A few excerpts from

CONTENT:

Selected Essays on Technology, Creativity, Copyright and the Future of the Future

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- **How Do You Protect Artists?** (Originally published in The Guardian as "Online censorship hurts us all," Tuesday, Oct 2, 2007)
- What's the Most Important Right Creators Have? (Originally published as "How Big Media's Copyright Campaigns Threaten Internet Free Expression," InformationWeek, November 5, 2007)
- Science Fiction is the Only Literature People Care Enough About to Steal on the Internet (Originally published in Locus Magazine, July 2006)
- **In Praise of Fanfic** (Originally published in Locus Magazine, May 2007)

Dedication:

For the founders of the Electronic Frontier Foundation: John Perry Barlow, Mitch Kapor and John Gilmore

For the staff—past and present—of the Electronic Frontier Foundation

For the supporters of the Electronic Frontier Foundation

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How Do You Protect Artists?

(Originally published in The Guardian as "Online censorship hurts us all," Tuesday, Oct 2, 2007)

Artists have lots of problems. We get plagiarized, ripped off by publishers, savaged by critics, counterfeited—and we even get our works copied by "pirates" who give our stuff away for free online.

But no matter how bad these problems get, they're a distant second to the gravest, most terrifying problem an artist can face: censorship.

It's one thing to be denied your credit or compensation, but it's another thing entirely to have your work suppressed, burned or banned. You'd never know it, however, judging from the state of the law surrounding the creation and use of internet publishing tools.

Since 1995, every single legislative initiative on this subject in the UK's parliament, the European parliament and the US Congress has focused on making it easier to suppress "illegitimate" material online. From libel to copyright infringement, from child porn to anti-terror laws, our legislators have approached the internet with a single-minded focus on seeing to it that bad material is expeditiously removed.

And that's the rub. I'm certainly no fan of child porn or hate speech, but every time a law is passed that reduces the burden of proof on those who would remove material from the internet, artists' fortunes everywhere are endangered.

Take the US's 1998 Digital Millennium Copyright Act, which has equivalents in every European state that has implemented the 2001 European Union Copyright Directive. The DMCA allows anyone to have any document on the internet removed, simply by contacting its publisher and asserting that the work infringes his copyright.

The potential for abuse is obvious, and the abuse has been widespread: from the Church of Scientology to companies that don't like what reporters write about them, DMCA takedown notices have fast become the favorite weapon in the cowardly bully's arsenal.

But takedown notices are just the start. While they can help silence critics and suppress timely information, they're not actually very effective at stopping widespread copyright infringement. Viacom sent over 100,000 takedown notices to YouTube last February, but seconds after it was all removed, new users uploaded it again.

Even these takedown notices were sloppily constructed: they included videos of friends eating at barbecue restaurants and videos of independent bands performing their own work. As a Recording Industry Association of America spokesman quipped, "When you go trawling with a net, you catch a few dolphins."

Viacom and others want hosting companies and online service providers to preemptively evaluate all the material that their users put online, holding it to ensure that it doesn't infringe copyright before they release it.

This notion is impractical in the extreme, for at least two reasons. First, an exhaustive list of copyrighted works would be unimaginably huge, as every single creative work is copyrighted from the instant that it is created and "fixed in a tangible medium".

Second, even if such a list did exist, it would be trivial to defeat, simply by introducing small changes to the infringing copies, as spammers do with the text of their messages in order to evade spam filters.

In fact, the spam wars have some important lessons to teach us here. Like copyrighted works, spams are infinitely varied and more are being created every second. Any company that could identify spam messages—including permutations and variations on existing spams—could write its own ticket to untold billions.

Some of the smartest, most dedicated engineers on the planet devote every waking hour to figuring out how to spot spam before it gets delivered. If your inbox is anything like mine, you'll agree that the war is far from won.

If the YouTubes of the world are going to prevent infringement, they're going to have to accomplish this by hand-inspecting every one of the tens of billions of blog posts, videos, text-files, music files and software uploads made to every single server on the internet.

And not just cursory inspections, either—these inspections will have to be undertaken by skilled, trained specialists (who'd better be talented linguists, too—how many English speakers can spot an infringement in Urdu?).

