MAKING A CASE FOR SHARING: AN ANALYSIS OF MUSIC COPYRIGHT, NEW TECHNOLOGIES, AND HOW CREATIVE COMMONS AND NETLABELS ARE FACILITATING A FREE MUSIC CULTURE ON THE WEB

by

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INTRODUCTION

With the emergence of the Web as a viable communications platform, and the introduction of sophisticated computer technologies available to the general public, producers and users gained significant new tools for distributing, accessing, and sharing music in new ways. Paul Miller (2008) says that we can look at the Web as "an immense repository of information accessible to a wide range of new applications – its an archive of almost anything that has been recorded" (p. 15). With this immense archive comes new possibilities, such as the ability to find obscure recordings that aren't available as physical copies in record stores anymore, or to upload your own music and have it available freely for a global audience to share and enjoy. However, the Internet also provides the ability for copyrighted music that is controlled by the four major record labels to be uploaded, downloaded, and shared through peer-to-peer (p2p) file-sharing networks. Through litigation against Internet users, along with heavy lobbying in Washington, the major labels and their representative trade group and legal arm known as the Recording Industry Association of America (RIAA) have used copyright law to justify the criminalization of music sharing (Stallman, 2004).

A history of technological innovations in music production, distribution, and consumption coincides directly with a history of extended copyright restrictions. The question that remains is whether these copyright laws are in the best interest of authors and most importantly the public, or rather in the best interest of large media corporations. I will be exploring those histories, laying out a framework for understanding music sharing in the age of networked computing and digital music technologies. It is important to remember that the recorded music industry has only existed for approximately 110

years (Morton, 2006), and as new ways of accessing music become available to users, traditional distribution models have the potential of becoming obsolete and incompatible with music user preferences. While this research is more about looking at music sharing on the Web as a new alternative form of promotion and distribution for independent artists, there is a need to outline the history of copyright law and recorded music to create a framework for understanding these new models that embrace free culture principles.

The access portals for recorded music content have increased a thousand fold, and music consumers are now overwhelmed with options of how, where, and what they listen to. Jim Griffin claims that "sound recording's economy is now a tip jar. It's a choice listeners make. Not morally, not legally, but effectively it's become voluntary to pay for music" (Bernstein, 2008, Para. 3). This has empowered the music listening public, allowing for the opportunity of meaningful interactions on a more personal level, while in some situations even completely eliminating the middlemen that previously existed between artists and fans in music commerce. Those middlemen are the record companies who, as Fleischer (2008) states, "keep dreaming about building a digital simulation of a 20th-century copyright economy, based on scarcity and with distinct limits between broadcasting and unit sales." He goes on to say that "this vision of copyright utopia is triggering an escalation of technology regulations running out of control and ruining civil liberties" (para. 34). This copyright economy based on scarcity is in direct conflict with the digital economy of music on the Internet.

Before computers, the methods of music distribution kept the control of distribution in the hands of the record companies. The equipment used to make copies of recorded music and sell them in mass amounts around the world was not available to the common public.

Thus, the means of copying music was controlled by companies, namely the record labels, that invested large amounts of money in the recording and reproduction technologies needed to facilitate copying. In this situation, the copyright laws applying to music and music copying made sense, as the laws did not restrict the abilities of the user, or reader.

Stallman (2009) states,

> Copyright on these musical recordings was mostly uncontroversial as it only restricted record companies and not music listeners. Today's digital technology enables everyone to make and share copies. Record companies now seek to use copyright law to deny us the use of this technical advance. The law which was acceptable when it restricted only publishers is now an injustice because it forbids cooperation among citizens. (Para. 4)

Stallman's quote points directly to the purpose of my research, to analyze how the Web, digital music distribution, affordable music production software, and new music consumer preferences are in direct conflict with US copyright laws that restrict music users and criminalize sharing, thus leading to a need for alternative models that facilitate sharing. That analysis will lay the framework for a more narrowed research focus on free music culture, a movement consisting of independent artists and musicians, netlabels, music sharing communities, remix portals, and music fans of all types. By embracing digital technologies, and using the Web as a platform to distribute music that can be shared freely throughout the world, these musicians and fans provide a great example of how the Internet can be used to enrich our music culture and promote new talent.

Distribution costs near zero, so costs for the consumer can near zero as well. This is

okay, as long as models are allowed to thrive that enable artists to use their recorded works as incentive for other purchases, like special limited edition physical releases, merchandise, and most importantly concert tickets. Rio Caraeff, the head of digital strategy at eLabs (a subsidiary of Universal Music Group) stated at the Digital Music Summit in Nashville that "the future is not the sale of recorded music." He goes on to say that now "context is king...everything around the music has value. Access to music will be more powerful and valued than possession...and music will become more valuable to consumers than it is today" (Caraeff, 2009, presentation). This might seem like a surprising statement from a a major label employee, but it serves as proof that the record companies are well aware of the shift in music consumption habits. To keep the major record companies scarcity-based business model working will require "bureaucratic hierarchies with gatekeepers at every level. Therefore, new artists' access to channels for financing, music production, distribution, and marketing is highly restricted" (Burkart, 2010, p. 22). As digital technologies allow anyone access to all of these channels, new business models form in opposition to the major labels, eliminating the gatekeepers that exist between musicians and fans. There becomes less of an absolute need to sign with a record label once the means of production, promotion, and distribution are available to the musicians themselves. I am interested in those embracing this new empowerment.

METHOD

To understand these issues in the proper context, I will begin by looking at the history of copyright law, and how that relates to the history of recorded music before the widespread adoption of the World Wide Web. I will then focus on new technologies like mp3s and p2p file sharing, and how they have changed the context of music, which will lead to a post-Web analysis of the recorded music industry. I will then look at the major label and RIAA responses to the digital shift, including the passing of the DMCA and the increased litigation against Internet users in the 21st century. I am primarily using scholarly journals, books, and online sources as my reference points. The major labels provide a context and comparison for what will be presented and analyzed in the second half of this research, a new cultural economy of music that exists in contrast to the major label models of commercial distribution.

My research will shift into a macro case study of netlabels and free music culture, which will serve as an example of Web communities that are embracing a shared music philosophy. Free music refers to non-restrictive licensing, meaning the music can be shared and re-distributed for non-commercial purposes legally. Netlabels are a driving force behind free music culture, filtering and aggregating free music which is then distributed on the Internet, bypassing traditional physical distribution practices and releasing music in a digital format, usually for free and under a CC license. However, this definition is by no means set in stone, as most netlabels have many similar characteristics but have different goals and operate in different ways. A lot of netlabel music is distributed free of cost, yet some use a hybrid model of some free and some paid downloads. However, I will argue that the freedom to share is the most important aspect

of this new network of cultural content, while a free price is not necessarily a defining element, just a common one. I will explain the concepts behind free culture, free software, and free music. This will include examples of new licensing models that are built around traditional copyright law, such as free software licenses and Creative Commons. These licenses are allowing programmers, authors, musicians, and media makers to choose exactly what rights they want associated with their work, while ensuring that the work can at least be shared freely for non-commercial purposes.

I will be utilizing a quantitative analysis of literature discussing netlabels and related topics, as well as a qualitative analysis of personal interviews that I have conducted with netlabel owners across the globe. Due to the lack of academic research on netlabels, the primary data gathered from interviews is helpful in portraying netlabels as seen through the eyes of those who run them. I will conclude with a discussion of other CC-licensed music and remix communities on the Web, and what social and cultural implications these communities have for the future of music production, distribution, and consumption. This analysis is important because netlabels and Creative Commons music communities are highly under-researched in academia, and thus a detailed explanation of netlabel history and culture is lacking and needed in critical media studies. Netlabels also present an excellent case study of a music distribution model that encourages sharing. At the end of the paper I will make some declarations for the future of digital music on the Web, specifically focusing on new licensing and distribution models, netlabels, and free music culture.

COPYRIGHT

The United States Constitution (1787) states, “The Congress shall have 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” (Article I, Section 8). This is known as the Copyright Clause, which serves as justification for US copyright and patent laws (Donner, 1992). There are two main ideas that need to be understood before discussing copyright law any further. The first point that needs to be understood is that the Framers of the US Constitution did not see copyright as an inherent right to the author, but rather an artificial concession made to them to promote science and art. This interpretation of the Copyright Clause, that copyright is not a natural right, has been upheld by the US Supreme Court on numerous occasions, such as Wheaton v. Peters in 1834, and then again in 1932 when the court states, “the Congress did not sanction an existing right, but created a new one...the sole interest of the United States and the primary object in conferring the copyright monopoly lie in the general benefits derived by the public from the labors of authors” (Fox Film Corp. v. Doyal, 1932, Para. 3). Thus, we must understand that “copyright's justification relies entirely on whether it provides a necessary and proper means of promoting the general welfare” (Bell, 2009, p. 6). To put it simply, copyright is a public policy tool, not a natural right. The second point is that copyright law should be understood as a deal between the US government and the public. Essentially, “the government spends the public's natural rights, on the public's behalf, as part of a deal to bring the public more published works” (Stallman, 2004, p. 79). This concept is known as the “copyright bargain” (Gillin & Sutter, 2006). It is also beneficial to be aware of the dynamic tension that exists between strong legal rights

giving incentives to create more new works, and strong legal restrictions (against the public/individual user) interfering with the dissemination of those works for the public good (Garlick, 2008, p. 428). This dynamic tension relates directly to a debate that has been going since the notion of intellectual property rights (copyrights, patents, and trademarks) first entered the European vocabulary (Hesse, 2002).

When the Statute of Queen Anne passed in 1710 in Great Britain, the English government had made its first step towards protecting creative works by granting legal monopolies to book publishers (Timmers, 2005). This was necessary due to the invention of the printing press, followed by the industrial revolution, a rise in literacy among middle class Europe, and increasing competition among printers and publishers (Hesse, 2002). Ironically enough, in these days the term "pirate" was used by authors to describe publishers who would publish unauthorized works. The copyright statute did little for protecting authors against this unauthorized publishing, and authors were still demanding reform in the way the publishing system worked (Hesse, 2002). Thus began a long debate that still carries on today on the notion of authorship and how it should relate to copyright law.

Eleven years before the US Constitution was adopted, in 1776 in France, a philosopher and mathematician known as Condorcet was a leading thinker behind the "utilitarian" view on intellectual property. He claimed that the property of literary ideas "is not a property derived from the natural order and defended by social force; it is a property founded in society itself. It is not a true right; it is a privilege" (as cited by Hesse, 2002, p. 35). Those who followed Condorcet's view of copyright believed that there was "no natural property in ideas," and that the only justification for these laws

would be that they are the best possible way to encourage new works to be created, strictly to benefit the public good. This utilitarian concept of encouraging new works to be created for the public benefit would be the premise of the Copyright Clause included within the US Constitution a decade later. On the other side of the debate were thinkers like Diderot and Fichte, who argued that ideas were subjective, and therefore authors had a "universal natural right" to "perpetual property in ideas" (Hesse, 2002, p. 36). Diderot claimed, "literary creation is the substance of the soul and mind, making it the most valuable and genuine type of possession" (Guindon, 2006, p. 156-157). This natural rights view can still be seen clearly today by the RIAA and figures in other media industries, like Jack Valenti of the MPAA who says that "copyright should last forever less one day" (Pollock, 2007).

