Music is Free(dom): Digital Music Platforms, Surveillance, and Subcultural Resistance to Datafication

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B.A. Media Studies, University of Virginia, 2022

A Thesis presented to the Graduate Faculty of the
University of Virginia in Candidacy for the Degree of
Master of Arts

Department of Media Studies

University of Virginia
December 2023

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ABSTRACT

Musicians' frustration over their inability to make a living from current music streaming models and increased industry anxiety over platform viability mark a crisis in the music industry. While many actors are scrambling to implement new streaming design, few have offered clear solutions to assuage current concerns. Further, while much work has been done to outline how current music streaming platforms are shaping our cultural landscape, little scholarship exists that points to new ways of conceptualizing streaming platform design that might maintain the integrity of music, artists, and listeners. In this thesis, I argue that music should be valued beyond its function as a commodity in platform design. I turn to a previous crisis in the music industry – the introduction of Napster – and look at bootleg music subculture and their media use to learn how subcultural values, practices, and identities ultimately shaped the present-day streaming platform: nugs.net. My analysis of nugs.net reveals how music can be treated for its aesthetic value and function as a technology of the self in constructing new platforms, not simply as a datafied commodity or technology of surveillance, ultimately leading to a more equitable streaming landscape for artists, music, and users alike.

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS

The only way to begin this section is to recognize the tremendous support system I am so grateful to have. I am only here, at the University of Virginia, because of my steadfast family and friends. To my parents, Shawn and Lori Coughlin, I would not be as adventurous, curious, or committed to following my passions without your unconditional and unwavering love, support, guidance, and reassurance. You keep me tethered. Thank you for raising me as a concert goer and giving me my love of music. I am forever grateful and indebted to you both. To my family and friends who encouraged me to take chances, change courses, and shoot for the moon, I'm happy to inform you all that I've landed among the stars; thank you. To my advisor, Siva Vaidhyanathan, thank you for consistently seeing in me what I am sometimes unable to see within myself. Learning from you has been an inspiration and an honor. To Elizabeth Ellcessor, thank you for investing so much of yourself and your time in me and my work, and for showing me that the door has always been open, I just had to walk through it. This process has been enjoyable because of your encouragement to follow my fire, and I can be proud of this thesis because of the feedback you've given me. To Kevin Driscoll, it's been a wonder to witness your commitment to your students and to have benefited from your expertise and intellect is the biggest gift. Thank you for talking shop with me. To all those I've had the pleasure to learn with and learn from while at the University of Virginia, thank you for sharing your time with me and opening my world. And to my past self, thank you for stepping off of trodden trails into what at the time felt like an abyss. Your courage reminds me that some of the best things lie in the unknown. The most love to you all.

INTRODUCTION

On a Sunday night in late summer, hundreds of people flooded into a local music venue on the downtown mall of Charlottesville, Virginia to see a not-so-local band perform. Upon entering the venue, just before finding a spot in front of the stage, guests walked past a merchandise table tucked in, left of the door. A modest setup, no bigger than two collapsible tables, it was easy to miss in the sea of people. Yet, a piece of printer paper–unlaminated no less–made a desperate plea, "One t-shirt is the equivalent of 6500 streams on Spotify. 76% of all music in 2023 is streamed and not bought physically or digitally. Band merchandise is the most direct way to support artists!" (formatting from original (see fig. 1)).

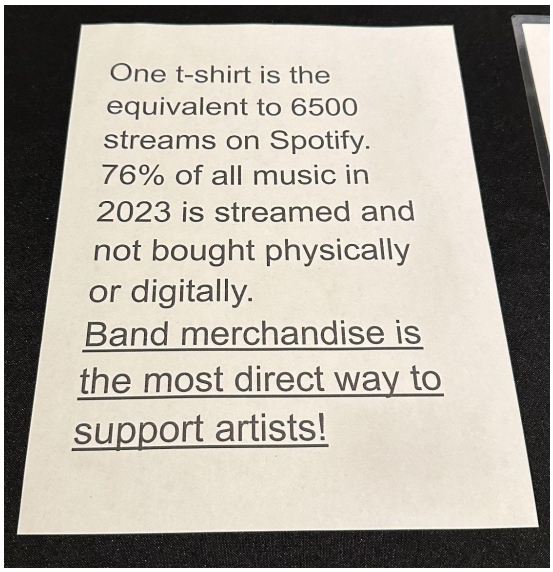

Fig. 1. From a concert at The Jefferson (Pink Skies - Aug 20, 2023)

Streaming services have become ubiquitous, generating "$17.5 billion worldwide in 2022, encompassing 67% of global recorded-music revenue."[1] With numbers like these, how can artists be making more money off their t-shirts than their music? This thesis explores the dynamics at play here and pushes our understanding of streaming model possibilities. To do so, I

[1] Water & Music, "Starter Pack: Music Streaming Platform Models," Water & Music, July 14, 2023, https://www.waterandmusic.com/starter-pack-music-streaming-platform-models/.

look at bootleg music subculture and their media use from Napster and the introduction of digital networks to a present-day music streaming platform born out of their community: nugs.net. I outline how the values and ideals of this subculture took root and can inform our understanding of alternative streaming models. Through the analysis of nugs.net I contend that music should be treated for its aesthetic value and function as a technology of the self in constructing new platforms, not simply as a commodity, ultimately leading to a more equitable streaming landscape for artists, music, and users alike.