Such experts don't come cheap, which means that you can anticipate a terrible denuding of the fertile

jungle of internet hosting companies that are primary means by which tens of millions of creative people share the fruits of their labor with their fans and colleagues.

It would be a great Sovietisation of the world's digital printing presses, a contraction of a glorious anarchy of expression into a regimented world of expensive and narrow venues for art.

It would be a death knell for the kind of focused, non-commercial material whose authors couldn't fit the bill for a "managed" service's legion of lawyers, who would be replaced by more of the same—the kind of lowest common denominator rubbish that fills the cable channels today.

And the worst of it is, we're marching toward this "solution" in the name of protecting artists. Gee, thanks.

What's the Most Important Right Creators Have?

(Originally published as "How Big Media's Copyright Campaigns Threaten Internet Free Expression," InformationWeek, November 5, 2007)

Any discussion of "creator's rights" is likely to be limited to talk about copyright, but copyright is just a side-dish for creators: the most important right we have is the right to free expression. And these two rights are always in tension.

Take Viacom's claims against YouTube. The entertainment giant says that YouTube has been profiting from the fact that YouTube users upload clips from Viacom shows, and they demand that YouTube take steps to prevent this from happening in the future. YouTube actually offered to do something very like this: they invited Viacom and other rightsholders to send them all the clips they wanted kept offline, and promised to programatically detect these clips and interdict them.

But Viacom rejected this offer. Rather, the company wants YouTube to just figure it out, determine a

priori which video clips are being presented with permission and which ones are not. After all, Viacom does the very same thing: it won't air clips until a battalion of lawyers have investigated them and determined whether they are lawful.

But the Internet is not cable television. Net-based hosting outfits—including YouTube, Flickr, Blogger, Scribd, and the Internet Archive—offer free publication venues to all comers, enabling anyone to publish anything. In 1998's Digital Millennium Copyright Act, Congress considered the question of liability for these companies and decided to offer them a mixed deal: hosting companies don't need to hire a million lawyers to review every blog-post before it goes live, but rightsholders can order them to remove any infringing material from the net just by sending them a notice that the material infringes.

This deal enabled hosting companies to offer free platforms for publication and expression to everyone. But it also allowed anyone to censor the Internet, just by making claims of infringement, without offering any evidence to support those claims, without having to go to court to prove their claims (this has proven to be an attractive nuisance, presenting an irresistible

lure to anyone with a beef against an online critic, from the Church of Scientology to Diebold's voting machines division).

The proposal for online hosts to figure out what

infringes and what doesn't is wildly impractical. Under most countries' copyright laws, creative works receive a copyright from the moment that they are "fixed in a tangible medium" (hard drives count), and this means that the pool of copyrighted works is so large as to be practically speaking infinite. Knowing whether a work is copyrighted, who holds the copyright, and whether a posting is made with the rightsholder's permission (or in accord with each nation's varying ideas about fair use) is impossible. The only way to be sure is to start from the presumption that each creative work is infringing, and then make each Internet user prove, to some lawyer's satisfaction, that she has the right to post each drib of content that appears on the Web. Imagine that such a system were the law of the

Imagine that such a system were the law of the land. There's no way Blogger or YouTube or Flickr could afford to offer free hosting to their users. Rather, all these hosted services would have to charge enough for access to cover the scorching legal bills

associated with checking all material. And not just the freebies, either: your local ISP, the servers hosting your company's website or your page for family genealogy: they'd all have to do the same kind of continuous checking and re-checking of every file you publish with them.

It would be the end of any publication that couldn't foot the legal bills to get off the ground. The multi-billion-page Internet would collapse into the homogeneous world of cable TV (remember when we thought that a "500-channel universe" would be unimaginably broad? Imagine an Internet with only 500 "channels!"). From Amazon to Ask A Ninja, from Blogger to The Everlasting Blort, every bit of online content is made possible by removing the cost of paying lawyers to act as the Internet's gatekeepers.

This is great news for artists. The traditional artist's lament is that our publishers have us over a barrel, controlling the narrow and vital channels for making works available—from big gallery owners to movie studios to record labels to New York publishers. That's why artists have such a hard time negotiating a decent deal for themselves (for example, most beginning recording artists have to agree to have money

deducted from their royalty statements for "breakage" of records en route to stores—and these deductions are also levied against digital sales through the iTunes Store!).

