

Along with new media for storytelling, technology has brought us a previously unimaginable ability to make copies of creative works. This makes a basic knowledge of copyright law invaluable to anyone interested in a career in the modern world of publishing. It was with this in mind that I took Michael Clark's Intellectual Property and Copyright Law class as soon as I could—I actually emailed him to see about getting into the class before I had even been formally accepted into the publishing program, out of fear that the course would be filled up before I had a chance to sign up. In the nearly two years since taking the course, I've been glad of it any number of times. Knowing the issues involved in copyright has both made me more informed about what I can and cannot do with the creative works of others and given me a more informed political perspective.

# The Problem of Copyright in the Digital Age

THE WORLD WIDE WEB is a huge presence in modern society—companies like Amazon and Google are household names, and sites like facebook and Twitter are enabling people to communicate with each other and companies to communicate with customers like never before. In addition, sites like YouTube, DeviantArt, and Flickr are providing people with an amazingly wide audience for their creative works. Copyright law, however, is having a very hard time on the web. It is very difficult to enforce any sort of copyright online, due to the number of people creating works, but it also has some more fundamental problems—notably, that copyright law is based in ideas that are relevant for analog, physical works, but are not so much so for digital works.

When copyright law was first developed in 1710<sup>1</sup>, the act of copying was a difficult one—it required a printing press, ink, a large stock of paper, and the services of a bookbinder to do on any sort of scale that would have economic impact. Technology has advanced quite a bit since 1710, but until very recently the fact has remained that those impacted by copyright law have been businesses rather than consumers. As James Boyle noted in a recent interview by Brooke Gladstone, of NPR's *On the Media*, “if we could transport ourselves back in time to 1950, let’s say, and I were to appear beside you and hand you a copy of my book and say, quick Brooke, violate copyright law, you wouldn’t have been able to do it. What are you going to do, get a mimeograph machine, read it aloud?”<sup>2</sup>

The last fifty years have seen a dramatic increase in the public’s ability to make copies. The development of the photocopier in 1959 was the first in a long line of inventions that served to make copying of protected works a trivial issue. Audio- and videocassettes followed in short order, each time to major corporate protests. All of these things, though, pale in comparison to the significance of the internet and the transmission of digital information.

One of the primary characteristics of digital media is that it is much easier to transmit, copy, and modify than analog media; in order to transmit a printed (analog) copy of a text, a physical delivery is required. Electronic (digital) text, on the other hand, is easily transmitted anywhere in the world with an internet connection. What’s more, this digital transmission is in fact a copying of information, rather than a movement of that information. As more and more media becomes digitized, the opportunities for illicit copying and modification of that media become more and more common. In addition, as the tools of production and distribution become more and more widespread and democratized, it becomes easier and easier for more and more people to copy and modify this rapidly growing store of digitized media. All of these factors act in concert to drive the common behavior of people online farther from the requirements of copyright law.

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Copyright, at its most basic, is a right given to the author of a work to control the reproduction

1 The Statute of Anne; Copyright Act 1709 8 Anne c.19

2 from transcript at <http://www.onthemedial.org/transcripts/2008/12/05/05>

of that work. This right is given not to ensure that the author of a work is compensated for creation, but rather to ensure that society continues to be enriched by the creations of authors—the author’s financial compensation for creating a given work is not an end, it is a means to the end of encouraging that author to create. In the words of the Constitution, Congress shall have the power “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”<sup>3</sup> Authors get an exclusive right to copy their creations in order to encourage them to create more things.

In the 1790 Copyright Act, the first US Copyright Act, copyright was limited to books, charts, and maps, and works needed to be registered with the copyright office to gain the protection of copyright. In the years since, copyright law has undergone numerous modifications, and it now protects a huge range of expressions of ideas, from books to movies to music to architectural plans. Registration of copyright is no longer required; works are now protected by copyright as soon as they are created, providing that they are “original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”<sup>4</sup>

When applied to traditional media, fixation makes a certain sense. Why should copyright apply to a poem written in the frost on a window, after all? The idea that long-term protection be applied to something so ephemeral is in some ways counterintuitive, as copying implies preservation, something at odds with an unfixed work. With the move from analog to digital, however, the idea of fixation becomes troublesome. Because digital content is raw information and separate from physical form, nearly any activity performed with it is, in some way, copying. For example, moving a particular file from one folder on a hard drive to another is technically a copying of that file; a new version of the file in question is created in the new location, and the old file is deleted. Similarly, downloading content over a network such as the internet is copying rather than moving—the original file is unaffected, and a copy is made on the downloading computer.

