

Mass Digitization and Copyright Law, Policy and Practice

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Introduction

Last [summer, June, 2007], at the International Creative Commons Summit in Dubrovnik, Croatia, Lawrence Lessig made a stunning announcement: he is going to retire from copyfighting and take up a new career, fighting for a new issue. He's going to stay involved with Creative Commons as its CEO, but from now on, he's working to fry a bigger fish: the corruption that leads countries to make bad copyright laws and other regulations, even when they know that the laws are bad for their society ([Doctorow](#), 2007).

Lessig explained on his blog,

Indeed, I'm convinced we will not solve the IP related issues until these "corruption" related issues are resolved...that until a more fundamental problem is fixed, "the [free culture] movement" can't succeed ... ([Lessig](#), 2007)

Lessig seemed to have given up on changing copyright policy by working within the legal structure that supposedly implements it, our federal courts and legislature. It seemed a logical move, in alignment with his actions in the wake of the *Eldred* loss in the Supreme Court, when he co-founded the Creative Commons, a mechanism enabling members of the public, both creators and users of others works, to legally reject the policy choices implemented by Congress and rubber-stamped by the Court. But this time he named a culprit that everyone can understand – money. He said that money speaks too loudly in Washington, so loudly that no other voice can be heard.

So he is off to fight the good fight, and no one wishes him more success than I do. But I am nevertheless not at all confident that enough will change in Washington in the next 10 years to head off the very “no brainer” Lessig referred to as a paradigmatic example of the senselessness, from a policy perspective, of Congressional actions in response to moneyed interests:

Think, for example, about term extension. From a public policy perspective, the question of extending existing copyright terms is, as Milton Friedman put it, a "no brainer." As the [Gowers Commission](#) concluded in Britain, a government should never extend an existing copyright term. No public regarding justification could justify the extraordinary deadweight loss that such extensions impose.

Yet governments continue to push ahead with this idiot idea -- both Britain and Japan for example are considering extending existing terms. Why? ([Lessig](#), 2007)

And, indeed, so will the U.S. be considering extending copyright terms another 20 years in just a short nine years from now (2017). What I want to suggest to you today is that the creative

landscape of 2017 will be very different from what existed in 1997 when we last considered this issue, that mass digitization projects are playing both a direct and in indirect role in ushering in those changes, and that the changed landscape may necessitate a fresh approach to the question of what difference another 20 years might make. That, however, is a topic for another day. Today I am going to focus on the fact that the landscape will change, but not because Congress will have implemented a different public policy by then. Rather, Congress has already become sidelined and will likely stay that way, by its own *modus operandi*: “negotiations among the stakeholders” are a sham. We can no longer pretend that locking the powerless in a room with the powerful will produce a compromise in the public interest. And when the powerful are locked in a room with each other, the result is no better. There are moneyed interests on both sides of the policy debate surrounding the scope and length of copyright protection, and neither of them has a clear advantage anymore. Something else has got to become the tie-breaker.

Copyright industries live and die by their bottom lines. Some of the money that has trouble achieving what it used to in Washington has begun to bet *on* the strengths of the digital networked environment rather than *against* them. This paper describes how that change is beginning. The story does indeed start with Congress but quickly turns to what’s taking place outside the law, in the markets. Then it looks to the courts, where mass digitization is having its most direct effect on copyright law. Even here, however, the markets are, again, the bigger story. I’ll close with Google Book Search, an important part of any path forward.

The paper has three parts:

1. Congress and the public interest: reactions to an outdated and wrongheaded legal framework for the digital world

- Inability to achieve policy objectives in Congress forces all sides to accept pragmatic work-arounds
 - Consumer resistance to industry reliance on old business models continues in the vacuum created by Congressional inability to consider alternative schemes to compensate copyright owners for materials shared on p2p networks ([Netanel](#) 2003, Fisher 2004; [A Better Way Forward](#) 2008; [von Lohmann](#) 2008)
 - Corporate pioneers help to normalize demand for freer access and use ([Jobs](#), 2007)
 - [Creative Commons](#) licenses respond to problems posed by overbroad protection ([Doctorow](#), 2007)
 - *De facto* standards for reasonable searches for copyright owners emerge out of unsuccessful efforts to obtain permission ([freethbooks](#), 2007; [Proffitt, et al](#), 2008), and in the wake of failed attempts to pass Orphan Works legislation ([Sanger](#), 2006)

2. Business begins to learn to live with the unbounded

- Twentieth century business models give way to approaches more in harmony with the networked environment’s strengths

- Attention itself becomes the scarce commodity, demanding a restructuring of business models predicated on a vanishing scarcity of information goods
- Convenience and free access win over even stalwart copyright maximalists
- DRM has not only failed to deliver what it promised, it has held back the industries that relied on it ([von Lohmann](#), 2007; Lehman, 2007, as reported in [Geist](#), 2007)

3. The courts expand fair use -- the only truly flexible copyright rule -- to deal with the evolving reality, but again, important progress is more often made in the markets than in court.

- Courts take advantage of opportunities presented by those who challenge Google's search engine business practices to re-energize the value of public benefit as a central inquiry in fair use analyses
- The search engine cases bode well for the fair use claim for Google Book Search indexing, but even without clear legal authority, market experiments in openness show progress

In short, the copyright industries' inability to implement their visions of copyright policy in an environment where polarized forces nullify nearly every effort since the DMCA, has created a legislative vacuum that the industries themselves are filling by practical adaptation to the realities of the digital networked environment. They didn't come to this strategy willingly. They have been resisting it for more than a decade. They will be, in the end, forced by consumer resistance, mass digitization projects and the sheer enormity of the mass of freely available online content, to come to grips with their futures.

Mass digitization projects have played a significant role in bringing about these changes, though they only *directly* affect copyright law itself where wealthy corporate entities like Google take a stand to push the envelope in court. Mass digitization's *indirect* effect is perhaps the bigger story, especially if, as I suspect, the effect may be to render parts of the Copyright Act less relevant to those who at one time depended upon those provisions for the economic life of their industries ([Harper](#), forthcoming). Congress (and its manner of addressing public policy) may continue to be sidelined by the growth of a highly accessible and usable public domain, an immense corpus of implicitly and explicitly licensed materials on the Web, and the fact that corporate and individual copyright owners are beginning to depend less on controlling and counting and selling digital copies. As these trends grow, as I think they will, it appears that copyright law may in some respects be simply getting out of the way. If it doesn't, it's going to be sidestepped.

Market opportunity knocks, and knocks, and knocks

Copyright owners probably thought they got off to a good start legislatively: they took bold steps 10 years ago to strengthen their rights, fearing an erosion of control in the digital environment.¹ Unfortunately, they designed their two major pieces of legislation, the Digital Millennium Copyright Act and the Sonny Bono Copyright Term Extension Act, to protect them from the

future, rather than to help them embrace it. Those who embraced a different vision of the future were slow to respond, perhaps slow to recognize the profound effects of the laws that were being proposed, but have managed in the wake of these two monumental enactments to prevent further deleterious modifications of the law. This is the stalemate of moneyed interests I referred to earlier where, for example, the device manufacturers counter content industries and defeat each other's initiatives.

