7 Copyright, Surveillance, and the Ownership of Music

Before the existence of sound recording, people could own printed sheet music for their use in reproducing music, or they could know and play music from memory, but they could not own the sounds themselves. With the advent of recorded media, sounds could be captured on wax cylinders, disc-shaped gramophone records, magnetic tape or wire, small cassettes for personal use, or compact discs. All of these are physical, tangible media that a person can own. Playing recordings at home became a realistic option for many people. Owning sounds was an exciting activity in its own right: many enthusiasts amassed large collections of recordings.[1] The owners of recordings could also move them from place to place, sell them, or give them away.

Physical recording media (compact discs, DVDs, cassettes, and other formats) are still very important in the worldwide circulation of music, encompassing about half of all music sales in the world.[2] To a great extent this is a matter of availability. As of 2018, only about 55 percent of the people in the world had internet access (fig. 7.1). Broadband or high-speed internet (which is most useful for moving music) is even more limited. Cell phones can also move digital music from place to place. As of late 2017, about 66 percent of individuals in the world had cell phones.[3] As we will see, however, physical media continue to play a role in moving music because their use cannot as easily be observed from afar.

With the capacity for making recordings widely available came opportunities to make money selling the recordings. Yet music remains an unusual kind of commodity for buying and selling because it is essentially intangible. What does it mean to own music, then? Karl Marx, who described the capitalist system in the 1860s, identified two kinds of value. An object can have **use value**: things satisfy human needs, so people use them. Every commodity has use value; this kind of value resides in the difference of this particular com-

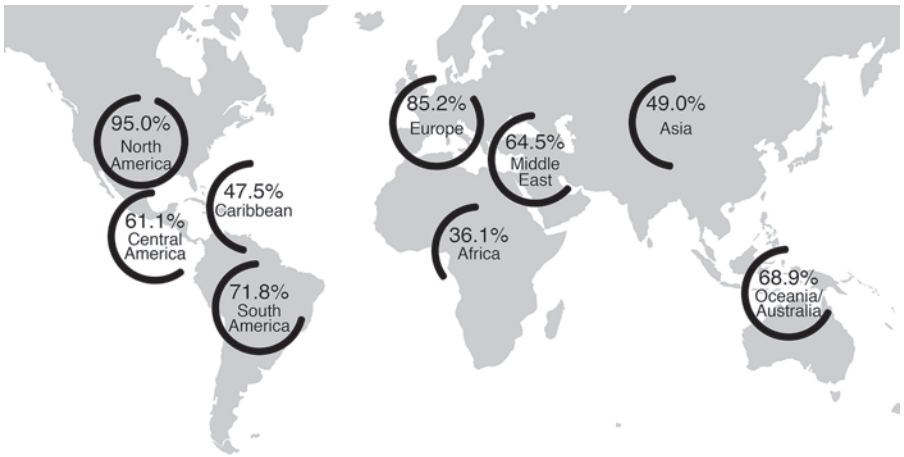

Fig. 7.1. *Music on the Move:* Internet Usage Rates by Region, 2018. Map by Eric Fosler-Lussier. This map shows the percentage of people in each region estimated to have internet access (broadband, mobile, or dial-up) in June of 2018. Data from www.internetworldstats.com. (See https://doi.org/10.3998/mpub.9853855.cmp.113)

modity from other commodities. For example, I think my favorite song is different from all others; and my car keys open only my particular car.

The second kind of value is **exchange value**: things that are useful can be exchanged for other things. Exchange value makes different objects comparable to each other. For example, a hammer might cost me $9.99, and a music download might cost me $9.99. Their functions are different, but their exchange value is equivalent. Only when items change hands by being bought, sold, or traded do they acquire "value" in this sense.[4]

In their ordinary lives many people tend to think about music primarily in terms of its use value. When a parent sings a lullaby, both parent and child might enjoy the song, but no payment changes hands. In today's world people often assign music exchange value in addition to its use value. Concerts demand high ticket prices, and music can be recorded onto an object or encoded as a digital file that is bought and sold like anything else. To the music industry, music is a commodity that can be sold for profit.

Sometimes these two views of music come into direct conflict.[5] Adrian Strain, the global communications director of the International Federation of the Phonographic Industry (IFPI), explained in 2014 that the music industry's principal aim is to assign exchange value to music and make it available for purchase. That is, the companies want to **monetize** musical experience: turn

it into money. Strain said, "We are a *portfolio industry* that is monetising all the different ways consumers access music. From CDs to downloads. Subscription to ad-supported services. From music video to performance rights."[6] In Strain's world monetizing musical experiences is good because it enriches record companies. Many in the industry would also argue that this process also supports musical creativity because it funds the purchase of more music from musicians. Nevertheless, the premise that music should be monetized is not universally accepted. As we will see, music circulates in the marketplace differently in different parts of the world, depending on the social norms that define music's value.

Despite the intangibility of music, part of the process of making recordings looks like manufacturing in any industry. Record companies like Sony or Warner Music pay to record music in recording studios and to duplicate and package physical copies of the recordings in factories. They also generate and sell digital audio files, collections of encoded ones and zeroes that can be decoded into musical experiences. Ownership of the manufacturing resources—Marx would call them the "means of production"—is tangible, physically real. More important, though, record companies also own the intangible legal right to reproduce, publish, sell, or distribute the content of the recording. This right, which is protected by law in many parts of the world, is called **copyright**. (Music that has been written down is also covered by copyright, which adds another layer of ownership and complexity. This chapter will deal primarily with recordings.)

