ANALYSIS OF A LOCAL MUSIC SCENE’S RECORD LABELS AS A NETWORK OF RESISTANCE TO THE DEMISE OF THE VINYL RECORD

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ABSTRACT OF THE DISSERTATION

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Music consumption has changed from a physical product to the current dominant mode of non-ownership of music through pay-per-month digital streaming. The music industry has undergone several sea changes in media products over the decades to get to this point. However, since 1980, New Brunswick, NJ, has seen the creation of over 25 record labels, and they have all produced physical releases. In addition, all these independent record labels have produced vinyl records—a format that originated over 130 years ago. Though the vinyl record format was near extinction in 1993, it maintained a faint pulse for several years, and has been steadily increasing in market share for over a decade now. This work looks at a local music scene as a network of resistance to the decline of vinyl record production and to investigate how this resistance has impacted the overall rise of vinyl production. This project incorporated a case study of the New Brunswick record labels from 1980s to the 2000s to understand the productive dynamics within an insulated community. I interviewed 14 record label owners from the New Brunswick music scene to discover how the practices of this community were connected over a 30-year period and how the legacy of their local-focused media products helps to explain the phenomena of the rise of vinyl ephemera in the post-internet age.
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Introduction

The media studies field is uniquely positioned to research the production practices of music media, through its history as an outgrowth of communication research, coupled with its theoretical background encompassing cultural studies, political economy, and economics. These underpinnings have assisted the media studies field to produce extensive insight into the history of the vinyl record, including investigating vinyl sales recent resurgence. However, there is very little research on why vinyl record production did not cease altogether in the early-1990s in the face of competition from a variety of music formats, given the predominant theory of diffusion of innovation, which predicts that new technologies gradually oust older ones. This research engages with the diffusion of innovation, communities of practices, and emerging work in scenes to examine a local music scene as a pocket of resistance to the demise of vinyl record production and hypothesises that this is made possible because of the scene’s nature as a networked community.

The goal of this dissertation is to investigate the music scene of New Brunswick, New Jersey, as a pocket of resistance to the demise of vinyl record production. This work is significant because it examines the production of independent creative work and its dialectical relationship with the prevailing production process. Specifically, a study of this type enables us to better understand the tension between the production process of the dominant culture—or mainstream culture—and that of a subculture. For this dissertation work, the production process in question is the formats of music produced for consumers. Remarkably, after nearly ceasing production over the past two decades, vinyl record production has more than doubled during the past four years. Moreover, vinyl
stands out as the only product that has shown sales growth in a rapidly diminishing field of purchasable music formats.

![U.S. Recorded Music Sales Volumes by Format](image)

Figure 1 U.S. recorded music sales volumes by format (RIAA).

This chapter will introduce the research by first reviewing the history and format competition to the vinyl record; followed by the research problem; research objectives and questions of the study; the significance of the research; and finally, a brief structural outline of the dissertation.

**Background**

Before understanding the history of the vinyl record as we know it today – a flat vinyl disc with a pressed concentric circle of inscribed modulations on each side that usually is produced in 12-inch and 7-inch diameters and spins at either 45 or 331/3 rotation per minute (rpm) – we must first understand the three mass-produced forms of music media preceding the innovation of recording live sound to a medium that could be
played back. By reviewing what preceded mass-produced recorded sound, there will be a better understanding of the culture surrounding the process and why each iteration of innovation added to the diffusion of the next. The three key mass-produced forms of music media preceding the innovation of recording live sound to a medium that could be played back are sheet music, the music box, and the piano roll. By reviewing this pre-record history this will help to better understand why the resurgence of vinyl was so unanticipated.

The first recorded music that was mass-manufactured was sheet music. A product that flourished alongside the book and newspapers with the advent of the printing press in the mid-15th century. With the advent of mechanical plate engraving in the late 16th century sheet music allowed for the mass production and distribution of not just established music, but of popular music of the time (King, 1968, p. 28). Walter Benjamin wrote about the work of art in the age of mechanical reproduction in 1936 and how these manufactured imageries of art were distanced from the original works and as a result lose their “aura”. (Benjamin, 1936) However, the mechanical reproduction of sheet music far preceded Benjamin’s writing and the ability to purchase popular music far exceeded any complaints that the scores were not in the original author’s hand.

Along the timeline of the printing press was the second innovation: the music box. Like the history of the vinyl record, the music box’s playable medium was originally a tube with pins distributed on it that contacted and engage metal tines tuned to the desired notes of the piece. When the tube was rotated it produced a melody. As these devices advanced, popular songs could be manufactured and sold in a very portable size that could be carried in one’s pocket (Roy, 1943, p. 23). The similarity of these Victorian-era
music boxes to the first iPod is striking considering they were similar in size and though a music box could not put “1,000 songs in your pocket” (Dormehl, 2021) it did allow for individuals to bring a song with them and create social interactions with others and possibly with others’ songs as well. It should also be noted that, like the development of the vinyl record, the music box “rolls” were adapted in the late-19th century to a flat metal disc with pins that allowed for the separation of separate disc for sale and a device that were able to play them (Roy, 1943, p. 51).

The third, and final music medium to note that was mass-produced to a degree was player piano rolls. A piano roll is a roll of thick paper with holes punched into the paper that, when fed through the player piano, will trigger the appropriate note from within the piano, giving the illusion that an invisible person is playing the piano. These are interesting because the device that used them could be used as a normal piano, but if a skilled piano player were not available, a non-skilled individual could easily install a piano roll of a song and a full song could be performed with both rhythm chords and singular note melodies. As the costs of player pianos decreased, they were found more and more in the home and reached a height of popularity at the turn of the century (Suisman, 2009, p. 91). It is important to note the innovations of sheet music, music boxes, and player pianos in laying out the culture that the vinyl record was being introduced to. The idea of mass-produced popular music, along with these innovations appearing more and more in the home, laid down an established culture that the vinyl record built upon.

Moving from the innovations that informed the culture of producing and recording, we can now turn to the technologies that led to the vinyl record. These two
technologies are Thomas Edison’s cylinders and Emile Berliner’s disk records. It is important to recognize that several inventors had been working on innovations that could both record sound and play that recorded sound back before Edison’s work (Feaster, 2012). This thesis aims to understand the dynamics of those consumers and manufacturers of recorded music in mass. Because of this relationship, this research begins with Thomas Edison’s phonograph. Edison made his first prototype of the phonograph on July 18, 1877, at his Menlo Park facility in what is now Edison, NJ. (MacLeod, 2020) Edison constructed a metal cylinder with a groove cut down the length of the cylinder so that a piece of flexible tin could slide into it. After it was wrapped around the cylinder, the other end of the tin could be inserted into the groove. A metal stylus was placed at one end of the cylinder and moved down the length of the cylinder as a crank manually rotated the cylinder. The stylus was attached to a cone, so that when sound entered the cone it vibrated the stylus and in turn etch into the rotated tin cylinder. When the stylus was placed at the beginning of the concentric groove that it had created and the cylinder was cranked again, the sound of what was previously recorded played back through the cone. This ability to play back the human voice was astounding at the time and it earned Edison the title of “The Wizard of Menlo Park” (Anonymous, 1879). Though Edison was awarded the patent for his phonograph technology on February 19, 1878, it was nearly a decade before Edison returned to recording sound, because his attention was focused on the electric incandescent light bulb and on constructing the factories that provided the infrastructure to provide electricity, along with the factories to produce the lights and bulbs for them.
In June of 1878, Edison had given the *American Review* a list of 10 possible uses for his newly developed phonograph. “Reproduction of music” was only item number four behind dictation aid, recited books for the blind, and for teaching of elocution (Sterne, 2003, p. 202). After a decade of sitting with his invention, Edison decided that producing recorded music was a sound business idea. On October 8, 1887, the Edison Phonograph Company was formed. Edison’s first phonographic cylinders were made from a formulation of waxes. These new cylinders were much more durable than the early tinfoil rolled cylinders, but they were still subject to wearing out over time and erosion from higher temperatures. Many improvements were be made over time to Edison’s phonograph machine and cylinders, but it was his attachment to the cylinder format that proved to be Edison’s downfall, even though in 1913 he introduced the Blue Amberol cylinder that was marketed as indestructible and arguably the best fidelity for recorded sound at the time (Morton, 2004, p. 28). Edison had made several advancements on the wax-based cylinder, but the Blue Amberol’s superiority in quality still lacked for its length of play. Edison had experimented with various diameter and length of cylinders but had steadfastly settled on the 4.25" long and 2.1875" in diameter design that only allowed for two minutes of audio. It was the Victor Talking Machine Company located Camden, NJ, and their flat recorded discs that allowed for three and a half minutes of recorded sound per side at a 10-inch diameter (Coleman, 2003, p. xix). Considering the disc also featured two sides for a total of seven minutes of sound, it soon became apparent to the music-buying public that Berliner’s disc was a far superior medium. This drastically cut into the sales of Edison’s two-minute cylinders. Victor’s discs revolutionized the record’s format and is still with us today.
While Edison was steadfast that the medium for recorded sound should be the cylinder format, Emile Berliner was pursuing a similar, yet radically different recording medium: a flat disc. Like the discs of the music boxes mentioned earlier, Berliner believed that a flat disc had superior qualities over Edison’s cylinder. The flat disc only needed to be expanded in one direction to increase the length of play—through its diameter—and the playback machine, what he called the “gramophone”, could accommodate varied sizes. Another advantage of a flat disc was that its manufacturing process was far simpler, and more reliable, than that of the cylinder. Since the disc was a flat surface, an inverse mold of the record’s groove could be made to “stamp” the sound in a malleable substrate. And finally, Berliner’s discs were made of a more durable material than Edison’s cylinders. Berliner experimented early on with different substrates such as a metal disc and a hardened rubber formulate but eventually settled on a shellac exterior with a brittle clay-like core. After a few business ventures producing and marketing his Gramophone, Berliner hit upon the perfect business partnership with Eldridge R. Johnson. Johnson was an engineer who ran a small machine shop in Camden, NJ, that helped perfect a wind-up spring motor (Suisman, 2009, p. 101-102). Johnson’s larger and more robust version of a music box windup motor was a perfect fit for running the Gramophone. Johnson’s motor offered a consistent rotation per minute, allowing for consistent quality in play back of the machine. After a few more false starts of the invention, Berliner and Johnson formed the Victor Talking Machine Company in 1901, which combined both of their patents and allowed them to pursue both of their visions: the flat disc and the playback machine for them (Morton, 2004, p. 36).
Though one might look at the recorded medium innovations of Edison and Berliner as the first “format war”, their mediums, and especially devices, were highly similar in these earlier years and into decades of recorded sound. Edison’s company eventually adapted and started producing record discs. Edison and Berliner both faced competitions as more and more entrepreneurs and established companies alike entered producing recorded music. The culture of recorded music was built on the established culture of sheet music, music boxes, and player pianos. These innovations allowed for the sharing of music inside, and outside the home, and, along with improved speed and lowered costs of printed sheet music, it ushered in a culture of mass-produced popular music. The establishment of the parlor in the home, where often a piano resided for entertainment purposes, was already a culturally established place for the addition of an Edison or Victor playback device. These devices, over time, were reduced in cost due to the growth of sales, and soon homes that could have never afforded a piano, and the cost of having someone learn how to play the piano, could afford a record player. And as the market grew in available variety of discs to purchase, the need to have a piano and a piano player at home decreased. And though this is no doubt a sea change for the home, it can also be viewed as a mere substitution for the performance of music. Additionally, the early desk-top models of record players had a level of portability about them. Coupled with the fact that early models worked by being hand cranked, it allowed for music to be portable and taken to events such as picnics and dances. This further established the portability afforded by early music boxes.

Another communication medium that was being developed along the same timeline as recorded music - and eventually subsumed much of recorded music by the
mid-20th century - is radio. A key development of radio was also happening in New Jersey through the work of Guglielmo Marconi and the New Brunswick Marconi Station, completed by the Marconi Wireless Telegraph Company of America in 1914 (Marvin, 1988, p. 214). Not only did radio stations end up playing records over their amplitude modulation (AM) transmissions, but records were also used within the radio business. Before the development and adoption of magnetic tape medium, radio stations recorded programs for future broadcasting, especially in the case of syndication, by recording these programs to discs very similar to Berliner’s innovation. This process was a boon to creating asynchronous content for radio. Eventually, as radio grew, we see these entities, especially what become the Big Three television networks, increase their presence by becoming multimedia conglomerates. We see the Radio Corporation of America (RCA) purchase the Victor Talking Machine Company in 1929 and then eventually create the first nationwide American radio network in 1933 through a series of regional networks they had created under the National Broadcasting Company (NBC) name. (Interestingly, the early flagship station of NBC was WJC located in Newark, NJ.) In the December 1926 issue of Radio News, Edison stated, “The radio is a commercial failure, and its popularity with the public is waning. Radio is impractical commercially and esthetically distorted and is losing its grip rapidly in the market and in the home” (Gernsback, 1926, p. 625). After following behind the competition in technology and not keeping up with the demands of popular music, Edison Records ceased production in late 1929 (Coleman, 2003, p. 37). Several Edison employees from the phonograph manufacturing side of his business moved to the radio division that Edison had only started a year previously. However, Edison’s radio division was extremely short-lived and ceased production in
1930. What had been happening in the marketplace was that the radio had slowly started to eat at record sales. Why purchase music when you could have all your music provided for free—once you purchased a radio, of course? The record player that had replaced so many pianos was now being replaced by radio in the parlors and in the living rooms of working-class homes that might not have even been able to purchase a record player along with all the discs that were being produced. The convenience of accessing popular music was made even more apparent with radio, which could eliminate the need for taking the time and money to purchase a record of a new song when you could listen to it on a radio as soon as the song was released on record. In late-1947, the transistor was invented at American Telephone and Telegraph’s Bell Labs in Murray Hill, New Jersey. With the introduction of the new transistor technology, transistor radios soon followed and allowed music from the airwaves to be taken anywhere, due to their small size and affordable price (Coleman, 2003, p. 96).

Up to 1948, the commercial standard for records was the 10-inch, 78 rpm, shellac disc. Over the years there had been experiments with various sizes of discs and the materials they were made from, and even with having them spin at a lower rpm for more recording time, but these were either just entrepreneurial experiments, or something that was used in niche markets of recorded sound. This all changed in 1948 when, after several years of research, Columbia Broadcasting Company (CBS) introduced the “long play”, or LP, that combined past technologies and improved on all levels of the previous record format (Morton, 2004, p. 135). The LP was 12-inch in diameter, spun at 33⅓ rpm, used a “microgroove” technology so that the concentric circle of recorded sound could be tighter for additional playing time. The material used in manufacture, polyvinyl
chloride or “vinyl,” was also much more durable than the shellac-coated discs. Along with all these improvements on the previous standard for a record, the CBS LPs were also much cheaper to manufacture, because vinyl could be easily produced, a smaller amount of the vinyl material was needed to produce a record, and vinyl records could be manufactured faster. It only took a few years before the LP become the standard format for music releases and lead to the 78-rpm records near extinction (Coleman, 2003, p. 69).

The change to vinyl as the material for the record medium was revolutionary to the medium of the record. To reiterate - this is the same material being used in records today nearly three-quarters of a century after vinyl’s introduction. There is another revolution that occurred on March 15, 1949, only a year after CBS’s LP. Competing record company, RCA Victor, also introduced a vinyl record, but this one was smaller at 7-inch and spun at a faster rate than the LP – 45 rpm (Coleman, 2003, p. 65). Known as either a 45, a 7-inch, or as a “single”, the RCA Victor format allowed for an artist to introduce one song, along with a “B side”, to the public. While, somewhat like Edison’s phonograph cylinders, a 7-inch focused on one song from an artist, in contrast to the cylinder, the 7-inch possessed all the economic qualities stated earlier of the LP since it was made of vinyl; moreover, it also contained the B side material. The 7-inch was allowed to stay in the marketplace alongside the LP because they each served a different need for the record companies, artists, and music buying public, alike (Figure 1).

The medium that become the vinyl record, as we know it today, made radical advances from a century and a half ago, when it started out as Edison’s hand-cranked piece of tin foil wrapped around a cylinder. However, in many ways the LP was still just a concentric circle with sound etched into its groove that reproduced the recorded sound
when it was rotated, and a stylus put into the groove. Compared to today’s technology, the innovation of the record is nearly the stuff of pre-historic times. The sales of vinyl records precipitously rose over the decades following its introduction and into the late 1970s. The competition that took place in the marketplace over the early decades of recorded sound had the effect of accelerating technological innovation, making the record nearly a perfect product. No other product had yet to supplant the vinyl record as the recorded medium of choice by the music-purchasing public. This changed dramatically starting in the early 1980s for the vinyl record, when each competitive recorded-sound format appeared more rapidly than the next. Three, and possibly four, sea changes were coming for the music industry, and especially to the vinyl record. In retrospect these changes posed the question: How could the vinyl record still be with us today if there were to be several radical changes of medium innovations adopted by the music-buying public?

Now that I have explored in some detail the history of vinyl record and the innovations that perfected this format through competition, I will turn to discuss the main media that has challenged the vinyl record in the marketplace. Several media have been introduced to challenge the vinyl record, on claims ranging from superior audio to superior quality to superior portability, but only four media have had significant impact on the diffusion of the vinyl record: They are the 8-track tape, cassette tape, compact disc (CD), and the MP3. All these media have had an impact on the sales of the vinyl record and all four have had their own day in the sun, but all have ended up as pale comparisons to vinyl even at the height of their diffusion. This fact poses a serious challenge to the
theory of diffusion of innovation, and it is worth untangling the history of the waxing and waning of competitive formats to the vinyl record.

The first real competition to the vinyl record occurred only a year after the introduction of the vinyl LP. It is difficult to fully call this a “sea change”, because even though it was a radically different medium, it took a couple of decades for this format to go through the adaptations needed for it to take hold - and almost another additional decade for it to become a major contender in the recorded music marketplace. This technology was audio tape. “Tape” is a plastic-ribbon substrate with a coating of a magnetic solution on one or both sides. The first form of tape introduced to the music-buying public appeared in 1949 when a few releases were introduced on reel-to-reel tape (Morton, 2004, p. 120). A reel of prerecorded music of the release, packaged in a box, is what was introduced. A customer played this back on their home reel-to-reel machine and the recorded tape spooled around a “take-up reel” as the recording was played. This was more of an introductory technology and did not have much significance in the marketplace, because the medium was still tethered to the home. It was less convenient than an LP, required the purchase of a new playback technology, and the fidelity was good, but not as good as an LP. Reel-to-reel tape did have the advantage of not warping or breaking compared to an LP, but there was the new problem of stretching the tape and/or having it “eaten” by the playback machine. What the reel-to-reel machine did introduce to the public is a radically different medium to play back recordings using the new tape technology.

The next innovation to use the tape medium, and with much more commercial success, was the 8-track tape. Technically the 8-track tape that was sold to the public was
introduced in 1964 – a year after the cassette tape was invented. However, a similar technology to 8-track tape had been in use in the radio industry since the mid-1950s. This technology was called NAB cartridge, or “cart”, manufactured by Fidelipac (Ehler, 1972, p. 62). Like the 8-track, a cart was a plastic case that contained a tape inside where the ends were rotated where they connected, like a Mobius strip, which allowed the tape to play continuously. This cart medium already had acceptance in the radio business and still had relevance in the radio business until the early-1990s. This established acceptance allowed for the technology to be improved upon for public use, while those in the radio business—who were established fans of music—already had a knowledge of this technology and hence a higher likelihood to accept it in the marketplace. The 8-track’s biggest selling point over previous recording mediums was its portability. Since the advent of the transistor radio, the public expected their music to be portable. Radios could be carried anywhere and with the growth of automobile sales, both consumers and the music industry wanted radios in automobiles. With 8-track players being introduced as options in automobiles, a consumer could play their favorite recording at home, outside on a portable device, and in their vehicle (Morton, 2004, p. 161). The 8-track tape did have its disadvantages, with lower fidelity and tape hiss, tapes being eaten in their playback devices, and the loud “click” that happened when the tape moved from one of their four recording areas on the tape. Sometimes this occurred even in the middle of a song. However, the convenience of portability outweighed these detractors. 8-track tapes held their market share throughout the 1970s, but the vinyl LP and single still controlled the majority of market share of recorded music sales. Cassette sales were beginning to increase in the late 1970s, but their market share was still so small it was difficult to
ascertain what their overall impact were. It was the introduction of another technological innovation on July 1, 1979, that brought a whole new meaning to portable music (Tuhus-Dubrow, 2017, p. 36). This was the Sony Walkman.

With the introduction of the Sony Walkman, first in Japan and a year later in the United States, cassette sales increased steadily from year to year, with 8-track sales plummeting. Cassettes had finally found their place in the marketplace and consumers showed this by purchasing them over 8-track tapes. By 1983, 8-track tapes were discontinued from major label sales in stores. The following year, cassette sales established their steady growth in annual sales and maintain that growth for several years (Figure 1). The cassette tape had won the battle of the tape mediums and had become a slight favorite over vinyl LPs at the height of its sales. The cassette was definitely a paradigm shift for recorded music, but it took over two decades to become the superior medium over vinyl LPs, as far as sales go. The second medium sea change and challenge to vinyl began in 1982, with the introduction of the compact disc (CD). (Coleman, 2003, p. 164)

The CD was a radical new medium for several reasons. The first was that there had never been anything like it in the marketplace. The vinyl record and cassette tape were adaptations of previous technologies over decades, all of which were analog devices. The CD was the first commercially viable, digital-music format (Morris, 2015, p.2). Additionally, the CD was marketed as being indestructible, it would last forever, and had superior sound quality over all other media. These claims did not prove out over time (Morris, 2015, p.15). However, CDs were far more durable than vinyl records and cassettes. They were also just as portable as any previous format, though they did tend to
‘skip’ if their playback devices were jostled in the slightest but overtime the sampling rate improved and skipping was greatly reduced (Tuhus-Dubrow, 2017, p. 93). In reality, the quality of the CD sound was superior to the cassette, and though not as high fidelity as the vinyl record, consumers found them to be high fidelity enough to be their choice of music medium at home and on the go.