On the other hand, efforts to roll back protection, even when it seems in a majority of the industries' best interests, can be stymied by even a single copyright industry segment that effectively persuades our lawmakers that catastrophe will result if the law passes.ⁱⁱ The 2006 failure of orphan works legislation that would have enabled use of works whose copyright owners cannot be identified or located is a good example of this phenomenon. It seems very likely that a second attempt this session to pass this legislation will be similarly doomed.

So in most cases we have legislative stalemate. I include myself among those who believe this is actually a good thing. Bill Patry, copyright treatise author and counsel to Google, remarked just this month at the "Who owns this image" panel discussion in New York City, "Don't look to Congress for any help. If they can solve orphan works at the 1% successful level, it will be a bonus. Any solutions will have to be private" ([Tushnet](#), 2008). Congress' inaction allows individual actors in the market to shape the role of copyright, and it may not play the same role in the future that it had in the past!

It has been observed that the copyright industries' success in passing the Digital Millennium Copyright Act and Copyright Term Extension Act actually undermined their ability to adapt by giving them tools to resist the inevitable, if only for a time ([von Lohmann](#), 2007; [Lehman](#), 2007 as reported in [Geist](#), 2007). But reality has a way of patiently waiting resistance out, and most content industries are beginning to accept the realities of the digital networked environment, and are now enjoying at least some success pursuing alternative business models that do not rely on stringent enforcement of copyrights in digital copies or digital rights management (DRM) ([Arrington](#), 2007; [Amazon.com MP3 Downloads](#), 2008; [Levine](#), 2007; but see [Edgecliffe-Johnson](#), 2008). It will become more difficult to make the case that copyright owners need this protection (though they will not likely stop pressing the case as the [2007 Intellectual Property Enforcement Act](#) introduced in the Senate demonstrates),ⁱⁱⁱ because the evidence increasingly will not support them.

Resistance to resistance. Steve Jobs had to work very hard to legitimize consumer demand for relatively freer access to and use of digital media ([Taylor](#), 2003). The music giants may be chafing under the constraints of his preferred deal structure, and struggling to break his strong hold on business model evolution ([Krazit](#), 2007; [Lee](#), 2008), but they owe him much for getting them off the starting line, and for later challenging continued use of DRM ([Jobs](#), 2007). Television networks seem determined not to make the same mistakes and have begun to offer their programming in relatively freer formats than they were willing to consider just a few months ago ([McIntyre](#), 2008; [Nakashima](#), 2008; [Goodman](#), 2008). Full-length feature films are still heavily protected by DRM, but they seem to be in a class by themselves given the astronomical costs associated with production. At this point, however, it seems that anything is possible, even DRM-free feature-length films ([4flix.net](#), 2008; [Good Copy Bad Copy](#), 2007).

Positively paring down. The [Creative Commons](#) has made it possible for millions of copyright owners to pare down their own set of rights ([Doctorow](#), 2007), for hundreds of millions of items of Web content, in the absence of Congressional recognition of the inappropriate scope of copyright protection for the overwhelming majority of works created today. Studies of how creators use Creative Commons licenses tell us much about the nature of expectations regarding a reasonable scope for copyright ([Kim](#), 2005). Congress would do well to pay attention to this kind of evidence.

***De facto* efforts to establish orphan works status – the copyright evidence base.** Several corporate entities (OCLC, Google and Internet Archive), the Copyright Clearance Center, and individual libraries ([Proffitt](#), 2008; [free the books](#), 2008; UT Austin's [Watch](#), 2008; [University of Michigan's public domain search](#) and its [public domain humanities resources](#), 2008), among others, are building tools that help people locate copyright owners to obtain permission for uses, and that ultimately facilitate individual assessments of the risks of placing some protected works online, even in the absence of clear rights to do so.

Orphan works are those books, records, images, compositions, manuscripts, movies, screenplays, paintings and drawings -- in short, any work protected by copyright -- whose owner cannot be determined or located, or who does not respond when contacted. There have always been orphan works, but a number of factors have converged to turn their existence into a significant lost opportunity. In the past, who really cared? Orphan status may have been unfortunate, but for the most part, it was just what happened over time because of the relatively short productive life of most published works ([Report on Orphan Works by the Register of Copyrights](#), 2006). The need to exercise the rights of the copyright owner of an out of print or otherwise unavailable works, that is, to make copies, create derivative works, display, perform or distribute an older work publicly, beyond the rights authorized in the Copyright Act, typically did not arise. And, works eventually became part of the public domain. Not necessarily so today. Now, extremely long copyright terms frustrate our desires to digitize library, archive and museum holdings, and offer access to them to as broad an audience as possible. The result is that the orphans with no owner to speak up for them will suffer a fate equal to death -- the obscurity resulting from their inability to be "permissioned," digitized and displayed.

As has been widely documented and reported, the vast majority of books on our shelves are still protected by copyright, but their copyright owners are unreachable ([Lessig](#), 2007). The cost of misidentifying an orphan is extremely high: a copyright owner who registered her copyright can ask a court to award up to \$30,000 per innocent infringement (\$150,000 for willful infringement).^{iv} These extreme penalties are meant to deter infringement, but for orphans, they deter public uses that no one will object to, by definition (there's no one there to object). Nevertheless, a small chance of being wrong, and a high penalty if one is wrong, makes for a risky situation. So what's going to happen to all those orphans? The promise of new life on the Internet dangles temptingly for them, but only very confident collection stewards will take this risk and digitize and display them.

And, I believe, that's just what we have among today's librarians: a growing number who are cautiously confident about their abilities to assess and manage risk.

The photographers' successful campaign to destroy the chance for effective Congressional legislation regarding orphan works in 2006 ([Urgent Call for Your Action on Orphan Works](#), 2006) drew the line in the sand. Either those who care whether a staggeringly large part of our cultural record ever makes it off the shelves, out of the boxes and onto the Internet, are willing to step over or they are not. Enormous numbers of works provide no signs of who the author is, who the publisher was or when the work was produced or distributed. If a work is published without proper notice (name of publisher and date) during certain time frames (1923 - 1989), it becomes a part of the public domain.^v If it is not published, or if it is published after 1989 without an indication of who its author is, its protection is automatic and lasts for the life of the author plus 70 years in the U.S. (and longer in some countries).^{vi} But if you can't determine the author, the date of publication or the date of creation, you cannot know for sure when such works enter the public domain. The obscurity we consign these works to is not a short-term condition. It lasts until someone has the courage to just put the work online. The opportunity cost of doing nothing is now unacceptably high.

The heart of the 2006 proposed but failed orphan works legislation, and the current version before Congress, is a limit on the remedies available to copyright owners whose works are mistakenly characterized as orphans.^{vii} Such limits would certainly encourage the use of orphan works because the current remedies are so extreme.^{viii} The other critical aspect of the legislation is the effect of a reasonable search for the copyright owner. A reasonable search entitles a user to the limited remedies if an owner appears after the work had been used. But as a practical matter, assuming one does conduct a reasonable search, the chance of mistakenly classifying a work as orphan might be pretty slim (depending on the quality of your search). That's the theory, and as we might imagine, there is a lot of disagreement about what a reasonable search is and how much detail should be spelled out in the statute. Librarians tend to be on the risk-averse side, in general, but in this case, as information specialists, they may have more confidence in their searches for a copyright owner than the average person. Nevertheless, the Register of Copyrights recommends and the industries support the idea that the industries should define reasonable searches for their respective types of works (cites). Though this sounds logical, corporations tend to think in terms of corporate resources that can and probably should be brought to bear on the question of whether there is a contactable copyright owner, in light of an objective motivated by profit ([STM Assn.](#), 2007). Applying the same criteria to nonprofit public access uses is not realistic. Nonprofits have neither the resources to make exhaustive searches, nor the profit motive to justify the expenditures of resources.

