

Intellectual Property

The intellectual property debate is so hot these days that I can't wander into a restroom without running across graffiti supporting one side or the other. Some people think that patents and other forms of intellectual property law are the bane of the free universe, and that these laws are not just misguided but actually *evil* and should be struck down as soon as possible. Others are convinced that pretty much the whole world economy is driven by intellectual property. And *those* people want to do anything to strengthen the legal status of IP rights.

As a result, the graffiti on the issue gets quite graphic at times.

Of course, most of it is on the virtual restrooms on the Internet, not so much the restrooms in the hotspots of San Jose's nightlife.* There'll be huge flamefests over some specific issue associated with intellectual property law, with people arguing everything from First Amendment rights to whether IP law might make open source development impossible sometime in the future.

And I find myself certifiably schizophrenic on the issue.

It's not that I don't have an opinion: I have very strong opinions on the worth of intellectual property, but they end up being on both sides of the argument. I can tell you, this can be very con-

*This, as anybody who lives in San Jose can tell you, is called IRONY. San Jose doesn't have nightlife. People living here drive to San Mateo if they actually want to have fun.

FROM: Just For Fun, Linus Torvalds + DAVID DIAMOND

HARPER BUSINESS, 2002

fusing. It means that I end up arguing both sides. And I think this is because there really *are* two sides to intellectual property, and they share nothing but the name.

To many people, including me, intellectual property is all about human inventiveness, about the very thing that makes us *humans* instead of animals (that, and thumbs, of course). And in that setting, the very name “intellectual property” is an affront: It’s not property to be sold like chattel, it’s the act of creation, it’s the greatest thing any human can ever do. It’s Art, with a capital A. It’s the Mona Lisa, but it’s also the end result of a long night of programming, and it’s an end result that you as a programmer are damned *proud* of. It’s something so precious that selling it isn’t even possible: It’s indelibly a part of who you are.

That kind of creativity—whether it be in the form of painting, music, sculpture, writing, or programming—should be sacred. The creator and the thing he or she created have a bond that cannot be severed. It’s like the bond between a mother and child, or between bad Chinese food and MSG. But at the same time it’s something that everybody in the whole world should be able to be part of, because it *is* humanity.

And then, in the other corner, weighing in at an approximate seven gazillion billion U.S. dollars a year, intellectual property is huge business. Human creativity got a price tag, and it turned out to be quite expensive. Creativity is rare, and as a result it is not just expensive but also extremely lucrative. Which brings in a totally different class of arguments, and totally different kinds of people. The kind of people who call the end result of human creativity “property.” Not to mention, of course, lawyers.

Read the title of this chapter again. The “property” people are winning. After all, their name stuck. So what’s the problem?

The most well-known example of intellectual property is the notion of copyright. Copyrights are basically the codification of the rights of any creator to do with his or her creation as he or she

wishes. The "owner" of the creation can decide on how that creation should be used.

Copyrights are also legally very simple to get. You don't have to register your copyright: You are automatically the copyright holder of whatever creative work you do. This is an important distinction from most other intellectual property law, mainly because it actually makes it easy for individuals, not just big corporations, to own copyrights. *You* can own a copyright, simply by virtue of writing, painting, or generally creating something unique. If you want to, you can add a legend like "(C) Copyright 2000 Yourname Here," but quite frankly, you don't need to. You own the copyright whether you say so or not. Saying so just makes it easier for other people to track you down if they want to use your work.

Of course, just owning a copyright in itself is not very useful. But the fact that you own what you create means that you can control how it is used. You have, for example, the right to sell such a work of art to somebody else, and nobody but the IRS gets to have any say in the matter. But it's about *more* than just the money, and that's where a lot of people seem to find themselves flummoxed.

