

# Copyright and the Future of Decentralized Incentives

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So far we have focused on subsidies, but the legal framework of markets is no less important for the arts. After all, many people believe that large corporations – and not government – are the true threat to decentralized American artistic creativity. So do current market institutions promote a flowering of diverse visions? And how can we expect our cultural landscape to evolve on the corporate side?

Today the biggest spur for cultural decentralization has been the Internet. Most obviously, the Internet lowers the costs of market entry. Cultural suppliers can sidestep intermediaries and reach consumers directly. For instance many artists give away free music samples or sell their product through on-line music services. The major music companies are losing their importance as market gatekeepers. Buyers in distant locales can order a wide range of books and CDs through Amazon and other on-line retailers. Ebay and on-line galleries bring together buyers and sellers in distant locales and lower information costs. Web postings give poets new outlets. Bestsellers and mainstream goods and services were already widely available; the Internet has swung the relative balance toward niche items.

The Internet also serves as a publicity engine. Musical performers and groups use on-line services to track the interests of their fans. Fans use the services to discover new groups, or to follow groups they already like. It is now easier to buy tickets, discover concert locales, follow a celebrity, exchange music recommendations, order books, and read book reviews, all using new technologies.

Rather than articulate these (well-known) benefits in detail, I wish to focus on how the Internet might threaten financial decentralization. Specifically, the Internet makes some kinds of copyright harder to enforce. Once a cultural good is converted into digital form, it can be offered free of charge for downloading. Many copyright-protected outputs, whether in art, music, or literature, are now available on the Web, often against the express wishes of the copyright holders. The future may hold no enforceable copyright

protection for many creative outputs, which raises the question of how decentralized financial incentives will continue to operate.<sup>1</sup>

Think of copyright as a response to the government's inability to pick artistic winners. In a first best world, a government would subsidize idea suppliers directly and reward the best ideas. Copyright would not be needed. Idea suppliers would receive higher returns without consumers having to pay higher prices. We do not, however, trust governments to do this job especially well. So we put rewards in the hands of the consumers, through copyright law. Suppliers receive copyright revenue only when they can persuade consumers to spend their money on a good or service. Copyright law and decentralized artistic finance are two sides of the same coin.

That being said, copyright represents government intervention rather than laissez-faire. It shows that the notion of government neutrality toward the arts is a chimera. In reality the system of property rights in the reproducible arts is based on government fiat. To what extent is copyright a natural protection of property rights, and to what extent is it a governmental grant of monopoly power? There is no simple answer to this question. The basic idea of copyright may have roots in natural law, but the practical application of copyright law is utilitarian, practical, and often morally arbitrary.

If copyright were based on a "moral right to the product of the human mind," it would have to be enforced far more stringently than it is today. It would be possible to copyright mathematical theorems, or the theories of relativity and quantum mechanics. Copyright would never expire, and artistic or intellectual borrowings would require payment of a fee, an unworkable system. Furthermore we deliberately seek differential enforcement of copyright. Dennis Rodman, a professional basketball player at the time, copyrighted the arrangement of tattoos on his body. At the same time we have no

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<sup>1</sup> In late 1998 Congress passed the Digital Millennium Copyright Act, which prohibits the unauthorized decryption of posted works. While this act regulates Internet-based copying in great detail, most of its provisions are already technologically obsolete. In some regards the Act opens the door for Internet copying, by limiting the liability of on-line service providers for the copying done by their account holders.

copyright for fashion design, textiles, calligraphic works, most forms of choreography, many kinds of craft design, and most scientific ideas. Nor do property rights in the expression of an idea protect against parody.<sup>2</sup>

The call for government neutrality toward the arts therefore represents an unattainable ideal. There is no well-defined starting point for property rights endowments as a baseline for defining laissez-faire. We thus return to practicality, and also direct government involvement, in the most fundamental of arts incentives, namely determining rights to revenue streams.<sup>3</sup>

The government's role in defining artistic property rights is far more important than its funding and subsidy decisions. Copyright law, by protecting the expression of artistic ideas, specifies who has rights to revenues and shapes decentralized arts incentives. Copyright law is especially relevant in the United States, where reproducible popular culture has flourished to an unprecedented degree. In a typical year, recorded music accounts for revenue of \$11 billion, the movie industry for \$44 billion, and book publishing for \$22 billion. These copyright revenues draw more cultural goods and services to the marketplace. They make idea generation more profitable and bring us a wider menu of cultural choice.

Given this context, I will consider how decentralized finance will likely evolve in a regime of weaker copyright enforceability. The best available evidence suggests that the virtues of the American system will remain robust. The Internet may make copyright law too hard to enforce, relative to an ideal state of affairs. Nonetheless the future is likely to be more workable than is commonly believed. We can expect artistic markets to change

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<sup>2</sup> See Strong (1999, p.149). On Rodman, see Besenjak (1997, pp.52-3).

<sup>3</sup> A dissident branch of libertarianism, called "Galambosianism," after its founder Galambos, once advocated precisely such a system. Tom Palmer (1990, 1997), a contemporary libertarian, suggests that no copyright protection is the natural starting point. Suppliers, however, could offer covenants to those who purchase their products. It is an open question to what extent third parties (what if the material is "lost"?) would be bound by those covenants as well.

in fundamental ways, but the symbolic and prestige components of art will keep decentralized finance robust.

### Is copyright indeed disappearing?

It is outside the scope of this book to debate the details of whether or when protection and encryption technologies will beat the hackers and copiers. Future technologies are difficult to predict. Nonetheless copyright enforceability will likely weaken within our lifetimes, if only temporarily. The most general argument is simply that technologies are changing. We cannot count on current levels of enforceability to persist.

Copyright has not been easily enforced throughout much of history. In eighteenth century Europe, opera scores and printed manuscripts were zealously protected, often without success. Composers and publishers feared that copyists would capture profits and limit the incentives for creation. More generally, Chinese and Islamic histories show little in the way of copyright protection. Copyright was not part of their system of laws. Until modern times, the reach of law was not sufficiently far to make strict and extensive copyright enforceable.

The relative strength of copyright enforcement in the twentieth century has been a historical and technological accident. Effective copyright enforcement depends on a delicate balance of technologies, as protection abilities must outpace copying abilities. This balance is unlikely to reign continually during rapid technological change, as we are now experiencing.

We have some specific reasons to believe that the enforcement balance is turning against enforceable copyright. The decoding of digital information into output enables decryption. We can think of a DVD disk as "decrypted" by the DVD player whenever the movie is shown. A CD is decrypted when it is played and the digital stream of information is converted into music. In principle a hacker needs only to intercept this stream of information. If nothing else, the CD can be taped in analog, and the

information can be reconverted into digital form. Any cultural output that can be copied and delivered to many consumers can also be made available on the Internet for free.