Until (if ever) we have legislation that reduces the enormous penalties for being wrong, there is considerable pressure to get the "reasonable search" for an owner right, so that the reasonable search becomes our insurance against catastrophe. This calls for collaboration. For-profit and nonprofit companies and libraries, working together, are beginning to build an evidence base, at first dedicated to identifying copyright owners, but then to freeing the books that are in the public domain, but not currently properly identified as such. Next in line are the orphans. The protocols we develop to determine whether a work is properly copyrighted (notice) and whether the copyright was renewed as required, and then who owns the copyright, merges imperceptibly into an inquiry into when an author died, whether and where he left heirs, whether a publisher is out of business, where the last place of business was, and so forth. Participants in this project will document sources of law and the factual information about each book, author and publisher,

document results and publicly display the process and the findings so that others may build upon what has been learned. In the U.S., evidence about a particular publisher's disappearance identifies not just one orphan book but every book whose copyright that publisher owned. When copyrights are owned by individual authors, evidence that an author left no estate or heirs, or that they cannot be identified or located, identifies as orphaned every book she ever wrote. So it is important to publicly cumulate this evidence and build not only our ability to find copyright owners, but to rebuild our public domain, and identify our orphan works. Slowly but surely, collaborators will put together the evidence we need to feel confident that, even if we must face draconian penalties, we can reduce the risks to manageable levels.

There is additional evidence that other institutions are also beginning to wade into these waters. Brewster Kahle, long committed to bringing public domain works to a world audience, was reported in hangingtogether.org (OCLC) to have encouraged participants at Open Content Alliance's (OCA) annual meeting (2007) to take the next step with a pilot-project that will "start digitizing out-of-print/in copyright works, a departure from the strictly public domain digitization in the OCA to date" ([Waibel](#), 2007).

Brewster could be relying on fair use for the digitization step, but if he plans to offer these works to a public audience, he would be going much further, perhaps claiming these works as orphans. If Brewster is considering making orphan works available, he would be grappling with the same issue described above -- establishing the contours of the reasonable search that establishes the likelihood of orphan status. Perhaps the project seeks permission, and in the failed attempt, determines that a work is an orphan. This will be a project to watch.

The copyright notices that accompany some digital collections provide additional evidence of risk assessment: it is not uncommon to see works included in digital collections accompanied by notes such as one on the Copyright Office's [American Memory Website](#). The note explains that the use of images in the American Memory Digital Collection does not mean that the images are freely usable by anyone for any purpose. Visitors are cautioned to make their own copyright assessment before engaging in any but fair uses of the images. These notes suggest that the Library has conducted its own risk assessment and taken reasonable action based thereon.

Here again, however, these actions highlight the unfortunate consequence of Congressional paralysis: potential copyright irrelevance. The pronouncement by then Patent Commissioner, Bruce Lehman, that, "[w]ith no more than minor clarification and limited amendment, the Copyright Act will provide the necessary balance of protection of rights -- and limitations on those rights -- to promote the progress of science and the useful arts," turned out to be quite wrong ([introduction to the 1995 NIITF White Paper](#), p. 17). In marked contrast, he confidently dismissed opponents' concerns that turned out to be deadly accurate, among others, that fighting technology would result in massive disrespect for the law and its ultimate irrelevance (p. 15) -- a high price to pay for codifying industry fears.

But people are moving forward: copyright owners are confronting their fears of financial loss; other copyright owners are trying trimmed down copyrights for their digital works; and libraries are confronting their fears of being sued for displaying digital images of works on their Websites -- all in the space created by Congressional inability to take any meaningful action to reign in the

laws it passed a decade ago, whose lack of utility is becoming obvious to many, if not to those with the power to change them.

Business models that work *with* the networked environment's strengths instead of *against* them

Although mass digitization project proponents do not, for the most part, have the power to change the law (with the obvious exception of the Google Book Search project), their collections, once digitized and made freely available, contribute to the pressure on content industry business models. As more and more images of valuable cultural artifacts, more documents, more books, audio files, and videos of every type can be accessed freely on the Internet (as in free beer *and* free speech, combining [Richard Stallman's famous distinctions](#)), the viability and utility of sequestering digital information behind toll barriers such as contractual subscriptions or DRM decreases ([Shampaier, Mazar, Ariely, 2007](#)). The legal props that copyright owners believed they needed to safely place their assets on the Web^{ix} have in fact prevented them from learning what they needed to know to really thrive in the networked environment ([von Lohmann, 2007](#); [Rogers, 2007](#)). Those who experimented early are well along the way to understanding how to create revenue streams without controlling, counting and getting paid for copies, in other words, without relying on their right to exclude others from making and distributing digital copies of their works ([Anderson, 2008](#); [Kelly, 2008](#)).

Almost 14 years ago John Perry Barlow (1994) wrote a provocative article in Wired, "[The economy of ideas](#)," in which he famously reiterated what Stewart Brand had earlier observed, that "information wants to be free." Much of what he had to say about the futility of ignoring the profound difference between information in physical forms and information in bits was nothing short of brilliant to those who agreed with him, but complete insanity for everyone else. His pronouncements were widely denounced as so much drivel. Among his claims were several predictions that have proven accurate, some, of course, that have not, and a series of suggestions about other ways creators could make a living without charging for digital copies of their works. His specific suggestions were not necessarily a road map for the future, but the *idea* that creative individuals would need to find other ways to make a living besides controlling, counting and being paid for digital copies was very perceptive. And indeed, that's what we see happening today. In November, 2007, [Glyn Moody of the Guardian. Ltd. interviewed Mike Masnick, founder of Techdirt](#), who makes many of the same claims Barlow made in 1994. But this time he's describing in the present tense what his and other companies are doing today ("The trick then is recognizing (sic) what other things that infinite good makes more valuable.") [Chris Anderson](#) (2008) and [Kevin Kelly](#) (2008) offer similar examples. How did Barlow's ideas go from insane drivel to practical advice from one businessperson to another about how to adapt to the digital networked environment?

Reality cannot be ignored for long. There have been important admissions by those within our government who were champions of the music, entertainment and publishing industries' claims before Congress, that the industries **had to strengthen protections** in order to survive in the digital environment. Mary Beth Peters, Register of Copyrights, admitted in a public discussion at a University of North Carolina symposium on Intellectual Property/Creativity and the Innovation

Process in 2005 that Congress had made a mistake in extending the term of copyright by 20 additional years in 1998 ([Doctorow](#), 2006). Bruce Lehman, considered the architect of the anti-circumvention provisions of U.S. copyright law, admitted in March 2007 at a conference hosted by McGill University (Canada) that, "our Clinton administration policies didn't work out very well" and "our attempts at copyright control have not been successful" (Lehman, 2007, reported in [Geist](#), 2007). Geist notes that Lehman went on to suggest we are entering a "post-copyright" era.