To obtain the copyright, the record company buys the labor of the musician, who assigns the copyright to the company so that the company will promote and distribute the music. The company also takes most or all of the profit. The musician may receive royalty payments for each sale, but this usually happens only after many units are sold (e.g., more than 100,000 copies) and intermediaries such as streaming services are paid. The companies justify this practice on the grounds that they have to recoup their costs for finding musicians and making, duplicating, and publicizing the recordings.[7] The most valuable part of what the record companies own is not the technology they use to reproduce the music but the legal right to reproduce that particular music. Companies sometimes refer to this ownership as **intellectual property**—an intangible, yet valuable, owned resource.

This system of ownership, developed in the early 1900s, earned record companies excellent profits. It is no surprise, then, that the advent of the internet, file sharing, and downloading worried the managers of these companies.

Everyone who has access to a microphone and a laptop or smartphone can make recordings, and it is easy to copy a digital file. Unauthorized copies of recordings threaten the companies' interests by violating their copyright, jeopardizing the investments the record companies have made in acquiring the rights to these songs. One trade group representing the music industry claims that as a result of online file sharing, sales of recorded music on compact discs fell 23 percent between 2000 and 2005.[8]

Illegal copying of recordings is not a new problem. After the Phillips corporation introduced compact cassette tapes to the consumer market in 1963, individual users could easily record music from the radio, from other recordings, or from live performances. They immediately began to make creative use of this technology—not only copying music they wanted but also making **mixtapes** on which they creatively chose a sequence of music to record. In the 1980s, record companies advertised the slogan "home taping is killing music" in hopes of persuading people to honor their copyright, and they labeled those who make illegal copies "pirates."[9] The sharing of digitally encoded music files on compact discs, portable hard drives, or the internet has only increased the ease of copying and the quality of the copies. **Piracy** rings around the world either distribute music for free over the internet or make illegal CDs to sell. The recording industry spends an enormous amount of money and effort trying to prevent these activities.

Because there are so few barriers to copying and distributing recordings, protecting the ownership of recorded sounds is the paramount problem in the music industry today. The rest of this chapter deals with the ownership and distribution of music, with particular attention to how copyright enforcement affects the movement of music on a worldwide scale. As individuals, record companies, and governments fight over ownership rights, a great deal of money is at stake. Also on the line is individuals' artistic freedom to mix and remix music, as well as the rights of people who own copies of audio recordings to use those recordings as they please.

What Does It Mean to Own Copyright?

Copyright law is intended to promote the creation and public availability of useful works and incentivize creativity by ensuring that artists get paid. In the United States, copyright law protects original works in a fixed form, including literary works, musical works and their lyrics, dramatic works, choreography,

pictorial works or sculpture, motion pictures, audio recordings, and architecture. No registration is required: once a work is in a "fixed form," it is protected by copyright for a period of 75 to 120 years after the death of the author, depending on when and where it was made and the nature of the material.[10] (Once the copyright period has expired, the work is in the **public domain**, available for use by anyone.) For music, a "fixed form" may mean either an original work that has been written down or an analog or digital recording.

As we saw in chapter 4, the reliance on fixed forms sets certain kinds of music apart from others. When US copyright law began covering music in 1831, legislators considered only sheet music in European-style music notation, which captures melody and rhythm in a fixed (written) form. In 1897 copyright expanded to cover public performances of printed music.[11] As folklorists began collecting and writing down music, and as sound recording of folk singing became available, these practices broadened the scope of music captured in fixed form. Yet, more often than not, the copyright has been held by the person who made and published the recording, not by the person who created the song. As the poet and folk singer Aunt Molly Jackson put it, "Since I left my home in Kentucky in 1931, I have had my songs that I composed translated in 5 different languages and records made out of my songs but I have never received one cent from anyone."[12] Copyright law does not protect all creators equally. Furthermore, the securing of copyright on a song known to many people may inhibit further development of that song, as artists have to pay licensing fees to the copyright holder to reuse or remake it.[13]

Once a work is copyrighted, US law restricts duplication of it, except in certain circumstances. Someone who wants to make a copy can claim **fair use** based on four factors: the purpose and character of the use, the nature of the copyrighted work, the portion of the work used relative to the whole, and the effect of the use on the market for the copied work. If a use is educational, takes only a small part of a work, and does not encourage people to use the copy in place of the original, a claim of fair use might be legitimate. Copying a whole poem or track of music to distribute widely or resell, however, would not be deemed acceptable.[14] The courts have established certain uses as fair: making one copy of a recording to a computer and one to another device for portability, making a "backup copy" for personal archiving, and making a noncommercial copy for a friend, as on a mixtape.[15] Apart from fair use, US law specifies some other legitimate uses of copyrighted work, most of them pertaining to educational settings or transformative artistic use such as parody.

Legal protection for sound recordings is extremely complex: the law has

changed to keep up with current customs and technologies. When and where a recording was made has determined what its users can do with it; in 2018 the US Congress enacted legislation to attempt to regularize enforcement.[16] As of 1976, copyright holders had the right to control the copying, distribution, and public display of the protected work and the making of derivative works based on it. Except in the case of freely available, noninteractive network broadcasts (such as over-the-air radio), they could demand a licensing fee in exchange for any of these activities. Similar protection for digital streaming was added in 1995.[17] Copyright is enforced by action of the copyright holder; that is, the holder has to find out someone has violated her or his copyright and sue them. Protecting a copyright involves significant resources of time and money. As the large record companies have the most at stake, they actively defend their copyrights through lawsuits and other means both in the US and internationally.

