The "Problem" with Musical Production in the Digital Age

Honors Research Thesis

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by

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I. Introduction

For decades, nearing a century now, the public has accessed the majority of popular music exclusively through a system of industrial production typical of the "complex professional" era of cultural production (Hesmondhalgh 67). This system of professionalized, commercial music production is a result of the development of technology for producing physical recordings of music, allowing for mass production of recordings and therefore assumption of an industrial production model. This industrial model has existed for so long that it has become an accepted, almost unquestioned element of our society. It would appear that the time may be ripe to question the system. The challenge has become timely primarily due to the fact that the entire foundation the industry is built upon is undergoing a substantial change, with potentially disastrous results for the industry and musical production in general. The foundation is based upon copyright law, or more broadly, the concept of intellectual property. Intellectual property, defined by Wikipedia as "creations of the mind for which exclusive rights are recognized", is able to enforce these exclusive rights through copyright law, which has two results. On one hand, a monopoly on production is given to the creator for a period of time, with

all the associated drawbacks, particularly inefficient pricing; on the other, this monopoly power provides incentive for creators in general to generate new products. As summarized by David Lowery, "The accepted norm for hundreds of years of Western civilization is the artist exclusively has the right to exploit and control his/her work for a period of time" (Lowery, "Letter"). Though this works as a definition, Lowery is incorrect on one important point.

Copyright law, specifically concerning intellectual property, has been around only since the 19th century; prior to this, musical production was incentivized primarily through a patronage model, with the significant drawback of the patron's "right to exploit and control" the resulting work.

Thus, given a broad enough perspective, it can be seen that the economic basis of cultural production has seen at least one dramatic shift between production models, and may be about to do so once more.

The change in production models is underway due to the new capabilities made available through the rise of the internet. The capability most relevant to cultural production, in this case music specifically, is that of online music piracy. Online music piracy, broadly speaking, is the use of the modern capabilities of the internet to share digital music files (e.g., mp3s) for free between people without following proper copyright regulations. Online music piracy has some precedent in earlier, physical forms of piracy like bootlegging and counterfeiting, but there are two important aspects of online music piracy (henceforth referred to as *piracy*) that distinguish it as a particularly disruptive force. First, it involves little cost, as there is no sharing of physical material; second, it can be easily done on a broad scale. The threat this poses to the industry is obvious: if people can acquire music easily, for free, and on a massive scale, there is no incentive for them to purchase music directly from the record labels. Thus, much, if not all, potential economic returns from recorded music sales begins, and indeed seems to have begun, to

disappear, which explains why record labels, and the industry as a whole, have fought so hard over the past decade to eliminate piracy through any means available to them, ranging from litigation to intimidation to innovation. Unfortunately, the major labels enjoy a powerful influence within the industry, featuring a concentration, or degree of market ownership shared by the majors labels, "that is five times the level DOJ/FTC identify as a cause of concern" (Cooper & Griffin 1). Therefore, few alternatives have been raised to this storyline of piracy as the primary – even sole – cause of the recent decline in sales. However, upon thorough research, it becomes obvious that piracy is not nearly the type of issue it is claimed to be. Instead, it serves to distract from the real problem, or rather opportunity, facing the industry: due to technological changes, societal valuations and capabilities regarding musical production have shifted, allowing for a revised, and potentially improved, market structure.

II. The Problem Facing the Industry

Disregarding for now whether or not piracy is the cause, however, there is clearly an issue facing the music industry. Its sales figures are falling, and have been for years: "Total revenue from U.S. music sales and licensing plunged to \$6.3 billion in 2009, according to Forrester Research. In 1999, that revenue topped \$14.6 billion" (Goldman)¹. Alternatively, the Recording Industry Association of America (RIAA) provides their own statistics, which, though in other areas their data may be tinged with bias, in this case can be viewed as relatively reliable due to their ability to be cross referenced (see Exhibit V-A):

"Since peer-to-peer (p2p) file-sharing site Napster emerged in 1999, music sales in the U.S. have dropped 53 percent, from \$14.6 billion to \$7.0 billion in 2011. From 2004 through 2009 alone, approximately 30 billion songs were illegally downloaded on file-sharing networks. NPD reports that only 37 percent of music acquired by U.S. consumers in 2009 was paid for" (Recording Industry Association of America).

It should be noted that in presenting their sales data, the RIAA has found it necessary to link the decline to piracy. Despite this, the RIAA does not present precise figures on how much revenue was lost to piracy. This is primarily due to the difficulties involved with measuring such phenomena, an issue that will be discussed later. Disregarding this for now, it should be clear from the declining sales that the market role of industrial music production may be disappearing. There are strong negative implications for this, provided that one accepts the suggestion made above that societies in general have an incentive to foster popular music production. Assuming – for now – that profit is the primary incentive of popular music artists, the decline in sales indicates a potentially dramatic decline in popular music production, which will henceforth be addressed as the problem facing the industry.

Even setting aside the consideration of piracy as an element in the problem facing the music industry, it can be seen that a variety of sources trace the origin of the decline in music sales to 1999. The RIAA linked this to the rise of Napster, which was itself developed in 1999; however, it should be noted that this was only part of a broader phenomenon, occurring in the same year, of a rise in the widespread use of digital music files. Considering this, it is of further note to recognize, for example, that Martin Kremscher quotes "various music firm executives and their common assessment that digitization would have a rather limited impact on the RMI

[Recorded Music Industry]" (Ericsson 1786). This suggests that whether the problem was caused by piracy specifically or the use of digital music more generally, the industry erroneously did not anticipate a substantial change to its business model due to digitization. Either way, the recorded music industry has clearly suffered the consequences: "the industry is adapting to consumers' demands of how they listen to music, when and where, and we've had some growing pains in terms of monetizing those changes" (Goldman). Developing a successful marketing method to fit the modern conditions of digital music has clearly been a struggle. Though various companies such as Apple (iTunes), Amazon (Amazon MP3) and Google (Google Play), services like Spotify and Pandora, and a multitude of other agents have sprung up over the past decade to take advantage of this growing market, none of them appears to have taken a clear lead: "the reality is that there is no functioning market here" (Ruen).

This last point of strong competition in the area of digital music services indicates that the market remains strong, or at least has significant potential to become so once more. Nevertheless, some concern remains as to the fate of the industry, and of popular music production more generally, due to the dramatic decline in sales over the past decade. This concern is particularly appropriate due to the somewhat unique nature of the music industry. In basic economic theory, businesses thrive when they provide a product that has a consumer demand sufficient to cover the costs of making the product. If the demand falters, or if costs rise too high, production diminishes, or some – or even all, if the market conditions are poor enough – businesses within an industry leave the market entirely. It is argued that the potential loss of these businesses, even entire industries in the worst cases, causes no major long-term concern to the economy, or society in general. After all, if there is no demand for a certain product at a price reasonable to the market, it clearly offers no benefit to society, and its loss means a net gain in

efficiency. However, this does not take into account the possibility of deleterious changes in the technological or legal landscape that cause the collapse of otherwise efficient industries; more importantly for this analysis, it also does not take into account the value of certain industries to society outside of their place in the market. It can be argued that popular music production fits into this latter category. It is difficult to analyze such a categorization objectively, particularly considering the divide in our society's treatment of "art music" and "pop music" and the overwhelming tendency to let the "invisible hand" guide the fate of any institutions involved in the market. Nevertheless, considering the role popular music plays within culture overall, it is not unreasonable to suggest that any and all societies have some incentive to foster popular music production, broadly speaking. I will be addressing the specifics of why and how we should do so later in this paper, but for now, this suggestion encourages an investigation into the decline in popular music sales.

III. Is Piracy Involved?

According to the various major record labels and their representative organization the RIAA, the primary, perhaps even sole, cause for the decline in record sales since 1999 is piracy. "Filesharing is made primarily responsible for the decline in sales in the phonographic industry, especially in the CD segment (see the current IFPI Digital Music Report)" (Tschmuck). Indeed, putting the blame on piracy is not limited simply to industry executives; a number of bloggers and artists feel much the same way. For example, David Lowery, co-founder of the bands Camper Van Beethoven and Cracker, discusses two of his friends: "Both of these artists, despite

growing global popularity, saw their total incomes fall in the last decade. There is no other explanation except for the fact that "fans" made the unethical choice to take their music without compensating these artists" (Lowery, "Letter"). Here, Lowery exhibits the passion and use of anecdotal evidence that make him a somewhat extreme example, but he is not alone amongst his peers (Nelson, "Debating"). Even empirical research has noted the effects of piracy on the industry: "Most studies find depressing effects of unpaid consumption on paid consumption" (Waldfogel, "Copyright Research" 337); that is, the ability to acquire music for free decreases the incentive to acquire music for a fee, echoing the analysis presented in the Introduction. In fact, it seems clear that, were the legal restrictions on such free acquisition to be removed, music sales would plummet, with perhaps slight levels of income due to atypically supportive fans. Even while illegal, however, piracy has already effected some decline in sales: "digitization has facilitated unpaid consumption which has, in effect, reduced appropriable revenue. There is...some debate about the size of this effect, but a reduction in appropriability makes it more difficult to generate revenue for any given product" (Waldfogel, "Copyright Research" 339).

Furthermore, piracy has clearly grown in popularity since its inception with Napster in 1999. As seen in the RIAA statistics mentioned above, 30 billion songs were shared over a sixyear basis – an approximately \$29.7 billion value. When compared to annual record sales at the height of the industry's success, at \$14.6 billion, this number becomes even more remarkable. Clearly a large base of people engaged in piracy, or pirates, is required in order to sustain this level of file sharing, and indeed, "while few participated prior to 1999, the founding year of Napster, in 2006 there were about 10 million simultaneous users on the major peer-to-peer (P2P) networks" (Oberholzer-Gee & Strumpf 2). It is likely that such numbers have only grown since, considering the improved access to necessary capital in the form of cheaper and more capable

personal computers and to the shared files in the form of increased and more efficient file sharing programs.

Therefore, it appears that piracy has at least some effect on the industry, and is a widely popular phenomenon. However, it can be hard to determine the degree of this effect on the decline in recorded music sales. To start with, defining the term "piracy" itself is a challenge, primarily due to the various ways it is used by the industry. Setting aside for now the definition of piracy established above as limited to online music piracy, piracy as defined by the RIAA covers a range of activities, from CD burning, to online file sharing, to sampling, to bootlegging:

"First, the word 'piracy' is a blanket term covering a wide variety of activities, including counterfeiting, pirating, bootlegging, home taping, tape trading and online file sharing.

All of these areas of piracy may have individual characteristics that make any attempt at synthesis a hazardous and, some might say, misleading venture. Second, the world of illegal recordings is not the easiest from which to gather data" (Marshall, 163).

Again, in this analysis, the primary form of piracy to be considered will be online file-sharing, due to the correlation of the rise in this form of piracy to the most recent decline in recorded music sales.

Under legal definitions, piracy is not even defined as theft (Dowling v. United States). Since the act of pirating an album does not take the original physical copy from the owner, it does not directly correlate to a lost sale. Furthermore, as an illicit activity, piracy is notoriously difficult to track. These two properties of piracy make determining its economic impact almost impossible. According to the IFPI (the European analog to the RIAA), "there is no precise

measure of the degree to which consumers of pirated CDs would continue to purchase those CDs at legitimate prices...it is then assumed that only 20% (1 in 5) of these downloaded songs would have been purchased legitimately if piracy did not exist" (Bangeman). Furthermore, even the research mentioned above, suggesting negative effects of unpaid consumption on paid consumption, is not a universally agreed upon conclusion. For example, "Oberholzer-Gee and Strumpf (2007) find little or no impact of file sharing on recorded music sales. Most other studies, including Liebowitz (2006), Zenter (2006), and Rob and Waldfogel (2006) find a depressing effect of file sharing on legal sales" (Waldfogel, "Is the Sky Falling?"). Even considering Waldfogel's determination that Oberholzer-Gee and Strumpf are an exception, he himself admits that "all of the studies of the effect of file sharing on legal sales use data drawn from the period before iTunes provided a well-known legal source selling a la carte songs...we may have little basis for evaluating file sharing in the iTunes era" (Waldfogel, "Music File Sharing" 309).

Of course, even given the assumption that piracy has a deleterious effect on sales, the facts appear to show that the loss incurred from pirates is relatively insignificant, at least in comparison with the loss from other music consumers. For example, an analysis by the Consumer Federation shows that the industry loses a much greater degree of potential revenue from radio listeners than from pirates: "[Pirates'] spending is less than their share of the population or time spent listening, but the record labels "lose" more sales to radio listeners than they do to pirates" (Cooper & Griffin 20) (see Exhibit III-C). The emphasis on the word "lose" is important here, since, as mentioned above, it is nearly impossible to determine how much music would be bought if piracy were not an option; indeed, Russ Crupnick of the NPD Group himself

admits that their chart "does not mean that P2P users would spend more if P2P did not exist" (Crupnick).

The debate over the precise effects of piracy becomes even more confusing when one considers that pirates are some of the most enthusiastic consumers of legal music, in addition to their consumption of illegally-acquired music. For example, "the individuals who collect bootlegs are in general the most committed fans that an artist has: 'bootlegs appeal most to diehard fans who want everything" (Marshall 166). It has been shown in research by the NPD Group that P2P (peer to peer, a method of online file-sharing) users spend significantly more than non-P2P users on products of the music industry, from recordings to associated merchandise to live shows. Of course, conclusions from such data may be overextended: as Russ Crupnick, a member of the NPD group himself, says, "Non-users of P2P include the 50% of Americans that don't buy any music...it's just a bad basis for comparison" (Crupnick). However, he also admits that "the truth is that P2P users spend about the same on the core music categories as nonusers...[but] there is a significant difference in spending on merchandise and concert tickets, where P2P users spend nearly twice as much as non-users" (Crupnick), (see Exhibit III-A). However, other studies have determined more dramatic distinctions; for example Columbia's American Assembly found that the difference in consumption levels "comes from significantly higher legal purchases of digital music than their non-P2P using peers" (emphasis supplied) (Karaganis) (See Exhibit III-B; also note the distinction shown between downloaded and copied music). Given this, it is hard to argue that online file-sharing has a significant effect on declining music revenue, until one recognizes that "the people who download music illegally are generally more engaged in music" (Crupnick), implying that their engagement is so high that they would pay more for legal music if piracy (i.e., free music) were not an option.

The implication that pirates would pay more for legal music in the absence of the availability of free music seems to point in the wrong direction, however. Instead, it seems to be the case that piracy can actually increase the effects on spending from engagement with music. According to the same Consumer Federation study referenced above, "There is some evidence...that downloading increases purchases in those demographic groups least likely to purchase (Boorstein, 2004; Liebowitz, 2004). This supports the promotional function of downloading" (Cooper & Griffin 26). Thus, in at least some cases, piracy may actually encourage sales, rather than draw away from them. Which, in addition to all the other elements obfuscating the process, causes one to wonder why, exactly, the industry, especially the RIAA and the major labels, have focused so strongly on piracy. Although I will address this more fully later in this paper, some incentive for such action taken on the part of the RIAA is indicated by a conclusion drawn by the Consumer Federation. Specifically, "incumbent major record labels have incentive to stifle new digital distribution platforms because those platforms begin to level the playing field among major labels, independent labels, and unsigned artists" (Cooper & Griffin 2).

