

**THE FOLK DEVIL GOES DIGITAL: TAPING AND TRADING LIVE MUSIC
IN THE DIGITAL AGE**

by

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ABSTRACT

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The Folk Devil Goes Digital: Taping and Trading Live Music in the Digital Age

Thesis directed by Assistant Research Professor Lynn Schofield-Clark

At the cusp of the 21st century, the exchange of digital music on the Internet brings forth interesting discussions. Reviewing data gathered from in-depth interviews with concert tapers and tape-traders, this thesis explores both the historical roots of concert taping and trading, and the present condition of digital music trading on the Internet. This study asks questions about the technological and the legal advances regarding music trading, and speculates whether or not those advances might signal the death knell of the amateur taping community, a vibrant subculture that long existed outside, but not opposed to, the music industry. Tapers, who envision themselves as cultural archivists and taste arbiters for the live music community, comment on the nature of the music collector in the digital age, and in doing so, add to the discussion of technology in an ever-shifting world of media and cultural studies.

“Computers, connected together, [have] the capacity to create an environment which human beings [can] and [do] inhabit...The people who share this awareness are natives of the future. People who have a hard time with it maybe always be immigrants.”

—John Perry Barlow, co-founder of the Electronic Frontier Foundation and
Grateful Dead lyricist

"...within days [of a performance] you've got tapes of these new songs all over the country, which is exactly what we'd want. That way, when we go out on this national tour, people are going to have heard of the new songs, and even heard tapes of the new songs, before we get to the different towns. For instance a woman called me [to say] ... she set up a tape tree, which is basically a way to get about 500 cassettes using only three generations of tapes. Each person makes about three tapes, and after three generations, you've got 500 tapes, or something."

—Trey Anastasio of Phish, St. Louis Post-Dispatch, 3/25/92

“We used to have a saying in our house that if there’s a fire, save the cats and the Dead tapes because that’s the most important stuff.”

—Jack Springer, long-time Grateful Dead taper

TABLE OF CONTENTS

CHAPTER

I.	INTRODUCTION.....	1
II.	OVERVIEW.....	3
III.	PLANTING THE SEEDS.....	6
IV.	BRANCHING OUT.....	11
V.	TAKING ROOT.....	33
VI.	DESIGN AND METHODS.....	41
VII.	FINDINGS.....	45
VIII.	DISCUSSION OF FINDINGS.....	68
IX.	CONCLUSION.....	80
	BIBLIOGRAPHY.....	85
	APPENDIX.....	88

CHAPTER I

INTRODUCTION

This thesis explores a subculture of musical fans who tape concerts and collect live concert recordings, and who create a community around live music. As a subculture, the taping community is directly responsible for the word-of-mouth advertising for the bands they tape. Tapers also play an important role as archivists within the genre known as “jambands,” a genre that thrives on extended, improvisational live performances.

The practice of taping produces specific cultural artifacts—taped copies of live concerts. In turn, these cassette tapes, and their circulation, produce and articulate a culture of fandom. Guiding this study is an inquiry into the material cultural artifact of the traded tapes, and how these tapes relate to the performance event of a concert. With digital technologies, the material goals of this fan culture undergo a shift from direct fan-to-fan interactions to fan-to-computer-to-fan arrangements. It is a slight, but effectual change.

In the tape-trading community surrounding live music, fans play a role in the maintenance of a larger live music culture. Through their fan practices, which have

their own specific set of codes, rules, and assumptions, tapers have been identified as a social group within their community, with a section of their own for tapers-only at shows. In a related way, tapers are an intrinsic part of the success of the jamband scene because of the online world they inhabit and use to distribute taped live concerts in high quality digital formats. Tapers are the primary technology users in the music-seeing audience, and by telling their stories, this thesis sets out to explore how fan cultures consume music in the digital age.

CHAPTER II

OVERVIEW: ORGANIZATION OF STUDY

To set the context of music trading methods of today, I will discuss some of the specific technologies involved, along with the recording methods and formats used over the years. As is true for many who study and write about contemporary culture, I find my topic evolving on a daily basis, and it raises many avenues of inquiry. For this paper, the specific moment of concern is the last half-decade when digital music trading started its challenge to the music industry. The highlight of this challenge came in the Napster years, beginning in 1999. Yet, as this thesis will detail, long before there was downloading, dedicated music fans traded tapes through the postal service. Now, bands with an understanding of, and relationship with, technology have embraced the potential of file sharing and seek to make a profit, as evidenced in the winter of 2002 when Phish began their new “LivePhish”¹ download service, making concerts available for purchase the day after the show.² This is a

¹“Live Phish Downloads Launches,” Phish: News, *Phish.com*.“ 20 December 2002, <<http://phish.com/news/index.php?year=2002#story21>> (Accessed Oct. 5, 2003).

² Upon its debut, visitors to LivePhish.com were able to download a free MP3 file of the band's final show before hiatus, an October 7, 2000, performance at the Shoreline Amphitheater in Mountain View, California. Other shows cost either \$10 or \$13, depending on the type of file purchased. All of the recordings, which are two to three hours, are high quality and unedited. The source of the recording came from the soundboard with the full cooperation and approval of Phish. The downloaded shows come with printable booklets; there are also inlay trays and labels for those who elect to burn the files to CD. None of the downloaded files are protected by digital rights management

prime example of a band that thrives on ticket sales, and therefore, recognizes the value of their “live intellectual properties.” As a response, some in the music industry are following suit and offering up archival concerts for sale online because it is becoming cheaper to offer them in digital format.³

The central question I had for the tapers was whether or not technological and legal advances concerning music trading signaled the death knell of the amateur taping community, a vibrant subculture that long existed outside, but not opposed to, the music industry. To frame the legal concerns of music trading, I will provide a section on the legal precedents that evolved as technology has evolved. Since I can only give cursory treatment of the intersection of music trading, legislation of communication technologies and copyright law, I will highlight the main legal cases applying to taping and trading and mention how the taping community responded over time.

To organize, I will start with how this project evolved over the years through my own involvement in tape trading, followed by a short history of the social and cultural branches that constitute the taping-trading community. Then I will discuss how this topic fits into the study of media and culture. Moving on to the research of this project, I will describe the data-gathering methods I employed while collecting

technology. The Web site merely requests that the material not be pirated, stating: "Live Phish Downloads relies on an honor system, and we ask that you do not abuse the unrestricted nature of these files. If you would like to see this type of delivery of shows continue and flourish, please respect our taping policy and don't abuse the system." A lofty goal, but so far LivePhish has made millions on this service in the first year alone. See 8.11.03 AP story “Phish rakes in big profits from concert downloading.”

<<http://theedge.bostonherald.com/musicNews/edgeMusic.bg?articleid=51&format=>> (Accessed Sept. 12, 2003).

³ Bob Tedeschi, *New York Times On the Web*, “Music at Your Fingertips, and a Battle Among Sellers,” 1 December 2003, <<http://www.nytimes.com/2003/12/01/technology/01ecom.html>> (Accessed Dec. 1, 2003).

the interviews with tapers. As central actors in their culture, tapers provide insight into the communal and ritual nature of their practice, and in doing so they add to the ongoing discussion of technological and cultural shifts in music and culture. In the narrative portion of the paper, they explain their role as cultural archivist and taste arbiter for the live music community. Lastly, I will highlight what I learned in the research process, and how my inquiry developed throughout the project.

CHAPTER III

PLANTING SEEDS—THE INITIAL CURIOSITY

I can trace the conception of this project back to the moment when I received my first Phish “bootleg” in the fall of 1995 from a friend. Since Phish was not on the radio in Chicago at the time, the nature of the music and culture of Phish was word-of-mouth, and it was in this fashion that my fandom began. From the first moment that I received unpaid for music, I knew that I was acting in a larger context, one that I did not yet understand. If there are crystal-clear moments in a person’s life, receiving my first tape was one of those. Moreover, I knew I had a taper to thank—this music came to me through another fan. I felt a connection, on some level, to the person who captured this performance art. I knew that in my hands was something more than just music or a piece of plastic. There was a culture within this transaction, this practice, and this product. The three elements together meant that I could listen to music in my home, free from the concert, but still fully able to reconnect with that moment of creation. This also meant that I had one person, sometimes a few people, to thank for that ability. In essence, this essay serves as homage to a group of individuals who, over the years, have distributed millions of hours of music to thousands of people.

In an effort to learn more about Phish and live music, I went to the Internet, which was still in its nascent days as a music-distribution and person-finding device—no Napster and no Google. In fact, it was only in 1994 that Netscape was taking over as the first established browser.⁴ In my searches, I found my way to the Phish.net, a community-maintained news, discussion, and set list webpage devoted solely to documenting all things Phish.

The key was to find taper websites and sign up to tape trees in order to not only copy tapes for yourself, but for other people. As the opening quote from Phish guitarist Trey Anastasio demonstrates, groups that played live realized that free publicity was in the best interests of the band, and early in their career, Phish adopted an open-taping policy.

The place where I most intimately experienced my fandom, outside of the show and offline, was at a place called “The Parking Lot,” which was a store in Evanston, IL, that had four analog decks for dubbing tapes. The Parking Lot was a gift shop that doubled as taper central, if there was such a thing in Chicago area at the time. In the back of the store was a shelf with a row of the books holding the Holy Grails of the Grateful Dead and Phish tape collector, *Deadbase*⁵ and *The Pharmer's Almanac*⁶, along with three-ring binders with set lists of various other bands who toured heavily. Behind the shelf was a door to a room that housed hundreds upon

⁴ Lee Rainie and John Horrigan, “A Decade of Adoption: How the Internet Has Woven Itself Into American Life,” *Pew Internet and American Life Study*, January 25, 2005, <http://207.21.232.103/PPF/r/148/report_display.asp> (Accessed March 17, 2005). |

⁵ John W. Scott, Stu Nixon, and Mike Dolgushkin, *Deadbase Ten: The Complete Guide to Grateful Dead Songlists*. (San Francisco, CA: Deadbase Publishers, 1997).

⁶ Kevin Cassels and Richard Northrup, *The Pharmer's Almanac*. (Atlanta, GA; Pharmer's Almanac Publishing, 1996).

hundreds of hours of live music—most of it recorded by the resident taper and staff member at the store. There was a lot of music, with the majority of shows from local venues, but I was there to dub Phish, and as much of it as I could. I would sign out two decks for four hours--that would give me close to two shows for that afternoon. If I was lucky, someone would cancel on his or her appointment, and I would have four decks furiously spinning Maxell XL-IIIS tapes (one of the thickest density analog tapes possible to preserve pristine sonic condition after multiple plays). By the decks, there was a small couch where I would sit and flip through set lists, looking for the highest quality rare show possible. I found some gems. Phish tapes were from a range of years and venues across America, much more than other groups, but much less than the Grateful Dead, whose fans had been preserving the concert experience since the early seventies. I was in a glut of music. After I had dubbed the tapes, they would travel with me everywhere, whether it was in my car or in my Walkman.

The most efficient method of acquiring tapes was through the mail as a part of tape trees. The purpose of the Tape Tree was to distribute copies of a tape of live Phish (*not* copies of Phish's commercial releases) hierarchically, using the best recording device available. All of this was an effort to get tapes to more people with fewer generations and less wear on tape heads as generation loss is the least desirable aspect of analog trading. Making copies of copies only further distances the recording from the original source. In some ways, this project addresses a generation that is becoming lost, as digital transfer takes over for this now anachronistic method. New fans will not have experienced the analog medium, which had a physical nature that required interaction and communication between people.

The person administering a tree, one person administering the tree made copies for five people. Each of the five then made copies for five people, etcetera. Running a tree involved time: not only the time it took to create the tree and initiate the taping and distribution process, but also to make tapes for the branches or settle any problems with other traders. As a testament to the community nature of trading, everyone on the tree was responsible for his section, and was at some point be asked to help out with late comers and with people who were not doing their part. In all, “Operation Everyshow”⁷ was an impressive effort to tree every Phish show ever taped. Thousands of tapes have been distributed this way. As the quote from Trey Anastasio that begins the paper demonstrates, both the band and the fans saw this as a vital source of community and continuation of the subcultural affiliations of the Phish scene.

Background aside, this cassette culture engendered in me a sense of participation and community, especially when I would arrive home and at my door would be three packages of ten to fifteen tapes of Phish shows. Each show was two tapes, although longer shows took up three tapes. That was three to four hours of music, whereas a studio release would cost thirteen to seventeen dollars apiece, totaling sixty to seventy dollars, depending on how many discs you would buy. For me, it was not a cost issue, since I often bought studio music. Rather, it was the possibility of accumulating tapes and participating in the community that was the main concern.

⁷ Operation Everyshow was another fan project whereby they goal was for *every* Phish show or tour to find circulation. No small feat considering Phish played university cafeterias in the early 1980s, without tapers documenting the experience. This project was effective in the late 1990s as Phish toured heavily and fan taping practices had reached salience.

By late 1995, there were hundreds of hours of Phish available for trading, along with the shows of countless other groups. When June of 1997 started, less than twenty months after I had first heard of Phish, I reached the 100 tapes of live Phish. Although I paid for blank media, postal fees and storage racks, my tape collection did not take much money, and certainly cost less than buying the same amount in studio-produced music.

Now, in the 21st century, music distribution has shifted to cyberspace, and the material expressions of a vibrant subculture are now visible in online forums and music-tracking applications on personal computers. I would now like to discuss how my early interest in collecting live music turned into a research interest.