The Cat-and-Mouse Game of Copyright Enforcement

Copyright ownership of recorded music is concentrated among the "big three" international corporations. The largest, US-based Warner Music Group, controlled about 25 percent of the market as of September 2018. Universal Music Group, an American company owned by the French media conglomerate Vivendi, controlled about 24 percent. Sony Music Entertainment, a Japanese company with studios in the United States, controlled about 22 percent. Each of these groups issues music recordings under a variety of **record labels** (or brands).[18] Independent labels unaffiliated with these companies control the other 29 percent of the market.[19] Of course, there are also privately made recordings that are not sold on any official label, and a great deal of content is distributed on social media such as YouTube. This independent fraction of the musical economy is hard to document. Taken together, the revenue from the sale of recorded music amounted to $15.7 billion in 2016, according to record industry figures.[20]

Since the 1950s, the US recording industry has been represented by the Recording Industry Association of America (RIAA), a trade group that tracks the sales figures for the industry. The RIAA spends between three and seven million dollars per year lobbying the US government to enact tighter copyright controls and enforcement.[21] The international organization affiliated with the RIAA is the IFPI, which is based in London but has regional offices

worldwide. Like the RIAA, the IFPI tracks sales and advocates for copyright enforcement but on an international scale.

The large media companies, RIAA, and IFPI routinely claim that illegal downloading and copying hurts their legal and economic interests, yet this claim has not yet been proven. For years the RIAA and IFPI have emphasized the "value gap"—the difference between what companies actually earn by selling music and what they imagine they could be earning if all illegal copying came to an end. Of course, because the industry does not have direct knowledge of user activities that are outside its control, the "value gap" estimate is based on guesswork. The trade organizations guard their sales figures closely, so no one else can confirm the truth of their data. The argument about lost revenue has surfaced every time consumers gain the ability to copy music on their own equipment in a new way. In response media companies have attempted to litigate remedies based on their estimates of harm (including, for instance, proposing a royalty tax on blank tapes, assuming they will be used for copying).[22]

To combat illegal duplication of copyrighted music, the large media companies began creating **digital rights management** (DRM) systems that use technical means to prevent copying. The most notorious of these cases unfolded in the mid-2000s. Sony had released more than five million audio CDs with a DRM package that could damage computers. When a user put the CD into a computer drive, a license agreement appeared that asked the users to give up many of their rights, including the right to make digital copies, the right to leave the country with the audio files, and the right to sue for damages if the software caused harm. Even if the user clicked "I do not accept" after seeing the agreement, Sony's CD still installed hidden software onto the computer. Sony's software made the user's system vulnerable to virus attacks. Worse, it included spyware that informed Sony about the user's listening habits, and if the user tried to remove the software, it could permanently damage the CD drive of the computer. Users sued Sony, and Sony paid to settle the court case in January of 2006. Sony's system was only one of a hodgepodge of strategies tried during this decade, including the use of digital "watermarks" that would permanently label files and the manufacture of devices that would not permit the copying of watermarked files.[23]

These DRM systems had several serious drawbacks. First, they did not deter the major piracy operations but only discouraged casual, small-scale copying by less determined people. Second, these systems actually took away rights from the user by preventing instances of legal copying. A 1998 US law

known as the Digital Millennium Copyright Act made it illegal under most circumstances to break into or reverse-engineer any DRM or "technical protection" systems.[24] For example, if a teacher wanted to copy an excerpt for educational use, that would be fair use, which is legal, but DRM prevented the copying, and it was illegal for the teacher to circumvent the DRM.[25] In effect, the major record companies arrogated to themselves rights that belonged to users. (The US Copyright Office has since acknowledged this kind of problem and tried to outline some exceptions.)[26] Third, some kinds of DRM, including Sony's, have operated like spyware, reporting on the user's computer activity without the user's consent. Record companies considered secrecy necessary, because if users could see how DRM worked, they could more easily defeat it. Yet the idea that corporations would gather information about users in their private homes disturbed many users.

After several lawsuits DRM technologies fell out of favor, but the attempt to regulate user behavior only became more urgent as peer-to-peer file sharing over the internet grew. In 1999 the US-based file-sharing website Napster began enabling the easy peer-to-peer sharing of music files; it was soon joined by Kazaa (Dutch, later based in Vanuatu), Grokster (Nevis, West Indies), Pirate Bay (Sweden), and others. The RIAA and its international affiliates pursued legal action against these entities. These lawsuits proceeded slowly, in part because of the complexity of international agreements about trade and telecommunications. Efforts to suppress file sharing failed: new sharing sites sprang up as others were shut down.

The RIAA next tried to attack copying by finding and punishing the users of pirated files. By hiring online investigators to trace individuals' internet protocol (IP) addresses, the RIAA identified college students who used university networks to download or share music. Between 2003 and 2008 the RIAA pursued legal action against about 35,000 individuals.[27] The RIAA also threatened to sue universities that refused to identify students by their IP addresses. In 2007, for example, Ohio State University turned over the names of more than a dozen students to the RIAA; most of these students settled the lawsuits out of court, paying several thousand dollars each.[28] This strategy frightened some students into buying music legally, but it did not come close to eliminating file sharing.