Even ignoring such possible motivations, so as to avoid any ad hominem-type fallacies, the debate over what effect piracy has had on sales has clearly not been conclusively determined. Even if the data, conclusive enough on this point of indeterminacy at the very least, is not enough, surely the number and urgency of the arguments being thrown by both sides of the debate make it clear that piracy's effects are anything but obvious. In this debate, over the role of piracy and free information sharing more broadly, technology interests ranging from Google to "internet freedom" or "Free Culture" activists are facing off against the major labels and certain individual artists. While the technology interests argue for the benefits to society that come from

open sharing of information, particularly a more informed and involved public, those involved with the music industry are defending their very livelihoods. Considering the curious role of popular music production within the market, and society, as mentioned above, it is not surprising that any debate over any issue threatening the industry would raise strong passions. Given the passion and economic interests involved in both sides of the debate, it is difficult to get an objective measure of any element involved, but especially the effects of piracy on sales².

IV. Proposed: Piracy is the Issue

From the argument made above, I believe I have shown that, at the very least, the negative effects of piracy on the industry have not been conclusively proven, and it is likely impossible to determine the precise nature of such effects at any point in the near future. Even disregarding this, the point is likely moot anyway: in 2002, a team of researchers from Microsoft determined that "the steady spread of file-swapping systems and improvements in their organization will eventually make them impossible to shut down" ("Efforts"). If these researchers are right, and piracy is unable to be completely shut down, a question arises, expressed best by Chris Ruen: "So what? What is the proposed solution to all this?" (Ruen). I will analyze the potential solutions from two standpoints: first, assuming piracy is not just a problem, but *the* problem to be solved, and second, assuming that piracy is, at worst, a secondary concern. Given the former perspective, there appear to be three solutions to the problem facing the industry. In order of increasing preferentiality, they are: a return to the classical patronage

model, adaptation through legal methods, and finally adaptation through innovative business practices.

Assuming that piracy is the primary cause of the decline in sales, the first method involves a return to the classical patronage model of production. In the case that the Microsoft researchers are correct, and piracy is unable to be stopped, artists will not be paid for the product of their labor under the current model, and so – again, assuming the primacy of the profit incentive - there is no incentive for them to produce. Once more assuming the presence of a societal incentive to foster popular music production, a new method of funding such production would have to be developed. Marketing a product generally works by either appealing to a large base with relatively low amounts of capital, or a small base with relatively large amounts of capital. Since the former system has, under our current assumption, become obsolete, the latter system must be approached. Therefore, artists would come to be sponsored, either by wealthy patrons or by the government. There are currently governmental endowments for artistic production, but they have largely not been applied to popular music due to the cultural distinction between "art music" and "pop music", and the success, at least until 1999, of the popular music industry's business model. Given the failure of this model, governmental endowments for musical production would likely increase to fill this gap. Unfortunately, it is beyond unlikely that musical production would continue at its current level in this scenario, although it is likely that some of the gap in production levels between this scenario and the current system would be filled by modern analogues to minstrel musicians: "the better, more sustainable bet seems to be treating music as an avocation, not as a vocation" (Nelson, "Debating"). Nevertheless, reverting to a patronage model does not appear to be an ideal option.

In the case that Microsoft researchers are incorrect, there are two methods for countering the use of piracy. Following Harvard law professor Yochai Benkler's model of information production being influenced by social, economic, technological, and legal factors (Benkler, "The Wealth of Networks" 26), it might appear that there are in fact four. However, affecting social attitudes toward music production is a nearly Sisyphean task, and the popular music industry is largely not involved in technological innovation; moreover, technological development is what has led to the problem facing the industry in the first place. Therefore, legal and economic adaptations are the remaining options available. Adaptation through legal methods has already begun. A number of methods have been utilized by the industry up to this point, including lawsuits, enacting legislation, utilizing Digital Rights Management (DRM) software, and finally colluding with internet service providers, or ISPs. Unfortunately, none of these methods have been notably successful.

Recognizing that the decline in sales was related to digitization, in the early 2000s the RIAA began pursuing lawsuits as a corrective method: "Claiming that file sharing was the culprit, the recording industry started suing thousands of individuals who share files" (Oberholzer-Gee & Strumpf 2). As could be expected, these lawsuits – essentially pursued against the industry's customer base, especially in light of the results of the analyses of pirates' purchasing habits by the NPD Group and Columbia's American Assembly – were not entirely popular. "As they prosecuted peer-to-peer home users – 20,000 so far, most of them teenagers – public opinion turned against an industry that criminalized its customers" (Lebrecht). Not only was the RIAA was suing its customers, but it had particularly excessive demands, out of proportion to its losses. In the case of one defendant, "If found guilty of willful copyright infringement, Tenenbaum faces financial penalties that could exceed \$1 million - \$150,000 per

song, the maximum fine allowed by the federal statue under which he is being sued" (Raphael). In addition to making the labels unpopular, lawsuits also inflamed a stigma which constantly threatens popular music artists, namely, the concept of "selling out". Pursuing these lawsuits caused bands and artists to be associated with what is perceived as a "base" desire to make money off of their fans (in contrast to the "purer" goal of artistic development): "audiences can react badly to musicians who acknowledge a relationship with money...you will rarely hear an indie act complain about piracy" (Abebe)³. The stigma against "selling out" is not surprising in an industry which, as stated above, operates in an occasionally uneasy balance between social value and market value. Even disregarding its level of popularity, the policy of pursuing lawsuits against pirates has not shown any sign of success: "Most data also suggests the lawsuits have done little to curb the online sharing of copyright music – rather, the number of filesharers appears to have actually increased" (Raphael). Facing public disapproval and little success, the RIAA ceased this legal strategy in 2008 (Vijayan).

The second legal method pursued by the industry against piracy regarded law enforcement, which includes both passing new laws and more strictly enforcing old ones. One of the goals pursued by the industry was targeting those hosting copyrighted content, rather than those downloading such content. The easiest way to do so was by eliminating the sources of their funding. One of the most popular methods of pirating today, following the closure of LimeWire (one of the industry's few legal successes) (NPD Group), involves "torrenting" files. Much of the details of this process are not relevant; what is important is that it requires going to "tracker" hosting sites, where a pirate may download the torrent file. These "tracker" sites earn money from ad revenue from these visits; thus, the music industry's strategy was to target these ads by enacting laws that would place more oversight and restrictions on advertising arrangements,

thereby cutting off funding to the sites that enable piracy (Ruen). Legislation effecting such oversight and restrictions, however, has become quite controversial, as it is difficult to tailor the technological effects so as to not unduly restrict other internet practices. Thus, such legislation has become associated with restricting internet freedom, resulting in the controversy over bills like SOPA and PIPA over 2011-2012.

The third legal method pursued by the industry was to introduce digital rights management, or DRM, software onto the music files that they sold. "Digital Rights Management describes attempts to stop people copying music from CDs and sharing the tracks via peer-to-peer networks such as Kazaa and Madster. To stop this piracy some music makers are starting to produce CDs that will not play on computers" ("Efforts"). As the article this quote was taken from was written before the introduction of the iTunes Music Store, it serves to mention that the practice of selling music files with DRM technology continued (after some negotiation) with the digital files purchased from the Store. Not surprisingly, this policy was also unpopular, due to the restrictions placed on what, for all intents and purposes, consumers considered their property. Thus, around the same time as the RIAA ceased pursuing lawsuits against offenders, it ceased the use of DRM: "Apple today [January 6th, 2009] announced that its entire iTunes music catalogue will soon be available without any copy protection, after agreeing to a new deal with the world's major record labels" (Johnson).

The fourth and final legal method pursued by the industry, which is the newest and still being developed today, is the practice of cooperating with ISPs to target offenders. Under this system of cooperation, often referred to as a "graduated-response" program, the RIAA "will notify an ISP, which will then warn the user to cease any illegal file sharing activity, and ultimately suspend or discontinue his access if a change is not observed. 'Major ISPs' are said to

be on board with the idea" (Raphael)⁴. As with most of the other legal methods pursued by the industry, the ISP collaboration method has not occurred without some contention. Since this has not yet been enacted to a significant degree in the United States, it is easiest to look at the response to such programs in Western Europe; for example, "BT Group PLC, one of Britain's largest Internet service providers, criticized a government proposal that would allow U.K. authorities to suspend Internet access temporarily for Britons who engage in...file sharing" (Sonne). There are concerns raised over negative effects on unrelated activities and unintended consequences (Sonne), especially given the inaccuracy in determining specific users of a provided internet service and the common misidentification of downloaded files, not to mention the fact that in pursuing this strategy, record labels are executing extra-legal methods of punishment. It is also worthwhile to note that in 2011, the United Nations "Special Rapporteur considers cutting off users from Internet access...to be disproportionate and thus a violation of...the International Covenant on Civil and Political Rights" (United Nations 21).

Clearly, some of the methods pursued by the industry been questionable not only in terms of appropriateness, but more importantly even in terms of effectiveness. Even if one disregards the human rights concerns raised by the United Nations, it is curious that record labels feel forced to take action against not their competitors or employees, but their customer base, which is relatively unheard of. Moreover, it has not been conclusively shown that a greater degree of copyright protection is even necessary under current economic conditions: "a simple shorthand for the digital era is that [sunk costs] have fallen while [demand has fallen], so we don't know whether copyright protection would need to be strengthened or weakened to preserve creative incentives" (Waldfogel, "Copyright Research" 339-340). Essentially what this means is that due to technological developments, the cost of producing music has dropped significantly, yet at the

same time the demand for the music produced has also dropped. As a result, the demand and supply curves for the popular music industry have shifted in mutually neutralizing directions. Therefore, taking action to protect intellectual property through strengthening copyright, as the record labels are doing, may not actually be necessary. Furthermore, as explained above, such measures have been shown to be ineffective: "current internet-based enforcement proposals, whether directed against P2P users or cyberlocker sites, do nothing to deter such copying – in fact, they're likely to increase it as people shift toward less exposed forms of exchange" (Karaganis).

The third and last method available to the popular music industry, developing innovative business practices, has also been explored, though not to the degree that the legal methods have. As mentioned above, industry leaders did not anticipate any dramatic changes due to digitization, and so were arguably a bit slow to adapt to the market. Furthermore, the way the first digital music distribution program, Napster, operated, likely affected the way the industry approached any methods of adapting to the new digital marketplace. Essentially, Napster singlehandedly brought back the single market. During the later 1980s, due to circumstances which I will discuss later in this paper, the single market in recorded music sales nearly disappeared. However, this disappearance was not due to decreased demand, and so the files shared on Napster were predominantly singles. Therefore, the digital marketplace became associated with the exchange of single tracks: "the rise of the iPod and iTunes made it harder for labels to pack long-playing albums with subpar 'filler' tracks. It also made it easier for music fans to fall for a hit single" (Van Buskirk). Of course, when sold in a marketplace, singles fetch a far lower price than do albums due to the decreased amount of content. Possibly due to the first of these qualities, but certainly due to the second, record labels were hesitant to engage in the digital marketplace.

The labels' hesitance to enter the digital marketplace, in contrast to David Lowery's argument that "we've been a web-based business since Napster" (Lowery, "Meet the New Boss"), is exemplified by the fact that between 1999 and 2003, the few services supported by the popular music industry, in order "to win licenses from the major labels...imposed strict limitations on what consumers can do with their music, which heavily undermine[d] their appeal" (Waldfogel, "Music File Sharing" 308). Therefore, until the opening of the iTunes Music Store in 2003, the popular music industry was offering no serious competition to piracy.

Arguably, this only encouraged music consumers to become familiar with the most convenient digital markets available – which were, in this case, unfortunately illegal.

The iTunes Music Store was the first widely used digital music program (Goldman). It should be noted, however, that it was developed not within the industry itself, but by a powerful company in the technology industry, that is, Apple Computer. Much like its half-hearted predecessors, the rise of iTunes does not appear to have diminished pirating activity: "the iTunes Music Store has substantially changed music retailing. But based on this sample of songs and consumers, it does not seem to have changed the effect of piracy" (Waldfogel, "Music File Sharing" 313). However, it should be noted that much as the decline in sales correlated with the rise of digitization, a rise in digital sales correlated with the opening of the iTunes Music Store. Thus, although iTunes may not have had an effect on piracy, it did have an effect on sales. This has two major implications for the future of the industry: first, innovation can be a successful answer to piracy, and second, piracy doesn't necessarily take away from sales (or else the rise of iTunes would have diminished the amount of piracy). In order to properly counter piracy, then, it would appear that the popular music industry must counter the benefits of pirating, primarily

price and access, in its own business model. Essentially, "the only way for music companies to compete on the same terms is by making music easy to get hold of and cheap to buy" ("Efforts").

In assuming that piracy is the primary, or perhaps even sole, cause of the decline in sales, I have ranked a reversion to the patronage model as being less desirable than any sort of adaptation on the part of the popular music industry. Since such a reversion would almost inevitably lead toward a decrease in popular music production, thereby catering to fewer musical tastes and contributing less toward a national, and international, cultural discourse, such a ranking is not unreasonable. However, it is less obvious that legal adaptations should be considered less desirable than business adaptations. There are two reasons for this determination. First, as with any industry operating in the general marketplace, modern economic theory encourages nonintervention on the part of the government and the will of the "invisible hand" over all. Second, and more importantly, the legal avenues pursued by the industry have almost universally had negative side effects out of proportion to the issues they were meant to address. It should be noted that, despite these effects, the general preference for innovation through business practices, and most of all the ineffectiveness of such methods, the popular music industry has almost exclusively chosen to pursue legal methods in eliminating piracy. Indeed, the one completely successful business adaptation to the digital music marketplace was developed by a company with no prior connection to the popular music industry.

V. Proposed: Piracy is *Not* the Issue

Of course, the methods for countering piracy enumerated above are all based on the assumption that piracy is the central issue facing the industry. If piracy is not a concern, or even if it is a minor concern, then the central problem remains unidentified, and therefore potentially more challenging. In Section II it was shown that the popular music industry is plagued by a decline in music recording sales (see Exhibit V-A), which may result in diminished incentive to produce popular music. If piracy is not the cause of this decline, the question naturally arises: what is the cause? The worst possible scenario is that it is a decline in the quality of music being produced, simply because such a problem would be immensely difficult to solve, considering it involves such a subjective determination as "quality" of works. Fortunately, it would appear that this is not the case. Waldfogel conducted a study "documenting the volume of high-quality work [in popular music]", consisting of three approaches. "The first approach makes use of critics' retrospective best lists...the second and third approaches make use of information on the service flow of recorded music, based on sales and radio airplay, by time and vintage" (Waldfogel, "Is The Sky Falling?"). He determined that "none of the three approaches shows a decline in quality following 2000". Admittedly, determining quality may be relatively subjective. However, Waldfogel's methods are meaningful for this analysis for two reasons. First, they are relatively unbiased, being based on a mixture of ratings from professional critics and from the general populace. Second, given his "second and third approaches", which show that modern music is consistently given dominant radio playtime over older music, it would appear that those purchasing music do not consider popular music to have experienced any considerable decline in quality, at least as demonstrated through their listening habits. Rather than the decline in sales

being due to a decline in quality, then, there are fortunately a number of alternative, measurable causes.

First, I will consider recent macroeconomic effects on the industry's supply and demand curves. At the most basic level, there have been two recessions since the rise of illegal online file-sharing, first in 2001 and then in 2008, which likely affected sales: "the two recessions during the decade certainly didn't help music sales" (Goldman). Of course, the decline in sales in the recorded music sales has been far more dramatic than any general economic decline.