We see from the RIAA sales chart (Figure 1) that from the first four years of the CDs existence, its sales nearly doubled each year, while vinyl formats were decreasing at nearly the same rate as CD sales increase. CD sales were still a relatively small market share from what they became, but from now on, vinyl sales steadily decreased, exactly as the diffusion of innovation theory anticipated. It is worth noting that cassette sales held steady during not only the first four years of the CD but maintained their sales numbers right into the late 1990s. By the mid-1990s, vinyl record sales had nearly disappeared; when compared to the combined sales of CDs and cassettes, vinyl record sales were less than 5% of total market share. By 1999, the overall sales of physically produced music hit an all-time high, with CDs making up a clear majority of these sales. Even though the overall sales of physically produced music went down slightly in 2000, CD sales increased slightly. A shift in the way people were listening to music had already begun. This time, it was the medium that people were listening to music that shifted: through computers – both desktop and laptops. This does not yet take into consideration the World Wide Web (WWW), introduced by Tim Berners-Lee in 1992 (Brooker, 2018). People began to spend more time at their computers, more people owned computers, and the CD medium was ubiquitous - not just for music, but also for software. Computers were being produced with CD drives fitted as standard and the ability to play CDs while
working at the computer allowed for a new cultural growth of not just computing, but of music playback. We do see, again from the RIAA chart, that vinyl records made a slight increase in sales in the late-1990s, but they decrease again and fall to the miniscule sales that they held onto in the early 1990s.

After 2001, CD sales began to decrease steadily. Cassette sales, which began to decrease in the late 1990s, have decreased to nearly nothing by the mid-2000s. The stage was being set for the third sea change in music listening formats - a format that became even more prolific than the CD and cassettes combined - the MP3. The use of computer technology to listen to music was becoming ubiquitous thanks to the CD drives built into computers from the early-2000s. Now, with the diffusion of the Internet using the WWW, audio files were fast becoming a format to be shared, like text or image files. Copying audio files from a CD, or “ripping,” not only produced copyright implications, but also produced storage - and more importantly - sharing implications over the Internet. CDs had their own native file system for playback with each minute of audio being roughly 10 MB of memory size. A new format was needed to reduce file size, which also reduced transfer times. This format was the MP3, formally introduced to the world on September 9 of 1995 (Sterne, 2012, p. 204). The MP3 allowed for a smaller compression size, which was useful for storing files. With the introduction of the Apple iPod on October 23, 2001, the usefulness of the MP3 became truly apparent (Bull, 2006, pp.145-146). MP3 devices were already available, but Apple showed the world that you could not only “Rip. Mix. Burn”, but “Rip. Mix. Go.” (Morris, 2015 p. 141) There was no need to “burn” a CD to bring your music with you. Consumers could rip songs off their own CDs and reconfigure them as a “mix”. They could also put roughly 1300 songs onto an iPod
where, rather than a unit of compiled music—like a mixed cassette or CD—they had a collection of music on a highly portable device. (Coleman, 2003, p. 200) Apple purposefully was not just saying to the public that over 1000 songs could be on an iPod, but, more importantly, that the unit of music was going back to a single track.

On April 28, 2003, Apple introduced the catalyst for launching the MP3 as a full-fledged sea change with its introduction of the iTunes Music Store that was accessible through their updated software (Li & Chang, 2006, p. 4). As noted, the MP3, iTunes, and the iPod were already established innovations in the marketplace of music consumption, but the ability to purchase MP3s—and especially singular songs rather than full-length CDs—soon established the MP3 as the dominant means to purchase music. Though not a physical entity, like vinyl records, cassettes, and CDs before it, the MP3 did require hard drive storage space as well as playback devices, so they could still be considered a quasi-physical music product. This changed in the 2000s when CDs sales were plummeting while MP3 sales were increasing. But at this same time, a new and unexpected phenomenon was happening: vinyl record sales were slowly beginning to increase. By the time of the 2010s, vinyl sales were increasing, while, as mentioned, cassettes had nearly ceased production and CDs were rapidly becoming irrelevant. Though it had disrupted music sales so rapidly, the MP3 was about to meet its match, like all physical formats before it. As smart phones became a ubiquitous technology and the computer—especially the laptop—were equally ubiquitous, the next step in music sales was to have access to not just an album, not just a song, and not just a small collection, but to “all” of the music.
Though rife with copyright issues, Napster, first launched June 1, 1999, introduced the concept of sharing music across the WWW through peer-to-peer sharing (Coleman, 2003, pp. 189-190). This did not mean that there was less music being consumed but that another sea change was occurring in the distribution of music: streaming music over the Internet through freemium models or monthly subscription fees. The innovation of peer-to-peer sharing and the music industry's desperate attempt to control it then led to the rise of music streaming services that worked out royalty payments with major record labels. At first, consumers turned to Internet radio, which used algorithms to customize playlists to users’ tastes, such as Last.fm’s service introduced in 2002. Ultimately, this morphed into truly on-demand services (Wikström, 2009, p. 8) These services included Pandora, launched in January 2000, Spotify, launched in October 2008, and Apple Music, launched June 2015 (Coleman, 2003). The shift from the ownership of music to essentially the renting of music makes the rise in vinyl record sales even more significant, because it seems to be the direct opposite of the dominant trend of music distribution.

Though Napster faced lengthy legal battles and eventually cease file sharing, the genie was out of the bottle and the idea of song streaming was beginning to become a commercially viable concept. Unlike Pandora and Rhapsody before it, Sweden’s Spotify pulled together all the multitude of legal copyright permissions with a substantial number of the music industry’s labels to propel streaming as the current way to own music (Wikström, 2009, p. 175). Consumers appreciated the development. Not to own - like possessing a physical copy of a vinyl record, cassette, or CD, or even the digital possession of 1s and 0s through purchasing an MP3 - but to be able to access streaming,
allowed the consumer to rent a massive collection of music and play it on a mobile device - to be more specific, a smart phone. Now in the 2020s, music ownership has been on a rapid decline since individuals can now subscribe to cloud-based streaming services, such as Spotify, Apple Music, and Pandora, that provide music on demand (Krueger, 2019, pp. 177-204).

I have argued in the above section that, to understand where the vinyl record is currently positioned in the marketplace of musical media, it is not enough to understand just the history of the vinyl record. The history of the vinyl record is connected to the history of the media that has significantly challenged it over the past nearly 100 years. That competition to the vinyl record is intertwined with the history of four sea changes of music medium innovations that competed with it – cassettes, CDs, MP3s, and now streaming. Since the introduction of these media, the sales of vinyl records have steadily decreased, hitting an all-time low market share of less than 1 percent in 1992. There was a slight rise in vinyl record sales in the late 1990s, but that fell to under 1 percent again in 2000. Since 2001, however, vinyl sales have slowly, but consistently, been growing. In 2020, vinyl sales reached an astonishing 28-year high, comprising nearly 27 percent of the market share (Richter, 2021). As vinyl records were increasing in sales over this time, all other formats—CDs, cassettes, and even digital downloads—were decreasing in sales. An understanding of the history surrounding the vinyl record and the culture of music media involved will make the theoretical framework of this research - as presented in detail below - more salient. It will also make it easier to understand the underlying core research question of this project: Why did the vinyl record not cease production with an end to the innovation’s diffusion?
Research Problem

I contend that the production of vinyl by underground communities has deferred the end of vinyl. While the music industry was experiencing sea changes in the areas of production and distribution on the mainstream cultural level, the area that provides the example and focus of this study - New Brunswick, New Jersey - has seen the creation of over 25 record labels since 1980, all of which have produced physical releases. In addition, all these independent record labels have released vinyl records. Analyzing what a culture produces affords scholars an intimate insight into the everyday life-practices of members of that culture (Lena, 2012). Moreover, by examining the intersections between a subculture and the mainstream, we can observe and analyze the often-noted tension created between the subsumption of the subculture by the mainstream culture and the former’s resistance to dominantly accepted practices (Hebdige, 1979; Spencer, 2008).

The ability within this research project to investigate and interview the producers of these subcultural texts, or artifacts, will allow for a unique ability to shine light on the purpose of these artifacts’ creation as well as the influence that the producers and artifacts have on each other. Focusing on the producers - instead of on the consumers - and exploring the crystallization of creativity into product both offers a different perspective than the one offered in much cultural studies research, which takes fandom and consumer practice as its main object (O’Conner, 2008; Shank, 1994); it also brings to light the choices made by producers to produce the text. By examining and engaging with a particular point of production—the local record labels—I will provide a clearer understanding of the process of resistance against mainstream cultural practices. The collection and interpretation of producer interviews will also help understand how the influences coming in from this...
form of subcultural production practices impact mainstream practices. On the other hand, by a careful and fine-grained investigation of these subcultural resistance practices, this research will help contribute to better understandings of how, over time, these resistances to change are further re-absorbed into mainstream cultural practices.

This research project conducted an in-depth study of local label owners within the highly active New Brunswick, NJ, music scene, in order to investigate their relationship with mainstream music production. The project incorporated qualitative and interpretive methods of inquiry to investigate the productive dynamics of record label owners within a local music scene. I aim to better understand how their actions have influenced the mainstream music industry to reinstate the production of the vinyl record.

The diffusion of innovation model predicts that the medium of the vinyl record should have ceased production by the mid-1990s. However, there has been a twofold phenomenon contrary to that prediction: vinyl record sales held on at just under 1 percent of the market share for several years; and since 2008 vinyl record sales have been on a steady incline of market share. A quantitative approach to this phenomenon does not show us why this resistance to the demise of the vinyl record has occurred. Applying the qualitative methodology of interviewing the vinyl record producers over a key time period, within a small—yet influential—location, can help us to construct a deep understanding of the upward growth trend of the vinyl record.

**Research Objectives**

To better understand the resistance to the demise of vinyl records, this dissertation will focus on a thriving local music scene that contains all the key stakeholders along the supply chain of production and distribution of vinyl records. These stakeholders include
artists, record labels, distribution outlets (stores, “zines,” radio stations, social media), and consumers. A local music scene acts as a subculture of the music business by its defined geographical location. Over the years there have been several key U.S. cities characterized by a distinctive music sound and/or production, including Muscle Shoals, Alabama; Athens, Georgia; Detroit, Michigan; Seattle, Washington; and Nashville, Tennessee, to name but a few. By inquiring into the rationalization of the vinyl record as a medium of choice by the key stakeholder along this supply chain—the record label owner—we can better understand how this impacts the rise of vinyl record sales over the past 15 years.

New Brunswick, New Jersey, represents a geographic location with a music scene that has been thriving for several decades. New Brunswick has been home to bands such as Looking Glass who had a #1 Billboard Hot 100 hit in 1972 with “Brandy (You’re a Fine Girl),” The Smithereens, who had several hit singles in the late 1980s, and the punk rock band Bouncing Souls, who have toured extensively nationally and internationally since 1989. In the past few years, Thursday and The Gaslight Anthem have released several major label albums while calling New Brunswick home, and, although the Screaming Females are not on a major label, they have released seven albums since 2006 and have been critically acclaimed. Since 1980, New Brunswick has been home to more than 25 labels, ranging in size from one-release-only labels to Don Giovanni Records, the largest and most prosperous label still going strong to this day with over 250 releases.

The New Brunswick music distribution network once contained well-known New Jersey record stores such as Cheap Thrills Records, Music in a Different Kitchen, and Tunes. Now there is Spina Records, which specializes in used vinyl and cassettes but also carries
some local vinyl. New Brunswick also has several other entities that aid in the
distribution of music, including Rutgers University’s radio stations—WRSU 88.7 FM
and 90.3 FM the Core —and The Daily Targum newspaper, various locally produced fan
zines, the legendary Court Tavern venue, and a well-known basement performance scene
(Lingel, Trammell, Sanchez, & Naaman, M., 2011). Finally, New Brunswick, New
Jersey, is home to Rutgers University, which supplies tens of thousands of potential
music fans, with 1000s arriving each fall semester. This healthy mix of bands, labels,
distribution network, and music fans makes New Brunswick, New Jersey, an appropriate
local music scene to study for this dissertation topic. The network of producers, radio,
consumers, corresponds to what Will Straw describes as the characteristics of a ‘scene’
(Straw, 2002).

The over-arching question driving this dissertation is: Why would local record
labels continue to produce vinyl records while the prevailing trend over several decades
had been towards the demise of the format altogether? As mainstream consumption
moved from purchased tangible digital files, to purchased downloadable digital files, to,
finally, streaming music without ownership, the idea of producing vinyl records during
this period—especially as an entrepreneurial endeavor—seems opposed to the changing
innovations in the production and distribution of music. The analytic problem to be
addressed is this: if the outcomes of music’s local scenes run counter to the ‘diffusion of
innovation’ thesis, how can we account for this contra-movement and what factors can be
identified specifically in the production sector that have contributed to pushback against
the diffusion of innovative technologies and allowed instead for a diffusion and growth of
an old technology?
It is within this context that this dissertation will explore the following three main questions about the local record labels of New Brunswick, New Jersey:

**RQ1: What are the social practices through which vinyl records become produced within the New Brunswick local music scene?**

Between the beginning of the 1980s and the end of the 2000s, all 25 record labels from the New Brunswick, New Jersey, music scene produced vinyl records in addition to CDs and cassettes (as well as digital downloads when that technology became available). By interviewing the record label owners operating during this 30–year period that produced four distinct technology shifts of production and distribution—the introduction of CDs, MP3s, digital downloads, and music streaming—I will gain an understanding of the practices of the network of record labels of New Brunswick over this crucial time period. I hope to understand why these labels kept releasing vinyl records, a nearly extinct music media technology, while the mainstream music business continued to evolve. Examining the tension between the two forces of a local music scene and the mainstream music industry with this qualitative research project will provide greater insight into the significance of factors other than economic ones that engender the creation and consumption of music on media.

**RQ2: What are the social relations through which vinyl records become produced within the New Brunswick local music scene?**

Where RQ1 is designed to investigate the practices of local record labels producing vinyl records within the New Brunswick local music scene, RQ2 examines the social relations of the local scene with the other embedded entities outside of the scene that make up the “seamless web” of music media production (Hughes, 1986). Instead of
making assumptions about local record label dealings with others outside of New Brunswick, it was productive to interview the owners to discuss their contacts and relations while producing music media. This tenuous connection, as explicated in the introduction, becomes the tension between the subculture and mainstream recording music media practices. These findings matter because they will provide a better understanding into the uptick in the production and sale of vinyl records over the past 15 years.

**RQ3: What would a model look like that would illustrate the tension between the social relations of the record labels of the New Brunswick local music scene and the mainstream music production practices?**

Because I have not come across any research examining how a local music scene could be a pocket of resistance to the demise of vinyl record production, I will be using a prototype model for this dissertation project. (See *Model*, in the Methodology section.) This model has been developed taking into consideration the relationship between mainstream music product production and the production of music on the local music scene level as it relates to vinyl records. An objective of this research project is to elucidate this model through interviewing New Brunswick record label owners that functioned between 1980 and 2000. The final version developed at the end of this project should be applicable for future research projects working on the topic of local music scenes.

**Significance**

Though this dissertation only focuses on one local music scene, its findings will help to illuminate other local music scenes. Because there are so many local music scenes
around the United States, and the world, that make up an informal network of “do-it-yourself” (DIY) scenes that are analogous to one another, the findings should be transferable. This loose-knit network of DIY scenes could further clarify the relationship of production and distribution between subculture and mainstream culture in general.

This dissertation is significant because it examines an area that has only recently begun to be researched: the intersection of locally created music and the production of it as a commodity for a greater area of consuming than just the local level it was created in. There have been many research projects on the production and distribution of the music business overall and even within genres of music, but nothing has been found in the published literature to date on this granular level, focusing on a specific local music scene and its relationship to vinyl record production. The act of interviewing such a significant number of record label owners in a concentrated area and longitudinally is a unique methodology for the topic. Though each of these releases on their own may not have had an impact on the music industry, in the aggregate they may have had a significant influence on music production.

This research will also help scholars to better understand the viability of a medium in the face of the standard theory of an innovation diffusing through a culture over time. The reemergence of vinyl goes against the established theory of Everett Rogers’s (2003) Diffusion of Innovation model. On the surface, the history of the sales of vinyl recordings up to the late 1980s meshes exactly with the rise, proliferation, and decline of such a ubiquitous innovation as the vinyl record. Additionally, the diffusion and decline of vinyl record sales is reinforced with the replacement by other music mediums including the cassette, CD, and MP3. However, vinyl records have not
disappeared as the theory projects, a disappearance which according to the cycle advanced within the theory should have happened around 1995. On the contrary, vinyl records have realized a significant gain in sales over the past 20 years within the mix of available current music media to purchase. Moreover, the remaining vinyl pressing plants have lengthy turnaround times due to demand from independent record labels, as well as the major record labels. Something has promoted this vinyl renaissance, and I propose that this renaissance is influenced by local music labels that have resisted the decline of the vinyl record innovation as it was being phased out as a mainstream music product.

**Structural Outline**

In Chapter one, the context of the study has been introduced through a detail historic review. The research objectives and questions have been identified, and the value of such research argued.

In Chapter two, the existing literature will be reviewed to situate music within a local scene.

In Chapter three, the theory of diffusion of innovation, social construction of technology, and communities of practice will be reviewed.

In Chapter four, the methodologies and theoretical framework will be presented. The adoption of a qualitative interview method will be justified, and the broader research design will be discussed, including limitations.

In Chapter five, the results of the study will be reviewed and analyzed. The results presented will focus on the common trends found through the interviews, as well as review items of interest that apply to the research and should be thought through.
In Chapter six, the conclusion of the study will be presented reviewing the findings as they address the research work. Additionally, further possible research out of this work will be discussed.
Literature Review

This dissertation blends two different literatures to inform the topic of the New Brunswick music scene as a network of resistance to the decline of vinyl. As noted earlier, the conventional wisdom, rooted in Everett Rogers’ influential ‘diffusion of innovation’ theory, suggested that the artifact of the vinyl record should have ceased production at some point, like any innovation that has reached the end of its diffusion lifecycle. Before we can fully appreciate the phenomenon of the vinyl record not reaching a demise, and instead having a notable resurgence in the marketplace of music media, I will outline some of the literature, especially the political economy of music production. Understanding music cultures and the music industry in a wider frame will help to recognize interactions and practices between a local music scene and the mainstream music system. Finally, I will review some of the key literature relating to local music, or “scenes,” and its tie-in with DIY music cultures and political economy.

This section of the literature review will look more closely into some aspects of music in more general terms, but again, with a focus on the topic of the resistance to the demise of the vinyl record. Jacques Attali states that “music is more than an object of study: it is a way of perceiving the world” (Attali, 1985, p. 4). Though the total expenditure on music was $18.3 billion in the United States in 2017, that figure only represents 0.1 percent of the GDP. However, 80% of Americans claim to have listened to music on any typical day (Krueger, 2019, p. 27 & 41). This is not taking into consideration the music that is also embedded into everyday environments through things such as commercials, movies, elevators, and in grocery stores. Music is a part of an overwhelming majority of people’s lives. This section will first examine music and
culture, then the social construction of music technology, and finally the DIY movement of independent record labels.

**Music**

Musicians have been contributing to culture since before the advent of complex language. When Werner Herzog documented the oldest cave paintings known to humankind in his film *Cave of Forgotten Dreams*, he could not help but discuss the power of music through the Paleolithic flute found in another cave. The flute, made from the radius of a griffon vulture, is dated to be 35,000 or 40,000 years old, making it the oldest known musical instrument. What is remarkable is that the flute is pentatonic and contains the same tones as we hear today in Western music. Archeologist Wulf Hein, an expert on prehistoric tools and musical instruments, demonstrated this by making a replica of the flute and playing a simple rendition of “The Star-Spangled Banner” (Herzog, 2010). In Colin Turnbull’s 1961 ethnography *The Forest People*, the importance and personification of the flute appears. The Mbuti people give high value and respect to their “molimo”, a long-tubed instrument, with Turnbull noting how they submerged the instrument in streams they forded to “drink” (Turnbull, 1961, p. 76). Prehistoric humans not only pushed their technological skills to produce instruments, but they also saw cultural value in the music these instruments could produce and cared for them. Fitch, in a 2015 manifesto for the emergent sub-discipline of ‘bio-musicology’ notes 4 components of human musicality, some of which are shared with other animals: song, drumming, social synchronization and dance.

Anthropologist Clifford Geertz often discussed the limitations of memory in his work as an anthropologist, pointing out that “anthropological writings are themselves
interpretations, and second and third order ones to boot” (Geertz, 2000, p. 15). Perhaps therefore prehistoric humans pursued music over more complicated language, or clearly, written language? Bernard Stiegler, the French theorist, takes this idea of the low quality and degrading tendencies of memory further by incorporating the work of Edmund Husserl to theorize that melody is the only element that we can truly remember, because we can “carry” it with us (Stiegler, 2013).