Grievances over music streaming platforms are far from novel. Artists have been protesting streaming compensation since its inception.[2] In fact it seems that "it's more complicated than ever for artists to make a living from streaming."[3] This can be credited to the leading payment model of streaming services, pro rata, which pays artists off of their share of all total streams. In this system, artists with the highest number of streams get paid the biggest share. Making money, let alone a living, in this streaming environment requires that artists focus on scaling. As "each stream is valued equally, regardless of its source…artists are incentivized to focus on generating a large number of streams across as many listeners as possible, in order to maximize their overall stream-share."[4] This has implications for the music that is produced, which I will discuss further in a moment, but also makes it extremely challenging for the vast majority of artists to make a sustainable profit off of streaming their music alone. In fact, "in 2022, only 57,000 artists of the more than 9 million uploaders to Spotify (less than 1%) generated over $10,000 in recording and publishing royalties" for the entire year.[5] But the

[2] Ben Sisario, "Musicians Say Streaming Doesn't Pay. Can the Industry Change?," *The New York Times*, May 7, 2021, sec. Arts, https://www.nytimes.com/2021/05/07/arts/music/streaming-music-payments.html.
[3] Water & Music, "Starter Pack: Music Streaming Platform Models."
[4] Water & Music, "Starter Pack: Music Streaming Platform Models."
[5] Water & Music, "Starter Pack: Music Streaming Platform Models."

consequences of current streaming models go beyond economics, impacting the very thing these battles are waged over: the music.

The impact on music can be attributed to the prioritization of quantity of streams above all else on these platforms. The type of music produced for these systems tends to be "shorter tracks to encourage repeated plays."[6] Artists are incentivized to shape their songs in a way that encourages their listeners to stay listening, as streams on Spotify are only counted if they last for at least 30 seconds.[7] Shaping their songs around this target gears the arch and style of a musical piece toward shorter, more easily hookable moments, producing a musical style that has been described monolithically as "Spotify-core."[8] The focus on stream-ability and scale shapes how artists are approaching the release of their music, as well, pushing them to produce "large quantities of music as quickly as possible, to create more opportunities to boost streams."[9] The pressure to release more songs and focus on scalability positions music simply as a commodity, changing the incentive for artists' expression from quality to quantity. In fact, Morris argues that the data-driven streaming landscape treats "music as data…[forcing] musicians and producers to think and act like software developers."[10] In this environment, artists are encouraged to treat their music "as an intermingling of sonic content and coded metadata that needs to be prepared and readied for discovery," rather than enjoyed and created for its aesthetic value.[11] This shift in priority opens opportunities for the proliferation of AI produced works on these platforms, as well. While this topic is beyond the scope of this thesis, the implications of such a reality are

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[6] Water & Music, "Starter Pack: Music Streaming Platform Models."
[7] Jeremy Wade Morris, "Music Platforms and the Optimization of Culture," *Social Media + Society* 6, no. 3 (July 1, 2020): 3, https://doi.org/10.1177/2056305120940690.
[8] Morris, "Music Platforms and the Optimization of Culture," 3.
[9] Water & Music, "Starter Pack: Music Streaming Platform Models."
[10] Morris, "Music Platforms and the Optimization of Culture," 1.
[11] Morris, "Music Platforms and the Optimization of Culture" 2.

under much debate and pose critical questions for how streaming models might consider reshaping.[12]

Further, while playlists can function as a goalpost for artists' success in reaching new audiences, they are also changing the landscape of subscribers' listening experience. By valuing music as a commodity, these platforms encourage a passive form of listening. The default becomes "'music for every moment': radio stations, curated playlists, [and] autoplay."[13] While I will discuss this further in the coming chapters, it's important to note that these streaming formats are "ways to stretch people's listening sessions to get more value out of the service & either subscribe or stay subscribed (or at the very least trigger more ads)."[14] The end goal of platforms is increased streams, "[treating users] as listeners first, fans second."[15] The emphasis on scale, mass production, and continuous streaming, values music for its money making potential, sacrificing the integrity of the art, artist, and, as we'll see, the users themselves. Despite these grievances and the fact that there are alternative models to pro rata, it maintains its position as the dominant payment method of music streaming services.