Therefore, more relevant to the popular music industry specifically was the rise in consumption of competing forms of media. "The estimated cross-price elasticities imply that changes in prices of other entertainment goods also explain the slump in recorded music sales. In 2000, roughly 37% of the decline in recording sales is due to such changes in prices" (Hong 1). What this quote suggests is that, since the prices of other entertainment goods like film and video games decreased significantly compared to the prices of popular music recordings, the popular music industry experienced a substantial decline in revenue. Specific data on certain individual entertainment good markets, for a broader period, present a more detailed picture:

"The sales of DVDs and VHS tapes increased by over \$5 billion between 1999 and 2003. This figure more than offsets the \$2.6 billion reduction in album sales since 1999. Consumers also spent more on video games, where spending increased by 40 percent, or \$3 billion, between 1999 and 2003, and on cell phones. Teen cell phone use alone tripled between 1999 and 2003" (Oberholzer-Gee & Strumpf 39).

Granted, none of these products are perfect substitutes. No consumer will be as happy with a \$10 amount of film products as with a \$10 amount of music products, or vice versa. However, given that all of these products can be considered forms of entertainment (and therefore relatively exchangeable given the right price differential), the dramatic increase in spending on these alternative goods, and consumers' opinion of music as overpriced (Bangeman), it is more than reasonable to assume that part, if not all, of the decrease in music sales can be attributed to consumers spending their money elsewhere. Indeed, such effects have been seen before: from a 1983 study, "explanation has been sought in the general economic recession, the influence of private copying, and competition from other media. But perhaps records, as a mass medium, have now reached the saturation point" (Tschmuck). Although the negative effects of the presence of competitive goods has been seen before, the decline in sales is clearly more dramatic this time (see Exhibit V-A). Even in the prior (late 1970s) slump, as the study referenced suggests, copying, competition, and the recession likely did not account for the entire decline. Fortunately, there are a number of additional potential causes.

First, a unique element of the rise of sales in the late 1980s and 1990s was the large role of CDs in this economic expansion. CDs dramatically changed sound recording technology, making it much more expansive and portable. Therefore, compared to the bulky and limited vinyl records, CDs were a more valuable alternative, and many fans began to replace their vinyl collections with CDs. The trend of replacement was so dramatic that it contributed to what was essentially a CD "bubble" – an artificially induced expansion in music sales: "One must not oversee that the CD boom was mainly fueled by the re-release of repertoire still existing on vinyl" (Tschmuck)⁵. Indeed, the invigorating effects of library replacement were strong enough not only to help the industry recover from a decline, but even to begin a strong increase in sales

figures (see exhibit V-A): "the record industry has become increasingly dependent on its back catalogue to maintain profitability. The success of the CD format has proved a lifebelt for the industry as record buyers have replaced their vinyl collections" (Marshall 176). The effect of purchasing collections on CDs was so strong, in fact, that in combination with the recession and competition effects discussed above, it may account for the entirety, or at least strong majority, of the decline in sales since 2000, entirely separate from piracy. That is, if the process of replacing record collections with CDs was completed for most fans by the mid- to late-90s, as sales figures discussed later in this paper indicate, CD sales would soon plummet. Evidence for this can be seen in the conduct of households without computers: "For instance, in the most recent (2004) Consumer Expenditure Survey for the United States, households without a computer, which seem unlikely to engage in file sharing, report that they reduced their spending on CDs by 43 percent since 1999" (Oberholzer-Gee & Strumpf 4). Considering the drop in overall revenue from CDs dropped by only about 25% in that time, that is, between 1999 and 2004 (see Exhibit V-A), it would appear that piracy may not be the sole, or even primary, cause of sales decline, as those with computers – and therefore able to engage in piracy – had to make up for the loss in sales from their computer-less peers.

Second, the effect of declining sales after 1999 could only have been exacerbated by the end of the price-fixing practices of the industry, which were forced out by the government in 1999 – at the same time sales began to decline (United States, *Statement*; "Efforts"). The industry's price-fixing strategies, in combination with the elimination of "single" production had caused "consumers to unnecessarily purchase hundreds of millions of overpriced CDs to get the music that they wanted" (Cooper & Griffin 12). With the possibility of a single market made available through digitization of music, there would necessarily be a marked decline in sales. For

the first three alternative causes – the recessions, the rise in competition from substitute goods, and the CD bubble – in each case the demand for popular music records diminished significantly, which would have caused a dramatic drop in sales. In the case of the last alternative cause, the end of price-fixing practices, the supply of music records would have increased, increasing production and decreasing price. Considering the rise in sales of digital singles, that is, arguably, exactly what occurred. Given a drop in sales and a drop in price, it is no surprise that industry revenue has plummeted.

Of course, these are not the only possible causes of a decline in the industry's profits. Not only have supply and demand been affected in the past 13 years, but the music market as a whole has changed dramatically. First, the physical market shifted from being housed primarily in record stores to being located in big box stores: "between 1999 and 2003, more than 14 percent of music sales shifted from record stores to more efficient discount retailers such as Walmart...as a result, album shipments, fell much more than actual sales" (Oberholzer-Gee & Strumpf 39). Since industry figures are often measured in shipments rather than sales, the shift to big box stores would clearly have at least some role in the decline in recorded sales.

Second, as mentioned above, a substantial part of the decline can be attributed to simply not adjusting quickly enough to the rise of a digital market. "This decline...is indisputably due at least in part to industry failures in adapting to a well-networked audience able to do much more than it could before" (Baym 4). Seung-Hyun Hong, in his analysis, is more direct: "It rather implies that recording sales would have increased if the recording industry had adopted new technology much earlier" (Hong 23). Alternatively, "That four-year lag is where the music industry lost the battle,' said Sonal Gandhi, music analyst with Forrester Research" (Goldman). Since consumers could access music much more conveniently, albeit illegally, online than in

physical stores, by not fully engaging in a digital music marketplace, the popular music industry was losing out on a significant amount of sales.

Third, and perhaps most importantly, even when the popular music industry did adapt to the digital market, it did not find the new market to be as profitable as the old one. As mentioned above, the industry as a whole ceased producing singles in the early 1990s, since it was less costeffective than the CD format. However, there remained high consumer demand for such products. Thus, when singles became available once more with the iTunes Music Store, demand exploded. Although the units being sold increased, the value of the units significantly decreased: "Recorded music transactions are up because people buy individual tracks now instead of 1 album of 10 songs" (Lowery, "Meet the New Boss"; see also Tschmuck, Cooper & Griffin 13). Soon, single sales were matching album sales, causing a decline in revenue (see Exhibit V-B): "the figures show that in recent years the album market turned back into a single market – it is clear that you cannot earn the same revenue with the same number of single units than with longplay units sold" (Tschmuck). Thus, while pre-iTunes consumers were purchasing albums for the two songs they might desire from the album (which, with an album cost of \$10-\$15, results in a markup of between \$8 and \$13), now consumers were simply purchasing the singles at \$1 each. This is often regarded as being the primary cause of the decline in sales: "industry insiders and experts argue that the main culprit for the industry's massive decline was the growing popularity of digital music" (Goldman)⁶. Thus, there are at least seven alternative causes to the decline of music sales apart from piracy.

For many reasons, the piracy-based explanation for the music industry's decline falls flat. First, the actual properties of the practice itself are often not directly harmful. For example, reminiscent of the Supreme Court ruling that file sharing does not constitute theft, "sharing files is largely nonrivalrous because the original owner retains his or her copy of a downloaded file" (Oberholzer-Gee & Strumpf 2). Thus, it does not prevent a future sale; whether it would cancel a present sale is also unlikely: "while downloads occur on a vast scale, most users are likely individuals who in the absence of file sharing would not have bought the music they downloaded" (Oberholzer-Gee & Strumpf 4; see also Waldfogel, "Music File Sharing" 306).

Second, there is historical data related to the issue that raises questions regarding the industry's story, in that the cultural industries have misdiagnosed the potential issues posed by incipient technologies. A major precedent is the film industry's opposition to home video technology, which would later become one of its greatest sources of revenue. Although this specific example involves the film industry, the lesson it teaches – that is, not to implicitly trust the industry line – can be applied to the popular music industry as well, considering their common membership in the category of cultural industries. The historical record of unreliable industry accounts concerns events both decades past ("the entertainment industry...has often blocked new technologies that later become sources of profit" (Oberholzer-Gee & Strumpf 3) and recent events: "The history of file sharing shows us that every time the content industries catch up with one network the problem has already long since moved onto another one" (Mulligan). Thus, the recording industry's claims of a problem are not conclusive evidence for there being such a problem.

Third, atypical economic results around the world in the period immediately before, during, and immediately after the rise of illegal file-sharing raise additional questions. For instance, "figures...showed that the Japanese market, the second most important market in the world, already suffered an 8.2% loss of CD sales between 1997 and 1999, but that it was up by 7.9% in 2000" (Tschmuck) and "for the French market no such simple explanations work. In 2001, an historic high of CD sales was measured before the recession started in 2002...similarly, it cannot be explained why the UK market...was able to hold its sales level in subsequent years, despite the emergence of new P2P filesharing systems" (Tschmuck). As for the United States, "during the price fixing period, before Napster (1995-1999), sales had flattened" (Cooper & Griffin 23). From this data, it is clear that there is not a universal correlation of declining sales data with the rise of file sharing technology; in fact, there is not even a correlation of declining sales in the United States itself with the year 1999.

Fourth, there is overwhelming evidence that claims of damages from piracy are unsubstantiated, or even downright false. In Section II it was shown that determining the effect of piracy was near impossible to do accurately. Even the U.S. Government Accounting Office agrees with this point, stating that claims of billions of dollars of losses due to piracy "cannot be substantiated due to the absence of underlying studies" (United States, *Observations*). However, a number of studies have shown that, at the very least, piracy has not been a primary cause: "In total the estimates indicate that the sales decline over 2000-2002 was not primarily due to file sharing" (Oberholzer-Gee & Strumpf 4; see also Tschmuck, Hong 28). It has been shown that the sales displacement rate – that is, the number of songs that would have been purchased for every song downloaded – "is roughly the same as the CD sales displacement rate found for the pre-iTunes era" (Waldfogel, "Music File Sharing" 313), implying that the new pirating format

has not changed piracy's overall effect for the worse. The reason for this is primarily due to the value that file sharers place on the songs they download: "if they are songs with valuations above the price, then file sharing displaces sales. If they are songs with valuations below the price – and would otherwise not have been consumed – then file sharing does not displace sales" (Waldfogel, "Music File Sharing" 307). Thus, if consumers do not highly value the music they download, there is little reason to believe that it displaces sales; and indeed, valuation has been shown to be below the price point: "even within person – and controlling for song – respondents valued their shared songs at \$0.23 (25%) less than the songs they have purchased in 2009 data" (Waldfogel, "Music File Sharing" 310).

Thus, "there is little basis to argue that piracy is a major factor today" (Cooper & Griffin 23), especially considering that, in certain ways, the industry is thriving. First, although I quoted Waldfogel in Section II as suggesting that new studies must be conducted to take the development of iTunes into consideration, Oberholzer-Gee and Strumpf "have data up to 2005", which suggests that, since iTunes appeared in 2003, their conclusions regarding the low impact of piracy should "hold in more recent years" (Oberholzer-Gee & Strumpf 39). Furthermore, with file-sharing as an option, consumer surplus (that is, the benefit consumers gain from engaging in trade) is at a high: "hence, in the current regime, consumer surplus is \$23.49 per person, revenue is \$5.48, and there is no deadweight loss" (Waldfogel, "Music File Sharing" 313)⁷. Of course, overall, artists are thriving as well: "the empirical evidence supports the conclusion that...the supply-side of the music industry is doing quite well. In addition to the fact that total units shipped have increased, the number of artists, (Mortimer, Nosko, and Soresen, 2010), titles (Handke, 2012) and companies (Handke, 2006) has increased" (Cooper & Griffin 27). The reason the industry is thriving in terms of figures aside from sales is because independent labels

are taking advantage of the new relatively equal footing they have with major labels; as suggested in Section III, this is at least one reason why the major labels did (and do) not want digital markets to thrive (Cooper & Griffin 33).

If piracy is not the cause of the decline in sales, then again, we must turn to the question of what exactly is the cause of the industry's problem, and whether these problems can be solved. As enumerated in Section V, there are at least seven alternative explanations as to the decline in sales. It is important to note the significance of the final alternative cause, that is, the association of the digital market with a singles market, which has been the case since its inception: "as soon as Napster opened up, the single came roaring back" (Cooper & Griffin 23).

It is the connection with Napster here that is essential. "Since CD sales in the U.S., Britain, and Germany have been falling since 2000 and 1999, respectively, it seems obvious to explain this decrease by pointing to the appearance of Napster" (Tschmuck). Of course, in this instance, the industry has unfortunately made a logical error: mistaking correlation for causation. Even if one assumes that piracy is a problem, which has not been conclusively shown, the industry has made yet another logical error, that is, arguing the fallacy of single cause: "wrongly presupposing that an event has a single cause when there are many causally relevant factors involved" (Lau & Chan). What is important about Napster is not that it is the origin of illegal file sharing. What is important about Napster is that it is the origin of online file distribution in general. Multiple accounts agree that the new format of musical distribution is affecting the relationship between consumers and artists, and that the market model that has worked for so long may have become obsolete. They suggest a reevaluation of what is fair for both artists and consumers, and how to achieve this (Tschmuck; see also Van Buskirk; Lowery, "Letter; Marshall 164, 173-174). This process is not entirely unprecedented, either: the technology shift

of recording in the late 20th century is what "enabled music to become a centralized mass-produced commodity" (Baym 4) in the first place. As the technology shifts again, perhaps causing us to abandon this centralized model, surely a commensurate paradigm shift should not be unexpected. In this case, the paradigm shift involves not only the popular valuation of, but also the average capabilities regarding, music and music production.

VII. Abandoning Piracy, and Everything Else

To summarize what has been covered up to this point, it has been demonstrated that first, piracy is not nearly the agent of destruction that it has been made out to be; second, much of the decline in sales can instead be attributed to an industry slow to adapt, and a less profitable market even following adaptation; and third, that the digitization that has diminished the profits available in the market also has the potential for transforming the relationship between artists and consumers. The first two conclusions naturally lead to the question of why, exactly, the popular music industry continues to pursue a narrative of piracy rather than addressing the actual problems it faces. After all, if there are measurable, "empirical anomalies that put the 'filesharing-thesis' into question" (Tschmuck), surely the record labels or the RIAA could set aside some funding in order to better inform their lobbyists. Especially considering the fact that file sharing may even *benefit* sales (European Union), it would seem logical for the industry to make sure that it had all its bases covered before pursuing a major public campaign against piracy. Two features of this situation help resolve the apparent paradox. First, the popular music industry, despite its relatively smaller role within the economy as a whole, has a particularly

strong influence upon public policy and cultural discourse, considering its role within the cultural industries in general. This influence allows for the situation as addressed by Julian Sanchez of the Cato Institute: "the only way to explain the longevity of these figures, if we charitably rule out deliberate deception, is to infer that the people repeating them simply did not care whether what they were saying was true" (Cato Institute). Second, as mentioned in Section III, "incumbent major record labels have incentive to stifle new distribution platforms because those platforms begin to level the playing field among major labels, independent labels, and unsigned artists" (Cooper & Griffin 2). As will be explained further later in this paper, the development of digitization technology severely reduced the costs of many aspects of the music production process, allowing a much more level playing ground between the major labels and their competition. Obviously, then, it would be in the interests of the major labels to publicly censure, and censor, the use of such technology.