The static nature of the target makes illegal copying hard to prevent. Encrypted material sits around for years, and the supplier has only one chance to opt for a protection technology. That technology, once in place, is a fixed target. Sooner or later hackers are likely to succeed, just as a Norwegian teenager posted the code for how to copy DVD disks. It is then only a matter of time before the "back catalogs" of many cultural genres become freely available. In other words, the hackers only need to win once to achieve a permanent victory, at least for previously issued material.

Some cultural producers have brought lawsuits against the institutions that aid Internet-based copying. The current legal campaign of the MPAA appears to have deterred many would-be downloaders. Nonetheless the illegal exchange of copyright-protected material has not ceased. File-sharing services can come from beyond the reach of United States law, or in the future they may offer anonymity for their users. Furthermore the American public has only a limited appetite for lawsuits against file-sharers, most of whom do not resemble common criminals.

Finally, the entire war against illegal file-sharing may be a red herring. New technologies use software to scan satellite radio stations and identify desired songs. The software then makes a copy of the music for the listener, in completely legal fashion. Simply by turning on the software an individual can, over the course of a few months, obtain just about any well-known song he wants. If illegal file-sharing were truly stopped, some version of this idea likely would arise to take its place.

So do we face the prospect of a world where creative artists cannot charge for their labors? Will consumers find that the supply of new culture is no longer forthcoming? Will the Internet, and by implication American telecommunications policy, force American popular culture into bankruptcy and overturn financial decentralization?

## Love of symbols

To see how the future will likely evolve, let us turn to the symbolic nature of culture. Buyers crave not only material goods and services but also symbols. I define a symbolic good as offering a feeling or perception of affiliation. A teenager may go to a Madonna concert to express her solidarity with feminism. Rich yuppie lawyers collect contemporary art to look “cool.” Social climbers go to the opera to be seen. Our cultural decisions tell the rest of the world what kind of person we are or at least what kind of person we are pretending to be. Buying culture is about identity and pride. Of course the relevant audience often includes ourselves. Most people want to think of themselves as a certain kind of person. They use art toward this end, even if they must self-deceive to do so.<sup>4</sup>

As copyright becomes harder to enforce, suppliers will reap less revenue from selling concrete products, and will reap more revenue from selling associated symbolic goods. They will convert cultural ideas into forms that cannot be reproduced so easily over the Internet. They will sell “the book-buying experience at a superstore,” to name one possibility.

Demands for cultural symbols will remain robust even when copyright protection for the accompanying cultural expressions is weak. The Internet transmits many cultural products very well, but it cannot copy most of the associated symbolic values with equal facility. The Internet does offer its own symbolic values, such as a certain idea of “technological cool,” but rarely do these symbolic values exactly copy non-Internet symbolic values. So we should not think of the Internet as selling the same cultural products but at lower prices. More accurately the Internet is offering a different set of products altogether, most of all in the symbolic realm. When viewed in these terms, it is easier to see why reproducible culture will survive the on-line revolution.

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<sup>4</sup> On symbolic goods, see Cassirer (1975), Todorov (1982), Cowen (2000), and Posner (1998, 2001).

The book trade shows the importance of symbolic demands. To put it bluntly, most people do not read the books they buy. In January 2000 Marcel Proust's Remembrance of Things Past was #544 on the U.K. bestseller list, yet few of these buyers finish a single volume. Many of them never start the book. Highbrow bestsellers by Stephen Hawking and Camille Paglia are read by only a small fraction of their purchasers. Most cookbooks are never used. Popular fiction bestsellers and self-help books are widely read, but much of the book trade is about selling image and symbols, rather than words on paper.<sup>5</sup>

Non-reading buyers are not always wasting their money out of stupidity, as an elitist perspective might suggest. Rather most people buy books for reasons other than the desire to process the book's information. People buy books to put them on the coffee table, to show their friends, or as a measure of expressive support for some idea or celebrity. Buying books bears some resemblances to individual voting, rooting for a sports team, or donating to a charity. Perhaps most of all, people buy books to support their self-image as a kind of person who likes a certain kind of book. For these reasons, books as we know them will not go away anytime soon. Book superstores have recognized this fact, and they offer the book-buying experience, replete with Starbucks coffee, singles night, live concerts, high ceilings, stylish interiors, and celebrity lectures. Superstores have increased the symbolic values associated with book shopping, and in a manner that digital technologies and the Internet cannot easily replicate.

When people care primarily about information, practicality and cheap access matter most. Then the Internet will triumph. The Internet is ideal for retrieving stock price quotes or serving as an encyclopedia. The Encyclopedia Britannica no longer is put out in physical form, and the Web itself serves as a giant searchable encyclopedia. But in most spheres of reading, most people do not care if the Internet puts all the world's texts at their fingertips for free. They did not want to read much in the first place. They do not care if

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<sup>5</sup> On Proust, see <http://books.guardian.co.uk/Print/0,3858,3950488,00.html>.

St. Thomas's Summa Theologiae, 652 pages in a regular print edition, can be found for free on the Web.<sup>6</sup>

One of the biggest early web successes in the book market came when 400,000 people downloaded Stephen King's "Riding the Bullet" in the first twenty-four hours. Yet most of these people appear to have taken more interest in the downloading experience, and participating in a new trend, than in reading the work. One industry source estimated that three-quarters of the downloaders did not read the book.<sup>7</sup>

The symbolic nature of book ownership and purchase helps the book trade compete with free public libraries. Libraries already offer readers free access to many or perhaps most of the books they would like to read. And to the extent that libraries are incomplete, this is the result of patron choices or at least patron indifference; if would-be readers and taxpayers pressured public libraries, they could change book-ordering policies. Yet the free public library does not put the book trade out of business. Books must be returned to the library within three weeks, and the library "book experience" is usually lacking in glamor. The book trade can coexist with freely available book copies, provided the booksellers bundle their wares with attractive symbols and appealing complementary experiences.

So let us step back and sum up how this market works. Most customers care about the symbolic goods more than the information embodied in the cultural product. Large numbers of books are produced, and the market favors books that are easily packaged with complementary symbols. Dedicated readers reap an enormous cross-subsidy but they are relatively small in number. The system also protects the creative freedom of many authors. If all book buyers were to read what they buy, publishers would pressure writers to serve these would-be readers. Instead writers can enjoy greater latitude, at least provided they can offer up some complementary symbolic goods. Writers must instead

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<sup>6</sup> The page numbers are taken from the Amazon listing, of course there are many differing editions. One current web version is <http://www.ccel.org/a/aquinas/summa/FP.html>.

<sup>7</sup> See "Learning to e-read" (2000).

write books that people will pretend to want to read. On all sides we see an uneasy albeit workable cultural truce, shored up by the demand for symbolic values.

### Which institutions best produce symbols and aura?

For decentralized finance to succeed, legitimate suppliers must be able to sell some relevant symbols more effectively than rogue hackers can. The for-profit production of reproducible popular culture then will remain profitable, precisely because people are willing to pay for symbols and their associated aura.