To understand this idea, we must first understand how humans process sounds. Music producer and sound designer turned cognitive neuroscientist, Daniel Levitin, outlines that “sound is a mental image created by the brain in response to vibrating molecules” (Levitin, 2006, p 22). Most of us have probably experienced the phenomenon of “hearing” a melody of a song clearly in our head, as Stiegler and Husserl describe above, but when we try to express that vocally we fall short of reproducing the melody. Levitin researched this phenomenon and in 1994 supported his hypothesis that the brain retained musical memory in the long-term memory of the brain instead of the short-term memory, which had been the consensus up to that time (Levitin, 1994). The “Levitin effect” can clearly be seen in the segment about Henry in the documentary Alive Inside: A Story of Music & Memory. When Henry, a 94-year-old man diagnosed with dementia, is given an iPod containing music of his youth on it to listen to, he nearly springs to life. He not only sings along to the music, and quite well, but he is also able to communicate and have a discussion with the interviewer. In this same segment, Oliver Sacks, the noted neurologist, describes this “awakening” with a reflection by German philosopher Immanuel Kant that music is the “quickening art” (Rossato-Bennett, 2014).
Music also has a cultural tie in. As Jacques Attali posits, music is the bellwether of life and intimately entangled with human cultures. For Attali, music is always in front, even when going to war, and it elucidates the future (Attali, 1985, pp. 3-20). This was the aim of German-born composer and writer, Richard Wagner, when he wrote *Zukunftsmusik*—“Music of the Future”— in 1861 and explained that the “endless melody” is what is carried out through music (Music of the Future, 2013). As musicians provide our culture with music, then, they also offer history, analysis and innovation, by recording their interpretation of life to be passed down in one form or another for the future.

The business of music is important to study, but the social construction around listening might be more important to look at. Krueger reports, “the time we spend listening to music is up, while spending on music is down by 80 percent in real terms since 1999” (Krueger, 2019, p. 266). Krueger adds, “Music is a quintessential component of the experience economy” (Krueger, 2019, p. 268). We are often in control of what we listen to and in control of what we do not want to listen to. There is an economic process that produces the music we listen to, but we are often in conversation with that process, by choosing what we listen to and how we listen to it. Sterne elaborates on this idea when writing about the social genesis of recorded sound, “Functional, aesthetic, social, and philosophical issues were bound together from the very beginnings of sound reproduction” (Sterne, 2003, p. 216). The intertwining of capitalism with music, especially for what became popular music manufactured by major labels, were the beginning of that interaction with audiences. Simon Frith further accentuates the point made by Sterne when he states, “Twentieth-century popular music means the twentieth-
century popular record, not the record of something (a song? A singer? A performance?) which exists independently of the music industry, but a form of communication which determines what songs, singers and performances are and can be” (Frith, 1988, p. 12).

And though the conversation between listener and recorded sound can be clearly seen when looking strictly at the mass production of music, it also plays out in fringe musics. David Grubbs book looks at, not the circumstances of the music release in conversation with the listener, but at the container - the physical LP record itself - and how the medium of the vinyl records limits what can be listened to. Grubbs states, “I consider what it means for contemporary listeners to construct narratives of experimental music in the 1960s through the lens of recordings” (Grubbs, 2014, p. 3).

The social construction around music that Sterne refers to is not just about the music itself, but also around the technologies used by consumers to listen to music, from the players to the media themselves, such as the phenomenon Grubbs describes, whereby the LP record format was controlling the length of musical pieces and how that hindered composer’s experimentation with music, by having time constraints for each side of the record.

An excellent example case study around the social construction between a corporation and music listeners in the context of a music technology is the headphone jacks on the Sony TPS-L2, or “Walkman”. The first Sony Walkman went on sale in the United States in December 1979, retailing in most places for $200 (about $600 in today’s dollars) (Tuhus-Dubrow, 2017, p. 38). The original design of the Walkman had two headphone jacks. Co-founder and CEO of Sony at the time, Akio Morita, thought that it was rude for one person to listen to music alone and that the second headphone jack
allowed users to share their music with others. This is not how most Walkman owners listened to their music—they wanted to not only control what they listened to and where, but they also did not want to share their music, so Sony removed the second headphone jack by 1983 (Lupo, 2020). Again, Sterne echoes, “sound reproduction—from its very beginnings—always implied social relations among people, machines, practices, and sounds” (Sterne, 2012).

As we have seen from the work of Sterne, Attali, and Frith, academic writing on the culture of music can be quite insightful for culture in general. Instead of the music culture being documented via product advertising and record sales, there are other views that can help guide music laborers in their own negotiation of the business. However, sometimes the culture academics can come up short. Even though Theodor Adorno’s views on the culture industry were apt in that it is “from the beginning, one of distribution and mechanical reproduction, and therefore always remains external to its object,” his views on jazz music were clouded by what was available through mainstream outlets (Hobsbawm, 1993, p. 300). In 1970, Roland Barthes pines away for Beethoven with nostalgic yearnings and appears to be oblivious to “the young generation, vocal music, the guitar,” or worse, just plain rude to it: “The amateur, a role defined much more by a style than by a technical imperfection, is no longer anywhere to be found…” (Barthes, 1977, pp.149-154). A common theme to some of these academic critiques on music is a naive echoe of the popular sentiment of, “music was great when I was in my 20s, but now it’s not.” Theodore Gracyk’s waxing on in Rhythm and Noise about how Bob Dylan, The Beatles, and The Rolling Stones were the greatest musicians of all time shows a naive bias for corporate rock and very little knowledge of any music that did not
receive mainstream airplay (Gracyk, 1996). However, such texts fall under the guise of research, and given that, in research, there is a process of building of knowledge, and of culture, we can allow that, even in their own faults, these writings still contribute to a greater whole and allow for reflection. For example, reading Gracyk in 2013, it seems almost primitive that he did not once mention the Internet when writing a book about music. Perhaps technological change was not part of his research scope when writing in the mid-1990s? A similar critique has befallen Marx’s *Capital*, for when he was writing he was focusing most of his attention on the industrial buildup of Manchester and using these observations to forecast the future. However, in Birmingham the industrial age was developing quite differently with more of a “small-scale but assembled in such a way as to realize economies of agglomeration” (Harvey, 2010, p. 215).

Nowhere in Marx’s critique of political economy in *Capital Volume I* does he specifically discuss the profession of the musician, but he does discuss in detail the environment that the musician must live in and negotiate their existence. Texts have been authored that reflect upon some of the musician’s political economy endeavors, such as Jacques Attali’s *Noise: A Political Economy of Music*; nevertheless, Attali’s true achievement is forecasting the composing epoch we have entered in the digital age (Attali, 1985). More important, as it ties to music and the time of Marx’s writing of *Capital Volume I*, is Jonathan Sterne’s work, which focuses on social, cultural, and economic production of recorded music (Sterne, 2003). It is within the contexts of our current time that we see a heightened and defined emergence of what Marx calls the “small master” (Marx, 1990, p 423). This is an individual who acts as a capitalist with capitalistic aspiration within the economic structure, but who must also keep laboring
with tools or with others to self-sufficiency in the hope of one day generating all their income for themselves, and the reproduction of themselves, through the accumulation of capital. (ibid) These individuals must function within the system to a desired end. It is these small masters who still must use their hands and their tools to move out of the laboring class. The small masters that I will be looking at within this research project are the record label owners within a local music scene.

By understanding the intersection of the music, culture, and political economy, we can better understand where music is being directed by technological innovation. Before going further into the musical “working class” of local music scene record label owners, perhaps it best to review the current state of the contemporary music industry. First and foremost, the underlying concept of the music business is that it is a business of music. This might sound like tautological word play, but even though this is an entertainment profession, it is still governed by capitalism, in that a commodity is crystallized via some means of labor valorization to be exchanged for capital (Marx, 1990). The birth of the recorded music business in the 1880s came directly out of the business world, as a failed machine to displace stenographers (Stern, 2003, p 212). From the beginning, recorded music had the dual problem of the fidelity of the recording process and the quality of the playback due to technical limitations of the equipment (Coleman, 2003, pp. 51-70). Compared to current standards, the recording process was extremely primitive: it was one rudimentary microphone that had to be recorded live and in one take. Because of the poor quality of this system, certain types of instruments were preferred over others, and singers had to contort their bodies into particular “affective states” for the recording process (Stern, 2003, p 236). Quite often, there was little concern about who was
performing the music; what mattered more was that there was quality. And for the consumer, more than likely the novelty of the whole affair outweighed the playback fidelity (Stern, 2003, p 236). Over the past 100+ years, record labels have come and gone and have been centralized due to buyouts. Currently, there are three major label conglomerates—Universal Music Group, Sony Music Entertainment, and Warner Music Group—that accounted for 65.6 percent of music sales for the first half of 2013 ( Martins, 2013).

Before the introduction of the CD, vinyl LP sales were on a decline ( Tschmuck, 2010). Advertising for the introduction of the CD touted their indestructibility and fidelity, but it was for two other reasons that the CD was a boon for the record business (Coleman, 2003, p. 173). What the CD did for record companies was to provide a new format to market to listeners so they replaced their current music collections. Second, and most dubious of the capitalist practices of record labels, was their closed-door meetings to institute price fixing on CDs. By doing this, they set a false standard of CD prices, which allowed a higher price margin. This in turn created a false sense of record sales by money generated, before the rise of the Internet and digital formats (Willis, 2002). In truth, as the popularity of the Internet began to rise, CD sales had already begun to decline. Additionally, 41 states brought a class action lawsuit against Bertelsmann Music Group, EMI Music Distribution, Warner-Elektra-Atlantic Corporation, Sony Music Entertainment, and Universal Music Group for the CD price fixing that ended with a $143 million settlement. (ibid)

From a research perspective, the story behind declining music sales began to change as well. First, there was an assumption that just because a song is downloaded, it
is a lost sale. As an analogy, not everyone wants a mint after his or her meal, but if they are made available for free, more will take them. And just because it is taken does not mean that it will be used. So, it is with downloading music. Additionally, early reporting of declining CD sales was based on brick-and-mortar store sales and did not include online sales (Koh, Murthi, & Raghunathan, 2010). But more important, research shows that individuals who download music are fans of music, and fans of music also buy music (Baym, 2011). What’s more, recent research has even shown that pirating music has increased music sales (Sinnreich, 2013, p. 27).

There is no doubt that the Internet has afforded musicians powerful tools for their creativity. Well-known artists today such as Soulja Boy, Justin Bieber, and Rebecca Black, were all “nobodies” before being discovered through YouTube videos years ago. Attali’s prophecy in 1977 that the “Age of Composition” would come to liberate music laborers to become their own masters was prescient (Attali, 1985, pp.133-148). A significant technological advancement that leads to this do-it-yourself (DIY) age came in 1979, when TASCAM introduced the Portastudio 144. This was the first 4-track, self-contained recording unit that used cassette tapes (Alberts, 2003, p. 31). The Portastudio entered the marketplace at $1200, but the media that it used was readily available and at a significantly lower price than reel-to-reel tapes. However, the tagline for the first Portastudio ad told the real story behind the device: “Learn on it. Rehearse on it. Create on it” (Alberts, 2003, p. 84). These “inexpensive”—although not really at 1200 1979 dollars—portable devices were merely a more expensive hammer for the music laborer. There were already cheap cassette players that musicians could purchase for recording their ideas. The Portastudio provided somewhat of an illusion for musicians to think that
they were creating a level of freedom away from the corporate system, because they still had to pay large companies, like TASCAM, for their costly recording devices.

With the advent of digital recording, democratization became more of a reality. With access to a computer and the Internet, there are several programs that one can run on their existing machines to create music. For example, Audacity is a fine recording software that is available for free, and for a small fee Apple’s GarageBand and SoundForge are products that have a good support system to them. For a professional quality, digital studio experience—at nearly half the price of the original Portastudio—Avid ProTools can be purchased for $700 (Bostic, 2013). The software for creating music can also be used for mastering music and creating the final files as products. With the ability to distribute digital files via the Internet, these files can be saved as the current standard—MP3. Now, all these steps can be done at home, where previously a studio of some size was needed, at a minimum, for the mastering process. By creating these files, the digital product is almost ready to distribute.

What we can see in our post-digital landscape is that there is an alternative to the contemporary record label system within the DIY system. There is a substantial amount of capital made in the business of music and it seems only fair that the musical working class should see some of that capital—perhaps even most of that capital. However, what we see from this choice to work outside of a major label system is that this move requires that the DIY music laborer become a ‘small master’ and play the part of both laborer and capitalist. A more contemporary term is an “entrepreneur” (Falkvinge, 2013). What we see from this parallel to the contemporary music industry is that to become a small maste requires an extreme amount of labor from the musician—probably more labor than a
musician, or even a group of musicians, can produce. What we also do not see throughout this scenario is that most of these services operate on a “freemium” model. It is free to join and set up an account, but to maintain and use the services you probably liked, a monthly/yearly fee is involved. There are many parts to this process that some musicians might not be good at, or not want to do. For every success of a Radiohead or Amanda Palmer, there are thousands of musicians who make little to nothing in this process (Baym, 2011; Palmer, 2013). The ones who are succeeding through this system and achieving some sort of “musical middle class,” as Houghton describes, are musicians who already had a large amount of both capital and social capital. In Palmer’s Kickstarter campaign, not only did she have an established fan base, but her husband Neil Gaiman is a very well-known author of works such as *The Sandman* book series and novels such as *Caroline* and *Stardust* (Gamerman, 2013).

In Audre Lorde’s 1984 essay, “The Master’s Tools Will Never Dismantle the Master’s House,” she tells of her involvement with a women’s conference where she was invited to comment on submitted papers and participate (Lorde, 1984). She noticed in the submitted work that the voices of poor, black, and lesbian women were not being represented. She said that by operating within the current system, feminism was removing some of the barriers while also exposing new ones such as racism. (ibid) The situation revealed that the feminism at this conference was specifically for white, middle class, academic women. Expanding this idea to music, the musical laborer needs to move past the ideas set within the contemporary music industry of the need for expensive hardware and then incurring the cost of manufacturing their own musical product en masse, before even beginning the task of trying to figure out how to sell this product in
the marketplace. Amy Spencer explains this contemporary necessity of musicians to do it ALL themselves: “Total freedom for the musician only comes with artist-driven, independent record labels. Often these labels are run by artists themselves, who release their own music and distribute it via networks where they do not have to compromise their ideals” (Spencer, 2008, pp. 285-286).

As we have seen, from examining the musical working class and the music capitalist, these two are locked into an entwined relationship. Just as in G.W.F. Hegel’s “Lordship and Bondage” dialectic, the musician does not need the capitalist to exist, but the capitalist does need the musician (Hegel, 1807). Marx extends this concept by saying that the laborer not only works to reproduce his own life, but to also produce the life of the capitalist (Marx, 1990, pp. 711-724). Though the digitization of music has made it possible for musicians to be liberated from the contemporary music industry, there seems to be a tendency to rebuild the master’s house for themselves. By creating a mirror image of the contemporary music industry as an independent DIY entity that they are a small master of, musicians have created a system that is dependent on the exact system from which they are trying to break free. For example, often the independent and DIY labels are reliant on a distribution system that is owned by major labels.

The glimmers of hope for the future are the small moments when those in the musical working class free themselves from the shadow of the contemporary music system by cooperation with each other, instead of using the master’s tools to engage with the master’s system. Before the Internet, the punk and hardcore music magazine *Maximum Rocknroll* published an annual called “Book Your Own Fuckin’ Life” or BYOF. In it they had categories, by state, for “venues, zines, stores, bands, and crash
pads all over the USA” (BYOF, 2009). It catered to mainly punk and hardcore music, but it still could be used by other genres of music to book their own DIY tour. It involved lots of phone tag and calendar checking, but it worked. For just a few dollars, a band could purchase this annual and book a tour in whatever direction of the United States they wanted to go. In Michael Azerrad’s work we find in-depth biographies along with interviews of 13 seminal independent bands of the era. Mike Watt, bassist of the Minutemen, sums up the punk DIY attitude of his band:

“Punk was about more than just starting a band, it was about starting a label, it was about touring, it was about taking control. It was like songwriting; you just do it. You want a record, you pay the pressing plant. That’s what it was all about.” (Azerrad, 2001, p. 6)

A similar sentiment is expressed by Kurt Schroeder, owner of the straight edge hardcore label, Catalyst Records, in his interview with Gabriel Kuhn: “The point has never been to be big, to make money, or to be most popular, but to continue to provide an alternative voice in the context of the hardcore scene” (Kuhn, 210, p. 150).

Granted, a band like Aerosmith could not use BYOF or take on a punk DIY attitude, because often the venues were small, or even just someone’s basement. For “legacy acts,” such as Aerosmith, research has shown that the arena-type system works for them (Connolly & Krueger, 2006). However, research into local music scenes has shown that a network of individuals can have a powerful connection to booking small shows in a “hidden” network of basements (Lingel, Trammell, Sanchez & Naaman, 2011). It is through moments of cooperation like this that, not just a gig can be secured in a thriving music scene, but also a place to stay the night for free and a quality meal to go with it can be found. For a touring band, booking a show in a faraway town is not enough. Questions about everyday life are important: Where are we going to sleep? Is
there a safe place to store our equipment? Where is an inexpensive place to eat that has quality food? This type of cooperative information can make a tour worthwhile, and even profitable for the band.

In his book *The Gift*, Lewis Hyde discusses the idea of giving things as a form of political economy by “establishing a feeling-bond between two people” (Hyde, 2007, pp.72-95). Although the idea of gift-giving is a powerful and universal cultural custom, Hyde fails to note that gift giving becomes a ritual in reciprocity, such as when patrons in restaurants in the South of France pour each other’s wine. Anthropological work on the gift has long noted this, since Marcel Mauss’ famous description of the obligation to give, the obligation to receive, and the obligation to reciprocate, in never-ending circles of exchange (Mauss 2002, original 1950). Many artists have begun to engage in this by giving away their music as digital downloads to encourage people to attend performances or purchase other merchandise, which might include alternate versions of songs or more elaborate packaging. Dubstep DJ/producer Rusko declared in March 2012, that he would be providing all his music as free downloads (Cunningham, 2012). Rusko tours relentlessly and uses his music as a public relations tool to promote attendance at his performances. Judging from the YouTube videos of his shows, this business model is working well for him (Rusko live, 2013). Sometimes artists permit a “pay what you want” model, which could be considered a form of gift exchange, because in these situations there is an option to pay nothing. The band Radiohead re-released their album *In Rainbows* through their own website in 2007 and allowed a pay what you want model for the digital download of the album (Baym, 2011). They had 1.2 million downloads sold by the release, and although they have not divulged how much they made, guitarist
Ed O’Brien stated, “We sell less records, but we make more money” (O’Brien, 2011). As pointed out earlier, musicians with established social capital can participate in these activities. However, it does show that when allowed to pay what they want, customers often end up paying more than what the established prices would have been (Dubner & Levitt, 2013). In Sweden, a group of labels have taken this extended idea of a gift culture to a new level by grouping together to form and use their cooperative energies to “restore focus on the music.” (The Swedish Model: About, 2013) By combining their energies, the collective—The Swedish Model—can give music away and use this as a moment to engage with fans. This creates strong social capital, resulting in high performance attendance and purchases of merchandise (Baym, 2011).

Some artists such as Die Antwoord, Death Grips, and Azealia Banks, have created large followings and received critical praise by using their online presence, especially on their YouTube channels, to garner large followings and then using that social capital as leverage for signing to a label where their creative visions would be taken into consideration (Bridges, 2013). However, in these three cases, the labels were not willing to work within the musician’s creative demands, and they were all three let go from their respective labels. Cultural studies professor Jack Bratich warns: “Marx noted that certain kinds of cultural production existed on the margins of industrial capitalism. Real subsumption is the name of the process by which the once-marginal comes to function as a source of capitalist value. As several autonomists argue, this peripheral dimension is increasingly becoming a key source of extraction and exploitation” (Bratich, 2011, p. 624). Artists should understand that the music capitalist is always looking to subsume
music labor, even if it lies on the fringe. It is in these moments that they can gain new markets, but this is not always the best move for music laborers.

*Scenes*

Sometimes a music community can grow around a physical space and within this space a scene can happen. Will Straw has been writing about the scenes approach since 1991. Straw defines scenes as “geographically specific spaces for the articulation of multiple musical practices” (Straw, 2001, p. 249). Straw adds that the term scene “compels us to examine the role of affinities and interconnections which, as they unfold through time, mark and regularize the spatial itineraries of people, things and ideas” (Straw, 2001, p. 253). The scenes approach includes a variety of stakeholders such as creators, fans and even spaces.