By 2008 the RIAA had found a new strategy: demanding that internet service providers (ISPs) monitor individuals' usage and cut off those who appeared to be sharing files illegally.[29] Like the strategy taken with the universities, this action relied on the ISPs' ability to survey the traffic of files over the

internet and identify particular users. The chair of the RIAA, Mitch Bainwol, believed that if users knew they were being watched, piracy would decline: "Part of the issue with infringement is for people to be aware that their actions are not anonymous."[30] When the Grokster file-sharing service was taken down as a result of a lawsuit, a notice appeared on its website stating that the specific IP address of the user's computer had been logged, with the words: "Don't think you can't get caught. You are not anonymous."[31]

As of this writing, the major music corporations have begun to discourage the use of mp3 sound files. The Apple corporation has publicized its plan to stop selling music files in 2019, directing users instead to Apple Music, its audio streaming service.[32] Other subscription streaming services, including Spotify, Pandora, Amazon Music, and Google Play, are working hard to attract listeners. With **streaming** technology the digital audio may stay online and never be copied onto the user's device as a file; or the file may be "rented" for download and disappear automatically from the device after a short time. As a business model this move makes sense: on a subscription basis the record company can at least capture some **royalties** (payment) for the music that customers listen to online. These services create a more seamless experience: rather than tediously moving individual files onto devices, the user can order particular selections or styles of music from a single dashboard.

That seamlessness is strategic: it offers the user fewer chances to defy the system. According to the music theorist Eric Drott, streaming services have convinced copyright holders that streaming is a way to capture listeners, bringing them into a "**digital enclosure**" in which their behavior is more easily controlled. This business model takes away users' ownership over files and the means to alter or disseminate them. In a streaming system companies identify (authenticate) users as individuals; companies then deliver music encoded as streams of information rather than files that can be duplicated. The relationship between the rights-holders and the streaming services is negotiated by contract; for example, Spotify must pay 83 percent of its earnings to the rights-holders.[33]

The record companies' strategy of keeping listeners in the digital enclosure is aided by **convergence**: a few companies are now controlling more and more elements of our digital lives.[34] What used to be separate technologies—telephone and internet, audio publishing and distribution—increasingly operate over the same networks. Apple makes devices that store and play music, but the company also controls what software can be used to play music on its devices, and it sells access to music through its streaming service. Time-

Warner owns the copyright for many movies but may also serve as the customer's ISP and phone company. An ISP may even decide what content is permitted to flow to the customer.[35] The more integrated our electronic services become, the more power a few communications and content companies can exercise over user behavior.

Furthermore, the advent of streaming services enhances a little-noticed aspect of the streaming business model: rather than selling music to consumers, media companies strategically sell consumers to advertisers. This practice has a long history. In 1935 a radio show called *Your Hit Parade* broadcast lists of top songs of the week; in the 1940s fan magazines like *Billboard* began publishing charts of hit songs as a way of attracting people to their publications and thereby selling advertising to the music industry.[36] The Nielsen company, which had produced audience ratings of television programs since 1950, introduced SoundScan in 1991—a service that collected all sales data about every recording from retail outlets and sold that information to record companies. To assist in tracking, each recording is marked with a unique code.[37] Record companies, distributors, retailers, and people who manage concert venues pay Nielsen Music Sales Measurement for access to the sales data. Knowing how many of each kind of record they might expect to sell allows companies to make choices about what to pay artists for recording contracts.[38] More important, though, these systems allow detailed tracking of listener behavior.

Now, for example, as users access *Billboard* magazine's charts through the internet, there is an added component of data-gathering: *Billboard* tracks the users of that content and sells their information as well. If you visit *Billboard*'s website, *Billboard* reserves the right to "observe your behaviors and browsing activities over time across multiple websites or other platforms." That is, *Billboard* watches you not only when you are looking at its website but also thereafter. Furthermore, *Billboard* will then "serve you with interest-based or targeted advertising."[39] These ads do not only describe *Billboard* or its products: they can include ads from anyone *Billboard* has sold your browsing data to. Thus, *Billboard* is involved in a multidirectional flow of consumer data: consumer purchasing decisions produce the data that become its product (the charts), but consumers' attention to that product (measured in clicks and time spent online) also becomes a product to sell to advertisers.

In this way the music business has monetized listeners' attention. Eric Drott has described how the subscription streaming service Spotify sells its user data. According to Drott, Spotify issued a wide-ranging licensing agreement that would allow Spotify "to retrieve personal data held on third-party

apps like Facebook; to access GPS and other sensors on mobile devices; to collect voice commands captured by built-in microphones; and to scan local media files on users' devices, including mp3 libraries, photo albums, and address books."[40] Spotify retracted this policy after user outcry in August of 2015. But the company still communicates user data to "advertising partners"; indeed, this data (not the music) is the company's principal asset. Because the data describes what users like, when they listen, and in the case of phones, where they listen—it reveals their personal habits in a way that advertisers can exploit.[41]

The ubiquity of these technologies, which accompany a person throughout the day, makes them strangely intimate: when the application solicits personal data, the user does not hesitate to give it. As we saw in chapter 6, this user is a flattered self—delighted to be attended to and catered to, and delighted to be asked. Spotify capitalizes on this sense of intimacy. Drott notes that when a user posted on Twitter that Spotify knows him well, "Like former-lover-who-lived-through-a-near-death experience-with-me well," Spotify began using this tweet when it marketed its services to record companies.[42] The tweet demonstrates how effectively Spotify draws the user into the service, making the user feel attended to and thereby concealing the unpleasant sensation of having one's data mined for personal details.

