was that there was only one book and you sold it and it was gone, you didn't have it any more. In the digital domain, that's not really true. In fact it's very hard not to accidentally proliferate copies of works all over the place, let alone be certain that if you sell a digital artwork that you've transferred and not duplicated all of the relevant bits, especially since a move operation in a computer is a copy followed by a delete... At the moment you generally don't have the assumed right of first sale for digital works, but you still do for works fixed in/on some medium if that medium is what is transferred. Legislators get all fuzzy here, it's not the paper or plastic your selling, it's the data, but first sale applies to the artifact.

In my opinion, first sale clearly illustrates that data wants to be free.

FAIR USE Fair use is insanely complex so I'll just summarize: Criticism, comment, news reporting, teaching, scholarship or research is fair use when the relatively clear test is cleared that the use cannot reasonably be expected to result in lost sales for the author. If you're 2liveCrew you can parody pretty woman too.

Most fair use literature focuses on academic use, but most of us care about the 1984 Sony ruling which specifically allows you to time shift, or copy a TV broadcast onto a VCR and watch it later, and is generally construed as to allow you to tape, for personal use, your CDs and listen to them in the car where you, for example, don't have a CD player, and similar activities which are for personal use.

Fair use is basically all fucked up by the WIPO compliance bills, and despite some improvements, is still insane. In general, in this room, its safe to say that most anything you want to do with data is not fair use and is probably a criminal copyright violation under WIPO and that includes activities specifically allowed by the Sony ruling.

Civil vs. Criminal

Another complication in the realm of copyright is the difference between civil and criminal copyright infringement. Basically nobody ever gets busted for civil infringement because it's bad press, even Disney backed down from busting a day care center with an unlicensed Donald duck on the wall. Criminal infringement is another story: the DA does the deed and the more companies can off-load the task of enforcing their copyrights on the taxpayer, the happier they are.

It used to be easy: if you charged or made money for the distribution of infringing materials you were a criminal. If you did it for free you were civilly liable, the claimant had to sue you, and the claimant had to be the creator or her direct assignee.

Under that definition our little friend at MIT managed to get off scott free despite a massive warez server in his dorm room.

No more, thanks to him and the No Electronic Theft act the definition of payment has been widened to include receipt of anything of value including other copywritten works, *or* of value over $1000 total. This means a small warez server with low value software is probably a civil violation *unless* you complain about leaches. But most warez servers have been a criminal violation since 7 Jan 1997.

And criminal violations are no fun: HR 2281 gives first offenders up to $500,000 fine and 5 years and twice that for further offenses.

Just to make it easier to catch your ass, NET also expands the rules for who can complain: it used to be that just the owner of the copyright could file a victim impact statement with the DA, Now anybody who has a financial stake in the work can: Producers, sellers, holders, and the legal reps thereof. A big list, and one that shifts the nature of the claimant from generally the creator or holder of the copyright to generally those corporations that profit from it.

And it's created a list of on-line bounty hunters out to narc on your infringing ass: our old friends SPA have been joined by markwatch and infringitek and probably others who spend their days scanning your websites looking for misues of Reebok or naked Pocahontas pictures.

HR2281/S2037

At this very moment, there is a bill making its slow passage through the peristaltic functions of congress. In the US lawmaking process,

Laws in the US start as a gleam in a lobbyist’s eye, then are introduced into an appropriate committee and debated, A bill typically has different versions in the senate and the house. Each festers awhile until eventually passed some morning when the most vocal opponents–i.e. those best paid by whatever industry will suffer from the law–are hung over. The two versions are then reconciled, reaffirmed, and sent to the president. to be signed into law or vetoed for political gain.

President Clinton Signed NET last year. The laws necessary to bring the US into WIPO compliance have been in this process for two years, the house version HR 2281 is the most recently revised on July 22, and is still in the house ways and means committee, but is now largely equivalent to S 2037 which was ratified by the senate on May 14.

It's important to note that Sonny Bono signed on as a sponsor on July 22, along with his lovely wife. At the time Sonny was quite dead, as he had, alas, bashed in his head.

Both versions contain provisions and language which pose an extreme threat to privacy, freedom of information, encryption, and the general structure of the net we know and love.