But this may not be the case for long. Industry rumblings are revealing that these platforms aren't particularly viable, increasing anxiety over the market and the control of music distribution. The majority of murmured grievances are actually coming from the music industry's major labels who fear that they are losing out on their market share as more

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[12] Water & Music, "Artificial Intelligence," accessed September 13, 2023, https://www.waterandmusic.com/category/artificial-intelligence/.
[13] Bas Grasmayer, "Four Reflections on SoundCloud's Fan-Powered Royalties & the Flaws of Subscription Models," *MUSIC x* (blog), March 9, 2021, https://www.musicxtechxfuture.com/2021/03/09/four-reflections-on-soundclouds-fan-powered-royalties-the-flaws-of-subscription-models/.
[14] Grasmayer, "Four Reflections on SoundCloud's Fan-Powered Royalties & the Flaws of Subscription Models."
[15] Grasmayer, "Four Reflections on SoundCloud's Fan-Powered Royalties & the Flaws of Subscription Models."

independent releases join the streaming pool. Many platforms are responding by offering new payment models in an effort to appease major labels. However, what's being proposed is something nebulous and not yet defined. Universal Music Group announced in January of 2023 that they were working with "Deezer and Tidel to craft a more 'artist-centric' model."[16] While there is no outline for what this kind of model may look like, this proposition further highlights the underlying anxiety about the relationship between the music industry and streaming platforms, and the fear of an impending crisis. Concerns for viability are creating an unstable ground in the music streaming industry where artists seem to be treated as an afterthought. The model for digital music distribution is far from set in stone and the path forward is not clear. This moment represents an opportunity to establish new, more equitable and viable platforms. How might we conceptualize these models and what should we be considering when designing alternative streaming solutions?

This thesis seeks to answer these questions and push our understanding of streaming model possibilities, offering new ways of conceptualizing music streaming platforms that value music beyond its function as a commodity. To do so, I take a look at the use of digital music platforms by bootleg music subculture during two key moments of crisis in the music industry: the introduction of Napster and the current impending crisis, as established above. I outline subcultural values, practices, and identities and demonstrate how this community's reprioritizing of music as a resource and technology of the self can help us value music's aesthetic power in constructing streaming platforms and not simply approach music for its money-making potential.

Tracing bootleg music subculture's media use from Napster to now allows us to recognize that this issue of control is far from new. In fact, the record industry and major labels

[16] David Turner, "The Developing 'Crisis' of Music Streaming," Penny Fractions, April 5, 2023, https://pennyfractions.ghost.io/the-developing-crisis-of-music-streaming/.

have been controlling the distribution of music since recording technology began. But the development of mp3 technology and digital distribution channels uniquely disrupted the industry's ability to absolutely control the sale of music and left major labels to find new ways to reinsert scarcity in a landscape of free and available music. An analysis of an industry sales slump in 1982 by economist Alan Greenspan concluded that "the success of capitalism [requires] vigorous intervention from the state."[17] As we'll see, the Record Industry Association of America latched onto this finding and launched a massive campaign to limit illegal music file sharing. While streaming has become the dominant form of music distribution today, its shape was not predetermined but rather the result of specific decisions and with specific priorities in mind. These things can be changed, shifted, and restructured to satisfy different ends. The issue of control remains as we analyze and discuss streaming platform models, but this thesis seeks to complicate our understanding of its centrality by looking at music's function as a resource for users in their processes of self-determination, not simply as a commodity for platforms and their affiliates.

Looking at a subculture known for bootlegging allows us to do just this and challenges taken for granted assumptions about how music, artists, and fans ought to be handled. The term, bootleg music subculture, is one that I've coined to describe the tape sharing cultures of bands that developed before the advent of digital networks and continued, as we'll see, into these digital spaces. This subculture spanned many different fan groups and was embraced by several different bands. Many even outwardly supported the recording and sharing of their concerts by establishing tape sharing booths at shows and offering sections in venues for people to record.

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[17] Stephen Witt, *How Music Got Free: A Story of Obsession and Invention* (New York, NY: Penguin, 2016), 83-4.

While this subculture is made up of distinct fandoms, there is often overlap between groups and I refer to them in the singular to recognize the congruence in their values, practices, and identities.

To understand this further, it is key to outline how I define subculture. To do so, I turn to Hebdige who rejects simplistic understandings of subculture as art and defenses of that art as worthy of high regard, explaining:

> …this misses the point. Subcultures are not 'cultural' in this sense, and the styles with which they are identified cannot be adequately or usefully described as 'art of a high degree.' Rather they manifest culture in the broader sense, as systems of communication, forms of expression and representation. They conform to the structural anthropologists' definition of culture as 'coded exchanges of reciprocal messages.' In the same way, subcultural styles do indeed qualify as art but as art in (and out of) particular contexts; not as timeless objects, judged by the immutable criteria of traditional aesthetics, but as 'appropriations,' 'thefts,' subversive transformations, as *movement*.[18]

In other words, subcultures position themselves against the hegemony of their moment, offering alternative modes of being, acting, and expressing. Their art or cultural production should be viewed within this context; as a commentary on that against which it is positioned, not simply as an aesthetic product. Approaching the study of bootleg subculture with the understanding that "each subculture moves through a cycle of resistance and defusion…[that] is situated within the larger cultural and commercial matrices," allows us to see their media use as modes of resistance; shining a light on new ways of, in this case, treating music.[19]

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[18] Dick Hebdige, *Subculture: The Meaning of Style*, New Accents (London ; New York: Routledge, 1991), 129.
[19] Hebdige, *Subculture*, 130.