This process of copying can occur several times in a given transfer of files. For example, burning a CD of music from files located online would involve, at minimum, a copy of the music files being made on the computer’s hard drive, and then that copy being copied again onto a CD. In addition, during the process of copying, more copies are being made of the file in question into the computer’s RAM, or Random Access Memory. RAM is a form of temporary information storage used when computers process complex tasks. Because it takes the form of integrated circuits, any of the information it contains is available at any time, unlike information on hard drives or CDs, which need to have the digital equivalent of a record player’s needle in the proper position to retrieve the information. Because information in RAM can be accessed freely, it is much faster to use than information on disk. This speed makes it an integral part of any computer’s operation—without the ability to load programs and frequently used files into RAM, computers would operate unacceptably slowly, if at all.

One would think, then, that copying a file into RAM in the process of normal operations of the computer would not be a copyright issue. However, in 1993’s *MAI Systems Corp. v. Peak*

3 US Constitution, Article I, Section 8, Clause 8

4 US Code Title 17, Chapter 1, Section 102, Clause a

*Computer, Inc.*, the Ninth Circuit found the reverse to be true.<sup>5</sup> MAI, a computer hardware and software manufacturer that also serviced computers bought by its customers, brought suit against Peak for unlawfully using software that Peak did not have a license to use. Peak was a computer maintenance company that serviced many computers, among them those made by MAI. In the course of servicing MAI machines, Peak's technicians would frequently make use of some of the tools that MAI had built into their operating system: in particular, they would consult an error log that was created by a diagnostic program that automatically loaded into memory any time the computer was turned on. MAI claimed that doing so was copyright infringement, as Peak was not licensed to make copies of the program, and by running the program, it was being copied into RAM.

In considering whether a copyright violation has taken place, two things must be proven: Copyright ownership, and "copying" of protectable expression." MAI's ownership of copyright of their software was undisputed, so the question came down to whether copying was taking place. Peak conceded that they used MAI software "to the extent that the repair and maintenance process necessarily involves turning on the computer to make sure it is functional and thereby running the operating system." Peak further admitted that turning on the computer would load a copy of the operating system into the computer's RAM, which the Peak technicians would then use to view the error log. Peak argued that they were not violating copyright because the information in RAM is not fixed—by its nature, information stored in RAM lasts at most until the computer is turned off, and sometimes for substantially less time than that.

The court disagreed with Peak, finding the representation created in the RAM to be "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."<sup>6</sup> One is moved to wonder what the boundaries of "more than transitory duration" are—is a poem written in the sand on the beach copyrightable if it is above the high-tide line, but not below it? And what of the frequently-seen exhortations to "wash me" on the backs of tractor-trailers around the country? Is there, perhaps, a primal graffitist somewhere waiting to bring copyright suits to bear on others who unknowingly violate copyright when they write in the dust on the back of a truck?

These speculations aside, it should be clear that this definition of fixation is somewhat troublesome and, more importantly, counter to the assumptions of most people. If John brings Jane his computer because it is not working and he wants her to fix it for him, copyright is not an immediately evident area of concern. This is because the law does not mesh with similar experiences John and Jane have had; when taking a car in to a garage to have it serviced, for example, one does not worry about violating copyright by using the mileage information contained on the odometer. This discrepancy between the law and people's expectations runs counter to the idea that people should have a reasonable idea about the sorts of things that are legal and the sorts of things that are not.

The Peak decision remains a controversial one; in her thorough analysis of the case, Katrine Levin concludes that "this decision is in stark contrast to the Ninth Circuit's earlier decisions in the computer software field and with the purpose behind the Copyright Act." Some parts of the case have been addressed by the Computer Maintenance Competition Assurance Act of 1998, which essentially repealed the MAI decision specifically as regards those repairing computers.