There is of course no guarantee that legal suppliers will offer more desirable symbolic goods. Internet suppliers, whether legal or not, compete to supply symbolic consumption just as they compete in terms of product and information transmission. Many web sites make cultural consumption a deeper and more interesting experience, or at least try to do so. Cultural web sites may greet us with the image of a beautiful painting, a fanfare of trumpets, or the whiff of a pleasing scent. We can think of these symbols as producing an aura. In the case of on-line music, many young people enjoy the "outlaw" image of capturing copyrighted music from large corporate conglomerates. The very name "Napster" suggested something deliciously conniving.

Most legitimate cultural suppliers, however, offer unique forms of aura which hackers and outlaw web sites cannot replicate. Internet auras differ by the very nature of computer technology. No matter how good the web site, looking at pictures over the Internet is not like being in a museum. So while Internet-based and non-Internet forms of aura will compete, the Internet-based auras will not win out in every case. More plausibly, two distinct networks will arise.

The two forms of aura often prove to be complements. That is, looking at pictures over the Internet, and enjoying the concomitant Internet-based aura, may interest viewers in finding out what a real museum is like. Similarly, people may be keener to buy books, if they can use their home pages to tell others what they have read. On-line music, even if

it lowers CD sales, may encourage fans to see more concerts. And so on. These complementarities are no accident; rather each medium will evolve to free-ride on and match the symbolic goods offered by the other medium.

That being said, legal product suppliers hold some key advantages in producing certain kinds of aura. Aura often comes through the association of a product with given institutions, given celebrities, or a given history. This favors products supplied by identifiable institutions with well-established reputations. Book superstores, concert halls, and art museums have auras because institutions have invested resources in making their venues attractive, interesting, or otherwise focal. Outlaw or hacker suppliers, who wish to remain anonymous or at least low profile, are unlikely to make comparable investments. They cannot easily turn aura-producing investments into reputational or financial gains for themselves.

In other words, customers often do not want products supplied by anonymous institutions. This truth limits the dangers from copyright-damaging web sites. If the copyright-damaging institution is truly anonymous, and thus impervious to legal sanction, it will have a hard time producing aura. Other copyright-infringing institutions have a central and traceable identity and thus can develop aura more easily and effectively. These same institutions, however, usually can be reached by the law.

Individuals who download culture from the Internet are akin to those who buy their product wholesale rather than paying higher retail prices. They are cutting out the middleman, which in this case happens to include the artist as well. Wholesale purchases exist in many markets, and they do constrain the level of retail prices. Nonetheless it is rare for wholesale purchases to destroy a retail market altogether. Typically many customers are willing to pay extra for services of packaging, presentation, selection, and aura. The existence of wholesale furniture outlets does not put department stores out of the furniture business, even though the price differential is often a large one. For similar reasons, the Internet will not bankrupt cultural industries, though it is changing how they do business.

As Internet competition intensifies, cultural suppliers will have to invest more intensely in non-reproducible forms of aura. The Russian composer Scriabin prophesied that the music of the future would be a live, multi-sense experience, involving not only sound but also images, a communal atmosphere, and even smell. He was the first prophet of the drug-soaked “rave,” a contemporary phenomenon in the world of electronic music. Scriabin also pointed out, unwittingly, the direction of live culture in an Internet age.

Ironically the Internet will make much of our culture more “primitive,” more visceral, and more orgiastic. As copyright protection weakens, cultural suppliers will move into areas that digital hackers cannot “steal.” This will likely involve live entertainment, public spectacles, and remarkable, once-in-a-lifetime experiences. Culture will become more thrilling, and more like the cultures of ancient societies, such as the live theater or pagan rituals of ancient Greece. For-profit culture will move away from the mere transmission of information, and will become increasingly invested with non-reproducible aura. The emotional force of Haitian voodoo ceremonies, replete with trances, wild dancing, and live animal sacrifice, cannot be replicated on-line.

These trends were in place even before illegal file-sharing became popular. Live theater is more popular today than twenty years ago. Live raves and techno concerts offer musical experiences – replete with dance and drugs -- that cannot be reproduced very well on disc. The United States is in the midst of a museum boom. Attendance is rising and museums are increasingly important public spaces, community symbols, and architectural masterpieces. “Historical reenactments” are not exactly culture in the narrow sense. Nonetheless they provide another example of the rising interest in the exciting live experience, even when reproducible culture is more available than ever before.

What about recorded music?

The problem of Internet copying is most serious when artistic products involve little or no aura. The consumption of recorded music, for instance, involves few complementary goods from the supplier, except perhaps for the album cover and liner notes. Consumers simply sit at home and pop a compact disc into a stereo. Music downloads come close to replicating this basic experience. The relevant symbolic complements, be they smoking pot or dancing in one's living room, are added by the consumer and do not come from the music company. So if the illicit musical product is available, how would musicians continue to earn a living?

First, illegal downloading is unlikely to eliminate material music products such as CDs and DVDs. Many individuals find computers and on-line music to be inconvenient or intimidating. While it is easy to predict that these cultural barriers will fall away, we are not close to this point in time. For most Americans, circa 2005, buying music in the store remains the easiest way to get it. Furthermore illegally shared files do not give equivalent sound quality, at least for the time being. Again, it is easy to proclaim that technology will remedy these shortcomings. But who would have expected that digital technologies, especially the mp3 file, would have lowered music quality to a level below that of many old 78s? For the foreseeable future, on-line music will be better in some ways and worse in others.

That being said, on-line music may cause music company revenues to fall significantly. On-line competition will constrain music companies and limit their pricing options.

Some CDs will become more expensive. In economic terminology, on-line music may drain off the "elastic" segment of market demand, the segment most responsive to changes in price. The remaining buyers may be richer, busier, older, less computer-literate, or somehow less able to shop around. These buyers might be more willing to pay higher prices. Since those who would rebel against the higher price have already left the market, price might go up. Furthermore music companies sometimes charge low prices in the hopes of generating a snowball of fan interest in their product. If the natural

market base is smaller, this motive for low prices will go away. Note that specialty CD issues usually have higher prices than very popular CDs.

At the same time other CDs would become cheaper. In these cases we are closer to the example of the videocassette, where the possibility of (illicit) copying lowers prices for everyone. When a large pool of potential buyers remain in the market, even in light of copying opportunities, the supplier will try to capture those buyers by lowering price and expanding volume. Some new CDs might cost only a few dollars rather than almost twenty dollars.

Most likely, some CDs will become cheaper and others more expensive. But under either case – rising prices or lower prices -- Internet competition will cut into the revenues of the music industry and reshape our cultural networks.

#### Marketing and talent selection: what would we lose?

Most musical artists (99.97 percent, by one estimate) earn little or nothing from the sale of their recordings and thus earn little or nothing from musical copyright.<sup>8</sup> Instead these artists usually make their living, if they make a living at all, by giving concerts. But we should not be fooled by these facts. The diminution of copyright income would affect the entire music industry, including these performers.