A second theoretical framework key to understanding the processes at play here is the concept of datafication. As the driving force behind platform economy, datafication describes the process of turning something into data. Music streaming platforms perform datafication in two important ways. The first is through the datafication of the music itself. By understanding music as data and metadata, platforms are able to organize, make sense of, and commoditize music. Music becomes a means through which platforms can continually gather data. I describe this datafication of music as the treatment of music as a commodity. The second form of datafication is built through a user's interaction with the music on a streaming platform. These interactions get datafied, turned into a stock of potentially exploitable data about user behavior that the platform can utilize and leverage to different ends. In fact, platforms can and should be understood as:

> a fundamental new kind of multisided market focused on datafication, a market that brings together platform users who generate data, data buyers (advertisers and data brokers), and platform service providers who benefit from the release, sale, and internal use of data.[20]

Because "datafication is linked to the generation of profit—whether through data's sale as a commodity or data's incorporation as a factor of production," music streaming companies have built their platforms in ways that optimize the generation of data.[21]

Understanding datafication and its centrality in the digital music streaming landscape leads to our third, and final, theoretical framework: music as a technology of surveillance. I use this concept to further understand the implications of a datafied music streaming environment.

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[20] Ulises A. Mejias and Nick Couldry, "Datafication," *Internet Policy Review* 8, no. 4 (November 29, 2019): 5, https://policyreview.info/concepts/datafication.
[21] Mejias and Couldry, "Datafication," 5.

Introduced by Drott, music as a technology of surveillance plays off of Tia DeNora's theory of music as a technology of the self. This theory posits that music functions as a particular resource for listeners, working as a tool for emotional regulation, as well as everyday identity formation and maintenance.[22] This means that the data that is produced by users on these platforms is arguably deeply personal and intimate data about the self. Drott explains that many streaming platforms actually market themselves on the fact that they have this data that offers "privileged access to listeners' innermost selves."[23] Consequently, they have a unique type of data that can be used not only for marketing and advertising (as we've seen datafication makes possible) but also, according to Drott, to surveille users in deeply personal ways.

These two concepts – datafication and music as a technology of surveillance – allow us to look at current music streaming models more critically and point to the deeper issue at hand. Yes, musicians are not getting compensated fairly for their work. Yes, platforms are not viable in their current form. But most importantly, music and users are being datafied and commodified in pernicious, or potentially pernicious, ways. Looking to bootleg music subculture's media use allows us to understand alternative values, practices, and identities that have shaped music streaming platforms from their own ideals. Doing so pushes our conceptualization of these platforms and urges a more equitable approach to music streaming models.

What follows is a turn toward what I identify as the first control crisis in the music industry: the introduction of Napster and digital networks. Here, I complicate traditional pirate narratives and show how the bootleg music subculture used this emerging technology, struggled with identity and values against criticism, and envisioned new ways of music distribution. While

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[22] Tia DeNora, *Music in Everyday Life* (Cambridge: Cambridge University Press, 2000), https://doi.org/10.1017/CBO9780511489433.
[23] Eric A. Drott, "Music as a Technology of Surveillance," *Journal of the Society for American Music* 12, no. 3 (August 2018): 239, https://doi.org/10.1017/S1752196318000196.

we know that this vision didn't prevail at the time, I outline how the values and ideals of this subculture took root and can inform our understanding of alternative streaming models today. With that we move to the second, current control crisis and analyze nugs.net and the attentive listening model it affords. It's through this model that I contend music is treated for its aesthetic value and function as a technology of the self, leading to a more equitable streaming landscape not only for artists but also for users. In the conclusion I discuss why music is particularly suited to the fight against control and make a final case for its decommodification.