The fact that the piracy narrative so thoroughly disseminated by the popular music industry has been shown to be relatively baseless should also lead to the question of whether any part of the industry's narrative is completely factual. Though I will be addressing this narrative in detail later in this paper, for now it serves to note that a major aspect of the narrative is that the industry is, for lack of a better word, failing. As noted above, industry profits have been declining at a dramatic pace. The facts here are undeniable. Whether this decline constitutes a problem, however, is deniable. The problem as defined in Section II was that, "assuming...that profit is the primary incentive of popular music artists, the decline in sales indicates a potentially dramatic decline in popular music production, which will henceforth be addressed as the problem facing the industry." Although profits have been falling over the past decade, they are beginning to show signs of recovery (Pfanner), indicating a revival of the profit incentive. Of course, the

assumption of the primacy of this incentive would seem wise to abandon at this point. After all, as mentioned in Section VI, "In addition to the fact that total units shipped have increased, the number of artists, (Mortimer, Nosko, and Soresen, 2010), titles (Handke, 2012) and companies (Handke, 2006) has increased" (Cooper & Griffin 27). If revenues, at least up to now, were declining, but involvement was rising, clearly profit cannot be the only incentive. This rise in involvement would also indicate that there is not, in fact, a problem as defined initially, considering that the major concern was a decline in production.

If there isn't a problem, then, the only question left is what there is to be concerned about at all. If production is increasing, and even profits are starting to increase, then it would appear that any concern over the fate of the industry is misplaced. However, it would be unwise to come to this conclusion so quickly. Even if the popular music industry dramatized the effects of file sharing on the industry in its narrative, and dramatized the effects of digitization through its inaction, both still have the potential to have major effects on the future of the industry and on popular music production in general. As such, they should be addressed, not as a problem, but as an opportunity. Arguably, popular music production comprises a significant element of a given populations social practices, and according to Harvard Law professor Yochai Benkler, "the way life is actually lived by people within a given set of interlocking technological, economic, institutional, and social practices is what makes a society attractive or unattractive" (Benkler, "The Wealth of Networks" 31). Indeed, Benkler suggests that none of these elements are independent, but that they all coevolve. Considering this coevolution and the recent major technological changes implied by digitization, there may be an opportunity present for beneficial changes in all of these four realms.

In order to conduct a proper analysis of any opportunities allowed by the effects of digitization on the popular music industry, however, it must first be recognized that the popular music industry occupies a relatively unique position in the economy: "the cultural industries have a dual role – as 'economic' systems of production and 'cultural' producers of texts" (Hesmondhalgh 60). In packaging and selling musical recordings, the industry has engaged in what is referred to as a "commodification of culture". This property of the industry has led to certain unique circumstances, most notably the distaste among fans for artists seen as "selling out", as mentioned above (Abebe, Hesmondhalgh 82). In fact, "for decades there have been few worse insults that can be bestowed upon a band than accusations of 'selling out', or putting a profit ahead of the perceived purity of artistic creation" (Baym 8). The industry as a whole has also experienced the difficulties in walking this line; for example, "in Adorno and Horkheimer's view, however, culture had almost entirely lost this capacity to act as utopian critique because it had become commodified – a thing to bought and sold" (Hesmondhalgh 24). Nevertheless, it should be understood that commodification is not necessarily unilaterally negative in its effects. After all, as will be explained later in this paper, popular music has arguably as much artistic value as "art" music, and should be evaluated on a similar level, since commodification can have both beneficial and deleterious effects: "we need to understand [commodification] not as a fall from grace from a non-commodified state of culture, but as fundamentally ambivalent, as enabling and constraining" (Hesmondhalgh 70).

If commodification of culture, then, is not taken to be unilaterally negative, popular music ought to be analyzed from a more appreciative perspective: "cultural studies has argued convincingly that ordinary, everyday culture needs to be taken seriously" (Hesmondhalgh 51). At the very least, "the cultural industries matter [because of] the power they have to influence

people, the varied ways in which they manage the work of symbol creators and their role in bringing about more general industrial, social, and cultural change" (Hesmondhalgh 33). It can be argued that through each of these three qualities, the popular music industry has come to take on the role of "social good". That is, popular music occupies a place of particularly high value to society as a whole, and has long exhibited the quality of being nonrival in consumption – that is, the consumption of a recording by one person does not preclude or degrade the consumption experience by another. Through digitization it has in addition become relatively non-excludable, meaning that because of the zero cost involved in copying music files, it is difficult to prevent any individual consumer from acquiring music without purchasing it (Etheridge). Normally, by economic theory, consumers are always highly valued, and producers are in general, but producers in any specific industry are rarely given special considerations, with the preference being to lean toward free trade. With social or public goods, however, public support for specific industries is often enlisted. In this case, then, we should seek "a balance between the rights of creators and the public" (Palfrey 144). Keeping in mind that artists individually should not be treated as superior to the average citizen due to their unique creative traits (Hesmondhalgh 6, 20), we should nevertheless take an exception to foster this group as a whole. Essentially, artistic production "can enrich people's lives, but often it is banal or mediocre. Sometimes it meekly serves power, or it promotes commercialism over creativity and knowledge" (Hesmondhalgh 7). Particularly considering the industry's commodification of culture, a promotion of commercialism should not be surprising. However, with the effects of digitization, a solution may have arisen not only for the tendency toward being "banal or mediocre", but for accomplishing a wide variety of societal goals for popular music production, which will be addressed later in this paper. This solution is based on a more democratic participation in the

music production process. If popular music occupies such a pivotal role in society, surely greater popular participation in its creation – much like greater popular participation in government – could only have beneficial effects (Benkler, "The Wealth of Networks" 277, 285). If we consider the changing technological conditions affecting the market, outside the influence of certain narratives and assumptions, it becomes clear that an opportunity to better accomplish these goals can be found in the approach of what might appropriately be called a "modern folk culture".

VIII. Narrative and Assumptions

VIIIa. Narrative

As mentioned above, the popular music industry has for many years now publicized a narrative of what was originally a relatively small industry experiencing drastically reduced sales due to piracy. Before any opportunities have become available to cultural production, a new, factual narrative must be constructed. The first step in doing so is to deconstruct the existing industry narrative. According to this narrative, the lost sales due to piracy have resulted in thousands of lost jobs and millions, or even billions, in lost revenue. In response, the popular music industry has argued that it is necessary to enforce existing copyright laws ever more stringently, and to enact new, ever more restrictive pieces of legislation in order to adjust to the new technological reality. The story, though initially convincing, raises some questions. First, the industry is admittedly not amongst the largest in terms of economic output. In that case, however, there should be little cause to worry about it, by economic theory. After all, aside from the arguments made above as to the value of popular music to society, by economic theory the

industry has clearly demonstrated its inability to adapt to changing markets, and allowing government intervention to save the industry would be unreasonable. Furthermore, even taking into account the value of popular music, "it would be silly to think that music, a cultural form without which no human society has existed, will cease to be in our world if we abandon the industrial form it took for the blink of a historical eye that was the twentieth century" (Benkler, "The Wealth of Networks" 426). Second, though small in terms of economic output, the popular music industry is, as mentioned above, powerful in its cultural influence. This will be discussed in more detail shortly, but, as a major media producer, the popular music industry has a significant influence on cultural discourse and on public policy, as seen through legislation like the DMCA and the NET Act, or more recent bills like PIPA and SOPA.

Of course, the most important element of the narrative is the denunciation of piracy: "filesharing is made primarily responsible for the decline in sales in the phonographic industry" (Tschmuck). In some expressions of this story, absolutely no other reason is allowed (Lowery, "Letter to Emily White"). As demonstrated above, this is clearly not the case, further disqualifying the industry narrative (Cooper & Griffin 25). More significant for the following analysis, then, are the actions taken against piracy. As enumerated in Section IV, the industry has pursued a range of options to combat piracy, including pursuing lawsuits, employing DRM technology, enacting more restrictive legislation, and collaborating with ISPs to restrict pirating activity: "none of the industrial giants of yore are taking this threat lying down" (Benkler, "The Wealth of Networks" 380). None of these methods have been shown to be particularly effective, and yet, although it has abandoned the first two due to publicity concerns, the industry continues to pursue the last two options. It is entirely possible that the industry believes these methods will

take time; however, given the opportunities that digitization provides apart from piracy, it is just as likely that there is an alternative explanation for the development of this narrative.

Specifically, digitization, as mentioned above, gives more equal footing to independent labels and unsigned artists in relation to the major labels (Baym). "Major labels can stifle this competition [from independent labels] by limiting the number of successful digital distribution platforms, which are the very places where independent labels' offerings can compete with those of the major labels on a level playing field" (Cooper & Griffin 33). Of course, it would be difficult for the major labels to oppose the development of digitization technology itself. Since the major labels enjoy, as mentioned above, a strong concentration of power within the popular music industry, they are able to use their market power to control the legal digital marketplaces, restricting the activity of independent labels. File sharing networks, however, are outside of their influence, and offer an alternative platform for distribution, particularly for unsigned artists but also to some degree for independent labels. Peer to peer technology, as will be discussed later, has particular beneficial implications for distribution that could benefit those with access to less capital, beyond simple illegal file sharing (Benkler, "The Wealth of Networks" 425). Although the popular music industry does not have a complete monopoly on popular music production (Hesmondhalgh 25), they do have an overwhelming influence, meaning that anyone who chooses to become involved in popular music production has relatively little opportunity to do so through their own individual capacity. Digitization and file sharing networks would diminish this property of the industry, and so, since "neither the theoretical economists nor the marketing executives have any interest in rendering culture transparent or writable" (Benkler, "The Wealth of Networks" 289-290), there is great incentive for the industry to oppose this technology. This type of anti-competitive activity is not unprecedented for the major labels, either; "the leading

firms in the sector have engaged in a repeated pattern of anti-consumer and anti-competitive behavior" (Cooper & Griffin 12) such as the price-fixing arrangement mentioned earlier.

The anti-competitive behavior of the popular music industry, when applied to antidigitization efforts, especially against unsigned artists, has the unfortunate side effect of causing the labels to treat their customer base as enemies, which becomes a particularly dangerous proposition in the context of their power to influence people and their role in socioeconomic changes, as mentioned above (Hesmondhalgh 33). Essentially, record labels have come to "approach their audiences as markets. This leads to viewing audiences as people who either pay or steal" (Baym 6). This is partially due to the nature of the Internet, and of communications in general: applying a condition to restrict the activities of one group – in this case, pirates – will generally have corresponding restrictions on similar groups. Unfortunately, in this case, the similar groups happen to be the customers. Put more clearly, "the zeal to curb peer-to-peer file sharing...could lead to a substantial redesign of computing equipment and networks, to a degree that would make it hard for end users to exchange information of their own making" (Benkler, "The Wealth of Networks" 261). Of course, the methods chosen by the labels, given their increasing tendency toward criminalization which will be discussed later in this paper, mean that not only is activity restricted, but any activity that attempts to go around these restrictions is penalized severely. This occurs even when labels are unable to enlist the support of the legitimate judicial system, for example in their new "graduated response" program of collaboration with ISPs, which "would institute a regime in which an alleged infringer could face punishment or redress without any kind of judicial scrutiny" (Sonne).

As suggested above, this exercise of power by the popular music industry is concerning given its powerful role as media. Given the economic trends of the past half century, in which

the idea of the "information economy" has grown ever more predominant, this role has only grown in significance (Benkler, "The Wealth of Networks" 6). The popular music industry, as stated above, is a part of the broader group referred to by communications studies scholar David Hesmondhalgh as the cultural industries, comprising among other elements film, television, and broadcasting. These industries "are involved in the making and circulating of products that, more than the products of any other kind of industry, have an influence on our understanding and knowledge of the world" (Hesmondhalgh 4). Yochai Benkler echoes this sentiment, arguing that "[culture] is a source of power in the critical-theory sense – a source that exerts real limits on what we can do and how we can be" (Benkler, "The Wealth of Networks" 298). This power of limitation is exemplified in the popular music industry's activities in limiting file sharing technology, the details of which will be discussed later in this paper, but is enacted in other, more subtle ways as well. For example, the piracy narrative promulgated by the industry has become almost embedded in the cultural consciousness, as demonstrated by the statement by David Lowery – an artist himself, who is not involved in the ownership or management decisions of any major labels – stating that "there is no explanation" (Lowery, "Letter") for declines in sales apart from piracy, or by the use of the inherently negative concepts of "piracy" and "intellectual property theft" themselves, or by the ability of the popular music industry to enact particularly restrictive legislation through the use of a rhetoric of "saving jobs" based on figures that are easily debunked (Sanchez). Since "the consequences of this size and power are unique to the cultural industries because of the ability of the goods they produce – texts – to have an influence on our thinking about their operations, about all other industries and, indeed, potentially, about all aspects of life" (Hesmondhalgh 31; see also Benkler, "The Wealth of Networks" 274) we as a society ought to be cautious about delegating such power to an industry with such a poor track

record. Until recently, it has been the case that at least economically the industrial production system was the most efficient method of producing popular music. Even now, it is commonly accepted that this production method still works, or at least would if it weren't for piracy.

However, this is due to seven key assumptions, which, when debunked, make it clearer that certain alternative market structures are possible in the modern technological, social, economic, and institutional environment.

VIIIb. Assumptions

The first of these assumptions has been alluded to multiple times above: the idea that popular music is in some way inferior to what is often referred to as "art music". Defining "art music" is difficult, but it can perhaps best be understood in contrast to its supposed counterpart, "pop music". That is, "art music" is generally not supported by a proprietary, market-based system, but instead by nonprofit, generally cultural, associations; is often regarded as a constituent of "high culture"; and primarily consists of orchestral and classical music, certain forms of jazz, and some modern experimental and minimalist music, rather than rock, "pop", rap, or other genres for the most part established by labels for marketing purposes. Bill Ivey, as former chairman of both the National Endowment for the Arts and the Recording Academy (responsible for the Grammy Awards), would appear to be an authority on comparisons of the two categories, Considering that he suggests that "the often-assumed for-profit/nonprofit distinction cannot be used to predetermine artistic quality" (Ivey), the similarities of the two styles of music should at least be considered. This is particularly true in light of the argument made above that commodification is not necessarily degrading to the quality of popular music; "to set creativity too strongly against commerce...is wrong. Creators need to be paid and some of the most eye-opening, thought-provoking, funny and lovely works have been produced as part of a commercial system" (Hesmondhalgh 28). Since the "[nonprofit arts'] dismissive term to characterize the for-profit arts is 'commercial,' suggesting an arena in which bottom-line concerns consistently trump artistry" (Ivey), setting aside the point of funding eliminates much of the distinction between the two categories. Considering the amount of praise – for artistic quality – given to popular music albums like The Velvet Underground & Nico, Sgt. Pepper's Lonely Hearts Club Band, Highway 61 Revisited, or Pet Sounds, or the admiration for technical and artistic prowess in popular music given to artists like Jimi Hendrix, Brian Wilson, Kurt Cobain, or Brian Eno, the comparison becomes all the more reasonable. Popular opinion, which considering the focus here on social welfare is what really matters, would tend to agree with this sentiment: "by the early 1990s, a National Opinion Research Center poll already found that an overwhelming majority of respondents agreed with the statement, 'Artistic excellence can be found in popular and folk culture just as much as in the fine arts" (Ivey). Understanding that both popular music and art music may have equal claim to quality of production allows us to have a clearer objective when it comes to policymaking in this field (Ivey).