Music companies do not know who will be the next big stars. So they invest in a large number of musicians, not knowing what will hit. They lose money on most of their investments, and profit from a relatively small number of significant winners. Of the 30,000 CDs released in the United States in 2002, only 404 sold more than one hundred thousand copies. Twenty-five thousand of the releases sold fewer than a thousand copies<sup>9</sup>

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<sup>8</sup> See Mann (2000, p.50), working from data supplied by Simon Frith. The obvious problem with this or any number is deciding who counts as a musical artist.

<sup>9</sup> See (Seabrook 2003).

It is the prospect of finding new stars that motivates the music companies to take chances on unknown artists. The economic problem is not only to get revenues to the artist, in return for music. We also must get other parties, such as entertainment companies, to invest in new artists and give them a chance to reach consumers.

Smaller returns to the mega-stars would mean that music companies will invest fewer resources across the board. Many mid-level artists will suffer as a result. If we examine a typical modern recording contract, an artist receives about twelve to thirteen percent royalties for each compact disc sold.<sup>10</sup> So if a compact disc sells for \$16.99, the artist is receiving less than two dollars for that disc. But the artist never sees this money in most cases. Musicians typically owe previously accumulated "debts" to their music companies for recording and promotion costs. The debts from unsuccessful releases typically are set off against their next recording. These debts need not be paid off if the performer stops recording, but they do transfer from one release to the next.

Without the gross copyright revenue flowing to the music company, most artists would be out of business after a single unsuccessful release, or could not have afforded the initial release in the first place. So even if artists see no copyright revenue, it keeps them out of debt. It is naïve to view copyright as an institution that benefits only the major entertainment corporations and a few mega-stars. If that were the case, significant parts of the music industry would have voluntarily abandoned copyright protection a long time ago. Some firms would have signed up musicians on cheaper terms and placed the relevant outputs within the public domain. But few hit songs if any receive this treatment, if only because both the musicians and the company need to cover their capital costs.

In reality, the music company serves as a combination venture capitalist and banker. They advance money to the most favorable musical prospects, in return for a share of the

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<sup>10</sup> See McPherson (1999, pp.66-7). This does not include any royalties that must be paid to the producer, but of course Internet music does not alter this cost.

profits. The diminution of copyright revenue resembles a tax on financial intermediation, but in this case focused on the entertainment industry.

Without copyright, music companies would invest less in expensive studio time and would substitute into cheaper technologies. In some cases music would become more immediate and less technologically refined. Classical CDs would draw more from tapings of live performances and less from expensive studio time. Many popular music performers would move closer to their roots, which were developed prior to the recording era. In other cases musicians would use new technologies to mimic the effects of the studio. The personal computer would play a greater role in musical composition and recording, as virtually any musical sound can be created by digital means. Forms of electronic music, such as techno and drum n' bass, already have benefited from this development. Overall more musical experiments would reach the market, due to the publicity benefits of the Internet, but each experiment would be less capital-intensive.

As musicians invested less time in the studio, good live concerts would be easier to come by. Musical spontaneity would likely grow in market importance, relative to musical refinement as defined by studio expertise. Touring would become a more important source of musical income than it is today. Some recordings would be offered for free, primarily to provide advertising for future tours. Many artists would earn more concert income and less royalty income. They probably would have to work harder. Artists who did not like to perform live, or who were poor at live performance, would be penalized.

In the classical market, the entire back catalog of Beethoven, Bach, and Mozart recordings would be available for free. Internet users already can download recordings by the great conductors and pianists of the past. In this environment it would be harder to justify a new studio-performed cycle of Beethoven symphonies. It is already the case that high-quality historic reissues, priced at budget levels, have severely damaged the market for new recordings by contemporary orchestras. We therefore can expect the market for new studio recordings of old works to continue to diminish, given that close substitutes are available for free. Nonetheless live concerts may be recorded and posted

on the Internet for very low cost. So modern interpretations of Beethoven symphonies need not disappear and in fact may skyrocket in number.

Songwriting could become a more important source of income for musicians. A songwriter is paid to the extent his or her songs are played or performed in public venues. The Internet does not make this form of copyright law any harder to enforce. Musical artists therefore would write their own material to increasing degree, to try to capture these gains.

Most likely marketing expenditures will fall and recordings would have to generate their own publicity to a greater extent. Music companies would take fewer chances on recording artists, but this does not mean that recording artists would have fewer chances to make it. The same mechanism that makes copyright income harder to capture – the Internet – can lower the costs of sorting and evaluating talent. To give a simple example, a music company executive can listen to downloads, instead of sending talent scouts around to live concerts in bars and clubs.

The Internet and word-of-mouth are assuming greater prominence in making records popular and spreading information about their quality. Over time we can expect such “volunteer” means of producing evaluation to become more important. The sorting function of the major entertainment companies thus would be replaced by a more decentralized set of gatekeepers. On one hand, many of the new decentralized gatekeepers will not have the same profit incentive as the record companies to make accurate evaluations. These new sorters will offer opinions without regard for profit and loss consequences. On the other hand, the more decentralized gatekeepers will have access to a greater diversity of opinion and information. Fans will rely more on the opinions of other fans, rather than relying on record company forecasts of fan opinion. We would expect a greater diversity of critical opinion and a greater diversity of publicity.

Most of the costs incurred by the music company stem from finding, evaluating, recording, and promoting musical talent. If a given bundle of music brings in less revenue, many of these costs have to be covered in some other fashion, removed from the music company, or discontinued altogether.<sup>11</sup>

Sorting is already moving outside of the entertainment companies. In some cases fans download the music and then buy over the Internet. Or a star may maintain a home page. Todd Rundgren, a rock star from the 1970s, sends his fans regular shipments of music in return for a subscription fee. In essence Rundgren does the sorting and finding for his fans, and they are willing to pay him for those services, not just for the music.<sup>12</sup> Digital satellite radio, another new technology, has an entire station devoted to bands without recording contracts.

The Internet will continue to bring new means of performing the sorting functions. Just as Google.com sorts web pages, so can information technology sort songs and albums on the basis of popularity or other criteria. Many on-line file-trading services already offer versions of this idea. Amazon.com allows fans to rank CDs for all to see. Podcasting and music blogs allow every individual to act as a DJ, and we can easily measure popularity of a service by the number of hits. The music companies, at best, are trying to guess what fans want. The Internet allows us to measure what fans want more cheaply and effectively than ever before.

If paying the artist enough to get the music produced is the relevant question (as opposed to paying the music company to do the sorting), Internet music faces a relatively low threshold. Even if the song price is lower, the artist may reap a higher percentage of the gross (as had been the case on MP3.com). So we need not think of these services as needing to generate enough revenue to cover current CD prices. On-line music makes it

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<sup>11</sup> For more detailed information on the costs borne by record companies, see Schwartz (1997) and McPherson (1999).