CONTROL CRISIS 1 – NAPSTER AND THE INTRODUCTION OF DIGITAL NETWORKS

In 1999, Shawn Fanning, with the help of Sean Parker, founded Napster, a peer-to-peer file sharing software that would allow users to exchange mp3s. The two took inspiration from their involvement in tape sharing cultures of bands like the Grateful Dead, Dave Matthews Band, and Phish, in developing Napster. These bands allowed, and even encouraged, fans to both film and audio record concerts and trade the tapes, building a grassroot following and community. In an interview, Sean Parker explained:

> The idea of Napster especially appealed to me because it makes it that much easier and that much more efficient to trade live concert recordings. So…you can go and find that obscure '94 recording from…a particular venue that you're looking for.[24]

The idea appealed to many other Americans as well. The site took off and by the summer of 2000, 58 million users were registered and over 450 million tracks were available for download.[25] Described in *Rolling Stone* as an "mp3 revolution," Napster's grassroots framework spread like wildfire making waves in the industry status quo along the way.[26] As one of the first decentralized models of music distribution, Napster "[stood] in marked opposition to the centrally distributed models of musical dissemination championed by the music industry," posing a serious threat to the industry as a whole.[27] In 2001, the Record Industry Association of

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[24] "Jason Stessel on Instagram: '(Followup to Last Post) - On ~this Day in 2001, the Unfinished DMB Album "The Lillywhite Sessions" Leaked on Napster. Ironically, in This Rare VHS Clip from 2000, Napster Co-Founder Sean Parker Reveals How His Love for Dave Matthews Band & Tape Trading Played a Part in Inspiring Napster's Creation. #DMB #DaveMatthewsBand #DaveMatthews #SeanParker #Napster #LillywhiteSessions,'" Instagram, March 26, 2023, https://www.instagram.com/reel/CqQgWHxrpsi/.

[25] "Napster's Free-for-All: File-Sharing Service Spawns the MP3 Revolution," *Rolling Stone* (New York, United States: Rolling Stone Licensing LLC, June 24, 2004): 158.

[26] "Napster's Free-for-All," 158.

[27] Griffin Mead Woodworth, "Hackers, Users, and Suits: Napster and Representations of Identity," *Popular Music and Society* 27, no. 2 (March 1, 2004): 162, https://doi.org/10.1080/0300776041000168581 3.

America (R.I.A.A.) acted against Napster, filing a lawsuit for copyright infringement, eventually shutting the site down in July of that year.[28]

The lifespan of Napster, though short, garnered a lot of attention, often discussed in the media as a battle between the record industry and the mp3 trading site.[29] Popular discourse framed this "music crisis" as a fight between good and evil.[30] The R.I.A.A. leveraged rhetoric to situate themselves and their traditional models of music distribution as morally superior to the file sharing service. In their framing, Napster users were *pirates* that used the service for the criminal activity of stealing music and money from artists.[31] This portrayal allowed the R.I.A.A. to maintain industry power and criminalize Napster users, without legally prosecuting millions of people.[32] Many artists adopted this sentiment as well. Dr. Dre was quoted in *Rolling Stone* saying:

> what they're doing is straight-up bullshit, and I'm going to fight them to the death…Napster is taking food out of my kids' mouths. I've always dreamed about making a living out of something that I love to do. And they're destroying my dream.[33]

Other musicians, like Metallica, went a step further, filing lawsuits against individual users. The term pirate carried power, not only deeming behavior – downloading mp3s – as criminal activity, but further marking the identities of Napster users as deviant, ultimately setting Napster up for a losing battle in court.[34]

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[28] Bryan C. Taylor et al., "New Media and the Circuit of Cyber-Culture: Conceptualizing Napster," *Journal of Broadcasting & Electronic Media* 46, no. 4 (December 1, 2002): 611, https://doi.org/10.1207/s15506878jobem4604_7.
[29] Jenny Eliscu, "Napster Fights Back," *Rolling Stone* (New York, United States: Rolling Stone Licensing LLC, June 22, 2000): 29.
[30] keith zarriello, "Re: [Rumori] Re: Pho: Re: My Open Resolution to the Online Music Crisis," June 2001, https://www.detritus.net/contact/rumori/200110/0076.html.
[31] Woodworth, "Hackers, Users, and Suits," 173.
[32] Woodworth, "Hackers, Users, and Suits".
[33] Eliscu, "Napster Fights Back," 29.
[34] Woodworth, "Hackers, Users, and Suits," 176.

It's this framing of Napster users as pirates that I wish to complicate in this section. After all, the tape sharing practices that inspired Napster came from communities of loyal music fans, not pirates out to hurt artists. In this section I ask, how can we complicate our conceptualization of Napster users beyond pirates and thieves? What were the driving bootleg user ideologies, culture, and practices behind the adoption and use of this file sharing service? When discussing Napster users throughout this section, I refer to the bootleg music subculture, and not Napster users generally. I argue that these Napster users were first and foremost fans and music lovers for whom Napster functioned as a tool to extend their practices, and whose culture valued community and was driven by an underlying anarchist ideology.

METHOD

To answer my two questions—how can we complicate our conceptualization of Napster users beyond pirates and thieves, and what were the driving bootleg music subculture user ideologies, culture, and practices behind the adoption and use of this file sharing service—I found and analyzed user-to-user interaction and conversations about, and related to, Napster from 1999-2002. I chose this date range as it corresponds with Napster's launch and subsequent shutdown, while allowing for the exploration of user posts that functioned as reflections on Napster. I primarily looked at archived Usenet groups, housed in Google Groups. Usenet conversations are not the only thing archived in Google Groups, so in order to confirm that I was viewing and accessing material from original bulletin board systems, I only gathered information from groups starting with the "alt." prefix, as this indicates a Usenet group.