The second of these assumptions is that artists' primary motivation for producing music is the hope of success, either in regards to fame or in regards to money. While it is likely that these are certainly factors, it seems that there are other, more important considerations for most popular music artists. Indeed, considering the stigma against "selling out" detailed above, artists seeking to make money clearly face a hostile environment. Considering the relationship with art music as described above, an alternative impetus to produce music should not be surprising. After all, the reason why art music has become supported through foundations while popular music has become supported by the market is simply a factor of economics and history. There is

a wider base of support, and therefore consumers, for popular music, but more importantly popular music has long been associated with the common people while art music has been associated with nobility and upper class patrons, meaning that when its future was threatened due to economic concerns, art music was able to enlist the support of wealthy donors (Ivey). This alternative impetus for creating music would appear to simply be love for the music, and for the creation process, itself (Abebe). "Independents... are motivated by 'the joy of independence and the pleasure of creating something new" (Baym 11). This is reflected in the practices of the labels themselves, as signed artists are generally given a fair degree of creative autonomy in producing their albums (Hesmondhalgh 32) rather than being forced to keep to a certain method. Furthermore, considering the fact that there is a substantial oversupply of artistic labor in the market (Hesmondhalgh 32, 84) it would appear that artistic production, even of popular music, is "motivated not only by self-maximizing behavior, but also by a range of other social and psychological motivations" (Benkler, "The Wealth of Networks" 381).

The third of these assumptions is the idea that art is produced primarily by individuals. Particularly in capitalist, and therefore individualist, societies, it is easy to fall into the mode of thinking that one's accomplishments are generally entirely one's own, and it is common, even easy, to achieve things independently of the actions of others. However, "even those who work alone at one moment in history do so by standing on the shoulders of those who came before" (Palfrey 45). It is generally the case, however, that major works are accomplished through working with groups. This is seen most commonly in popular music production through the work of bands, but it is also true for solo artists, considering the role of producers and studio musicians, not to mention those involved in the marketing and sales processes: "More often than not, creativity is a collaborative exercise" (Palfrey 45). This trend can even be applied more

broadly, to groups of sizes greater than the half dozen that might be in a band, if one takes into account every form of creative influence: "creative cultural and artistic work is the product of collaboration and a complex division of labour" (Hesmondhalgh 47).

The fourth of these assumptions is that the proprietary, market-based production model continues to be required to produce popular music, or even remains the best method of doing so. As stated above, the popular music industry offers a unique economic problem (Hesmondhalgh 40) as a commodification of culture. When it first became possible to produce recordings on a massive scale, music production naturally followed an industrial model, as that was (and is) the most common form of production in Western economies (Benkler, "The Wealth of Networks" 381). However, it is not the only form of production, even in the cultural industries. "In the overall mix of our information, knowledge, and cultural production system, the total weight of these exclusivity-based market actors is surprisingly small relative to the contribution of nonmarket sectors, government and nonprofit, and market-based actors whose business models do not depend on proprietary exclusion" (Benkler, "The Wealth of Networks" 41). There is significant precedent of other market systems for cultural production (Hesmondhalgh 67), including the patronage model discussed above. Furthermore, due to technological developments, production and transaction costs have been significantly diminished, allowing for supply models that earlier would have been impossible to execute, based on nonproprietary systems of production (Benkler, "The Wealth of Networks" 8, 52). The standard formats of transaction, by economic theory, are given as the firm and the market, but social sharing and exchange is also a working format – it is simply harder to measure (Benkler, "The Wealth of Networks" 463). Due to file sharing and other forms of digital technology, this form of exchange has grown in its potential. Considering this, the benefits of utilizing this format should be

addressed. After all, "the rules of property...constrain what one person or another can do with regard to a resource" (Benkler, "The Wealth of Networks" 24). It has long been assumed that ascribing proprietary rights to production is the best, and perhaps only, way to properly incentivize production, but given the conclusions made about artists' motivations made above, this may not be the case (Benkler, "The Wealth of Networks" 41). This is particularly true in light of the fact that the effect on incentives made by a change in regulations "depends on whether...it increased input costs more or less than it increased the prospect of being paid for one's outputs" (Benkler, "The Wealth of Networks" 49). If any form of production, including cultural production, is collaborative and built upon the work of others, copyright necessarily has some negative effects on future production. This will be discussed in further detail later in this paper, but it can be stated for now that rather than a competitive, proprietary environment, "an intellectual property ecosystem...can support the growth and profitability of multiple participants if the ecosystem itself thrives in a cooperative environment" (Palfrey 15).

The fifth of these assumptions is that file sharing itself is inherently criminal. This is part of the reason that social sharing and exchange has not become a significant method of production: the public relations efforts of the popular music industry have successfully associated file sharing and other collaborative online technologies with piracy, discouraging and even disabling their use for more neutral or positive functions (Benkler, "The Wealth of Networks" 261). For, in fact, "peer-to-peer techniques can be used for a wide range of uses, only some of which are illegal" (Benkler, "The Wealth of Networks" 421). For example, Skype, the video chat program, is based off of p2p technology (Goodin). So is SETI@home, a distributed computing system used by SETI that compiles the computing power of volunteers' personal home computers while not in use to run what is, in sum, the most powerful computer in the

world. P2p technology can also allow for cheaper content delivery through a similar process (Anderson), allowing cheaper and faster distribution methods that could benefit not only independent labels – as mentioned above – but also untold numbers of other producers with small amounts of capital. In effect, the association of file sharing technology with piracy, though based in fact, is "little more than a distraction" (Benkler, "The Wealth of Networks" 84).

The sixth of these assumptions is that intellectual property acts in much the same way as physical property, at least in economic terms. Due to the nonrival quality described above, however, this assumption becomes questionable (Palfrey 37). Since intellectual property, unlike physical property, can be shared freely without cost, "theft" as a concept nearly ceases to exist, and sharing the information can even increase its value through network effects, as will be discussed in further detail below. As mentioned above, there have long been provisions, starting in the United States with the Constitution, for protecting intellectual property, which includes patent, copyright, and trademark protection. The economic basis for this is a tradeoff of static and dynamic efficiency: as stated in the Introduction, intellectual property protection allows for a monopoly in the short term, which prevents access to information, but incentivizes production in the long term, allowing access to a greater degree of information over time. Without this protection, it is assumed that there would be little incentive to produce, and so there would be net zero production, and so zero access to new information, in both the short and long term. This assumption comes from experience with producing physical goods, and is unfortunately based on "the intuitive, but mistaken, Economics 101 belief that property is good, more property is better, and intellectual property must be the same" (Benkler, "The Wealth of Networks" 319). As mentioned above, this protection actively constrains future production, since "one cannot make new culture ex nihilo" (Benkler, "The Wealth of Networks" 300). Considering the extent of

recent legislation in expanding copyright protections, for example the notorious "Sonny Bono" Copyright Term Extension Act, not only has this protection come to harm future artists, but the public as well, who are continually prevented from freely utilizing what has otherwise become common cultural material. "There is serious conflict between commercial institutions that attempt to make cultural works their private property and common ownership of, or access to, cultural goods" (Hesmondhalgh 70). Dynamic efficiency is a praiseworthy goal, but only if it actually provides the public access to cultural goods in the long run.

The final and most important assumption is that the popular music industry has been seeing a broad decline, in both revenue and production. As discussed above, while the decline in revenue may be factual, this is primarily due to the industry's failure to adapt to the new digital market (Goldman), as well as the fact that the digital platform, due to the convenience it provides for a single-based market, reduces the available profits to be made. As argued above, "the entertainment industry's opposition to file sharing is not a priori evidence that file sharing imposes economic damages" (Oberholzer-Gee & Strumpf), and furthermore, as the industry begins adapting to the digital market, there are signs that revenue will increase soon (Goldman) or has already begun (Pfanner). Furthermore, the range and amount of products, as mentioned above, has not been negatively affected by digitization, and though the market has generally shifted toward singles rather than albums, "by 2011 units shipped are well above the pre-digital trend, reflecting the attractiveness of singles and the new technology" (Cooper & Griffin 23).

Thus, in summary, the assumptions inherent in the industry narrative are first, that popular music and art music are fundamentally different; second, that artists' primary motivation is for success and/or money; third, that art, including music, is produced almost exclusively by individuals; fourth, that the market-based, proprietary production model is the only, or even the

best, model; fifth, that file sharing programs are inherently criminal; sixth, that intellectual property acts in economically similar ways to physical property; and seventh, that the industry is in decline, both in revenue and production. All of these assumptions are false, if not entirely then at the very least substantially so. Dropping these assumptions help to deconstruct the industry narrative, and furthermore allow the construction of a new narrative, based first upon the technological, social, economic, and institutional (legal) realities of the market, and second upon the goals that will be set for popular music production.

IX. Technological, Social, Economic, and Legal Parameters

As suggested above, the analysis of the conditions affecting the current state of the production of popular music go "well beyond the question of file-sharing or single- vs. albummarket conversion" (Tschmuck). There are a multitude of socioeconomic factors at play, but I will proceed according to the model used similarly by both Yochai Benkler (Benkler, "The Wealth of Networks" 26, 381) and David Hesmondhalgh (Hesmondhalgh 96) incorporating technological, social, economic, and institutional/legal elements. These four elements interact and coevolve; "this coevolution leads to periods of relative stability, punctuated by periods of disequilibrium, which may be caused by external shocks" (Benkler, "The Wealth of Networks" 381). Arguably, such a shock has occurred with digitization technology. Of course, this shock cannot be viewed independently of both the changes and continuous properties of the other three elements (Hesmondhalgh 110). Nevertheless, the shock provided by technological change must be carefully considered, as "during periods of perturbation, more of the ways in which society

organizes itself are up for grabs" (Benkler, "The Wealth of Networks" 27). Although up to this point I have argued that the market faces an opportunity rather than a problem, this would appear to indicate that it in fact also faces a potential problem; not a problem of declining sales, but rather of the potential for certain agents to take advantage of this potential path divergence to adjust the social, economic, and legal elements of the market for their own benefit. In order to ensure the adjustment of these elements for society's benefit, a proper analysis of the disequilibrium is necessary.

IXa. Technological Conditions

The most important technological developments affecting the production of popular music have occurred largely over the past twenty years, and involve the spread of capital, primarily personal computers and internet access, and the spread of music production and sharing programs. Regarding personal computers, "in the 1990s...stiff competition among PC makers drove prices steadily downward. Over the course of the decade, computing power rose exponentially, while PC prices fell from an average of \$2,500 to under \$500" (Carlson 1). Not only have computers become cheaper, but they have also become more capable, meaning that access to powerful, open-ended (rather than single-function) computing technology has become pervasive in Western nations in particular, but increasingly so to the people of developing nations as well, although in such locations it is generally on a more communal rather than individual basis. Nevertheless, "the material requirements for effective information production and communication are now owned by numbers of individuals several orders of magnitude larger than the number of owners of the basic means of information production and exchange a mere two decades ago" (Benkler, "The Wealth of Networks" 4). Internet access has become similarly

widely available, as in the 1990s "the growth rate of traffic on the public Internet...[was] about 100% per year" (Coffman & Odlyzko 1) resulting in an estimated total of over 2 billion Internet users, or 30.2% of the world population, worldwide as of April 2011 (Internet World Stats). This decline in costs and increase in capabilities has diminished the need for market based production models, as the cost of capital has dramatically declined, allowing for anyone to acquire previously unreachable capabilities (Benkler, "The Wealth of Networks" 52). "With the declining cost of computation, that cost [of initial music creation] has become relatively low, often simply a computer owned by the artists themselves, much as they own their instruments" (Benkler, "The Wealth of Networks" 425).

The decline in capital costs has significantly democratized the process of musical creation on its own; however, it is matched by the increase in access to music production programs and file distribution capabilities. As discussed earlier, "the majors had marketing and budgets, but the internet made it easy for the independents" (Baym 24). Regarding production, "digitalization, the internet and mobile telephony...have made small-scale production easier for millions of people" (Hesmondhalgh 2). For example, the free, open source production program Audacity has become relatively well-regarded among music production programs (Admin) and has been suggested to be comparable even to Pro Tools, one of the standards in production software in the popular music industry. Whether this comparison is justified is debatable, but Audacity nevertheless serves as a reasonable option for most artists, particularly as most, as discussed above, are not concerned with producing a "Top 40" album. Even those who are can now access quality music production programs for less than \$100 (The MusicRadar Team). As for distribution, digitization has dramatically reduced transaction costs, as "the digital tools are available for 'everyone' directly to reach [their] audience" (Ginsburg 499). The fact that making copies now has

essentially zero cost brings entirely new capabilities, but also drawbacks, to musical production. For example, "the ease with which people can redistribute digital music files has savaged music's value as a commodity, yet in some ways increased its potential as a gift" (Baym 3). The elimination of transaction costs has affected the social valuation of music, but, much like commodification itself, not necessarily in a negative way.

IXb. Social Conditions

It has been argued that, due to the ability to exchange music for free provided by digitization, "the baseline value of music was set (and remains) at zero" (Ruen). However, it is arguable that this analysis is somewhat overbroad: it is not music itself that is devalued, but its form of commodification into discrete units. In regard to information goods, including music, consumers generally value access over ownership; that is, consumers are generally not concerned about not owning a song as long they can listen to it when, where, and how they want – especially if the loss of ownership comes with a decrease in price. Digitization has changed the conditions of access, devaluing discrete units of music simply due to the condition that they can acquire such forms of music much more cheaply through piracy. Furthermore, in the context of technological changes, it is not surprising that consumers should be aware of the decreased costs of transaction and production of popular music. After all, consumers have access to much of the same technology. Furthermore, studies have shown that people strongly associate higher value with physical property (Hansen 457), leading one study to find that nearly all consumers would be unwilling "to pay for digital downloads at the same prices as CDs" (Cooper & Griffin 16; see also Goldman). In this case, "the loss of giveability represents a loss of objective value" (Lebrecht). Nevertheless, this loss of value is that of music sold in units; access to music in the

form of libraries, for example, still retains high value as a service (Van Buskirk), as will be discussed later.

The ease of exchange causes not only devaluation of discrete units of music but also a greater acceptance of sharing music, particularly among young people, with friends and family (Karaganis). "There is a widespread, global culture of ignoring exclusive rights...this culture has developed a rhetoric of justification that focuses on the overreaching of the copyright industries and on the ways in which the artists themselves are being exploited by rights holders" (Benkler, "The Wealth of Networks" 456; see also Palfrey 24-25). It is interesting to note here that labels' activities may have actually exacerbated the "problem" they are fighting against; of course, it is more than likely consumers are justifying actions after the fact, but nevertheless it is a fact that the public has become more accepting of piracy (Masnick, "New Study"). Much like the devaluation of discrete units, the growth of music sharing has made the current proprietary model more difficult to sustain. "Powerful forces – cultural views in other parts of the world, widespread social norms (good and bad), and certain real benefits to open-information environments – are making it hard for the full exclusion approach to work over time" (Palfrey 141).