But, thanks to the web, artists have more options than ever. The Internet's most popular video podcasts aren't associated with TV networks (with all the terrible, one-sided deals that would entail), rather, they're independent programs like RocketBoom, Homestar Runner, or the late, lamented Ze Frank Show. These creators—along with all the musicians, writers, and other artists using the net to earn their living—were able to write their own ticket. Today, major artists like Radiohead and Madonna are leaving the record labels behind and trying novel, net-based ways of promoting their work.

And it's not just the indies who benefit: the existence of successful independent artists creates fantastic leverage for artists who negotiate with the majors. More and more, the big media companies' "like it or leave it" bargaining stance is being undermined by the possibility that the next big star will shrug, turn on her heel, and make her fortune without the big companies' help. This has humbled the bigs,

making their deals better and more artist-friendly.

Bargaining leverage is just for starters. The greatest threat that art faces is suppression. Historically, artists have struggled just to make themselves heard, just to safeguard the right to express themselves. Censorship is history's greatest enemy of art. A limited-liability Web is a Web where anyone can post anything and reach *everyone*.

What's more, this privilege isn't limited to artists. All manner of communication, from the personal introspection in public "diaries" to social chatter on MySpace and Facebook, are now possible. Some artists have taken the bizarre stance that this "trivial" matter is unimportant and thus a poor excuse for allowing hosted services to exist in the first place. This is pretty arrogant: a society where only artists are allowed to impart "important" messages and where the rest of us are supposed to shut up about our loves, hopes, aspirations, jokes, family and wants is hardly a democratic paradise.

Artists are in the free expression business, and technology that helps free expression helps artists. When lowering the cost of copyright enforcement raises the cost of free speech, every artist has a duty to speak out. Our ability to make our art is inextricably linked with the billions of Internet users who use the network to talk about their lives.

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Science Fiction is the Only Literature People Care Enough About to Steal on the Internet

(Originally published in Locus Magazine, July 2006)

As a science fiction writer, no piece of news could make me more hopeful. It beats the hell out of the alternative—a future where the dominant, pluripotent, ubiquitous medium has no place for science fiction literature.

When radio and records were invented, they were pretty bad news for the performers of the day. Live performance demanded charisma, the ability to really put on a magnetic show in front of a crowd. It didn't matter how technically accomplished you were: if you stood like a statue on stage, no one wanted to see you do your thing. On the other hand, you succeeded as a mediocre player, provided you attacked your performance with a lot of brio.

Radio was clearly good news for musicians—lots more musicians were able to make lots more music,

reaching lots more people and making lots more money. It turned performance into an industry, which is what happens when you add technology to art. But it was terrible news for charismatics. It put them out on the street, stuck them with flipping burgers and driving taxis. They knew it, too. Performers lobbied to have the Marconi radio banned, to send Marconi back to the drawing board, charged with inventing a radio they could charge admission to. "We're charismatics, we do something as old and holy as the first story told before the first fire in the first cave. What right have you to insist that we should become mere clerks, working in an obscure back-room, leaving you to commune with our audiences on our behalf?" Technology giveth and technology taketh away.

Seventy years later, Napster showed us that, as William Gibson noted, "We may be at the end of the brief period during which it is possible to charge for recorded music." Surely we're at the end of the period where it's possible to exclude those who don't wish to pay. Every song released can be downloaded gratis from a peer-to-peer network (and will shortly get easier to download, as hard-drive price/performance curves take us to a place where all the music ever re-

corded will fit on a disposable pocket-drive that you can just walk over to a friend's place and copy).

But have no fear: the Internet makes it possible for recording artists to reach a wider audience than ever dreamt of before. Your potential fans may be spread in a thin, even coat over the world, in a configuration that could never be cost-effective to reach with traditional marketing. But the Internet's ability to lower the costs for artists to reach their audiences and for audiences to find artists suddenly renders possible more variety in music than ever before.