The ideas of scenes developed out of work focusing on subcultures, and especially with a focus around a musical genre. As Straw defines a musical scene it is fixed geographically, which sometimes came into the realm of a subculture if it were to describe something like the Southern California punk rock scene, but if the topic was punk rock in general it was not scene specific. Dick Hebdige’s book, *Subculture: The Meaning of Style*, published in 1979 is one of the first thorough documentations of subcultures of post war working-class youth in Britain that defined their meaning around musical genres: Teddy boys, rockers, mods, punks, and skinheads (Hebdige, 1979). In her study, Sarah Thornton moves away from the term “subcultures” and pivots to a more descriptive term of the segment of culture that she studies, “club culture” in Britain (Thornton, 1996). Others have also moved away from the term “subculture” because of its idea of being deviant to culture in general and, an assumption that all of participants’
actions are governed by subcultural standards (Gelder & Thornton, 1997; Chaney, 1996). Simon Frith adds, “In the cultural studies tradition with which I am most familiar, British subcultural theory, this reworking of Frankfurt theory took on the particular form of identifying certain social groups with what we might call ‘positive mass consumption’ (which became—and remains—the pithiest current definition of ‘popular’—as against mass—culture)” (Frith, 1996, p.13).

It is still important to note that Hebdige’s view is that mainstream culture subsumes subcultures for capital and that this ends up leaving the members of the subculture dispirited (Hebdige, 1979). These same sentiments are also echoed by Stephen Duncombe in his work around zine culture, which has close ties with music culture. Duncombe writes of Generation X being popularized in media, “The under-ground is discovered and cannibalized almost before it exists” (Duncombe, 1997, p. 6). Alan O’Connor researches independent labels within the punk music scene and their function in opposition to mainstream music practices. O’Connor says, “Music is a complex form of communication, and it seems difficult to separate it from social relations. Being in a band and making music together is an intense social relation” (O’Connor, 2008, 90).

Andy Bennett and Ian Rogers theorize music scenes as “cultural spaces in which the past and present remain aesthetically linked” (Bennett & Rogers, 2016, p. 2). They present two key ideas about the scenes approach. First, the scenes approach presents a powerful way to access “meaning-making, identity-making, creative practice, collaborative cultures and varied communities (ad hoc or otherwise) commonly found—or directly formed alongside—popular music” (Bennett & Rogers, 2016, pp. 33-34). Second, Bennett and Rogers emphasize that a scene’s “primary use has been to map out new and
illusive spaces previously undocumented and seldom considered by the academy” (Bennett & Rogers, 2016, p. 34). A scenes approach emphasizes relationships, memories, and meaning making among scene participants, pays careful attention to inclusivity, and emphasizes the importance of cultural spaces, physical and virtual.

With “scene” being defined, it can be used at an extreme local level when applied to something like a single venue. The music venue, City Gardens, once located in Trenton, New Jersey, became a historic stopping point for many bands of many genres. This single building became a scene unto itself. Amy Yates Wuelfing and Steven Dilodovico write, “The scene at City Gardens was the result of trial-and-error; there was no blue-print for building an indie music scene” (Wuelfing & Dilodovico, 2014, p. 13). Another example of a scene built around a mere space is The Outhouse music venue. The Outhouse was a one-story, cinderblock building literally in the middle of a cornfield in Lawrence, Kansas, which operated from 1985-1997 (Brad Norman, 2017).

Often, the literature about music scenes is about local music scenes of specific cities. Barry Shank begins his book with, “The rock’n’roll scene in Austin, Texas, is characterized by the productive contestation between two forces: the fierce desire to remake one-self through musical practice, and the equally powerful struggle to affirm the value of that practice in the completely structured late-capitalist marketplace” (Shank, 1994, p. x). Dewar MacLeod covers Asbury Park and Hoboken, along with a few other areas around New Jersey. Especially noted for this research project, MacLeod affirms, “my interest lies in the social history of the ways in which people produce and consume music” (MacLeod, 2020, p. 1). MacLeod adds, “Through our participation with music, we join the sonic and the social” (MacLeod, 2020, p. 10). Clearly the most relevant for
this research project, and the most heart-felt in writing style, is Ronen Kauffman’s memoir, *New Brunswick, New Jersey, Goodbye*. Throughout the book, Kauffman is extremely critical of almost everything as it enters his sphere in the New Brunswick music scene, but there is also a hope that he brings to the scene at the same time. Kauffman writes towards the end of his memoir, and tenure in New Brunswick, “True, ‘the scene’ didn’t always seem to fulfill the promise I projected upon it, but I saw real movement and potential” (Kauffman, 2007, p. 141).
Theory

The conceptual framework informing this dissertation is comprised of the following theories: diffusion of innovation (Rogers, 2003), social construction of technology (Bijker & Pinch, 2012), and communities of practice (Wenger, 1998), with a focus on political economy and how it reifies with culture. Though the term “political economy” has a variety of conceptual applications I will focus on the theory using a cultural studies lens. Nicholas Garnham explains:

“Political economists recognize with Marx that all commodities must have a use-value; they must satisfy some need or provide some pleasure. There is no simple relationship between the unequal power relations embedded in the production, distribution and consumption of cultural forms as commodities—the overwhelming focus of cultural studies analysis—on the one hand, and the use-value of that commodity to the consumer on the other.” (Garnham, 1995, p. 65).

This lens considers the economic choices around production and how these interact to construct an accepted view of how things should be done at the cultural level. As applied to recording mediums, the theory of political economy through a cultural studies lens examines proper or normative practices related to what materials are produced and sold. My site of study, the vibrant New Brunswick music scene, has produced well-known bands that have been signed to major record labels, while at the same time it has also witnessed the rise of numerous record labels from the 1980s through the 2000s, with some persisting. This dichotomy of the tensions between adherences to mainstream culture, while simultaneously resisting it, makes this local music scene a rich site to study.
To examine resistance to standard political economy, I will also employ Marx’s critique of political economy as a main theory informing this study. Marx’s work *Capital, Volume I* was written during the establishment of the Industrial Revolution in Europe. As large-scale Capitalism was being established, perfected, and accepted, there was also resistance to its growth through subsumption, such as through the craft economy, actions of the Luddite movement, and cottage industries (Harvey, 2010; Marx, 1992; Peel & Palmer, 2019).

These parallels are remarkably like today’s production of vinyl records. Over time, through monopolistic actions of the music industry writ large, there are only three major label record companies: Universal Music Group, Sony Music, and Warner Music Group. Though the clear trend of the music industry has been towards one major label to produce most of the music within the United States, and outside of the United States, there has been a resistance to this progression by individuals starting their own independent record labels. This has been motivated by various forms of resistance to the mainstream thinking, such as for a diversity in genres of music, for providing creative outlets to those that might not be represented, and for a fairer economic system for the artists. The craft economy puts a price on the skill of the artisan and of what they create and recognizes value in the creative process itself. A major label is not in the business of selling music, but in the business of pleasing their shareholders. The major label’s only concern is to make a profit every quarter. As Theodor Adorno put it, “In contrast, the technique of the culture industry is, from the beginning, one of distribution and mechanical reproduction, and therefore always remains external to its object” (Adorno, 1991, p. 101).
Marx refers to a hybrid capitalist he terms, “small master,” a person who not only produces goods through the labor of others, but also uses their own time by joining in with these other labors to increase production (Marx, p. 337, 1992). I see local record label owners as “small masters”: not quite capitalists and not quite proletariat, but also not quite crafts people. The small master is positioned at the epicenter of the tension between mainstream appropriation and resistance. I posit that they have not been consumed by the accumulation of capital and exploitation of labor, but still value the craft and the art of creating something to sell on the merits of its quality. A local record label owner is like one of Marx’ ‘small masters’, in that they are producing a good for resale with the hopes of recouping their initial capital spent and perhaps make a profit to reinvest into producing another release. But they are also directly involved in the selling of this product, with the belief that this product needed to be produced and consumed by others, as well as to benefit the artist along the way.

Diffusion of innovation

Next, I will critique Everett Rogers’s (2003) Diffusion of Innovation model as it pertains to the diffusion of the vinyl record. Parallel to political economy, Rogers’s model of an innovation diffusing over time within a population has been used in thousands of research projects and in many and diverse areas of study (including management studies, Damanpour 1991; nursing, Johnson 1990; agriculture, Klerxx et al 2019). Evidence supporting this theory has been building for decades, with 138000 citations of and engagement with the work. This theory and model are key to thinking about—as reviewed in this dissertation’s Introduction - how one recording medium is going through its life cycle as other mediums have been introduced and are going through
their. Some have been quite successful, like the vinyl record, cassette tape, and CD, but others have not had nearly as much success, such as 8-track tape, MiniDisc, and DVD-Audio. However, this has not been the case for the vinyl record. Not only has it never reached a status of zero production level in its lifetime, but it is also increasing in sales, at the same time as sales of the current prevailing format—MP3s—are decreasing, and the most recent tangible format—CDs—have similarly been drastically decreasing in sales.

Before looking at how the diffusion of innovation theory’s lifecycle projection has been contradicted by the life of the vinyl record, a general understanding of the theory is needed. Over the past 57 years, the diffusion of innovation theory has been applied to a diverse array of products and innovations from hybrid corn to boiling drinking water in Peru, to course management software to social media platforms, and from postage stamp usage to development of augmented reality (Rogers, 2003; Pavlik & Bridges, 2013). It may also be instructively applied to various media, including music media.

Social science scholar Everett M. Rogers established a considerable body of work, refining and giving further explication of his theory since he first wrote on the topic in 1962 (Rogers, 2003, p. xv). In his groundbreaking work, Diffusion of Innovations, Rogers outlined the process that innovations (both products and ideas) must go through before they are ultimately adopted, or rejected, by society. By engaging in the research of how products and ideas diffuse within culture, he opened the door for further engagement of how social interactions impact technology, which will be covered later in this research project.
Rogers’s research delineated five stages in the adoption process of an innovation (Rogers, 2003, pp. 168-218). These stages are knowledge, persuasion, decision, implementation, and confirmation. In the knowledge stage, an innovation becomes first known, but there is usually insufficient information for the individual to act. This is a very key moment because it is the moment an individual goes from not knowing something exists to knowing that it does exist (and therefore, that it may be of use to the individual). In the persuasion stage, potential users become interested in the innovation and seek out more information. During the decision stage, the innovation is evaluated with respect to advantages and/or disadvantages that are becoming apparent, which help to adopt or reject the innovation. If the innovation is adopted, the implementation stage involves a trial of the innovation in which the overall usefulness of the innovation and whether it should be used on a larger scale are assessed by the individual. Finally, the confirmation stage involves the adoption of the innovation to its fullest potential for the user. Note that this is not necessarily the intended use of the innovation. Consider the tremendous volume of exercise equipment that is purchased, placed in laundry rooms, and then used for hanging clean laundry on, instead of being used for exercise—their original design.

Rogers’s research also shows that the rate of adoption of an innovation is influenced by at least five factors, including (1) the perceived relative advantage of the innovation, (2) compatibility, (3) complexity or simplicity, (4) trialability, and (5) observability. (Rogers, 2003, pp. 219-266). What is lacking, however, in this list of five factors is the concept of social relations, a sizable social factor in the act of listening to music with others. More broadly, music has a virtually universal appeal and is always
deeply socially embedded. These and other social considerations have considerable impact upon innovations of recorded music, such as the vinyl record. Only by taking account of the social and looking more closely at the web of relations that construct the technological side of the music business, especially for independent labels, can we fully account for the trajectory of technologies like the vinyl record. Sound studies scholar, Jonathan Sterne, refers to this as “the social genesis of sound fidelity” (Sterne, 2003, p. 215).

The five stages Rogers identified in the process of innovation adoption can be understood as a metaphorical “engine” for users of new technologies; the bell curve-like distribution identified as the diffusion of innovation (with the x-axis being time and the y-axis the market share of the product) is a sort of road taken by those the engine moves along. Rogers (2003) identified five categories of adopters of innovations over the lifespan of a product as shown in Figure 1. The earliest adopters of a new technology, or innovators, represent about 2.5 percent of all potential adopters of an innovation. These individuals (or organizations) if they connected with an innovation, Rogers suggests in *Diffusion of Innovations*, will also become advocates for it. So-called “early adopters” represent about 13.5 percent of the population, while the early majority represents about one-third, or 34 percent. The late majority represents another one-third, or about 34 percent. Laggards, or late adopters, represent the final 16 percent of the curve.
Figure 2 The diffusion of innovations according to Rogers (1962).

Rogers’s diffusion of innovations model is not without its critics. Geoffrey A. Moore argued in his 1999 book, *Crossing the Chasm*, that technology products do not fit Rogers’s model well. He believed that early adopters of a product and the early majority have very different expectations of the product that create a “chasm” that must be crossed for the project to truly be taken up (Moore, 2014). It is at this critical stage that many technology products fail in the marketplace. Moore states, “It turns out our attitude toward technology adoption becomes significant—at least in a marketing sense—any time we are introduced to products that require us to change our current mode of behavior or to modify other products and services we rely on” (Moore, 2014, p. 12). Moore suggests a variety of ways that this chasm can be crossed, such as focusing on a specific customer use case and communicating with the peers of the protagonists that make the buying decisions (Moore, 2014). However, Rogers states that, “past research shows no
support for this claim” and adds that “innovations, if measured properly, is a continuous variable and there are no sharp breaks or discontinuities between adjacent adopter categories” (Rogers, 2003, p. 282).

The concepts of the diffusion of innovations can be seen in the major innovations of physical recorded music reviewed in the previous chapter: phonograph cylinders, vinyl records, cassette tapes, and CDs. The first large-scale commercial medium for home play of recorded music was the phonograph cylinder invented by Thomas Edison in 1877. Consumption of music at home, up to the introduction of the phonograph cylinder, was by learning a musical instrument, such as the piano, and purchasing printed sheet music of the latest songs of the day. The phonograph cylinder’s diffusion was rapid because there was already a high level of enjoying music at home, however, this was an “instrument” that anyone could play. The flattened acetate record, or gramophone, that we know as the vinyl record, was patented in 1887 by Emile Berliner. The gramophone allowed for longer playback time depending on the size of the disc and this capacity could be doubled, because the disc had two sides to it. Though its challenge by the 8-track tape was rebuked, it was the cassette tape that won over the most popular consumer medium due to its high level of portability and durability, and the ease of recordability on the cassette medium. Often thought of as a stopgap technology, the cassette is looked on in retrospect as a recording medium that played a more impactful role in recorded sound (Daniel, Mee & Clark, 1999, p. 103).

The compact disc (CD) was introduced in 1982 with the marketing mantra that it had superior audio quality and was virtually indestructible. Sony announced in their first ad for the CD that it was “sixty minutes of perfect sound that will last forever” (Coleman,
Both selling points have ended up being highly dubious, however. The CD was as portable as the cassette but had the added feature of being able to go to any track on the disc at a push of a button. Since the music was digitally encoded onto the disc it also allowed for the easy transfer into the rapidly growing number of home computers, as well making it for simpler to make mixed CDs over the mixed cassette. As the CD market was increasing in market share the cassette market began to rapidly decline. There is currently only one producer of cassette tapes in the U.S. – National Tape Company in Springfield, MO (Great Big Story, 2016).

As noted above, there has been yet another sea change in the way that music is produced, distributed, and consumed: streaming over the Internet. With the proliferation throughout the U.S. to access the Internet through smartphones, laptops, and home cable access, the need for physical media for music and/or movies has become unnecessary. We can stream as much content as we want through services such as Spotify, Apple Music, Netflix, Amazon, and YouTube. Further, many of these streaming services are creating their own original content that can only be accessed through their streaming service, and there are some that only focus on original content from independent music artists such as Soundcloud and Bandcamp.

However, throughout all these innovation diffusions, there has been the curious phenomenon of the persistence of the vinyl record: a medium that for all intents and purposes should have ceased production in the early 1990s based on the trajectory of its diffusion curve. Couple this with the fact of multiple prevailing competitive media and the rise of streaming media, and an unanticipated milieu emerges, in which it has not only resisted economic extinction but is now thriving. While music streaming progresses on its
diffusion curve and physical media overall has been on a rapid decline, the vinyl record has been on a steady incline. How can a product that is over a century old and made up only 13.7% of all physical sales in 2018 not just be resisting its demise, but having a renaissance? It is this phenomenon of the resistance of the vinyl record that this research project intends to investigate.

Figure 3 U.S. recorded music sales volumes by format (RIAA).

The chart from the Recording Industry Association of America® (RIAA) of the U.S. “Recorded Music Sales Volumes by Format from 1973 to 2018”, illustrates not only the diffusion of innovations of music media, but it also illustrates the influence each has upon the other, as we see, predictably, the give way from each format to the next as a new format is introduced and then superseded by a newer format. It must first be noted that, since this graph begins in 1973, that it does not cover the first nearly 100 years of recorded music. It is also important to note that this near century of vinyl record sales
was not without its ups and down. The diffusion of the radio competed with the standard 78 rotations per minute (rpm) 12-inch shellac disc popular at the time, and sales of records were decreasing. In 1948 Columbia Records introduced the 33 1/3 rpm “microgroove long playing” record, or LP, and this not only allowed for longer running time per record side, but also increased the fidelity of the recorded music. The 33 1/3 rpm LP is for the most part what is still being produced today, although this research project will also be taking the 7-inch vinyl record into consideration.

A better understanding of the intertwining of diffusions of the various recorded music artifacts in the marketplace allows for an appreciation of the phenomenon of vinyl resistance. Considering the phenomenon of the continuing increase in vinyl record sales over the past 15 years, it becomes even more pertinent to understanding why the recorded music industry did not cease production of the vinyl record in the early 1990s. There is also a third phenomenon that has been created through this rippling effect over time, and that is: not only did the vinyl record not meet its demise, and not only has it been increasing in sales over the past 15 years, but it is the only physical format at all that is not losing massive market share to streaming music (this includes MP3 technologies). Jack White, guitarist, singer, producer and owner of Third Man Records, asserted that there will be only two music formats in the future, saying, “I definitely believe the next decade is going to be streaming plus vinyl—streaming in the car and kitchen, vinyl in the living room and den” (Krueger, 2019, p. 179).

Another critical element of Rogers’s Diffusion of Innovation is the last step of the five stages in the decision innovation process that drives the model: Confirmation. Once someone has adopted an innovation—in this case, purchasing the product of the vinyl
record and the means to play it back, there is an interaction between the technology and the customer, or fan of the music. This interaction is intimate, due to the nature of the act of playing a record in the privacy of the owner’s home. This interaction is important to the status of the vinyl record medium and its life cycle. Those that are still purchasing and using vinyl records are shaping their existence, by not letting the vinyl record’s life cycle in the marketplace end. As a result, this calls for the use of social construction of technology (SCOT) for this dissertation project.

*Socila construction of technology*

Work within the area of the social construction of technology (SCOT) is important when thinking about the diffusion of innovation. The idea behind SCOT is that “there is a widespread agreement that scientific knowledge can be, and indeed has been shown to be thoroughly socially constituted” (Pinch, 2012, p. 12). A key point here is that “knowledge” does not lie waiting in the world to be discovered. Further, there is nothing epistemologically “special” about scientific knowledge; its production is the result of local practices (a kind of “knowledge culture”) that fashions this understanding. Additionally, a “multidirectional view is essential to any social constructivist account of technology,” meaning that one needs to think past a linear model when thinking of the diffusion of technology (Pinch & Bijker, 2003, p. 227). Where Rogers’s bell curve gives a look at an innovation within a vacuum, it is key to consider that several artifacts’ bell curves are also interacting with each other at the same time. They may even be delivering the “same product” in different formats. For example, when *Freedom Rock*, a collection of 40 “classic rock” hits, was being advertised on television in 1988, it could be purchased as four vinyl records, three cassettes, or two CDs (The Diamond Mine, 2017).
Social construction of technology (SCOT), as well as actor-network theory (ANT) and large-scale technological systems (LTS), comes out of the work from several academics at a workshop at a conference in the Netherlands 35 years ago. Larry Cohen says of SCOT, “What appealed to me in SCOT was that it provided a set of tools for structuring the telling of complex stories” (Bijker & Pinch, 2012, p. xvii). What is appealing to this research is that SCOT has been applied to several research projects in the sound studies field, including Trevor Pinch and Frank Trocco’s book, *Analog Days*, about the development on the Moog synthesizer and the culture that has emerged around the invention (Pinch & Trocco, 2002).

Ruth Schwartz Cowan suggests that research strategies using SCOT can be incorporated at what she calls the “consumption junction.” Cowan elaborates, “I focus on the consumption junction, the place and the time at which the consumer makes choices between competing technologies and try to ascertain how the network may have looked when viewed from the inside out, which elements stood out as being more important, more determinative of choices, than the others, and which paths seemed wise to pursue and which too dangerous to contemplate” (Cowan, 2012, p. 255). For this research project, the local record label owners are the “consumer”, and it is they who make a choice of what medium to put their musical releases out on. They have choices and pros and cons for each format, no matter what year a release is put out.

*Communities of practice*

Finally, the last theoretical position to be utilized, bringing in concepts that can be applied to the functions of a local music scene, is the theory of communities of practice (Wenger, 1998). Communities of practice (CoP) uses professional contexts to build
information networks. For the purpose of this research project, I will define “professional” as anyone who reproduced a quantity of a musical release to sell to the public. The theory of CoP is built on previous work on the use of storytelling to share learned experiences especially Charles S. Peirce’s writing on “community of inquiry.” Peirce states in the simplest terms, “Thus, the very origin of the conception of reality shows that this conception essentially involves the notion of a community, without definite limits, and capable of a definite increase of knowledge” (Peirce, 1958, p. 69).