I centered my search around groups that were Napster related, such as alt.music.mp3.napster, which had approximately 5,000 posts, and alt.napster, which had a

smaller rate of engagement at about 250 posts. Additionally, I looked at groups that were centered around artists that had a predigital tape sharing culture. Those included alt.music.dave-matthews, alt.fan.allman-brothers, and alt.music.rush. I focused on these boards as they had a high rate of engagement, with over 120,000, 4,000 and 104,000 posts respectively and allowed me to gain insight into how a fan base that participated in predigital, bootleg tape sharing culture was using and talking about Napster. The group alt.music.rush was selected to supplement my search on fan activity in these spaces. Though Rush did not support tape sharing or have a particularly strong predigital tape sharing culture, the fan base was active on Usenet and Napster, adopting and endorsing the same practices as bootleg music subculture in these spaces. Including this group extended my understanding of how fandoms used Napster and how the values of bootleg subculture were spreading through this space, pushing up against more mainstream cultures. Other bands that supported a predigital tape sharing culture were not included in this research as a Usenet group dedicated to them did not exist or was unable to be located.

In addition to Usenet groups, I was able to access an archive of an old forum called the Pho list. The Pho list was created by Jim Griffin, "the CEO of Cherry Lane Digital, an Internet business incubator and think tank that focuses on music and entertainment."[35] The group was started as a place to discuss mp3 file sharing and Napster specifically. Described in 2000 by the *Atlantic* as "the biggest and most active online discussion group about the future of music online," the pieces of the Pho list archive that I was able to access offered insight not only into the conversations users were having amongst themselves, but also showed how users were attempting to interact with, and be heard by, industry executives.[36] The *Village Voice* described

[35] Charles C. Mann, "The New Tastemakers: An e-Mail Exchange with Cherry Lane Digital's Jim Griffin," The Atlantic online, September 2000, https://www.theatlantic.com/past/docs/issues/2000/09/mann-griffin.htm.
[36] Mann, "The New Tastemakers: An e-Mail Exchange with Cherry Lane Digital's Jim Griffin."

the groups as containing "record label sorts, new-media brass, music lawyers, reporters, artists, and interested onlookers – nearly 700 members – [that] hash out everything from copyright reform to music-related IPO offerings and the latest antipiracy chip," offering Napster users a unique space in which they could advocate for themselves and offer alternative narratives to those presented in the media.[37]

Combing through these primary resources allowed me to directly hear user voices and get a sense of user culture, conversation, values, and ideologies through discourse analysis of my findings. Additionally, I looked at archived articles from the *Rolling Stone* archive and the *Back Pages* archive that discussed the Napster case and its stakeholders. A few sources were found on social media accounts dedicated to sharing archived tape recordings, namely a snippet of an interview with Napster co-founder, Sean Parker. These sources gave me a sense, respectively, of the popular debate and conceptualization of Napster users in the media, as well as insight into how Napster founders understood its community and their values. These findings allowed me to gather a sense of the historical context of Napster user conversations, as well as the external factors that influenced and shaped bootleg Napster user culture and self-conceptualization. I argue that Napster users who belonged to bootleg music subculture were first and foremost fans and music lovers for whom Napster functioned as a tool to extend their practices, and whose culture valued community and was driven by an underlying anarchist ideology.

Napster as a Tool for Fans and Music Lovers

Napster users were primarily fans and music lovers, not pirates and criminals trying to steal from artists. This is most readily evident in the Usenet groups centered around particular bands and

[37] Eric Weisbard, "Keeping Up With the Napsters.," May 10, 2000, https://www-rocksbackpages-com.proxy1.library.virginia.edu/Library/Article/keeping-up-with-the-napsters.

musicians. That Napster users had a presence and were active on Usenet shows their commitment to the fandom and music group. These were serious fans, communicating and engaging with one another, and not just people trying to scam the system or hurt others, as popular discourse would imply. Further, as it became known that the founders of Napster were involved in bootleg tape sharing cultures as fans themselves and that that experience shaped the vision for the file sharing service, "Napster's technology and corporation were conflated with images of Fanning as a music fan."[38] Based on this correlation Napster was made by fans for fans, a narrative that Napster users readily identified with and adopted. In this way, Napster functioned as a tool for fans, extending their already established tape sharing cultures online by allowing them to share, discover new music, and find live recordings or deep tracks with more efficiency and at an increased scale.