Those artists can use the Internet to bring people back to the live performances that characterized the heyday of Vaudeville. Use your recordings—which you can't control-to drive admissions to your performances, which you can control. It's a model that's worked great for jam bands like the Grateful Dead and Phish. It's also a model that won't work for many of today's artists; 70 years of evolutionary pressure has selected for artists who are more virtuoso than charismatic, artists optimized for recording-based income instead of performance-based income. "How dare you tell us that we are to be trained monkeys, capering on a stage for your amusement? We're not charismatics,

we're white-collar workers. We commune with our muses behind closed doors and deliver up our work product when it's done, through plastic, laser-etched discs. You have no right to demand that we convert to a live-performance economy."

Technology giveth and technology taketh away. As bands on MySpace—who can fill houses and sell hundreds of thousands of discs without a record deal, by connecting individually with fans—have shown, there's a new market aborning on the Internet for music, one with fewer gatekeepers to creativity than ever before.

That's the purpose of copyright, after all: to decentralize who gets to make art. Before copyright, we had patronage: you could make art if the Pope or the king liked the sound of it. That produced some damned pretty ceilings and frescos, but it wasn't until control of art was given over to the market—by giving publishers a monopoly over the works they printed, starting with the Statute of Anne in 1710—that we saw the explosion of creativity that investment-based art could create. Industrialists weren't great arbiters of who could and couldn't make art, but they were better than the Pope.

The Internet is enabling a further decentralization in who gets to make art, and like each of the technological shifts in cultural production, it's good for some artists and bad for others. The important question is: will it let more people participate in cultural production? Will it further decentralize decision-making for artists?

And for SF writers and fans, the further question is, "Will it be any good to our chosen medium?" Like I said, science fiction is the only literature people care enough about to steal on the Internet. It's the only literature that regularly shows up, scanned and run through optical character recognition software and lovingly hand-edited on darknet newsgroups, Russian websites, IRC channels and elsewhere (yes, there's also a brisk trade in comics and technical books, but I'm talking about prose fiction here—though this is clearly a sign of hope for our friends in tech publishing and funnybooks).

Some writers are using the Internet's affinity for SF to great effect. I've released every one of my novels under Creative Commons licenses that encourage fans to share them freely and widely—even, in some cases, to remix them and to make new editions of them for

use in the developing world. My first novel, Down and Out in the Magic Kingdom, is in its sixth printing from Tor, and has been downloaded more than 650,000 times from my website, and an untold number of times from others' websites.

I've discovered what many authors have also discovered: releasing electronic texts of books drives sales of the print editions. An SF writer's biggest problem is obscurity, not piracy. Of all the people who chose not to spend their discretionary time and cash on our works today, the great bulk of them did so because they didn't know they existed, not because someone handed them a free e-book version.

But what kind of artist thrives on the Internet? Those who can establish a personal relationship with their readers—something science fiction has been doing for as long as pros have been hanging out in the con suite instead of the green room. These conversational artists come from all fields, and they combine the best aspects of charisma and virtuosity with charm—the ability to conduct their online selves as part of a friendly salon that establishes a non-substitutable relationship with their audiences. You might find a film, a game, and a book to be equally

useful diversions on a slow afternoon, but if the novel's author is a pal of yours, that's the one you'll pick. It's a competitive advantage that can't be beat.

See Neil Gaiman's blog, where he manages the trick of carrying on a conversation with millions. Or Charlie Stross's Usenet posts. Scalzi's blogs. J. Michael Straczynski's presence on Usenet—while in production on Babylon 5, no less—breeding an army of rabid fans ready to fax-bomb recalcitrant TV execs into submission and syndication. See also the MySpace bands selling a million units of their CDs by adding each buyer to their "friends lists." Watch Eric Flint manage the Baen Bar, and Warren Ellis's goodnatured growling on his sites, lists, and so forth.

Not all artists have in them to conduct an online salon with their audiences. Not all Vaudevillians had it in them to transition to radio. Technology giveth and technology taketh away. SF writers are supposed to be soaked in the future, ready to come to grips with it. The future is conversational: when there's more good stuff that you know about that's one click away or closer than you will ever click on, it's not enough to know that some book is good. The least substitutable good in the Internet era is the personal relationship.