With CoP a community, or a set of professionals, create an informal social network with a supportive culture that develops shared meanings and engages in knowledge building (Hara & Kling, 2002). CoP develops organically within the community to support the community’s aims and cannot be forced upon it. Hara (2009) defines CoP as informal networks of collaboration that assist professionals to develop shared understandings and engage in work-relevant knowledge building. Though Shank (1994) does not use the term “communities of practice,” however, he does describe how the music scene in Austin, Texas, is a supportive, ad hoc network that constructs the identity of the community. Shank’s description parallels Hara’s research of a community of engineers who support learning practices outside of formal training with various methods such as storytelling and tip sharing.

An example of CoP as it relates to a music scene is Wenger’s research of claim processors (Wenger, 1998) Wenger states that treating the claim processors as a single community of practice did not reveal their more nuanced characteristics so that the claim processors should be viewed as constellations of interconnected practices. Wagner defines constellation as “a grouping of stellar objects that are seen as a configuration even
though they may not be particularly close to one another, of the same kind, or if the same size” (Wenger, 1998, p. 127) Also relatable to this research project is Prigoda & McKenzie (2007) study of an informal community of knitters that meet at a public library. This informal network of knitters sought out formal training of their craft by looking to community to gain the knowledge they were seeking out. The community of knitters was originally created as a teacher/student model, but their community of practice developed into a seminar model to create a framework of equality for the community (Prigoda & McKenzie, 2007).

CoP then defines the informal networks of collaboration that can focus on technology practices and knowledge in a workplace environment (Hara & Kling, 2002). This broad concept of ‘workplace environment’ can be interpreted to a local music scene and to those various stakeholders in that scene that produce music releases. The contrast between formal networks of production and informal CoP production networks includes how DIY record labels interact with other record labels, including major labels. Homogeneous sets of practices should be present, but the power dynamics and the ethics – competition or collaboration, secrecy or sharing, profit over everything or profit as part of a wider set of goals – are important to note and analyze from the DIY, independent, and major label spheres. Dissimilar spheres of technology bisect, along with dissimilar groups of individuals. Further, this idea bisects with SCOT and ANT to form the theory of “communities of practice construction of technology.” While CoP tends to focus on workplace environments, under the framework of the local music scene, a DIY network of record labels can share many of the same skills and tactics.
CoP is not just focused on learning within a community it is also about the managing of knowledge within that community (Lave & Wenger, 1991). As the experienced users leave, then the environment adapts to the members that are left. Knowledge here is never abstract and disembodied, never a mere mental model, but is always experiential, held in the bodies of knowers and activated in on-the-ground situations. In the local music scene context, newcomers, rules, and norms are all present, while knowledge is constructed through group practice and practice grows organically out from embodied knowledges. The collaboration and construction of the socially agreed upon rules and norms of local music record labels can borrow strategies and tactics from major labels, including resisting those practices. It is embodied, organic, on-the-ground practice that provides the soil where both knowledge and future practice grow.

*Proposed model*

Based on the currently perceived variables within this research, a proposed model of the relationship between the mainstream music system and the local music scene is offered. (See Figure 3) There is a tension and dialectic between the mainstream music system and the local music scene: the DIY ethic of the local music scene eschews the culture of the mainstream music system in the form of resistance, a form of political action, (Millar, 2018) while the mainstream music system searches for emerging musical trends to commodify in the form of subsumption of these ideas from the local music scene. As this plays out, there are the consumers of the musical products produced by both mainstream music system and the local music scene. There are consumers who purchase from only one of the two music areas, but there are also those consumers who purchase from both the mainstream music system and the local music scene, and their
power to be able to have an influence over both two music areas in the scenario needs to be noted in the model.

For this research project, the production of vinyl releases will be the main point of interest, but this model could possibly be developed to analyze other products within the music dialectic. This theoretical model is to be applied to how the local music scenes resisted the changing formats of musical production to keep producing vinyl, while the mainstream music system ushered in sea change after sea change from vinyl, to cassette, to CD, to digital download. The latest, and most disruptive sea change was to go to no production format at all, and in turn no consumer ownership of music, with digital streaming. This moment gave way to the mainstream music system subsumption of that which it had abandoned: the production of vinyl records.

The development of this model will be explained further in the Methodology section as it applies to RQ3: Can a model be developed illustrating the tension between the social relations of the record labels of the New Brunswick local music scene and the mainstream music production practices?
Figure 4 Social relationship tension of music production practices model.
Methodology

In line with the research goals of exploring the practices and social relations through which vinyl records become produced within the New Brunswick local music scene, an interpretivist paradigm and qualitative approach is justified, in order to understand and explore participants’ own stories. The primary methodology of data collection will be interviewing those individuals that started record labels in New Brunswick, NJ. Long (minimum 40 minutes) semi-structured interviews were selected as the best method to answer this project’s first two research questions:

- RQ1: What are the social practices through which vinyl records become produced within the New Brunswick local music scene?
- RQ2: What are the social relations through which vinyl records become produced within the New Brunswick local music scene?

A purposive sample was appropriate, as the research focus is not a general population but the very specific sub-population of people who were key actors in the phenomenon of persistence and revival of vinyl. To this end, the research target population was identified as the DIY record label owners. These small independent label owners were the critical stakeholders when it came to the decision to produce the final recorded product for resale. The label owners are also vital to interview because of the small nature of their labels’ historic footprint, meaning that there is very little information about many of the labels. Though an historical methodological approach could have pieced together the bulk of the labels’ releases, that approach could not reveal why the specific formats were chosen to produce the releases; nor could it illuminate the relationship of each label to other labels, especially over the span of 30 years. Because of
the limited production runs of some of the labels’ releases, such as hand-produced cassettes or a fanzine that included a limited-production run of a 7 inch, there are possibly key releases that could be overlooked. Given the research goal of investigating the decision-making process and the longitudinal trajectory of independent vinyl production, primary data from these key stakeholders was fundamental.

Through answering the first two research questions, the third research goal was to support the proposed model (Figure 3) set out in the Theory section and hopefully nuance and expand on its design. As Petty, Thomson & Stew (2012) point out, qualitative studies can produce results that offer confirmability, dependability, credibility and transferability. The working model, informed by this study could be incorporated into future research relating to the tension between the mainstream music business and independent music, including scenes. The model’s use could then be expanded to explore areas such as specific music genres, music production, and concert promotion.

It was originally proposed that this research project would also include limited archival research in the NBMSA housed at the Alexander Library at Rutgers University. Lindlof and Taylor explain that material culture possesses a degree of agency and expound on that by stating, “it is fair to say that objects make their influence felt just as soon as they appear (Lindlof & Taylor, 2011, p. 218). It was thought that by using mixed methods of data collection and analysis this could allow for a mix of foci—interviewing people and evaluating material culture—and that this, coupled with the blend of theories discussed above, could generate a more informed research project “because different data collection methods gather different facets of data, and their combined effects build on each other to compose a more three-dimensional perspective of the phenomenon”
(Lindlof & Taylor, 2011, p. 294). However, because of the COVID-19 pandemic it proved to be impossible to access Rutgers University’s Special Collections, who administrates the NBMSA, after I had completed the interviews during the summer of 2021. Additionally, Rutgers University’s Special Collections sustained significant damage from hurricane Ida and the University is now in the process of relocating all their collections.

Site of study

The site for this study of a local music scene and its relation to vinyl production is New Brunswick, NJ. I have a personal and lengthy residency in the local music scene that is outlined later (in the Self-Ethnography Work section). However, there are some other points about the city from a historical, musical, and research standpoint that can be touched on here and make the site especially suitable for this research.

New Brunswick, NJ, was up to the early 17th century the area where the Lenni Lenape Indians “planted crops, hunted, and traded with a few local farmers” (Listokin, Berkhout, & Hughes, 2016, p. 1). Like many colonial cities, New Brunswick is located on a river for ease of transportation and communication. This river, the Raritan River, opens to the Raritan Bay with the Atlantic Ocean due east and New York City to the north (Lurie & Wacker, 2009). With the completion of the Delaware and Raritan Canal in 1834 it connected New Brunswick to Bordentown, NJ, a transportation nexus on the Delaware River at the time (Listokin et al., 2016, p.6). Because the canal was a major coal and finished goods route, it positioned New Brunswick as a key city in the Industrial Revolution producing many goods such as tires, bicycles, automobiles, instrument strings, and audio equipment. In the early part of the 20th century, New Brunswick
hosted a multitude of trolley lines earning the transportation hub the nickname “Hub City.” The creation of a cotton pad held in place with an adhesive strip to protect a wound, later to be called the “Band-Aid,” was invented across the Raritan River in Highland Park and propelled the already established Johnson & Johnson Company, a New Brunswick company since its founding in 1886, to become a household name around the world (Foster, 1999, p.150).

New Brunswick is also home to Rutgers University. The university was granted a charter on November 10, 1766, as Queen’s College, named in honor of Queen Charlotte, wife King George III (Frusciano & Justice, 2015, p. 18). Rutgers University is the eighth-oldest college in the United States and has the second oldest collegiate newspaper, The Daily Targum, and one of the oldest college radio stations, WRSU 88.7 FM, started on April 26, 1948, as an AM station (Frusciano & Justice, 2015, p. 286). Rutgers University New Brunswick area campus (Rutgers University also has campuses in Newark and Camden) currently has over 50,000 students enrolled. With such a large annual influx of young adults, the university acts like a heart pumping fresh blood to the university, the city, and the local music scene. The anthropologist, Michael Moffatt, a former professor at Rutgers University, posed as an undergraduate in the 1980s to gather data for his noted 1989 ethnography, Coming of age in New Jersey, that documented life as a college student (Moffatt, 1989). This research project is not that far off from Moffatt’s work, in that, while interview material forms the basis of the formal data, the researcher has been a participant in the scene during the years of the main timeframe under focus. The researcher has then acted as informal participant and later, during the research project, as a participant-observer, documenting the choices of release production by local record
labels in New Brunswick, New Jersey. A major difference from Moffat’s work is that in this project the researcher is a bona fide member of the scene rather than adopting a temporary ethnographic-instrumentalist pose and is following contemporary ethical practices of transparency and full accountability.

This research project notes and acknowledges one Rutgers University student who helped to mold this research project by influencing the researcher. This individual is Matt Pinfield. Pinfield has been a veejay at MTV and VH1 as well as a radio DJ at the legendary WHTG FM 106.3 in Eatontown, NJ, and is currently a DJ at KFOG 104.5 in San Francisco, CA (Pinfield, 2016). During his time at Rutgers University, Pinfield was in a local band, Opium Vala, and a DJ at WRSU. He created the local music show, Overnight Sensations, in 1983 that still airs today, focusing on music and bands from the New Brunswick local music scene. It is worth noting here that I listened to Pinfield on WHTG while attending Monmouth Regional High School, and that I was inadvertently following in his footsteps when I attended Rutgers University, became a DJ at WRSU, and began to perform in New Brunswick bands. I, too, frequented The Melody Bar, or performed there in various bands, while Pinfield DJed downstairs at the dance club. In May of 2016 I took over as host of Overnight Sensations on WRSU, where I continue to host the seminal local music show.

New Brunswick, and Rutgers alike have then been key sites for musical carriers as well as happenings. For example, Paul Robeson, Lenny Kaye, and the members of Looking Glass were all Rutgers students and started their musical careers on the banks of “the mighty Rar-i-tan.” Robeson, while being one of the first black students at Rutgers, became a sports star, and orator, and performed at small venues around the city for
spending money. Kaye performed his first concert at Rutgers at Alpha Sigma Phi in
the fall of 1964 and went on to perform in Patti Smith’s band and have a long and storied
career of his own (Coyne, 2017). And, Looking Glass, though maybe only known for
their #1 Billboard hit, “Brandy,” were all members of Rutgers in the band’s first iteration.
Their noted song is still a cultural touchstone, featured most recently in the 2017 Marvel

The performance spaces themselves around New Brunswick, and again, Rutgers
itself, were key venues for historic performances. Douglass College was a nexus for the
Fluxus experimental art movement with musical performances incorporated in events like
the Fluxus “Yam Fest” along with happenings at painter and sculptor George Segal’s
farm near Rutgers (Lurie & Mappen, 2005, pp. 731-732). On March 9 of 1966, Rutgers’
Scott Hall main lecture hall hosted The Velvet Underground with their first show of them
wearing white and having a film projected on them. This show was part of Andy
Warhol’s Rutgers Uptight two campus tours and not only advertised Warhol’s
attendance, but also that of Edi Sedgwick, Barbara Rubin, Gerard Malanga, Danny
Williams, Billy Linich, and Paul Morrissey (Bockris & Malanga, 1983). A few years
later, on July 23, 1970, the same lecture hall hosted one of the first proto punk bands,
Figures of Light, made up of Rutgers students, that featured a motorcycle being ridden
into the room and a wall of TVs smashed with sledgehammers (Savage, 2009). Bruce
Springsteen often came up to New Brunswick from Asbury Park to play at Rutgers’
Student Activities Center, at the time named The Ledge, between the Hardenbergh and
Frelinghuysen River Dorms, for $2. “The Boss” even performed once at Records Hall in
New Brunswick for a benefit show on August 5, 1973 (1973 Bruce Springsteen postcard).

Throughout the 1980s and into the 1990s, New Brunswick was known for many bars and clubs that featured live music such as Patrix, The Court Tavern, The Melody Bar, The Roxy, Plum Street Pub, The Budapest, and Bowl-o-drome. As these music venues began to disappear and become subsumed into the New Brunswick landscape, the New Brunswick “basement scene” began to emerge in the mid-1990s (Makin, 2016). The combination of Rutgers University students who were under the age of 21, local bars more strictly enforcing the drinking age, house shows with performances in garages and backyards being easily identified by the police, and musicians wanting to perform music that might have limited appeal to local venues literally forced the New Brunswick music scene underground—and into basements. Many single-family homes near Rutgers University’s sprawling campus were converted to an apartment upstairs and an apartment downstairs. Because it is customary to build homes in the Northeast with a basement, off-campus students found themselves with the ability to establish a speakeasy-type music venue in their own basements. It is out of the New Brunswick basement scene that bands like The Bouncing Souls, Lifetime, Dead Guy, Thursday, Gas Light Anthem, and Screaming Females emerged. In addition to all these bands that have become well known coming out of the New Brunswick bars, clubs, and basements, are the hundreds of bands that have come and gone in New Brunswick that might have only left a small imprint. Nonetheless, their combined impact has significantly added to the culture of music production in New Brunswick (Kauffman, 2007).
The combination and presence of so many key stakeholders that make up a music scene and create a set of multiple culture practices makes New Brunswick an extremely rich site to research the production of music and especially vinyl records. Through my decades of involvement in the scene, I am confident that New Brunswick, New Jersey, made an excellent site of study for this research project.

**Participant interviews**

It was deemed that participant interviews was the best method for addressing the research goals and objectives. Given the researcher’s pre-existing familiarity with and immersion in the scene, identification of potential respondents and framing of relevant questions was easily achieved. The participants selected - all individuals that ran a record label in one form or another between 1980 and 2010 - were identified as key stakeholders in this situation. Interviewing them allowed for answers to be teased out that were relevant for this project’s research questions. Lindlof and Taylor (2011) refer to interviews as the “digging tool” of social science. They elaborate, “It is not much of an exaggeration to say that we live in an interview society, in which ‘the interview serves as a social technique for the public construction of the self’” (Kvale & Brinkman, 2009, p. 12)” (Lindlof & Taylor, 2011, p. 170). James Spradley likens participant interviews as a friendly conversation “into which the researcher slowly introduces new elements to assist informants to respond as informants” (Spradley, 1979, p. 58). I conducted interviews lasting from 29 minutes to 2 hours and 52 minutes with 14 respondents. The reason for the disparity in time is because one of the interviewees was at work—the shorter time—and had to make things brief, and the other was a co-founder of Don Giovanni Records, who was quite reflective since the label was approaching their 20th anniversary. Some
respondents were interviewed once, and others were contacted for follow-up interviews. The interviews took place over from May 19, 2021, to July 24, 2021.

Additionally, since the project posits research questions over hypotheses (i.e., is inductive rather than deductive), the interviews allowed for follow up research questions, as well as a recursive process of allowing interviews to build upon each other, by adjusting each interview slightly, according to the context and the interviewee. The underlying analysis of the data based on this research project was not inductive or deductive, but “abductive.” Lindlof and Taylor describe this as, “Theory, analysis and imagination come together in the abductive process of developing a surprising finding—a finding that one cannot infer from looking at instances, as in induction, or from the logic of deduction” (Lindlof & Taylor, 2011, p. 243). None of this could be afforded with a method such as a survey. Since most of the labels are no longer in existence, something like full participant observation is impossible. This research project reviewed the eras before the World Wide Web (WWW) in the 1980s, during the WWW growth in the 1990s, and in the commonplace existence of the WWW in the 2000s. These eras are also congruent with the CD era of the 1980s, digital download era of the 1990s, and streaming era of the 2000s.

As well as interviews, documentation has been a thread of the research method. I have conducted an extensive search of record labels started between 1980 and 2010 through my work with the NBMSA, and I have created a database with notes on each label. Thanks to my own involvement in the music scene, access was made easy. I either knew, or knew how to get in contact with, most of the label founders over the three-decade time period. that forms this study’s focus. At current count, I have identified 26
labels started over the three-decade period: five in the 1980s, 12 in the 1990s, four in the 2000s, with the remaining five currently without a start date. Additionally, I did come across a few more New Brunswick labels as I went through the interview process.

For this research project, I incorporated a modified purposive stratified sampling method. The “modified” method comes from an intentional research decision to interview more label owners from the 1990s, because most of the local labels appear from this decade. Additionally, it is in the early 1990s that vinyl record sales hit their lowest market share point, making this a key period. I proposed to interview 14-18 label owners. After interviewing, 14 label owners I reviewed the data and determined that data saturation was now achieved, meaning that there was no need to conduct additional 4 interviews. As Timonen et al (2019) note, data saturation is reached when no new significant insights are emerging from interviews.

Originally, I proposed to first interview 4 record label owners for each the 1980s and 2000s, and 6 from the 1990s. However, after performing the first few interviews, it became more obvious that the 1990s were the key era to investigate for this research, so I modified the purposive sampling to 3 record label owners for each the 1980s and 2000s, and 8 from the 1990s. As data saturation was reached, and interviews cross-confirmed each other, performing these 14 interviews relating to a 30-year period was fully sufficient sample for this research project to obtain reliable responses for the research questions.

Because of the Covid-19 pandemic I performed all but two of the interviews via Zoom. Though I had originally wanted to perform these interviews in person to achieve a more intimate setting and to have the interviewee provide any material they might have
as conversation starters, this method ended up being highly problematic logistically, and possibly harmful. The positive of the Zoom interview is that it did eliminate the need for travel to the interviews. With the Zoom interviews I recorded the audio at this same time, which is described in my approved IRB. After I completed each interview, I had the interview transcribed from service and I reviewed each converted text to the audio files for accuracy. I used the Charmaz (2014) constant comparison method to closely read the transcripts in an iterative fashion, applying open coding and then axial coding to identify patterns, and combine codes into categories and then into themes. This will be explained further in the Data analysis section.

Because the research questions themselves drove the interviews, I framed the interviews like a discussion. As someone who ran a record label in New Brunswick from 1990 to 1995, I fostered trust with my interviewees because I too went through the same process as they did of deciding to manufacture a release for a local band. My personal insights helped guide this conversation around the included list of questions (see Appendix A). Additionally, I have conducted over 100 interviews with bands and musicians through the local music radio show Overnight Sensations that I host on Rutgers University’s WRSU FM. My knowledge of the New Brunswick music scene is extensive, but because of hosting the radio show I also have developed an innate ability to discuss music and motivation with artists. This tapped into the ethnographic nature of this research project. My intimacy with the political economy of local music was an asset for interviewing New Brunswick record label owners.
Model development

In addition to the participant interviews conducted to collect data for this research project, I also worked on developing the proposed model as set out in the Theory chapter. Farzana Shafique and Khalid Mahmood write about developing models as a research method, “It assists investigators and scientists in relating more accurately to reality; it also aids them to describe, predict, test or understand complex systems or events” (Shafique & Mahmood, 2010, p. 4). Working with, and developing, the model helped to bridge theory, methods, and the data analysis of this research. The model also helped to provide a visual representation of the data analysis. A desired outcome for this research was that others researching at the intersection of popular culture, alternative culture, and consumers could incorporate this model.

Data analysis

Considering the two-fold nature of the CoP–both local music scene and record labels owners within this music scene–the data generated from the participant interviews did not generate enough data for a formal qualitative analysis, so an interpretive analysis was used for this data. Because of the extensive knowledge I bring to this research project an interpretive analysis of data was possible. Juliet Corbin and Anselm Strauss state, “Interpretation implies a researcher’s understanding of the events as related by participants” (Corbin & Strauss, 2008, p. 48). The nature of the research questions about the phenomena of vinyl production within a local music community also leans to an interpretive analysis of the data. The underlying analysis of the data based on this research project was not inductive or deductive, but “abductive.” Lindlof and Taylor describe this as, “Theory, analysis and imagination come together in the abductive
process of developing a surprising finding—a finding that one cannot infer from looking at instances, as in induction, or from the logic of deduction” (Lindlof & Taylor, 2011, p. 243).