5 *Mai v. Peak* 991 F.2d 511

6 US Code Title 17, Chapter 1, Section 101

The underlying doctrine of copies in a computer's RAM being legal copies is unchanged, however—the only real change is that computer technicians are now allowed to make those copies.

The MAI case illustrates some of the difficulties that copyright law has on a single computer. When computers are connected and sending information to each other, different sorts of problems arise. These problems are well illustrated by Dan Wallach's Dilbert Hack Page<sup>7</sup>, which is an archive of the discussions of Professor Wallach, then a computer science graduate student at Princeton, with United Media in 1996. Wallach had been a long-time fan of the Dilbert comic strip, to which United Feature Syndicate, Inc. owned copyright. He wanted to display Dilbert on his own web page, but wanted to do it in such a way that it did not violate copyright, so he used "inline linking", or "inlining" to link to the images.

A web page is a series of instructions that tell a web browser what to display and where to display it. Much of what is displayed is contained in the instructions, such as text and text formatting, but not necessarily all of it. When an image is included on a web page, the instructions to the browser amount to "Go to a certain location and get the image file named X." Most of the time, these image files are stored on the server of the person whose website is being visited, but this is not necessarily the case. It is just as possible to tell a browser to go get an image that's located at, for example, a page owned by United Media, as it is to tell it to go get an image on one's own computer. To the end user, the results will be identical—Dan Wallach's site displayed the Dilbert strip of the day, exactly as it looked on the Dilbert website owned by United Media, but it could be fairly said that he had not, in fact, copied anything. All he had done was provide a window onto the Dilbert website that was exactly the size of the Dilbert comic of the day.

Wallach eventually agreed to disable the links to the Dilbert strips on his site. In his words, "After carefully reading 160 messages of lawyers arguing about my page and the issues surrounding it, I decided to take the safe exit and remove my page."<sup>8</sup> While this means that no legal precedent was set, it certainly illustrates the concerns that people on both sides of the issue have. United Media was concerned about protecting their intellectual property—as John Parker, their legal counsel, said in an email to Wallach, "UM's only product is selling to others the right to copy and display those rights, *i.e.* the likenesses of the comic strip characters. Consequently, UM zealously protects and guards the value of those rights. If others can use those rights without paying, UM loses its ability to make money."<sup>9</sup> Wallach, on the other hand, was motivated not by money, but "because, despite a lot of e-mail to the Webmasters at United Media, the layout of their Dilbert page was really lame. I could do better..."<sup>10</sup> This is, in many ways, the basis of many of the conflicts that copyright faces online. Rights holders are concerned about their ability to continue to make money off of their content, and creators are interested in playing with content and modifying it, or spreading it around and showing it to friends.

Wallach's dispute with United Media did not make it to court and therefore set no legal precedent, so the question of inline linking remained unsettled. It came up again in *Kelly v. Arriba Soft*. The Kelly case was very similar to Wallach's dispute with United Media: Leslie Kelly was an artist who displayed many of his photographs on his website, while Arriba Soft

7 <http://www.cs.rice.edu/~dwallach/dilbert/>

8 *ibid*

9 <http://www.cs.rice.edu/~dwallach/dilbert/letter2.html>

10 <http://www.cs.rice.edu/~dwallach/dilbert/>

operated a search engine that displayed images that it found online. Kelly objected to Arriba Soft's unauthorized reproduction of his images and brought them to court.

In the case, the court distinguished between the thumbnail-view images that Arriba Soft displayed on its search screen and the full-sized images it would display when those thumbnails were clicked on. These full-sized images were inline links to Kelly's webpage—the links were integrated seamlessly into Arriba Soft's search engine, appearing to all intents and purposes the same as they would were they on Arriba Soft's server, but they were nothing but links to the pictures on Kelly's website. The court initially found that "Arriba's reproduction of Kelly's images for use as thumbnails in Arriba's search engine is a fair use under the Copyright Act. We also hold that Arriba's display of Kelly's full-sized images is not a fair use and thus violates Kelly's exclusive right to publicly display his copyrighted works."<sup>11</sup>

This would have been an end to the question of inline linking, except that the court later withdrew this opinion, substituting the opinion that "we hold that the district court should not have reached whether Arriba's display of Kelly's full-sized images is a fair use because the parties never moved for summary judgment on this claim and Arriba never conceded the prima facie case as to the full-size images."<sup>12</sup> Inline linking is still an undecided issue; one that Google has sidestepped with their image search, which displays thumbnails as allowed by the Kelly case. Those thumbnails, when clicked on, send the user directly to the site in question, and only from there is there an option to view the picture in full size.