Conversation, not content, is king. If you were stranded on a desert island and you opted to bring your records instead of your friends, we'd call you a sociopath. Science fiction writers who can insert themselves into their readers' conversations will be set for life.

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S S S S S

And now a brief commercial interlude:

If you're enjoying this book and have been thinking of buying a copy, here's a chance to do so:

http://craphound.com/content/buy

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In Praise of Fanfic

(Originally published in Locus Magazine, May 2007)

I wrote my first story when I was six. It was 1977, and I had just had my mind blown clean out of my skull by a new movie called Star Wars (the golden age of science fiction is 12; the golden age of cinematic science fiction is six). I rushed home and stapled a bunch of paper together, trimmed the sides down so that it approximated the size and shape of a massmarket paperback, and set to work. I wrote an elaborate, incoherent ramble about Star Wars, in which the events of the film replayed themselves, tweaked to suit my tastes.

I wrote a lot of Star Wars fanfic that year. By the age of 12, I'd graduated to Conan. By the age of 18, it was Harlan Ellison. By the age of 26, it was Bradbury, by way of Gibson. Today, I hope I write more or less like myself.

Walk the streets of Florence and you'll find a copy of the David on practically every corner. For centuries, the way to become a Florentine sculptor has been to copy Michelangelo, to learn from the master. Not just the great Florentine sculptors, either—great or terrible, they all start with the master; it can be the start of a lifelong passion, or a mere fling. The copy can be art, or it can be crap—the best way to find out which kind you've got inside you is to try.

Science fiction has the incredible good fortune to have attracted huge, social groups of fan-fiction writers. Many pros got their start with fanfic (and many of them still work at it in secret), and many fanfic writers are happy to scratch their itch by working only with others' universes, for the sheer joy of it. Some fanfic is great—there's plenty of Buffy fanfic that trumps the official, licensed tie-in novels—and some is purely dreadful.

Two things are sure about all fanfic, though: first, that people who write and read fanfic are already avid readers of writers whose work they're paying homage to; and second, that the people who write and read fanfic derive fantastic satisfaction from their labors. This is great news for writers.

Great because fans who are so bought into your fiction that they'll make it their own are fans forever, fans who'll evangelize your work to their friends, fans who'll seek out your work however you publish it.

Great because fans who use your work therapeutically, to work out their own creative urges, are fans who have a damned good reason to stick with the field, to keep on reading even as our numbers dwindle. Even when the fandom revolves around movies or TV shows, fanfic is itself a literary pursuit, something undertaken in the world of words. The fanfic habit is a literary habit.

In Japan, comic book fanfic writers publish fanfic manga called dojinshi—some of these titles dwarf the circulation of the work they pay tribute to, and many of them are sold commercially. Japanese comic publishers know a good thing when they see it, and these fanficcers get left alone by the commercial giants they attach themselves to.

And yet for all this, there are many writers who hate fanfic. Some argue that fans have no business appropriating their characters and situations, that it's disrespectful to imagine your precious fictional people into sexual scenarios, or to retell their stories from a different point of view, or to snatch a victorious happy ending from the tragic defeat the writer ended her book with.

Other writers insist that fans who take without

asking—or against the writer's wishes—are part of an "entitlement culture" that has decided that it has the moral right to lift scenarios and characters without permission, that this is part of our larger postmodern moral crisis that is making the world a worse place.

Some writers dismiss all fanfic as bad art and therefore unworthy of appropriation. Some call it copyright infringement or trademark infringement, and every now and again, some loony will actually threaten to sue his readers for having had the gall to tell his stories to each other.

I'm frankly flabbergasted by these attitudes. Culture is a lot older than art—that is, we have had social storytelling for a lot longer than we've had a notional class of artistes whose creativity is privileged and elevated to the numinous, far above the everyday creativity of a kid who knows that she can paint and draw, tell a story and sing a song, sculpt and invent a game.

To call this a moral failing—and a new moral failing at that!—is to turn your back on millions of years of human history. It's no failing that we internalize the stories we love, that we rework them to suit our minds better. The Pygmalion story didn't start with Shaw or

the Greeks, nor did it end with My Fair Lady. Pygmalion is at least thousands of years old—think of Moses passing for the Pharaoh's son!—and has been reworked in a billion bedtime stories, novels, D&D games, movies, fanfic stories, songs, and legends.