The admissions don't stop there, however. Ian Rogers, Yahoo! Music's General Manager, spoke to a group of music industry representatives in October 2007 and [very clearly articulated his complete rejection of DRM](#). Even where admissions are not express, we see the failure of this approach reflected in actions. The year 2007 was a watershed for abandonment of DRM and contract in favor of digital delivery on the open Web: we saw Steve Jobs deliver [Thoughts on Music](#), his opinion on the future of the music industry, which did not include DRM, EMI thereafter agreed to sell unprotected mp3s on iTunes and at Amazonmp3 ([Arrington](#), 2007; [Amazonmp3](#), 2007), the New York Times abandoned its subscription model for access to content on the Web ([Riley](#), 2007), and in the fall, the Wall Street Journal followed suit ([AP](#), 2007) as TV stations finally began to reluctantly offer some programming on the Web ([O'Hear](#), 2007). What will 2008 bring?

It has taken almost 10 years of indulging their desperate, wishful thinking for the content industries' strategy (to lock up their works in order to offer them online) to begin to collapse. What has proven the film, music and publishing industries wrong is simply the success of unprotected, freely available works, over and over and over again. As Ian Rogers said, [convenience wins](#) (2007). Take news, for example. News is everywhere. If you want a story on Hillary Clinton's reaction to her rival's strategy of "ganging up on her" at October's debate, you can choose from 1,343 similar offerings. This is the kind of information that greets me every morning on [Google News: Top Stories](#). Want an article on that same subject that you have to pay for? Even if it is in the New York Times? Didn't think so ... And the New York Times finally accepted that in the fall of 2007 ([Riley](#), 2007).

In an environment where immense amounts of information, entertainment, news, video, books, articles, nearly anything you want to know about or explore, is available for free at the touch of a few keys, selling digital copies is just not a great idea (Anderson, 2007; Shampanier, 2007). So little by little the industries that claimed they couldn't survive without DRM and copyrights that last forever, are beginning to let go of the idea of using their eternal copyrights and DRM to control and count and sell digital copies. The Web's ease of publishing, library, cultural institutions and commercial mass digitization projects, user-created content, and plain old-fashioned public resistance are putting pressure on 20th century business models. Freely available content does not have to be *as good as* the New York Times, though there is excellent content online for absolutely free. It does not have to be *as good as* a Hollywood movie, though, again, there is excellent entertainment available online for free. Media whose owners impose a charge for access to a digital copy and therefore must erect barriers of time, effort, expense and inconvenience in the way of their would-be users must compete for users' time and attention against TONS OF LEGAL FREE STUFF. If media companies want some part

of our limited time and attention, the lesson is that they ought not make it harder for us to give it to them, than to give it to everyone else. That's the story.

Now wait a minute, you're no doubt saying. What about movies and books? They are for sale, and even for rent, one copy at a time, as usual. What about subscription databases in libraries? What about digital copies on iTunes, and ebooks? What about Rhapsody and DRM'd subscription services? Yes, you are correct. Today. Clearly, we're only beginning the transition. We have almost, but not quite, turned the corner on the phase of active denial ([Linksvayer](#), 2008; [Sandoval](#), 2008). The industries are acknowledging and even acting upon the evidence that life is possible without DRM and contractual barriers.

Making sense of the Web; creative interpretation of transformative fair use

While Congress may have sidelined itself, not so the lower and appellate courts. Mass digitization projects contribute to the pressure on business models to adapt to the "attention" economy by offering ease of access and freedom to use products and services as the consumer desires. But the massive push to put everything online has indirectly changed the law because such massive amounts of online information require effective means for their organization and access. The most successful method so far is the search engine. But search engines carry out their functions by *duplicating in their entirety* the works to be placed in the index, and displaying and distributing links to the works to be served as search results. Plaintiffs have challenged these and other features of search and, given the value search engines add to the masses of online information, we should not be surprised that the courts have refused to interpret the law as putting search engine companies in the untenable position of having to ask permission before indexing and serving up information about the existence and description of others' works.^x

Conceivably, Congress could create a search engine exception to infringement liability. Indeed, Gigi Sohn of Public Knowledge called for just such an amendment at the 2007 [New Media and the Marketplace of Ideas Conference](#), but that is not likely to happen (as Gigi no doubt knows). So the action is taking place in court. The search engine cases elaborate the scope of the only existing exception capable of handling the situation, and are thereby giving new definition to the scope of fair use and contributing to the ongoing policy debate about the scope of secondary liability for others' infringements. This series of cases began with [Kelly v. Arriba Soft](#), continues with [Field v. Google](#) and [Perfect 10 v. Amazon & Google](#). All of these involve search engines making and displaying copies of plaintiffs' works as part of normal search engine operation. The fair use analysis in each case is similar in that the critical aspects include first, characterizing search engine use of others' works as highly transformative, and then weighing and balancing the social benefit of the search function against the harm, if any, to the copyright owner. The details vary from case to case, of course, but the pattern has been established. If you place materials online, they will be crawled, your work will be copied, contents indexed, thumbnails of images created, and the works included in results pages, with links to the originals, in accordance with the relevance and other criteria built into the search engine's algorithms. If a copyright owner does not want this to happen to her online material, she indicates her desire that Web crawlers ignore her work (she opts out) by using the robots.txt tag. End of discussion.

It sounds easy now that it's been fairly well-established, but there were several major hurdles along the way. The courts had to characterize thumbnails (reduced, lower-resolution versions of full-sized images, as defined in [Perfect 10 v. Amazon](#), p. 5761) as fair use, establish that caching was fair use (notably in [Field v. Google](#)), and establish the relative social value of search engines compared to the possible harm to a plaintiff's market interests (explored in all three cases). As mentioned above, since in all cases the decisive facts about the infringing use were the highly transformative nature and great social value of the search engine's copying and displaying, we can surmise that such massive infringement in the service of a goal or aim that merely competed with the plaintiff's purpose would not have prevailed. The search engines have a wholly different purpose from the purpose underlying content providers' creation and distribution, however -- to help us make sense of the billions of works on the Internet. And the courts recognize that important purpose and are not inclined so far to underestimate its value in comparison to the value of the economic incentive to copyright owners. That's the essence of fair use: balancing competing interests. Even if there were some harm or potential for harm to plaintiff's market interests, that harm or potential for harm must be sufficiently serious to outweigh the social benefit provided by search engines. Thus, it may be that a copyright owner could sell little tiny pictures (thumbnails) of naked women to cell phone owners, but if the court must choose between privileging those possible sales and requiring search engines to do the impossible, that is, ask permission from every Web page owner before crawling a page -- that has not proved to be a tough choice.