In 1998, Brian Wassom examined the problems that were then becoming evident with copyright and the Web, in particular as regards inline linking, and he concluded that "Web copyright guidelines should establish a presumption that such actions infringe on the right of display and derivation," though he goes on to note that "This presumption should be rebuttable, however, and the high likelihood that such use is transformative should make fair use a particularly important consideration when analyzing inlining."<sup>13</sup>

The real difficulty with inline linking isn't that it's hard to tell what is a legitimate use covered by Fair Use and what is a violation of copyright—it's that inline linking is so easy that anyone with a computer and an internet connection can do it. The same is true of the creation of transformative works; in computers, people have at their disposal very sophisticated tools for working with digital information. As Chris Anderson observes in *The Longer Long Tail*, "the number of new albums released grew a phenomenal 36 percent in 2005, to 60,000 titles (up from 44,000 in 2004), largely due to the ease with which artists can now record and release their own music. At the same time, bands uploaded more than 300,000 free tracks to MySpace..."<sup>14</sup>

This ease of production, distribution, and manipulation is something that young people today have grown up with, but it was unimaginable even fifteen years ago. This shift has a profound influence on the way that people think about intellectual property and values on the Web. Being able to go online and download any of those 300,000 free songs from MySpace, or less legally but just as easily to go to any of the later-day incarnations of Napster and download virtually any song imaginable, fosters a mindset that does not equate online media with money, and hence does not equate taking online media with stealing. As Diane Zimmerman mentions in

<sup>11</sup> *Kelly v. Arriba Soft Corp.*, 280 F.3d 934

<sup>12</sup> *ibid*

<sup>13</sup> 49 Case W. Res. 181, p. 255

<sup>14</sup> Anderson, *The Longer Long Tail*, p. 54

the Albany Law Review, “To a user, it is not theft to multiply copies without consent in order to space-and time-shift access to legitimately obtained music or video, or to share a copy with a friend. Nor does the noncommercial user think of herself as ‘stealing’ from a copyright owner when she reuses parts (even extensive parts) of protected works to make her own creations.”<sup>15</sup>

This perception of what is theft and what is not comes from many places. Part of it is based in the physical world, where the First Sale Doctrine makes it perfectly legal to loan a CD or a book to a friend. Users don’t see a problem with doing the same thing with an electronic copy, despite the crucial difference that when sharing a CD, the original purchaser no longer has that CD, while sharing an MP3 file results in both people possessing the song. Another part of it is a product of the Web’s presence as a new kind of venue for products rather than a venue for new kinds of products; much money is made on the Web by companies such as Amazon, but they make their money by virtue of the fact that the Web gives them access to a huge number of people and the ability to sell a vast range of physical products. Most companies that make money on the Web do so by selling physical things, rather than by selling electronic things; even Google is essentially doing this at second-hand, by selling advertising space to people who are selling physical things online. The perception of the Web as a place where you try to get your product noticed, rather than a place where you try to get it used, motivates people in a way that runs counter to copyright law. Cory Doctorow illustrated this point very clearly in a 2006 article on Forbes.com: “There’s no empirical way to prove that giving away books sells more books—but I’ve done this with three novels and a short story collection (and I’ll be doing it with two more novels and another collection in the next year), and my books have consistently outperformed my publisher’s expectations. Comparing their sales to the numbers provided by colleagues suggests that they perform somewhat better than other books from similar writers at similar stages in their careers. But short of going back in time and re-releasing the same books under the same circumstances without the free e-book program, there’s no way to be sure.”<sup>16</sup>

If an author is not interested in making money on the web, but is instead interested in getting known on the web so that she can then make money in some other way, then limiting the number of copies of a given work is not in the author’s best interests. What is more desirable is the sort of unlimited distribution that the Web allows—provided that the author can be sure that she will be properly given credit for the work.