From the 1950s to today, then, record companies have gathered gradually more specific information about listeners—now achieving a stunning degree of particularity. Once clumsily used to sell advertising or prevent copying of physical media, this information is now deployed to encourage us to tell more and more and to allow the digital enclosure to meet our needs without our conscious awareness. Because this persuasive method is pleasing, it appears to be much more effective than any lawsuit in shaping user behavior toward streaming and diminishing the appeal of illegal sharing of music.

The International Cat-and-Mouse Game

Record companies find it particularly difficult to enforce their copyright across international borders. There is no such thing as "international copyright": international protection depends on the laws of each country. Not all nation-states agree on standards for intellectual property protections, and different nation-states may or may not be committed to spending resources on enforcement.[43] If one nation-state wants another to honor copyrights held by its citi-

zens, that agreement must be secured by a treaty between the two governments. Many countries have worked on this problem for a long time. In 1886 a few countries signed a treaty called the Berne Convention, stating that each would honor the others' copyright laws, and these agreements have evolved over time.[44]

The founding of the United Nations (UN) in 1945 inspired a new sense of global cooperation in politics and trade. The UN encouraged newly decolonizing nations to join the Berne Convention, and in 1967 the UN funded the World International Property Organization (WIPO) to foster "balanced" worldwide policy about intellectual property. WIPO aimed to help newly decolonizing countries integrate into existing copyright treaties; in so doing, it connected private corporations with governments and governments with one another.

The World Trade Organization (WTO), formed by treaty in the mid-1990s as an entity separate from the UN, dealt with the regulation and enforcement of trade agreements, including intellectual property. Since 1995, all members of the WTO must sign the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which incorporated and expanded the Berne Convention. TRIPS required member nations to seek out and prosecute music piracy and to establish intellectual property laws in line with "international minimum standards."[45] The United States, Japan, and the European Union, which host the big media companies and own most of the world's copyrighted material, exerted pressure to get other countries to accept TRIPS. The WTO may punish its member states by sanctions if they do not follow the agreement.

The WTO permitted developing countries a "phase-in" period during which they would bring their practices in line with the TRIPS agreement, but the hurdles proved insurmountable. Enforcement costs money, and each country was supposed to bear the cost. To comply, some countries would have to revamp entire judicial and policing systems. Police were often reluctant to jail poor people who did not know the law merely to comply with an abstract international treaty.[46] Where states attempted to use local authorities for enforcement, the authorities and musicians associated with them have been assaulted by music vendors. In some cases police invented blackmail schemes in which they collected money from the sellers of illegal CDs and allowed them to keep their businesses open.[47]

Furthermore, most citizens in these countries were accustomed to their own ways of using music, so TRIPS would require changing citizen behavior

on a vast scale. In Brazil, for example, entire livelihoods are built around the copying and sharing of recorded music. Since the 1990s, people near the city of Belém in northeastern Brazil have enjoyed ***tecnobrega***, which means "cheesy" or "tacky" techno music. The DJs who mix this music in the studio use a computer to add a techno beat to an already existing song, usually one issued legally by a record label. The film in example 7.1 shows how, using the strategies of hip-hop and techno DJs, a tecnobrega DJ takes samples or loops from other copyrighted popular music as well.

Example 7.1. Excerpt from Andreas Johsen, Ralf Christensen, and Henrik Moltke, *Good Copy Bad Copy* (Rosforth Films, 2007). Licensed under Creative Commons. YouTube.
Link: https://doi.org/10.3998/mpub.9853855.cmp.114

Once enough songs are made to fill a CD, the disc is handed to a street vendor, who duplicates and sells copies at a low cost. The CD serves as an advertisement for a party, where thousands of people pay for entry and dance to the music mixed by the DJ. The party is the main revenue source: successful DJs can earn more than $1,000 at one party. The DJs include shout-outs to particular audience members to personalize the concert, and CDs and DVDs of that concert are sold that same evening as souvenirs.[48] If tecnobrega creators want to distribute their music through official channels, they may go to the trouble of licensing their work, but doing so is not the norm. There are numerous other instances of informal circulation in low-income countries: South Africa's *kwaito* music is another kind of creative studio work that takes preexisting music as its basis.[49]

Given the difficulty of changing citizen behavior and legal systems, many people in low-income countries began to criticize TRIPS as coercive and inappropriate. In states where basic needs such as food, literacy, and sanitation are not met, governments cannot and do not want to spend money to enforce the property rights of rich foreigners.[50] Nonetheless, Brazil made significant efforts to comply with TRIPS: officials implemented more restrictive copyright laws, destroyed four million pirated items, and closed more than 2,800 file-sharing websites. Yet in 2001, under threat of sanctions, Brazil was compelled to create a new government ministry to combat piracy, and international trade groups continued to lobby the US Trade Representative to place Brazil on a "priority watch list" for possible punishment.[51]

Adding insult to injury, musicians in lower-income countries have found frustration when they tried to gain representation by major record companies

and participate in the legal market. Large record companies only market music they believe will sell very widely. Although Brazil has more than 200 million citizens, the companies treat low-income countries as consumers, not producers. Furthermore, the companies only pay royalties after a certain number of copies has been sold. Brazilian musicians report that the large international record labels are merely another form of piracy: they give up their music, the music sells well, but they receive no money in return. "I was pirated . . . by Sony!" exclaimed one musician, Marcílio Lisboa.[52] State officials have verified this claim: to evade paying taxes in countries where enforcement is lax, labels underreport the number of recordings sold, leaving musicians with no pay and no recourse. For this reason many musicians distribute their music through vendors via the informal economy. Rather than giving away their product to multinational companies, which will price the CDs too expensively and pay no royalties, they produce it themselves and offer it in the local market at a price people can pay.[53]