For example, you can use your power as owner of a copyright to try to do more interesting things than just sell it. You can license it. This is even *better* than selling it; instead of selling the work of art you can sell the license to do certain things to it, and still retain the copyright on it. Basically, you can have your cake and eat it, too. This is how the Microsofts of the world get created: endlessly selling the rights to use something, without actually losing anything. No wonder people just *love* to own this kind of property.

Does anybody perhaps start to see a problem here? If you don't see anything strange so far, I have a bridge and a few pieces of waterfront property to sell you.

The basic problem with intellectual property is starting to show itself: You as the owner of intellectual property can effectively sell it forever, without ever losing anything yourself. You don't risk anything, and in fact you might decide to write your license in a

way that basically says that even if the property is *flawed*, you cannot be held responsible in any way. Sounds preposterous? You'd be surprised.

Flaw: no consumer protection.

It gets worse. The copyright holder not only has the right to sell his or her property without losing it, but also the right to sue people who sell property that *looks* like his or hers. Clearly the copyright owner has rights over that *derived work*.

Clearly? Not so fast. Where do you draw the line between inspiration and copying? And what happens when different people come up with similar ideas? Who gets the gravy train of being able to sell his idea over and over and over again, and gets to tell the other people to butt out of his business? It's not just consumers who aren't protected, it's also *other* creative people who are not protected by the notion of "intellectual property."

What makes the discussion ugly at this point is that a lot of the arguments for stronger intellectual property rights are based on the notion of giving inventors and artists more "protection." What people don't seem to ever realize is that giving such powerful rights to some people also ends up taking rights away from others.

And maybe not so surprisingly, the proponents of stricter intellectual property laws are the organizations that stand to gain the most. Not the artists and inventors themselves, but the clearinghouses of IP: companies that make a living off other people's creativity. Oh, and lawyers, of course. The end result? Copyright law amendments like the infamous Digital Millennium Copyright Act (DMCA), which removes the last vestiges of consumer rights over the use of copyrighted material.

Now, if you are getting the notion that I think copyrights are actually detrimental, you're wrong. I happen to absolutely love copyrights, I just don't believe in taking the rights of the authors *too* far. Not to the point of screwing the consumer over. And I say this not just as a consumer, but as a producer of copyrighted material myself, both in the form of this book and of Linux itself.

I, as a copyright holder, have my rights. But with rights

come obligations—or as they say in certain neighborhoods, *noblesse oblige*. And so I have the obligation to use those rights in responsible ways, and not as a weapon against others who lack such rights. As one great American once declared, “Ask not what your copyright can do for you, ask what you can do for your copyright”—or something to that effect.

And in the end, copyright is, despite even the DMCA, a fairly mild and well-behaved form of intellectual property. The notion of “fair use” does still exist, and holding a copyright does not give *all* rights to the work to the copyright holder.

The same cannot be said for patents, trademarks, and trade secrets; the heavy drugs of IP. Discussions over software patents in particular have gotten so inflamed in technical circles that it officially counts as one of the subjects you should not discuss in polite company, along with gun control, abortion rights, medical marijuana, and whether Pepsi tastes better than Coca Cola. And the reason is that patents, in many ways, give control over new inventions similar to that of copyrights, but with few of the redeeming qualities of copyrights.

One of the most awkward issues with patents is that, unlike with copyrights, you don't get a patent just for inventing something new. No, you get a patent after you've gone through the painful and prolonged process of filing for it with the patent office. Waiting for the patent office, by the way, is a bit like standing in line at the DMV, but you have to realize that you stand in line with about twelve patent lawyers, and the line is TWO YEARS LONG. In short, it's not something you do for fun on a Friday evening if the kids fell asleep early.

As if to add insult to injury, the patent office doesn't necessarily have the resources to check whether the patent for a new invention of yours is really all that groundbreaking. It's not as if they have Einsteins* working for them, so it's fairly hard to give

*Actually, Einstein *did* work for the patent office when he did his work on special relativity. But he was special. Even most patent clerks admit that.

new inventions their proper checking. Which means that, in many cases, obviously bogus patents have been accepted. Think of it as the post office with Ph.D.'s—minus the guns.