CHAPTER IV

TENDING THE SEEDS —FROM CURIOSITY TO SPECULATION

Once my early interest progressed, I realized that there was more at stake in an activity like tape trading. As I came to make a distinction, a hobby of this affection fits into theories of collecting, notions of the mechanical reproduction of works of art (in this case a live concert), and concepts of cultural activity. There is the tension with the material world and the suspension of time when at an artistic performance, and as such, the live show creates a moment of authentic interaction that tapers feverishly seek to capture. Within the study of popular music, authenticity is a major area of research. So central is authenticity that Sarah Thorton considers the notion of authenticity to be “arguably the most important value ascribed to popular music.”⁸

In the taping example, the “liveness” of the concert setting is the location of authenticity that tapers hope to extend. Tapers choose to capture and to share that experience by using high quality recording and transfer systems to represent what happened in the live moment in that time. For many fans, to deny the right-to-tape would thus strip a group of their authenticity because tapers would no longer be available to tape and to preserve the product of the group. Many bands now tape their

⁸ Sarah Thorton, *Club Cultures: Music, Median, and Subcultural Capital*. (Hanover, NH: University of New England, 1996), 28.

own shows in order to sell them, yet many still allow audience taping as recognition of their fans. Thus, taping can cause authenticity to rest in multiple locations—the live show, the copy of the live show and the ability to tape the live show. Since authenticity is a slippery slope to traverse, this study only formulates concepts for a new examination of how fan interactions change with the consumption of the live music experience, as opposed to studio music.

The Rock Ideology: the emergence of the live performance

“The thing about live music is it’s just so real. It’s in the moment. It’s human.”

-Jon Fishman, drummer of Phish⁹

Guiding the question of fan interest is the construct of a “rock ideology,” wherein “liveness” plays a central role.¹⁰ My notion of the primary aesthetic “text” in rock differs from the descriptions found in most rock literature, notably the work of Theodore Gracyk in *Rhythm and Noise*. In *Rhythm and Noise*, Gracyk argues that rock is primarily a recorded medium, and that the studio album is the definitive performance.¹¹ In the 1960s and 1970s, this was certainly the case. The Beatles

⁹ Richard Gehr and Phish, *The Phish Book* (New York: Peripheral Books, 1998), 19.

¹⁰ I first came across the musicological construct of “liveness” in David Rowe’s *Popular Cultures: Rock Music, Sport and the Politics of Pleasure*. (Oxford, UK: Sage, 1995). Essentially, the rock ideology—another term I first found here—relies, in part, on the live show and the ability of the performer to reach fans directly and authenticate the performer/fan relationship.

¹¹Theodore Gracyk, *Rhythm and Noise: An Aesthetics of Rock*. (Durham, NC: Duke University Press, 1996).

stopped touring and released *St. Pepper's Lonely Hearts Club Band*, a seminal text in music history. Following that example, the goal became the definitive studio album, as it imprinted an artist's vision and addressed the audience of one. Over the years, touring groups would influence fans to travel to multiple shows, in the process shifting the focus from the studio album to the performance at the live show. Most influential were the Grateful Dead and their nearly thirty-year stretch of concerts that brought fans from coast to coast. The proliferation of Dead tapes allowed for trading and consumption of non-studio texts and today, fans trade still live concerts liberally, without regard to studio texts.

The philosophy of The Grateful Dead and Phish proposes an alternative model to the prevailing music industry standards for career building and career maintenance. As the open quote from Trey Anastasio demonstrates, the goal of Phish was to play as many shows as possible and allow fans to tape and to distribute those tapes. Early in their careers, neither The Dead nor Phish had a "record consciousness," because their goal was to interact with fans. The fact they had limited budgets for studio time is another factor. It was a directly proportional relationship—more shows will equal more tapes, which means potentially more fans. Since there is no exchange of money for the tapes, no one is benefiting from their exchange. The social and historical milieu of The Grateful Dead and Phish were right for these analog efforts, and although other bands continue this tradition today, it remains speculative if the financial payouts will parallel the Phish example. We are past the analog age and the Internet facilitates many musical projects, making it interesting to see if a group can capture a mass appeal like The Grateful Dead or Phish.

As I said above, my notion of the rock text differs from prevailing scholarship. For the purposes of this study, the “liveness” of the live performance will be the starting point for the discussion of the authentic experience that occurs during the band/fan interaction. The point being made is that the live performance is where the artist demonstrates their ability to create their music in a live setting “without a net,” to use a popular phrase for live performances. This means that the live performance affords the potential for error, surprise, or the real moment where a crack in the façade of the performer allows you a slight view into the humanity of the artist. The frozen moments of the studio performance do not provide that glimpse. Because of the many shows played, the socio-cultural music community of jambands fit into the rock ideology. Part of this ideology, as noted, is the live experience, replete with the big lights, the big sounds, and the big shows. Tapes do not replicate those performances, but they provide a residue of experience for the fan to consume. Indeed, many fans will never see a Grateful Dead concert, but they can try to locate what The Dead sounded like in 1977. Yet, as theories, these notions do not explain how a simple analog cassette inculcated so many experiences as a music fan. To get closer to how theory fits in, I will look at the origins of taping and then bring in the social history that surrounds home recording.

The Technology and Social History of Music Trading

The capturing of live music rests outside standard industry practices of music making, and the taper, as a social being, is a fulcrum to the live music

community—both at the concert and online in cyberspace. By their “work” at shows, tapers further an historical, ideological movement started in the 1960s. Although in most cases tapers are taping shows by groups that have open taping policies, some casual, uninitiated fans would say they are “pirates” in one definition, or “bootleggers” in another. Yet, the majority of tapers are neither; the recordings they make are encouraged, in some cases offered¹², by the groups they see. If the musical groups themselves see tapers as vital to their success, this leads me to believe that tapers play an important and under-examined role in live music fan cultures. As a whole, contemporary live music cultures, specifically those bands grouped under the “jamband” rubric, provide many potential topics of sociological and cultural analysis, just like Grateful Dead culture. Later in the paper, I will discuss how Grateful Dead culture became an academic area of study, and how this culture established many contemporary standards and rules for taping and trading.

Bootlegging and Tape Trading: Unpacking a Tape Collection

To understand current trends in digital technology, there must be an understanding of the structural arrangements that surround tape-trading culture, including the history of the medium of the cassette tape cartridge itself. The romantic notions of the music “pirate” is as pervasive as the ubiquitous Robin Hood taking from the rich to give to the poor. The concept of an illicit and non-commercial musical work reshapes the nature of music exchange, and it is important to

¹² In the early 1990s, Phish gave soundboard copies of shows to their fans, thus authorizing the highest quality tape for trading.

understand the distinction between a “bootleg,” a moniker from history and Prohibition time applied to cassette tapes, and sanctioned live tape.

In his discussion of the bootleg and the music industry, Lee Marshall offers a lucid distinction between taping and bootlegging.¹³ His work frames tape trading as a practice that legitimizes artists and re-legitimizes the mainstream music industry. He discusses how the historical movements of Romanticism shape the “artist as author” and give us a conceptualization of the “Bohemian” ideology at work within rock ideology. In rock, authorship has many layers, and in this example, the authenticity is most located in the live performance. For the purposes of my research, I am expanding on an area where Marshall mentions that need to study those who tape concerts legally, and how their practices reinforce cultures on the fringe of the music industry.¹⁴ In doing so, I conceptualized this project with those areas in mind. To ground the history, now I follow the chronology and development of the physical medium of recording: the cassette.

Developed in the 1930s, recording cartridges were not included in tape recorders until the late 1950s. They were, however, a better option than the wire recorders of the day, which were hard to thread. Various technology companies conducted research on the medium, but in 1958 that RCA developed a tape cartridge that would be a precursor to the 8-track. This tape would play for 32 minutes and sell at a price comparable to a record.¹⁵ This format did not last, and it was not until 1963

¹³ Lee Marshall. *Bootlegging: Romanticism and Copyright in the Music Industry*. (Forthcoming, Oxford, UK: Sage Publications), 181-182.

¹⁴ Lee Marshall, “For and Against the Record Industry: An Introduction to Bootleg Collectors and Tape Traders,” *Popular Music* 22 no.1 (2002): 57-72.

that the Phillips Company would introduce the cassette tape, a format that provided portability and ease of use—most importantly, use in the car. In 1969, Dolby introduced their noise reduction system, reducing tape hiss and improving dynamic range. By 1970, a few short years after its introduction, the cassette player outsold open-reel and cartridge recorders by two million units.¹⁶ The recording industry then reacted by asking for a change in copyright laws because of the new nature of reproducibility. The next step would be digital recording, which as a culture traces its roots to 1900s and Samuel Morse’s telegraph patent.¹⁷ To note, in the 1920s, the Bell Telephone Laboratories developed the process of digitization to overcome “the limitations of analog recording,” although it would be decades before digital recording became the *de facto* technology for taping concerts.

It was not until the late 1970s that microprocessors were ubiquitous and inexpensive enough for consumers to access digital recordings. Before that, tapers used analog cassettes, or open-reel recordings, which were bulky and harder to supply with power—two key components when it comes to concert taping. The standardization of digital tape recording was the main ingredient for concert tapers, and this technology gave an enhanced version of the time and space of the musical event—with higher quality preservation of the collective memory of the concert.

As a grassroots music-distribution method, tape-trading culture has its roots in the countercultural movement of the 1960s. In *Bootleg*¹⁸, Bob Dylan scholar Clinton

¹⁵ Simon Frith, *Sound Effects: Youth, Leisure, and the Politics of Rock'n'Roll*. (New York: Pantheon Books, 1981), 35.

¹⁶ Frith, 37.

¹⁷ *Ibid.*, 38.

Heylin centers on 1969 and the history surrounding the first “official” rock bootleg, Dylan’s *Great White Wonder*. Without the authorization of the artist, the release of a collector’s compilation of unreleased, demo studio music created a new genre of musical release—the “bootleg.” The argument made is that bootlegs have helped the music industry, and in the process helped preserve traces of culture that might be lost to the machinations of the corporate, industrial music business. The most important statement Heylin makes concerning rock is that “rock music is live music, and record companies do not like live music.”¹⁹ Bootlegging conflicts with the entire structure employed by the record companies, though the group that values the live product often finds an audience for sanctioned taping. In the case of concert taping the producer-manufacturer relationship **shifts**, creating, in effect, a new form of the work of art. Tapers have a status of power in their community because they hold the power to tape or not tape. The dialogue of tapers set the tone for many other fan discussions since tapers evaluate shows for the quality of the musicianship as well as the quality of the taping itself.²⁰

Heylin provides a context for this sixties taping by providing examples from opera taping and jazz taping, including the story of Dean Benedetti, a saxophone player in Charlie Parker’s band who quit playing to follow Parker and tape just Parker’s solos from a show.²¹ In some ways, Benedetti is a link to Allen Lomax and

¹⁸ Clinton Heylin, *Bootleg: The Secret History of the Other Recording Industry*, (New York: St. Martin’s Griffin, 1994).

¹⁹ Heylin, 412.

²⁰ There is the case of Phish, who returned from a two-year hiatus to rave reviews from their fan base, only to find criticism a year later—criticism that started in the taping and trading community, and which is seen to have been central in the band’s decision to retire for good.

the early field recorders who lugged hundreds of pounds of gear around the country trying to preserve a musical and cultural legacy. Thought lost, Benedetti's recordings became part of the Parker legend, with rumors circulating that they had been destroyed. Recently, these recordings showed up in Italy and were transferred to compact disc from a variety of media used by Benedetti. Recording just the solos was due in part to the limitations of the technology available for portable recording, and because Parker never played the same thing twice, not unlike the style of music from jambands who vary shows and sets from night to night. Benedetti would cut acetates on 78's in the clubs, and progressed to paper-based tape later. At the time of their recovery, all were in a terrible state.²² Finally, when released they totaled seven compact discs in length. The sound quality is reported to be poor and the box set only of interest to Parkerites, but the fact that recordings of this nature occurred at all is a statement of the regard with which fans held Parker.

This practice of taping continued through to the time of Bob Dylan and the Grateful Dead. While Dylan had mixed feelings about bootlegs and about live taping, the Dead continued to allow their fans to collect and circulate their concerts. Without as much time spent in the studio, compared to time on the road, the Dead did not find the practice as intrusive. The majority of fan tape trading came in the form of bootlegs and illicit copies of studio recordings. Live taping would come into popularity as the seventies progressed and technology became more portable and more adaptable.

²¹ Lewis Macadams, *Birth of the Cool: Beat, Bebop, and the American Avant-Garde*, (New York: The Free Press, 2001), p.58.

²² Macadams, 59.

In fact, by 1984 the Dead acknowledged that they had a community of people dedicated to documenting their shows by creating a taping section at shows. Coupled with that, the band released tickets for a dedicated a section for taping. This major step codified a subculture within the culture of live rock music, as now tapers had a defined space, legitimizing what was once an illicit practice.

Subcultural Connections

Live music trading on the Internet conflates two subcultures: the “hacker” movement and the “hippie” movement. These two movements trade information, but in vastly different ways. Hackers founded the Open Source movement, while the Grateful Dead helped further tape-trading culture with their open taping policy. My research interests led to inquire into the rise of digital music sharing, and how the lines blurred when addressing music on the Internet. Using the precedent of the Grateful Dead and bringing the historical arc to the digital era, I found that recent events demonstrate the need to look closer at the characters involved.

John Perry Barlow, lyricist for the Grateful Dead, is active in music and technology issues, commenting on the taping community in popular press and in the halls of legislature. A group he helped found, the Electronic Frontier Foundation (EFF),²³ seeks to influence technology policy and restrictions in cyberspace. The EFF lobbies for a variety of issues, be it source disclosure for online journalists, copyright infringement lawsuits against consumers, or intellectual copyright protection. Some

²³ Electronic Frontier Foundation. <<http://www.eff.org/>>The mission statement banner reads: The Electronic Frontier Foundation - Defending Freedom in the Digital World.

might think it ironic that Barlow, a member of the flower child generation, would end up in a testimony in front of Congress. Nevertheless, there he was in 1993, sending a message of caution to the music industry and those who would not adapt and implement new technology. His claim is that technophobes would always be “immigrants” of the future world,” a new world where music distribution would be digital, with subscription services and file sharing encroaching on terrestrial radio and album sales.²⁴ Barlow’s involvement in two major countercultural movements—the hippie movement and the open source movement—makes him an interesting case study, in and of himself. He acts as a historical link from tape trading cultures to file sharing cultures.