For the data generated from the participant interviews, I used Charmaz’s constant comparison method (2014) for coding the interviews and discovering themes and patterns in the data. The constant comparison method is applicable to my existing knowledge of the owning a local record label in New Brunswick. This intimate prior perspective helped me to see the data not as truth, but as an established perspective and I “may gain more awareness of the concepts that (I) employ and might impose on (the) data” (Charmaz, 2014, p. 132). Additionally, my prior experience helped me to identify what Charmaz refers to as “in vivo codes” (2014). These special terms (codes) of the participants “provide a useful analytic point of departure” and “help us to preserve participants’ meanings of their views and actions in the coding itself” (Charmaz, 2014, p. 134).

As I performed the constant comparison method and applied open coding and then axial coding to identify patterns and combine codes into categories and then into themes I made a special review after the seventh interview to evaluate if my interview questions were generating worthwhile data as it relates to my research questions. I made minor modifications to my interviewing questions at this point. After the fourteenth interview I again made a special review of all the data to see if I have reached saturation within the data. It appeared to me at this point that I had reached saturation and I decided to not complete the other 4 interviews for this research project.
Limitations

Because this dissertation is not designed to examine numerous local music scenes, there is no definitive way of knowing if this project’s findings can be replicated elsewhere. This research features interviewing 14 of the nearly 30 record label owners within a local music scene that have produced vinyl releases over the span of 30 years, taking a qualitative approach, such that transferability, rather than generalizability is the goal. (Miles, Huberman & Saladaña, 2020, pp. 307-308). In any case, this is a limitation inherent to most qualitative work. The trustworthiness of this qualitative research study will be evaluated through the criteria established by Lincoln and Guba (1985): credibility, transferability, dependability, and confirmability.

Secondly, there is speculation that the resurgence of vinyl record sales is being stoked by an increase in nostalgia for the “physical-ness” of music products in the post-Internet age. This could be seen as manifested in Urban Outfitters, one of the largest retailers of vinyl records, which also offers an extensive line of entry-level record players. Additionally, cassette tapes have seen a similar rise in popularity, with record labels in areas such as Brooklyn, New York, offering limited-run cassette releases. In 2014, Marvel Studios’ Guardians of the Galaxy featured a major plot theme in which Peter “Star-Lord” Quill’s prize possessions were a Sony Walkman and a mixtape that his late mother had given him on her deathbed. And though these examples of nostalgia might contribute to an explanation of vinyl’s resurgence, they do not fully explain the resistance to its demise. Exploring the practices of the New Brunswick local music scene through this research project will inform the shaping of the reemergence of vinyl as a desired medium.
Finally, this dissertation is designed to interview the local music label owners who were in business from the 1980s to the 2000s, but it is not designed to interview the other stakeholders. As noted previously, there are other key stakeholders along the supply chain of the production and distribution of vinyl records. However, the research design is based on the presumption that the local music label owners are the key stakeholders, and that interviews with them will provide the deepest insights into the resistance to the demise of vinyl records.

On a more micro level as it pertains to the methodology of this research project there can be several possible limitations to conducting participant interviews:

- Participant observation has a high risk of bias entering the data.
- The representative sample being studied is relatively small.
- It takes a lot of time to gather factual data using participant observation.
- Self-selection can cause information bias to appear in the collected data.
- Participant observation relies heavily on the skills of the researcher.
- The data collected through participant observation is somewhat subjective.
- Participant observation gathers situation-specific data.
- Researchers must have familiarity with the subject matter they study.

(Gaille, 2020)

Though these limitations to participant interviews seem numerous, many of these concerns are reduced significantly because of my extensive experience within the New Brunswick music scene and my careful reflexive work around the question of my own positionality. As Dean et al (2018) note, in their discussion of researcher positionality in interpretive research, taking careful note of the researcher bias or position is crucial. I
suggest that the interviews of this research, which took the form of a conversation between two individuals both deeply embedded within the scene, but positioned slightly differently, offers the advantages of a ‘double perspective’ on the same phenomenon and question, much like the ‘teamwork research’ process suggested by Dean et al as a means of mitigating single researcher bias. The idea of myself, a former New Brunswick label owner, having a discussion with other former, and current, New Brunswick label owners further suggested “insider research,” where two experts are engaging in the topic they are experts in (Hodkinson, 2005).

*Expectations*

At this point in the diffusion of the vinyl record, it is no longer debatable that the innovation of the vinyl record is still a produced music medium, even though the medium’s sales reached nearly zero. More remarkably, vinyl record sales have been increasing over the past several years. Coupled with the innovation of streaming music, vinyl record sales have also gained in over-all market share as the purchasing of music over the Internet has been dropping precipitously. This research looks at the period before the vinyl record sales rise, 1980-2000, and how a local music scene could have been a pocket of resistance to the demise of the vinyl record. Through interviews with most of the owners of the local music labels in New Brunswick over the three-decades of 1980-2000, my goal has been to explore what happened to prompt the individuals running the record labels in New Brunswick to keep producing vinyl records during this period of multiple sea changes in the production and distribution of music media. My expectation has been that there is a relation between nostalgia, cost, and sound quality and a dynamic tension between DIY music and mainstream music production. Through these interviews
with the local record label owners, an answer can be teased out to why the resistance to
the trend of non-production of vinyl record release and apply the findings to a model that
could be used in future research of record labels in other local music scenes. Ultimately, I
hoped that the findings of this research project could provide an informative and key text
at the intersection of music and scene research.

*Self-ethnography work*

Though I did not conduct formal ethnography, throughout this dissertation some
of my previous and current experiences were used to guide the research process as well
as used to interpret the interviews. As Thommy Eriksson explains, I am “’breaking out’
of cultural and social structures taken for granted within this group, understanding them
from within” (Eriksson, 2010); engaging in “self-ethnography,” because I am looking at a
group that I was an established participant in. My self-ethnography, or exploratory work,
for this dissertation began in August of 1989, when I moved to New Brunswick, NJ, as a
transfer student to begin my sophomore semester at Rutgers University. For over 30 years
I have participated in the New Brunswick music scene. For the purposes of this research
project, I have participated in four key stakeholder positions: radio DJ, musician, record
label owner, and local archivist.

One of the first things I did when I transferred to Rutgers University was go to
WRSU and start the process of becoming a DJ. I started my first time slot in the spring
semester of 1990 and remained a DJ at WRSU until 1994. In addition, I was also the
Promotions Director for the station for two years. While at WRSU I was exposed to more
music than I had imagined was available and some of the music was from the local music
scene, including a compilation album of local bands called *Mental Floss*, which was
produced by two DJs at WRSU. These two DJs also had a long-running radio show at WRSU called Overnight Sensations that focused entirely on the local music scene in New Brunswick. In May 2016, I returned to WRSU as a DJ, hosting Overnight Sensations, the local music show that had such an impact on me upon my arrival to New Brunswick. I have added my own touch to Overnight Sensations by having bands come up to the radio station to perform live while I also interview them during their set. I have adapted these performances into podcasts that are available online and through iTunes, Stitcher, and Android. I am currently up to episode 115. Additionally, Overnight Sensations and I won the 2020 Best Live Music Broadcast from the Intercollegiate Broadcasting System for the appearance of the band The Holy Smokes.

My second goal when I moved to New Brunswick, after becoming a DJ, was to start a band. The first band I cofounded was called kiaro • skuro in the fall of 1989 and I played bass in the band. We went on to play many shows in New Brunswick and throughout New Jersey, as well as in New York City and Philadelphia. We ended up headlining several shows and opening for well-known national bands such as the Goo Goo Dolls, Lush, Poster Children, 360s, and Dweezil Zappa. We played at legendary clubs such as The Stone Pony, Khyber Pass, and CBGBs and were even being scouted by Sire Records. In 1993 I cofounded my next band, Duochrome, and we achieved even more notoriety with tours further out of New Jersey, and even an international appearance at the 1995 Halifax Pop Explosion in Nova Scotia, Canada. Over the course of the career of these two bands I was on several releases including cassettes, vinyl 7-inches, and CDs, on multiple labels. The passion and thrill of playing in a band is still with me and I play
bass in the band San Tropez that was recently signed to the New Jersey record label, Mint 400 Records.

Before the first New Brunswick band I was in could play out we had to do what most bands did during the early 1990s had to do to get a gig: make a demo tape. What a band quickly discovers is that to receive better gigs, better media coverage, and maybe a record deal, they need to appear that they were already on a record label. In the spring of 1990, I started Well Primed Records in New Brunswick, NJ. I ran Well Primed Records until 1995 putting out fifteen releases on LP vinyl, 7-inch vinyl, cassette, and CD of bands that I was in as well as several other bands.

Finally, I cofounded the New Brunswick Music Scene Archive (NBMSA) in the fall of 2015 with an archivist at Rutgers’ Special Collections and University Archives, Christie Lutz, and the collection of material from the scene is growing there. Through my work with the NBMSA I have been conducting research to document the record labels I have discovered that were started in New Brunswick. Highlights of the archive to date have been being featured in the May 2016, *American Libraries* article “Rock in the Vault,” and winning the New Jersey Caucus Innovative Archives Award at the 2018 Mid-Atlantic Regional Archives Conference. Additionally, I have presented on the work of the NBMSA at several conferences including Art of Record Production in 2015, Pop Culture Association in 2016, Association of Recorded Sound Collections in 2018, Rare Books and Manuscripts Section of ACRL/ALA in 2018, and International Association for the Study of Popular Music-United States in 2019.

I also believe that I am the individual that is uniquely qualified to perform this research through my 30-year connection to the New Brunswick music scene as a radio
DJ, musician, label owner, and as an archivist, not only am I sure that the New Brunswick music scene is an excellent source for the research of local record labels as a network of resistance to the decline of the vinyl record.
Results

As stated above, this research has explored the possibility that the production of vinyl by underground communities has deferred the end of vinyl. While the music industry was experiencing sea changes in the areas of production and distribution on the mainstream cultural level, the area that provides the example and focus of this study—New Brunswick, New Jersey—has seen the creation of over 25 record labels since 1980, all of which produce vinyl records. In order to gain a clearer understanding of the process of resistance against mainstream cultural practices, I chose to focus on a key point in the production process and conduct interviews with 14 local record label owners. By interviewing these key stakeholders in a thriving local music scene, I have also gained an understanding of the processes through which these local record label owners created a network of resistance to the demise of vinyl records. It is within this context that this dissertation explored the following two main questions about the local record labels of New Brunswick, New Jersey:

**RQ1: What are the social practices through which vinyl records become produced within the New Brunswick local music scene?**

**RQ2: What are the social relations through which vinyl records become produced within the New Brunswick local music scene?**

Where RQ1 was designed to investigate the practices of local record labels producing vinyl records within the New Brunswick local music scene, RQ2 examined the social relations of the local scene with the other embedded entities outside of the scene that make up the “seamless web” of music media production. Through these two RQs I was able to gain an understanding for my third RQ:
**RQ3: What would a model look like that would illustrate the tension between the social relations of the record labels of the New Brunswick local music scene and the mainstream music production practices?**

Because there are so many local music scenes around the United States, and globally, that make up an informal network of DIY scenes that are, as the literature review demonstrated, analogous to one another, the research findings here have the potential to be transferable. Better understanding at the granular level of these loose-knit networks of DIY scenes could further clarify the relationship of production and distribution between subculture and mainstream culture in general. This research has significance and addresses a gap in academic knowledge, because it has examined an area that has only recently begun to be researched: the intersection of locally created music and the production of it as a commodity for a greater area of consumption than merely the local level it was created in.

This Results chapter will present the process of analyzing interviews, using thematic analysis to uncover codes and themes. It will review and discuss the 13 subthemes arranged into five major themes that emerged from analysis of the 14 interviews with New Brunswick record label owners. For each established theme, I will provide relevant extracts from the interviews in order to support and further elucidated these themes. Because of the inductive nature of the interviews, it is important to demonstrate meaning through substantial quotes over phrases to provide a more data-driven understanding of the themes. Finally, I will conclude with a summary of the key aspects that can be drawn out from the themes.
I used the Charmaz (2014) constant comparison method to closely read the transcripts in an iterative fashion, applying open coding and then axial coding to identify patterns, and combine codes into categories and then into themes. As I performed the constant comparison method, I made a special review after the seventh interview to evaluate if my interview questions were generating worthwhile data as it relates to my research questions. I made minor modifications to my interviewing questions at this point. After the fourteenth interview I again made a special review of all the data to see if I have reached saturation within the data. It appeared to me at this point that I had reached saturation and I decided to not complete the other 4 interviews for this research project.

**Practices within the scene**

The theme “Practices within the scene” incorporates the subthemes “Significance of place – New Brunswick, NJ,” “Significance of place – Rutgers University,” and “Starting a record label and the significance of community.” These subthemes from the interviews incorporate distinct concepts of CoP.

*Significance of place - New Brunswick, NJ*

As outlined in the Literature Review, New Brunswick, NJ, has a thriving music scene and, although its dynamics have changed over the decades, it still possesses the physical characteristics of a music scene as defined in academic studies on scenes and scene culture. The network of producers, radio, consumers, corresponds to what Will Straw describes as the characteristics of a ‘scene’ (Straw, 2002).

As will be reviewed in the upcoming theme, Rutgers University plays a key component in attracting young adults to New Brunswick. However, as my research
uncovered, more significant is the geographical location of the city: it is the city itself that makes up the boundaries of the music scene there and contains all the scene’s practices. Some of the interviewees lived outside of but close to New Brunswick and visited the city in their early teens, where they discovered the music scene at an early age:

“So, one day, I’m walking around New Brunswick. And some guy comes up to me, says, ‘Hey, are you into punk rock and such?’ I’m like... I was wearing eyeliner and all kinds of... And my hair was like going in weird directions and such. So, he just came up, and that’s how you met people back then.” (Participant 9, personal communication, July 5, 2021).

“My parents moved to New Jersey, to Princeton, and then starting in ninth grade, I started getting involved in the New Brunswick music scene as a fan and someone that was going to shows and stuff like that. So that was very much my music scene growing up.” (Participant 13, personal communication, July 19, 2021)

Others discovered the New Brunswick music scene upon coming to Rutgers as an undergraduate and quickly saw all the musical practices that were taking place in the city and felt that they could participate in these activities as well:

“I will say that I definitely think that arriving in New Brunswick and then seeing that Well Primed was there and seeing there's maybe one other... That was really the only one that I remember being there when I first got there, which was ’91. That was one of the things that I was like, Oh yeah, there’s people here who are making shit, so... I was like, ‘Oh, this thing that I sort of did as a lark with my band in high school, I could keep doing this ’cause other people are doing it’.” (Participant 7, personal communication, June 8, 2021)

“But I think for me, it was just seeing if you could do it, seeing there was a bunch of labels happening. I think for me it was largely New Brunswick itself, because I’d come from a small town where there was nothing to suddenly having multiple bands, multiple venues, people putting on shows. So, you watch these people, who weren't that much older than you, you knew they were a little older but they weren’t adults, they were just somewhat older... And I’d go, ‘Wow, that guy’s got it. I think I could probably figure this out too.’ So, I think that was... It made it feel very accessible and easy, and the stakes were super low to make it happen.” (Participant 3, personal communication, May 26, 2021)

Other respondents reported that they already knew about the New Brunswick music scene and specifically wanted to attend Rutgers in order to participate in the scene:
“I wanted to get there and dive into what was going on in New Brunswick, like I said in the band in high school, we had a lot of fun, but I didn't think it was particularly good. And I wanted to branch out and make some new friends.” (Participant 4, personal communication, June 6, 2021)

Even for those that grew up already embedded in the New Brunswick music scene, there was still a sense of wonder at the multitude of players and activities taking place:

“From Booking The Court and seeing all the new folks, yeah. I can’t keep up, I can’t keep up with all the bands in New Brunswick, it’s just... Which is fine, but it’s just... There’s just so much going on.” (Participant 8, personal communication, June 13, 2021)

“And I wanted to be the next Creation Records, like Tony Wilson or something, but not subscribing to any particular genre of music. But it just ended up that because of the people I was friends with and the bands that I had access to, that it was mostly the New Brunswick scene. So, it wasn’t premeditated that it was a New Brunswick label, but that’s what it ended up being. In retrospect, I think it was a special time and place and cultural context, the whole New Brunswick music thing.” (Participant 6, personal communication, June 7, 2021)

From the interviews with these New Brunswick music scene local label owners, a consistent theme that emerged is that there were a multitude of musical practices taking place in the city and that they felt that they could take part in them as well.

**Significance of place - Rutgers University**

I posit that a key component of the New Brunswick music scene is Rutgers University, which draws in thousands of young adults to the city every year. Most of the individuals interviewed for this research project had attended Rutgers as an undergraduate student. Some arrived at Rutgers and eventually sought out some aspect of New Brunswick music scene:

“I’ve always been like a total fan of college radio since, like maybe my sophomore year of high school, so I listened to WPRB and WTSR kinda religiously, and I still listen to WPRB. And so, when I first went to Rutgers, even my campus visits, the first thing I did was try to find the radio station, so, like, I don't know if I knew... I might have heard the bands on PRB or something, but mostly it was when I first got to campus, and had RSU on in the car all the time,
and listening, and looking at... Actually, honestly, the flyers around town, like the, like going to Cheap Thrills or, and going to shows, whatever was around, it’s like, you know, freshman year.” (Participant 1, personal communication, May 19, 2021)

Others arrived at Rutgers and did not have good experiences initially:

“...I hate to be such a Debbie Downer about Rutgers, ’cause I think I had a pretty good experience there overall, but I got there and I was really, really disappointed as a kid. And I feel really lucky that I found the people that I found, so I did wind up coming out with a good experience.” (Participant 11, personal communication, July 13, 2021)

As the scene grew in the 1990s, others were already familiar with the New Brunswick music scene and wanted to attend Rutgers for the explicit intent on participating in the scene:

“And I applied to Rutgers for Early Decision that fall, and I got in. And I was like, ‘I’m not gonna care about anything else for my senior year, and I’m gonna go to Rutgers and...’ So yeah, so I got to Rutgers and it was like my goal was like being a good student was part of it, but I wanted to plug into a music scene, so that’s what got me there.” (Participant 4, personal communication, June 6, 2021)

“And I was getting ready to go to college, and sort of not super interested in college, more interested in being 17 or 18 and being punk rock, and I said, ‘I’m only gonna apply to Rutgers University.’” (Participant 10, personal communication, July 12, 2021).

It is at Rutgers that students could readily meet musicians and discover an inroad to the music scene and possibly be in a band together:

“...Because one of my friends, a guy I went to college with, he was actually one of my roommates in college. Rutgers, I went through Rutgers Undergrad, and his name was Mike. He was the guitar player for a band called Bunt.” (Participant 12, personal communication, July 14, 2021)

On the other hand, there was one interviewee that noted that by them attending college at another university it furnished them with a distance from New Brunswick and that allowed them to appreciate and participate in the scene more:

“...if I went to college at Rutgers, I would have probably just been in bands and never started a label, and if I grew up even five years later with Napster, let alone Spotify, I would’ve just... I would probably love music, but I would have probably just... Again, just enjoyed music and done whatever... Had a different
life. I’d probably still have some of these values I have, but I would probably just
not be running a record label, certainly.” (Participant 13, personal communication,
July 19, 2021)
Rutgers was a key attracting component for bringing several of these future local
label owners to New Brunswick. If it was not for Rutgers, the demographic of New
Brunswick would be radically different, and this could have an impact on the New
Brunswick music scene.

Starting a record label and the significance of community

All the interviewees for this research project remembered how they started out
putting out music. Maybe they did not remember every single detail, but no one was so
distanced from this moment in time of their lives that they did not remember starting out.
As I lay out the other themes in this chapter, it is productive to illustrate a couple of these
instances. This is Participant 5’s recollections of producing his first musical product—a
cassette:

“I’m trying to think. When did I start playing? 13, so 1983. And it’s just like, you
know some older people in bands. It turns into, ‘Well, I’d like to get some shows.’
Well, how do you get shows? ‘You gotta have a demo.’ ‘How do you make a
demo other than a boombox in your rehearsal space?’ ‘Oh, somebody I know has
a studio.’ ‘Oh, cool.’ And then it... You dub your demo cassette a million times,
and then at some point you realize, this thing’s gonna wear out.” (Participant 5,
personal communication, June 7, 2021)
Later, Participant 5 described how he looked on and learned awhile a friend of his
put out his own 7-inch:

“It just happened. I guess, he did it first and I watched from afar. And yeah, he
was doing his thing, putting out zines and putting out 7-inches, and all out of his
bedroom, no distribution.” (Participant 5, personal communication, June 7, 2021)
Participant 1 added his thoughts on starting a label:

“Yeah, I didn’t know the mechanics of how to do it, but I had seen enough indie
records that I realized that it was possible. So, I think I always had it in the back
of my mind that the same thing with fanzines, you see enough photocopied
fanzines that people actually buy and read, and you realize that’s not hard to do.
And the record thing, all it takes, and I think we both have that entrepreneurial, the little light bulb goes off, you actually run with it, I just sort of watch it until it fades out. So, you had the... You were... Basically, you get stuff done, so I think we were a good team to do that because I could kinda like... I got the ball rolling, but basically, when things had to get done, you just picked it up, ran with it.”
(Participant 1, personal communication, May 19, 2021)

All the interviewees started their record labels with a passion to release music that they believed in and wanted others to hear. Sometimes it was their own music, sometimes it was their friend’s music, and sometimes it was music being made by individuals they did not know. All were involved in communities of practice, where informal learning took place. The theme of informal learning was an anticipated one, from the literature review work, but my research has highlighted an unexpected finding—the very young age at which respondents often entered these communities (Hara, 2008; Wenger, 1998).