This evidence shows that before copyright law had even made its way to the United States, there was already an intense debate between the notion of copyright as an individual right to the author, and the notion of copyright as a privilege to the author which has a specific purpose of promoting the public good. "The utilitarian position thus understood the public interest as the highest aim of the law, while natural-rights proponents argued that the sanctity of the individual creator should be the guiding principle of any legislator" (Hesse, 2002, p. 36). This conflict in viewpoints would continue throughout the history of copyright law in Europe, the Unites States, and the rest of the world.

The natural rights viewpoint becomes more and more prominent in legislation within countries that have a strong economy of ideas to export, especially Europe and later the United States (Hesse, 2002). The United States in particular moved further and further

away from the utilitarian view and further towards the natural rights view "as it evolved from being a net importer of intellectual property to a net exporter" (Hesse, 2002, p. 40). Has the adoption of this notion of copyright, as a universal right to the author, served in benefit to the public, or rather to the benefit of media corporations that hold the publishing rights to increasingly large numbers of exploitable copyrighted works? When answering this question it is important to consider the concept of the copyright bargain, which places the public interest first. Stallman (2004) states that "benefit for the reading public is an end in itself; benefits for publishers are just a means toward that end. The first step in misinterpreting copyright is the elevation of the publishers to the same level of importance as the readers" (p. 80). Misinterpretation of copyright law is even more common due to terms like "intellectual property" and copyright "protections," which have altered the public perception of the true purpose of US copyright laws.

Guindon (2006) states,

> Although it is now common to talk about intellectual property of a book, a movie, or a piece of music, this is not always the best way to understand the purpose of copyright. The original copyright laws...were all about making the best possible compromise between favoring creation and securing easy access to knowledge and art. (p. 160)

In our current environment, it could be said that copyright law is favoring creation and duration, while severely limiting easy access to knowledge and art.

Copyright law in the United States was first enacted in the US with the Copyright Act of 1790, which granted rights to authors of books, maps, and charts. The copyright term was 14 years with the option of a 14-year renewal. As new technologies were introduced, copyright law was increasingly extended in both what formats it covered and its duration.

The initial 14-year term was doubled in 1831, and protections were extended to include musical compositions. The 14-year extension was doubled with the Copyright Act of 1909, bringing the total possible term to 56 years (U.S. Copyright Office, 2010). As we will see when analyzing the history of the US music industry, this copyright extension coincided with a huge boom in the newly developed recorded music industry of player pianos, phonographs, and gramaphones. However, "even though copyright was extended to a growing number of media formats, its protection of content still did not directly affect the public, as self-production was financially still far out of their reach" (Timmers, 2005, p. 28). This is the crucial difference between copyright law in a system of scarcity and physical distribution, and copyright law in a system of infinite space like the Internet, where distribution becomes limitless.

Up until 1972, only musical compositions were protected by federal copyright law, not sound recordings. This was because sound recordings "were only readable by machines" (Standler, 2009, p. 20). This changed with the Sound Recording Act of 1971, which granted state law protections to pre-1972 recordings. The term of copyright had been unchanged for 67 years, until the Copyright Act of 1976 was developed and eventually passed through in 1978. Cited as a necessary fix due to new technologies like tape-based sound recording and major motion pictures, this Act extended the copyright term to either 75 years, or the life of author plus an additional 50 years, while also extending copyright law to all works, including unpublished works (U.S. Copyright Office, 2010). Also extremely important was that sound recordings were now protected under copyright, a change that was influenced by the ability of the public to make copies of vinyl records onto magnetic tape. As copyright law stands today, not one sound recording will fall into

the public domain until at least 2067, 95 years after the recordings first became copyright protected (Clarida, 2000). Copyright law was now beginning to lean further away from protecting the public interest and further towards corporate interests, in the name of author's rights (Stallman, 2004). This trend extends much further with new copyright legislation passed in the late 1990's after the widespread adoption of the Web and digital music technologies. The major labels and the RIAA have used these new technologies to justify increasingly extended copyright terms and the criminalization of those who use the technologies to their fullest capabilities. “It is ironic to think that the call for stronger moral rights is based upon the revolutionary emergence of new digital technologies and networks” (Gunidon, 2006, p. 173). These technologies are indeed revolutionary, so much so that past technological shifts in the recorded music industry might not lend much help in predicting the future of digital music. As Chon (1996) points out, the basic principles of copyright, the work principle and the author principle, are increasingly deprecated in the digital world. I now will trace the history of the recorded music industry and different music formats before analyzing the industry responses to the Web and digital file sharing technologies.

RECORDED MUSIC – PRE-WEB

Sound recording first became possible in 1877 with Edison's phonograph invention, a wax cylinder player that could be recorded onto by the user (Morton, 2006). However, for roughly the first twenty years after Edison's invention, the phonograph mainly served as a dictating machine and a scientific tool (Gronow, 1983). One author claims that the recorded music industry officially started when Louie Glass, president of a west-coast phonograph distributor, set up the first coin-operated phonograph in the Palais Royal Saloon in San Francisco on November 23, 1889 (Morton, 2006, p. 23). As the coin-slot phonographs became more popular to the public, there was a growing demand for pre-recorded cylinders. Edison started making these pre-recorded cylinders for the coin-slot operators, but the archaic copying method available at the time allowed for only 200 or so copies of each recording to be produced. At the same time, Berliner had introduced the Gramophone, which could play back pre-recorded shellac discs but could not be recorded onto (Gronow, 1983). The Victor Talking Machine Company was set up in 1901, using Berliner's Gramophone patents to produce and distribute players and discs in the US (Morton, 2006). These Gramophone record discs would soon become the preferred format for records, mainly due to the ability for manufacturers to press thousands of copies from one master disc. This is important, as the means of easily recording or copying music would not be available to the public for another 60 to 70 years, thus leading to what Lessig (2008) refers to as a RO, or Read-Only culture.

Introduced to the public as 'the machine for the millions,' the home entertainment phonograph was officially released by Edison and Columbia in 1896 (Gronow, 1983, p. 54), marking the beginning of music's shift from a public event to a private experience.

In 1899, 151,000 record players were produced in the United States (Gronow, 1983). Lessig (2008) lays out more numbers, explaining that "fifteen years later, that number had more than tripled to approximately 500,000 units," with record sales in the US reaching 27 million in 1914. "By the 1920s, between 33 percent and 50 percent of all households had a record player," and US record sales averaged at 100 million units per year (p. 29). By this time, wax cylinder sales decreased heavily forcing Edison to adopt the Gramophone method of laterally-cut discs (Morton, 2006). While I am focusing mainly on the US recording industry, it is worth mentioning that record sales were seeing growth in other areas of the world as well. In 1915, the Russian record industry sold 20 million copies, while countries like Argentina were importing over 1 million records per year (Gronow, 1983, p. 59-60). By 1929, the UK, Germany, and France were all selling more than 20 million records per year (Gronow, 1983).

Thus, music culture had officially become a "professionalized" culture. "The machines that made this change possible worked their magic through tokens of read-only culture— recordings, or performances captured in some tangible form, and then duplicated and sold by an increasingly concentrated 'recording' industry" (Lessig, 2008, p. 29). The nature of copying in these first years of recorded music is essential in understanding why restrictions on copying made sense and were acceptable during this time. The public did not have the means to make copies for mass distribution, thus restrictions on copying did not have a negative impact on the average music listener and the public interest at large.

The great depression began in late 1929, which hit "even deeper in the record business than in the general economy" (Gronow, 1983, p. 64). Not only were people not buying

records because of financial issues, but when they did want music and entertainment they went to radio and sound film, two other developments of the time that were gaining significant audiences. Edison's Entertainment Phonograph division shut down in 1929 due to the depression and the overpowering market share of the Victor Talking Machine Company. It would take about twenty years for the record industry to fully recover, but by the end of World War II in 1945, the US record industry sales were back up to $109 million (Gronow, 1983). For a quick perspective on the growth that was to come in the US recorded music industry over the next fifty years, by 1965 sales were up to $862 million (Gronow, 1983), by 1980 sales hit $3.6 billion (Gronow, 1983), and by 1998 sales reached an astonishing $13.7 billion (Sinha, Machado, & Sellman, 2010). This growth would be made possible by a number of factors including a partnership with radio, an increase in music retail stores, an increasingly consolidated industry owned by fewer companies, and copyright protections that arguably favor corporate interests.

Going back to post-war US in the late 1940's, the vinyl record is introduced and eventually takes over shellac discs as the most popular format by the 1950's (Morton, 2006). Both the 12” vinyl discs introduced by Columbia, and the 7” vinyl discs introduced by RCA became the norm, and would continue to dominate recorded music throughout the 50's, 60's, and 70's. Throughout this period of time there were a large amount of independent labels that formed in opposition to the majors. This included labels like Sun Records, who were highly influential in country and rock 'n' roll with artists like Johnny Cash and Elvis, as well as labels like Motown who released rhythm 'n' blues music by African American artists like Stevie Wonder and the Supremes to commercial success (Escott & Hawkins, 1992). However, many independent labels

would eventually be consumed by the majors after massive industry consolidation and conglomeration in the 1980's.

Philips introduced the compact cassette to the US public in 1964, a format that would allow for audio to be copied and re-copied easily. This leads to the passing of the Sound Recording Act of 1971, which officially "published" all sound recordings and gave them copyright protections in 1972. While the cassette format caught on for recording and copying purposes at home, in studios, at live shows, and in underground tape-trading scenes, it was not until the commercial release of the Walkman in 1979 that cassette tapes would eventually overtake vinyl records as the preferred music format in the 1980's (Morton, 2006). This marked a turning point for music consumers, as they could now make copies of music for personal use or sharing with friends, or in some cases "bootleg" many copies and sell them illegally. This made a reusable and copyable audio format available to music users for an affordable price, and thus recorded music had become a read-write (RW) medium. "The option to record music onto them made cassette tapes the easiest way to copy, save and share music with friends" (Timmers, 2005, p. 7). However, as we will see in the next section of this paper, digital technologies take the possibilities for sharing to new heights, eliminating scarcity and physical objects from the model, thus allowing one copy to make its way around the globe many times, being copied again and again every time it reaches a new server. This reality will lead to harsher restrictions on copying in the following years.

The cassette tape facilitated a growth in music sharing, with underground tape-trading communities facilitating music distribution for subcultures like punk and hardcore music. These sharing communities were restricted by geographic boundaries, making them much

less of a threat to the music industry than future digital technologies would prove to be, while in many cases also serving as an essential promotional tool for independent and "underground" bands. In 1979, the same year that the Walkman was made available to the public, compact discs (CDs) were introduced by Philips. CDs and CD players became commercially available in 1982, marking the beginning of a shift to digital music formats. In 1987, Sony introduced the Digital Audio Tape (DAT) format. DAT machines could record music digitally onto DAT tapes at resolutions that equal or even exceed the sound quality of audio CDs, and were primarily marketed as high-grade machines for studios. The DAT tape and players were the subject of extreme controversy, as the RIAA saw the ability of the machines to make perfect copies as a huge threat to music sales. The RIAA threatened to sue any company selling DAT players in the US, as well as demanding the devices have restrictions on copying copyrighted recorded music. The lobbying by the RIAA failed, and DAT players and tapes were released by Sony in the US. In 1992, the Audio Home Recording Act would impose a tax on all DAT players and tapes sold in the US, as well as cassette tapes and blank CDs, with the majority of the money collected going to the major record labels. Players could be taxed up to $8 per unit, while 3% of the cost of each tape was taxed as well (Duke, 2002). This can be seen as an unfair solution to the music listening public, assuming everyone is using the technology to create illegal copies. The Act also required all DAT players to employ a copy protection system known as Serial Copy Management that would restrict copies made from a master from being copied again. The Act also included the first anti-circumvention laws, which would be expanded upon much more in 1998 with the Digital Millennium Copyright Act (Duke, 2002). While DAT players gained popularity in studios

for their high-fidelity recording capabilities, they never caught on with average music consumers, mainly due to the high price of devices. Either way, the Digital Audio Tape technology represents the beginning of an ongoing war against the copying and sharing of digital music by the RIAA.