So, search functionality, this very important and necessary service that organizes and provides access to the massive amounts of digital materials available on the Web today, has indeed affected copyright law. The search engine cases refined the application of the function of fair use enabling transformative uses. The [Perfect 10 v. Amazon & Google](#) case is poised to further refine the law of secondary contributory liability as well. The 9th circuit court sent the matter back to the district court for further fact finding on the issue of whether Google's *linking* to infringing images on third parties' servers *contributes* to infringing activity. The district court originally held that it did not, but the 9th circuit disagreed. Even if Google does contribute to infringement by linking to infringing copies, it claims protection of the Internet service provider liability limitations in [Section 512](#), those provisions that protect universities as well as major Internet service providers who provide information location tools (links to others' content).^{xi} The dispute will center on what steps the law requires that Google take in response to a notice from Perfect 10 that its images are being infringed. Perfect 10 will argue that Google should do more than it has done so far. Google will argue that what it has done is all the law requires, that is, respond to notices of alleged infringement.

Google Book Search

Arguably the grandest of the grand mass digitization projects, the Google Book Search Project steps up the pressure to put full text online where anyone can readily access it. Once potential readers are able to learn about the existence and relevance of a text online, many (I would bet most) immediately want to read that text -- online (or be able to print it out and read it). This is true for books, journal articles, essays, book reviews as well as music, images and audiovisual works. As we locate more and more of what we need using our computers, our tolerance for

complicated obstructions to successfully obtaining the text, image, sound or audiovisual file diminishes.

Google Book Search also steps up the pressure on copyright law. Book Search relies on fair use to make the copies that make the connection for us between what we want to know about, and existing literature that might speak to our needs. Google asserts that it is fair use to digitize a work in order to index its words and subject those words to queries from Google Search users. As we all know, many publishers and authors objected to this characterization of fair use and, presumably unable to resolve the dispute through negotiation, brought lawsuits instead. The two Google Book Search lawsuits have the potential to change copyright law and policy in a dramatic way, perhaps one of the most dramatic effects mass digitization could have.

If the Supreme Court were to decide that digitizing for the purposes of adding a work to a search index were fair use, it would put an end to the legal ambiguity surrounding indexing copies and presumably the display of snippets of text surrounding search terms. As a result, the project to identify for searchers millions of works owned by publishers and authors when the contents of those works are relevant to users' search queries would continue, legally. But more importantly, the project would lift millions of orphan works out of obscurity and make them discoverable in the digital environment. By definition, there is no one to ask for permission in the case of an orphan work, and for most companies, legal ambiguity about the authority for indexing these works combined with the possibility of making a mistake about the fact of orphan status would prevent digitizing and distributing them.

Conversely, if the Supreme Court were to decide that fair use does not include within its scope the right to make a copy in order to index the work, the publishers and authors would be vindicated and could shut down Google Book Search until agreements were reached with them, but there would be no one to make deals for the orphans – and presumably no legal indexing of those works. As I guess I have made clear, I don't believe the legislature is capable of addressing orphan works in a way that would facilitate indexing. The [failed legislation from 2006](#), the "safe harbor" proposed by certain publishers for users who mistakenly characterize their works as orphans ([Safe Harbor Provisions for the Use of Orphan Works](#), 2007) and the [bills proposed in this session](#)^{xii} make clear that copyright owners conceive of orphans as adoptable on a case-by-case basis only, not at scale, with all the in-depth investigation that the analogy to adoption suggests. Such an approach seems to me to be unworkable even case-by-case, and I am not encouraged at all that particularly the House bill will really address the problems that orphan works pose. In any event, no legislative proposal will accommodate the scale of operation Google has undertaken, so if the fair use argument were to fail, the orphans would languish.

Unlike many, I am optimistic about Google's chances of winning the lawsuits, all the way to the Supreme Court. I have written about this before ([Harper](#), 2006), and the recent *iParadigms* decision further reinforces my optimism,^{xiii} but as I have also said on many occasions, I think they are likely to settle. Most litigants do. And while it's very difficult for all of us, not knowing what will happen to fair use and whether the gamble will have been worth it, or what the shape of a settlement might be, we can already see without any doubt that Book Search is changing the publishing world. Google is, behind the scenes, patiently persuading copyright owners that more open wins over less open, that there are tremendous audiences for not only their current works,

but for their out of print works and works long forgotten. Google has succeeded in signing up every major U.S. publisher (Random House was the last to come on board) as a partner in Book Search and I think the reason is not that complicated: Google aggregates a monstrous amount of demand around what is building up to be an equally monstrous amount of supply. This is good. It is good for readers. It is good for writers. It is good for publishers, at least for now. And it is good for Google. It pushes libraries over a cliff, but, hey, we need a good shove actually.

Google Book search accelerates the pressure the masses of freely available Web-based works put on copyright owners to abandon digital business models that impose a charge for access to and use of digital copies. Just as the New York Times and Wall Street Journal are figuring out how to charge for other things besides digital copies to recover the costs of production and make a profit, so will book publishers and authors. Not everyone will figure it out, but as some do, others will follow and new approaches will be tried. I do believe, however, that this fundamental shift in approach to digital business models will eventually throw into question every aspect of copyright protection, including the question of when it should end, but that's a paper for another day.

Conclusion

The story of mass digitization's effect on copyright law and policy is not over by any means. So far, it is a story of confronting fears, of one step forward and two steps back in some cases. Sometimes the only way to calm fears is just to stand up, stride towards the light switch, and show that there's nothing to be afraid of. Unfortunately, many of the first to stand up end up as casualties as they try to show us that it will be ok. But luckily for the rest of us, there were those who were willing to take chances to test the waters. Today, there is wider recognition of the necessity for change, and the opportunity that it offers, than existed when mp3.com came up with a very good idea about how to make money in a digital networked environment.^{xiv} And even just three and a half years after it began digitizing library books for its online Book Search, Google enjoys the benefit of mounting evidence that with respect to the evolution of business models that rely on exposure rather than armor, there was nothing to be afraid of. The jury is still out on the price we may pay for the risks Google takes by taking advantage of the ambiguities of the fair use doctrine to force a deal with publishers and authors.

But businesses are not the only ones facing down fear. Libraries sat on the sidelines for awhile, but the temptation to stand up was too great for many. When you are entrusted with your and other countries' cultural heritage, and your *raison d'être* is to preserve it for the benefit of the public, many are concluding that we simply have to digitize it and put it online. For free. The masses of digitized materials get used, get viewed, get watched, get listened to. Along with the other tens of billions of pages of free content on the Web, they create a growing corpus of materials that compete with pricy, locked-down commercial offerings for our time and attention, and they are winning a lot of the time, and they compete for the honor of inspiring new works. Now what is scary is *not* getting seen, read or listened to ([Graham](#), 2006; [Seiff](#), 2007).

Policy and law are slow to change, and that's as it should be. All the planets will have to line up just right for Congress to change copyright law in the future, even decades after the public and business communities have worked out better ways to take advantage of the networked environment. I won't be holding my breath (if I'm still breathing at all). But I'm not too worried

about it either. Just as content that isn't online "won't exist," laws that no one needs or uses won't exist either.

But there is one area of the law where Congressional paralysis would actually be a very good thing. As Lessig has highlighted, in nine years, copyright owner industries, and quite likely authors as well, newly enriched by the discovery by the public of their heretofore out of print works, will be asking Congress for another extension to the copyright term. We'll need to do much more than rehash old arguments about why that might not be a good thing, because the creative environment in 2017 will be very different from the environment when Congress last addressed the question. What difference will another 20 years make? We need to be able to effectively answer that question, or we're going to find out the hard way.