The desire to distribute works freely across the Web while still ensuring proper attribution is what prompted the development in 2001 of the Creative Commons. Creative Commons is a non-profit organization that has developed a set of licenses authors can apply to their works. To date, they have developed licenses specifically for 54 different countries, and are working on licenses for five more, and for countries for which licenses have not yet been specifically designed, there is a generic, “jurisdiction-agnostic” license. They have several licenses available, the most basic of which allows the licensed work to be copied, distributed, displayed, modified, and performed, so long as the author of the work is properly attributed. This basic license can be modified in three possible ways, most of which can be combined with each other, giving a total of six possible licenses. The modifications are:

1. Noncommercial. This term permits the same uses as the basic license, but only so long as

<sup>15</sup> Zimmerman, 70 Alb. L. Rev. at 1377

<sup>16</sup> [http://www.forbes.com/home/technology/2006/11/30/cory-doctorow-copyright-tech-media\\_cz\\_cd\\_bookso6\\_1201doctorow.html](http://www.forbes.com/home/technology/2006/11/30/cory-doctorow-copyright-tech-media_cz_cd_bookso6_1201doctorow.html)

those using the work are doing so for noncommercial purposes.

2. No Derivative Works: This term removes the possibility of others making derivative works based on an author's work.
3. Share Alike: This term is mutually exclusive with the "No Derivative Works" modification, as it permits derivative works only so long as the derivative work is published under the same license as that governing the original work.

Creative Commons licenses are free to acquire for any work, and very easy to apply. In the process of acquiring a license, the user generates an icon such as the following:<sup>17</sup>



This icon can be displayed online and clearly shows which license limitations have been selected. It is also a clickable link that will redirect a browser to the Creative Commons website for a "human-readable summary of the Legal Code,"<sup>18</sup> to which there is a further link. Attaching the icon to a webpage also marks that webpage to search engines such as <http://search.creativecommons.org>, making it very easy for interested people to find Creative Commons licensed works that they can use.

Public licenses have already seen some conflict in the courts, most notably in the 2008 case *Jacobsen v. Katzer*.<sup>19</sup> In this case, Jacobsen held the copyright to a computer program that enabled users to modify the programming of model railroad trains. This program was distributed under an Artistic License (a public license similar to the Creative Commons license) that required certain terms to be followed when distributing the programs licensed. Jacobsen claimed that Katzer had taken his program, modified it, and incorporated it into his own product, which he then sold to the public. The district court found that, while the terms of the license had been violated, that violation did not constitute a violation of copyright—it was, rather, a violation of the terms of the license, meaning that Jacobsen could sue for breach of contract, but not for violation of copyright. On appeal, however, the United States Court of Appeals for the Federal Circuit determined "that the terms of the Artistic License are enforceable copyright conditions."<sup>20</sup> In effect, the Jacobsen decision has set legal precedent in favor of public licenses—the terms of licenses like the Artistic License and Creative Commons licenses have been determined by the court to be enforceable with copyright law, rather than having to rely on contract law. In addition, the court found that "Open source licensing has become a widely used method of creative collaboration that serves to advance the arts and sciences in a manner and at a pace that few could have imagined just a few decades ago."<sup>21</sup>

On the web, then, we have an environment that makes copying of copyrighted material trivially easy. At the same time, we have a profusion of software that makes modifying text, images, video, and sound recordings at a professional level something that virtually anyone can do. There is a large population of people on the Web who do just that, posting videos to YouTube that are cobbled together footage from favorite videogames and movies, using copy-

<sup>17</sup> Creative Commons icon from <http://www.tom-mccluskey.com/>

<sup>18</sup> <http://creativecommons.org/licenses/by-nc-sa/3.0/us/>

<sup>19</sup> *Jacobsen v. Katzer* 535 F.3d at 1373

<sup>20</sup> *ibid*

<sup>21</sup> *ibid*

righted songs as soundtracks.<sup>22</sup> And at the same time, there is a large group of creators who want to feel that they are being justly compensated for their creativity and for enriching our culture. Creative Commons-style licenses are one possible way of adapting to the changing face of copyright on the Web, but there are others.