Cassette tapes would continue to be the most popular format for consumers up until the early 1990's. As portable CD players got better and more labels embraced the CD format, CD sales eventually overtook cassette tapes in the early 1990's (BBC, 2007). The compact disc remains to be the most sold music format, but sales numbers are dropping dramatically each year, as I will outline later in this paper. It was during this same period of time that home computers with Internet connections were becoming widely adopted by the public, leading to an eventual paradigm shift in the music industry that will change everything.

NEW DIGITAL TECHNOLOGIES

The history of the Internet can be traced back to 1957, when the USSR launched Sputnik, the first artificial earth satellite (Anderberg, 2007). In response, the US Department of Defense created the Advanced Research Projects Agency (ARPA) to increase science and technology research as related to military advancement (Kristula, 1997). In 1962, Paul Baran of RAND proposed a decentralized packet switched network that could survive a nuclear strike and maintain military control over nuclear arms. This packet switched network began in 1969 when four universities were linked together with 50 Kbps circuits (Anderberg, 2007). For the next twenty years, Internet technologies would be vastly improved. By 1991, the network was composed entirely of T3 lines, which were nearly one thousand times as fast as the previous circuits used twenty years earlier. The previous year, Tim Berners-Lee had written the first web client and server, and CERN subsequently released the World Wide Web to the public in 1992. The World Wide Web was developed as "an internet-based hypermedia initiative for global information sharing" (Berners-Lee, 2010). Berners-Lee is also the head of the World Wide Web Consortium (W3C), which was developed in 1994 as the main standards organization for the Web. In this same year, the Web grew at an amazing "341,634% annual growth" (Anderberg, 2007, Section 1994). In the context of this research, it is extremely important to understand that "the Internet is a copy machine" (Kelly, 2008, Para. 1). As bits of data are sent around the network, they are copied many times over and over again. "Every bit of data ever produced on any computer is copied somewhere. The digital economy is thus run on a river of copies. Unlike the mass-produced reproductions of the machine age, these copies are not just cheap, they are free" (Kelly, 2008, Para. 1).

This is why the Internet as a primary distribution channel for music is in direct conflict with music copyright laws. The Internet "super-distribution system has become the foundation of our economy and wealth" (Kelly, 2008, Para. 3), thus to restrict copying and sharing goes against the very nature of the system that new models of music distribution and consumption are built upon. By the end of the 20th century, the Internet had seen large growth since the emergence of the Web. By 1999, five million domain names were registered, and there were over 300 million people with Internet access (Anderberg, 2007).

Internet users are now connected on a global scale, opening up unlimited possibilities for cross-cultural communication, production, and distribution. This new culture of connected users and media creators has sparked an online movement of collaboration, interactivity, and sharing. This is in stark contrast to traditional media business models of one-way communication where passive consumers are force-fed content through a radio, television, music store, and/or movie screen. We can now see a culture of media users and creators existing on the Web that have taken the production, distribution, and consumption of content into their own hands. In what Tapscott and Williams (2006) describe as "the age of participation," they claim that these "new collaborative infrastructures...allow thousands upon thousands of individuals and small producers to co-create products, access markets, and delight customers in ways that only large corporations could manage in the past" (p. 11). This is a critical point, as individuals and users (remember the public good?) are the ones that will truly benefit from a shared content culture. Tapscott and Williams (2006) go on to say that "these changes, among others, are ushering us toward a world where knowledge, power, and productive

capability will be more dispersed than at any time in our history" (p. 12). This presents a positive outlook on shared culture, insisting that there is indeed a shift of power taking place, with value being created by the sharing and reuse of content. At the same time, this future world that the authors mention is exactly what the corporate conglomerates are determined to prevent from becoming a reality. With the introduction of new digital music formats and the means to easily share those music files globally, the recorded music industry is nearing a paradigm shift at the turn of the 21st century.

The MPEG-1 Audio Layer 3, or mp3, is a digital music format that was developed by the Motion Picture Experts Group and officially released in 1994. The mp3 format allowed music files to be compressed into much smaller capacities, allowing for much faster transfers over Internet connections. The mp3 format began to gain popularity with the release of the Winamp player in 1997, as well as the introduction of mp3.com in the same year. Also in 1997, Microsoft added mp3 support to the Windows Media Player, and shortly after the first portable mp3 players began appearing in 1998 (Ewing, 2007).

Once the mp3 format became widely adopted on the Internet in the late 1990's, there became a need for an efficient method of transferring those mp3 files from computer to computer. Peer-to-peer networking was the answer to that need, and Napster was the first major player on the scene. While different kinds of file sharing networks like USENET and IRC had already existed for some time, Napster was the first to specialize in the p2p model of trading and sharing of mp3 music files. Developed by college student Shawn Fanning in June of 1999, Napster was a music sharing service that allowed users to share mp3 files with one another through a p2p network. Napster used centralized servers for indexing files and users, and while the actual file transactions were made strictly between

users' computers, this centralized model left Napster open to liability infringement charges. The RIAA immediately filed a suit against Napster in late 1999 claiming copyright infringement. However, it could be argued that this lawsuit actually drastically increased the amount of copyrighted materials being shared on the Web, due to the fact that the case becoming public drew many curious people to the service. When the RIAA's lawsuit against Napster was filed in early December 1999, there were approximately 50,000 users of the Napster service. By the end of that same month the number of users had tripled to 150,000, most likely due to media press (Knopper, 2009). The lawsuit between the RIAA and Napster would go on for a year and a half, and by the beginning of February 2001, there were over 25 million registered users of Napster globally, with over 10 million of the users residing in the United States (Knopper, 2009). The music industry attempted to use moral grounds to prevent users from sharing music. On the RIAA's website, Lars Ulrich of Metallica stated that those illegally downloading Metallica's music through p2p file sharing had the “moral fiber of common looters” and that this was an issue between right and wrong. The RIAA president at the time was Hilary Rosen, who stated that a “business model built on infringement is morally and legally wrong,” while others in the industry “likened file swapping to Satan and Stalin” (Marshall, 2005, p. 85). Moral arguments like this were essential to the major labels strategy of curbing file sharing on the Internet. Without the moral argument, there is no justification left for criminalizing file sharing.

As Marshall (2005) explains,

> This approach by record companies – persuading the public that piracy is wrong because it infringes artist integrity – has a much greater chance of success than economic arguments against piracy: because they care little for the profits of large companies, individuals will only stop downloading mp3s, copying friends' CDs, or trading tapes if they think it is wrong. (p. 85)

Napster was eventually completely shut down in July 2001, and went bankrupt and sold off its assets in 2002. However, consumer preferences had already shifted towards digital music, especially for younger music users, and the the framework for music sharing on the Web had already been established.

With Napster shut down, many more file sharing services stood in to take its place. This new breed of p2p uses decentralized servers, making copyright infringement much more difficult to prove in court. Sites and services like Kazaa, Soulseek, Limewire, and BitTorrent enabled file sharing to continue despite continued litigation attempts by the RIAA. It became clear that lawsuits and threats on moral grounds were not convincing users to stop file sharing. Telephone interviews were conducted in 2006 by the Canadian Record Industry Association (CRIA), finding that 66 percent of 13 to 24 year olds have downloaded music files to their computer from the Internet. Among that group, an average of 38% of the music files on their computer were obtained through illegal peer-to-peer music sharing services (CRIA, 2006). Based on the average amount of digital music files that these participants had on their computers, the data “suggests that the average peer-to-peer downloader in the study had roughly 210 songs obtained from these unauthorized channels” (Fisher, 2008, p. 4). The difficulty in prosecuting these

decentralized unauthorized sharing channels lead the RIAA to a new strategy, suing individual Internet users. I will discuss this bold strategy further in the next section.

At the same time, some established artists are embracing file sharing and p2p and using this phenomenon as a way to grow their fan bases and further their careers. One of these artists is the renowned recording engineer, owner of Electrical Audio Studios in Chicago, and lead singer for the band Shellac, Steve Albini. At a Fair Use panel discussion at Southern Illinois University Carbondale in 2009, Albini expressed his views on file sharing and p2p, seeing them as new ways for users to access content. He claimed that this is a "normal" thing for people to do. He states that "we should treat normal life normally instead of formalizing it in any way" (Panel discussion). Albini also mentioned a specific situation where illegal file-sharing of his band's album actually helped them monetarily. Shellac's CD was not readily available in many parts of Eastern Europe, so people there would have to illegally download the music on the Internet if they wanted to hear it. Albini estimates that the band sold approximately one thousand CDs in the region. However, when Shellac went on tour in Eastern Europe, they sold over thirty thousand concert tickets. This was related directly to the fact that their music was available for free to users online through p2p networks, who in turn became fans and purchased tickets for their shows. Albini (2009) concludes, "unauthorized dissemination does not always hurt the artist, many times it is a reward" (Panel discussion). This example shows the Internet as a global promotional tool for music, without any effort put forth by the actual band or artist other than actually making and releasing the music. The users and fans spread word-of-mouth and music files at the same time, acting as the most powerful promotional tool for artists and musicians ever.

Another important technological development is the introduction of affordable home recording and music creation software. Digital Audio Workstations (DAWs) got their start in the late 1970's and early 1980's as expensive, computer based, tape-less digital audio sampling devices. Flash forward approximately twenty years, and the current reality is that any Internet user can easily secure a free copy of audio production software that will allow anyone with a little bit of creativity to make songs. Or that user can choose to legally buy a software package like Pro Tools, Logic, Acid Pro, or Nuendo for an average price of a few hundred dollars, still just a small fraction of what it cost for similar but much more limited functions twenty years earlier. The introduction of the software Acid Pro specifically points to a shift in access to the means of music production. Launched just a year before Napster, Acid Pro came out in 1998 as the first ever audio production software that could automatically adjust the tempo of sound sources to a predetermined beats per minute. This allowed for easy looping and remix capabilities, leading to a boom in amateur music production in the US. Popular software today like Ableton Live takes those looping and mash-up possibilities to another level, integrating many unique instruments, processors, and live performance manipulation tools. Extremely affordable hardware controllers are also available, allowing for musicians and artists to easily manipulate sounds and effects with keys, knobs, and sliders. As these tools became available to anyone and everyone with a home computer, suddenly the professional recording studio was not a necessity for recording and mixing an album, as a simple home or “project” studio is now capable of producing professional musical recordings.