Another important character is Sean Fanning, the creator of Napster, whose story is instrumental to the digital music trading debate. I will bring in his story when I comment on the rise of Napster. Now, in order to bring trading to the present day, I will discuss how current technologies play a role in distribution.

Technologies at Work—Systems and Functions

What is MP3?

MP3 is the most well known form of digital audio. Jonathan Sterne argues in “The MP3 as Cultural Artifact” that the MP3 lies at the center of important debates around intellectual property and file sharing, but that it is also a cultural artifact in its

²⁴ Barlow references from Thomas Streeter, “Romanticism in Business Culture: the Internet, the 1990s, and the Origins of Irrational Exuberance,” in Andrew Calabrese and Colin Sparks, eds., *Toward a Political Economy of Culture: Capitalism and Communication in the Twenty-First Century*. (Oxford, UK: Rowan & Littlefield Publishers, 2004), 286-306.

own right. His essay examines the design of the MP3 from both industrial and psychoacoustic perspectives to better explain why MP3's are so easy to exchange, and the "auditory dimensions of that process of exchange." As a carrier of recorded sound, the MP3 shows that the quality of 'portability' is central to the history of sound and the evolution of technology.²⁵ The name 'MP' stands for "MPEG," from the Motion Picture Experts Group standards for compressing and storing digital audio and video. The "3" in the name stands for MPEG Audio Layer 3, the physical part of the MPEG that stores the audio. Music files take up an enormous amount of physical space on a computer, and MP3 is the compression technology commonly used to make digital audio computer files relatively small while maintaining high audio quality. It is one of many formats used for uploading and downloading on the Internet, others include: WAV, FLAC, and SHN. MP3 was the main file type used by Napster. Really, it is a file made up of a bunch of 1's and 0's—the standard language of computers. Morse's early code was in the binary language so familiar in computers. Accessing that code is what makes downloading happen. To download these 1's and 0's and then listen to MP3 files on your computer, you need a computer, a sound card and speakers for the computer (if your computer has speakers, it has a sound card), an Internet connection, and an MP3 player like WinAmp (a software application you can download from the Web in 10 minutes). There are commercially available alternatives, like Apple's iTunes and the concept of the 'digital computer

²⁵ Jonathan Sterne, "The MP3 as Cultural Artifact," Forthcoming in *New Media and Society*. In Sterne's conceptualization, MP3 is a psychoacoustic technology that literally "plays" its listeners; the MP3 shows that digital audio culture works according to rules and codes somewhat distinct from digital visual culture, though audio and visual combine when interfacing with digital music.

peripherals' like the iPod portable MP3 player in particular.²⁶ For the time being, we leave the 'peripheral' world of Apple and iPod, and take a closer look at Napster and the underlying architecture of the Internet that allowed for cultures of sharing existing on the Internet.

Contemporary music trading: the case of Napster

In the Napster example, people download music because they want it, and not purchasing it is at odds with the prevailing authority; the ease of access and the breadth of what was available only heightened the arousal for the music collector. What makes the case of Napster so compelling is mostly in the way that it works. Napster did not store or serve any MP3s from its site; instead, it allowed users to access the MP3s stored on other users' hard drives. An organic, extremely viral entity, the Napster network gets better as its get bigger because each new user adds something to it.²⁷ Simply, the fact that Napster was free and open-source remains the key to its original popularity (since its purchase by media conglomerate Bertelsmann, Napster is a mainstream, pay service). Another key point is timing. Windows 98 was just out, and the graphic user interface (GUI) was similar to Napster. The crossover helped both programs—users could navigate music like a webpage or organize it like a Word document. Napster, as a socio-cultural phenomenon in 1999, could not happen without the installation of high-speed residential Internet connection,

²⁶ Rob Walker, "The Guts of a New Machine," *New York Times Magazine*, Nov. 30, 2003, p. 82.

²⁷ G. Beato, "Trading Spaces," *Juice* no. 90, (May 2000): p. 72. In John Scanell "Renegade Refrains: MP3 and the Pursuit of Affect," *Convergence* 7, no. 3 (2001): 62-82.

decreasing computer prices, decreasing blank compact disc prices, increase in programs designed to burn MP3 format, and a standard CD-burner in each computer sold.²⁸

In a 1995 essay “Enterprise on the New Frontier: Music, Industry, and the Internet,” Philip Hayward predicts the current struggle over digital music on the Internet. He comments on a lucrative, but unexploited area of the Internet: “one potential use of the Internet which has attracted the attention of a variety of performers has been its potential as distribution medium. In contrast to traditional music industry enterprises, the Internet offers an *immaterial* means of music distribution or rather *access* for musicians or industry agencies to place music tracks at web sites which can then be accessed and downloaded by Internet users.”²⁹ A few years later, in early 1999 the story of Napster begins when Sean Fanning—a programmer of Internet Relay Chat fame³⁰—developed a use of the Internet that allowed people to search for, identify, and copy music files from a program based around a vast network of computers. The key to controversy is that this music transferred without the consent or prior knowledge of the artists or the labels.

Sean Fanning and his associates were a group of hackers who exist on a fringe of cyberspace, not unlike the tapers who exist at the fringe of the music industry. The

²⁸ Brad Hill, *The Digital Songstream: Mastering the World of Digital Music*, (New York: Crown Business, 2003), p. 103.

²⁹ Philip Hayward, “Enterprise on the New Frontier: Music, Industry, and the Internet,” *Convergence*, 1, no. 2. (1995): 29-44

³⁰ Joseph Meen, *All the Rave* (New York: Routledge, 1999), 18. “Napster” was Fanning’s screen name on an IRC channel name w00 w00. IRC is a form of mass instant-messaging that can also transfer MP3 and other files.

“Open Source”³¹ mentality in the netherworld of the Internet allows for splintering and fragmenting. Fanning and friends met online and created code for the Napster program online. This group of individuals also frequented another fringe community on the Internet. This community, however, was able to translate from virtual space to physical space at raves and club parties with DJ’s. The music at these events is primarily electronic/techno, and the creators of Napster were fans of techno music, wherein the key principle of techno music is sampling.³² In this musical form, sampling is part of the creation and production of the music.³³ Simply, the creators of Napster have been socialized in a culture where borrowing—or in the case of Napster, ‘peer-to-peer file-sharing’—is the main mode of communication and interaction. It is part of their vocabulary and everyday practice. To understand this concept is to understand Napster, and in a larger context, it helps understand how important the notion of “sharing” is within the culture of the Internet. Tapers and the community surrounding the Grateful Dead also encoded a culture of sharing in their practices, whether that sharing involved trading tapes or tickets for concerts.

³¹ Open source is a movement on the Internet that hopes to keep the “creative commons” (the Internet) a space of free exchange of information and programming code. Lawrence Lessig is a preeminent writer on this topic.

³² Menn, 9.

³³ Jonathan Sterne, “What’s Digital in Digital Music?” Forthcoming in Paul Messaris and Lee Humphreys, eds., *Digital Media: Transformations in Human Communication*, (New York: Peter Lang). In a forthcoming essay, Sterne explicates the “digitalness” of so-called “digital music” in his essay “What’s Digital In Digital Music?” and directly questions the meaning of “digital” in digital music by arguing that digital technologies are best understood as always bound up with a range of cultural practices and other “analog” technologies. It proceeds in four parts: the first section explores some basic issues in thinking about the relationship between digital technology and music, and the context of contemporary sound culture, which is not purely or even mostly digital. Following this claim, the second section examines a range of creative technologies and practices like sampling and turntablism that can be lumped under the label “recombinant music.” Much has been made of the role of digital technology in these practices. Sterne offers a description of recombinant music that does this music seriously as an element in a larger cultural formation, explores changing relationships between professionals and amateurs in the recording industry, and questions the role of digital technology to this transformation.

Fanning's model popularized peer-to-peer technology, while the company known as Napster—distanced from Fanning himself—tried to turn the service into a profit-making business. It is worth noting that Sean Fanning did not create the program with the intention of making money. In fact, he designed the program for his roommate at Northeastern University during his first year, before he dropped out to finish work on the Napster code. It became ubiquitous on numerous networks in a remarkably short period. Over a million users registered the next year, and large-grid systems were crashing along with the copyright infringement at never-before-seen rates.³⁴ Legal consequences would be lengthy, costly, and eventually end Napster as it quickly became clear that the users were on the Napster program for the sole purpose of copying and distributing an unprecedented number of copyrighted works, primarily sound recordings of musical works.³⁵

Competing Philosophies—The Internet versus the Recording Industry

End-to-End Networks

The Internet is a network of networks.³⁶ These networks and the wires that link them are privately owned, just like the wires of the old telephone system of

³⁴ Trevor Merriden, *Irresistible Forces: The Business Legacy of Napster and the Growth of the Underground Internet* (Oxford, UK: Capstone, 2001). Right after Napster's introduction in 1999, the University of Illinois reported 75-80% bandwidth traffic on Napster. In early 2000, New York University reported 98% bandwidth traffic. Figures like these caused many universities to ban Napster—for logistical and financial reasons.

³⁵ Statement of Marybeth Peters, "Pornography, Technology, and Process: Problems and Solutions on Peer-to-Peer Networks," The Register of Copyrights before the Committee on the Judiciary, United States Senate, 108th Congress, 1st Session, 9 Sept. 2003.

AT&T and Verizon today. However, the operating principle of the Internet is different from those guided the early telephone companies. Innovation is the driving force of the Internet's growth and performance. In 1981, network architects Jerome Saltzer, David Clark, and David P. Reed became the first to outline this principle—called the “end-to-end argument” (e2e). End-to-end guides network designers in developing protocols and applications for the network. The overarching instruction of end-to-end says to keep intelligence (information) in a network at the “ends,” or in the applications, leaving the network itself to be relatively simple and clutter free.

Network designers commonly differentiate computers at the end or “edge” of a network from computers within that network. Fanning and his crew occupied the edge. The computers at the end of a network are the machines you use to access the network. A pertinent example is the machine used to dial into the Internet, or a cell phone connecting to a wireless Web, both act like a computer at the edge of the network. The computers “within” the network are the machines that establish the links to other computers—and thereby form the network itself. For instance, the machines run by an Internet service provider (ISP), for example, could be computers within the network.

By placing intelligence at the ends, computers within the network perform only very simple functions needed by many of different applications while functions needed by only some applications are performed at the edge. Peer-to-peer capitalizes on this principle, because downloading is relegated to a place where it does not

³⁶Lawrence Lessig, *The Future of Ideas* (New York: Random House, 2001), 27. Much of the following section owes credit to Lessig and his theory of the commons-on-the-wires.

interfere with storage and other applications. Thus, complexity and intelligence in the network are pushed away from the network itself. The mantra: simple networks, smart applications. The reason for this design was flexibility, to make sure that there would not be a feature of the underlying network technology that would restrict using some new underlying transport technology, should that new idea turn out to be good in the future.

“...But architecture matters. And arguably, no principle of network architecture has been more important to the success of the Internet than this single principle of network design—e2e. How a system is designed will affect the freedoms and control the system enables. And how the Internet was designed intimately affected the freedoms and controls that it has enabled. The *code* of cyberspace—its architecture and the software and hardware that implement that architecture—regulates life in cyberspace generally.

To understand the flourishing of innovation on the Internet is to understand the original design. To change this original architecture changes the nature of innovation. The Internet is not a novel or a symphony. No one authored a beginning, middle, and end. At any particular point in its history, it certainly has a structure, or architecture, that is implemented through a set of protocols and conventions. But this architecture was never fully planned; no one designed it from the bottom up. It is more like the architecture of an

old European city, with a central section that is clear and well worn, but with additions that are many and sometimes confused.³⁷

Open Source Philosophy

The larger theme of end-to-end is commercial innovation and cultural innovation. Regulating end-to-end is a difficult situation, mostly because it is in the underlying philosophy of the Internet. End-to-end encompasses peer-to-peer (p2p), just like p2p is part of the larger Open Source movement that undergirds the structure of the Internet. Open Source is more an ideology than a philosophy, and if you align yourself with the precepts of Open Source, you will be hard pressed to think that downloading music is illegal. To say that Open Source serves as ideology is a large claim, but it works for the purposes of analyzing how cultures of sharing on the Internet relate to cultures of sharing in the material world. For Open Source to work, programmers have to be able to read, redistribute, and modify the source code for a piece of software. When this happens, the software evolves because users can improve software, get a feel for the operations, and then fix bugs. This is why Napster progressed so rapidly. The Open Source community has learned that an evolutionary process produces better software than the traditional closed model, in which only a very few programmers can see the source and everybody else must use whatever they find.

Idealistically, the Open Source Initiative exists to make this case to the commercial world, but in a marketplace, this is tough to do. It is the e2e principle that

³⁷ Lessig, 27.

makes a strong argument for the technical desirability of p2p and the importance of the "right to innovate." If you apply Lessig's "future of ideas" thesis, he talks about the Internet as an "innovation commons" and how regulating the e2e nature of the Internet creates a shock to that innovations commons. The argument turns around this notion—to those with Open Source sensibilities the notion that artists *are* accountable, or "stand on the shoulders of giants," and owe their success to the commons that inspire them is blindingly obvious. Open Source thrives on the accretion of innovation, acknowledging those that have come before. The commodification of culture in the music industry goes against this acknowledgement. The artists themselves took from the culture commons to write their music; therefore, their music is part of the cultural commons. Since the community owns the cultural commons, we cannot steal from ourselves.³⁸ In this dialectic, "downloading" is not stealing, because free resources are a "commons." A commons is defined not by ownership but by access rights. A road can be privately or publicly owned, as long as everyone has the same access rights, it is part of the commons. The crucial distinction here is between control and openness. A commons is a resource open to everyone within a community, whereas exclusively the owner controls private property. In the context of the commons, it does not matter if the owner is a private entity, the state, or a co-op.³⁹ The Grateful Dead, with their "open" taping policy, essentially instituted a material version of Open Source.