Both Bills are defined by two major additions to Title 17 of the US code which concerns copyrights: Section 1201 broadly illegalizes the circumvention of copyright protection measures, and 1202 broadly protects copyright management information. Each bill contains some exemptions, safe

harbors, for protected activity and these safe harbors are where the debate is, though it probably should be on revising the language of 1201 and 1202.

Section 1201

1201 says:

> *"1) No person shall circumvent a technological protection measure that effectively controls access to a work protected under this title. 2) No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology product service, device, component, or part thereof that–A) is primarily designed or produced for the purpose of circumventing a technological protection measure that effectively controls access to a work protected under this title; B) has only limited commercially significant purpose or use other than to circumvent a technological protection measure that effectively controls access to a work protected under this title; OR C) is marked by that person or another acting in concert with that person's knowledge for use in circumventing a technological protection measure that effectively controls access to a work protected under this title."*

Then yadda yadda yadda, there's a bit further on in an attempt to placate the ACLU:

> *"...D) other rights, etc., Not affected–nothing in this section shall affect rights remedies limitations or defenses to copyright infringement, including fair use, under this title."*

Let's start there, 1201 D): If it sounds like that last bit means nothing you're right. Since this bill creates new restrictions in A) and B) and D) does not address those new restrictions. The problem is that it's still illegal to circumvent the technologic protection, even if once you did, using the data protected therein would be fair use. And further, it's illegal to make a device or pretty much anything that would facilitate such access.

1201 A1) says that it's illegal to access a technologically protected work no matter how just the access, no matter how lame the protection.

Remember, the new fines for this stuff are real, criminal access which is for profit or exchange *or just more than* $1000 worth of *data* results in up to 500,000 fine and up to 5 years in prison. Even just a casual violation, on that is intentional but clearly does no or minimal harm to the copyright owner leaves you liable for $2500 fine, court costs, and attorney's fees. So this stuff isn't just screwing around, it's more serious than homicide.

Effects that are of concern include

The ability to lock up public domain information in a protective wrapper that carries significant fines for opening.

Protection of your cookies. That is, first cookies are themselves copywritten, but they may contain copyright control or protection measures like passwords or other access information. You can't delete them, even if there's no good faith violation of the intent, they are a technologic copyright protection measure and are therefore protected under the new draconian copyright rules.

A big concern is that cookies might contain information regarding your surfing habits, your interest in S&M teeners for example, that you might not want to remain on your hard disk.

There is an express provision in later versions of the house bill and a slightly less explicit version in the senate bill which allow the user the right to delete cookies that (in plain English) collect information about them personally if and only if the act of deleting the cookie *only* disables the collection of personal information, is only done to prevent the collection of information, and the package did *not* conspicuously warn you that it was going to be collecting information.

Not a hell of a lot of help. If the cookie has password info too, forget it, and if it didn't tell you it was collecting info, how did you know, especially since dinking around with the copyright protection measure is outlawed anyway. Catch 22.

ENCRYPTION research is also well hobbled by the bill. Let's say you get a new encryption package, clipper 4, and you want to try to break it before you trust your credit cards and love letters to your mistress to it. That would be no. It's illegal to try to circumvent a technology which controls access to a protected work. Be it the encryption program itself or your own data so protected.

The basic problem is that the act of trying is illegal, not doing a bad thing like making your own line of MicroSoft office disks on more attractive gold CDs at half price, but the act of circumventing the copyright protection itself is illegal. It's not pirating, it's being able to pirate.

Again, there are some closely worded exemptions for Crypto Research thanks to some loud voices from our community, though narrow:

It is not a crime to break the lock on a piece of data if you bought the data, the lock itself is what you're testing, you made a good faith effort to ask microsoft if they'd let you try to break their password system, and in so doing you are not infringing or breaking the Computer Fraud and Abuse Act of 1986, and if you get busted, the court is supposed to consider if you published your data for the world's edification (say, on the L0pht), you're a bona fide encryption cracker person, and you tell microsoft they're weenies as soon as you know (better).