<sup>12</sup> On Fisher, see Mann (2000, p.54).

possible to save significant sums on retail expenses, which may run from ten to fifty percent of the price of a CD.<sup>13</sup>

The non-entertainment corporate world might increase in importance as a musical gatekeeper. Companies might give away music for free, over the Internet, but "wrap" the music in an advertisement. Downloading the song might require an individual to first hear or see an advertisement. This model will be sustainable as long as the cost of experiencing the ad remains below the inconvenience of pirating the music (ad-free) from the Internet. Or the very offer of free downloads will constitute the advertisement. In this model the consumer has to go through the ad to get to the music. Alternatively the company may serve as patron to the artists, in return for free publicity.

This model takes musical promotion out of the hands of the record companies and puts it into the hands of large non-musical corporations. The popular music sector, for all the publicity it receives, is small relative to many other sectors of the economy. Coca-Cola alone, for instance, has annual revenues almost twice as high as the entire music industry, which is closer in size to the annual revenues of Northwestern Mutual Life Insurance. In quantitative terms, it is not unrealistic to fund part of the music industry through corporate advertising revenue. American tax law, which allows advertising expenditures to be written off as a business expense, helps in this regard.<sup>14</sup>

Some forms of music will move into the not-for-profit sector and fund themselves with donation. Just as people give money to support their local symphony orchestra, they might give money to support their city's leading jazz band or perhaps even a rock and roll group. Some record companies might reorganize as non-profits, or existing non-profits could issue more recordings, as orchestras are starting to do. Donors could be asked to support the free distribution of such recordings over the Internet, just as they are now asked to pay for construction costs of a new symphony hall.

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<sup>13</sup> On the retail estimate, see "Siren Songs" (2000, pp.16-22).

To fund an artistic activity by donation, of course, requires that the activity be surrounded by an aura of status and prestige. When opera and the symphony orchestra moved from the for-profit to the non-profit realm in the nineteenth century, they abandoned their earlier carnival-like atmosphere and turned themselves into status clubs and networking institutions. Unable to sell their product for a profit, they instead traded reputation to their patrons, using the music as a focal point for organizing the production of status. Donations will be sought to ration access to these networks, again as we have seen for opera and museums. Insofar as other forms of music or art enter the non-profit realm, they are likely to follow a similar path. By becoming more status-oriented, these arts seek to provide something that the Internet cannot replicate.<sup>15</sup>

Overall the symbolic and informational functions of art may become increasingly separate, rather than integrated in the same products. The Internet will offer pure information, in the form of cultural "stuff," and other outlets for the arts will rely more heavily on the production and sale of symbolic goods. Just as high culture and low culture have split, consumers may put together their own cultural portfolios. To an increasing degree, consumers mix and match informational and symbolic experiences from a wide variety of genres and supply sources.

#### How should we evaluate music worlds?

From the aesthetic point of view (see chapter one), we achieve a good result to the extent the music market produces enduring masterpieces. We look to the judgment of history. In this perspective, 1968 was a great year for music because it had the Byrds' Sweetheart of the Rodeo and Captain Beefheart's Safe as Milk, even though the albums did not sell well at the time or subsequently. From today's vantage point, few people care that the average pop song of the 1960s was poorly constructed and overly sentimental. Few

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<sup>14</sup> Mann (2000) discusses the scenario of funding through advertisement; see Mann (2000, p.50) for the comparison with Northwestern Mutual. On Coca-cola, see <http://biz.yahoo.com/p/k/ko.html>.

people downgrade the 1960s because Herman's Hermits and Herb Alpert and the Tijuana Brass sometimes pushed the Beatles and The Rolling Stones off the top of the charts. The aesthetic point of view emphasizes peaks of achievement. It refers to what lasts, rather than the typical product, or whether every listener at the time was happy.

From this aesthetic point of view, the weakening of copyright enforcement should not occasion serious worry. Most critics argue that today we have too much investment in mass culture, and too little investment in niche culture. On-line music, by weakening copyright enforcement, will force marketing expenditures to fall, moving us away from mass culture and limiting the creation of mega-stars. To the extent that marketing costs fall, the music market will be less "winner-take-all," less geared towards commonly shared celebrities, and more oriented to satisfying diverse and heterogeneous niche tastes. Most critics would like this result.

We already see that mega-stars expect to lose the most from downloadable music. The less popular musicians typically have a more favorable attitude toward a regime of weaker copyright enforceability. The Internet, including illicit file-sharing, often provides a relative boost to musicians aiming at small and sophisticated audiences.<sup>16</sup>

In contrast to an aesthetic point of view, consider the preferences of consumers and the economic perspective. The most obvious benefit is that the Internet brings an incredible on-line "universal jukebox." The Internet takes music that is already there and distributes it to consumers more widely. Illegal file-sharing in particular brings music to people who otherwise would not pay for it.

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<sup>15</sup> On this switch, see Caves (2000, p.241-2).

<sup>16</sup> In the context of literature, William Warburton, an eighteenth century theologian, argued that the decline of copyright would spur creativity and quality. He argued that money was a corrupting lure, and that fame incentives would provide for a superior product, as they did for the ancients. Warburton noted approvingly Thucydides's comment that he wrote to be famous, not to be fed. On Warburton, see Cowen (1998, chapter two). Unlike my view, Warburton hoped that copyright protection would disappear.

That being said, it is difficult to judge how a given level of illegal downloads will affect economic efficiency. First, the quantity of music sold in a given year is not a very accurate indicator of how much value consumers receive from music. Fans commonly experiment by buying a number of CDs, only a few of which pay off and become favorites. Many or most of the products bought are quickly regarded as disappointments and discarded; in this regard the market for CDs differs from the market for refrigerators. Whether consumers like what they bought is at least as important as the absolute size of the industry.

The Internet already helps music companies track fan demands. When fans sample on-line music, usually they can figure out whether or not they would like the entire CD. Many of these fans still buy the CD, to get better sound, to have the music in more convenient form, to receive the packaging, and so on, as discussed above. These fans usually will be happy with their purchases. As a result, it will be harder for the music companies to issue low quality CDs. Of course this tighter monitoring of quality may cause the number of new issues to decline. In nominal terms the industry will shrink, but at the same time it may produce more real value for consumers. For this reason, a shrinking music industry, as measured in terms of either dollars or new releases, can be desirable from an economic point of view.

#### What do consumers really want from music?

Evaluating the efficiency consequences of illegal downloads is difficult for a more fundamental reason. Most generally, we do not understand the demand for music very well. We do not understand what most fans want from their music. Just as book buyers are not always readers, the music market is not always about the tunes. Sometimes it is about symbolic values.

It is a mystery why fans spend almost all of their music money on product of very recent vintage. Until we untangle this puzzle, and we have not yet, we will not understand how Internet music is likely to affect consumer welfare.