³⁸ James Howison, "End to End," 1 December 2003, personal e-mail, (2 December 2003). Much thanks to James for hashing out the theory of end-to-end, namely how it shapes open source, and how open source addresses downloading.

³⁹ Felix Stalder, "The Excess of Control: Review of Lawrence Lessig's *Future of Ideas*," *Telepolis*, 8 January 2002, <<http://www.heise.de/tp/english/inhalt/buch/11504/1.html>> (Accessed 1 November 2003).

Early legal precedents

The 1970s were a time of technological innovation with the introduction of the VCR. Consumers gained more control over how and when they entertained themselves. In November 1975, the Sony Corporation of America introduced the Betamax videocassette recorder. In the wake of this option, tapers found a way to adapt Betamax to tape concerts, one of the first uses of digital recording of live music, although analog recording would continue into the late 1980s. The following November, Universal Studios and Walt Disney Productions sued Sony, alleging that recording movies and TV programs off the air was copyright infringement. Three years later, in October 1979, the U.S. District Court for the Central District of California ruled on the first precedent that allowed for the practice of taping and copying of media. The case held that off-the-air home video recording for private, noncommercial use was not copyright infringement.⁴⁰

Sony v. Universal City Studios

In 1984, the U.S. Supreme Court ruled that videocassette recorders could enter the market, against the eight-year legal protestation of the movie industry. The 5-4 majority held that even though Sony's VCR's could be used to copy protected

⁴⁰ United States Court Of Appeals for the Ninth Circuit, "Sony Corporation. v. Universal City Studio, Inc., 464 U.S. 417" (1984), Argued January 18, 1983 Reargued October 3, 1983, Decided January 17, 1984 <<http://caselaw.lp.findlaw.com/scripts/getcase.pl?court=us&vol=464&invol=417>>, First accessed 1 November 2003.

television programs and sold, the vast majority of use would be for innocent purposes—taping a program or watching videos. The opinion stated that the sale of copying equipment did not necessarily constitute contributory infringement, if the product was used for legitimate purposes.⁴¹ Napster tried to take the same approach, by arguing that individuals would share home recordings and unprotected materials, and failed. The “Betamax Case” still acts as the standard that allows audiophiles like tapers to continue their practices under coverage of the law.

In its early days, Napster was the tent in the street with music everywhere, a virtual bazaar offering any music you desired. The late 1990s will be remembered as the time of the Digital Revolution, when everything sped up, got closer, and seemed smaller.⁴² Not only were there new audio and video formats that offered consumers unparalleled sound and picture quality, but also personal computers that would alter the everyday lives of millions around the globe. While the major cases concerned cable television and the 1996 Telecommunications Act, subtle movements around the Betamax ruling moved through the halls of legislature and in the courts. In the late 1990s, when Napster came on the scene, the courts were still legislating blank media while file sharing was freeing music from the physical world. The courts were late in addressing a culture that had moved past simple analog copying. The shift from analog culture had already occurred, and tapes showed that adaptive uses of technology could elude standard industry practices.

⁴¹ Justin Steinmen, interview by author, 6 October 2004.

⁴² Eric Steven Raymond, *The Cathedral and the Bazaar*, (Thyrsus Enterprises: version 3.0, 2000), <<http://www.catb.org/~esr/writings/cathedral-bazaar/>> (Accessed 10 November 2003).

CHAPTER V

TAKING ROOT: THE INTERSECTION OF MUSIC, MEDIA AND CULTURAL STUDIES

While there is a body of literature surrounding fan communities of various music groups, this project builds on the work of the community of people that followed the Grateful Dead. The model for my project is *Deadhead Social Science*,⁴³ a book that came out of a college sociology class on the American folk-rock group The Grateful Dead. The class toured with the Dead and created academic curriculum in preparation for the final assignment—lead guitarist Jerry Garcia would read the best papers, and work with those students. This book serves as a scholarly cultural study, and as a whole, it is a collection of chapters by former undergraduate, master’s and doctoral students enrolled in the “Field Research Methods and Applied Social Theory” course (or, “Deadhead Sociology”) at the University of North Carolina at Greensboro. Each chapter has a personal narrative, and then a sociological analysis of some element of the culture. The disciplinary perspectives included run the gamut from American studies to educational psychology to folklore. Missing, however, is an in-depth discussion of efforts of tape trading as a central element to Dead culture. The

⁴³ Rebecca G. Adams and Robert Sardiello, eds. *Deadhead Social Science: You Ain't Gonna Learn What You Don't Want to Know*, (Walnut Creek, CA: AltaMira Press, 2000).

focus is on the culture at shows, but the show often continued into the home due to the efforts of tapers.

Due to the years between studies, the state of the research demands new inquiry into the practice of taping and trading tapes (now digital files). In a 1998 essay that is seemingly a preview of the *Deadhead Social Science* text, Robert Sardiello, the co-editor for *Deadhead Social Science*, writes a chapter on “Identity and Status Stratification in Deadhead Subculture.” In this chapter, Sardiello, a Deadhead-turned-academic, discusses sublevels of the “scene” surrounding the Dead through the sociological concepts of “intragroup status stratification” and “the diversification of Deadhead Identity, “which translates into social classifications of individuals within Deadhead fan culture. For example, three larger groupings are: the Hardcore Deadhead, or those who would live from tour to tour; the New Deadhead, or those who lack experience in the subculture; and the Stable Deadhead, those who participate occasionally, but consistently.⁴⁴ I would place the tapers somewhere between the Stable Deadhead and the Hardcore Deadheads as far as their involvement in the culture. Often tapers are at shows early, and in the summer months struggle through hot and rainy conditions to make their recordings. This effort comes even though they often have steady jobs to provide the income to purchase, maintain, and update their gear. Sardiello recognizes within the Grateful Dead subculture, the taper held a “status distinction” because the band has always allowed their shows to be taped, and many Deadheads valued this service because it preserved the live concert experience. The average fan that collects does not dismiss the work put in by the tapers. Exchanging tapes, according to Sardiello, helped “build the social networks,

⁴⁴ Sardiello, 130-134.

and preserve qualities of the live concert experience.”¹ To pick up where he left off, this paper adds the stories of the people within the “taper phenomenon,” as Sardiello refers to it.

Making Connections between Media and Music Studies

In the field of media studies, there are a number of “grand” theorists who deal with culture, technology, and social change. From the outset, the writing and thinking of T.W. Adorno⁴⁵, Walter Benjamin⁴⁶, and Harold Innis⁴⁷ informed this paper. Benjamin and Adorno contribute to the music literature with their aesthetic studies of culture, while Innis addresses cultural change and communications technology—with communication playing a large social role. Adorno and Benjamin disagree over the purity of art in the age of technology, and the dialogue set up by their work allows much room to theorize, though I cannot reconcile their differences here. These works serve as “planks” in this study because the thoughts are central to current understandings and interpretations of media and culture. Media theorist Denis McQuail states that recorded music and the music industry are understudied areas that have large social, political, and economic implications, and that further media studies will have to consider music.⁴⁸ He was writing at crest of the Napster moment,

⁴⁵ T.W. Adorno, “On Popular Music,” in John Storey, *Cultural Theory and Popular Culture: A Reader*, (Essex, UK: Prentice Hall, 1998), 197-209.

⁴⁶ Walter Benjamin, “Unpacking My Library” and “The Work of Art in the Age of Mechanical Reproduction,” in *Illuminations*, (New York: Schocken Books, 1968).

⁴⁷ Daniel J. Czitrom, *Media and the American Mind: From Morse to McLuhan*. (Chapel Hill, NC: The University of North Carolina Press, 1982).

whether he knew it or not, with the majority of impact of music sharing over the Internet to gain attention years later. One element from McQuail that guides this study is that he implores the reader to consider the “diversity in reception” studies that music affords, as this study takes into account how audiences received and manipulate music (media) content. Within the music industry, there are strict delineations as to where certain activities occur—for instance, a song is recorded in a studio, handled by a release agency, passed off to the manufacturing and marketing people who then ready the product for distributors. Only after the distribution does the product reach a consumer—the audience.⁴⁹ Downloading music skips a few layers in the chain of command, and digital technology even allows recordings to be made in the comfort of the home.

Lastly, McQuail’s call to “audience reception” studies could incorporate the work of Roland Barthes, who calls for attention to everyday life as an important and revealing area of study.⁵⁰ Tapers and traders are an example of the active audience due to their everyday use of computer technology and implementation of word-of-mouth advertising techniques. In an effort to situate this project in the larger body of audience research, I will attempt to incorporate the everyday experiences of the taping-trading community into the social context in which it operates.

⁴⁸ Denis McQuail, *McQuail’s Mass Communication Theory*, 4th ed. (London, UK: Sage Publications, 2002) 26-27.

⁴⁹ McQuail, 294

⁵⁰ This is more an extension of the ideas of Dick Hebdige, from *Subcultures: the Meaning of Style* p. 9. Hebdige uses the theories of Roland Barthes and the notion of audience studies. Barthes furthered a branch of audience research that focused on the audience (“reader”/“listener”) and how they create meaning from texts. In this way, the artists are not the ‘sole author’ of a work. This is important when it comes to taping and collecting because the constant interaction with the “text.”

Consuming music, creating culture

Part of the formulation of this project comes from a study of the impact of cassette technology on popular music in North India.⁵¹ Peter Manuel's book *Cassette Culture* explores the structure, content, and social significance of most of the major styles of popular music that have emerged in close connection with cassettes. In doing so, he analyzes preexisting genres that have come to be disseminated on a mass scale through cassettes. Because live music is music not heard on the radio, the practice of recording and disseminating audiotapes of live concerts is a way to create community around live music. Manuel discusses how analog cultures have "participatory" elements that aid in the process of social mobilization, an apt parallel to the fan culture of amateur taping.

Lee Marshall's writings remain central because he was my introduction to the academic analysis of music consumption and cultural creation. As noted earlier, he makes the distinctions between musical consumers, be they bootleggers or tape traders, and how these groups interact with music industry.⁵² The argument made in his paper is that this group of consumers actually supports the industry through discourses of authenticity, which valorize musical commodities made by the legitimate industry. In this, the discourse of authenticity is in the act of trading taped music, and the studio recordings take on a different quality. For the live music community, studio recordings act as signposts for the live concert, but the live concert

⁵¹ Peter Manuel, *Cassette Culture: Popular Music and Technology in North India*. (Chicago: University of Chicago Press, 1993).

⁵² Lee Marshall, "For and against the music industry: an introduction to bootleg collectors and tape traders," *Popular Music and Society* 22, no. 1 (Jan. 2003): 57-72.

setting allows a version of a song to become the ideal performance of the work. By acknowledging the studio recording and not bootlegging the official recordings, tapers gain the trust of the groups they tape, thus furthering the band-fan relationship that rests outside of the standard industry. Marshall's work is especially useful because it serves as a jumping off point to study legal trading in-depth.

As noted above in the discussion of the rock ideology and the writing of Theodore Gracyk, the production of the concert tape rest as an alternative to the existing industrial structure of the music industry, which is where tapers and jambands find their niche. Dean Budnick, the author responsible for the creation of the neologism "jambands," documents this music scene in his book *Jambands: The Complete Guide to the Players, Music and Scene*. The book focuses on profiles of individual bands, but Budnick does point to the creation of the jambands.com website in 1998 as the popular establishment of the term "jambands."⁵³ This helped establish the popular moniker that now describes the improvisational music community. Budnick describes the choice between "jam band," "jam-band," and "jamband," and other issues with language and genre classification in music. Another jamband scholar, Colin Helb, a jamband scholar, developed his master's thesis in American Studies at Temple University to document the jamband community using a webpage for cyber-ethnography.⁵⁴ For the purposes of this study, Helb's comments on the state of the music industry and the over-reliance on genre for sales and marketing are most important to how jamband culture started on the fringes of the music industry. In fact,

⁵³ Dean Budnick, *Jambands: The Complete Guide to the Players, Music & Scene* (San Francisco: Backbeat Books, 2003).

⁵⁴ In his purpose statement, Helb tries to give a definition of the jamband scene. The complete text from his now-defunct website can be found in the Appendix.

there is now a “Jammy” awards ceremony in New York each year that recognizes the groups in this music culture. Founded by Budnick, the Jammy’s are a grassroots effort that seeks to establish a place for live music within the structure of the music industry.

Following this “genre” theme, media scholar Keith Negus makes the claim that genres are social categories.⁵⁵ Tapers work within this social community, and by applying Negus’ conceptualization, I hope to describe the jamband movement as a social entity on the fringe of, but in conjunction with, the music industry. Less a style of music, per se, jambands represent a larger community of live music fans.⁵⁶

On the topic of tapers as creators of music cultures, Marc Perlman¹ ethnographic study of “technoculture” focuses on the communities that engage media and information technology, namely audio engineers. Of particular interest is where Perlman introduces a new conceptualization for analyzing music consumption, “Tweak Theory,” which is a treatment of the impulses that bring people to audiophilia—users are constantly trying to upgrade and “tweak” their stereo systems for maximum performance. The central organizing theme is that technology is central to the music audience, and that through interactions with technology, audiences imbue cultural meaning to their craft, in the process creating personal and emotional investments with their technology. Furthermore, audiophiles constitute a realm of

⁵⁵ Keith Negus, *Music Genres and Corporate Cultures* (London: Routledge, 1999).