That's a pretty narrow provision. It's not at all clear that EFF's DES Cracker would be legal under this bill. We might still think DES is good for 39 days, not 56 hours if this bill were today law.

And you can't reverse engineer stuff. Basically, unless microsoft gives you the file format for word, it's illegal to take apart word or it's files to figure it out. Therefore Microsoft has a very easy time controlling the interoperability of it's products and everyone else goes hang.

Again, there's a special exemption that might actually be OK in this case. It is again overly narrow in that it explicitly only authorizes cracking a file to reverse engineer it to achieve interoperability if so doing does not violate normal copyright law, and applies only to data files: *"...the ability of computer programs to exchange information and of such programs mutually to use the information which has been exchanged."*

1201 A2) says you cant develop any technology to crack codes, guess serial numbers or probe for weaknesses: that is it can neither be designed to circumvent protections, have a limited purpose other than circumventing protections (even if that was not it's original intent, presumably, let the market decide), or be something sold to circumvent technologies.

Technically your VCR is in violation, or will be. As you can make an analog copy of a DVIX flick during the first viewing and watch it as much as you like. This actually violates a host of provisions, and what's interesting is not only is the act illegal and potentially criminal if you say, trade a copy of Debbie Duz Dishes for your neighbors latest Christian coalition video, but the device is illegal. That

is the VCR. This would be in contrast to a VCP - player only. People don't buy consumer VCRs with record capabilities to make their own movies, the record capability is primarily designed to circumvent copyright even though that infringement was found in Sony Vs. Universal to be, at least for personal use, fair use.

Now there is a provision which specifically exempts manufacturers from designing a device to respond affirmatively to a copyright protection scheme, i.e., you can't be required to build your VCR or you web browser with every client technology known to man to respond to copyright protection attempts, but you can still be screwed: DFC posits that if a judge finds that an equipment designer changed the value of a resistor to eliminate a response to a copyright protection scheme, that the designer could be civilly and criminally responsible. This is a judges decision, not a technology one, and we know how sensible law professionals are when asked to think about technology.

It also outlaws a lot of very useful equipment that in it's normal course of operation might disable somebody's wacky copyright protection scheme. A great example is the horrible macrovision crap, which makes your videos look like shit. It would be illegal to build a frame buffer or sync enhancer into a VCR. Or a video capture card. Which makes all decent video capture cards illegal.

In the software world, let's say you have a Newton that has a 4 bit display, it would be illegal to write a program to reduce the bit depth of images to optimize useful data since so doing would eliminate digimark copyright glyphs. Again, it's not the act that's illegal here, it's the technology, the capability, and writing specific exemptions into the back pages does nothing to remedy that basic fault.

1202

1202 protects copyright management information, Here's the double fuck for you data optimizers, sync restorers and even making an analog copy of a digital work: IT IS ILLEGAL TO ALTER OR REMOVE THE COPYRIGHT INFORMATION which may be contained in the digital signal. Hell, it could just be written on the CD, but if it doesn't go with the copy, even if the copy is fair use, the copier is a violator. Remember the penalties are no joke.

1202 is generally cited as another protection for cookies as well, and despite the direct and limited exceptions we touched on earlier, it basically makes it illegal to tamper with or delete or edit cookies, password files, or prefs files, even if they're corrupted. Again and again, it's not whether you actually infringe, it's an act that *could* have the *effect* of infringing that's illegal. If your prefs file has your serial number or name in it as a copyright control process, even if the developer couldn't care if you delete and start over, even if doing so is fair use under existing doctrine, under 1202 it's a crime.

It's interesting to note the exceptions to 1202 in 2037 and the latest version of 2281: broadcasters, commercial FCC approved broadcasters, don't need to broadcast the copyright information, but everybody else does. If you have a pirate radio station you're not only busted by the FCC, but also by the data police since you do not have an exemption to keeping the copyright information intact with the broadcast, performance or other “ephemeral copy”.

In Both bills, in 1201(f) and 1202 (d), law enforcement is granted sweeping powers, especially in the senate bill where basically every government contractor is given a blanket exemption. So none of this applies to the various law enforcement agents, at least in pursuant to your duties.