RECORDED MUSIC – POST-WEB

Access to the means of production and distribution is now not limited to only the major labels and publishers, but rather available to anyone with a computer, some free software, and an Internet connection. Some scholars argue that this is a good thing, as it has empowered independent artists and musicians, enabling them to avoid unfair major label contracts and take control of their own production, promotion, and distribution (Kusek & Leonhard, 2005; Burkart, 2010). However, the RIAA sees the Internet as having a negative effect on artists and labels due to digital "piracy". The RIAA website states that "for every artist you can name at the top of the Billboard music charts, there is a long line of songwriters, sound engineers, and label employees who help create those hits. They all feel the pain of music theft" (RIAA, 2010). Equating file sharing with theft is one of the first misconceptions of this viewpoint. As stated by Marshall (2005), "copyright infringement is not theft, it is copyright infringement which is different thing, statutorily and practically. Yet the overwhelming rhetoric of piracy is that of theft and stealing, a conscious mislabeling to emphasize the moral dimension of the activity" (p. 85). Efficiency of distribution and the public interest are left out of the rhetoric of the RIAA's argument, as both have the potential of favoring file sharing over traditional music distribution from a practical standpoint. However, both viewpoints can agree on one thing, that the Internet has become a major hub for music content and consumers are now accessing more of their music online. Almost any song can be found somewhere inside the massive archive of the Web, and thus, "consumers have the broadest range of choices possible. Just as it is for an avid reader in a very large library, the content of music becomes available for individuals to choose rather than available as disc jockeys

choose" (Lessig, 2001, p. 132). This has changed the power structure in the economy of music, ushering in future possibilities where fans, users, and artists can take control away from the labels and back for themselves.

No longer does someone have to drive to the mall or to the their local community record shop to check out a new music release. No longer do they have to rely on radio stations, print reviews, and television networks for the discovery of new music and music-related information on popular bands, songs, and artists. No longer is browsing through songs and albums of unsigned and obscure independent music material something that only insiders get access to. And no longer is the means of production and distribution controlled by major record companies. Negus argued that no one involved in the music industry can predict what is going to be successful, and that "all entertainment corporations can do is struggle to monopolize access to recording facilities, promotional outlets, manufacturing arrangements and distribution systems, and be in a position to appropriate the profits" (as cited by Jones, 2002, p. 217). With the emergence of the Web and digital technologies that allow any computer and Internet user to have the means to produce, promote, distribute, and share music for little to no cost at all, we see that that the record labels have lost their monopolies on these systems. Miller (2008) points out what "Marx said so long ago, that ''all that is solid melts into air''-perhaps he was anticipating the economy of ideas that drives the network systems we live and breathe in" (p. 10). These network systems have shifted power structures, leaving the corporate gatekeepers on the defensive. All the control that remains with the major labels is the ability to manipulate copyright legislation in an attempt to maintain old models of production and distribution while restricting technologies and the users of those

technologies.

This copyright manipulation was best seen in 1998, just twenty years after the Copyright Act of 1976 was enacted. In the midst of new digital technologies that enable efficient and easy copying by anyone with a computer, another drastic extension was made to copyright terms with the Sonny Bono Copyright Extension Act. Copyright terms were extended to 95 years for corporate copyrights, or life of author plus 70 years for natural authors (Lessig, 2004). Even more critical was the passing of the Digital Millennium Copyright Act (DMCA), which was signed into law by President Clinton on October 12, 1998. The DMCA was designed to implement the World Intellectual Property Organization's (WIPO) treaties that had been developed in 1996. Some of the provisions in the DMCA include criminalizing any circumvention of anti-piracy software, requiring webcasters to pay licensing fees, and forcing Internet service providers (ISPs) to remove material from users websites that "appear" to be infringing copyright (U.S. Copyright Office, 1998). This last provision of the Act is extremely detrimental to a user's fair use rights, as infringement does not have to be proven for the material to be blocked or removed. The DMCA states, "Under the notice and take-down procedure, a copyright owner submits a notification under penalty of perjury, including a list of specified elements, to the service provider's designated agent" (U.S. Copyright Office, 1998, p. 12). If the copyright owner follows all the correct guidelines for submitting the take-down request, then the ISPs have no option to but to cover themselves and take the material down. As the DMCA goes on to say, "If upon receiving a proper notification, the service provider promptly removes or blocks access to the material identified in the notification, the provider is exempt from monetary liability" (U.S. Copyright Office,

1998, p. 12). This allows powerful record companies and copyright holders to send letters to ISPs demanding materials be taken down, and without question the ISPs are required to do so if they do not want to be held monetarily liable, even if the website is not actually infringing or is protected under fair use. Not surprisingly, both the Copyright Extension Act and the DMCA were heavily lobbied for in Washington by the RIAA.

After spending years focusing on combating "piracy," the major labels eventually decided it was time to embrace selling music on the Internet, and Apple made this possible with the launch of iTunes in 2003. However, in order for the labels to get on board, they had to be assured by Apple that they were still in control (Lessig, 2008). Thus, digital rights management (DRM), or as the FSF refers to it, digital restrictions management, was seen as the solution. This DRM would restrict the user's freedom by imposing limits on what can be done with a purchased music file, "designed to handcuff users and make copying impossible" (Stallman, 2009, para. 5). These limitation-imposing technologies are reaching beyond the intended scope of copyright law, in turn restricting end users in the name of artist's rights. DRM has been included on products from just about every media industry, including the Content Scrambling System on DVDs introduced in 1996, as well as the cable card system and broadcast flags for television. Apple developed a DRM system known as FairPlay, which would be imposed on all media content sold through the iTunes store. This restricted the amount of computers a file could be played on, as well as the amount of times it could be burned to a compact disc. This element of control was enough to get the labels to sign a deal with iTunes. Relating to Kelly's (2008) generative qualities, iTunes is a perfect example of how convenience and access can indeed add value to a digital file that is already essentially

free of cost. The consumer isn't really paying for the digital file itself, they are paying for the added value that iTunes provides along with that digital file, such as ease of search, prior relationship with Apple, and knowing the file will be of good quality. Without those added values, there is no reason that the consumer would not just go to BitTorrent and download the music for free. However, the FairPlay DRM restrictions and Apple's proprietary AAC format are not user-friendly, and have thus given plenty incentive for users to download from unauthorized channels. As a result of this realization, all music sold through the iTunes store is now DRM free (iTunes, 2009). There are other authorized digital music stores that have found a lot of success as well, including eMusic and Amazon MP3. In 2006, approximately 500 million digital music files were purchased online. However, an estimated five billion songs were traded on p2p file sharing services. As of 2009, the most popular of those services are BitTorrent, Limewire, and eMule. While digital downloads through label-authorized channels now comprise nearly 20 percent of the overall revenue of the music industry, they have yet to make up for the drastic decline in CD sales.

In 1998 there were six major labels that held over 75% of recorded music sales worldwide. Now there are only four majors, and they hold over 85% of recorded music sales worldwide. Out of these Big Four major labels, “Universal, Sony, Warner, and EMI, none has got to grips with the Internet revolution that has ravaged their complacent and often collusive dominance” (Lebrecht, 2008, Para. 2). The current paradigm shift taking place in the music industry has forced the Big Four to re-analyze their business models in an attempt to maintain profits while struggling to control their copyrighted music. They have seen a large drop in sales over the past decade, with the RIAA estimating that

“music sales declined from $13.7 billion in 1998 to $8.5 billion in 2008” (Sinha, Machado, & Sellman, 2010). This drop in sales had a huge effect on music retail stores. From 2006 to 2009, over 500 independent music stores closed, and huge chains like Tower Records and Virgin Megastore were liquidated due to drastic drops in music sales (Christman, 2010). The major labels and RIAA see this as a direct effect of the Internet and “music piracy,” and have thus gone to great lengths to protect their traditional model of selling music, including thousands of lawsuits against Internet users (mostly college students) for illegal file-sharing (Burkart, 2010, p.70). Stallman (2009) explains, “it appears the only way to stop people from sharing is with a harsh War on Sharing. Thus the record companies, through their legal arms such as the RIAA, sue teenagers for hundreds of thousands of dollars for sharing” (Para. 5). This is indeed a bold strategy, using litigation and scare tactics against your own customers in an attempt to curb music sharing on the Web. Lessig (2008) claims that “as of June 2006, the RIAA had sued 17,587 people, including a twelve year old girl and a dead grandmother” (p. 39). In addition, the RIAA sent thousands of warning letters to university students, threatening legal action against those who have shared music files illegally. Cary Sherman, president of the RIAA, claims that the war on sharing is justified, calling it “tough love” by “holding people personally and financially accountable for the theft of creative works” (Sherman, 2007, Para. 3). This is another example of the mindset of the RIAA, equating copyright infringement with theft when in reality they are two different things. Sherman (2007) says that the RIAA's “anti-piracy” campaign has created a “legal marketplace that is far better because of what we've done,” citing statistics claiming that “digital revenues doubled in 2006, from 8 percent in 2005 to more than 16 percent” (Para. 8). However, the

logic that this is due to anti-sharing campaigns ignores the fact that authorized digital sales growth can mainly be attributed to Apple's iTunes software and the growing popularity of iPod music devices, and the fact that Apple held an 88% share of digital music sales that year (Faas, 2006). Sherman (2007) went on to say that what the RIAA really wants to be doing is "helping artists make great music that we can distribute in lots of exciting new ways that music fans want" (Para. 17). In response to this last quote by Sherman, Lee (2007) responded in an article on TechDirt entitled *Lawsuits Don't Create New Markets*, stating that "their approach has been the opposite: doing their best to sue new music technologies out of existence and sharply limiting the ways consumers can listen to the music they want" (Para. 1). This is in line with the argument that it is not illegal file-sharing and digital technologies that are to blame for the drops in CD revenue, but rather the major labels inability to adapt to consumer preference shifts and reform their business models to embrace digital distribution, while simply treating the Web as a new distribution channel for the same old model (Kusek & Leonard, 2005; Knopper, 2009; Burkart, 2010). The use of copyright law to criminalize music sharing goes against the very nature of the law itself. This view argues that copyright law has become unbalanced, favoring corporate interests over public interests.

Guindon (2006) claims,

> Only a well-balanced copyright system, one that is flexible and open to human interpretation, can ensure an optimal flow of information. The alternative is a sad one: a thick, rigid legal system based on technological gates will defeat the hopes associated with the digital revolution or, at the very least, will greatly limit its potential. (Guindon, 2006, p. 173)

While the RIAA and the major labels continue with their argument that file sharing and music "piracy" are to blame for decreases in revenues, some studies have actually found that file sharing does not have a negative affect on music sales. Harvard professors Olberholzer-Gee & Strumpf (2007) tracked 1.75 million p2p downloads during the last four months of 2002, comparing and contrasting music files that were downloaded on the sharing networks with their corresponding US sales numbers during that period of time. The study's results concluded that it would take over 5,000 downloads to equal a lost sale of just one physical CD. Some of the files shared actually showed possibilities for a positive effect on sales, which would be known as the sampling effect.

Olberholzer-Gee & Strumpf (2007) came to a conclusion that,

> File sharing has no statistically significant effect on purchases of the average album in our sample. At most, file sharing can explain a tiny fraction of this decline (in music sales). Alternative factors (for the decline in music sales) include poor macroeconomic conditions, a reduction in the number of album releases, growing competition from other forms of entertainment such as video games and DVDs, a reduction in music variety stemming from the large consolidation in radio along with the rise of independent promoter fees to gain airplay, and possibly a consumer backlash against record industry tactics. (p. 24)

The RIAA was reluctant to accept the results of the study as factual, quickly citing their own numbers that show negative impacts on CD sales (Borland, 2004). The problem with accepting numbers from the RIAA is that they have something to gain from skewing results in their favor, while the Harvard professors do not. While the effects of music piracy continue to be argued, the fact remains that the Internet has forever shifted the

power structure in the recorded music industry.