The situation is only more difficult for musicians in nation-states where the government suppresses music, for underground music is by definition difficult to regulate. In Iran, for example, rap music with socially critical lyrics is forbidden: musicians have been arrested and punished and illicit recording studios shut down.[54] Several musicians have left the country, but they still make their music in the Farsi language, so the largest market for their music remains in Iran. These musicians cannot openly sell or distribute their recordings in Iran, but they cannot sell their music as downloads or streaming from abroad, either: as a result of international sanctions, most Iranians cannot complete banking or credit card transactions with people outside the country. The musicians give their music away for free, putting it onto many different apps and file-sharing sites so that it can be streamed at private parties in Iran.[55] When the state cannot see the musical activity it is supposed to regulate, it is difficult to imagine how it could enforce copyright law.

Brazil: Changing the Rules of the Game

Thus, the rules of copyright enforcement, established by wealthy countries, did not at all match the reality of how people use music in low-income countries. Even while the Brazilian government attempted to comply with TRIPS, Brazilians developed an alternative model for thinking about intellectual property that challenged the WTO's model of cultural ownership. The Brazil-

ian Ministry of Culture introduced a model called "Living Culture" (Cultura viva), based on a principle of shared resources rather than locked-down resources. Instead of encouraging a few products from outside the country to dominate the market, the ministry sought to provide avenues for many people, even poor people, to become creators. Gilberto Gil, who served as Brazil's minister of culture from 2003 to 2008, stated that his policy of "digital inclusion" was "inspired by the ethics of the *hacker*"—allowing remixing and even theft as means of participation.[56] Gil declared that citizens have a right to culture and that law should accommodate the real needs of citizens.[57] He hoped not only to revitalize the arts but also to support a cooperative model of citizenship that gave more people access to knowledge.[58]

Gil had been a famous singer and songwriter since the 1960s, and he resumed his career as a recording artist after leaving the Ministry of Culture in 2008. As a singer, he helped develop the Tropicália movement, which rejected efforts to create a Brazilian musical nationalism based solely on indigenous folk traits. Tropicália music emphasized internationalism and mixing: Afro-Brazilian elements blended with electric guitar or other elements imported from rock 'n' roll. In formulating their idea of mixture, Gil and the other Tropicálists drew on Brazilian theories of modernization from the 1920s. The Brazilian writer Oswald de Andrade believed that Brazil did not acquire its modern traits from being colonized by the Portuguese. Rather, as a proudly multiracial and multiethnic society, Brazil consumed and digested imported elements—in the manner of "cannibalism"—constantly producing something novel and meaningfully Brazilian.[59]

In 2005 Gil continued to claim "a mixture or a permanent recycling of values, references, sentiments, signs and races," as a principal feature of Brazilian society.[60] For Brazilians in the 2000s, that mixing also meant recirculation of ideas. Countries that could hardly afford to pay US or European prices for patented medications argued that these forms of intellectual property had to be loosened for humanitarian reasons. Likewise, the expense of purchasing software hampered efforts to improve industry in Latin America. Many viewed the high price of legal music purchases as a similar impediment. Copyright or no, in Gil's view adopting and remixing all these elements served the best interests of Brazil's citizens. Gil's project website offered a bold statement: "Copy, remix and distribute these files freely, you'll be doing a favor to cultural diversity and strengthening an autonomous network of free knowledge."[61] It is not surprising that the Brazilian affiliate of the IFPI strenuously opposed Gil's efforts.[62]

When Gil took office, few homes and schools had internet access.[63] Under Gil and his successor, Juca Ferreira, the Ministry of Culture established "Culture Hotspots" (Pontos de cultura), distributing technology resources such as internet access and free software. Many Culture Hotspots featured recording studios or other communications technology. The ministry did not manage the hotspots: maintaining local community control made it more likely that the hotspots would take on projects that reflected the interests of people in that community.[64] For instance, some communities produced documentaries and fiction films in indigenous languages, not the colonial language, Portuguese. The hotspots would never become financially viable, for the ministry placed many of them in the poorest communities. Rather, these state-funded enterprises aimed to create an educated and technologically savvy citizenry with a lively community spirit.[65] The emphasis on local production also served to emphasize the heterogeneity and diversity of Brazilian music and to publicize that heterogeneity as an alternative to imported music promoted by the global record labels. At the height of the program, hundreds of hotspots had opened all over the country.[66]

Apart from funding the technology and training, the Ministry of Culture also facilitated communication among the hotspots through online exhibitions and social media sites. The ministry hoped to produce a digital archive of Brazilian music, called Canto Livre (Free song), produced by citizens and reflecting their tastes and preferences. This archive would include digitized versions of Brazilian music that had entered the public domain and, with the artists' agreement, works produced at the Culture Hotspots. During its brief existence the archive aimed to promote artists and connect citizens who would otherwise never meet. The Canto Livre idea closely resembles Benedict Anderson's theory of nationhood: Gil wanted Brazilians of many ethnicities and places of origin to experience contact with each other, sympathize with each other, and gain a sense of fellow-feeling.[67]

Gil made common cause with the Electronic Frontier Foundation, which seeks to preserve individual rights against corporate intrusion. As of 2010, international music labels controlled 86 percent of the Brazilian market for legal CD purchases.[68] Gil encouraged Brazilians to embrace Creative Commons licensing, a form of copyright that allows the artist to choose whether and under what circumstances the work can be repurposed. Instead of reserving a whole bundle of rights for the copyright holder, Creative Commons offers a menu of separate rights. In choosing a license, the artist can decide to allow some kinds of reuse but not others. All Creative Commons licenses

require that the author be given credit; other elements that the author can choose are prohibiting commercial use, prohibiting derivative works (like remixes), and requiring any derivative work to be issued under the same Creative Commons license as the original.[69] If an artist wants to allow remixing, a Creative Commons license easily accommodates that option.