Most consumers are not interested in buying much music from 1950, regardless of its objective quality in the eyes of the critic. Music from 1650 is even less popular. Few people search the history of music for "the best recordings" and focus their buying on those. Rather, in any given year the most recent recordings dominate the charts. At a typical moment, all of the Billboard Top 40 singles, or albums, come from the last two years of recorded output. Every now and then there is a Beatles revival, but such events are the exception rather than the rule. Consumers evince an overwhelming preference for music produced in the very recent past.

Most likely the music market is about more than simply buying "good music," as a critic might understand that term. People buy music to signal their hipness, to participate in current trends, or to distinguish themselves from previous generations. Buyers use music to signal their social standing, whether this consists of going to the opera or listening to heavy metal. Others value partaking in novelty per se. They find newness exciting, a way of following the course of fashion, and the music market offers one handy arena for this pursuit. For some people music is an excuse to go out and mix with others, a coordination point for dancing, staying up late, drinking, or a singles scene. Along these lines, many fans seem to enjoy musical promotions, hype, and advertising as ends in themselves, and not merely as means to hearing music. They like being part of the "next big thing." The accompanying music cannot be so bad to their ears as to offend them, but the deftness of the harmonic triads is not their primary concern.

In other words, the features of the market that matter to the critic may not be very special to consumers at all. Most of all, consumers seem to care about some feature of newness and trendiness, more than they care about music per se. So how much does it matter, from a consumer's point of view, if weaker copyright protection reshapes the world of music?

Under one hypothesis, the specific musics of our day are easily replaced, or in economic terminology, highly substitutable. All other things equal, people will buy the new, but they could get along with alternatives almost as well. For instance perhaps “ravers” could use Gregorian chants to define their cultural status. Indeed one chant CD (“Chant”) had a very long and successful chart run. Young rave and techno fans were among the largest buyers of this recording.

Or perhaps half the supply of music could do almost as good a job of supplying symbolic goods, especially if music companies can track fan demand with greater facility. Alternatively, individuals could rely more heavily on alternative means, such as fashion, to signal their social standing and participate in trends. These points are all speculations, but they show the difficulty of pinning down what music fans really care about.

Consider two further examples. First, in the former Soviet Union, dissident rock and roll bands performed many popular culture functions and commanded a fervent following. These bands fell short of the objective critical quality of their Western counterparts. Still they provided consumers with many useful services, including a means to signal rebellion against the Soviet state. Second, in 1941, the major radio stations refused to carry the catalog of the music publisher ASCAP, in a dispute over fees. At that time ASCAP, the leading music publisher and clearinghouse in the United States, dominated the music market. The stations instead played BMI music, which was more oriented towards rhythm and blues and offered less Tin Pan Alley, crooning, and big band. Radio listeners seemed to take the sudden change in stride; there is little evidence of a serious problem. Music fans continued pretty much as before, except for the change in styles and associated music publishers.<sup>17</sup>

For whatever reason, most consumers find it harder to reorient their attention towards older musics. Perhaps only new music allows for effective signaling and sorting. When music is new, individuals can show that they are connected to current modes of thinking

and feeling. Not everyone can know “what is in,” because “what is in” is changing so frequently. That very fact makes it worthwhile for consumers to put effort into following the new. The music market might therefore churn product to help people communicate their identities to others, and to help people play an ongoing dynamic game of clues and cues. Furthermore previous generations already have claimed older musics, making them less well suited for social differentiation. Perhaps musical taste is a game of secession and repudiation more than anything else.

So the music of Chuck Berry “no longer fits” the world of 2005, and cannot be made to fit it. Critics still love the music, and some niche consumers will be drawn to its merits, but it can never hold the current place of Britney Spears. That is why hit reissues are rare. It is not because consumers still remember the older musics. Rather most consumers do not care about them very much. It thus appears that the value of popular music, to most consumers, consists of some temporally specific tracking quality. This may involve an ability to follow, correspond to, or perhaps even shape the spirit of the times. Rejection of the previous *Zeitgeist* may be part of this same process. For consumers, this tracking quality is a significant part of the value of music. The music industry is delivering the goods when its product performs this tracking function, and otherwise not.

The Internet helps music perform tracking functions of this kind. The time period between the launch of a new group and its acceptance should decline. Music companies should be more in tune with fan tastes. More diverse groups of fans should find musics to track their respective social needs. More and better live concerts should bring customers closer to musical experience. We therefore have some reasons to be optimistic about the welfare consequences of weaker copyright enforceability from the consumer's point of view, and not just from an aesthetic point of view.

### The visual arts

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<sup>17</sup> On this episode, see Crawford (2001, pp.720-1).

To date the visual arts have not experienced serious copyright problems with the Internet. Many individuals post unauthorized copies of paintings and other artworks, but these copies have not disrupted the markets for the originals. The difference in market value between an original artwork, even a print, and a digital copy of that artwork remains enormous. In contrast copies of literature or recorded music are worth almost as much as the original.

We nonetheless can imagine a more distant future where digital holography, or some comparable technology, allows for the very accurate reproduction of visual artworks. In the limiting case, very accurate digital reproductions might allow viewers to enjoy their own copies of the Mona Lisa or of a Monet haystack painting, indistinguishable from the original to the naked eye.

This scenario, while far off, would not spell doom for the art world. First, the original may continue to be worth much more than the copies. The price difference between an original artwork and a copy, even a very good copy, is significant. Experts have been fooled many times by artistic copies, frauds, and forgeries. But once an artwork is revealed to be non-authentic, its value plummets immediately, even though the quality of the non-authentic work remains constant. Buyers care about the aura of the original and its symbolic value, even when they cannot tell the difference between the real and the copy. Why they feel this way is an interesting question, but the attitude seems to be robust. It will prevent copies from completely cannibalizing the market for original artworks.

If copies are good enough, perhaps the difference in value between fakes and real art works will disappear or narrow over time. Perhaps we shun unauthorized copies of artworks because, deep down, we know they are not very good. Forgeries are devalued because, once we realize they did not come from the hand of Rembrandt or van Gogh, their weakness becomes common knowledge. The fakes then drop to the value of their true aesthetic worth, or lower, for reasons of attached stigma. So if unauthorized copies were truly of high quality -- as good as the original Mona Lisa -- over time the premia for

original works might diminish. Social conventions might change. We already see that the current generation of art buyers is not so put off by the “multiple” nature of artistic photographs. In contrast the previous generation of buyers was keener to buy "original" works. If we look to the past, prestigious museums once bought and displayed copies of famous artworks, rather than focusing solely on originals (a copy of a Leonardo hangs in the Prado to this day, though as more of a curiosity than anything else).<sup>18</sup>

Higher values for copies would not, however, ruin the market for art. Instead the arts would become more popular and less elitist. Artists would sell many copies of a single work to a large market, rather than selling only a few copies to very wealthy buyers. In essence, more artists would be induced to enter the print market, albeit with a higher quality of reproduction than is currently available.