No longer does an artist or band have to rely on the deep pockets of the majors to be heard by large audiences, in turn giving up a massive amount of artist's rights and future profitability. A typical record deal with a major label will give the label exclusivity to the artist or band for a certain extended period of time. This allows the label to have the option to continue promoting and releasing material from the artist if they are financially successful, otherwise the label will just drop them after the first album release if unsuccessful. The typical record deal is a points-based system, and in many cases can leave artists with a salary equivalent to that of fast food service. The artist will "receive" an average of 10 points, meaning 10% of the retail price of a CD. This is where it begins to go downhill for the artist. The label uses the artist's royalty points from music sales to recoup any costs incurred by the artist during the process of recording and releasing an album, including the up-front signing money, recording costs, manufacturing costs, half of video costs, promotion, among other things. Also, managers, producers, and lawyers all get cuts of the money before the artist is paid. Due to the nature of these deals, many major label artists never recoup the costs of their record. The labels use cross-collateralization, which takes royalties from the second album to recoup costs for the first, if they decide to even go on with a second album. All of this leads to a system where labels get rich and artists live on pennies. Even worse is the new breed of record deals throughout the past decade, where it has become commonplace to sign new major label artists to a "360 deal." Some research has claimed that these deals actually violate unconscionability laws as they take away essential rights of the artist or band involved (Brereton, 2009). A 360 music deal is a contract between a label and an artist or band that

gives the label a share of all profits associated with that musical act, including music sales, merchandise sales, and concert tickets (Arrington, 2008). Warner Music Group now requires 360 deals from all new artists that they sign to the label, with CEO Edgar Bronfman arguing that due to declining CD sales the label would not be able to continue promoting artists without taking profits from all aspects of the musical entities they represent (Arrington, 2008). One might ask why anyone would even consider signing one of these deals that essentially strips them of their rights. So if we are going to talk about "piracy" and how it affects artist's rights and their ability to profit for their work, we should first look at the real "pirates," the major labels. If a large amount of artists under major label contracts never receive royalties from the sales of their recorded material, while the labels make huge profits and disguise it with clever accounting, then we can begin to understand that the "war on sharing" is really in the interests of maintaining control for the large corporations, not the creative people behind the music (Stallman, 2009).

The reality of file sharing on the Web brings the question of whether or not these activities can be monetized by the recording industry. The EFF (2008) supports a possible future model known as voluntary collective licensing. They explain that voluntary collective licensing, or blanket licensing, would give copyright holders, musicians, fans, and computer users the ability to opt-in to a legal music sharing system. Artists and labels could choose to make their music available, and Internet users can choose to pay a small monthly fee to have legal access to that music. The labels would set up a number of collecting societies, and the money collected would be divided among them according to the popularity of their music. This same system was set up for radio, with collecting

societies like ASCAP and BMI serving as the intermediary between radio and music copyright holders (Kretschmer, Klimis, & Wallis, 2009). Initially radio was seen as a negative for the music industry, with broadcasters being likened to "pirates" (EFF, 2008). Then the collecting societies were formed, and broadcasters who wanted to play music could pay a small fee to become legal. What followed was a symbiotic relationship between the radio and music industry that helped both increase profits. The EFF (2008) argues that a similar system could be used to monetize music file sharing on the Internet. For collecting the money, users would have the option of purchasing monthly plans online or with a simple fee added to their Internet service bill. For dividing up the money collected from the monthly fees, the EFF proposes both anonymous monitoring of file sharing networks by companies like Big Champagne, as well as using volunteers "to serve as the digital equivalent of Nielsen families...which is something Last.fm subscribers are already doing" (EFF, 2008, Para. 6). However, there are a number of issues that could make this less of a solution and more of a problem.

Rose (2008) explains that the music industry is already proposing a similar solution, using ISP taxes to compensate copyright holders of music being shared online through unauthorized channels. This solution is being lead by the head digital strategist for the major labels, Jim Griffin. It seems that Griffin has the right intentions, to help music fans who share become "legal," while giving the labels a way to monetize file sharing. Griffin is the head of Choruss, a service backed by Warner Music, that plans on using universities as the test subjects of a collective licensing model (Griffin, 2008). The problem with collective licensing is that it does not add any value for the user. The record labels will not be providing something new and useful for Internet users with collective

licensing, they are simply providing the user with a promise to not sue them. But what about the artists and labels that don't sign on? Or what about the songwriter who can still sue because his copyright is different than the labels? Collective licensing would cause more confusion than good. Internet users who paid the fee would consider themselves in the clear, when in reality they are still as liable as ever, just not to the major record labels who endorse collective licensing. However, I do see these blanket licenses as a serious possibility for the future path of the majors, attempting to cash in on file sharing. If this did get implemented, what would keep the majors from inflating the license costs? The EFF (2008) claims that the market will determine the price for such a service over time. As was seen with the introduction of VHS, when you charge to much for a format or service, people won't buy into it. When VHS tapes cost $90, people were copying them and not buying them. When the cost came down to acceptable market prices, people bought into it and were willing to pay (EFF, 2008). This is why a simple $5 to $10 monthly fee would be the most likely scenario for a music licensing fee. But as mentioned before, this does not empower users in any way, but rather serves a payoff for the major labels to turn their heads the other way.

So what can artists do that are tired of waiting for reform and want to allow their fans to share music now? This is where exciting new licensing models for creative content can offer alternatives to traditional copyright law. I will now introduce free culture and Creative Commons, outlining a new cultural economy of music sharing on the Web.

NEW ALTERNATIVE – FREE CULTURE

When the means of production and distribution become available to everyone with a computer and a little bit of creativity, as mentioned before, there become possibilities for building large pools of works that benefit culture. However, under current copyright law, many of the things that users would like to do with these creative works would be illegal, such as sharing or remixing. This is where the notion of free culture comes into play, existing as a present-day "gift economy" (Hyde, 1979) or "sharing economy" (Lessig, 2004). Free culture advocates are using new kinds of licensing that reserve only some of the rights of the author as granted by copyright law, while giving up some rights to the public. The idea is that the author of a specific work should be able to maintain his copyright, including his right to exploit the creative work, while at the same time the public should have the ability to do things like share that work freely, build upon it, and re-share their modified version with the world. Lawrence Lessig wrote a book in 2004 titled *Free Culture*, explaining this philosophy and calling for reform in limits that copyright laws put on creativity and sharing.

Lessig (2004) states,

> For the first time in our tradition, the ordinary ways in which individuals create and share culture fall within the reach of the regulation of the law, which has expanded to draw within its control a vast amount of culture and creativity that it never reached before. The technology that preserved the balance of our history has been undone. The consequence is that we are less and less a free culture, more and more a permission culture. (p. 8)

Free culture advocates, including scholars, lawyers, writers, artists, musicians,

photographers, film makers, and more, are all attempting to shift ourselves away from the permissions culture that we have become, and towards a creative culture of freedom and collaboration.

We can trace this free culture movement to programmer, advocate, and writer Richard Stallman, the leader of the Free Software Foundation (FSF) and the developer behind the GNU operating system. Stallman began working at MIT in the Artificial Intelligence Lab in 1971 as a staff system hacker, a programmer who would improve on computer systems by being clever with code. Stallman describes the AI Lab as a software-sharing community that would freely build upon the work of others (Stallman, 2004). However, in the 1980's the hacker community at MIT fell apart, and proprietary software became the norm. Sharing was no longer considered acceptable, as software developers used copyright law to justify a closed-system of production and distribution (Stallman, 2004). Stallman came to point where he had to make a decision, either become a part of the proprietary software world, or find a way to make the software-sharing community concept of MIT live on. He chose the latter, determined to create an “free” operating system that could be shared and built upon freely, which would be known as the GNU project. In order for software to be free, it must follow four basic principles, of which price is not one. Freedom is the “free” in free software, not price.

The four principles as stated by Stallman (2004) are,

1) You have the freedom to run the program, for any purpose.

2) You have the freedom to modify the program to suit your needs.

3) You have the freedom to redistribute copies, either gratis or for a fee.

4) You have the freedom to distribute modified versions of the program. (p. 20)

With these ideals in mind, Stallman quit MIT and set out to develop this operating system, which would be known as GNU. He would also develop a license for that system that would echo the principles of free software listed above, which would be known as the GNU General Public License, or GNU GPL. In 1985, FSF was set up by Stallman to embrace this philosophy and promote free software development around the world (Stallman, 2004). As parts of the GNU system where developed over time, they were released to the public in pieces, rather than waiting for the whole system to be complete. This allowed for parts of the system to modified and improved over time, before the entire system was even available as a whole. By 1990, the system was nearly complete, minus a final crucially important piece known as the kernel. In 1992, Linus Torvalds' Linux kernel was partnered with the GNU system, resulting in the first completely free operating system for computers, known as GNU/Linux (Stallman, 2004). The main idea is that users of this free software are enabled to share and modify software code for the benefit of the entire computing world. “Free software is a matter of liberty, not price. Free software is a matter of the users' freedom to run, copy, distribute, study, change and improve the software” (FSF, 2010, Front page). The philosophy caught on, and new programs were created and improved under free licenses at a rapid pace.

Over time some developers have adopted the term “open-source” as an alternative to free software. The Open Source Initiative (OSI) was formed in 1998 as the main promoter of this view. They focus on the efficiency of the software-sharing model, without the ethical and social concerns of freedom as the reason behind the practice (Weber, 2004). Many open-source licenses do not require the modified versions to be free software, meaning you can modify the code and then make it proprietary software. The

open-source camp is only concerned in making powerful and reliable software, not promoting user freedom and other ethics associated with free software. Stallman (2005) explains in an interview that free software is a movement, while open-source is "more a collection of ideas, or a campaign" (Fourth question). Regardless of these differences, I see both movements as positive for society and the public at large. Both free and open-source software present alternatives to proprietary systems that limit the abilities of computer users, thus giving control back to those users.

The free software movement has now made amazing progress since its beginnings with GNU. As of March 2010, there are millions of computers users on the GNU/Linux operating system (Stallman, 2005), thousands of programs using free and open-source licenses, and 44 different specific licenses available to programmers that comply with the FSF free software definition (FSF, 2010, Licenses), as well as many more open-source licenses that allow software and code to be shared, but do not fit the definition of "free" software. These licensing models present a perfect example of how sharing and collaboration can enrich our cultural economy. By combining the viewpoints of free software and the viewpoints of open-source software, we can see that sharing and collaborative production can not only provide a social benefit to society, but also provide a more efficient model for creating and distributing works. Thus it was realized that these ideals could be applied to creative works other than software, such as images, music, and video, and this is exactly what happened with the introduction of Creative Commons (CC) licenses. CC licenses promote the "some rights reserved" philosophy and represent the norm for netlabel music licensing around the globe (Galuszka, 2009). I will outline the basic principles and features behind Creative Commons licenses, which will then be

followed by an analysis of netlabels and free music culture on the Web.

CREATIVE COMMONS

Creative Commons was founded in 2001 by Lawrence Lessig, along with a group of cyberlaw and copyright experts, as a non-profit organization that provides "some rights reserved" licenses for authors and media makers (Garlick, 2008). These licenses would give artists a chance to grant users the ability to do more things with their work than copyright law currently allows. CC released their first suite of core licenses in December of 2002, and within a year there were over 1 million licenses in use (Garlick, 2008). The Creative Commons website estimates that by 2008 that number had grown to an astonishing 130 million works in use that are published under CC licenses (Creative Commons, 2010). It is also estimated that approximately two-thirds of these works allow derivative works to be made from the original source material, providing a massive Commons of works that can be re-used, re-interpreted, and re-mixed. Hartmann (2004) states that "the shift away from identifying music with commodity products and towards a community-interaction based framework closely aligned forward-thinking artists with the principles of Creative Commons" (p. 3). These new licensing structures filled a void that was missing for creators to have a choice in how they license their work.