⁵⁶ In fact, I can recall at a jamband show in Madison a few years ago, a fan, reacting to a comment that the band on stage sounded like Phish, replied, “It’s not a band—it’s a genre.” From that day forward, I felt that this subculture could open new inquiries in musicology related to live performance and the rock aesthetic, which will be explained later. This study, however, does not hope to reconcile any of the problematic notions of genre.

creative involvement and practical mastery. In the case of amateur tapers, their goal is to preserve the history of their favorite musical groups while at the same time participating in cultural events with peers who share the same interests. For Perlman,

The most convenient point of entry into the universe of meaning surrounding consumer audio equipment is surely the world of the audiophile, the person who takes audio very seriously indeed, investing large amounts of time and money in acquiring, using and thinking about audio technology. Audiophilia is ideally suited for this investigation because of its complexity and visibility. It is a hobby, a form of serious leisure,” and a form of consumption; it provides its devotees with a source of self-image and an arena of social relationships, ranging from informal friendship networks, clubs, annual trade fairs, and Internet discussion groups to the “community” of consumers of specialist audiophile magazines.

For my topic, Perlman gives the construct to apply to fandom: the culture of audiophilia and music consumption. To get at this construct, the questions had to be shaped in such a way that tapers could descriptively reflect on their taping experience. The next section will discuss how I moved from theory and literature to conceptualize the research questions and how I constructed the data-gathering process.

CHAPTER VI

DESIGN AND METHODS

The community I have studied is the "taping-trading" community—the primary audiophiles within the jamband musical community. In using this hyphenated term I am referring to those individuals who record and exchange recordings of the live performances of certain rock and jazz musical acts with the permission of the artist. The term "tapers" refers here to anyone who brings hundreds or even thousands of dollars' worth of their own audio equipment to concerts for recording purposes. Virtually all tapers are also "traders" who actively engage in exchanging recordings with like-minded fans. Because of the high initial cost and the risks to property involved, many people are content to assemble a tape collection solely through trading, thereby making tapers sought-after individuals within the community.

The decision to take on this project came about as I considered a way to study the intersections of technology, music, and culture. To address those questions, I chose to work in-depth with four Colorado tapers, of a range of ages and experiences. Three were located in Boulder, a town with a vibrant local music scene that also boasts quality venues for touring bands to play. I met my first contact and informant in the taping subculture at a show at the Boulder Theater. I also collected online surveys from responses to a post I put up at an online taper forum. While insightful,

the online interviews did not have the same dimension as the sit-down interviews, and thus I used online interviews as reference points rather than borrowing heavily from the data provided by tapers. Often, I used the online interview to supplement comments from in-depth interviews,

I realize that I have been a participant in jamband culture for nearly a decade. I hope that this “insider knowledge”⁵⁷ allows me to take the comments of the tapers and interpret them through an understood personal history and knowledge of the scene. The critique of insider knowledge is important to this study because it brings out the reality that self-reflexivity is important in research. For me, it helped me negotiate my ability to enter the field, to differentiate tapers, to locate interview contexts, and to extract myself from the field. In sum, insider knowledge was my greatest strength and my greatest weakness. Yet, all the while insider knowledge was essential to gleaning good interviews.

The question of ethnography came up as I designed this project. I chose an indirect application of this method because I have never taped a live show, and I do not intend to record the shows. In doing so, I also decided against ordering “Taper only” tickets to the concerts that I attended. This was a conscious choice because I want to observe the tapers but not intrude on their experience. Simply, I did not want to present the guise that I was a taper while I was in the field. I was not trying to “go native” in the classic sense of a research project, partially because I would consider myself a “native” of jamband cultures.

⁵⁷ Andy Bennett, “Researching youth culture and popular music: a methodological critique,” *British Journal of Sociology*, 3, no. 53 (Sept. 2002): 451-466.

This conceptualization process brought me to the point where I need to speak to tapers. I had decided how I was going to go about collecting interview, and the next step was to enter the field and find the tapers. The interviews took place between June 2004 and March 2005, on the road at concerts and festivals. There were follow-up interviews conducted by telephone and at selected live concerts in the autumn of 2004 and the spring of 2005. The sample list of questions is below, although the majority of the interview went from one question and cascaded into other others. I would revisit my interview guide, but often answers folded into other questions.

General Questions

1. When was your first live show?
2. How many shows do you think have you seen?
3. What band(s) do you typically see?
4. Where do you see most of your shows?

Taping Questions

5. When did you start taping?
6. Why did you start taping?
7. How many shows have you taped?
8. Do you see a distinction between bootlegging and tape trading?
9. Do you see the time you spend at shows as “work”?
10. Do you have a certain way that you go about taping?
11. How much time do you devote to music outside of shows?

Technology Questions

12. With what type of equipment did you start taping?

13. What type of equipment do you use now?
14. How do you store your recordings?
15. What mediums do you have (tape, cassette, compact discs)?
16. How has the technology changed while you have been taping?
17. What are your on file sharing and the RIAA recent lawsuits?

Community Questions

18. Did someone help you as you developed your interest?
19. Do you interact with other tapers at shows?
20. How do you communicate with fellow tapers?
21. Do you see fellow tapers outside of the show setting?

After transcription, I coded the transcripts employing both "etic" and open coding methods to make sense of the data.⁵⁸ For instance, I coded and grouped this section for the reference to the live taping policy of the Grateful Dead. I then cited, or paraphrased, where appropriate.

Keeping in mind the questions I had before entering the field, the Findings section contains the biographies of select tapers, and the narrative of the taping and tape-trading experience.

⁵⁸ Thomas Lindlof and Bryan Taylor. *Qualitative Communication Research Methods*, 2nd ed. (Thousand Oaks, CA: Sage, 1999), 14-16.

CHAPTER VII

FINDINGS

The culture of fandom personified: voices from the taper's section

It was a weekend night at the Boulder Theater in Boulder, Colorado, last autumn, and I was alone at a Peter Rowan and Tony Rice Bluegrass band show planning to enjoy a night of music. I took a walk around the venue to get the lay of the land and take in the crowd. The front section was reserved, a rarity at the Boulder Theater, for this “sit-down” bluegrass show, which I suppose brings a different clientele than a rock show or hip-hop show. As I strolled forward, I had to step through rows of chairs to get near the stage to get a look at the instruments and accoutrements on stage. Reaching the lip of the stage, I turned around to see the balcony and lights above. While scanning down from the balcony to the bar at the end of the first floor, I noticed a microphone stand perched above the crowd, just in front of the soundboard, where a taper was setting up his gear.

Arriving at the show, I had not planned to do “research” that night, but there was this microphone, drawing me toward it like a beacon of light.

I approached this taper and introduced myself by previewing the project I was planning. He said his name was Justin and that he was all for it. He seemed glad that I

had not inquired, “What is all that *stuff?*” right there because the show was going to start soon, and he still had to finish preparing his gear. We scheduled an interview, and I went on my way—buoyed by the informant contact established that night.

In the section of the paper that follows, I will begin with the conversation I had with Justin and describe how that interaction helped orient the rest of my inquiry. Along the way, I will intersperse the stories of other tapers who contacted me, as Justin’s story acts as a bridge to many examples provided previously.

A Generation Removed—The Phish Taping Community

Justin lives in Boulder County, just outside of Boulder. The Front Range is an area with many venues for live music, which often begets live music taping. The climate, from weather to music, brought Justin to Boulder after his graduation from the University of Missouri at Columbia. He works at a computer company, and in the rest of his time, he attends and tapes shows. Justin’s work and play cross over as he applies his technical skills in his taping practices, judging from the spindles of compact discs and two Creative Labs Nomad MP3 Jukeboxes (his preferred taping device) sitting amongst a row of digital audiotapes. The focus of the room was the computer area, and during the interview, Justin sat at his computer to “cut up” (make into individual files) the recent Tony Rice and Peter Rowan show from the Boulder Theater, the show where we first met and set up our interview.

Justin tapes concerts because of the “improvisational nature” of the live show, and he enjoys how each show features extended “jamming” away from traditional

structures of the three-minute song. This jamming can be, in Justin's words, "fun and upbeat, even psychedelic." For Justin, these musically varied, un-composed improvisations are the attraction of the live show. This attraction brought him to collect tapes, mostly Phish and the Dead. Despite the rise of digital technology, he still has his whole tape collection. As he viewed other tapers and as he became a collector, he learned of the cultural practice recording at shows. He bought a minidisk recorder and started taping in 2000, but sought to make a distinction between the ways he now understands taping versus what he was actually doing at the time.

My first show taping was Phish at Deer Creek 2000. But because I was a patcher, so I was not really taping. A patcher is just someone who brings a deck in to patch into someone else's rig so if you're a taping you've got the mics and the pre-amp and the analog to digital converter and your recorder. If you are a patcher, you just have your recording deck and you take it and patch off someone else. That is what I started with, and I did not think that my show experience was much different because I would just show up in the section with my deck and plug into someone and go hang out with my friends. So, it was not too much different from what I was doing before.

Justin started taping during a critical time in the history of Phish. Not soon after that summer tour of 2000s, Phish announced that they would be taking a hiatus for an undetermined amount of time. Justin and the taping community had to branch out and begin to tape other shows, and during that time, Justin progressed as a taper.

I started bringing my minidisk to shows. Then I bought my first rig [a complete set up with microphones and converters] in 2001 and just started recording pretty much everything that I could, you know, at the Fox, at the Boulder Theater, and my whole goal, at the that time, this was after Phish went on hiatus, was to have a good set-up by the time they came back. So, in the meantime, I started taping many shows, and when Phish came back from hiatus and I started taping, that is really when I got in big with the taping community and taperssection.com.

While his favorite group to tape was not touring, in the interim, Justin worked on his taping. In an effort to progress with his taping skills, he taped many shows and worked on ways to upgrade his recording technology.

JS: I taped some things that were not so great. My help and information came from Sonic Sense, which is basically a taper store down in Denver, run by Mark Nutter, who has been a taper for a long time, and he helped to write a guide on-line that was like my Bible when I started. It is called the 24-BIT FAQ, Frequently Asked Questions. So, that is where I got most of the information about how to optimize my system and everything like that...

I: So do you try to get better at your taping?

JS: A lot of times it is the circumstances. There are the pitfalls. Your battery goes out. Your tape ends. The PA in the venue goes out. It is definitely a learning experience. Some of my first tapes were crap.

Of primary importance to my project, Justin pointed me in the direction of the Taperssection.com website, mentioned above, which is where I contacted dozens of other tapers. Started in 2000, the taperssection.com acts as a forum for tapers to discuss concerts, recording devices, techniques, and other general, music-related topics. I posted on the forum to gain more interviews, and it was on the Taperssection.com website that I began an exchange with Jack Springer, a taper from Colorado Springs. This contact was vital to my project, and I would visit with Jack two months later and find that his story predated Justin's by two decades, steering my project into an unexpected history lesson.

Taping Uncle John's Band—Grateful Dead taping culture

Jack Springer works in the audio engineering industry after having worked in the news industry for a number of years as a photographer. He saw over seventy Dead shows from 1983 to 1995. Hundreds of precisely labeled compact discs of live music fill his living room wall, each with a printed insert of information, including: band, date, venue and the requisite taping information--microphone type, location in venue, the type of deck used, and the transfer and encoding system used to burn to CD.

After coming to Colorado in 1984, Jack worked live sound for a band for four years, three nights a week. He bought his recording rig in 1984, but did not transition to DAT until 1992. He comments on how his hobby has progressed over the years.

I started taping, I guess you could say, when I was 13. I used to tape stuff as a teenager, used to record rain and thundershowers on my dad's 8-track. I wanted to tape natural sounds to be able to be outside. A few other guys got into taping the same way. That way, I could have the outside with me, and listen to it at home. If you have a technical mind, it draws you in. I got interested in the mechanics, placing the mic and using the pickup patterns to make different sounding recordings.

Jack is the type of taper who finds his professional and personal life converging, and for obvious reasons, audio engineering is a common denominator in the taper community.

In 2002, I started audio editing for a conferencing company. I do pre-recording for corporations, and go through speeches and match them and edit them down. They are basically canned performances that thousands of employees listen to on a company network by calling and listening to the updates. It mirrors what I do. It is funny—I do it eight hours a day, and then I come home and do it here.

Chuck also spoke about friends of his who are in the audio field. Often, tapers work in audio engineering, and Jack's social contacts in the taping world have been

instrumental in the development of both his technical knowledge and his sense of community. Two of his friends in the taping world, Mike Grace, who runs Grace Designs a pre-amp/microphone company in Boulder, and Doug Oade from Georgia, who started one of the first online taper sites (oadebrothers.com) and now runs a taping service and recording company, were the first to adapt the Betamax format to allow for digital taping.

Mike, Doug, and some other guys used the PCM (Pulse Code Modulation) machines they made, and carried around Beta decks and taped to digital with these machines—the very first digital concert taping, as least as far as I know. The only thing better would be large format reel-to-reel, which is impractical in the field, as far as people who wanted to record live concerts—big, bulky stuff you don't want to drag around.

As the above example demonstrates, the fan culture of the Dead was such that tapers themselves were looking for better ways to preserve the concert experience, and in the vein of the audiophile “tweak theory,” tapers were looking for a way to use technology to further their fan practices and improve their community in the process.

As for Jack, his first deck for recording the Dead was a cassette deck. In the early stages of his taping days, he found that his hobby got increasingly expensive.

Been through a lot of mics, I'll tell you that. Fifteen maybe. You get sick of certain things. When I first started, I started on dynamic mics, which are not

the best thing to use. Went to condensers, which have a different pickup pattern, in 1990. But back then to me it was geez, a thousand bucks. Lots a lot of money for a guy with a house payment. I'm a working guy, I can't tour.

The influence of the Grateful Dead on taping culture

Jack's entry into Dead culture was through the live show, but he did not pick up audience taping right away. Instead, he had seen the Dead a few times, and one time when visiting his brother he came across tapes that "didn't sound good." Since he had the interest in audio, he started taping on his own.

At first, I was more excited about taping itself, over collecting. To us it was live tapes, and back in those days I was mainly into the Dead because they had the best PA and were most conducive to it. Music in other cases was not as good to record live. With the Dead, you could go three nights in a row and not hear the same song.

When Jack says that the Dead were "conducive" to taping, he means that they adopted an "open-taping" policy.