**Working with recording technology**

The theme “Working with recording technology” incorporates the subthemes “Impact of recording costs,” “Recording on your own,” and “Chris Pierce and his recording studio.” These subthemes from the interviews illustrate the labor that goes into the process of economically recording music.

*Impact of recording costs*

A theme that occurred 12 of the 14 the interviews was the prohibitive costs of studio recording. There would not be enough money to put out a release if too much was spent recording. Record-label owners had to walk a financial line of only recording a few songs as economically as possible so that they could still have enough funds to produce the actual release.

To have a studio recording experience, some reported having put themselves into situations that did not quite seem like the recording studio of their imagination.
Participant 9 remembers going to Trax East Recording Studio before it developed into its South River, NJ, location: “And we started there when he was in his basement, and you’d have to walk through, past his dad and his dad’s dog in the living room, to get downstairs to the recording studio.” (Participant 9, personal communication, July, 5, 2021)

Even recording at a well-known studio could still be approached with a budget in mind. Participant 2 recollects going to Chicago, IL, to record with Steve Albini at his famous studio, Electrical Audio Studio: “That’s the thing, those are all tracks recorded by him and that was like budget compared to going to any other studio and stuff, and even that's like, it’s still real money.” (Participant 2, personal communication, May 26, 2021)

Even the act of recording just two songs appeared across interviews as a learned strategy passed through the communities of practice. This helped receive a break in studio expense. Participant 11 reflected: “We had two songs that we had written in between records, and then this engineer named Paul Mahajan, somehow through an old friend, like a friend of a friend of Jarrett was working with this guy, Paul Mahajan, and he was an engineer who maybe assisted on some Yeah Yeah stuff, I don’t really remember, I’d have to look up his CD, but he was working out of somebody’s loft space in Green Point or Bushwick or somewhere, I don’t remember, somewhere in Brooklyn.” (Participant 11, personal communication, July 13, 2021)

These recording patterns were learned from band to band: “So this is like 1981, and they were putting out singles. Like, bands before us were putting... They were doing what we were... We were doing what they were doing. We were putting out singles to shop, to get signed.” (Participant 14, personal communication, July 24, 2021)
Finally, there are other studio-related costs associated with putting out a release such as sequencing and mastering: “But we found that guy and we would just go to him and he would charge us, so cheap, $25 bucks or something, then we would just mail them out and get them made.” (Participant 3, personal communication, May 26, 2021)

Studios and their owners are key stakeholders within, and outside, a local music scene. They are running businesses to support whoever would like to use their services. Because of this, they charge rates to reach the maximum of what the market can bear. For a DIY record label, these fees can be out of reach, or if they are in reach, it is just barely. Often, studio time is the first cost a burgeoning label must face on their path to putting out a release, so they must be frugal from the start.

*Recording on your own*

To keep the cost of recording music down, some artists took it upon themselves to record on their own. As noted in the Introduction chapter, the advent of analog home recording gear, especially 4-track and 8-track to cassette, lowered the cost considerably for independent musicians. Even though these home recording machines were expensive, they often cost less than a recording studio in a session, but with the artist now owning the recording equipment, they could essentially record music whenever they wanted to.

“Yeah, when Sandor and I had that band Juice Tiger we were on a million compilations, people would just hit us up and say, ‘Hey, can you make a song for our comp?’ We’d just go in his basement and record something and send it to them.” (Participant 3, personal communication, May 26, 2021)

“Yeah, he [a fellow bandmate] had a... It wasn’t a half inch, it was still a quarter inch tape, but it was a reel to reel 8-track. I forget the model number, but it was the one that was kind of like all built-in console and you’d flip up this piece of glass to get to the reel to reel. If I recall correctly. But he had this thing in... Like he was living with his mom kind of the outskirts of town in an apartment, and he just had this basically taking up half of his room.” (Participant 2, personal communication, May 26, 2021)
And even if an artist did not have their own recording device, they might well know someone who owned one come to them with their recording device, so as to have the convenience of home-recording, but still cost less than going into a studio: “No we recorded it, again, we recorded it in my basement with somebody who knew how to record, somebody else who now had a record on a four-track...” (Participant 7, personal communication, June, 8, 2021)

As noted in the previous theme, it was costly to record enough songs to appear on a full-length release, and even if a band or label could afford to do this, they would not have enough money afterward to release the music. The overall idea for DIY record labels was to keep costs down in all areas. This meant not only recording just a few songs as cheaply as possible, but also being able to record these songs on your own. And as Participant 3 points out, if you can record on your own for nearly nothing, you can possibly release more music. These ideas around home recording tie to Pinch and Trocco’s work around the development of the Moog synthesizer and the culture that has emerged around the invention (2002).

*Chris Pierce and his recording studios*

An interesting theme to emerge was the role of certain influential and supportive players within the wider network. There was a notable small shift to the picture outlined above, identified across 3 of the 14 interviewees when they spoke about recording shifts that occurred around the late-1990s. This marks a moment where there seems to have been less talk about home recording and a shift to mentions of recording with Chris Pierce in New Brunswick. Pierce moved to New Brunswick after playing several shows in the city in the mid-1990s with his band Doc Hopper from Boston, MA. He started and
ran four different studios, with his current studio being Volume IV. By now, Pierce has become a fixture in the New Brunswick music scene. Along with being a studio owner he is also a multi-instrumentalist and has performed in several local and area bands over the years. He is an ardent supporter of the New Brunswick music scene, and his studio has been recommended as a recording space by bands and labels, alike.

“So, there was this band called Cheeky, one of my favorite bands at the time. And we paid for them to record an album with Chris Pierce, who would be doing all of our records at the time.” (Participant 13, personal communication, July 21, 2021)

“Yeah, he’s recorded a bunch of stuff with Chris Pierce, who is also an infamous New Brunswick engineer and musician.” (Participant 11, personal communication, July 13, 2021)

Additionally, at some of Pierce’s studios he rented out practice space to bands:

“Yeah. Now that I remember it too. So, Volume IV used to be called MF Studios, and that was the practice space, where Rapid Cities practiced for a while.” (Participant 4, personal communication, June 6, 2021)

Pierce emerges from the interviews as a key stakeholder in the New Brunswick music scene - as someone who can record bands within a sweet spot of quality and affordability. This appealed to anyone interested in further pursuing releasing a physical product after making a recording of their music. While the scene is a loose network of connections, within that network, there are some nodes that appear as more important or densely connected than others. This could reflect a shift in the diffusion of innovation where the reduction of studio costs, coupled with Pierce’s recording knowledge and skill, moved labels away from home recording (Rogers, 2003).
Working with vinyl

The theme “Working with vinyl” incorporates the subthemes “United Record Pressing” and “The 7-inch vinyl record was the perfect release.” These subthemes from the interviews highlight the process and reasoning for producing 7-inch vinyl records.

United Record Pressing

One of the specific items of information communicated and shared within the New Brunswick label community was, interviewees told me, the actual place to have records manufactured. Clearly, this is a key piece of information for running a record label. In all the interviews, there was only one record manufacturing facility named, and it was named six of the 14 interviews. The manufacturing facility named was United Record Pressing in Nashville, TN. Also known simply in the community as “United”, this facility has been in operation since 1949. (Spice, 2016) “There was sort of this oral tradition of ‘How do you put out a record,’ and there were also a couple zines that had published various guides on... Everyone knew you get your records pressed at United.” (Participant 10, personal communication, July 12, 2021) This sentiment was further echoed by Participant 7, “Everybody was like, ‘Oh yeah, go to United, record pressing, go there.’” (Participant 7, personal communication, June 8, 2021)

Even when interviewees forget the name where they had their label’s records manufactured, they were able to guess United: “You know I had probably gathered some info from people like, ‘Oh, how did you press your record? Where did you...’ And people knew about plants around the country, like... What was it called? United? I can't even remember the names of these places...” (Participant 6, personal communication, June 7, 2021)
The quality of the vinyl itself from United was also remembered by three of the interviewees. United’s records were remembered as being thinner than some and this meant a poorer quality. However, the price was almost always the deciding factor for these local record labels being run on a shoestring budget: “And I remember, with that one in particular, wanting to get a better quality vinyl, because I think that all of the stuff that Karl [owner of another New Brunswick label] was putting out; he went with United, which... Yeah, it was cheap, but he got what he paid for in a way. It was kinda bendy.” (Participant 2, personal communication, May 26, 2021)

For any record label to release a vinyl record, it was imperative to ascertain how and where this could be accomplished. In a close-knit community like New Brunswick, a recommendation from someone who had already released a vinyl record was an important and trustworthy piece of information. For the New Brunswick music scene, that recommendation was overwhelmingly United Record Pressing. As with Pierce’s studio, mentioned above, this again highlights how certain nodes in a network may be more densely connected or important than others, and thereby help draw the scene together, linking individuals via their shared relationship to that specific node.

*The 7-inch vinyl record was the perfect release*

A recurring theme across interviewees was that the 7-inch vinyl record was the best way to release music, because the medium possessed several advantages, especially for those running labels in the 1980s and 1990s. The 7-inch was the least expensive medium to produce, after small runs of cassettes; the 7-inch could be played easily at radio stations; the 7-inch could be played in jukeboxes; the 7-inch was a long-established medium to release two songs, but it could also be produced at 33 1/3 rpm instead of at 45
rpm to have a longer running time; the 7-inch artwork could be produced for next to nothing on a copy machine; the 7-inch was a sturdy medium over a cassette that had moving parts or a 12-inch record that was more prone to warping; and then, there was an established nostalgia of putting out a 7-inch ”single.”

“Like you were saying, it was cheaper to go into a basement and record it. Never put out a full length. We put out 7 inches and stuff like that, but never a full length that I can remember.” (Participant 3, personal communication, May 26, 2021)

“I think vinyl was adopted by the underground because it was a cost-effective, good way to get out good music. You could do cheap, the fidelity was forgiving of shitty recordings also.” (Participant 10, personal communication, July 12, 2021)

“So, this is like 1981, and they were putting out singles. Like, bands before us were putting... They were doing what we were... We were doing what they were doing. We were putting out singles to shop, to get signed.” (Participant 14, personal communication, July 24, 2021)

“The 7-inch looks more real than a cassette and a fake label name looks a lot better than no label name.” (Participant 5, personal communication, June 7, 2021)

As costs came down for recording and producing CDs in the late-1990s and 2000s, this option was mentioned with more frequency in the interviews. However, it was the 7-inch record that remained the most common code spoken about as the format of choice for these record label owners in the New Brunswick music scene. This result is an important reflection to Lena’s assertion that what a culture produces affords an intimate insight into the everyday life-practices of members of that culture (2012). The development of a community around the production of mostly 7-inch records was also in line with Cowan’s idea of a “consumption junction” (2012).
Passion vs. capital

The theme “Passion vs. capital” incorporates the subthemes “No dreams of money,” “Opposition to major record labels and identity,” and “Most labels lost money.” These subthemes from the interviews document the ideas the label owners were more passionate about releasing music than they were concerned about making money.

No dreams of money

All interviewees were unanimous that they did not start a record label for making a profit. All the label owners reported that they had started record labels out of a passion to release their own band and/or to release a band that they admired but were not part of themselves. Most did not have a plan past their first release. If they were thinking into the future financial, it was with either a hope to break even or to make enough money from one release to produce a second release. And often, they produced their second release without having enough profit from the first release.

“You gotta be savvy business people. We weren’t, we were very creative people.” (Participant 14, personal communication, July 24, 2021)

“I think I wasn’t as business-oriented as a lot of labels, where they insisted on ‘I’m gonna protect the label to make sure I don’t lose money.’ I always felt like it was more a hobby.” (Participant 2, personal communication, May 26, 2021)

All these individuals that started record labels were in their mid-10s to early-20s at the time. The thoughts these individuals reported about business at this age could possibly be a separate theme, but I have chosen a narrower theme, which clearly emerged from the interviews: that none of these labels were started with the goal to make money. The idea of success was measured by different, more localized and more specific parameters.
“But there was a certain level of that, of just creating something different, but I also think when you’re younger, your ideas of success are much different.” (Participant 3, personal communication, May 26, 2021)

“But we ended up selling pretty much all those records somehow. The batch that I had, I think we ended up with 100 or 125. So, I only have one or two copies in my apartment. So, it’s like... It was ill-timed, but it was also one of the more successful runs of vinyl I've been a part of. And there's something about being part of that band in particular in that moment that kind of worked out.” (Participant 4, personal communication, June 6, 2021)

“I was like, ‘Wow, I’ve taken it this far that we’ve made a demo and I’m on a 7-inch? Success.’ I took every single step as, ‘Well, if I get to the next thing, I’m happy.’” (Participant 10, personal communication, July 12, 2021)

Everyone that started a label in New Brunswick reported one single overarching goal: to put out a release. Most producers did not have a plan past their first release and if they did it did not involve capital for capital’s sake. It was a hope that maybe they could put out a next release.

**Opposition to major record labels and identity**

The act of starting a DIY label is already an affront to the major labels, even if not done consciously. As reviewed in a previous theme, these local music labels were not designed or started with the intention to make money. If someone wanted to make money in the music business, the most logical step was to work for a major label. All the producers interviewed expressed that they had a passion for independent music and wanted to get that music out for others to hear. For most interviewees, this attitude prevailed over making money:

“I remember we were like, ‘Man, they sound Unwound or something. We should’... So, Mark and I put it out, ’cause we also thought like, ‘This band is great. They need to be heard.’ But, other times it was like... We had the band Azucar that was me, and Jen, and Mark, and maybe John from the Billy Crosbys or something. We were just making noise, and we were like, ‘let’s do a split 7-
Sometimes, some respondents reported, a small label is conscious of major labels, with a hope that major will sign one of their bands, allowing them to make money by selling signed-bands back-catalog items, or better yet, have the major buy the master tapes for fresh release at a premium price. Participant 8 reflected on The Blasés appearing on the *Mental Floss* compilation record and then being signed to Permanent Rave Records:

“They got a lot of attention because of that, because of the *Mental Floss* album and getting played on... It was the most... It was a very catchy, it was the most commercially viable song, and it just started getting lots of airplay on HTG and led to the... I think them getting a small record deal, not with a major... But a small independent and stuff and... You know.” (Participant 8, personal communication, June 13, 2021)

This was echoed in other interviews:

“The one thing we put out Val Emmich’s album. Now, Val Emmich, then later went on to get signed a couple of years later by... Ah, fuck... It wasn’t Warner Brothers, it was a major... Sony, I think, you know who Val is?” (Participant 12, personal communication, July 14, 2021)

“But that was very standard for a punk band back then. That’s what we all did. Just sorta... It was like a rock’n’roll college, that's what you did, if you wanted to get signed to a major, you... The quickest, easiest way or the path of least resistance would be to do it yourself, you have full control over what you’re doing, and then you mail your singles to the radio stations.” (Participant 14, personal communication, July 24, 2021)

Though none of the label owners interviewed reported making any money from having their bands move up the scale to a larger label, one did tell me that they still ended up losing money on their release:

“Yeah. We had maybe sold out most of them already before that signing to the major label happened. But we didn’t recoup the expenditure. We didn’t make enough money back.” (Participant 6, personal communication, June 7, 2021)

Interestingly, there was no sense of shared identity, common activity or endeavor between the producers interviewed and the major labels. In the interviews, the label
owners spoke about their experiences radically different than how a “real” label would have been run. It was as if their definition of “record label” was not the same one that a major label was using. They all reported that their activity was nearly void of any business strategy whatsoever. As respondents recounted their decision-making process and activities, it was presented as more likened to “anarchy” when compared to major labels, rather than a strategic opposition from the strictest sense. As they are presented in interview, the local music labels functioned within their own almost self-contained sphere. To the most part, this sphere was the local music scene, but some respondents reported that they also engaged with other individuals, often from another local scene, who appeared to subscribe to their same values. This demonstrates how scenes may overlap and connect into each other (Frith, 1996).

*Most labels lost money*

Extending from the previous theme of not starting a label to make money, most of the label owners interviewed reported that they had to cease operations after losing too much money on their combinations of previous releases. Some might have sold and held steady out of a small initial pressing, but every respondent recounted a story of having to shutter their businesses after losing too much money.

“We never thought of it as a full-time job. We didn’t have a staff, we didn’t have interns. It was just a way to be involved in the culture, and I think we probably lost money, I don’t think we broke even...” (Participant 3, personal communication, May 26, 2021)

“...and then Mike just sort of lost interest in putting out albums, because it was a losing proposition. There was no money being made.” (Participant 12, personal communication, July 14, 2021)

One of the interviewees even reflected that when they did get a “real job” and was making a greater personal income, that this could have been a better time for them to
have run a record label, financially speaking; but by then, they did not have the personal desire to run a record label, because they were also no longer as involved in the music scene:

“And the funny thing is it’s like when I did... Quit the store, finally, got another job that was like paid better and it was the “real job”. And I had more income. That would have been the perfect time to now like, hey, I really don't have those constraints, so why don’t I keep doing it. And if I think about it, it was because I enjoyed more of being in the struggle with the band and knowing you’ve a shoestring budget, and I was really close to it then, once I was more out of music generally, I couldn’t imagine just doing a label, and even though financially, it would have been a lot easier for me to do that, financially how strapped I was for years after graduating college in ’92 through ’96. So, it's like four years of not making a lot of money and all that money you make going into the band or putting other stuff out, or some kind of music-related expense.” (Participant 2, personal communication, May 26, 2021)

As noted, the record label owners in the New Brunswick music scene were not motivated by money but reported being motivated by releasing music that they “believed in” - often, by bands that did not have a release. Only one label that was started in the 30-year time frame that this research project covers is still in operation today, and that is Don Giovanni Records. Don Giovanni started with a low bar definition of success like all the other labels, but they truly beat the apparent odds and have gone on to function as a successful business from a profit standpoint.

**Texts for information seeking**

The theme “Texts for information seeking” incorporates the subthemes “Simple Machines Mechanic’s Guide” and “Impact of the WWW on local scenes.” These subthemes from the interviews review outside texts, one physical and one virtual, that label owners would utilize for decision making.
The interviews highlighted the role of physical information that was circulated, along with oral information, within the New Brunswick music scene community of practice. As was outlined in the Introduction, the WWW was not introduced to the public until 1991. The proliferation of the WWW took several years. The use of physical items to spread information appears in interviews as clearly important. Two key items for someone starting their own record label, mentioned by 6 of the 14 interviewees, was the previously noted *BYOFL* annual produced by *Maximum Rocknroll* and the *Simple Machines Mechanic’s Guide*, published by Simple Machines Records. *Simple Machines Mechanic’s Guide* was published, in 4 imprints, from 1991 to 1998, with close to 8000 copies produced and distributed (Simple Machines Records, 2007). The guide was only a few pages and put together like a zine was sent out for free if you included return postage with your mailed-in request. The guide contained contact information of companies involved in the production of vinyl records, cassettes, and CDs. Notably, it also offered step-by-step instructions of how to put out your own releases. Four of the interviewees remembered using the guide to produce their releases.

“And at that point, I was already kind of dealing with a lot of the indie buying and talking to people at Simple Machines and things like this, and kind of picking their brains on, ‘So, who do you use for pressing?’ And they actually put out that... I’m gonna forget the name, the actual name of it, but it was that little pamphlet of basically putting your own stuff out.” (Participant 2, personal communication, May 26, 2021)

“I was just trying to think... I was thinking about that as you’re talking. I couldn’t remember if that Simple Machine stuff, so there were a couple of DIY thing, there was a book that had... Like it was a directory of all the radio stations and places to play. Maybe *Maximum Rock and Roll* coming out.” (Participant 1, personal communication, May 19, 2021)
“The more you become a fan of bands that are doing this stuff, the more it becomes like, ‘Oh wait, I could probably do that too,’ and then... Yes, like what you said, once you crack the code and you're like... You find out from this person. ‘Oh yeah, we used...’ You basically ask your friends who put out a record like, ‘Where did you put out, How did you do this?’ Or you find out from somewhere like Simple Machines who put out that thing about how you put out a record...” (Participant 7, personal communication, June, 8, 2021)

Simple Machines Records’ *Simple Machines Mechanic’s Guide* proved to be an invaluable tool for DIY record labels to start up—even if it was on a very small scale. This ties back to Spencer’s DIY work and writing that the guide helped to “explain the whole recoding-making process in simple terms” (2008, p. 304). People could share the guide with friends who were interested in putting out their own release or they could mail Simple Machines Records for their own guides. With the information in the guide, anyone with a little bit of money and a recording could make their dream of a physical release a reality.

*Impact of the WWW on local scenes*

The impact of the WWW on the community of record label owners in the New Brunswick music scene also appears as an important theme within the research. Perhaps the most startling example came after performing most of the interviews and hearing over and again from respondents about the process by which interviewees had personally learned about putting out records from others in the scene who had already gone through the experience. When I asked Participant 11 how she and her band release their first two albums (*Baby Teeth* in 2006 and *What If Someone Is Watching Their T.V.?* in 2007) on their own, she matter-of-factly said:

“A lot of the logistical things that went into all the management type stuff really was in Jarrett’s hands. And he just seemed confident and capable, and also, he just probably Googled ‘CD manufacturing’ [chuckle] or something and found a place in New Jersey where we could pick them up, so we wouldn’t have to pay for
shipping or whatever, found an estimate that was within our price range, and we just did it.” (Participant 11, personal communication, July 13, 2021)

In the early years of the WWW, if a label owner knew enough about technology, they could create relationships through newsgroups and chat rooms with others who might be interested in the same types of music and might further be able to sell through products through these WWW means. In this way, the on-the-ground community networked scene expanded into virtual space. This is what Participant 3 did with his labels. John Allen did the same thing with a label, whereby the WWW enabled him to start specializing in New Zealand-only bands (Participant 3, personal communication, May 26, 2021)

Some of the interviewees who had started labels before the WWW (or before it had proliferated around the world) lamented the ease today of gaining knowledge you might be interested in learning about.