A primary way Napster functioned as a tool for fans was by facilitating the sharing of their recordings. Many posted in forums letting other users know that they had certain songs or shows available for others to download. Usenet user dmbnatto posted to alt.music.dave-matthews simply to let others know that he had a particular Dave Matthews Band song, Bartender, and provided his AIM and Napster usernames so others could contact him and find it.[39] Similarly, another user posted in the same Usenet group raving about an mp3 of a live song that sounded like a studio recording. In a post title, "DOWNLOAD I DID IT FROM UVA ON NAPSTER," the user says, "holy Sh*t…it looks like they fixed up daves guitar to make it sound more like the studio…anyway, search for 'dave matthews band,' 'April 21, 2001' if u have trouble finding it, i

[38] Taylor et al., "New Media and the Circuit of Cyber-Culture," 616.
[39] dmbnatto, "I Have Bartender," March 26, 2001, https://groups.google.com/g/alt.music.dave-matthews/c/-fiN7pVufs4/m/4cJDAzMu3bgJ.

have it (my screen name is DMBLUVR36.)"[40] We can understand fans as "[operating] in the domain of affect," where affect "defines the strength of our investment in particular experiences, practices, identities, meanings, and pleasures."[41] To be a fan is to be a "faithful 'devotee,'" who invests their time, selves, and emotions into their subject of adoration.[42] That this user cares about the quality of the song and is so excited to share it shows a level of affect and investment that indicates their status as a fan. Further, the user informs others how to find the song, offering their screen name so people can download it directly from them, showing how much more efficient Napster made sharing recordings for fans.

Other fans incorporated the trading aspect of tape sharing practices into their Napster engagement, posting songs that they believed would be worthy of swapping (see fig. 2).

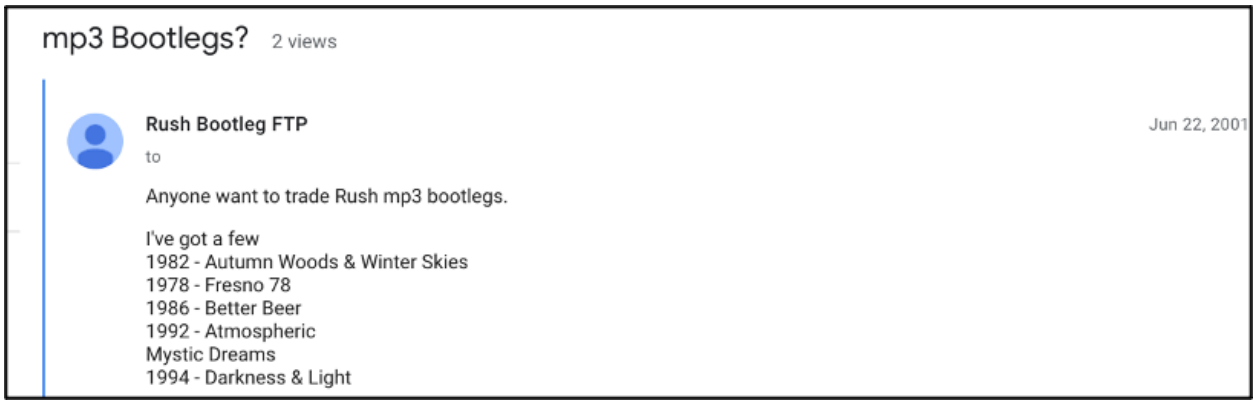

Fig. 2. Screenshot of a post by Rush Bootleg FTP listing songs available for trading.

Napster made sharing songs with other fans more efficient than their analog predecessor, tapes, illustrating Woodworth's argument "that Napster [was]…a catalyst, changing the patterns of fan

[40] PHISH for DMB, "DOWNLOAD I DID IT FROM UVA ON NAPSTER," April 22, 2001, https://groups.google.com/g/alt.music.dave-matthews/c/m78YUUIR8Bg/m/5rnUI15JFN0J.
[41] Lawrence Grossberg, "Is there a Fan in the House?: The Affective Sensibility of Fandom," in *The Adoring Audience: Fan Culture and Popular Media*, ed. Lisa A. Lewis (London, UNITED KINGDOM: Taylor & Francis Group, 1992): 56-7, http://ebookcentral.proquest.com/lib/uva/detail.action?docID=166134.
[42] Henry Jenkins, *Textual Poachers: Television Fans & Participatory Culture*, Studies in Culture and Communication (New York: Routledge, 1992): 12.

trading in degree but not in kind."[43] In this way, Napster functioned as a tool for fans to extend their practices digitally.

Napster also functioned as a tool for discovery for fans online. Many found that they were able to not only find new songs from their favorite artists but also discover new musicians they liked. On the Usenet thread, *I Love Napster*, a user writes, "Napster has helped me find some old and a few odd songs which I haven't heard for many years so Napster IS the best thing since sliced bread."[44] Similarly, user Jiro Okada responded to someone on a Usenet thread saying, "AJ, I totally agree with you how we discover so many artists through Napster. I also went out to buy a bunch of albums of artists I heard through Napster. In fact, DMB is one of them!!."[45] Jiro's comment introduces an interesting dynamic that was present in many of the conversations about the usefulness of Napster to fans: the need to justify their use of Napster.