One possibility that has garnered much corporate support in the past few years is the use of Digital Rights Management (DRM) technology. This is technology that limits the possible uses of purchased digital media. For example, music files purchased from Apple's iTunes store are proprietary, so that they are only playable through Apple's devices or software. In addition, they can be copied onto a maximum of five computers.<sup>23</sup> DRM has the possibility to control the distribution of digital works, at least in a superficial way, but it has problems. The most profound of these is that it sets up an adversarial relationship between the author (or more likely the publisher) and the consumer; there is considerable feeling against DRM, in many ways due to the overly restrictive DRM some companies have attempted to use.<sup>24</sup> Excessive use of proprietary devices and DRM can also stifle creativity and work counter to the purpose of copyright. If devices are truly locked to only accept proprietary file formats, it becomes very difficult for authors trying to spread their works. In addition, there is the very real possibility that if a particular device became overwhelmingly popular, the producers of that device would find themselves in the position of arbiters of taste if works could not be freely transferred onto the device in question. This is an issue that has come up most recently at the time of writing of this essay with Apple's iTunes store: As noted on the technology blog *boingboing*, "Apple's refused to allow an application called 'Comic Reader' in the iTunes Store because they don't like the comic book it ships with."<sup>25</sup> There is also the objection that DRM is not perfectly secure, as can be seen in the astonishingly quick breaking of the encryption on Blu-Ray and HD-DVD, the popular reaction to which also illustrates the extreme unpopularity of DRM technology.<sup>26</sup>

DRM, by its nature, is not a good solution to copyright problems. It seeks to control the flow of ideas, it limits how people can use their legally purchased works, and it can cause serious problems for consumers when they want to do things as simple as transfer songs from one computer to another, or even when they buy a DVD in a foreign country and want to play it on a DVD player at home. The fundamental issue with DRM is that it is an attempt to make digital media behave like analog media: It tries to make copying difficult, if not impossible, while still keeping the commercial advantages of digital media, such as instant delivery, zero shipping costs, and no need for warehousing. Both for that reason, and for the fact that people are less and less willing to accept DRM, it is not a viable solution to the problems copyright faces today.

Dianne Zimmerman outlines four different schools of thought in her article *Living Without*

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22 For example, [http://www.youtube.com/watch?v=nzkidZ4\\_\\_ek](http://www.youtube.com/watch?v=nzkidZ4__ek) or <http://www.youtube.com/watch?v=7Q3kuYW5iug>

23 Zimmerman, 70 *Alb. L. Rev.* at 1385

24 As mentioned at <http://architectures.danlockton.co.uk/consumers-reactions-to-drm/>, Sony's Librie ebook reader (in Japan and as of 2004) only allows readers to access a given file for two months before the file is locked, requiring re-purchasing.

25 <http://www.boingboing.net/2008/12/11/apple-gets-into-the.html>

26 *New York Times*, May 3, 2007; [http://www.nytimes.com/2007/05/03/technology/03code.html?\\_r=2&coref=slogin](http://www.nytimes.com/2007/05/03/technology/03code.html?_r=2&coref=slogin)

*Copyright in a Digital World.*<sup>27</sup> Two of these schools, we have already talked about: Advocates of DRM she calls Locksmiths; “These producers and distributors place their faith, instead, in contract law and a variety of technology-based devices.”<sup>28</sup> Then there are the Subverters, who “rely’ on copyright in cyberspace, but in a sense that would appeal to a character in Alice in Wonderland: they turn the law on its head with the aim of disabling it.”<sup>29</sup> Subverters are those who use public licenses like Creative Commons or the Artistic License to spread their works.

Both of Locksmiths and Subverters make use of existing copyright law on the Web, but selectively and with substantial changes; the Creative Commons license, for example, discards restrictions on copying, except as set out in the restrictions one can apply to a Creative Commons license. Locksmiths, on the other hand, view copyright law as one possible tool to aid in their quest for complete control over their intellectual property, but probably not the primary one—that would be their DRM.