The spread of personal computers and internet access mentioned above has led to increased involvement in online communities, in this case specifically focused on the sharing of information and cooperative projects of creation (Benkler, "The Wealth of Networks" 4-5). Yochai Benkler cites recent social trends "of networked information economy, of nonmarket production, of an increased ethic of sharing, and an increased ambition to participate in communities of practice that produce vast quantities of information, knowledge, and culture for free use, sharing, and follow-on creation by others" (Benkler, "The Wealth of Networks" 470).

The most widely known example of this is the rise of open source software, in which volunteers worldwide contribute to software code for what have become widely used software, programming languages, and services, without any sort of monetary incentive. The capabilities provided by access to capital and the Internet have led to greater individual production efforts (Benkler, "The Wealth of Networks" 38, Palfrey 130) and collaboration with what are essentially total strangers (Palfrey 130). The possibilities for collective action in particular stand in stark contrast to the "notion of ownership and property as the right to exclude others" (Hesmondhalgh 70) that acts as a negative side effect to commodification.

IXc. Economic Conditions

Of course, this exclusionary principle is becoming easier to work around in general. For example, as suggested in the discussion of technology, music production and transaction costs have significantly diminished over the past twenty years due to digital technology (Michel 16). Hesmondhalgh voices concern that transaction costs have decreased significantly more than production costs (Hesmondhalgh 29), although Waldfogel finds that digitization can have similarly significant effects on production costs as transaction costs (Waldfogel, "Copyright Research" 339). This finding is supported by a report by the Canadian Public Arts Funders, which found that "it is possible to produce, record and mix music in small, affordable digital studios and produce sound quality matching high end studios of the past. Recording does not need to be concentrated in large urban centres" (Poole 33). The report goes on to suggest that recording equipment has become affordable for individual musicians, and that recording software has become available online, both of which allow amateur musicians "access to equipment and processes that used to be available only to professionals" (Poole 34). Similar

declines have been seen in transaction and reproduction costs, where "digitization has reduced the marginal costs of digital products to essentially zero" (Waldfogel, "Copyright Research" 339). As suggested above, these cost declines have allowed for a significant expansion of individual capabilities for music production and distribution.

The decrease in costs has potentially significant effects for one major characteristic of the production model of the popular music industry: the risk factor. Since risk comprises both chance of loss and size of potential loss, a decrease in costs implies a decrease in associated risks. "The cultural industries constitute a particularly risky business because they are centred on the produced texts that can be bought and sold...this risk derives from the fact that audiences use cultural commodities in highly volatile and unpredictable ways" (Hesmondhalgh 27). In response to this, since the late 1970s, "instead of serving all market segments, the major [labels] were committed to the superstar principle" (Tschmuck). That is, major labels would focus on a few artists targeted toward the largest demographics, rather than many artists targeted toward a variety of demographics, with "attention and revenue...concentrated in hits, or the most successful and popular cultural products" (Hesmondhalgh 30). Even so, "many texts fail, even those that companies expect to succeed" (Hesmondhalgh 8), a fact supported by David Lowery, who suggests that only one out of every ten artists on a label's roster are successful (Lowery, "Meet the New Boss"). Despite the targeting of large demographics, as stated in section VIIIb, artists are given a fair amount of creative autonomy in order to counter the unpredictability of fans' tastes, a point emphasized by Hesmondhalgh (Hesmondhalgh 27, 32, 79) which he considers "absolutely crucial for an understanding of the cultural industries in the late twentieth century [as] it shows that the metaphor of the traditional factory production line...entirely misses the point" (Hesmondhalgh 81).

As mentioned throughout this analysis, the current model of the popular music industry is based upon market trade, secured through proprietary rights. As suggested above, this contrasts with nonprofit music production, as "if the default in the for-profit world is to generate maximum revenues from the licensing of intellectual property, the default in the non-profit setting is probably to make intellectual property as broadly available as possible" (Palfrey 120-121). What is particularly striking about the distinction here is that exclusive rights operate in what acts as essentially a feedback loop (Benkler, "The Wealth of Networks" 50). In a market where not all players operate on a proprietary model, any legislation that expands proprietary rights (which would be seen as efficient, as will be discussed below) would increase costs for the nonproprietary operators, inciting them to take on proprietary forms of production. This is not to suggest that proprietary modes of production are necessarily worse for society, but given a market where a certain percentage of the output is immediately available for public use, we should be hesitant to eliminate such output. What is notable about the popular music industry is the fact that the labels are primarily the ones benefiting from greater proprietary rights, rather than the artists. "Very few musicians, including successful recording artists, make money from recording royalties. The recording industry takes almost all of the revenues from record and CD sales, and provides primarily promotion and distribution" (Benkler, "The Wealth of Networks" 425).

Beyond these major characteristics, the popular music industry has adopted certain business practices over the past twenty years that have potentially dramatic effects in the light of the recent technological change. First, the industry as a whole has become a more concentrated oligopoly than in years prior. It tends toward concentration due to the risk involved in the industry, where, if only one out of ten artists will succeed, it is wise to fund the production of

substantial amounts of music in order to achieve a statistically significant population of artists, and therefore come close to eliminating these risks. Furthermore, access to a greater amount of cultural material without having to pay the licensing costs diminishes the costs of production, and so "strong exclusive rights drive concentration of industry owners" (Benkler, "The Wealth of Networks" 50). Increasingly restrictive copyright legislation has thereby encouraged concentration in this industry, as exemplified by the merger of UMG and EMI in 2012, reducing the number of major labels to three. Second, the industry has to a large degree retained its old model of production and marketing, despite the recent technological and social changes. As stated above, much of the reason for the industry's decline over the past decade has been due to its reluctance to engage in the digital market. Instead, the major labels preferred to retain their old model through legislation like the DMCA, through which "copyright owners believed that it would be possible to build strong encryption into media products distributed on the Internet. If they did so successfully, the copyright owners could charge for digital distribution and users would not be able to make unauthorized copies of the works. If this outcome was achieved, the content industries could simply keep their traditional business model...at lower cost" (Benkler, "The Wealth of Networks" 415). This "traditional business model" consists of multiple stages of production; as summarized by David Hesmondhalgh, it comprises of conception, execution, transcription, reproduction, marketing, publicity, distribution, and retailing (Hesmondhalgh 80). The third practice that the industry has engaged in is the shrinking role of the major labels in a substantial number of these individual stages in the process. Considering the risk involved in establishing successful acts, the major labels "have stopped investing in artist development and now just chase the next big thing" (Rose). Instead, artist discovery and development have largely been "subcontracted to small- and medium-sized firms" (Hesmondhalgh 108). It is key to note

that despite the increasing capabilities of artists to produce their own material, and the subcontracting done by major labels in terms of discovery, much if not all of the work produced by artists is actually owned by the labels (Rohter), further reinforcing the point that made above that the labels benefit more from proprietary rights than do the artists, with relatively significant legal implications that will be discussed shortly.

IXd. Institutional/Legal Conditions

According to David Hesmondhalgh, "Neo-liberalism and the information society are the vital political contexts for understanding changes in communications and telecommunications law and policy since the 1980s" (Hesmondhalgh 102). The key implications of such a perspective for this analysis are first, the focus that neoliberal policies place on proprietary models of production, and second, the attention paid to the cultural industries, particularly the popular music industry, as an element of the information society. In this context, the major legal conditions currently affecting the popular music industry are the increasing degree of legal protections provided to copyright, the conditions of intellectual property in a capitalist market as compared to physical property, and the rise in legal methods of circumventing the traditional system of copyright protection.

As described in Section III above, the popular music industry has pursued a number of legal channels over the past twenty years in order to combat piracy, primarily in the form of "pushing toward greater scope and reach for exclusive rights" (Benkler, "The Wealth of Networks" 455). "The legal battles reflect an effort by an incumbent industry to preserve its very lucrative business model" (Benkler, "The Wealth of Networks" 427). The increasing amount of legal protections has come in the form of extensive litigation, criminalization of piracy (Benkler,

"The Wealth of Networks" 442), and expansion of copyright coverage in terms of both material and duration (Benkler, "The Wealth of Networks" 443). This has been met with a fair amount of opposition, considering that criminalization classifies many of the tens of millions of p2p users as felons (Benkler, "The Wealth of Networks" 442) and that copyright extension, especially the "Sonny Bono" Copyright Term Extension Act, implies that much of the cultural material produced in the 20th century may never reach the public domain (Benkler, "The Wealth of Networks" 442), causing many to reach the opinion that "intellectual property law is today generally skewed too far in favor of creators and too little in favor of the public at large (Palfrey 144). Furthermore, the extensions on copyright protection, in combination with technological developments, have caused the concept of ownership of information goods to lose much of its meaning, given that purchasing digital files now "only gives a license to listen to it, for example, but often comes with restrictions such as preventing that person from lending it, sharing it, or burning it to a CD" (Farrell). Indeed, recent issues over transferring rights to iTunes purchases, whether during one's life (Farrell) or after it (Whittaker & Osborne) indicate that the popular music industry has already shifted away from a model focused on individual ownership of music, a process that has been recognized by David Hesmondhalgh (Hesmondhalgh 70).

"In the standard argument, [strong intellectual property rights are] intended to give producers incentives to create information that users want" (Benkler, "The Wealth of Networks" 318). "Policy makers and their advisers came to believe toward the end of the twentieth century that property in information and innovation was like property in wristwatches and automobiles" (Benkler, "The Wealth of Networks" 461), resulting in legislation like the DMCA that treats information and culture like "finished goods, rather than the outputs of social and communications processes" (Benkler, "The Wealth of Networks" 417). However, considering the

discussion of incentives presented above, the extension of intellectual property rights may not be the best method of encouraging production. Indeed, "the market that develops based on [intellectual property laws] will, from the technical economic perspective, systematically be inefficient" (Benkler, "The Wealth of Networks" 36). This is due in part to the conflict between dynamic and static efficiency discussed above, but also due to the fact that in the digital era, the replication cost, and therefore marginal cost, of information goods has been set to zero.

Economic theory argues that in efficient markets, goods are sold at their marginal cost, which makes it unsurprising that "in theory and as far as empirical evidence shows, there is remarkably little support in economics for regulating information, knowledge, and cultural production through the tools of intellectual property law" (Benkler, "The Wealth of Networks" 39). Due to these considerations of the inefficiency of intellectual property law, "a vibrant discussion [has risen] in the United States and other countries about whether intellectual property rights have grown too much over the past two hundred years" (Palfrey 24).

Concurrent with the questioning of the appropriateness of the strengthening of intellectual property rights has been the rise of alternative, generally nonproprietary, methods of protecting ideas. For example, with the Creative Commons license, "it is possible to give away certain rights in certain creative works" (Palfrey 107) while still retaining the right, for example, to commercial exploitation. Such protections offer significant benefits to artists, particularly those who are, for example, incentivized primarily by the love of, and desire to share, their music. Creative Commons licenses generally allow much more flexible and free licensing arrangements than standard copyright models, although recent judicial decisions have increased the freedom allowed with certain uses of copyrighted materials. For example, "courts now regularly give wide berth to 'transformative' reworkings of copyrighted works" (Ginsburg 487).

These developments illustrate "the evolution of copyright doctrine toward…a law of users' rights" (Ginsburg 497), in opposition to the best efforts of the popular music industry.

In summary, then, there are a substantial number of factors affecting the current development of the popular music industry. Due to technological developments, sophisticated, open-ended computing equipment with powerful networking capabilities has become commonly available to the average consumer, as has simple but effective file sharing and production software. Partially in response to this, consumers in general have come to value music, at least in discrete units, less than they would twenty years ago, and have become more accepting of sharing music freely amongst themselves. This greater capability and willingness to share has contributed to the development of online communities based around social production and information sharing. The technological developments have significantly diminished production and reproduction/transaction costs for popular music, effectively diminishing the risk inherent in the system, which has in prior years generally led toward the pursuit of a "star system" based on marketing hit songs to larger demographics. The changes in technology also have implications for the industry's other features, such as the industrial production model, with its feedback loop of increasingly strong proprietary rights that has led the industry to be dominated by a highly concentrated oligopoly. Though this oligopoly has attempted to retain its old model of production, "law would have to achieve a great deal in order to replicate the twentieth-century model of industrial information economy in the new technical-social context", as it would have to essentially reshape the face of computing and networking characteristics, not to mention "fundamental human motivations and practices of sharing and cooperation" (Benkler, "The Wealth of Networks" 385). Therefore, due partially to the risk involved in production but also due to the increased individual capabilities of artists as a result of digitization, the role of labels

in the production process has generally declined. Despite this, copyright legislation has generally only gotten more restrictive over the past twenty years, both in coverage and in duration of protection, even though it has not been conclusively shown that such protection actually encourages production. As a result, alternatives and workarounds to the restrictive copyright regime have been developed, for example with Creative Commons licenses and the expansion of fair use. With the technological, social, economic, and legal context of the popular music industry established, it must now be determined whether "the system serve[s] the larger public interest, or [whether] it tilt[s] too far toward special interests, owners' rights, and protected revenue streams" (Ivey).

X: Goals of Popular Music Production for Artists, Consumers, and Society

As suggested in Section VII, if society is presented with any opportunity for changing the structure of popular music production, it must improve, or at least maintain, the "balance between the rights of creators and the public" (Palfrey 144). A more pragmatic guideline is provided by Bill Ivey, who suggests that "a vibrant arts system requires a reasonable split among artistry, the bottom line, and the public interest" (Ivey). Unfortunately both artistry and the public interest are relatively subjective concepts, but an attempt will be made to provide a workable definition for each. In this analysis, the public interest will be divided between goals for consumers as individuals and goals for society as a whole.

Regarding artists, "the future of the Internet lies in amplifying the value of human creativity" (Ruen). Determining the goals of artists themselves in producing music is incredibly

subjective as it is likely to vary from artist to artist. As suggested above, it is unlikely that success, either in regards to fame or money, acts as a primary goal, especially considering the fact there remains an oversupply of artists even while "there's not a lot of superstars out there" (Rose). Instead, it would appear artists make music "because [they] love it" (Abebe). Indeed, "the equation of human well-being with the optimizing of economic satisfactions...provides a limited basis on which to proceed in assessing the cultural industries" (Hesmondhalgh 39). Considering the fact that "Nearly all symbol creators seem at some point to experience the constraints imposed on them in the name of profit accumulation as stressful and/or oppressive and/or disrespectful" (Hesmondhalgh 82), it would appear that some degree of freedom of expression is of particular importance to artists. This is reinforced by the dissociation of commerce and artistry in the public mindset discussed above, resulting in the artistic license given by even major labels to their star artists. Related to this desire for free artistic expression is the desire for free access to existing materials. As discussed above, restricting the use of information has costs for future information production (Benkler, "The Wealth of Networks" 38), and so easier access to existing information is surely of benefit to artists. Furthermore, in cases where motivation is primarily provided by artistic goals or other "intrinsic", nonmonetary incentives, monetary incentives may actually discourage the production of music, due to the negative associations with being paid for something regarded as a social function (Benkler, "The Wealth of Networks" 94). Of course, "creators need to be paid" (Hesmondhalgh 28), but there is a strong argument to be made that while artists need a *living*, they do not need wealth, in order to incentivize production.