"At the time, it was a big thing, condoning and encouraging taping. They said they didn't want "stealth" recordings, which is a euphemism for taping without permission.

With the inception of the taper's section, the social dynamic changed within taping culture. According to Jack, the taper's section introduced "a more competitive aspect to taping, like I could do better than that guy, or sound better than that tape." Special tickets were required for seats in the taper's section, and to Jack, the early days of being a fan meant doing your share of work—not only taping, but getting tickets and traveling. Jack recalls the days when the Dead set up a phone line for ticket distribution.

I remember when the Dead set up the Dead hotline, and that's how you got tickets and information about their tours. The Dead sort of started the whole selling tickets to tapers. As tapers trying to get tickets, we would decorate envelopes with fluorescent colors and pictures and artwork to send in the mail, just to get those taper section tickets. Phish had the same scheme.

When Jack started taping Dead shows, tapers would really only meet at shows to trade tapes and information. In the spirit of fan-production, there was a newsletter distributed in the parking lots before shows that facilitated outside-of-show interaction for both the casual fan and hardcore deadhead. In fact, for a period, one fan set up a Grateful Dead hotline that you could call and, for a small fee, you could listen to the set lists of previous shows on a tour. This community was independent of the larger musical culture surrounding the band, yet they always remained intertwined with the movements of the band. In some ways, the tapers helped the average Deadheads because cassette tapes were the only way the show continued past the

night of the concert. Their work in those early days is what binds the community today.

Fan services such as newsletters and bulletin boards continued into the 1990s at Dead shows, and subsequently Phish shows, but Jack notes that getting information about the band has changed.

Back in those days, you had to call up your buddy to get the sets from that night's show. One guy had a phone service, and he had menu to get to the dead list. For fifty cents, you could call a number and get the list. I have spent a lot of time thinking about this, especially with Phish. It really changed the scene when you could get information really quickly. Now you can get a whole review from a tour before you see the show. I have mixed feelings about that, but that is how it is now. I think it came in with Phish because they were the Internet band, and everything with Phish has been documented. With the Dead there is lost history, but to me they were the first band. In *Dead Base* they were timing versions of "China Doll," and that is when I thought it was getting a little too...I don't know. It was just a getting to that point.

As Jack points out, there are differences between the experiences then and now, namely the instant access to set lists and band information, compared to when fans had to wait and meet up on tour. The atomizing features of technology are present in this example as well, as fans came to shows more "prepared" and less liable to talk and contribute to the conversation of the culture. For Jack and his taper friends, they viewed themselves as part of a family. Jack would lend out gear to his brother's

friends so they could tape shows out East. Jack says that this practice developed in an effort to cover tours, and it helped save money on tickets and traveling. This demonstrates that the culture of sharing surrounding the taping community extended past just exchanging tapes of shows, and in the process facilitated more taping and further cultural preservation of the concert experience. The attachment to his gear was not as great as his attachment to his desire to have the show taped.

Jack noted how his days with the Dead shaped his view of his life, even contributing to a spiritual development within his group of friends. His feeling was that much of that experience went by the wayside when lead guitarist Jerry Garcia passed away in 1995.

...When Jerry died it was a hard thing. I mean I remember coming home and laying on the couch crying. It was truly very sad because going to see the Dead was a very important thing in our lives. What it boiled down to for us was that seeing the Dead was a whole experience: driving hundreds of miles to California for a three-show weekend to stay in a hotel, see a show, go to the hotel, see the next show, back to the hotel, and then driving again. A lot of people who aren't as involved with music would think that's absolutely crazy, and I have friends and family that have said it for sure. But on those trips, at some points, we used to talk about it like religion; we'd go there and do ritualistic things, and it sort of "fills you up" like religion does and then you go off and do other things.

After this life-altering event, Jack was forced to make decisions about how he would spend his time, and even left the taping community for a period.

After Jerry died, I stopped taping for a while. I'd just go to concerts and there wasn't anything that interested me as much as them. And then maybe a little earlier than 2000. Then more bands were allowing people to tape and I thought it might be a good time to get back into it. Post-Dead I did not jump on Phish bandwagon, it seemed like more a young person's thing to do. And actually right when I started taping again in 2000 I was more interested in smaller bands because at the end of taping the Dead it was not so fun, you'd go to a stadium, like Mile High, and it's just huge.

Jack's wife came home during the interview and sat with us. Her characterization of Jack—and his taper friends—was that he was “particularly picky about his tapes” and that he had “good recordings, sometimes better than you heard at the show.” They often attend concerts together, and she will comment on some of Jack's recordings depending on the show. In some cases, taper spouses are “neglected” for shows, but Jack has traveled to many shows with his wife. In fact, the taping community is largely male, although Jack has come across female fans and female tapers. Still, all of the tapers I was able to interview were male, and I queried Jack Springer about what he thought was the reason for the lack of females in the taping section.

Female tapers? Well, there's one gal Tracy B. who's at taperssection.com. It's mostly a male thing, and I don't know why that is. I think I know, in a certain sense it's a techie thing, and when it gets expensive, it's guys and their toys. You know guys and car, or stereos. You don't see women talking about their stereos. I met Tracy at a String Cheese show, one of the first females tapers I met.

The notion that taping fits into larger patterns of male behavior is interesting and Jack does his best to explain the archetype of male-as-technology-consumer. Jack also notices that the expense of the pursuit is a limiting factor. It is hard to correlate music consumption and gender disparities without taking into account an entirely lengthy history, so for the time being, I will highlight that Jack, as a long-time taper, noticed that his cohort is majority, if not all, male.

Jack recognizes that his role as a taper goes past simply attending shows and making a recording for him to enjoy. In fact, he sees his role in the scope of music history.

I might be different in this respect, but I look at us as archivists, and I thought this way when I was a news photographer. I was going out and showing pictures of what the world looked like in the 1980s. And taping is the same way, we are giving people what a concert sounded like in the 2000s. Think, to have been able to have that back in the day of Mozart, I mean, we have sheet music, but we don't know, they might have used different tonal scales. There

are discrepancies as to whether their middle A was 140 cycles, and if you had a digital tape, you would have that.

Jack's words indicate a deeper relationship with the practice of taping than observers would expect. The importance of cultural memory to Jack is paramount, and his orientation to his taping hobby comes from the lineage of field recordists like Dean Benedetti and Alan Lomax who sought to capture the sound of disappearing musical forms.

Acting On an Impulse: A Trader Turned Taper

As I interviewed other tapers and traders who contacted me, I found that many had experiences common with mine. Ken Curtis and Nip Carleton, both Midwesterners who, like me, have camp counseling and Phish in their biographies, shared their stories with me through personal contact at Phish shows. Curtis recalls his first foray into the online world of Phish:

Even then (in 1995), there were newsgroups where set lists would come down (after shows). I started though just getting any tapes of shows I could get my hands on. High school friends had a few (Phish) tapes, and I just dubbed them in my Panasonic stereo, heeding closely to the Maxell XL-II protocol. I would find people looking for or offering stuff on rec.music.phish (the early fan community site), and when I had something that they wanted and they had something I

wanted I would email them (the trader) and set up a mail trade. Phish and Phish fans were good like this: embracing the Internet from the start.⁵⁹

Another trader, Nick Gregory had traded tapes since his time as a student at Eastern Carolina University. At that time, the Dave Matthews Band was big on the college circuit, and he used to see them monthly at a minimum. It is worth nothing that Phish and the Dave Matthews Band toured together in the early 1990s in the H.O.R.D.E. (Horizons of Rock Developing Everywhere) tour. Both groups would ascend into popular consciousness, but Phish did not receive the radio play of the Dave Matthews Band (DMB) because DMB made radio-friendly studio recordings. As a result, the sound of Phish became entrenched in the live tape, and the live tape best represented the sound of a particular era in the band's history. At the time, both Phish and DMB were completely open to soundboard patches, which are the highest quality source, and consequently, many tapes circulated from those sources. For Nick, he said that Dave Matthews was his primary group to collect. He felt that he

couldn't get enough of them [Live tapes]. The more I heard, the more I wanted, kind of like a bad addiction. True, it had a lot to do with their improvisational skills that they definitely focused on early in their career, but I began to realize I was a sucker for live music. I loved it.

This passion for live music caused him to attend more shows and collect more tapes. The example of Nick Gregory points to the notion that fan practices such as

⁵⁹ Ken Curtis, phone interview with author, 17 February 2005, parentheses added.

trading music not on the radio codifies a sense of association with a culture of rebellion and non-conformist foundations. As Nick's fandom progressed, he found he was pulled into the throes of taping.

As a result of being an active trader, I began to get frustrated with going to shows and seeing that there no one there to tape it, so I took matters into my own hands when the Black Crowes were coming to town. Before that show, I went out and bought my first microphone and minidisk player. Since then, my wallet has not been the same since!

For the majority of tapers, this progression from trader to taper seems common. Justin and James (whom I'll discuss later) had the same path. Once in the taping community, Nick found guidance from tapers that he now considers friends. These same people helped him navigate the folkways of concert recording, namely setting up a taping rig and troubleshooting problems when recording in the field.

From the Audible Past to the Tangible Present

Jack and Justin represent two distinct stories in the taping community, yet they both embrace the mission of the archivist that Jack introduced. There is a documentary nature to taping, along with the requisite technological aspects. Their stories tell of both the development of a technology, and of how fans interact with that technology to create use value. Jack started taping in the early 1980s on an analog cassette rig, while Justin's first recordings were done on a minidisk. I chose to

highlight their stories because of the contrast in their earliest experiences. In the present day, their taping practices converge over the DAT player. At this point, I would like to blend in more voices from the taping community, as well as adding some voices from those who have traded tapes. In the section that follows, I review the responses to the two of the central questions guiding this project. The first question was, how does the show-going experience change when taping? The second was, how do new technologies affect amateur audience taping?

At Work While At Play

From the conception of this project, I wondered why it was that a tapper would choose to participate in a work-like activity during what looked to me like an event that most people attended for enjoyment or leisure. Concerts are forms of mass culture that allow the audience to suspend their daily lives and enjoy music from a point of involvement or distraction. Yet, it seemed like tappers involved themselves with a deliberate distraction when at a show. My initial conversations with Justin caused me to re-conceptualize how fandom and fan practices work in relation to the show experience and in relation to taping.

I: Do you look at yourself as a fan?

JS: No, I definitely see myself as uber-fan (laughs).

I: Uber-fan?

JS: Well, not always, you know, I am not always a huge fan of what I might be taping, but I show up early, I get set up, I'm there to record the show and there

are some shows that I go in, I'll set up, and then I'll go walk outside and have a cigarette and I'll end outside talking to people for the entire show. But that's just if it's a show that I am not terribly interested in, or maybe like an opening act. But I still want to record it, and I want to have it on tape, and that's part of the reason that I know I go off and do whatever because I am taping it and I can hear it later. So sometimes I feel like less of a fan, when I do that. But, if there is a show that I really want to see and tape, then I feel like hardcore fan, then I'm there early, all prepared for it and everything.

By claiming to what he termed an "uber-fan," Justin suggests that his devotion to the craft of taping elevates his status in the fan community. I asked others about this, and the opinions converged on the fact that, indeed, they felt this way as well.

For Nick, he sees the time he spends with tapers at show as a communal effort.

We tapers have a common bond. We are all there way too early trying to protect way too much money invested in gear, and to have a good time...[it's] kind of a taper geek convention.

Nick's response also demonstrates the care and concern tapers have for their gear. Justin also mentioned the need to care for gear, but noted that sometimes his task as a taper seemed to cross over from a fun and communal effort to something more akin to work.

At times, it definitely feels like work. If you're the only taper there, and it's crowded show, and there's a bunch of people standing around talking, or a bunch of drunks walking by, yeah it can be work because you've got to stand there and guard your stuff, right? You've got to tell people, and try and be nice about it so they don't get bent out of shape. Because sometimes people get drunk and they get belligerent and you tell them to shut up and they say, "screw you, I am going to talk as loud as I can, and by the way, I am going to try to knock your mic stand over now." So it is sometimes like work because you're standing there guarding, you're trying to keep people quiet and not be mean about it.

Justin tapes most of his shows at the Fox Theater in Boulder, CO, where the taper's section is between the bar and the coat-check area. This causes fan noise and foot traffic that tapers must filter out of recordings and it means that tapers have to be more active in their leisure time, instead of enjoying the music they came to see. Jack notes that he and his taper friends employ strategies to combat this same type of problem.

Taping is different at different places—at tiny little sections, pretty much everyone clamps on to one stand and everyone stands by that and works as blockers. That's turning into a group activity, and now blocking is the thing. If it's a small space, and it's around the drinks, then it's pretty much a bunch of guys standing around a mic. People are whopping and hollering, and that's

another thing about taping. When you're in a taping section you don't cheer, you have to have etiquette in the section.

When asked about whether incidents such as drunken fans and noise restrictions make him feel like he is working when taping a show, Jack reflected on his history and how his taping practices have changed over time.

That's a funny question because it is kind of like that [work], and I'll tell you what, it's not sort of like work, it is work. Back in the days, I mean now it's getting easy and I am getting less resilient, but when I was taping the Dead we'd be standing in the hot sun for hours, etc. and then you'd have to run to get a spot and then set up and check gear...the conditions in the early days sometimes weren't the best.

In the broader sense, Justin sees the value of the taping community in making the task less burdensome.

Most of the time, though, it's enjoyable....enough shows around here get taped by a whole multitude of people. There are a ton of tapers out in Colorado because there is such great music going on out here, and a lot of the times it's easy to set up because there is going to be someone to watch over things so you don't really have to work.