Lastly, both bills provide some measure of exemption from liability for ISPs. Section 512 basically sets forth the terms a large commercial ISP would like to protect them from the violations of their users. Since they are predicated on a reasonable presumption of ignorance, they might not be applicable to smaller ISPs that might presumably know more about the activities of their users.

What's interesting about these provisions is that access is specifically granted to the ISP to violate the users rights to privacy on the suspicion or report of copyright violation. Under 512(g) a copyright owner need only provide your ISP with a sworn statement that he or she thinks you're violating their copyright and the ISP is required to investigate and not required to tell you that it's done so.

This is an obvious and striking extension of civil search and seizure and grants rights to copyright holders in the electronic world that are without precedent in the physical world.

Lets say you're in a flame war with some reporter, and winning, he could quite easily obtain the full contents of your account on the premise that he thinks your storing copies of his data on your disk beyond your fair use, or that you've downloaded them from the New York times web site, say. If he finds that nude Daffy Duck picture, you're busted.

Conclusion

That's pretty much the state of copyright law as it stands now. But it's far from clear that copyright law is a valid concept to begin with. First the fuss we're seeing about enhancing copyright is predicted on the assumption that we're entering an information based economy, and we're passing ever more draconian laws in an attempt to build a foundation for that economy without considering whether it's reasonable to do so.

First, IP law is not immune to challenge. It's an odd concept to being with, what do you own if you own IP? An idea? A thought? If you share with me that thought is it not in my head also? Do you therefore own something that most probably has a physical manifestation in my brain? If memory turns out to be encoded in proteins, do you own those proteins in my brain?

IP law has no one clear foundation for it's justification, in it's history it's been justified in various ways.

One is Natural Law. Under natural law those naturally occurring things with which I mix my labor are mine. Ownership is allocated to one entity on the premise that two cannot simultaneously have possession, and so ownership must be applied to one or the other.

This is not the case with IP, as Jefferson so eloquently pointed out, IP is not scarce. My understanding has not diminished yours, so exclusive ownership need not be established, indeed it cannot be.

Another is Fairness: If I invent it, I have a right to profit from it. Fine, except that I can patent my mousetrap but not a mathematical algorithm or a philosophical truth. Obviously allowing protection of these would create problems, you couldn't live an existential life without paying the estate of Sartre for example, but if creations of philosophy aren't deserving of remuneration, why are other inventions. How can we claim fairness as a justification for IP law if we refuse to apply the law fairly?

The constitution endorses the Utility theory, that IP law is necessary to promote the useful arts. The premise of this is that creators would not create if they weren't paid. This audience, hackers, more than most dismisses that idea on it's face. Just look at Linux, sendmail, FreeBSD and any number of

incredibly useful programs or technologies created, many the best in their class, without any remuneration.

It is clear that the profiteers of copyright law, the newly protected class of sellers and distributors who now have an equal stake in the IP that pays their way are dependent on copyright law and in the past an argument could have been made that the availability of IP is dependent on these publishers making a profit, independent of paying the authors, or their rather expensive distribution methods would fail.

This is no longer the case. It is now reasonable to consider publication to be cost free. In fact the very successful distribution schemes of things like Linux (or Doom) show that not only can superior products be developed without remuneration, but they can also be widely distributed.

If it is the optimization of the greatest good we seek, it is clear that the path that WIPO and other bills takes is not going to be successful. It is obvious that these laws are being passed for the benefit of the corporations that profit from the distribution and control of ideas and information and not for the benefit of society at large.

And this is an unconscionable perversion of the original and noble intent of copyright law and represents a tremendous shift: In effect the government is become the willing agent of corporations against it's population. Your tax money goes to support the profitability of corporations in violation of your right to information.

But can it succeed? This is the real question, and I posit that the punishments created for violating copyright law, for infringing on corporate responsibility which exceed the penalties for murder in some cases, that these laws are a de facto recognition of the fact that most of the population doesn't give a damn about copyright law. Unlike tangible property law which benefits almost everyone directly, and carries a *do unto others* reciprocity that everyone can understand, the general population *does not own IP* and so these laws only hinder them and do not benefit them.

And so why should they, or we, pay any attention.

Thank you.

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