Regarding individual consumers, the most important goal is access. As suggested in Section IXb, consumers generally value access over ownership, which has been one of the major

factors in the industry's failure to adapt to the digital marketplace: "the industry's concern with questions of supply (who owns these recordings?) has neglected important questions of demand (why do people want them?)" (Marshall 64). Many sources have come to the conclusion that, with the ease of distribution, access models have come to trump ownership models (Etheridge; see also Goldman, Sheff 883). This is actually a major driver of piracy, as shown in a study by the international market research firm YouGov, finding that "Danish pirates actually would prefer to stay within the law. But for the group the need for ease of use and a high level of accessibility simply pulls so much that they choose to gain access to illegal material" (YouGov). This is the understanding of Spotify's leadership, for example, who "[have] always maintained that music fans don't want to fileshare illegally but they do want to have everything at their fingertips instantly" (Topping). Of course, access is primarily an economic consideration, and ignores the complex social aspects that popular music entails. In order to analyze those, I conducted an online survey of the student population at the Ohio State University, focusing on students' listening habits and valuation of the music they listened to. Considering the fact that "the most relevant populations from the perspective of the music and movie industries [are] teenagers and young adults" (Benkler, "The Wealth of Networks" 424), this population is particularly appropriate for such an analysis. The survey returned 168 responses, 92% of which were from students between 18 and 25, with a gender and racial makeup statistically similar to that of the University as a whole, as well as a relatively even income distribution, making it an effective random sample. The survey responses indicate that the majority (62%) of this age group considers the capability of sharing music to be "somewhat", "very", or "extremely" important, particularly for its social function, as 94% stated that they primarily share music in person. According to the responses, sharing is done generally for purposes of discovering new

music, bonding with other people, expression of their own musical tastes, and to help support their favorite artists. In order of importance for music access software, respondents ranked price first, followed by accessibility and variety of content, and then amount of available content. In terms of the listening experience itself, respondents indicated that the most important elements were quality of the music (in terms of artistry rather than sound quality) and a relationship with the music or artist.

Regarding society as a whole, there are certain shared goals with both artists and consumers, which is not surprising given that society has an incentive to balance the needs of these two groups: "intellectual property policy should seek to promote innovation, fairness and the public interest all at once" (Palfrey 144). For example, there are strong arguments that an increased variety and number of sources of information, which includes cultural production, improves conditions of individual freedom and autonomy (Benkler, "The Wealth of Networks" 147-150). Both David Hesmondhalgh and Yochai Benkler emphasize the point that the cultural industries have a potentially dramatic impact on the implementation of liberal values (Hesmondhalgh 42, Benkler, "The Wealth of Networks" 274). It is useful here to recall the argument that popular music has much in common with art music, and to look toward arts foundations and their leaders for guidance as to what the societal goals for popular music production should be. To start with, the Ford Foundation values art for its ability to "inspire innovation and imagination, encourage civic dialogue and reflect the rich diversity of our nation's changing demographics" (Ford Foundation); alternatively, the National Endowment for the Arts provides awards "to support artistic excellence, creativity, and innovation for the benefit of individuals and communities" (National Endowment for the Arts). Unfortunately these goals, while admirable, do little to provide objective goals against which to measure success. In

contrast to this, Bill Ivey believes that "we can evaluate that balance and judge the health of our system by looking at two processes: nurturing and gatekeeping" (Ivey). Nurturing is here defined as possessing the resources for, and actively engaging in, the investment in quality works of art; gatekeeping is defined as allowing a "diverse variety of art and artists to connect with audiences" (Ivey). Ivey further suggests that if institutions charged with these tasks have demonstrated themselves ineffective at doing so, "then society should find ways to intervene; it's in the public interest" (Ivey). Considering the fact that the popular music industry engages in a market environment, and "the correlation of capacity to pool capital resources with capacity to offer the best possible filtering and synthesis is not obvious" (Benkler, "The Wealth of Networks" 199), it might do some good to reevaluate the role of the popular music industry in popular music production.

To summarize, the goals for artists in popular music production are to achieve a comfortable living while retaining the capability for free artistic expression, with as few restraints as possible, not only in terms of what they produce but also in terms of the material they have access to. The goals for individual consumers are to have relatively cheap, easy access to music, as well as a strong social connection to the music, both in their capability of sharing it with others and in their relationship with the artist or the music itself. Finally, the goals for society as a whole are to foster institutions for popular music production that effectively conduct the two functions of nurturing and gatekeeping, or, put more explicitly, investing in quality works of art and distributing a wide variety of such art to the public.

XI. The Opportunities Facing the Market

It should be noted at this point that the opportunities being addressed here focus on the popular music *market*, rather than *industry*. The distinction is relevant, due to the fact that the goal is to foster continued production of popular music, for the benefit of consumers and society generally; whether or not the best way to do so means the strengthening or weakening of the industrial production model should not be a concern. In fact, the arguments that are made below tend to view the industrial production model as constrictive of liberal values (Benkler, "The Wealth of Networks" 22), and that "institutions – non- and for-profit organizations – tend to serve the public interest when they pursue strategies of openness rather than exclusion" (Palfrey 146). Considering Hesmondhalgh's argument that we should understand the original industrialization of popular music production "not as a fall from grace from a non-commodified state of culture, but as fundamentally ambivalent, as enabling and constraining" (Hesmondhalgh 70), surely a return to a non-commodified state should be viewed similarly, at the very least. However, none of the opportunities enumerated below involve a wholesale elimination of the industrial production model. Instead, they all describe alternative models of production that have become possible due to the increased "salience of social sharing and exchange as a modality of economic production" (Benkler, "The Wealth of Networks" 121), all of which can coexist with the industrial model.

XIa. Adjusted Market Production: The "Scholarly Lawyer" Method

In his book "The Wealth of Networks", Yochai Benkler proposes a framework for understanding methods of production of information-based goods, which includes music, based

on whether such methods involve profit-based proprietary, profit-based nonproprietary, or nonprofit models, and whether they operate in the market, within firms, or in the public domain. He describes the model of nonproprietary profit-based production in the public domain as the "scholarly lawyer", who "write[s] articles to get clients; other examples include bands that give music out for free as advertisements for touring and charge money for performance; software developers who develop software and make money from customizing it to a particular client, onsite management, advice and training, not from licensing" (Benkler, "The Wealth of Networks" 43). Thus, in this model, artists would share their music freely for individual use, generally under a Creative Commons style license, allowing them the flexibility to control commercial use. Licensing for further creative use would also be more freely licensed, making music what Richard Stallman, founder of the Free Software Foundation, describes as "free as in free speech, not free beer". As such, artists would retain the rights to sale through platforms like Spotify and Pandora (which, notably, offer services beyond ownership) and the rights to performance, which is where such artists would earn the better part of their income. Granted, many claims are made that Spotify and Pandora do not pay enough (Krukowski) although the reliability of these claims is somewhat debatable (Degusta). "Interestingly, this is the model of appropriation that more than a decade ago, Esther Dyson and John Perry Barlow heralded as the future of music and musicians. They argued in the 1990s for more or less free access to copies of recordings distributed online, which would lead to greater attendance at live gigs" (Benkler, "The Wealth of Networks" 45). There would be a significant decrease in the use of labels, considering that "record labels have traditionally played major roles in production, promotion, and distribution of music [and] it is clear that new technologies have revolutionized production and distribution" (Waldfogel, "Copyright Research" 340).

This model is not unprecedented, nor is it without analogues. For example, as mentioned in Section IXc, even in the current system artists earn money primarily through performance, merchandise, and other nonproprietary avenues, while the labels earn most of their revenue through record sales (Benkler, "The Wealth of Networks" 425; Masnick, "RIAA Accounting"). In a survey of artists by the Future of Music Coalition, "88% of survey respondents derived between 0% and 10% of their music-related income from sound recordings in the past 12 months" (Thomson). Furthermore, licensing of earlier works is commonly done, as witnessed through the influence of blues music on the Rolling Stones, the innumerable covers of folk tunes, the concept of jazz "standards", or, in more recent phenomena, the explosion of electronic music remixes and samples used in hip hop recordings. Freer licensing could only contribute to more invigorated cultural production (Palfrey 45). Furthermore, there are analogues in other entertainment industries, particularly in the film industry with the services Netflix and Hulu Plus. Much like Spotify, these services provide access to a substantial library of content for a monthly access fee, and are able to be accessed from any location with a single account. Unlike Spotify, these services have become financially successful, and indicate that music services may, with proper adaptation, follow the same path. Alternatively, crowdsourced funding has become an option for some artists, for example with Kickstarter, which "uses Amazon as a payment system to implement what is a current-day implementation of the street-performer model", which suggests further that assuming such a model would not be unprecedented.

Granted, this model may appear to be unstable, primarily due to uncertain revenues, but this is not necessarily the case. It is worthwhile to keep in mind that, as noted above, proprietary markets are not necessarily required for popular music production (Benkler, "The Wealth of Networks" 41). For example, in current information markets, proprietary systems occupy a

comparatively small position compared to nonproprietary systems (Benkler, "The Wealth of Networks" 41). Furthermore, voluntary payment models have been shown to be effective, with "total revenues...consistent with those that artists can expect from forced-payment systems" (Benkler, "Voluntary Payment Models" 29). "We take for granted that voluntary payments, tips, will play a nontrivial part of the revenue of taxi drivers and servers, but think it ridiculous to think of voluntary payments as a part of the mix of revenues that artists can rely on to make a living" (Benkler, "Voluntary Payment Models" 29). Even aside from this, as noted above, artists currently make most of their money off of nonproprietary aspects of music production, so "it appears that much of the actual flow of revenue to artists...is stable" (Benkler, "The Wealth of Networks" 426). There is also a significant cost, both economically and in terms of public relations, to pursuing ever stronger intellectual property protection (Sheff 882). Allowing for open sharing of music for individual use would diminish these costs, although it would also require reducing the dependency on and role of labels, due to the resulting decrease in their portion of revenues. This would come with a requirement of artists to take on the tasks of labels themselves, although in "the digital age...self-financing production and distribution becomes a credible option with the new Internet technologies" (Michel 24). Given that the role of labels is already shrinking, this concept is far from unworkable, especially given the increasing legal options available for contextual protection of one's works.

The benefits of such a system are numerous. Primarily marked by the assumption of much, or all, of labels' functions by the artists themselves, this system features all the associated benefits for artists. For example, although Hesmondhalgh emphasizes the role of creative autonomy in the process of production for major labels, as it "shows that the metaphor of the traditional factory production line...entirely misses the point", there is a concern that even if

artists are given some creative autonomy, there remains the point that the labels still choose which artists to hire and which artists to dismiss, especially given the concentration in the industry (Cooper & Griffin 1). By participating in a more independent mode of production, many more artists are given not only creative autonomy, but the opportunity to actually be heard, "and as a result...[may] be able to get paying gigs instead of waiting tables or 'getting a job'" (Benkler, "The Wealth of Networks" 426). Furthermore, artists retain the potential for stable income, given that "much of the actual flow of revenue to artists...is stable" (Benkler, "The Wealth of Networks" 426) and the fact that users of streaming services "may not buy an album...but you can sell them tour tickets and a T-shirt of their favorite band" since "the industry benefits by learning more about fans' tastes" (Topping). Aside from getting paid, artists gain by the fact that sharing enables a "broad dissemination of knowledge" (Palfrey 109), a goal artists tend to share with the nonprofits Palfrey is in this case advising. As for individual fans, the benefit is that, in regard to streaming services, "by paying out only when people actually listen...on-demand unlimited music services build an incentive into the music business to create works of lasting value" (Van Buskirk), satisfying consumers' desire for quality music. Furthermore, with more independent production and greater access to worldwide communities through extensive access to computers and the internet, artists are able to appeal to "the most engaged or satisfied audience" (Benkler, "The Wealth of Networks" 205) rather than the larger demographics that the industrial model required, allowing better tailoring to specific tastes. Finally, there is substantial benefit to society in that this form of production would allow a greater variety and number of sources of information, improving conditions of individual freedom and autonomy (Benkler, "The Wealth of Networks" 147-150). Furthermore, the disinclination of this system toward proprietary models "is a good thing for society at large"

(Palfrey 120-121), as it provides greater access to information and cultural participation in general. It is hardly necessary to mention the fact that, with reduced label presence and need for proprietary rights, the excessive lawsuits, overly restrictive legislation, and pursuit of extralegal methods of punishment will largely subside.

XIb. Gift Economy and Fan Integration

Similar to the model described above is another model that still features professional musicians, but begins to approach what might be referred to as a "folk culture", in that it decreases the distinction between producers and consumers, or between artists and fans. It also encourages open sharing of music, but puts it in the context of an exchange, building a connection between artist and fan: "the whole thing begins and ends through the uniquely human connection – and this connection is not in one direction, but in many directions. It's the artist giving to fans, the fans giving to artists and, beyond that, the fans giving to other fans and artists giving to other artists" (Masnick, "Dont Make People"). As the artists give fans music, the fans feel an obligation to give back to the artist, either directly by purchasing merchandise and concert tickets, indirectly by providing publicity, or, in a twist unique to this model, providing shelter and sustenance to the artists they support. This may seem alien, especially in the context of the current model, but it is already starting to appear in certain circumstances. For example, Amanda Palmer of the band The Dresden Dolls recently gave what has become an infamous TED talk on her experiences following this model, in which "instead of seeing audiences as revenue sources waiting to be correctly monetized, [artists] view them as allies in a cause that has many ways to break even or at least turn an adequate profit" (Baym 23). This model has been utilized in other countries, particularly Sweden, where an entire consortium of artists have

established a network of this style with their fans, called the "Swedish Model" (Baym 3). Considering the open approach the artists make to their fans, the barrier between them is intentionally dismantled, allowing fans much greater input into the creative process.

This model has some precedent, as suggested above, in the form of "folk culture" common before the industrial era of popular music production: "once local and interpersonal, inherently relational, and shared with co-present others, the phonograph and the recording industry it spawned enabled music to become a centralized mass-produced commodity" (Swedish Model). Folk culture primarily featured musicians pursuing their craft for love rather than money, more often as avocation than vocation, earning them a place in their community but generally little recognition beyond it to society at large. Now that technology has allowed for a return to large-scale networks of support and communication, there is the potential for the return of a new form of folk culture, in which artists are once more generally supported by the communities they are a part of, consisting not only of fans but also of fellow artists. "For most of human history musicians and artists have been a part of the community...the Internet, and the content that we are freely able to share on it, are taking us back" (Masnick, "Don't Make People"). This is still a relatively untested system, and does not fit at all within the standard market framework. Nevertheless, "Amanda's message is clear: Make the human connections, then trust the relationship even though it sometimes seems awkward" (James).

Once more, it is important to note the fact that the concept of the necessity of market production has been debunked. Furthermore, the social networks of sharing information that digitization technology has fostered encourage the development of fan-based communities, especially fan-based communities that incorporate the artists they are centered on. Digitization has also made the concept of a gift economy more realistic, as "the ease with which people can

redistribute digital music files has savaged music's value as a commodity, yet in some ways increased its potential as a gift" (Baym 3). The sentiment expressed by Benkler in section Xia, on the general acceptance of tipping waiters but hesitation to approve of similar voluntary payments for artists, applies equally well in this model (Benkler, "Voluntary Payment Models" 29), as does the study suggesting that voluntary payment methods could be as successful as forced payment methods (Benkler, "Voluntary Payment Models" 29). Again, this model stands in stark contrast to the proprietary system – "gift economies are often contrasted with market economies" – and many artists will likely feel uncomfortable engaging in it (James). However, for those willing to trust, it has the potentially to be quite successful.