During Gil's administration, the Ministry of Culture promoted Creative Commons licensing on its website and through its educational projects. This promotion directly challenged both strict Brazilian copyright laws and the premises of the TRIPS agreement, encouraging more open sharing of music and therefore diminishing the need to spend money on enforcement. Apart from pushing back at global corporations, Gil sought to embrace a copyright arrangement that fit how Brazilian people used music. A licensing scheme that allowed derivative works, for example, would legitimate tecnobrega and other forms of remixing that played important roles in Brazilians' lives. The ministry also hoped that the government's promotion of music would increase its circulation and allow musicians to earn more money through live performances.[70]

After 2011, with the election of a new president, a new minister of culture was appointed. Ana de Hollanda reversed the policies Gil had put into place. She revoked the Ministry of Culture's support for Creative Commons licenses. She vastly reduced the budgets for the Culture Hotspots and declined to meet with the hotspots' managers. The ministry has taken down the Canto Livre archives website and other sites associated with Gil's Culture Hotspots project. Several observers noted that Hollanda met frequently with representatives of the internationally affiliated trade groups that represented the recording industry: these observers attributed the ministry's abrupt change of course to her alliance with the industry.[71] Because the changeable will of governments affects both copyright law and international commitments to enforcement, efforts like Gil's remain fragile.

Copyright Enforcement and Global Power

The decline of Gil's Culture Hotspots happened around the same time as a shift in global corporations' strategy. Rather than waiting for the US Trade Representative and the WTO to act on piracy, the IFPI began to act more directly. The IFPI tracked illegal copies to their sources all over the world and asked local law enforcement officials to raid the producers, seizing the materials used to create the illegal copies.

For example, in August of 2008, in and around the market of the Tepito neighborhood in Mexico City, 375 police officers and 10 prosecutors from the Mexican Attorney General's office stormed 70 warehouses and 15 laboratories to seize pirated music and related equipment. The police seized approximately 410,000 recorded CD-Rs/DVDs, three million covers, and 850 CDR/DVD burners. The Mexican government had recently agreed to invest in intellectual property enforcement, and the government worked with the local industry antipiracy group APCM, which is affiliated with the IFPI, to carry out the raids.[72]

Also in 2012, the IFPI coordinated an international effort to close the torrent website Demonoid, asking INTERPOL, an organization that coordinates police forces across borders, to intervene. Ukrainian police seized computer servers and closed down the site, and Mexican authorities arrested several people. John Newton, who led INTERPOL's Trafficking in Illicit Goods Sub-Directorate, explained that "international police cooperation is the key to ensuring that the illegal activities of transnational organised criminals are stopped."[73] This case involved police from multiple countries, coordinated and informed by the agenda of the music industry.

Global music corporations are using the policing and military resources of their own and foreign governments to enforce their (private) rights and set the norms by which people live. According to the sociologist Saskia Sassen this is not an isolated incident but an arrangement characteristic of our times: "It has become increasingly common for rules originated by private actors to be eventually enacted by governments."[74] The private and public spheres are blurred together: where earlier the IFPI may have taken offenders to court in a particular nation-state and waited for the government of that nation-state to intervene, it now engages directly with police forces to carry out its aims. Increasingly, no one can hold the IFPI accountable because the organization is acting across international borders and using agents who are presumed to be enforcing the law.[75]

The idea that what is good for industry is good for the public at large is known as **neoliberalism**—"liberal" in the sense of allowing corporations to have liberty to pursue their interests.[76] The IFPI's efforts to make copyright enforcement global and require restrictions favorable to the United States are a form of neoliberalism that aligns with the popular notion of "globalization." With the support of world institutions like the WTO, international corporations and national governments have extended their reach around the world, shaping faraway events. Whereas the governments of nation-states formerly

set the rules for corporations within their borders, the corporations are now dictating to governments what the rules should be and even intervening directly in other countries, disregarding borders. For this reason many thinkers say that globalization has made the nation-state less important and the corporation more important.[77]

Yet the effort to globalize the IFPI's and the WTO's concept of copyright enforcement is not exclusively imposed by powerful corporations. Many economists who specialize in development believe that the way to distribute the world's wealth more equally is to monetize existing resources—to bring these resources into the economy by assigning them exchange value. A monetized economy facilitates trade and connects the local economy to that of the rest of the world. Some economists and some commentators, including many in lower-income countries, believe that this connectedness would offer better livelihoods for citizens in those countries and contribute to stability and security of "the world order."[78] The UN's WIPO organization aims to support lower-income countries in entering the world's intellectual property economy. This argument is founded on the idea that even if the economy is structured in a way that favors large international corporations, participation in the economy still offers better opportunities than nonparticipation.