So what's the result? Very few individuals get patents, for obvious reasons. *Companies*, on the other hand, get a ton of them. They are useful as weapons against other companies that threaten to sue over the patents *they* own. The patent system of today is basically a Cold War with IP instead of nukes. And it's not much prettier. The people left huddling in bomb shelters are the individual inventors, who have to deal with a system gone crazy and who lack the resources to have 12,000 lawyers on staff.

Now, if you want to avoid the bother with patents, you can go for the strongest drugs of IP, trade secrets. The advantage of the trade secret is that you don't have to worry about a Trade Secret Office or anything at all: You can just stamp your intellectual property "secret" and be done with it. You can still tell people about it, but you have to tell them it's a secret.

People used to do this all the time before, and that is actually why patent law was originally introduced. In order to encourage individuals and companies to expose their secrets, patent law allowed for protection in the marketplace for some time *if you divulged what your secret to success was*. A basic form of tit-for-tat: You tell how you do something, and we'll give you exclusive rights for X years.

Before patents, people would guard their technological advantage jealously and take their secrets to the grave. That was, for obvious reasons, bad for technical evolution because promising technologies were never divulged to anybody else. The promise of exclusive rights made patents a very powerful incentive to tell all, as you no longer had to worry about your competition finding out what you were doing—at which point you would otherwise have lost the protection of it being secret.

However, that was then, and this is now. These days even trade secrets have legal protection, for unfathomable reasons. Any sane person realizes that once a secret is out, it is no longer a

secret. Except in the strange and twisty passages of intellectual property law, where secrets can continue to be secrets even after everybody knows what they are. And where the knowledge you have in your head can get you sued, if you happen to go to work for the wrong employer. Some intellectual property law is downright scary.

To a large degree, finding peace in this intellectual property war is what open source is all about. While a lot of people have their own opinions about what open source really tries to do, in many ways you can see it as a high-tech *détente*, a defusing of copyright as a weapon in this fight of intellectual property.

So open source would rather use the legal weapon of copyright as an invitation to join in the fun, rather than as a weapon against others. It's still the same old mantra: *Make Love, Not War*, except on a slightly more abstract level (probably a *lot* more abstract, considering some of the geeks I know).

But as with any major philosophical rift, there is always the other side of the story. This is where my certifiable schizophrenia comes in.

I've tried to explain why a lot of people feel that intellectual property, and especially the strengthening of intellectual property laws, is downright evil. Many in the open source community (and outside too, in all honesty) would like nothing better than to tear down all the nukes altogether, and totally abolish the Cold War of knowledge. Others disagree.

The other side of the picture is that yes, intellectual property may be unfair, and yes, intellectual property laws are largely designed to further the aims of large corporations over the rights of consumers or even the individual author or inventor. But boy is it *lucrative!* It concentrates the power of the powerful, and the very fact that it's a powerful weapon makes it so effective in the marketplace. The same reason that made nuclear weapons the ultimate force in the Cold War makes intellectual property so attractive in the war of technology. And technology sells.

And it also generates a very powerful positive-feedback cycle. Because intellectual property is such a good source of revenue, a lot of money is being spent on creating *more* intellectual property. And that very fact is important. In the same ways that wars have historically always been a source of invention and great leaps in engineering (initially, the computer itself was largely developed for purely military purposes), the virtual war of intellectual property rights helps feed the engine and brings never-before-seen resources into technology development. This is a good thing.

Of course, I, as an intellectual snob, am convinced that merely throwing resources around is not really all that conducive to true creativity. Just look at the music business of today. Kajillions of dollars are spent every year on finding the next hot artist—yet nobody really thinks that the Spice Girls (who have been richly rewarded for their contributions to their art) can compare to Wolfgang Amadeus Mozart (who died destitute). So throwing money at the problem does not make for that kind of genius.