Keeping Up a Collection: The Material Artifact and Collecting

The simple material aspects of this culture are not lost on those who collect shows. Jack said he realized that his collection was getting burdensome when he had fifteen hundred tapes stored in hundred-tape racks mounted as shelves, which meant that he had no wall space left over. He decided to build a box for all of these racks so that he could pull out the racks and access the tapes by row. After our interview, we kept chatting and he took me to his basement to show me what was left of the box. Empty of tapes since he gave away his entire Dead tape collection to a new Deadhead from Fort Collins, I was surprised to see an object that took up an entire corner in his basement. I had tape racks when I collected tapes, but only a few. Here was a *box* for all of these racks. It demonstrated to me the physical dimension of material culture—how much *space* our *stuff* takes up. These fifteen hundred tapes were a substantial collection. In the digital age, a four-inch hard drive can hold all of those shows and then some. The only key to digital culture is that you still have to back up to physical media to ensure that it will be preserved. In that respect, digital is not perfect, nor does it differ from when a taper transferred a show to analog.

Now, Jack has rows of compact discs and hundreds of computer files when previously he had rooms of his house devoted to storing his old tapes. He reflected nostalgically on this time in his collectorship, and noted how his methods have changed over time, but that his consumption is not much different. For him, though large, wooden racks were the most effective storage solution. This storage method

seems common across tape collectors, but it was not without its drawbacks. Ken Curtis had a similar organization system, but found that

One slot per tape meant that it was tedious when I added something to the collection that made me shift tapes up or down one or two slots. I kept them in strict chronological order, highlighting in yellow the j-cards of the shows I went to. I didn't pay much attention to sources and types of mics during the tape years—the source or the mic was less important than the generation. Later I got Caselogic two-sided zip closing storage cases: 30 per side. I still have 120 Phish tapes I carry around with me like that.

Nick Gregory has progressed through the medium of DAT and CD's. He views solid-state recorders as the next step in audio recording, which means no physical media are necessary. Presently, he has a system that allows for multiple copies of songs and shows in a variety of formats.

I tape the originals onto DAT, which I usually listen to only once to convert to CD, then I store my original audio CD copies in CD binders, and I also burn a DVD of the .shns (lossless compression) of the show in a spindle. The next big technology change will be the hard drive based recorders, though I don't see them making a huge cut into market share until they are more stable and come down in price.

Nick provides ample material for discussion in the Findings section, as he mentions the transition to non-material storage and transfer, which cuts out the many layers that constitute taping and tape trading. His methods for storage also bring into the play the notions of curatorial consumption and preservation. In the spirit of Benjamin throwing light onto his boxes of books, I will attempt to illuminate and synthesize the narratives I collected.

CHAPTER VIII

DISCUSSION OF FINDINGS

A certain type of person tapes shows. A few of the interviewees work in the information technologies industry, either in network or database management, and some had been in the audio industry. Like these interviewees, virtually all tapers, in some way or another, are tech-savvy. This is a central component, since the access to technology is a factor. In the current system, to gainfully access shows in their entirety and in good quality format, you have to have the means to purchase and to use the technology, no matter how minimal or how intricate your setup.

As tapers, Justin and Chuck represent two of the most rabid fan taping cultures within cyberspace and the concert world. Justin, a Phish taper, and Jack, a Grateful Dead taper, serve as distinct voices in the larger community of concert tapers because of their subcultural associations. The Dead were the first group to sanction taping and trading by instituting the taper's section, while Phish brought a vibrant online presence from the early days of their career. Due to their constant touring schedule that increased the amount of recordings available, Phish and the Dead tapes found heavy circulation. What intrigued me most about the contemporary moment of music trading is that the changes in technology meant that fans could take a concert

home or load it right onto their iPod. I wondered what would happen to the taping community in the absence of demand for recordings, now that personal recording devices are getting cheaper and easier to use, and venues are coming out with services that provided the show directly after it's over.⁶⁰

A central question I had for the tapers was how Instant Live would affect their culture. Surprisingly, they were in favor of the ideas, but still preferred their own tapes. Jack Springer finds that while accessible for fans, the reproduction is not the same to his ears.

Instant Live is a good way for bands to make some extra money. So far, we, meaning tapers, have been able to co-exist with Instant Live. Tapers and Instant Live offer two different representations of the live performance. Instant Live mixes onstage mics with audience microphones and offers the CD's for a fair price. The result depending on who is doing the mixing is theoretically the best kind of recording. One that mixes the studio type, close miced version with the room sound, including the audience. I've heard several of these and I think the result is often quite good. We tapers are at the mercy of the Front of House [FOH]⁶¹ engineer and his mix of the band and the room itself, which can play a

⁶⁰ Instant Live is a service run by Clear Channel Communications that records the show, duplicates it, and sells it directly after the show. Over a year old, Instant Live has a few jambands on their roster of groups they work with, including a major touring act, moe. In many ways, this could be a signal post for the decline in live taping. In addition, I assume there are plans in the works to allow the shows to be downloaded directly to a fan's personal MP3 player. The amount of time, energy, and people power it takes to burn all of those CD's seems somewhat unnecessary when you can allow digital technology to do the "work."

⁶¹ Jack is speaking of the Front of House [FOH] engineer, or the person responsible for mixing the sound from the stage. This person is often altering levels in the PA system, which affects the sound that tapers capture.

huge role in how our audience tapes sound. The Instant Live thing is big with some of the A and B list groups.

The act of taping is still essential for groups that do not have the circulation to warrant Instant Live at their shows, those at the “B-level” or below, to use Jack’s categorization. Jack, who like many tapers, attends many shows and listen to live music as a hobby, assumes that he is able to discern the level at which a group plays. The “A-list” groups have the resources for services such as Instant Live, and Jack might be less inclined to tape a show of that nature. Still, his affection is for the audience recording. Justin shares that affiliation for the audience recording because it gives a sonic snapshot of the room where the show is being played.

You get the spatial feeling of the venue from audience tapes, versus soundboard tapes. Acoustically, obviously you can tell differences in venues: basements with cinder block walls, big arena with big ceiling. That’s what I enjoy about audience shows, even outdoor shows. A lot of times, it’s the mic placement techniques and microphone types that get you the best recording.

Justin brings up a few points for discussion, namely that of “technical listening.”⁶² Tapers, in order to equalize and set levels, have to an ear for acoustics and an aptitude for their gear. This translates into an ear for recordings, to the point where a taper can listen to a recording and know the type of microphone, the pickup pattern used, and the location of the microphone. Technical listening goes beyond

⁶² This notion from Jonathan Sterne in *The Audible Past*

simple music listening, as it requires the listener to have an array of knowledge concerning technology and its uses. While mass produced live reproductions will serve the average consumer, tapers have a deeper investment in how a show sounds due to their application of technical listening. As far as the impact of these innovations, Jack sees a two-fold response to the new services: a slight decrease in the amount of taping for some shows, but an increased importance for the groups that are up-and-coming.

I think that as Instant Live gains a stronger hold in the band community, our role as tapers is going to be diminished with the artists that use it. Of course, lots of groups don't do this. Many local bands never will, so eventually, our main role may be to record and circulate new bands and their music rather than to just document popular bands. I see this happening in my own taping. For example, tonight I'm taping The Last Bus, a Montrose Colorado jam type band. Nobody knows who they are, including me. I've never heard them, but I'm willing to go out and tape them tonight in the hope that they may be great.

Justin agrees with Jack that Instant Live has its benefits, especially for the uninitiated, casual music fan.

Instant gratification, that's what people want. Right? And I think that's what's behind online trading is that you don't want to go out to the store, you don't want to wait until you have enough money, or you just don't want to pay for

it—it's instant gratification, you get it right then. And that's a great idea, but bands that allow taping are a whole other thing. I think that's a wonderful idea. Most bands that are worth taping should allow it because not only does it give them publicity by people being able to spread the music all over the place, but also it encourages fans that have never heard a band to hear them before they ever go to the show.

These words point to an uncertain future, but they provide a context for how tapers view their contribution to their culture. While elements of their fandom have become commodified, they still see a place for their efforts, to the degree that they will now preserve the lesser known acts that might go out of circulation faster, thus causing their recordings to have more "value" as the years go on.

As I proceeded with the project, the discussion around changes in technology became central, and tapers spoke about how the community, instinctively, reacted. Analog, which had been standard for nearly two decades, was becoming less prevalent. In phone conversation I had with James Freeman, James commented that

DAT used to be king. I could never afford one though. Mini disc provided an opportunity for a lot of people to start recording music. Lots of tapers are really gear snobs so they might tell you that is bad but I think it is good. More people recording means more people are capturing live tunes. Now DAT is on the way out. Sony just stopped making the portable models. Now I have a 20gig hard drive recorder, the Creative Labs Nomad Jukebox 3. Creative

stopped making those already and their new units don't have recording capabilities. They're just trying to compete with iPods.

Two things are occurring according to James's statement. The first is the influx of minidisk recorders in the taper's section, which meant that more, less-equipped people were taping, causing the section to become crowded. On the other hand, more people could get high quality recordings, helping spread the music of the groups in question. Fan cultures were becoming altered with new formats because it shifted the nature of the transaction. Ken Curtis, interviewed through e-mail dialogue, highlights a few effects of changing technologies.

Digital formats allow people to exchange music with next to no degradation in the quality of the recording. It also allows people to exchange music using their home computers and Internet connections almost on-demand. When I started collecting music it was done mostly on cassette, and our primary means of exchange were the U.S. postal service. It took weeks to go from wanting to listen to a show to actually listening to it; now with the Internet and computers it only takes minutes. The quality of the cassette was often less than desirable; you had to endure a lot of 'tape hiss' and other noise introduced in the duplicating process. But, there was nothing like getting tapes in the mail, packages of them.

As discussed in the history section, Dolby came out with a "noise reduction" function on their dubbing decks. One of the protocols for tape trading was that

“Dolby NR (Noise Reduction)” was never used because it cut off the low and high end of the sonic wave, causing a lower volume level and lesser reproducibility when it came time for re-dubbing. As Ken observes, he had to negotiate “tape hiss” to listen to his recordings back when he was trading tapes. This less than pristine reproduction was a status indicator in the tape-trading community, as those with higher generation tapes (those with less hiss) had better connections for tapes and would get seeded higher in a tape tree for generational purposes.

For the casual fan, however, tape hiss and specific taping protocols do not matter at all, and some casual fans do ~~tape~~ ^{one} more casual taper, Steve Painter, would tape Big Wu shows, as they were his favorite band. The Big Wu are a “B list” jamband from the Midwest, and when they would tour state of Minnesota, where Steve went to school, he would tape their shows with a minidisk player. He would either set up in the taping section if it would work out, or he would simply duct tape the microphone to his hat or clip it to his shirt and stand in the crowd. He would not transfer the shows to compact disc or any other media, but rather he would listen to the recordings on the minidisk player itself. This relates to the gear snob issue that James Freeman brings up because in the taper community, the technology that a person uses defines them as a more “casual” taper, one self-recognized as outside the center of this particular fan culture. For Steve, it was less about supreme quality transfer and archiving, but rather the experience of recreating the show. Yet, the discussion of tapes as a different class of music listeners is valid because of their investment of time and money into their craft. High quality audio equipment allows for higher quality recordings, provided the user knows their gear.

Etree or the Music industry—A Current Example

This point is a springboard for the next line of inquiry, as it concerns the evolution of trading practices over time. In this section, I would like to present the new form of the tape tree, the “ETree.” The etree.org music community was created in the summer of 1998 for the online trading of live CD-R's. Participants in this online music community do not trade CD-R's via regular mail. Instead, as Justin informed me, they trade by downloading losslessly compressed audio files, extracting these files, and then burning them onto a CD-R. The etree.org community uses an independent network of file transfer (FTP) servers that host and distribute Shorten (SHN) audio files. Shorten is the file format of choice because it uses a lossless compression scheme, and is available for a variety of operating systems.

This means the digital audio files distributed via etree.org are identical to the original DAT source, and can be played on any computer. There is no sound quality loss or any loss of information at all. Every downloaded copy is an identical clone of the original DAT source. This type of concern sets the taping community apart: they are actively using their technology to further their sonic quality of their culture and the products of their fandom. This method of “treeing” shows is different from generation loss experienced when dubbing analog tapes, and goes a long way in proving the audiophilia of tapers when it comes to preserving for posterity the live concert.

The idea of transferring DAT-quality audio files via the Internet was first discussed in 1996, however it was impractical at the time due to the large file sizes required to keep the quality intact. Enter etree.org. The community now known as etree.org was formed as an offshoot of two highly regarded online Phish communities; Sugarmegs Audio and PCP (People for a Clearer Phish). Starting with 10 people, etree.org has seen a staggering growth rate since inception. As of February 2001, there were almost 300 independent file (FTP) servers, providing the trunk of etree.org to over 12,000 users.

Etree uses one of the latest adaptive technologies, BitTorrent, which is an open protocol for sharing large files and filesets. In a way, BitTorrent is like an online tape-trading conference. There are shows from various groups continually in the process of exchange. The main attraction, like Napster, is the ease of use. BitTorrents downloads are started just by clicking on small "torrent" files or hyperlinks that are then opened with your choice of BitTorrent client, which is a type of software. Downloaders get pieces of the fileset from the original server, and from anyone else who is downloading. The more people there are downloading the same thing, the lower the burden on the central server, and the faster everyone's downloads get, due to sharing with each other.

In the vein of audiophilia, the Etree community hopes to set the standard in lossless digital audio distribution via the Internet. A hardworking community of volunteers runs Etree.org. It is a not-for-profit venture, organized by people who love the music and simply want to see it spread. People who 'work' on etree.org include FTP server operators, mailing list administrators, web site designers, and the other

countless number of people who seed the Etree.org with their DAT tapes and compact discs.

To understand how digital music fits into the music industry, Steve Jones⁶³ notes how digital distribution causes a “disintermediation,” which is a process where layers are cut out of the industrial process. File sharing skips the act of pressing albums and shipping them to stores and causes a “reintermediation” where “control of different elements in the value chain could move to different places.”⁶⁴ Jones also implores scholars to look at “the Internet simultaneously as a social space, medium of distribution, and engine of commercial and social change: as a space of interrelated practices rather than a text to be critiqued, or a technology in need of assessment and control.”⁶⁵ Later he mentions a host of issues that come to forefront of music and the Internet, with the “home delivery of music” of emerging concern.⁶⁶ This is important, because the home is where most downloading occurs. In addition, in the fields of popular music studies and the Internet studies, he sees “fandom and affect” as important areas of research, along with “values and beliefs.”