In addition to its potential for success, the gift economy model allows for greater interaction and collaboration between artists and fans, which, if artists are willing to follow Amanda Palmer's advice and trust the relationship, provides a degree of security. First, once more, artists already make a comparatively small percentage of their income from recorded music sales, so abandoning this form of income does not incur any immediately drastic consequences. It does involve abandoning the label's production support, but as discussed above, production and distribution are now much more easily accessible processes for individuals. Second, in terms of this system in particular, the arrangement presents less risk to artists, given not only their direct support as a key member of a community, but also the fact that their close interaction with their fans decreases the risk that arises from audiences using "cultural commodities in highly volatile and unpredictable ways" (Hesmondhalgh 27). This is because, with such close interaction between artists and fans, there would be greater potential for anticipation of shifting tastes. Furthermore, there is evidence that "file-sharing acts as a mechanism to spread information about a good from consumers with zero or low willingness to

pay to users with high willingness to pay" (Peukert & Claussen 2). Thus, by encouraging a community of sharing, artists engaged in a gift economy have higher potential to engage users who will be willing to buy more merchandise, concert tickets, or other forms of income for the artist. This results in a situation where artists "find file sharing [to be] an indisputable positive" (Baym 12). As for the benefit to fans, as suggested above, a relationship with the artist is one of the essential elements for enjoyment of music, and this model presents the opportunity for much closer interaction than the proprietary market-based model. Furthermore, due to this interaction and building of community, much like in the "Adjusted Market" model, artists are able to cater more directly to fans' tastes, due to the ability to access innumerable fans worldwide even for the smallest niche genres. Finally, society benefits due to this increased variety of production, as well as the further diminished role of labels in this format. Specifically, as suggested above, trusting the popular music industry with the power and responsibilities associated with popular music production is potentially dangerous, given the "ability of the goods they produce – textsto have an influence on our thinking about their operations, about all other industries and, indeed, potentially, about all aspects of life" (Hesmondhalgh 31). The opportunity to have great public participation in the production of texts should surely be a benefit to society.

XIc. Peer Production

If the opportunity to have greater public participation in the production of texts is of benefit to society, then peer production has the potential for even greater benefit than the gift economy model. The peer production model takes advantage of the widespread access to both sophisticated, open-ended computing technology and the networking capabilities provided by the Internet to foster direct popular production of music. Rather than featuring a class of professional

or semi-professional musicians like the adjusted market or gift economy models, the peer production model allows anyone to contribute directly to cultural production, in as large or small a degree as suits their capabilities and desires. This builds on the theme of interaction inherent in the gift economy model, taking it one step further by making producers and consumers essentially equivalent (Benkler, "The Wealth of Networks" 126-127). "We are seeing the possibility of an emergence of a new popular culture, produced on the folk-culture model and inhabited actively, rather than passively consumed by the masses" (Benkler, "The Wealth of Networks" 275). Much like the other models, this form of production has a number of analogues. Most notable is the open source movement, which "depends on many individuals contributing to a common project, with a variety of motivations, and sharing their respective contributions without any single person or entity asserting rights to exclude either from the contributed components or from the resulting whole" (Benkler, "The Wealth of Networks" 63). Open-source production has produced "every imaginable type of computer code – some of it the most important code in a given domain [such as] the Linux operating system, Apache Web servers, Mozilla Firefox Web browser, [and] OpenOffice word processing software" (Palfrey 106). Certain Massively Multiplayer Online Games (MMOGs) also operate on a peer production model, like Minecraft and Second Life, where a platform is established by one entity, but the experience is shaped by the users themselves (Benkler, "The Wealth of Networks" 74). This model requires some degree of modularity and granularity (Benkler, "The Wealth of Networks" 100), meaning whether production of an individual song can be broken into smaller pieces, and whether these pieces are small enough. Arguably, with digital technology enabling convenient access to music production and editing software, which allows songs to be built up from combining individual basic elements, as well as access to extensive ranges of electronic pitches,

timbres, rhythms, and other elements of musical composition, modularity and granularity are not a concern. Given the small degree of investment any contribution would require – for example, adding a bassline to a two-second clip – and that "if this investment is sufficiently low, then 'incentives' for producing that component of a modular project can be of trivial magnitude" (Benkler, "The Wealth of Networks" 101), then only the intrinsic motivations of contributing to one's culture should be enough to motivate participation. There is some concern that without the labels, there would be no one to conduct the function of accreditation, or determining what the "quality" productions are; however, given the dependence of this model – and all of these models – on fan involvement, it would appear even this process would become more democratically determined. That is not necessarily the best-case scenario, however, as fans will generally not be able to offer expert opinions on this subject; therefore multiple sources suggest an alternative to be found in online magazines, forums, and (good) blogs to act as intermediaries for filtering and accreditation (Baym 16; see also Waldfogel, "Copyright Research" 341).

This model has fewer precedents, although it echoes the punk era's "Do It Yourself" or DIY mentality. Peer production exhibits some similarities to folk culture, with its focus on community involvement in artistic production (Hesmondhalgh 34), but the most serious comparison can actually be made with the function fulfilled by the modern band structure. Yochai Benkler describes peer production as featuring "a loose association with others who are interested in a particular outcome they share with us, allowing us to provide and explore many more diverse avenues of learning and speaking than we could achieve by ourselves or in association solely with others who share long-term strong ties" (Benkler, "The Wealth of Networks" 464-465). Arguably this definition could fit relatively well to bands, especially the more informal unsigned bands, with the desired outcome being musical production. Peer

production of music features a group of individuals each contributing somewhat equally, according to the ability and desire of each, to a common interest of musical composition – as does production by a band. Peer production simply operates at a larger scale, and with greater requirement of a technological interface.

The peer production model simply takes the argument made above, that art is largely collaboratively produced, to its logical conclusion. "As the network makes low-cost production and exchange of information and culture easier, the large-scale commercial producers are faced with a new source of competition – volunteers, people who provide information and culture for free" (Benkler, "The Wealth of Networks" 442). Given the capabilities provided by access to production software as well as sophisticated, open-ended computing hardware, the opportunity for individuals to become music producers themselves has never been greater (Palfrey 131; see also Hesmondhalgh 2, Ginsburg 493). The opportunities this provides for collaborative production are particularly notable in light of the argument made above that in recent years people have become much more accepting of sharing digital files and information. Given the success of similar models for software, and the fact that "the software industry has some notable parallels with the cultural industries" (Hesmondhalgh 19), at the very least the potential for this model should be recognized, even if not immediately acted upon.

The fact that the potential of the peer production model should be recognized is particularly true in light of the benefits this model could provide to society. Considering the fact that peer production superimposes the role of artist onto the role of consumer, determining the individual goals here is difficult, but it is not unreasonable that these artist-consumers should retain the desire for free expression, unrestricted access to material (both for creation and consumption), and a social connection to the music. Arguably the aspect of social connection is

most prevalent in this model of production, even moreso than in the gift economy. Free expression is also given particular license, considering that there is no profit incentive nor market restrictions on what may be produced, and each individual is free to contribute as much or as little as they want to each project. Unrestricted access to preexisting material for consumption is given by the nature of open source projects; access to material for production is still controlled primarily by those involved in the proprietary, market-based model, but with increased adoption of any of the three models addressed in this paper, such access would become more open with time. In this model, however, the benefits to society are the most significant. Most importantly, the freedom of expression allowed in this model means that it "provides an outlet for contrary expression" (Benkler, "The Wealth of Networks" 277), and has the potential to make culture "substantially more transparent and available for reflection, and therefore for revision" (Benkler, "The Wealth of Networks" 293). The most notable benefit for society that this model presents is its potential effects on what is often referred to as "cultural imperialism". "Cultural imperialism" is a side effect of the dominance of developed nations, especially the United States, in world trade whereby, American and other developed nations' cultural products are spread throughout the world with little exchange of similar products back to the West from developing nations. Indeed, "social and cultural losses in forgoing production in a particular area are seen as 'externalities'...these are often sidelined by economists because they are hard to measure, but these factors are often crucial" (Hesmondhalgh 86). Given that access to a computer and the internet, in this model, is all that is necessary to contribute to cultural production, and given the spread of such technology over the past twenty years, those in developing nations have acquired the potential for more even footing with those in developed nations in terms of cultural production. Granted, access to such technology is still greater in developed nations, but this

model offers the opportunity for a more significant role for individuals in contributing to their nation's cultural, and thereby economic and social, conditions.

XId. Synthesis

As argued above, none of these models necessarily need to replace the industrial system of popular music production, and indeed all can coexist alongside it. While this is true individually, this is also true collectively: each of these three models can exist alongside each other, and in fact, there is no reason why this should not be the case. They are united in their abandonment of proprietary production as well as, at least to a large degree, major record labels, and in their engagement with and empowerment of consumers. Encouraging production under all of these models allows artists to choose what works best for them, and provides the benefits to consumers and society of all three. Under each of these models, unrestricted by the proprietary system but able to provide for themselves with new technology, artists would be able to achieve freer expression while retaining a relatively comfortable living. Consumers would enjoy relatively unrestricted access to music, as well as a stronger connection to the artists that they follow, which would encourage them to contribute more to support these artists. Society as a whole would benefit by retaining substantial investment in musical production and enjoying more variety in what is produced, with its associated connotations of social critique and freedom of expression. "The emergence of what might be thought of as a newly invigorated folk culture...provides both a wider set of cultural forms and practices and a better-educated or better-practiced community of 'readers' of culture' (Benkler, "The Wealth of Networks" 466). Of course, there is no reason to believe any of these options, let alone all of them, will inevitably be implemented, considering the overwhelming influence of the current system as discussed

above, and the fact that "none of the industrial giants of yore are taking this reallocation lying down" (Benkler, "The Wealth of Networks" 23). However, neither would it be shocking if any of these new models succeeded in gaining influence. First, none of the models propose a wholesale replacement of the current industrial model; "rather, they represent a self-conscious choice by their participants to use copyrights, patents, and similar rights to create a domain of resources that are free to all for common use" (Benkler, "The Wealth of Networks" 455-456). All three models have clear precedents, clear opportunities, and clear benefits for society. It remains only a matter of not only allowing, but actively encouraging them to happen.

Notes

- 1. Also see Tschmuck: "For 2008 the IFPI reported continued reductions of both unit sales and turnover figures; Oberholzer-Gee & Strumpf, "Between 2000 and 2005, the number of compact discs shipped in the United States fell by 25 percent to 705 million units (RIAA 2006)."
- 2. For a sample of viewpoints on the debate, see Lowery, "Letter to Emily White"; Nelson, "David Lowery"; Bangeman, "A \$13 Billion Fantasy"; Crupnick "Driving Under The Influence"; Masnick, "Who Cares"; Lowery, "Meet the New Boss"; Ruen, "Deconstructing"; Karaganis, "Where Do Music Collections Come From?". For a somewhat objective viewpoint on the debate, see Goldman, "Music's Lost Decade".
 - 3. See also Marshall, "Effects of Piracy" 175; Baym, "The Swedish Model" 8.
 - 4. See also Vijayan, "RIAA Shifts Gears"; Sonne, "British Antipiracy Plans Draw Fire"
- 5. For more on this effect, see Baym, 'The Swedish Model" 4; Hong, "The Effect of Napster" 23; Liebowitz, "Record Sales" 7; Goldman, "Music's Lost Decade".
 - 6. For more information, see Cooper & Griffin, "Role of Antitrust" 20, 21.
- 7. Deadweight loss is defined here as the loss in benefits from trade due to undue restrictions from monopolies, governments, or other forces with the ability to adjust the market.

Exhibits

Exhibit III-A

	Per Capita Spend: Annual 2011: NPD			
Category	Non-P2P User 18-35 Music Buyer	P2P User 18-35 Music Buyer		
Physical CDs	\$24	\$23		
Paid Downloads	\$29	\$35		
Subscription Fees	\$2	\$5		
Subtotal	\$55	\$63		
Merchandise	\$20	\$52		
Concert Tickets	\$63	\$91		
Grand Total	\$138	\$206		

Source: https://www.npdgroupblog.com/driving-under-the-influence/

Exhibit III-B

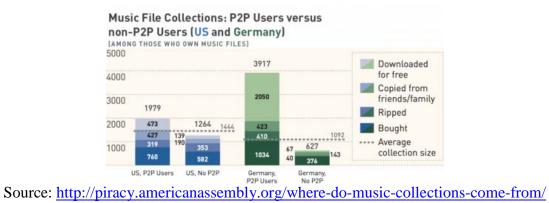


Exhibit III-C

EXHIBIT IV-2: THE SMALL IMPACT OF PIRACY ON MUSIC SPENDING: TIME SPENT LISTENING V. MUSIC SPEND

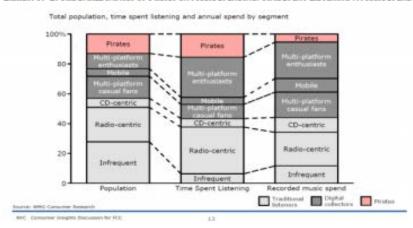
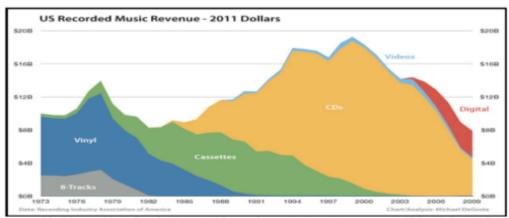


Exhibit V-A



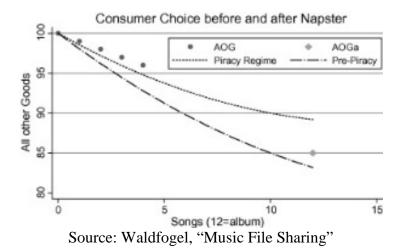
Source: Michael Degusta, The Real Death of the Music Industry, February, 16, 2011; Bain & company, Publishing in the Digital Age, January 1011.

Exhibit V-B

Year	LP units in million	MC units in million	CD units in million	Digital Albums units in million	Single-format units in million
1973	617	185			530
1974	655	209			515
1975	674	236			483
1976	743	289			516
1977	898	374			545
1978	942	428			600
1979	896	470			624
1980	878	474			526
1981	1.140	510			550
1982	900	570			580
1983	850	660	6		800
1984	800	800	20		750
1985	730	950	61		650
1986	690	970	140		490
1987	590	1.150	260		390
1988	510	1.390	400		370
1989	450	1.540	600		357
1990	339	1.447	777		344
1991	292	1.493	998		334
1992	175	1.476	1.185		352
1993	109	1.382	1.419		410
1994	49	1.354	1.784		390
1995	33	1.200	1.983		432
1996	21	1.188	2.162		466
1997	17	1.034	2.232		516
1998	23	897	2.374		459
1999	14	847	2.411		440
2000	12	736	2.454		370
2001	10	659	2.310		318
2002	8	534	2.190		265
2003	6	492	2.043		233
2004	7	368	2.065	6	354
2005	4	186	1.938	18	582
2006	3	114	1.760	39	931
2007	6	82	1.545	64	1.202
2008	9	53	1.329	113	1.494

Source: Tschmuck

Exhibit VII-A



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