But intellectual snobbism—the you-can't buy-a-genius philosophy—doesn't really work as a long-term business model. The creative juices are just so unpredictable, so hard to court on finding, that any long-term planning should not concentrate on the promise of pure genius. The technology development of today (and, sadly, the music) depends not on the Einsteins (and Mozarts) but on a huge army of plodding engineers (and, in the case of music, well-endowed young females) who may show only occasional flashes of brilliance. The added resources do not make for great art, but for slow and steady progress. And, in the end, this is all to the best.

The notion of plodding engineers may have less romantic appeal than the eccentric-genius approach. Just think about how many “Mad Scientist” movies there are compared to the number of “Plodding Engineer” movies. However, when it comes down to business, you do want your occasional flashes of genius but, even

more than that, you want the steady stream of small improvements over time.

And this is where the power of intellectual property shines: Having grown so lucrative, it has become the holy grail of modern technology companies, feeding this big machine. And thus, thanks to IP protections the steady progress goes on, unhindered. It may not be all that creative any more, but it's dependable.

So I see both sides—although I have to admit that most of the time I'd rather see a more fun and inspiring world of technology. One where economic factors wouldn't *always* prevail. I have a dream—one day IP laws will be dictated by morals, not on who gets the biggest piece of the cake.

Trust me, I understand the economic issues. At the same time, I can't help but wish they did not have such an overwhelmingly negative impact on modern intellectual property law. The economic incentives to strengthen the ownership of intellectual property, and the difficulty in expressing the notion of "fair use" and "morals" in legal text, have caused the two viewpoints on IP to grow further apart. As in a dispute between two neighbors, neither side is willing to even acknowledge that the right solution is likely to be somewhere in between the two extremes.

Clearly, as the unfortunate passing of the DMCA showed, economic incentives are doing well. The question is, what kind of intellectual property law would help drive development while being less driven by crass money-grabbing interests?

The issue is intensified by the fact that modern technology (and the Internet in particular) are weakening many of the traditional forms of intellectual property protection almost faster than we can keep up. And in ways nobody could have predicted. Who would have imagined that Midwestern grandmothers would be pirating needlepoint instructions over the Internet? The ability to copy works of art—and technology itself—on a large scale has

become so widespread and easily available that institutions with vested IP are running around doing the best they can to shore up their interests. They are doing all they can to make such copying illegal, and introducing new measures to actually outlaw technology that can be used for piracy.

What's wrong with this picture? The problem is that a lot of the new efforts to make it harder to illegally use other people's intellectual property also make it much harder to use other people's work in legal ways. The classic example of this from the Linux world is the so-called DeCSS lawsuit.

In the DeCSS suit, people who were working on technology to decode DVD movies were sued by the entertainment industry for making the code available to others on the Internet. It didn't matter to the judge on the case that the ultimate aim of the project was perfectly legal; the fact that the project could *potentially* be used for illegal purposes made it illegal in the United States to distribute even the information on where to find the instructions to do the decoding. (The "DeCSS" name itself comes from the project undoing the DVD Content Scrambling System—CSS. So you "de-CSS" something in order to remove the scrambling so that you can watch the movie on your computer.)

This is a perfect example of intellectual property law being used not to help foster innovation, but to control the marketplace, to control what consumers can and cannot do. It's an example of intellectual property law gone bad.

Such misuses of intellectual property power aren't limited to technology, by the way. Another classic example is the use of trade secret law to prosecute and persecute the people who tried to inform the public about Scientology. The Church of Scientology successfully claimed that their scriptures ("Advanced Technology") fell under trade secret protection, and used IP law to defend them from being made public.

What are the alternatives? Imagine an intellectual property

law that actually took *other* people's rights into account, too. Imagine IP laws that encouraged openness and sharing. Laws that say sure, you can still have your secrets, whether they be technological or religious, but that doesn't *mandate* legal protection for such secrecy.

Yeah, I know. How unrealistic of me.