Project resources

This page provides quick jumps to resources for the paper -- the major cases; legislation; news items that support the argument. Most of these are cited in, and linked from, the text.

Orphan Works

[Mass Digitization: Implications for Information Policy](#), a report from a March 2006 symposium on Scholarship and Libraries in Transition.

[Orphan Works report of the Library of Congress](#)

Documents illustrating objections by photographers to orphan works legislation (that eventually killed the bill and will be brought to bear on any reintroduced legislation)

- [American Society of Media Photographers urgent call to action](#)
- [National Press Photographers' Association objections](#)
- [Royalty-free orphans: Why the Current Distribution System Doesn't Work](#)
- [Illustrator's Partnership Orphan Works Analysis \(David Sanger\)](#)

[Orphan Works safe harbor "rules" offered by consortium of publishers](#)

[Lawrence Lessig's 30 minute video about the Google Book Search Project that highlights the number of library books that are orphan works](#) (orphan works statistics appear about - 9:30 minutes before the end of the video)

[National Information Infrastructure \(NII\) Taskforce White Paper \(1995\)](#) -- proclaiming that all the law needed was a little beefing up to make it work in the digital environment

[Free the books](#), the University of Texas at Austin Libraries blog documenting our processes and evidence base for identifying public domain works today (phase 1), and orphan works tomorrow (phase 2). We are collaborating in this effort with University of Michigan's library.

[A good day for open access!](#) -- report on hangingtogether.org of the Oct. 17, 2007 annual meeting of the Open Content Alliance at with Brewster Kahle is reported to have encouraged participants to "take the next step in terms of copyright: a pilot-project will start digitizing out-of-print / in copyright works, a departure from the strictly public domain digitization in the OCA to date."

Examples of mass digitization projects

[Google Book Search](#)

[Microsoft Live Search](#)

[Open Content Alliance](#)

[American Memory Project](#)

National Archives and Records Administration (NARA) [draft digitization plan](#)

[NARA Online Exhibits](#)

Lynch, Clifford (2002). [Digital collections, digital libraries, and the digitization of cultural heritage information](#), *First Monday*, 7(5).

Google search: [digital collections libraries](#) -- nearly 14 million responsive results...

[Future reading: Digitization and its discontents](#) -- Anthony Grafton's New Yorker article, Nov. 5, 2007, about the history of books, libraries and the future of mass digitization projects

[Adventures in wonderland](#) -- Anthony Grafton's New Yorker article, Nov. 5, 2007, companion to Future reading, above, linking to dozens of digital library projects

Legal resources (links to the Copyright Act)

[Recently enacted changes to copyright law](#)

[Section 504 \(remedies\)](#)

[DMCA](#)

[Sonny Bono Copyright Term Extension Act](#)

[Section 107 \(fair use\)](#)

Examples of retreats from insistence on DRM, longer terms and contract

Mary Beth Peters, Register of Copyrights, [acknowledges that extending term by 20 years was a mistake](#) [video available]

Bruce Lehman (2007), then Commissioner of Patents, [acknowledges DMCA anti-circumvention policies have not been successful](#) [video available]

von Lohmann, Fred (2007). [Is DRM "enabling new business models"?](#) *Electronic Frontier Foundation Deeplinks Blog*.

[Amazon's MP3 albums](#)

Jobs, Steve (2007). [Thoughts on music](#).

Ian Rogers, Yahoo! Music's General Manager, [Convenience wins, hubris loses](#)

[EMI, Apple to sell DRM-free music for \\$1.20/song](#). *Techcrunch*.

[Apple drops price of DRM-free music to \\$.99/song](#) (same as DRM'd music...)

[Good Copy Bad Copy](#) (Denmark 2007) -- a 1 hour video documentary about copyright and culture, directed by Andreas Johnsen, Ralf Christensen, and Henrik Moltke. It features interviews with Danger Mouse, Girl Talk, Siva Vaidhyanathan, Lawrence Lessig, and many others with various perspectives on copyright, and illustrates how film and music industries in other countries derive their revenue streams from other activity besides sales of copies.

The Google Book Search and related lawsuits

[Authors Guild v. Google, Inc.](#)

[McGraw-Hill Companies, Inc. v. Google, Inc.](#)

[Lawrence Lessig's 30 minute video about Google's fair use claim \(market failure/orphan works\)](#)

[News story about settlement of Agence France-Presse case against Google](#) : illustrates the ambiguity presented by settlements that suggest, but do not confirm, that settlement did not include Google's paying for mere indexing

Lessig's [The Future of Ideas](#)

Lessig's [Free Culture](#)

News and other stories about publishers' successes resulting from Google Book Search:

- [Chronicle of Higher Education, June 5, 2007](#)
- [Google's partner success stories page](#)
- [Scott Lorenz' story with publisher comments](#)

Fair use cases that help us understand the relationship between harm to markets and social benefit in transformative use cases

- [Sony](#)
- [Campbell v. Acuff-Rose](#)
- [Kelly v. Arriba-Soft](#)
- Grateful Dead case ([Bill Graham Archives v. Dorling Kindersley Ltd.](#))
- [Perfect 10 v. Amazon & Google](#)

Business model evolution moves on from reliance on lock-down and copy sales (contract and DRM) -- and what happens to law we don't rely on anymore?

John Perry Barlow's 1994 Wired Magazine article, [The economy of ideas](#)

anmoku no ryokai -- the Japanese words for a gentleman's agreement: [if:book](#) links to a [story in Wired](#) about the tacit agreement not to enforce existing laws that protect Japanese comic books, in order to allow the derivative manga market to thrive, to everyone's benefit

[Free is more complicated than you think](#) -- O'Reilly Radar post about making content freely available, including references to Scott Adams' experiments with making Dilbert and non-Dilbert publications free

[How to hit paydirt amid an infinite supply](#) -- Glyn Moody of the Guardian, Ltd. interviews Mike Masnick, founder of Techdirt, who describes, without citing him, almost exactly what John Perry Barlow suggested were ways to make a living in a world of ubiquitous copies.

[New York Times abandons subscription access to online news stories](#)

[Wall Street Journal follows suit](#)

SPARC and ACRL panel discussion about sustainable business models for open access publishing: [Course check: A conversation with three open access publishers](#) -- the materials at this site demonstrate how the movement of the journal literature to open access models puts pressure on the remaining scholarly publishers to find ways to provide access to their materials as well. The same lessons we are learning in music, movies and popular periodicals we are also learning in scholarly publishing.

[Lessig's talk about remix culture](#) [video]: excellent -- watch this! Lessig emphasizes the importance of competition, that "more free" can compete with "less free," that artists' choice (to distribute differently, for example, to make their own works more freely available) is the key to breaking monopoly, and that laws that criminalize our children's creativity are corrosive -- and we can do better.

[Lessig blog comment and link to Miro](#), an open-source, non-profit alternative video portal that allows for the growth and use of free HD, entertainment and educational video content, downloadable, subscribable (RSS feeds for over 1500 channels), directly competing for time and attention with not free.