As in the music or book markets discussed above, prints would have to sell more cheaply, given the possibility of unauthorized reproduction. The price of a print could not be much above its cost of unauthorized reproduction. The relatively low profit margin would mean a smaller role for art intermediaries, such as galleries, just as on-line music means a smaller role for record companies. Galleries currently certify product quality, and to some extent word-of-mouth and volunteer Internet surveys would take over this function, analogous to the above discussion of the music market.

We could expect art school training to become less profitable, given that art copiers could mimic the efforts of art producers. Art might become more "Outsider," more "naïve," and less schooled. This mirrors how music might be forced to lower its capital costs; again, a kind of disintermediation will take place.

The effects on the art market might resemble how electronic recording reshaped the music market. Many new genres rose in visibility, such as jazz and country and western. Overall most music became more popular, making many less popular musics more viable. Many relatively obscure musical forms, such as free jazz, have used recording to

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<sup>18</sup> On past museum purchases of copies, see Sassoon (2001, p.41).

reach a wider audience and earn a better living. Recording has brought more diversity at the fringes, while making the center of the market more profitable.

High-quality copies also would alter the symbolic values associated with painting. The visual arts currently serve as a field for producing social status and differentiation. In contrast, a reproducible genre such as popular music is more likely to serve functions of cultural bonding and coordination around popular stars. The widespread availability of good copies would lower the exclusivity of art ownership, and make art easier to use as a signal of commonality, rather than as a signal of distinction. This might make art buyers more interested in very new products, and less interested in the classics, again as we have found in music markets.

### Cinema

Cinema is one of the hard cases for the prospect of weaker copyright enforceability.

Theater-based cinema, which bundles informational and symbolic goods, faces little danger. Movies are about more than just seeing the film. Movies are "date movies," "family movies," sharing popcorn, making fun of other people waiting in line, and simply getting out of the house. Furthermore many moviegoers are willing to pay to see the film on a large screen.

Nonetheless freely available digital DVD copies would damage business significantly. Circa 2005, Hollywood film studios receive over half of their revenue through the home video/DVD market.<sup>19</sup> This source of income would likely fall. Furthermore some people will wait for the free pirated digital broadcast at home, in lieu of going out to the theater. That is why movies are the problematic case for any fan of Internet-transmitted digital culture.

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<sup>19</sup> See Snider (2004).

Today it is not very convenient for most home users to download copies of films, if only because it is hard to transfer them to one's television. That being said, several hundred thousand DVD copies are downloaded illegally off the Internet every day, usually through file exchange services. These copies may compete more seriously with DVDs and theatrical releases as technical obstacles diminish. We can imagine a computer-TV hookup that would download a movie while the viewer watches, with no glitches or interruptions.

Unlike live movies, videocassette or DVD rentals do not offer many complementary symbolic goods in addition to the movie itself. DVDs offer various auxiliary features, but these could be downloaded with the movie. This market therefore is vulnerable to Internet pirate copies. Even if a production company refused to release a digital copy of a film, pirate digital copies might be sneaked out of the studio or recorded in the theater. Only a single pirate copy is needed to generate widespread circulation.

The more strongly the Internet competes with movie theaters, the more theaters will invest in non-replicable aura. Movie going would become more of a live experience, and the notion of a movie theater as a "pleasure palace," prominent in the 1920s, might be revived. Perhaps the movie would somehow interact with the live experience of being there to watch it.

Movies might adapt to Internet competition, just as they survived competition from free television broadcast. As television grew popular in the 1950s and 1960s, the movie industries were devastated in the West and in Japan. It was common for movie admissions to fall by as much as a factor of five over the span of a decade or two. At the time most movies were little more than B fare, effectively "made-for-TV" movies on the big screen. Television took away this part of the movie market, but Hollywood responded by investing in spectacles for the large screen and expensive special effects. Today Hollywood releases fewer films per year than it did before television, due to the

migration of the “B picture” to that medium, but the industry as a whole is economically healthy.<sup>20</sup>

If illicit Internet copies take over the home rental market, they must compete in terms of convenience more than in terms of price. Videocassettes have competed against illegal copies for a long time, but since it costs only two dollars to rent Raiders of the Lost Ark, few individuals bother to make an illegal copy. The possibility of illegal copies nonetheless keeps rental prices down, forcing movie rentals into a low-price, high volume mode. So we know that individuals are willing to pay a higher price for the legal product, if the legal service somehow offers sufficiently greater convenience or greater product quality. This reopens the possibility that Hollywood studios will not only survive the age of digital culture, but prosper in it. Exactly how and why the legal copy might offer superior convenience remains to be seen. The best case scenario is that legal web sites, or some form of video-on-demand, can outcompete illicit movie downloads. The worst case scenario is that illegal downloads capture some share of the current DVD market. But since moviemakers apparently can prosper at low per-unit movie rental prices, we have reason to be optimistic.

#### What about the costs of copyright?

To be sure, copyright law has its costs. Once a cultural good is produced, or if it is going to be produced in any case, copyright means that the good is distributed less widely than otherwise. To the extent information is a public good, the very best outcome distributes that information as widely as possible. In other words, once a song has been recorded, I can download it off the Internet without stopping anyone else from hearing the same song. But copyright enforcement makes information more exclusive, and more like property. All other things equal, such a protected status is undesirable for a public good.

Legislation in 1976 brought copyright protection to new extremes, namely the life of the author plus fifty years, and for a company seventy-five years from publication or one

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<sup>20</sup> Cowen (2002, chapter four) offers more information and data on this history.

hundred years from creation, whichever is sooner. The renewal process was eliminated altogether. Over time the large corporations of the entertainment industry have captured Congress in this matter, and the copyright period has now been extended eleven times in the last forty years. The most recent extension was the Sonny Bono Copyright Term Extension Act of 1998, which expanded copyright protection to the life of the creator plus seventy years, rather than fifty. Corporate copyrights also were extended twenty years to a total of ninety-five years, as were copyrights for all works produced before 1978. The campaign to change these laws was led by Disney, which had feared the forthcoming expiration of copyright on Mickey Mouse and other lucrative cartoon characters.<sup>21</sup>

Copyright can restrict output in other ways as well. Many artists borrow heavily from each other, often without paying royalties or receiving permission. Disney characters are frequently drawn from European fairy tales or American folk tales, without payment of any licensing fee. Some of Bob Dylan's songs are so close to the works of Woody Guthrie that Dylan would lose a lawsuit, had Guthrie received contemporary copyright protection. Of course Guthrie borrowed heavily as well, most of all from blues musicians. This did not stop Dylan, once a populist 1960s radical, from joining the lobbying effort in favor of copyright extension.<sup>22</sup>

Copyright also makes it harder for rap artists to sample music. Looking back into history, many Shakespeare plays draw their plots from other works; Hamlet, for instance, was based on Thomas Kyd's The Spanish Tragedy. Large sections of Chaucer's poetry are borrowed from other writers, either through translation or paraphrase. Blues, jazz, country music, and rap are all based on widespread borrowing of melodies and riffs, usually without any acknowledgement and certainly without any payment of licensing fees. It is debatable whether these artistic forms could have developed as we know them, had today's copyright laws been enforced all along.