Some musicians and record industry executives in lower-income countries echo this sentiment. When the IFPI list of influential music markets for 2013 did not include Nigeria, for instance, music blogger and writer Ayomide Tayo blamed the lack of a "functioning music industry." Tayo observed that "the revenue that this so called industry of ours is making has been cut short by piracy, traditional media and the internet. We need to aggressively battle these monsters before we can start making serious revenue in this country."[79] An entertainment lawyer quoted in the same article advocated for stricter intellectual property laws, which would support the monetization of music.

Likewise, in many parts of the world, music industry executives and government officials subscribe to the IFPI's claim that piracy is bad for music, for musicians, and for economies. In Thailand, music industry officials claim that trade in pirated goods costs billions of dollars and takes away artists' and music corporations' incentive to make music.[80] Recognizing that the World Trade Organization's regulations did a poor job of meeting the needs of people in lower-income countries, the World Bank has joined the Senegalese government and musicians to create "The Africa Music Project," "an ongoing effort by World Bank staff to help Africans to advance the business and cultural potential of their music." The project's authors raised the possibility that

"the legal environment should not be imposed from outside," but the platform calls for the institution of copyright tracking, elimination of piracy, and legal reform.[81]

These musicians are in a bind: if they do not accede to the WTO's copyright model, they may not receive payment for their work, and their music may not be protected from theft. According to Brazilian musician Gilson Neto, "In 1998, one CD that costs two dollars to make, and I sold for seven dollars. And the profit for my recording label was five dollars per CD sold. Today in 2002, the pirate is the one who sells the most of my CDs."[82] If they do accede, however, they face uncertainties. Will their legal recordings sell well enough to generate royalties? Will the laws be applied fairly? How will existing modes of music-making respond to the disruption caused by enforcement actions? Many musicians in lower-income countries face all these challenges. According to the ethnomusicologist Ryan Skinner, musicians in Mali want their nation-state to protect their work by law and to bring about an order that facilitates their livelihoods.[83] In an environment where nation-states do not deliver on the promise of order, though, and the "big three" music corporations favor a few highly successful artists and neglect others, most musicians do not feel the benefit of the promises made by the IFPI, WIPO, and the WTO.[84]

The choice to participate in the global distribution system may enable artists to market music on a worldwide scale, but because many have been left in obscurity by large record companies, they have little reason to trust this system. Recent evidence suggests that in an uncertain climate for intellectual property rights, musicians and labels are trying many different alternative tactics. In Brazil, for example, some are signing recording contracts with major labels or their affiliates, and some are signing on with independent labels that seek to control the pipeline from recordings to concerts in the manner of tecnobrega. Some are designing their own online platforms to sell individual tracks via mobile phone, and some are licensing their music primarily to film companies rather than trying to sell it as stand-alone work.[85] A variety of intermediaries have sprung up: e-commerce sites that sell music from multiple labels, shops where one can buy mp3s in exchange for a low monthly subscription fee, and streaming services. Many of these intermediaries exist for only a short while because their business models have proved unsustainable.[86] Even as Brazilian musicians and distributors seek access to global markets, they are also competing with each other for that access: this competition can intensify already existing rivalries between cities or musical styles.[87]

The large international record companies have named streaming as the future of their industry—not only in countries where these services are well established but also in countries where today's music industry is not within their reach. In a 2014 speech IFPI official Adrian Strain observed that streaming services have grown fast, from a handful of markets to worldwide in just a few years, and that they might be especially important in world regions where copyright protection has historically been weak.[88] The cost of legal CDs in Brazil has been so high that stores have offered installment plans so that customers can make payments over time to buy even a single disc.[89] With the advent of streaming, which reduces the likelihood of illegal copying, the IFPI plans to make price adjustments that will make the legal product affordable and guide people into the regulated digital enclosure.[90]

The anthropologist Anna Tsing has called the idea of globalization a "dream space" where ambitions have free play: for the people leading international corporations a global market appears to be a vast opportunity for expanding sales and profits.[91] From this perspective it is easy to imagine music moving effortlessly from place to place. It is also easy to imagine a uniform enforcement network that ensures that each customer, anywhere in the world, pays equally for the music they use.

When we look more closely, though, we see that the global free market does not operate smoothly; as Tsing points out, there is friction in the network. Some of this friction is created by practical obstacles. A minority of musicians—most of them from the US, Europe, or East Asia—can access global channels of distribution and copyright protection. Most cannot. A significant number of nation-states cannot enforce the supposedly global trade agreements that protect copyright, and listeners, artists, and vendors resist when the rules of ownership defined in those agreements do not protect their interests.

Disagreements of principle create further friction. Not everyone shares the vision of the digital enclosure. Those who have enjoyed music as a shared public good may find that use diminished or cut off by the monetization of their music.[92] As representatives of Brazil, Argentina, and many other countries have pointed out, the TRIPS agreement favors copyright holders, not the makers, users, or remixers of music.[93] If one cares about music for its use value, and wants to be able to share it with others, this balance may seem unfair: it certainly takes the control of music away from the many to place it in the hands of the few. This arrangement perpetuates the social inequalities that long plagued the colonized world: the TRIPS agreement appears to ensure

continuing economic inequality by affirming the dominance of corporations' rights over musicians' interests.

While the effortless and well-regulated ideal of a global music market exists in the "dream space," the actual practice of regulating copyright internationally remains neither stable nor orderly. Under the neoliberal model the corporate copyright holders of the US, Europe, and Japan hold a great deal of power: they collaborate closely with the governments of wealthy nation-states to protect their interests, and these governments negotiate international agreements that set the rules for everyone. Many in the developing world have challenged this model, but for now, copyright holders seem to have the upper hand in controlling how music moves.