[Cory Doctorow's explanation of Creative Commons licenses](#), on Locus Magazine, from the perspective of a creator and a user of others' works (applying licenses to your own work, and searching for materials that are licensed for nonprofit and other uses)

**The search engine lawsuits
(other than those related to Google Book Search, covered above)**

[Gigi Sohn's call for revision to copyright law](#), including an express exemption for making a digital copy for indexing in a search engine

[Kelly v. Arriba-Soft](#)

[Field v. Google](#)

[Perfect 10 v. Amazon & Google](#)

Bibliography

- A Better Way Forward: Voluntary Collective Licensing of Music File. (2008, April). Retrieved April 1, 2008, from <http://www.eff.org/wp/better-way-forward-voluntary-collective-licensing-music-file-sharing>.
- Amazon.com MP3 Downloads: Popular music, classical music, new releases and more, in MP3 format. (2008). *Amazon.com*. Retrieved April 6, 2008, from <http://www.amazon.com/b?ie=UTF8&node=163856011>.
- Anderson, C. (2006). *The Long Tail: Why the Future of Business is Selling Less of More*. New York, NY: Hyperion.
- Anderson, C. (2008, February 5). Free! Why \$0.00 Is the Future of Business. *Wired Magazine*. Retrieved April 6, 2008, from http://www.wired.com/techbiz/it/magazine/16-03/ff_free?currentPage=all.
- Arrington, M. (2007, April 2). EMI, Apple To Sell DRM-Free Music for \$1.29/song. *TechCrunch*. Retrieved April 6, 2008, from <http://www.techcrunch.com/2007/04/02/emi-apple-are-announcing-sale-of-non-drm-music/>.
- Associated Press. (2007, November 13). Wall Street Journal Online Goes Free. *ABC News*. Retrieved April 6, 2008, from <http://abcnews.go.com/Business/IndustryInfo/story?id=3858939>.
- Barlow, J. P. (1994, March). The Economy of Ideas. *Wired Magazine*. Retrieved April 6, 2008, from <http://www.wired.com/wired/archive/2.03/economy.ideas.html>.
- Doctorow, C. (2006, February 21). Copyright office head denounces "big mistake" of extending copyright. *Boing Boing*. Retrieved April 6, 2008, from <http://www.boingboing.net/2006/02/21/copyright-office-hea.html>.
- Doctorow, C. (2007a, June 19). Lessig switches from copyright to corruption. *boingboing*. Retrieved April 20, 2008, from <http://www.boingboing.net/2007/06/19/lessig-switches-from.html>.
- Doctorow, C. (2007b, November 8). Locus Online Features: Cory Doctorow: Creative Commons. *Locus Magazine*. Retrieved April 1, 2008, from <http://www.locusmag.com/Features/2007/11/cory-doctorow-creative-commons.html>.
- Edgecliffe-Johnson, A. (2008). Apple mulls unlimited music bundle. *FT.com / Companies / Media & internet*. Retrieved May 10, 2008, from http://www.ft.com/cms/s/0/b55a0d64-f523-11dc-a21b-000077b07658.html?nclick_check=1.
- Fisher, W. W. I. (2004). *Promises to Keep: Technology, Law, and the Future of Entertainment*. Stanford: Stanford Law and Politics.

- free the books. (2008). *free the books blog*. Retrieved May 10, 2008, from <http://blogs.lib.utexas.edu/freethebooks/>.
- Geist, M. (2007, March 23). DMCA Architect Acknowledges Need For A New Approach. *Michael Geist Blog*. Retrieved April 1, 2008, from <http://www.michaelgeist.ca/content/view/1826/125>.
- Good Copy Bad Copy. (2007). *Good Copy Bad Copy.net*. Retrieved May 10, 2008, from <http://www.goodcopybadcopy.net/>.
- Goodman, T. Watching TV online may bring on an Excedrin headache (2008). *Seattle Post-Intelligencer: seattlepi.com*. Retrieved May 10, 2008, from http://seattlepi.nwsourc.com/tv/360905_tv29.html.
- Google News. (2008). *Google News*. Retrieved April 7, 2008, from <http://news.google.com/news?hl=en>.
- Graham, P. (2006). The Power of the Marginal. *Paul Graham*. Retrieved May 10, 2008, from <http://www.paulgraham.com/marginal.html>.
- Harper, G. (2006). Google this. *The Copyright Crash Course*. Retrieved May 10, 2008, from <http://copyright.lib.utexas.edu/googlethis.html>.
- Harper, G. (2008, April). Dissertation Proposal -- Next draft. *Lifelong learning: The third degree*. Retrieved May 10, 2008, from <http://georgiaharper.blogspot.com/2008/04/dissertation-proposal-next-draft.html>.
- HM Treasury. (2007, June 11). Gowers Review: Index. Retrieved March 25, 2008, from http://www.hm-treasury.gov.uk/independent_reviews/gowers_review_intellectual_property/gowersreview_index.cfm.
- Jobs, S. (2007, February 6). Thoughts on Music. Retrieved April 1, 2008, from <http://www.apple.com/hotnews/thoughtsonmusic/>.
- Kelly, K. (2008, January 31). Better than free. *Kevin Kelly -- The Technium*. Retrieved March 15, 2008, from http://www.kk.org/thetechnium/archives/2008/01/better_than_fre.php.
- Kim, Minjeong. (2007). The Creative Commons and Copyright Protection in the Digital Era: Uses of Creative Commons Licenses. *Journal of Computer-Mediated Communication*. Retrieved March 2, 2008, from <http://jcmc.indiana.edu/vol13/issue1/kim.html>.
- Krazit, T. (2007). Apple, record labels head for negotiating table. *Technews CNET News.com*. Retrieved May 10, 2008, from http://www.news.com/8301-10784_3-9716781-7.html.

- Lee, E. (2008). Apple denies big record label may quit iTunes / Universal reportedly won't sign a long-term contract for music. *SFGate -- San Francisco Chronicle*. Retrieved May 10, 2008, from <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/07/03/BUGM5QPPLG1.DTL>.
- Lessig, L. (2001). *The Future of Ideas: The Fate of the Commons in a Connected World*. New York: Random House. Retrieved from <http://www.the-future-of-ideas.com/>.
- Lessig, L. (2004). *Free Culture: How Big Media Uses Technology and the Law to Lock down Culture and Control Creativity*. New York: Penguin Press. Retrieved from <http://www.free-culture.cc/>.
- Lessig, L. (2006). *Code (Version 2.0)*. New York: Basic Books. Retrieved from <http://codev2.cc/>.
- Lessig, L. (2007, June 19). Required Reading: the next 10 years. *Lessig 2.0*. Retrieved April 20, 2008, from http://lessig.org/blog/2007/06/required_reading_the_next_10_y.html.
- Levine, B. (2007). Apple Drops Price for DRM-Free Music Tracks. *NewsFactor Network*. Retrieved May 11, 2008, from http://www.newsfactor.com/story.xhtml?story_id=11200CPM64HC.
- Liebowitz, S. J., & Watt, R. (2006). How to best insure remuneration for creators in the market for music? Copyright and its alternatives. *Journal of Economic Surveys*, 20(4), 513-545. doi: doi:10.1111/j.1467-6419.2006.00259.x.
- Linksvayer, M. Zombie DRM. *Creative Commons*. Retrieved May 9, 2008, from <http://creativecommons.org/weblog/entry/8277>.
- von Lohmann, F. (2007, October 9). Is DRM "Enabling New Business Models? *Electronic Frontier Foundation EFF Deeplinks Blog*. Retrieved April 1, 2008, from <http://www.eff.org/deeplinks/2007/10/drm-enabling-new-business-models>.
- von Lohmann, F. (2008, March 20). Monetizing File-Sharing: Collective Licensing Good, ISP Tax Bad. *Electronic Frontier Foundation*. Retrieved April 1, 2008, from <http://www.eff.org/deeplinks/2008/03/monetizing-file-sharing-collective-licensing-good-isp-tax-bad>.
- McIntyre, P. (2008). TV takes the online challenge. *The Sydney Morning Herald: smh.com.au*. Retrieved May 10, 2008, from <http://business.smh.com.au/tv-takes-the-online-challenge/20080416-26lk.html#>.
- Moody, G. (2007, November 1). Interview: Mike Masnick, Techdirt's founder. *Guardian Ltd*. Retrieved April 6, 2008, from <http://www.guardian.co.uk/technology/2007/nov/01/blogging.interviews>.
- Nakashima, P. (2008). TV Networks Seek Formula for Online Ads. *The Associated Press*.