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<sup>21</sup> See, for instance, Walker (2000). On the revisions for number of years, see also Wyszomirski (1999, pp.129-130).

<sup>22</sup> On Dylan, see Walker (2000).

That being said, these costs of copyright are easily remediable, if we so choose. We could have a copyright law that is shorter in duration. Similarly, we could move back to earlier versions of copyright law, which prohibited outright copying but treated borrowing of ideas very liberally. So these costs of copyright, while real, do not provide a reason to throw out the entire institution.

The coming of digital culture makes current copyright laws stricter, without anyone having intended such an outcome. In previous times, the “fair use” doctrine generally gave consumers the right to make copies for their personal use. The law has not changed, but the gateways of digital culture limit consumers’ real options. Lessig (2004, p.143) explains:

“Enter the Internet – a distributed, digital network where every use of a copyrighted work produces a copy...because of this single, arbitrary feature of the design of a digital network, the scope of [a category of copyright law] changes dramatically. Uses that before were presumptively unregulated are now presumptively regulated...let’s be very specific to make this general point clear. Before the Internet, if you purchased a book and read it ten times, there would be no plausible *copyright*-related argument that the copyright owner could make to control that use of her book...But the same book as an e-book is effectively governed by a different set of rules. Now if the copyright owner says you may read the book only once or only once a month, then *copyright law* would aid the copyright owner in exercising this degree of control, because of the accidental feature of copyright law that triggers its applications upon there being a copy.”

While Lessig’s point is well-taken, these costs of copyright are unlikely to prove significant in the long run. Provided we can maintain decentralization of supply, copyright owners are unlikely to exert an excessively high degree of control over users. Consider, for instance, the choice of a legal on-line music service. Some services allow for extensive copying, ownership, and file transfer privileges, but others do not. Consumers weigh their privileges against price and other relevant metrics of quality. If

the number of suppliers makes the market roughly competitive, we expect consumers to receive options that are satisfactory, relative to the real costs of supplying those options. This is standard microeconomic reasoning.

We also could seek to improve the market through a legal and institutional remedy. In particular we could modify current law to give on-line music access to mandatory licensing. We already apply various forms of this practice to radio, jukeboxes, department store broadcasts of music, cable retransmission of television signals, or to individuals who wish perform somebody else's composition live. To provide a simple example, a radio station can play someone's song, provided they pay an appropriate fee to the copyright owner of the composition (no payment is made to the copyright holder for the recording, who is considered to benefit from airplay). The fee is set by law, in recognition of the difficulty of negotiating an appropriate price in each and every case. Similarly, we could require compulsory licensing for the transmission of music over the Internet.<sup>23</sup>

Today the record companies have the right to withhold music from non-authorized Internet services. Compulsory licensing would require the music companies to trade at a certain price. The back catalog would become immediately available to anyone willing to digitalize it. More importantly, on-line music entrepreneurs could set up on a much smaller scale. They would not need the teams of lawyers required to negotiate Internet rights with all of the copyright holders. Compulsory licensing therefore would make the market in on-line music more competitive very rapidly.

Compulsory licensing may seem like a curious position to encounter in a book that heralds the virtues of decentralized markets. It looks like government-sanctioned price fixing. But compulsory licensing can be given an alternative interpretation. Whatever its favorable practical effects, copyright is a government grant of monopoly. Compulsory licensing is simply forcing the monopoly holder to share some of the government-sanctioned monopoly position with others. Furthermore, the initial contractual

assignments of royalty rights did not foresee the development of the Internet.

Compulsory licensing is a blanket means of assigning Internet rights ex post. While it is highly imperfect, the other legal means of assigning these (poorly specified) rights will have problems as well.<sup>24</sup>

While I am an advocate of copyright in general, the current state of copyright law is neither morally nor legally sacred. Much of American musical copyright law was written for technologies of player pianos and sheet music. It was not designed for a world with Internet culture and digital reproduction. Furthermore the origins and development of copyright show a legacy of censorship, monopoly, and special privilege. In the nineteenth century the U.S. Supreme Court ruled that copyright is a statutory monopoly rather than a natural law right of the author. Going back earlier, in Renaissance Venice, the home of Western copyright law, some printers were given monopoly rights to the entire printing industry. These rights then evolved into more specific monopoly rights to print particular works; early copyright was often vested directly in the publisher, rather than the author. The subsequent development of copyright shows similarly close links to state control. Throughout much of English history, copyright law served partially as a system of censorship. The grant of a copyright was considered equivalent to a decision to allow the particular work to be published.<sup>25</sup>

### Whither copyright?

In sum, the Internet and weaker copyright enforceability will have complex effects on various artworlds. The technologies are exciting, but the relevant truths are often banal.

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<sup>23</sup> On various aspects of compulsory licensing, see Samuels (2000).

<sup>24</sup> We can also see a possible public goods problem when the music companies set their fees for their on-line services. Each might tend to set fees too high. A high fee encourages more rogue services, but each single company only bears part of the cost of each rogue. Compulsory licensing, by opening up the market to competition and enforcing lower fees across the board, will require each company to give up some profits, in order to make the market harder for the rogues.

<sup>25</sup> On the Supreme Court, see Patterson and Lindberg (1991, pp.61-2). See Rose (1993, chapter two) and Patterson and Lindberg (1991, p.26, passim).

Many people will be better off while others will be worse off. The shareholders and managers of the major entertainment corporations may suffer the most.

Disintermediation will occur. Many creators will be worse off, but that does not mean that the arts as a whole will suffer. Some styles will flourish while others will stagnate. Consumers are on the verge of having a universal jukebox of sorts at our disposal, granting access to the world's musical, literary, and cinematic treasures for a mere pittance. Yet most people do not care much about this marvelous opportunity. They use culture for other purposes.

When evaluating copyright enforcement, should we take the viewpoint of critics or consumers? And is the music or culture of a particular age easily replaceable or not? In neither case do we have clear answers. But none of the cases show that Internet-based digital reproduction, and weaker copyright enforceability, will bring obvious disaster to cultural markets. We can expect financial decentralization to prove robust in the future of the American arts. And the ability of large corporations to endanger that decentralization is declining over time.

We therefore should be inclined to welcome the new technologies and to enjoy and herald their benefits, rather than restricting them by additional legal means. Furthermore we see once again that beneficial policy often arises through accident. Congress and the regulators debated telecommunications for decades and often chose ill-advised policies, such as restrictions on cable television. Yet subsidies to the Internet came with little explicit debate through DARPA and the Department of Defense. The Internet will go down in history as a major success for both telecommunications and culture. DARPA and the DOD likely will go down in history as the greatest benefactors our government has produced for the arts.