The ability to specify how content can be used, or reused, has provided a launching pad for the growth of remix communities, large databases of content, and a shared music culture reflected in the netlabel model that I will analyze later in this paper. These licenses can give music a long and rich life by allowing it to be shared and reused over time. This new format is promoting the idea of a shared culture, and has completely reinvented the way that a lot of new artists, writers, museums, and musicians, to name a few, are looking at protecting their works.

The Creative Commons website (2009) states,

> Too often the debate over creative control tends to the extremes. At one pole is a vision of total control — a world in which every last use of a work is regulated and in which 'all rights reserved' is the norm. At the other end is a vision of anarchy — a world in which creators enjoy a wide range of freedom but are left vulnerable to exploitation. Creative Commons uses private rights to create public goods, and offer creators a best-of-both-worlds way to protect their works while encouraging certain uses of them — to declare 'some rights reserved'. (Front page)

Many scholars argue that we must invent a new copyright law that rewards creativity without inhibiting new forms of consumption, use or cultural exchange (Poster, 2006; Stallman, 2009; Lessig, 2008; Burkart, 2010). I agree with this view, but the problem remains that major media companies have strong lobbying powers in Washington, making it very difficult to push through copyright reform that would ultimately take control away from large companies. This new copyright law that we wish for will not become a reality anytime in the near future. If anything, we will see the continued trend of extended copyright regulations. However, the point is that authors of creative works now have choices. Creative Commons offers "simple legal and technical tools to publish their content more flexibly than is allowed by 'all rights reserved' copyright protection. The tools can be utilized to create a public good—content that is freer to access, share, and remix" (Garlick, 2008, p. 432). These tools are essential for the growth of a free culture of creative works. I will explain the different CC licenses that are available to users before moving on to a case study of netlabels and free music culture.

With the exception of the public domain CC license known as CC0, which gives up all

author's rights, all of the Creative Commons licenses start by requiring that the work is at least able to be shared freely for non-commercial purposes, and that attribution is given to the original author, signified with "BY" (Creative Commons, 2010). Then one can choose to allow commercial uses of the work, derivative works, and whether that derivative work must be shared in the same way, similar to free software licenses. According to the Creative Commons licensing page (2010), this results in a total of six main CC licenses, including Attribution (BY), Attribution-No Derivatives (BY-ND), Attribution-Share-Alike (BY-SA), Attribution-Non-Commercial (BY-NC), Attribution-Non-Commercial-Share-Alike (BY-NC-SA), and Attribution-Non-Commercial-No Derivatives (BY-NC-ND). This diverse range of options give authors/artists the ability to choose exactly what rights they would like have associated with their work, while ensuring that the work is at the very least freely sharable for non-commercial purposes. This is the most important right that music users should be granted in the digital age. It is also important to note that Creative Commons licenses are being used for much more than just musical works. CC licenses are now used for certain projects by the White House, Wikipedia, the Public Library of Science, Google, many universities, and of course writers and media makers of all types (Creative Commons, 2010). This is ensuring that millions of works created now are available to our future generations, without the limits and restrictions imposed on users when trying to access, share, and use traditionally copyrighted works.

Now that I have outlined the ideals and history behind free culture and Creative Commons licensing, I will move to a focused analysis of netlabel culture. Netlabels have become what I like to consider the "peer review" of free music culture. They hunt down and filter the best CC artists they can find, and release the music under free licenses that

encourage sharing. Before analyzing netlabel culture as it exists today, we must first understand the historical roots behind it, dating back to roughly twenty-five years ago.

NETLABELS – HISTORY

During the early to mid-1980's, a collective of primarily teenage boys "formed possibly the earliest transnational networked digital subculture that centered around creating artifacts: the demoscene" (Carlsson, 2009, p. 16). The demoscene is essentially a subculture of hackers, computer programmers, and musicians who make "demos," or audio-visual presentations that run on a computer. This networked culture of creators historically shared their demos through Bulletin Board Systems (BBS), which were computers with special software that were run by a sysop, or systems operator. These BBS computers allowed other users on other computers to connect through a phone line and a modem. Users could then send and receive messages, upload and download files, and read bulletins. Walleij states that "already in 1979, North American Apple II software crackers were organized in modem networks to exchange data" (as cited by Carlsson, 2009, p. 16). This was essentially a pre-Web version of peer-to-peer networking. Everyone involved in this community freely shared their work with others with no restrictions attached, as the main goal was respect among their peers, not financial gain.

The earliest examples of demos were known as crack-intros or cracktros, which were the graphical signature of a cracker that was added on to the start of a "cracked" game, or a game that had the copy protection removed. Over time these signature intro-screens became more elaborate as crackers saw an opportunity to show off their programming skills. By 1985, stand-alone demos started to emerge that were not in any way associated with cracked games, hence the beginning of the demoscene as we know it today (Carlsson, 2009). It is important to keep in mind that this scene was using computers as their primary production and distribution tool for creative content, several years before

the World Wide Web had even been developed. The computer of choice among this scene was the 8-bit Commodore 64 which was released in 1982, a computer intended for gaming that ended up selling more than 20 million units by the time it was discontinued in 1993 (Collins, 2006).

Demos were developed by demo groups, which were groups of programmers (coders), graphic artists, and musicians who would pool their talents together to create demos. The music was made using tracker software, and was usually added after the code and graphics were complete (Carlsson, 2009). Tracker software "offered simple arrangement and effects processing capabilities for a limited number of sample based instruments. Constraints of computing power imposed a distinct low-fidelity aesthetic on most productions" (Hartmann, 2004, Flashback section). This aesthetic is still visible today within the chip music scene, a sub culture that creates 8-bit music, sometimes with machines that have limited capabilities (like phones or hand held gaming devices), pushing the boundaries of the hardware to create interesting music. The chip scene is still thriving today, with over 16,000 registered users at 8bitcollective as of February 2010, which is "the first completely open chiptune-related media repository and file sharing community," allowing for all music contained on the site to be downloaded and shared freely (8bc, 2010). As computer technologies got better, and the 16-bit Commodore Amiga was released, tracker music began to thrive. "The tracker scene got started when Karsten Obarski developed the first tracker program for the Commodore Amiga: Ultimate Soundtracker" (Timmers, 2005, par. 1.1). Communities of tracker musicians and fans began setting up networks for sharing their musical works, leading to the creation of Internet module groups such as KFMF, Monotik, and Tokyo Dawn (Sauer, 2008). These

module groups represented the early seeds of netlabel culture, and Monotik and Tokyo Dawn would actually go on to be two of the most well known netlabels ever. Vince Fugère, who ran the now-defunct Camomille netlabel, talked to Phlow (Sauer, 2008) about his roots in the BBS scene. Fugère mentions the underground community feel of the scene, and how excited he was after first discovering music disks containing strange file extensions like .mod or .it that could be played back using special Mod players, which by nature "exposed its musical source code - the complete sequencing information as well as any sound samples employed - to the public for inspection" (Hartmann, 2004, Flashback section). While Hartmann (2004) argues that because of this and the lack of financial stakes in the scene, music was freely shared and re-used. However, Carlsson (2009) counters that argument by saying sampling and re-use of music was actually frowned upon within the demoscene and Internet module groups. Carlsson's research stressed the necessity to be "original" in the scene, and that the samples a tracker musician used in their pieces essentially defined their sound. Regardless of the sampling issues, tracker music was completely free to be shared.

By the late 1990's, the module scene started to take advantage of new technologies like mp3, music production software such as Cubase and Reason, and of course the Internet. Fugère goes on to say that "as we all got better (Internet) connections, the module started to die out and hence, when the group owners stop calling their organizations music groups or tracker groups, the name netlabel surfaced" (Sauer, 2008, p. 2). The mp3 format not only gave these musicians the freedom to add analog sounds to their creations like synthesizers and vocals, but also took up less amount of space than the previous Mod format. The mp3s could also be played back using standard media players

that most Internet users had access to, as opposed to the Mod files which required a special player. This opened the door to reaching a much larger audience, thus lifting these musicians out of the hidden corridors of BBSs and FTPs and making their music available to a global audience.

NETLABELS – PRESENT AND FUTURE

Netlabels now exist in a digital environment where a large amount of people are sharing creative works freely online. However, netlabels differentiate themselves from an individual artist or band releasing music on the Internet. Using an academic analogy, I like to think of netlabels as the peer-review of free music culture, as mentioned before. While anyone can post their works on the Internet and share them freely, which is a good thing, there is a still a need for filtering and aggregation of high-quality music that people are interested in downloading and supporting. Netlabels can fulfill this role, acting as distribution portals for certain niche styles of music like electronica, house, dub, glitch, lo-fi, acoustic, and experimental.

Timmers (2005) explains,

> Netlabels are a protest sign against the over-commercialized music industry where money talks, and against the decreasing public sphere. They turn the spotlight on important music that was ignored by the commercial four (i.e. four large companies owning ninety percent of the industry), and put the artists again both in control and in touch with their listeners. (p. 9)

Some netlabels build reputations over time as having a certain niche audience, while others are more diverse in the styles of music they release. Either way, the netlabel model provides artists with a way to come together as like-minded creative people, and create a venue for displaying their works to a larger public. Timmers (2005) goes on to say, "netlabels are enlarging the public domain – decreased by copyright laws – by using creative licenses to offer artists the chance to showcase their work without any legal limitations or artistic restrictions" (p. 5). It needs to be understood that all netlabels

release original music by artists who are willingly sharing their works freely with the public. Over ninety-five percent of netlabels use Creative Commons to license the music that they publish on their sites (Galuszka, 2009). By releasing music on a netlabel, you are encouraging people to download, share, and spread the music as wide and far as possible, and in some cases reuse and remix the original work.

Patryk Galuszka (2009) conducted an Internet survey on netlabels in 2008, sending surveys to 650 functioning netlabels that he identified on the Internet. He received completed surveys back from 339 netlabels from around the globe. He has made his research available on the Web under a CC license, allowing me to freely access the document and draw valuable data from his findings for my own research. According to Galuszka's (2009) findings, there were only ten netlabels surveyed that existed before 1999. This picks us up right where Fugère (Sauer, 2008) left off, with his description of the music groups and tracker groups changing to netlabels in the late 1990's. However, with the growth of mp3 and p2p technologies throughout the next couple of years, that number quickly rose to 76 by 2003, and then boomed into the hundreds over the next few years. Galuszka (2009) attributes this to the “introduction and growing awareness of Creative Commons licenses” around 2003 (p. 2). Creative Commons provided a licensing system that made sense for netlabels and free music on the Web. By attaching an appropriate CC license to the work, all of the confusion is eliminated for the user in regards to what they can do with the work. This gives a sense of protection to artists that might otherwise be unwilling to release their work on the Internet with no license attached, thus allowing netlabel culture to grow immensely throughout the course of the past six years. In 2004, Hartmann stated that the Internet Archive held catalogs of over

130 netlabels, and a total number of 3,275 recordings available for download (p.1). Now, six years later, as of March 2010, the Internet Archive holds over 1,000 netlabel catalogs, or sub-collections, and has a total number of 23,363 recordings available for download (Internet Archive, 2010). This is a massive jump in numbers for such a small period of time.

Due to the nature of the tracker music scene, the majority of netlabels were, and still are, rooted in electonic music, with Galuszka's study showing that nearly ninety percent of respondents claimed to have released some form of electronica music (p. 5). Electronic music has historically been an underground genre that rarely sees mainstream success. Due to the niche nature of electronic styles of music, netlabels can play an important role in delivering unique musical works that would not otherwise be available through mainstream channels. As Timmers (2005) explains, netlabels "are diversifying and transforming the music market by publishing kinds of music that previously went undistributed and keeping them open for further use" (p. 5).