Zimmerman’s other two categories are the Naysayers and the Explorers. The Naysayers are the most easily defined, as they are those who do not view the Web as a safe or desirable place to put their intellectual property, so they don’t. The Explorers are the hardest to pin down; Zimmerman defines them as “individuals and entities interested in disseminating their own expressive materials ... but without help from the formal legal regime set out in the Copyright Act.”<sup>30</sup> Her Explorers are those who explore different models for receiving compensation from creative works, such as auctioning works through a site such as The Digital Art Auction.<sup>31</sup> One of the more interesting ideas Zimmerman credits her Explorers with is the Street Performer Protocol, which is essentially a system by which authors of works set out samples of their works for the public to inspect, and then set a total price for their next work. Consumers can then contribute by paying money to a publisher, who would hold the money until the author’s price was reached. At that point, the author would receive the money and the work would be released into the public domain.

Zimmerman’s three categories of authors interested in distributing their works online can be segregated into two groups: The Locksmiths and the Subverters “both want to use copyright selectively to adopt what is useful to them, but escape from those aspects of formal copyright that they deem troublesome or inconvenient,”<sup>32</sup> while Explorers have decided that copyright on the Web is not a viable option and that some other method is required to ensure that authors are compensated for their works. The primary tension here is one between those who do not think that copyright is salvageable for use on the Web and those who think that there is still some worth to the system.

The reality is that the Locksmiths, Explorers, and Subverters are all likely to be in existence for the next few decades. DRM is too appealing to those interested in ensuring they make all the money they can from the rights they hold, and it is too accepted by big business to be disposed of in the near term, as can be seen by the fact that nearly two years after Apple’s Steve

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27 Zimmerman, 70 Alb. L. Rev. 1375

28 Zimmerman, *id* at 1379

29 Zimmerman, *id* at 1381

30 Zimmerman, *id* at 1382

31 <http://tdaa.digitalproductions.co.uk/>

32 Zimmerman, *id* at 1383

Jobs wrote an open letter calling for the music industry to cease the use of DRM<sup>33</sup>, almost all of the files available on iTunes are still burdened with DRM. The Locksmiths will be around for many years to come.

Creative Commons licenses are gaining popularity and recognition, as the recognition of the importance of the *Jacobsen v. Katzer* decision spreads. It is worth noting that *change.gov*, President-elect Obama's website, is wholly licensed under a Creative Commons attribution license, the freest of the Creative Commons licenses available. However, the Subverters will likely have some problems in the future that the Locksmiths won't: The premise of free distribution of works is that the distribution allows the author to spread his name widely, in effect as a marketing effort. The author can then use the web presence generated by this free distribution to make money in other ways. For musicians, this means that albums given away for free will draw more people to concerts, which is where musicians have generally made their money anyway. For authors of books, this means that ebooks are given away with the goal of selling print copies. While this approach may continue to work for musicians, writers may end up in an uncomfortable position; if ebook readers, cell phones, or some other digital device come to be the primary medium for reading, rather than printed books, writers who have opted to give away digital rights to boost print sales may find themselves widely read but uncompensated. The same could be said for those who make videos, or even of musicians who do not or can not give performances. In the short to medium term, though, it is safe to say that the Subverters will be a strong presence; according to their website, as of 2008 there are an estimated 130 million Creative Commons licensed works, up from 90 million in 2007.<sup>34</sup>

In some ways, Creative Commons licensing will help to answer the question of whether authors create for the sake of creating or if they create for financial reward. As it stands right now, many authors are trading the temporary monopoly given by traditional copyright for, in effect, free advertising for their other methods of making money. If the Web ceases to be a place to advertise services and becomes instead a place to offer services, then there will be little outside incentive to produce creative works. There will likely be a large and ever-expanding pool of Creative Commons licensed works, thanks to no small degree to the Share Alike modification to the license that requires derivative works to be licensed in the same way as the original work, but it is very possible that these works will be a training ground for amateurs who after securing sufficient skills and popularity will eschew Creative Commons licenses on their later works.