“Nowadays, you would go on Google or YouTube and you would type in, ‘How to start a record label,’ or, ‘How to put out a record.’ But this predated that. We just knew that it was possible just by a real-life human network, and yet none of us really knew how to do it.” (Participant 6, personal communication, June 7, 2021)

“People go on YouTube, people Google things, and YouTube’s owned by Google. So what do you need... What do you do when you gotta change a tire or fix a leak? You Google it. How do I do it? And it takes you right to YouTube.” (Participant 14, personal communication, July 24, 2021)

The diffusion of the WWW is quite clear today but - much like music media products that overlapped each other during their lifecycles, as outlined in the Introduction of this dissertation - the adoption of online expertise and networking by individuals still occurred over time and with uneven adoption. Some of the interviewees embraced the technology, while others were still content utilizing the information available by those in
the community that had previously done what they desired to do. However, some did adopt a hybrid approach, remaining rooted in face-to-face networks and the scene, but also engaging in online fora and information-sharing.

**Concluding summary**

From the 14 interviews with those that started record labels in the New Brunswick music scene between the 1980s and 2000s, 13 subthemes arose, which cluster around the ideas of social practices and social relations. Major themes to emerge include an ideal of and attachment to a specific locality and to ideas of authenticity; the importance of narrowly localized social networks and the appearance of certain hyper-important nodes within the network (people, places, service-providers) as supporters of the scene and as “bridgers” between different parts of the scene; information sharing within the group, with a clear valorization of face-to-face sharing; the importance of face-to-face working, the value placed on music over profit, the commitment to a DIY ethic and the courage to experiment. The music scene was very present within New Brunswick and participation in the scene was reported as being very attainable for all the interviewees, which might be tied to their age, and a lessened sense of responsibility while in college. In some cases, members of the scene even reached out to them and draw them in. All the interviewees also stressed that releasing musical products was not about what could be achieved in the future—like profits—but was very much about the now of releasing music that they felt a passion towards, and thought should be available to others. There is also a dominant theme that emerged which points to the transience of this moment: these activities took place in a key time for these individuals, with a focus on their youth. Most of the events of running a record label in New Brunswick were now looked back at by respondents as a
moment in their youth. Finally, a cross-respondent and important theme that emerged, given this dissertation’s concern with the New Brunswick music scene as a network of resistance to the demise of vinyl, is that the 7-inch record was noted by interviewees as offering the perfect musical format to release in the 1990s due to its price, amount of playing time, and its wide acceptance with the culture of music in general.
Conclusion

This chapter will conclude the research project by first discussing the overarching question of this dissertation, followed by the theoretical and practical implications tied to the research questions, as well as their value and contribution. Finally, this chapter will propose future research opportunities based on key findings of this research project.

Discussion

This research project began with the overarching question: Why would local record labels continue to produce vinyl records while the prevailing trend over several decades had been towards the demise of the format altogether? To better understand the answer to this question we must understand why one would start a local record label in the first place. I posited in the beginning of this project that the local label owners were acting in resistance to the mainstream music system. They were being as Marx said, “small masters”—a hybrid capitalist who not only produces goods through the labor of others, but also uses their own time by joining in with these other labors to increase production (1992). I initially saw the local record label owners as producing a good for resale with the hopes of recouping their initial capital spent and perhaps make a profit to reinvest into producing another release. This idea was not supported by the results of this research. The local record label owners were not consciously acting in resistance to the mainstream music system at all. As noted in the Introduction by Lorde they were not trying to use the master’s tools to dismantle the master’s house (1984). The local record label owners were creating their own community with their passion for releasing music that they believed in. Their actions had nothing to do with the mainstream music system.
This echoes Spencer’s idea that the DIY approach is about total freedom for all involved in the process of producing and distributing music (2008). The labor that these local record label owners performed within their community was more akin to an autonomous “cottage industry” in that they functioned within a community to create their musical media products, but they were not controlled from outside the community to do so. Additionally, these local record labels were not created from a traditional entrepreneurial spirit to create capital. For the most part the local record label owners interviewed did not do what they did for capital—first and foremost was their belief and passion for the music they were releasing. They created their labels more from a spirit of “sympathetic magic” than anything else. By individuals creating imitations of a record label to produce the music they believed in they were conjuring a reality for that music. As Participant 5 succinctly stated, “The 7-inch looks more real than a cassette and a fake label name looks a lot better than no label name (June 7, 2021).”

The above quote also highlights a key finding from this research to the initial question of: “Why produce vinyl records?” I reviewed in the Introduction chapter that within the realm of “vinyl records” there were further choices to be made in size—7-inch, 10-inch, and 12-inch—along with the rotation speed—45 rpm or 33 1/3 rpm—of the vinyl record that dictated the length of music that could be pressed into the vinyl record. From my interviews of the 14 local record label owners, the 7-inch vinyl record was a dominant music medium produced, and especially in the 1990s. There is evidence from this research project to support that small production orders from numerous record labels from active local music scenes were a contributing factor to the support of vinyl record pressing plants. From this research one pressing plant was often recommended and used
within the New Brunswick music scene. The key to maintaining vinyl record sales is to have vinyl record pressing plants stay operating.

Theoretical implications

Where RQ1 is designed to investigate the practices of local record labels producing vinyl records within the New Brunswick local music scene, RQ2 examines the social relations of the local scene with the other embedded entities outside of the scene that make up what Hughes describes as the “seamless web” of music media production (1986). By establishing the first two research questions similarly it allowed the project to tease out the ideas of social practices and social relations within a particular local music scene. The idea of using the lenses of both CoP for social practices and SCOT for social relations allowed me to think of these two areas as separate, though, knowing through the established literature on scenes that these two theories are very similar and often overlapping.

The research on CoP and on music scenes provided a complementary foundation for RQ1. The idea of the New Brunswick local record label owners working to foster a supportive culture of informal social networks that engage in knowledge building based on shared meaning (Hara & Kling, 2002) coupled with Straw’s defining of a scene as “geographically specific spaces for the articulation of multiple musical practices” (2001, p. 249) is the framework for:

**RQ1: What are the social practices through which vinyl records become produced within the New Brunswick local music scene?**

As was expected from the work in CoP and scenes the findings found in the subthemes “Significance of place - New Brunswick, NJ” and “Significance of place –
Rutgers University” were not necessarily new, but the combination of the two subthemes did allude to the idea that the two places worked in tandem to attract one to discover the other. Some label owners came to Rutgers to discover New Brunswick and its music scene, while others wanted to come to New Brunswick to be a part of the music scene and discovered Rutgers. New Brunswick defined the geographical space of the scene, but it was Rutgers that played a role in bringing young adults together within it.

The theme of informal learning was an anticipated one, from the reviewed CoP literature review, but my research has highlighted an unexpected finding—the very young age at which respondents often entered these communities (Hara, 2008; Wenger, 1998).

An important underling questions of this research of those that started a record label in the New Brunswick music scene was: Why start a label in the first place? This will be addressed further in the discussion of RQ3, but as documented in the subtheme “Starting a record label and the significance of community,” none of the 14 interviewees started a record label to make money. They all started their record labels with a passion to release music that they believed in and wanted others to hear. Some of the interviewees knew people within the scene that they could talk to about putting out a release, but several just watched others do it, and they followed the practices they observed.

The discussions around recording turned out to be more nuanced than I had expected. From the interviews, three subthemes emerged around recording: “Impact of recording costs,” “Recording on your own,” and “Chris Pierce and his recording studios.” Since producing a musical release is a two-step process of recording the music and then putting it out on a medium the costs of one can impact the other. Through the interviews I found that to keep costs down record labels recorded as few songs as possible for a
release and they tried to record as cheaply as possible. If feasible, the label owners tried to record for free to eliminate the cost all together. In the Introduction I laid out that with the diffusion of cassette tapes, there was a reduction of cassette tape prices and the introduction of portable 4- and 8-track recording devices musicians could make an initial investment and then record as much as they liked.

From the interviews there also seemed to be a shift in recording practices when a recording studio was opened in New Brunswick in the late-1990s by Chris Pierce. Pierce’s expertise and commitment to the community was reciprocated by being hired to make recordings for release. Pierce still runs a studio in New Brunswick and is a key stakeholder in the New Brunswick music scene. While the scene is a loose network of connections, within that network, there are some nodes that appear as more important or densely connected than others. This could reflect a shift in the diffusion of innovation where the reduction of studio costs, coupled with Pierce’s recording knowledge and skill, moved labels away from home recording (Rogers, 2003).

And finally, the last subtheme to appear from the interviews relating to the social practices through which vinyl records become produced within the New Brunswick local music scene is “The 7-inch vinyl record was the perfect release.” This subtheme will also appear for RQ2, but Lena asserts that what a culture produces affords an intimate insight into the everyday life-practices of members of that culture (2012). Those that started record labels in New Brunswick saw the practices of other labels within the scene and end up recording and releasing the same way as them.

The subthemes that have emerged from this research will help to contributed to the literature of both CoP and scene theory by supporting established beliefs, but also
adding new findings from these subthemes including the social practices of music
production at a local level. This research project is unique to the contribution to CoP
literature because it highlights a non-professional community of makers, but that also sell
what they make.

Where RQ1 focuses on the internal social practices of the New Brunswick music
scene, RQ2 focuses on the external social relations of the New Brunswick music scene.
What is appealing for RQ2 is that SCOT has been applied to several research projects in
the sound studies field, including Trevor Pinch and Frank Trocco’s book, Analog Days,
about the development of the Moog synthesizer and the culture that has emerged around
its invention (Pinch & Trocco, 2002). We will also see that some of the subthemes that
apply to RQ1 also have a reflection on RQ2.

**RQ2: What are the social relations through which vinyl records become
produced within the New Brunswick local music scene?**

The subtheme “Impact of recording costs” that came from the interviews applied
to both RQ1 and RQ2. As reviewed above, before a medium could be produced for
release a sound recording needed to be made. Sometimes these occurred outside of the
New Brunswick music scene and sometimes at great physical effort to defer studio costs.

Studios and their owners are key stakeholders within, and outside, a local music
scene. Often, studio time is the first cost a burgeoning label must face on its path to
putting out a release, so they must be frugal from the start.

The next subtheme, “Simple Machines Mechanic’s Guide,” was a small booklet
produced by Simple Machines Records that contained contact information of companies
involved in the production of vinyl records, cassettes, and CDs, and had step-by-step
instructions of how to put out your own releases. The guide was first introduced in 1991 and was a valuable source of information outside of the New Brunswick music scene before similar information was available via the WWW. Even if the interviewee forgot the name of the guide, they remembered it as an important source of information.

The next subtheme to discuss relating to the social relations through which vinyl records become produced within the New Brunswick local music scene is “United Recording Pressing.” In all the interviews, there was only one record manufacturing facility named, and it was named in six of the 14 interviews. The manufacturing facility named was United Record Pressing in Nashville, TN.

As noted earlier in this Discussion, Lena asserts that what a culture produces affords an intimate insight into the everyday life-practices of members of that culture (2012). The development of a community around the production of mostly 7-inch records was also in line with Cowan’s idea of a “consumption junction” previously reviewed in the Theory chapter (2012). As will be discussed in a later, the subtheme of “United Recording Pressing” and choosing them to produce the local label’s releases supports Cowan’s claim.

I wondered when and how the subtheme, “Impact of the WWW on local scenes,” emerged with the interviews. For the most part, the WWW had little to no impact on the New Brunswick record labels interviewed from the 1990s. (Obviously, the WWW did not have an impact on the labels in the 1980s, since the WWW was not introduced until 1991.) The WWW only appeared once in a response in all the interviews for this research.
As noted, this subtheme was expected, but not of real significance for this research. I did feel it was important to recognize it, though, because in our post-WWW world it is still important to understand that knowledge that is easily procured now was not so readily available. Additionally, a “multidirectional view is essential to any social constructivist account of technology,” meaning that one needs to think past a linear model when thinking of the diffusion of technology (Pinch & Bijker, 2003, p. 227).

The final subtheme to review relating to RQ2 is “The 7-inch vinyl record was the perfect release.” This subtheme is perhaps the most important theme to emerge from the interviews because it relates to several of the other 13 subthemes, supports RQ1, and it relates to both CoP and SCOT. I wanted to include this subtheme with RQ2 because it so closely relates to Cowan’s SCOT work. Cowan elaborates, “I focus on the consumption junction, the place and the time at which the consumer makes choices between competing technologies and try to ascertain how the network may have looked when viewed from the inside out, which elements stood out as being more important, more determinative of choices, than the others, and which paths seemed wise to pursue and which too dangerous to contemplate” (Cowan, 2012, p. 255).

The subthemes that have emerged from this research will help to contribute to the literature of SCOT by supporting established research and by adding new findings to the body of work, especially as it relates to the subtheme “The 7-inch vinyl record was the perfect release.”
Practical implications

RQ3 was based on the proposed model (Figure 4) in the Theory chapter of this research project that illustrated the social relationship tension of music production practices:

**RQ3: What would a model look like that would illustrate the tension between the social relations of the record labels of the New Brunswick local music scene and the mainstream music production practices?**

Simply put, the findings of this research project did not support that there was any tension between the New Brunswick local music scene and the mainstream music production practices. This was surprising based on my knowledge of the New Brunswick music scene along with the literature reviewed for this project. I proposed in the Introduction that there is a tension and dialectic between the mainstream music system and the local music scene: the DIY ethic of the local music scene eschews the culture of the mainstream music system in the form of resistance, a form of political action, (Millar, 2018) while the mainstream music system searches for emerging musical trends to commodify in the form of subsumption of these ideas from the local music scene. It is widely supported that mainstream culture practices involves subsuming ideas of the non-mainstream culture to commodify them. Therefore the mainstream culture producers create capital from the affective labor of those outside of their system—for the purposes of this research, the DIY musical community (Duncombe, 1997; Hebdige, 1979; Spencer, 2008). However, instead of the New Brunswick local record company owners acting in resistance to mainstream culture, as proposed in the model, it seemed that they did not
recognize it at all. Instead of “resistance” the label owners seemed to be exercising a silent anarchy to capitalism as shown in the subtheme of “No dreams of money.”

I had also proposed in the model that consumers played a key role in support of purchasing mainstream music products, local music products, or both. Again, per the subtheme of “Opposition to major record labels and identity” the label owners were not motivated by making profits. The label owners were more focused on the music they believed in, and they just wanted to make a product of that music for others to be able to purchase. They were not significantly interested in how many units of a release were purchased.

And finally, all the label owners that were interviewed for this research have shuttered their labels, except for one. And as supported in the subtheme “Most labels lost money,” again, profits were never achieved.

The one outlier to the absence of a capitalistic success is Don Giovanni Records. The label was started in 2003 and has released over 222 records, CDs, cassettes, and books. Don Giovanni Records has grown from a DIY label that focused on local music of New Brunswick into an internationally recognized label that specializes in a wide variety of artists and release formats. I purposefully spent over three hours interviewing a co-founder of Don Giovanni Records because I knew they were an outlier for this research project and the co-founder was happy to talk to me for the extended sessions because they were reflecting on how to celebrate the upcoming 20\textsuperscript{th} anniversary of the label. The success of Don Giovanni Records reflects the other label owners’ desire to put out music that they feel needs to be heard over making profits.
After conducting the interviews for this research project, the results did not support the proposed model (Figure 4) relating to the local music scene and its resistance to the mainstream music system. As outlined above, the local music scene functions autonomously from the mainstream music system and the record label within the community releases the music they believe in. I have updated the model to reflect these findings (Figure 5). Additionally, I have moved the practices of the record label into the local music scene space because the predominant function of the record label is to serve the needs of the community—for both musicians and fans of music. I have also disentangled the consumers from both the local music scene and the mainstream music system with the attachment to the latter. This illustrates the function that the mainstream music system is in a symbiotic relationship, though arguably, it serves the needs of the mainstream music system more, because it could not function without consumers. This updated model can now be applied to future research relating to local music scenes.
Future research opportunities

I see three intriguing future research opportunities from this research project, with all three of these opportunities concentrating in the 1990s.

The first research opportunity could be further work like that conducted here but focusing on interviewing all the labels from the 1990s in New Brunswick. As outlined in the Introduction, vinyl record sales had hit their lowest sales mark in 1992 after beginning to decline in the late 1970s with the introduction of the cassette tape. The decline continued with the introduction of the CD, and it seemed that the vinyl record should have ceased production all together in the mid-1990s as theorized by the diffusion of innovation model (Rogers, 2003). Going into this research it was also clear that the concentration of local record labels in New Brunswick was also correlating with the resistance to the demise of the vinyl record in the 1990s. After reviewing the data gathered from the first seven interviews per the proposed Methodology for this research, I felt it was necessary to modify the purposive sampling to include more labels from the 1990s. Continuing this research by interviewing more, if not all, of the New Brunswick record labels from the 1990s could help to understand whether the correlation of the quantity of labels was a key factor in the causation of the resistance of the demise of the vinyl record.

A second future research opportunity drawn from this research project could be further work examining the practices of recording music in a local music scene. Looking at the subthemes of “Impact of recording costs,” “Recording on your own,” and “Chris Pierce and his recording studios” there seems to be a shift from home recording to a local studio. This shift is also occurring with the introduction of the WWW tying to the
subtheme of “Impact of the WWW on local scenes.” Additionally, could there be a movement of musicians “recording in the basement” shifting to musicians “recording in the bedroom” as computer technology scaled up in performance power and down in size and price (Morris, 2015; Sterne, 2012; Wikström, 2009)?

Finally, the third future research opportunity, and perhaps the most important, is pursuing further the idea that the 7-inch vinyl record played a key factor in the resistance to the demise of the vinyl record. From the indications of the subtheme “The 7-inch vinyl record was the perfect release” this medium was important for several reasons reviewed in detail in the Results chapter. Additionally, this research could involve the vinyl record pressing plants themselves as noted in the subtheme “United Recording Pressing.” All 14 local label owners interviewed released 7-inch records over a 30-year period. Focusing on DIY record labels from the 1990s on a national scale and learning about their production habits relating to the 7-inch record could be important to CoP, SCOT, and scene theory.

Conclusion

In this dissertation I have shown how record labels within the New Brunswick music scene were a community of practice through the 1980s, 1990s, and the 2000s. This network of local music record labels kept producing 7-inch vinyl records overtime while the vinyl record industry nearly reached its demise in the mid-1990s. The findings of this dissertation highlight that while not a reaction of resistance to the mainstream music industry they did resist the trend by the mainstream music industry to not produce vinyl records. The local record labels of the New Brunswick music chose to produce the music medium that was best for their financial and technical needs reflecting their social
construction of technology and as a result contributed to the operation of vinyl record pressing plants. The passion that the local record company owners had for music that they felt should be in the local marketplace far exceeded their desire for capital and as a result has helped make the vinyl record an increasing physical medium product in the music marketplace that is now dominated by streaming.
References

1973 Bruce Springsteen postcard


Coyne, K. (2017, Spring). “It’s only rock’n’roll (but he likes it).” *Rutgers Magazine.* https://magazine.rutgers.edu/features/its-only-rock-n-roll


https://music.si.edu/story/smithsonian-collections-object-sony-tps-l2-%E2%80%9Cwalkman%E2%80%9D-cassette-player-national-museum-american


Rusko live. (2013). In YouTube. Retrieved from http://www.youtube.com/results?search_query=rusko+live&oq=rusko+live&gs_l=youtube.3..0l10.35218.37025.0.37671.10.9.0.1.1.0.247.1056.6j1j2.9.0...0.0...1ac.1.11.youtube.lyZpHFhLDPs


Appendices

“Appendix A”

1. What has been your involvement in the New Brunswick music scene?
2. In what ways do/did you interact with others in the New Brunswick music scene?
3. Why did you start a record label?
4. How did you start your record label?
5. How did you measure success?
6. How did you distribute your releases?
7. How did you promote your releases?
8. Did you have contracts and or lawyers? With bands? With others?
9. Did you think of your label as a business?
10. Did you make any money?
11. What made the New Brunswick music scene good, bad, and/or different when you were running a label?
12. What are/were your thoughts about vinyl records as you were running your label?
13. Why did you stop running your label?

“Appendix B”

Participant 1, personal communication, May 19, 2021
Participant 2, personal communication, May 26, 2021
Participant 3, personal communication, May 26, 2021
Participant 4, personal communication, June 6, 2021
Participant 5, personal communication, June 7, 2021
Participant 6, personal communication, June 7, 2021
Participant 7, personal communication, June 8, 2021
Participant 8, personal communication, June 13, 2021
Participant 9, personal communication, July 5, 2021
Participant 10, personal communication, July 12, 2021
Participant 11, personal communication, July 13, 2021
Participant 12, personal communication, July 14, 2021
Participant 13, personal communication, July 19, 2021
Participant 13, personal communication, July 20, 2021
Participant 13, personal communication, July 21, 2021
Participant 14, personal communication, July 24, 2021