Over seventy-five percent of the netlabel respondents reside in Europe, fifteen percent in the US, with the other ten percent spread out across the globe (Galuszka, 2009). "Most of netlabels declare that they are non-commercial organizations aimed at dissemination of interesting music" (Galuszka, 2009, p. 6). As mentioned before, over ninety-five percent of respondents claim to publish the music they release under Creative Commons licenses. The most popular CC license used by netlabels is the BY-NC-ND, or music sharing license, with forty-four percent of respondents picking this option. The second most popular is the BY-NC-SA license, used by twenty-four percent of survey respondents (Galuszka, 2009). The main difference between these two licenses is the right to create

derivative works, with the first and most popular option not allowing remix and appropriation.

Many netlabels are run as strictly non-profit organizations, making little to no money from the distribution of their music. However, some netlabels are converting to what I will describe as a hybrid model. These netlabels are offering either paid downloads, exclusive content, or physical products along with occasional free downloads. There are convincing arguments coming from both distribution models. Out of the 339 netlabels that responded to Galuszka's (2009) survey, only 5 percent stated that earning money is "very important." Due to this, he claims that "it is quite possible that netlabels should not be compared with traditional record labels at all, as most of them are organized around different, non commercial principles" (p. 9). Timmers (2005) agrees, claiming that netlabels and traditional labels "resolves around a similar core. This center is musical content, but both universe's definitions of it, and their production and distribution methods, are very different from each other" (p. 9). I spoke with the owner of Peppermill netlabel, Peter K., about his non-profit model of distributing music.

He explained,

> I would rather work in the real world for stretches of time, and take those funds and use them to finance my little netlabel. Keep art and money separate. Not that I have anything against artists making a career out of their talents, of course not, but that's not my world. And that seems to be a defining characteristic of netlabel owners (2010, Personal communication).

This philosophy along with a knack for bringing together interesting collaborations, Peter even gets commercial label artists to release music for free on his projects. He told

me that he likes “to encourage the pros to exercise their creative muscles in doing something purely for art's sake,” and at the same time he says he wants to do the reverse, “to get more amateur talents to push themselves and possibly make connections with people that can help take them to the next level” (2010, Personal communication).

On the others side are netlabel owners that are going against the defining characteristic of the netlabel model, music with a free price, and looking for ways to make money while still embracing shared music ideals. Volker Tripp of the netlabel iD.EOLOGY told me that he sees monetary incentives for netlabel artists as an important aspect for the future of netlabel culture. He states that, “a monetary perspective will help netlabels to be perceived as a full-blown alternative to, say, conventional independent-labels. It will help bind quality musicians to them (netlabels) instead of seeing them (artists) wander off to conventional labels once they have built up a considerable audience” (Tripp, 2010, Personal communication). While I totally respect and understand the viewpoints of netlabels that want to keep music and money completely separate, I definitely see the positive aspects of creating a netlabel model that can facilitate free music culture while also providing opportunities for monetary incentives to artists.

Due to a lack in academic research on netlabels, I felt it necessary to communicate directly with netlabel owners around the globe. This primary research helps in providing a in-depth look into the motivations behind running a netlabel, as well as understanding the mindset of these individuals that contribute so generously to free music culture.

NETLABELS - INTERVIEWS

Nik, also known as 4T Thieves, runs the long-standing net label known as Kahvi Collective, which has released 284 albums from over 140 different artists since 1997 (Kahvi, 2010). Nik explained to me that his roots are in the demo scene, stating that "Many of the artists roots are in the demo scene or tracker scene...a scene that breeds talent is always a good thing," speaking specifically of all the artists affiliated with net labels that have roots in the demo and tracker scenes (Personal communication, 2010).

According to Nik,

> Netlabels will always be a niche market. After all, the general listener of pop isn't interested in free music. Electronic music audiences tend to be more of the intellectual edge and generally are creative, artistic or more interested in the media than the usual iPod owner. (Personal communication, 2010)

This brought up an interesting assumed correlation between electronic music and netlabels. I wondered if genre, particularly electronic music, being so closely tied to netlabel culture could possibly restrict its growth. He stated that "electronic music goes hand in hand with home studios. There are some acoustic labels out there, but artists creating music with authentic instruments are a much smaller group" (Personal communication, 2010). Kahvi Collective is one of the originators of netlabel culture, so hearing Nik's perspective was very interesting.

I also spoke with the netlabel known as Archaic Horizon, which has existed since 2006, and as of February 2010 the net label has had 37 music releases. Scott, the founder of Archaic Horizon, spoke with me about his motivations for starting and maintaining a net label, as well as what motivates an artist to release their work for free.

Scott states,

> Motivation to start Archaic Horizon came from seeing other net labels release great music but then die off too soon, or change their business model to fit commercial goals. Following this free model, I began AH with the goal to release my favorite genres of music. Free music was the greatest motivation...commercial profit was never a goal, nor was accumulating downloads. Certainly, having a respectable audience was key but it was about the respect, not the numbers. Likewise, by collectively organizing like-minded artists we can share the fan base and reach more listeners that share common interests. I feel this is an artists greatest motivation to release music for free on a net label. (Personal communication, 2010)

This is an inspirational quote for me, showing that monetary incentives and commercial goals do not have to be the driving factors behind running a label. This is what makes netlabels so special, that they are embracing the Web and using digital technologies to gain respect from their peers, connect with others that have similar interests, and reach larger fan bases on a global scale. I also spoke with Archaic Horizon about the lack of organization in the netlabel community, and how that could possibly be solved. He envisions a Web 2.0 site that is tailored to netlabels, "a site where content is dynamically organized in ways to best fit the user...and users can create and share content" (Personal communication, 2010). I couldn't agree more, and as more netlabels pop up every day the need for an organized cultural hub becomes even more prevalent.

Another netlabel I spoke with is Peppermill records based out of British Columbia. Peppermill is a very unique label, with a model that stresses collaboration between artists. Peter, the owner of Peppermill, states that "building the community is important, and I

enjoy it. I like putting netlabel artists next to more successful, commercial ones. I like introducing people, match-making, sparking collaboration" (Personal communication, 2010). He also touched on his thoughts about the future of music on the Web, claiming that "we're still in a transitional period. Once people are more comfortable buying everything online, no matter how small, then I think more artists will be able to make a living with the music" (Personal communication, 2010). Peppermill recently has been working on putting together an amazing project entitled *If You're A Pretender, Come Sit By My Fire*, but have run into legal issues that might hinder the release. The concept of the project is that over 70 musicians and bands would take one of the late Shel Silverstein's children's poems each, and interpret them into melody and song. This project includes the likes of Cars and Trains, Jess Hill, The Apologists, and many more (Peppermill, 2010). The problem is, the estate of Mr. Silverstein does not approve of the project and has threatened to sue any artist that gets involved with the project on the grounds of copyright infringement.

Peter explains,

> It's the harsh reality, just because we think it's fine to do something like take the poems we grew up with as children and turn them to song, doesn't mean we're allowed to. Unless you plan to only share it with a few friends and keep quiet about it. However, it is a new age with some new rules and just because the old generation sticks to its guns doesn't mean their guns are applicable. Freedom I think will win out eventually, as long as we persevere. (Personal communication, 2010)

Netlabels provide a great model for analyzing CC music on the Web, but they are by no means the only distribution channels for CC-licensed music. Many individual artists are bypassing any sort of label structure at all and releasing their music for free on the Internet, either through their own personal websites or through one of the many online communities that exist as a hub for free music and sound on the Web. New sites such as Jamendo, Magnatune, and ccMixter provide prime examples of large databases of CC-licensed audio that is being sold, shared freely, and/or remixed. By looking at these three sites we can begin to see an even better picture of the large scope of musicians and artists that are adopting free music principles and making their work available to others for sharing, and in many cases still finding ways to profit from their works.

Jamendo is a music community on the Web that allows musicians and bands to upload and share their works, and lets users download those works freely. All of the music is published under Creative Commons licenses. As of March 2010, the Jamendo community has 31,429 albums available for download, all freely shareable. Some interesting features on Jamendo make the site more than just a place to release music for free (Jamendo, 2010). The Jamendo model allows artists to accept donations, sell special products in their own virtual shops, share ad-revenue, as well as license their music for commercial uses for a fee. This is what I would consider a CC hybrid model, releasing digital music freely for no cost, while profiting from selling special physical products like limited edition vinyl releases and merchandising, sharing ad revenues with the site, and licensing music to be used in television, film, or commercials. The functionality of the site makes it simple for users to download, donate, buy products, and clearly see what CC

license that music is published with, and what that specific license permits the user to do with the work. I will briefly outline these features, showing how Jamendo is being used to increase fan bases and create revenue, all for no monetary cost to the artists.

The donation feature is one that I find to be essential to any model for releasing CC-licensed works. One of Kelly's (2008) eight generative qualities is patronage, stating that music fans want to support the artists that they love. By making donations a possibility, Jamendo has created a way for artists to benefit from patronage, allowing users to donate to the artists that they see as deserving of their money. Also, when you download a song or album on the site, the donate option is clearly visible, yet not intrusive, making the decision to donate an easy one should a user decide to do so. Next, Jamendo allows artists to have their own virtual web shops where they can sell physical and/or special limited-edition products, which are called “collector's items” or “rarities” (Jamendo, 2010). This allows artists to not only give users the ability to download their music for free, but also purchase special physical goods if they are so inclined to do so. Artists who release their music for free digitally can still have an opportunity to sell physical discs, which many fans might buy if they like the free download. Jamendo also has a “Pro” program where artists can sign up to share ad revenues with the site. Depending on how many hits your music pages get, the artist receives 50% of the ad revenue generated by those hits. This is another feature that is attempting to give CC artists new ways to monetize freely shared music. Another important feature of the “Pro” program is the ability to license your works for commercial purposes, for a negotiated fee (Jamendo, 2010). I see this as an increasingly interesting aspect of CC music, as there are unlimited possibilities for licensing free music for public spaces like stores and

restaurants as an alternative to expensive music licensing, or licensing for use in other media formats like games, commercials, and mobile, thus providing a revenue stream to artists that does not interfere with distributing the music freely on the Web. All of these features make for an exciting new business model, giving music fans the ability to download and share albums freely, while giving musicians access to new ways of monetizing music in the digital environment.

Magnatune is another site that is using new and exciting methods to make freely sharable music available to users while providing artists an ability to profit at the same time. Magnatune was founded by John Buckman in 2003 as an independent commercial record label that would sell music with Creative Commons licenses, and split the profits from any sales or licensing right down the middle, 50/50, with the artist (Buckman, 2004). Magnatune now uses a subscription-based model, allowing subscribers to download unlimited amounts of songs and albums in the site's catalog, which as of March 2010 has surpassed 10,000 songs from over 300 artists, for a $15 monthly fee (Magnatune, 2010). The label is different from Jamendo because they do not allow anyone and everyone to release music on the site. Magnatune takes a netlabel approach to filtering what they will release, meaning that they accept music submissions from anyone, but of those submissions only approximately 3% are released on the site (Magnatune, 2009). Along with subscription fees, the site also generates revenue by licensing their artist's works for commercial purposes. As of 2009, Magnatune had licensed over 3000 songs for commercial use, offering lower prices than the industry licensing standards and giving 50% of the fees collected directly to the artist. This is a stark contrast to typical record label deals that provide little to no income for most

recording artists under these contracts.