- Retrieved May 10, 2008, from
<http://ap.google.com/article/ALeqM5hWmYHx6DsruS3AELpAAcaH0cvFQD8VVT5OGO>.
- Netanel, N. W. (2003). Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing. *SSRN eLibrary*. Retrieved April 1, 2008, from <http://ssrn.com/paper=468180>.
- O'Hear, S. (2007, December 20). Internet TV: 2007 Year in Review. *ReadWriteWeb*. Retrieved April 7, 2008, from
http://www.readriteweb.com/archives/internet_tv_2007_year_in_review.php.
- Proffitt, M., Arcolia, A., & Malpas, C. (2008, March 28). Copyright Investigation Summary Report. *hangingtogether.org*. Retrieved April 1, 2008, from
<http://hangingtogether.org/?p=402>.
- Riley, D. (2007, September 18). The End Of The Pay For Content Model Is Nigh. *TechCrunch*. Retrieved April 6, 2008, from <http://www.techcrunch.com/2007/09/18/the-end-of-the-pay-for-content-model-is-nigh/>.
- Rogers, I. (2007, October). Convenience Wins, Hubris Loses and Content vs. Context, a Presentation for Some Music Industry Friends. *Fistfulayen*. Retrieved April 6, 2008, from
<http://www.fistfulayen.com/blog/?p=127>.
- Safe Harbor Provisions for the Use of Orphan Works (Ver. 1.1). (2007, November). *STM Association*. Retrieved March 31, 2008, from <http://www.stm-assoc.org/documents-statements-public-co/2003-2007-documents-statements-public-correspondence/2007-documents-statements-public-correspondence/>.
- Sandoval, G. (2008). RIAA: DRM not dead and likely will make comeback. *Tech news blog - CNET News.com*. Retrieved May 9, 2008, from http://www.news.com/8301-10784_3-9939189-7.html?tag=nl.e433.
- Sanger, D. (2006, February 22). Orphan Works IPA Analysis. *David Sanger Photography*. Retrieved March 31, 2008, from <http://www.davidsanger.com/copyright/orphan-works-ipa-analysis>.
- Seiff, A. (2007). Will John Wilbanks Launch the Next Scientific Revolution? . *Popular Science.com*. Retrieved May 10, 2008, from <http://www.popsci.com/scitech/article/2007-07/will-john-wilbanks-launch-next-scientific-revolution#>.
- Shampanier, K., Mazar, N., & Ariely, D. (2008, March 3). Zero as a Special Price: The True Value of Free Products. *Docuticker*. Retrieved March 12, 2008, from
<http://www.docuticker.com/?p=19620>.
- Sohn, G. (2007). Six Steps to Digital Copyright Sanity: Reforming a Pre-VCR Law for a YouTube World. *Public Knowledge*. Retrieved May 10, 2008, from

<http://www.publicknowledge.org/node/1244>.

Stallman, R. The Free Software Definition. *GNU Operating System*. Retrieved April 6, 2008, from <http://www.gnu.org/philosophy/free-sw.html>.

Taylor, C. (2003). TIME Magazine: Coolest Inventions 2003, Apple Music Store. *Time Magazine*. Retrieved May 10, 2008, from <http://www.time.com/time/2003/inventions/invmusic.html>.

Tushnet, R. (2008, April 30). Bridgeman v. Corel, 9 years on. Rebecca Tushnet's 43(B)log. Retrieved May 12, 2008, from <http://tushnet.blogspot.com/2008/04/bridgeman-v-corel-9-years-on.html>.

U.S. Copyright Office - Orphan Works. (2008). Retrieved May 10, 2008, from <http://www.copyright.gov/orphan/>.

Urgent Call for Your Action on Orphan Works. (2006). *ASMP American Society of Media Photographer, Inc*. Retrieved May 10, 2008, from http://www.asmp.org/news/spec2006/orphan_faxcall.php.

Vaidyanathan, S. (2001). *Copyrights and Copywrongs: The Rise of Intellectual Property and How It Threatens Creativity*. New York: New York University Press.

Waibel, G. (2007). A good day for open access! *hangingtogether.org Blog Archive*. Retrieved May 10, 2008, from <http://hangingtogether.org/?p=290>.

Waldrop, M. (2008, April). Science 2.0 -- Is Open Access Science the Future? *Scientific American*. Retrieved May 2, 2008, from <http://www.sciam.com/article.cfm?id=science-2-point-0>.

Welcome to 4Flix.Net. (2008). *4flix.com*. Retrieved May 10, 2008, from <http://www.4flix.com/>.

Footnotes

ⁱ Digital Millennium Copyright Act; Copyright Term Extension Act.

ⁱⁱ Proposed legislation and 2006 legislation available on Copyright Office's Orphan Works Website.

ⁱⁱⁱ For example, the Intellectual Property Enforcement Act (S. 2317)

^{iv} 17 U.S.C. 504.

^v 17. U.S. C. 301 et. seq. (explaining how to calculate terms for works under most conceivable conditions, including when the author's death date is not known)

^{vi} *Id.*; Mexico 100 years.

^{vii} Proposed legislation and 2006 legislation available on Copyright Office's Orphan Works Website.

^{viii} 17 U.S.C. 504

^{ix} 17 U.S.C. 1201.

^x *Kelly v. Arriba-Soft*, 280 F.3d 934 (9th Cir. 2002); *Perfect 10 v. Google*, Case No. 06-55406 (9th Cir. May 16, 2007); *Perfect 10 v. Amazon.com*, Case No. 06-55405 (9th Cir. May 16, 2007); *Field v. Google, Inc.*, 412 F. Supp 2d. 1106 (D. Nev. 2006).

^{xi} 17 U.S.C. 512

^{xii} U.S. Copyright Office Orphan Works Website, 2008.

^{xiii} *A.V., et al. v. IParadigms, Limited Liability Company*, Civ. Act. No. 07-0293 (E.D. Va., March 11, 2008)

^{xiv} *UMG Recordings, Inc. v. mp3.com, Inc.*, 92 F. Supp. 2d 349 (S.D.N.Y. 2000)