Jones provides multiple areas of inquiry, but most effective is his example that digital transfer systems offer alternative modes of distribution. The last four conceptual tools were helpful because consumption and identity are components of fandom, and values relate to notions of authenticity.⁶⁷ In fact, the disintermediation

⁶³ Steve Jones. “Music and the Internet” *Popular Music*. (United Kingdom: Cambridge University Press) Volume 19/2, 2000. 217-230.

⁶⁴ *Ibid.*, 219.

⁶⁵ *Ibid.*, 222.

⁶⁶ *Ibid.*, 224.

example directly applies to a new form of distribution currently in play. The values held by tapers are those of the museum curator who seeks to preserve culture for patrons of the future. There are listeners of the future who will wonder what certain musical groups sounded like in 2005, and due to a taper, there might be a recording, with sonic representations coded with the authenticity of coming from the audience. Tapers, identity formulated through online personas, play out social roles at the show, and in their recordings. On BitTorrent, tapes are ranked and discussed, with certain preferences for some recording decks; minutiae such as microphone height are discussed.

Once the Internet and digital technology matured, taping and tape-trading communities experienced a rather quick progression from analog to digital forms of recording, collection and exchange. I therefore interested in learning how and why the new technologies so quickly became an essential part of fan life, and why they were incorporated into the specific practices of tapers. What I found was that the taping community simply used existing and emerging technologies and applied them to their own operations. Meeting at a live show is still the most important place for tapers to convene. While there is a cyberspace component, the key is the live show, the experience that combines the taping ritual and the subcultural practice. In both the cyber world and the real world, tapers support the distribution of information about their culture through word-of-mouth, or in most cases, “virtual-word-of-mouth” advertising. In doing so, they perpetuate the notion that they are outside of the music industry, and this usage of “outsider genre” status is important to the community and

⁶⁷ Ibid., 225.

the dialogue of the subculture.⁶⁸ The taping community has created a way to make the tape tree virtual, thus preserving the original element of the culture that gave rise to the careers of Phish and the Dead, the originators of the “jamband” genre. By digitizing sharing through new media, the taping community has instituted a new form of introduction to fandom. In the section that follows, I will discuss how the modern technology has revived a practice that started with “old media” like cassette tapers.

⁶⁸ Nessim Watson’s 1997 essay discusses the Phish.Net community—the first online community dedicated to a “jamband.” In 1992, the start of the Phish online community, there were three other groups with Rec.Music chat groups: Bob Dylan, The Beatles, and the Grateful Dead. For more, see Nessim Watson, “Why We Argue About Virtual Community: A Case Study of the Phish.Net Fan Community”. In Steven G. Jones, ed., *Virtual Culture: Identity and Communication in Cybersociety* (London, England: Sage Publications, 1997) 102—132.

CHAPTER IX

CONCLUSION

In some ways, I knew I could not track the history of recording and sound reproduction in the project, but I did know that I wanted to hear the stories of the people who ended up in the taping section. The real impetus was that I looked at taping as an art form—especially when considering how tapes were transferred, collected and archived for later consumption. I made the assumption that in the age of digital reproduction and lossless file transfer over the Internet, taping-as-art was threatened. For tapers, the practice of taping and the act of trading—now less material and more based in computerized “sharing”—preserves that authenticity. In fact, there are still levels within authenticity that fluctuate from tape to tape and recording to recording. Microphones themselves contain different pickup patterns that discriminate how much sonic range they capture. Through their stories, tapers showed me that the aura is not gone, although in some cases, it might be a “generation” or two removed. The cultural practice of exchanging tapes and attending live shows reinforces and maintains the authenticity that tapers imbue in their tape collections and other accoutrements of fandom. In fact, with innovations in digital technology, lossless transfer preserves elements of the aura on a more practical level.

Over the course of the project, my perspectives on taping and trading changed after hearing from tapers. The argument is that this type of audio consumption affords the user to engender meaning into their possessions, which at one point were commodities of exchange. As we move from analog to digital distribution systems, we see layers folding back on the process, and new users are swept up in the transfer network of the Internet. While the live show is still the spontaneous and creative moment, the show at home allows the fan to retain a piece of the authentic experience through a direct memory, or an indirect memory (if they did not attend the show they are listening to, they have an attachment and understanding of the live show and the live moment). Downloading has technologized the authentic moment, so much so that tapers now have authenticity in different forms—the live show and the download of the live show at home. Walter Benjamin also discusses the role of the audience in making meaning of texts through reproduction, but it is his work on collection could be the description of a taper and his devotion to his tape collection.

To turn the lens on my experiences, I had to find a way to speak to tapers with a beginner's mind and strip away the conceptions that I have encountered and developed over the years. Interviews turned into cascades of collective memories, whether we shared a moment about a concert shed in central Indiana, or a small show at the Boulder Theater. Both the tapers and I found out a lot about shared memories. The time I spent listening to recordings of the interviews on my laptop during the transcription and coding process created a new dialectic within the project that I had not expected. Through the transcribing process, I soon entered a new conversation because I heard my questions as I asked them, thus learning from my own tone,

delivery and interaction with tapers. I could hear myself unravel past assumptions as interviews progressed. Each interview was a reaction to the last, and I found myself digging deeper in a history that I had known, but never really took the time to unpack. As I unpacked that tape collection, I found that I was able to fit this study into various disciplines. From anthropology, this fits into the “confessional tale”-style anthropology of John Van Maanen, whereby personal recollections guide research.⁶⁹ In the realm of material culture, the activity of tapers and collection adds to the discussion started by Brenda Danet and Tamar Katriel when they speak of the “glorious obsession” that is collecting.⁷⁰

Grateful Dead historian David Gans has an analogy for the type of fandom found in the live concert experience. In his essay “Grateful Dead concerts are like baseball games,”⁷¹ Gans uses this metaphor to chart the similarities a touring musical group has with America’s pastime, arguably creating another “pastime” for those involved.⁷² Live music fans of this era, willingly or unknowingly, participate in their culture in this fashion. Tapers continue to document the shows, or “games,” like scorekeepers at the game, while the rest of the show-going public sits and cheers night after night. In that sense, the RIAA and file-sharing incidents will not taint the experience of tapers and other live music fans, just as steroids and other issues will not tarnish baseball. Fan cultures are resilient entities, and fans, largely, seek the release they desire and find it in their favorite pursuits. Yet, beneath the veneer of

⁶⁹ John Van Maanen, *Tales of the Field: On Writing Ethnography*. (Chicago, IL: University of Chicago Press, 1998). 73-100.

⁷⁰ Brenda Danet and Tamar Katriel in Stephen Harold Riggins, ed., *The Socialness of Things: Essays on the Socio-Semiotics of Objects* (Berlin, Germany: Mouton de Gruyter, 1994), 23-62.

⁷¹ Complete text in Appendix.

everyday life rests the machinations and structural arrangements that extend deep into the fabric of collective and cultural memory. Fleeting as contemporary life might seem, tapers provide the continuum to a culture of fandom, and through their adaptation of technology will preserve that culture of fandom as long as the musical groups allow taping and the courts rule in favor of home taping and reproduction.

The production process of the compact disc seems to be moving towards obsolescence, and the consequences on the mechanical industry around music production will play out in the next few years. It simply demonstrates that media have entered a digital culture, with the consumer socialized to the interface, process, and experience of the Internet. Copyright issues become more abstract within the structure of the Internet, and a generation has found itself with free music on demand. The liquid texture of the Internet facilitates navigation quickly and effectively. Finding music will not get harder, and there is no way to stop a search program within the end-to-end architecture. The goal of further research must be to understand how the Internet acts as a facilitating device for distribution of culture, while qualifying and quantifying the economic and social implications of online sharing so policy can adapt to the evolving issues surrounding property, new media, and the Internet.

In this paper, I chose to concentrate more on that which came and how it affects the present. In that sense, I do emphasize the role of history, and in the many conversations I had with tapers and traders, I found that music and memory converged. Jack spent a fair amount of time in reference to the Grateful Dead, while Justin's remorse over not taping the last Phish show was apparent. Both saw an end to their favorite groups, but the taping experience maintains their knowledge of live

music and taping practices. In the process of learning, I found emergent strands of how culture has become enmeshed in technology, and my nostalgic overtones were stripped by the reality the tapers presented me: technology and culture evolve together, in a systematic, dialectical relationship. Thus, the actions of individuals shape cultural processes, not the other way around. As tapers transitioned from analog tape to digital tape and consumers transitioned from cassettes to compact discs, the value of concert taping still rested in the microphone and its location in the venue. The conversation of culture moved from magazines and phone hotlines to forums on the Internet. The social space of the concert did not change in function, although more tapers might be seen with smaller decks and cheaper microphones. The nature of the cultural act of taping presents a role for technology, but technology does not supplant the importance of the taper's negotiation of technique and experience while taping a show.

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APPENDIX

The Problematic of Definition: Jambands

Colin Helb's discussion of the jamband scene points to further inquiry. Below is one excerpt from his writing.⁷³

The JamBand scene is truly an anomalous thing. Today, possibly more so than ever, mass amounts of money go into the creation of banal, interchangeable music. (Is there any difference between Avril Lavigne and Kelly Clarkson?) The difference between success and failure in the mainstream music business is measured in millions. The majority of albums, much as the practice was in the early days of rock and roll, are constructed with the "hit single" in mind. To "fill out" the rest of the album, songs are picked as if from a grab bag. Two or three singles equals moderate success, one is a failure, and to have five is to instantly be recognized as a super star. An album is only presented as a souvenir of a specific performer that can be sold for \$18.99 at the local Tower Records.

But music involved in the JamBand scene has a good beat and everyone seems to dance to it too. Those who may purchase the album are just as likely to buy like-minded products from a specific brand (or performer).

⁷³ Colin Helb, "Jambands" (Master's Thesis, Temple University, 2004).

The JamBand scene seems to exist in spite of the Music Industry. Many bands release records on independent or self-run labels. Most promoters are just fans with a job. And record sales mean very little to the majority of those involved.

So why then has a bizarre subculture created enough of a buzz to be included (to some extent) in the mainstream media, yet remained “under the radar?”

Genres are used by the mainstream media to typecast and aid the public in understanding “just what it is those crazy kids are listening to.” disco, to punk, to metal, to post-modern, to rap, to grunge, to neo-punk, to whatever. These terms are more aesthetic descriptions of the music itself rather than the cultural “thing” surrounding them. Once upon a time, prior to the days of long-range, mediated information terms such as Baroque (although posthumously applied) described more the times rather than the music. That is not to say that Baroque music is indefinable, quite the opposite, it is just that it was (for lack of a better word) the “scene” – art, writing, performance, life, everything was just a little Baroque. Is there a genre involved with the JamBand scene or is it simply a weird hodgepodge of rock, jazz, electronica, country, bluegrass, folk, trance, and blues?

Live Dead and the Role of David Gans

As mentioned in the conclusion, David Gans provides a foundation for writing about music and culture from the perspective of the live-music enthusiast. His work on the The Grateful Dead Hour, a nationally syndicated radio program solely devoted to live Grateful Dead concerts, demonstrates that there is a place for live music within

the format of broadcast media. He also serves his role as archivist and arbiter of the live Grateful Dead available for radio, and with his presence, he continues an oral tradition of telling stories about shows and songs. Music never happens in a vacuum, and the social and historical context is important to understand the band in any period. Below is his comparative commentary, *Grateful Dead Concerts Are Like Baseball Games*.

*Grateful Dead Concerts Are Like Baseball Games*⁷⁴

Grateful Dead concerts are like baseball games: no two are ever alike. The plays are always different, and there is always fresh hope. Sometimes the game is an all-timer even though individual performances are sloppy; sometimes everybody plays great but the team loses anyway.

Some people thrive on yesterday's moments, and are not too keen on the way the game's played today. Some have only been fans since last year and do not care what happened way back when. You can cherish the great victories and triumphant seasons and chart them across decades, or you can go simply for the enjoyment of tonight and to hell with the standings. Like all the great teams, the Dead have their pennant years and bleak innings, perfect games and whippings, hits and foul balls, heroes and goats.

⁷⁴ David Gans, "Grateful Dead Concerts Are Like Baseball Games," in Paul Grushkin and Jonas Grushkin, eds., *Grateful Dead: The Official Book of the Deadheads* (New York: Quill, 1983). (This piece was first accessed in 1999 from the Jambands.com "Box Scores" page, which is edited by Jessie Jarnow. Jarnow writes about music and culture for Relix and Jambands, and as an undergraduate at Oberlin College taught an elective course on Phish. The course syllabus circulates in the nether of the Internet.

To many they are an institution, to some mere child's play, and to others the Grateful Dead is more or less an indispensable part of life. There are those who say the game's too slow, that the brief moments of action and excitement are too few and far between. Like "America's Favorite Pastime," the Dead are both celebrated and criticized, and some people will never see what is to enjoy.

Like big-league fans, Deadheads are as varied as the game is long. There are scorekeepers who record every detail for statistical analysis and a place in the Hall of Fame; camera buffs and video freaks; armchair umpires, die-hards, groupies. Some are bleacher bums who would be in the stands no matter who was playing; and there are even spousal fans that would go because if they did not, they would be left home alone. A lot of people attend because they've always gone and really don't care to stop.

It may take a few visits to grasp the subtleties, but if you let yourself into the flow of things, there is something to enjoy from the very first moment you're there. As the old saying goes, the mind believes what the mind believes: Grateful Dead is cerebral if you choose to analyze it, but it is basic and instinctive too. Like the game of baseball.