Buckman (2009) puts it like this,

> We sell your music online. How much money does this really mean? We don't know yet. One thing we do know: the 50/50 split we offer means that a $5 album sale yields $2.50 for you, the artist. A typical record label will pay you 25 cents to a dollar in royalties on a CD sale after they recoup their expenses (if that ever occurs). That means we have to sell 1/10th as many albums to give the artist the same revenue. Can we do it? We don't know yet, but we're trying, we're trying. (3rd bullet point)

Users browsing the Magnatune site that are not members have the ability to stream full tracks and search through the music catalog. Also, Magnatune encourages users to share the label's music with friends. By using a CC BY-NC-SA license on all of the music released on Magnatune, the site is making sure that while artists get paid, fans also get something extra out of the transaction as well. They are allowed to share the music freely, as well as remix the original music material for non-commercial purposes.

In contrast to Jamendo and Magnatune, ccMixter is a website that focuses specifically on remixes rather than free music promotion and distribution. Creative Commons licensing has played a critical role in the emergence of a thriving remix culture on the Web, and ccMixter is at the center of that culture. Victor Stone is the project lead of ccMixter, as well as the open source projects ccHost and dig.ccMixter that provide the source code for these sites to work. Stone (2009) explains that ccMixter was set up as a music site built around three types of submissions that can be uploaded and shared in-cluding samples, a cappellas, and remixes that use those samples to create a new work. Also, when the remixes are uploaded there is a simple interface that allows the remixer to

easily identify what samples were used, allowing links and relationships to be made between samples and remixes. Stone refers to the site as a "sample pool" that "is a safe harbor since, by definition, all the samples are provided under a well understood, liberal licensing scheme (p. 11-12). As of March 2010, ccMixter hosts 11,696 completed remixes, as well as over 2,000 a cappellas and over 10,000 samples that are free to be remixed (ccMixter, 2010). All of these samples and remixes are published under Creative Commons licenses that allow for sharing and derivative works. Stone (2009) goes on to state that his "goal was to use ccMixter as a laboratory for the hypothesis that if musicians were encouraged to share their remixes, samples and a cappellas amongst each other, they would, in turn, create more innovative, perhaps even higher quality music, to the benefit of everyone. The ccMixter project would be my existence proof" (p. 29). While we have no way of quantitatively measuring the innovation or quality of music and how that has changed since the introduction of Creative Commons and digital remix culture, sharing and the ability to reuse creative content indeed benefits culture and the public as a whole. A site like ccMixter is essential in helping this cultural economy of open content to grow, allowing for future generations to have infinite "sample pools" at their disposal, encouraging art to build upon art.

Creative Commons licenses are now being used by more and more artists and musicians, both large and small. Some well-known bands have moved away from the major label model and embraced Creative Commons as a way of giving their fans the freedom to share. One of the best examples of this is Trent Reznor's band Nine Inch Nails (NIN) and their *Ghosts I-IV* album released in March of 2008 on the band's website. The album consisted of 36 tracks, released under a Creative Commons BY-NC-SA license,

and was available to fans in a number of tiered offerings. Users could download the first nine tracks for no charge, or they could pay $5 for all 36 tracks. The tracks were also officially released by NIN on all of the major file sharing services, including the infamous Pirate Bay. This might seem like a sure way to cannibalize sales, but just like the example of Steve Albini's band Shellac mentioned previously in this paper, Reznor used p2p to his advantage and increased demand for the work. NIN created physical versions of the album at the same time that the free copies were released, including limited edition box sets for $75 or $300. The $300 box set set was limited to 2500 copies and sold out in less than 30 hours, resulting in a gross profit of $750,000 in a little over a day. Add to that the downloads and other physical versions for sale, and NIN took in over $1.6 million in the first week of the album release (Masnick, 2009). This is money going directly to artists, not a label. And this is all for music that was available for free! This example shows that freely sharable copies do not necessarily take away sales, but rather can work as promotional tools for other things that can be sold like limited edition products, merchandise, and/or concert tickets.

Linksvayer (2009) explains,

> A few years ago, often I'd hear people comment that tools like CC licensing were only useful for artists that weren't well known and needed to take extreme measures to promote their works. Ironically, more recently, and especially following NIN's successes, I see comments that open music can only work for bands that already have a rabid fan base. Obviously both can't be true, and it turns out neither is. (Para. 3)

Creative Commons can facilitate a new model for music distribution, for both established and new artists. By creating a blend of fan appreciation and the encouragement of

sharing with new and interesting ways for fans to connect with the music, we can see a new model that benefits both fans and artists. Masnick (2009) describes this model as "Connect with Fans (CwF) + Reason to Buy (RtB) = The Business Model ($$$)" (Para. 1). He states that NIN presents a perfect example of this model in action, creating "successful strategies for building up a stronger fan base, creating wonderful new works of art, distributing them out to the community and getting paid for it at the same time" (Para. 2). This is an exciting time in music culture, a time where a paradigm shift has deemed the old business model incompatible with the digital world. As major labels continue to fight new technologies and attempt to maintain control with lobbying in Washington, the future possibilities for a shared music culture to thrive are strong. Musicians, artists, and fans have become more empowered than ever in the past 110 years of the recorded music industry, and no laws can change the permanent shift in consumer preferences and expectations.

CONCLUSIONS

There will never be a shortage of musicians willing to create new music. The argument that file sharing will lead to less music being created is an unjustified claim. It was never the music or the artist that a customer paid for. The physical product containing the music was the scarce good in the model, and that is what music customers were really paying for. But now, distribution is almost infinitely abundant due to the Internet and digital technologies like the mp3 and p2p file sharing. Without some scarce resource connected with the music it holds little to no value, and this is why CD sales will continue to drop. This also why copyright law is incompatible with the digital environment. Internet users are criminalized for sharing music, even though the Internet technology facilitates it.

As Lessig (2004) explains,

> Property law originally granted property owners the right to control their property from the ground to the heavens. The airplane came along. The scope of property rights quickly changed. There was no fuss, no constitutional challenge. It made no sense anymore to grant that much control, given the emergence of that new technology. (p. 294)

We can now see that the Internet is to music and copyright law as the airplane was to property law. It makes no sense to grant as much control to authors and owners as our current copyright system does. To grant hundred-year terms and criminalize non-commercial copying and sharing is to restrict the airplane to fly, so to speak. As explained by Stone (2009), “It might have made sense to regulate on a per copy basis when the only people who would build a record pressing plant were either legitimate or

bootleggers" (p. 4). However, attempts to apply this old per copy model of restriction in the digital environment is futile. The nature of computers and the Internet are built upon copies, so as these become the primary means of distribution and consumption, restricting non-commercial copying is no longer logical.

An author should not have to choose between all (traditional copyright) or nothing (public domain), but should rather have a choice as to what rights they would like to have associated with their work. This is where new licensing structures like Creative Commons can benefit a digital culture and help users take advantage of computer and Internet technologies without concerns of infringing the law. If we cannot change copyright law, we can at least create alternatives that facilitate the ability to choose what rights artists want associated with their works. We need to educate the public about Creative Commons, making sure that people understand the limits of traditional copyright law and that they have new alternative options. By encouraging more works to be licensed with Creative Commons is to ensure that future generations have a rich pool of creative content to share, interact with, and build upon, without the restrictions that scarcity-based copyright laws have imposed upon our current generation.

The environment in the music industry is now the most inviting it has ever been for artists and musicians to gain audiences for their work. At the same time, music consumers are more empowered than ever as well. It has been said many times in the past decade that the music industry is dead. This is far from the case. The fact remains that it is not the music industry that is dead, but rather the CD industry and the major label model of selling physical products to consumers labeled as music that will never be as it once was. Therefore, as more and more established artists and bands follow in the footsteps of

Radiohead, Nine Inch Nails, and others embracing new distribution models, the future of music will see a lessened need for record labels. There are more opportunities and options available to musicians and consumers than ever before. Artists now have access to a world of Internet users, many of whom are consistently searching out new music and looking for reason to buy. At the same time, users have been empowered with the ability to decide what content we want, when we're going to get it, and where we are going to get it from.

The Web, along with advanced digital technologies like p2p and mp3, has facilitated efficient music sharing across the globe. While this is no doubt in direct conflict with US copyright laws, statistics show that Internet users are continuing to share regardless of the criminalization of their actions. One in six American Internet users have used file sharing networks, and the numbers continue to rise. Thus, the criminalization of music sharing is the criminalization of a major portion of the population, namely the teenagers and young adults who represent the future of this country. Instead of simply attacking these users who represent the core market of the music industry, labels, digital start-ups, and most importantly artists need to embrace these fans and give them viable and fair alternatives to p2p networks. This includes fair pricing, no DRM, ease of use, and findability.

Kelly (2008) says, “A zero price does not help direct attention to a work, and in fact may sometimes hinder it. But no matter what its price, a work has no value unless it is seen; unfound masterpieces are worthless. When there are millions of books, millions of songs, millions of films, millions of applications, millions of everything requesting our attention -- and most of it free -- being found is valuable”. Netlabels provide generative values to CC licensed music by helping the work be found more efficiently, and adding a

trust factor to the files, especially when released on established netlabels that have a lot of releases. However, netlabels need better organization and access for music users on the Web. While sites like Phlow and Sonic Squirrel do their best to bring attention to netlabel music, a main hub with user-generated ranking systems is needed for netlabel culture to grow into a substantial alternative for music distribution and consumption.

Most music content is already available at little to no cost on the Web if the user knows where to look. Due to this, the netlabel model of distributing music for free could possibly become a more widely adopted practice for independent musicians and labels, and possibly even the major labels. Giving music to fans for free will become a way to maintain direct relationships with audiences, thus increasing financial opportunities in other places like touring and merchandising. Doctorow (2008) states that "every techno-literate participant in the information economy can choose to access any data...just by searching for the cracked copy on the public Internet. If there's one thing we can be sure of, it's that an information economy will increase the technological literacy of its participants" (p. 60). When all music is available on the Web for free, there must be some incentive for users to pay for music. This is where Kevin Kelly's (2008) eight generative qualities can make sense of a world where creators are competing with free. These generatives include immediacy, personalization, interpretation, authenticity, accessibility, embodiment, patronage, and findability. Combining these generative qualities with Masnik's (2009) CwF + RtB model will equate to a viable business model for the future of music, where fans get what they want and artists get paid. However, traditional major record labels and restrictive licensing do not have a place in these future models.

There is a great possibility for film, games, and television to embrace net labels and

CC music as a source for licensing creative works, lessening the need for expensive music licensing while also providing a source of income to netlabel artists. Also, stores and other public spaces that play music, and thus pay licensing fees to collecting societies, could instead play CC licensed works for a fraction of the cost. Jamendo is already trying to adapt to these possibilities, offering commercial licensing packages for businesses, and other new services are looking at these possibilities as well.

As this research has outlined, copyright law continues to increase owner's rights while decreasing public rights. By embracing new alternatives like Creative Commons for licensing media on the Web, American music culture has the potential of shifting back to the utilitarian purpose of copyright that was intended by our Constitution. Helyer (2008) states, “To be optimistic we might embrace the concept of a greater community of consumers, allowing ourselves to indulge in a simplistic embrace of the notion of a freedom of choice within the free-market economy of music” (p. 63). While I am not optimistic about US copyright reform, I am extremely optimistic about the possibilities of a free music culture that exists as an alternative to the restrictions culture of traditional music copyright. I hope more of the public will embrace these new alternatives.

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