The Explorers will certainly continue to explore, which is exactly what we need, if DRM is unpalatable and the approach of the Subverters is based in using the Web as a marketing tool. The particular examples of Explorers that Zimmerman cites are problematic in many respects: Putting aside the fact that The Digital Art Auction's website has not been updated since 2004 and has apparently never acquired or created any software with which to run auctions,<sup>35</sup> without some form of copyright there is no reason for people to bid in an auction—if the work will be released into the public domain after the auction, why spend any money? The more likely examples of Explorer distribution involves authors who already have a large following: Stephen King and Lawrence Watt-Evans, both successful writers, and Radiohead, a very

33 <http://www.apple.com/hotnews/thoughtsonmusic/>

34 <http://creativecommons.org/about/history/>

35 <http://creativecommons.org/about/history/>

popular music group. All three of these creators sold their works directly to the public, but in different ways: Radiohead sold their album *In Rainbows* online through their website at no fixed price<sup>36</sup>—people were encouraged to pay what they felt the album was worth; Stephen King posted his novel *The Plant* on his website chapter by chapter once a sufficient number of people had paid for the previous chapter<sup>37</sup>; and Lawrence Watt-Evans posted each chapter of his novel *The Spriggan Mirror* on a weekly basis as long as contributions of at least \$100 a week had come in.<sup>38</sup>

The problem with these Explorer approaches is that they assume a certain level of reputation. Music, video, and books all require post-production editing to reach their fullest potential, and having that editing done requires either people willing to gamble on a work's commercial success by taking a share of the profits or an outlay of money before works are sold. Some certitude of the work's selling well (whether on the part of the author or the editor) is therefore a necessary precondition to these systems working. This could actually provide a less robust and lively creative environment than exists currently, as publishers of creative works are generally willing to take risks on unknown items because they can count on the sales of popular items to offset the potential losses. This is not to say that the Explorer model is unworkable—as it is a catch-all category for anything that doesn't fit into Zimmerman's other three categories, there are any number of possible Explorer solutions.

So what is needed to promote the progress of science and the arts on the Web? First, people must feel that the law is in tune with their expectations. Decisions like that in MAI must be reexamined and, if found wanting, repealed. This will serve to ensure people that copyright law is relevant to modern life. Secondly, authors must feel that they are getting credit for the work that they do. This is the central point of both the Dilbert incident and the Arriba Soft case; inline linking makes it very easy to make a given image seem to be an integral part of a different web page. It may only be a window onto the source page, but the window itself is invisible. Authors getting credit for their work is also the central proposition of Creative Commons licenses. Attribution is important not just to professional creators, but also to the very large amateur population of the Web; bloggers, machinima creators, and bands who post their music on MySpace are only too happy to have their works spread far and wide, but if someone else takes credit for their work the amateurs get at least as angry as professionals whose works are “pirated.”

Finally, authors will probably require a system of compensation for creating. At present, that system of compensation is based in the real world and in using the Web as a marketing tool. In the future, this may change, and this is the central point of difficulty that the Explorers will have to deal with. What this system of compensation entails could involve the sort of limited monopoly the Founding Fathers had in mind in the Constitution, or it could be something entirely new, like the trust matrix Charles Stross constructs in his science fiction novel *Accelerando*, which tracks the goodwill the public has towards people and each other to extend value to those people deemed to be most trustworthy and most in tune with the culture.

Regardless, it is likely that amateur creators will continue to create and modify works under

36 <http://www.nytimes.com/2007/12/09/arts/music/09pare.html?ex=1354856400&en=ec2fic29937292be&ei=5090&partner=rssuserland&emc=rss&pagewanted=all>

37 [http://www.stephenking.com/library/novel/plant:\\_zenith\\_rising\\_the\\_flap.html](http://www.stephenking.com/library/novel/plant:_zenith_rising_the_flap.html)

38 <http://www.ethshar.com/thespriگانexperimento.html>

something similar to the Creative Commons license. It is equally likely that those same amateurs will wish to do the same with works protected by copyright. At the present time, if we accept the premise that the Web is being used, for most creative industries at any rate, as an advertising platform, then there is no real harm in allowing amateurs to create videos using, write stories about, or set music to existing works, so long as those works are attributed properly—those amateur derivative works become advertising for the original work. Rights holders would, if anything, benefit from allowing their works to be used freely so long as attribution accompanied the use of the original work.

This may change in the next five, ten, or twenty years as the Web evolves, but as long as it is primarily a marketing tool, attribution of works combined with the rapid spread of those works is a strong encouragement to create. Once the Web is no longer simply a marketing tool—well, that future is the job of the Explorers to inform us about.