Each person who retold Pygmalion did something both original—no two tellings are just alike—and derivative, for there are no new ideas under the sun. Ideas are easy. Execution is hard. That's why writers don't really get excited when they're approached by people with great ideas for novels. We've all got more ideas than we can use—what we lack is the cohesive whole.

Much fanfic—the stuff written for personal consumption or for a small social group—isn't bad art. It's just not art. It's not written to make a contribution to the aesthetic development of humanity. It's created to satisfy the deeply human need to play with the stories that constitute our world. There's nothing trivial about telling stories with your friends—even if the stories themselves are trivial. The act of telling stories to one another is practically sacred—and it's unquestionably profound. What's more, lots of retellings are art: witness Pat Murphy's wonderful There and Back

Again (Tolkien) and Geoff Ryman's brilliant World Fantasy Award-winning Was (L. Frank Baum).

The question of respect is, perhaps, a little thornier. The dominant mode of criticism in fanfic circles is to compare a work to the canon—"Would Spock ever say that, in 'real' life?" What's more, fanfic writers will sometimes apply this test to works that are of the canon, as in "Spock never would have said that, and Gene Roddenberry has no business telling me otherwise."

This is a curious mix of respect and disrespect. Respect because it's hard to imagine a more respectful stance than the one that says that your work is the yardstick against which all other work is to be measured—what could be more respectful than having your work made into the gold standard? On the other hand, this business of telling writers that they've given their characters the wrong words and deeds can feel obnoxious or insulting.

Writers sometimes speak of their characters running away from them, taking on a life of their own. They say that these characters—drawn from real people in our lives and mixed up with our own imagination—are autonomous pieces of themselves.

It's a short leap from there to mystical nonsense about protecting our notional, fictional children from grubby fans who'd set them to screwing each other or bowing and scraping before some thinly veiled version of the fanfic writer herself.

There's something to the idea of the autonomous character. Big chunks of our wetware are devoted to simulating other people, trying to figure out if we are likely to fight or fondle them. It's unsurprising that when you ask your brain to model some other person, it rises to the task. But that's exactly what happens to a reader when you hand your book over to him: he simulates your characters in his head, trying to interpret that character's actions through his own lens.

Writers can't ask readers not to interpret their work. You can't enjoy a novel that you haven't interpreted—unless you model the author's characters in your head, you can't care about what they do and why they do it. And once readers model a character, it's only natural that readers will take pleasure in imagining what that character might do offstage, to noodle around with it. This isn't disrespect: it's active reading.

Our field is incredibly privileged to have such an

active fanfic writing practice. Let's stop treating them like thieves and start treating them like honored guests at a table that we laid just for them.

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About the Author

Cory Doctorow (craphound.com) is an award-winning novelist, activist, blogger and journalist. He is the coeditor of Boing Boing (boingboing.net), one of the most popular blogs in the world, and has contributed to The New York Times Sunday Magazine, The Economist, Forbes, Popular Science, Wired, Make, InformationWeek, Locus, Salon, Radar, and many other magazines, newspapers and websites.

His novels and short story collections include *Someone Comes to Town, Someone Leaves Town, Down and Out in the Magic Kingdom, Overclocked: Stories of the Future Present* and his most recent novel, a political thriller for young adults called *Little Brother*, published by Tor Books in May, 2008. All of his novels and short story collections are available as free downloads under the terms of various Creative Commons licenses.

Doctorow is the former European Director of the Electronic Frontier Foundation (eff.org) and has

the world. In 2006/2007, he was the inaugural Canada/US Fulbright Chair in Public Diplomacy at the Annenberg Center at the University of Southern California. In 2007, he was also named one of the World Economic Forum's "Young Global Leaders" and one of

Forbes Magazine's top 25 "Web Celebrities."

participated in many treaty-making, standards-setting and regulatory and legal battles in countries all over

university dropout. He now resides in London, England with his wife and baby daughter, where he does his best to avoid the ubiquitous surveillance cameras while roaming the world, speaking on copyright, freedom and the future.

Born in Toronto, Canada in 1971, he is a four-time