Fans often defended their use of Napster against character attacks from public discourse, arguing that its function as a discovery tool didn't replace their music buying practices, but it in fact enhanced them. One user described Napster as "a preview mechanism," claiming that this was proven by the fact that CD sales did not decline even when Napster use was at its peak.[46] This claim is not far off. Though singles sales decreased sharply by 38.8% in 2000, "data from SoundScan, which tracks actual retail sales, showed total music sales increased 4%" in the same year.[47] Some described 2000 as "a banner year" for the music industry as "customers bought more music that year than ever before or since."[48] Similarly, in talking about listening to

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[43] Woodworth, "Hackers, Users, and Suits," 170.
[44] Trevor Hosking, Triari62299, and bug, "I Love Napster," December 2000, https://groups.google.com/g/alt.music.mp3.napster/c/nQIKrWvM6u8.
[45] Jiro Okada et al., "Napster Debate," October 2001, https://groups.google.com/g/alt.music.dave-matthews/c/XkI6ILTJu0E/m/YrXfqCB8qGIJ.
[46] Okada et al., "Napster Debate."
[47] Jeff Leeds, "Record Industry Says Napster Hurt Sales," Los Angeles Times, February 24, 2001, https://www.latimes.com/archives/la-xpm-2001-feb-24-fi-29694-story.html.
[48] Witt, *How Music Got Free: A Story of Obsession and Invention*, 124.

unreleased Dave Matthews Band songs, one user wrote, "if this album ever came out - i would buy it right away as I do every other DMB record."[49] Yet another user, ~Lori, echoed these claims:

> I'm pro-Napster too...if anything, the sharing of music digitally…has prompted me to buy MORE Cds than I would have, if I had not heard live stuff or MP3s over the internet. It's a win/win deal for the artists if ya ask me....."[50]

This supports Woodworth's claim that "'genuine fans' often buy the output of an artist as well as [seek] out unreleased, bootlegged, or other illicit material online."[51] One user, AJ, defended his Napster use by calculating how much he believes he spent on his favorite artists:

> I believe that Napster in fact inspired people to discover new music. I personally have 7 CDs from bands I discovered by finding and enjoying their music on Napster. I likely would not have given them the chance otherwise. Of those bands I went to 3 shows:
>
> 7 CDs = $140
>
> 3 shows = $100
>
> 1 sticker = $3
>
> That's $243 Napster had inspired me to spend last year - and I still bought the few CDs I normally would have bought. How is that a bad thing?[52]

This messaging was all over Usenet boards. These were fans who wanted to support artists. They saw Napster as a tool used for discovery that didn't take money away from artists but actually encouraged them to purchase the albums of the music they had explored. In fact, one study

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[49] Fgssand, "Lillywhite Legal Thoughts (Please Add To This)," March 2001, https://groups.google.com/g/alt.music.dave-matthews/c/W9ccpDdaR40/m/gjwaiKbOwUsJ.
[50] Okada et al., "Napster Debate."
[51] Woodworth, "Hackers, Users, and Suits," 177.
[52] Okada et al., "Napster Debate."

confirmed this tendency finding that "illegal downloaders [were] ten times more likely to pay for acquiring legal music contrary to those who do not. This implies that some consumers are probably using more than one channel to obtain music."[53]

Usenet user, Matt Dwyer offered yet another anecdotal experience in defense of Napster users:

> When I went to buy "Everyday" at midnight, I was first in line, and they put on the album. When one of the songs came on (can't remember which, may have been WTWE) I said, "oooo, this is a good song," and the guy working there said, "Oh, you so downloaded the album off of Napster, right? And I bet it made you want to go out and buy the album. Man, I wish the record label people knew the amount of people I sold CDs to because they heard them on Napster and liked them." Just an interesting little conversation I had...[54]

Fans were frustrated by the R.I.A.A. claims that they were costing their artists money and hoped that their experiences could offer a case in favor of the use of Napster as a discovery tool that "builds awareness" and ultimately supports musicians.[55] As one music executive was quoted saying, "if it's not bootlegged…it's not a hit."[56] Matt Dwyer's post works to counter narratives of Napster users as pirates by humanizing them and building sympathy for fans whose practices were under attack.[57]

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[53] Athina Dilmperi, Tamira King, and Charles Dennis, "Toward a Framework for Identifying Attitudes and Intentions to Music Acquisition from Legal and Illegal Channels," *Psychology & Marketing* 34, no. 4 (2017): 429, https://doi.org/10.1002/mar.20998.
[54] Okada et al., "Napster Debate."
[55] Leeds, "Record Industry Says Napster Hurt Sales."
[56] Leeds, "Record Industry Says Napster Hurt Sales."
[57] Okada et al., "Napster Debate."

Another fan expressed how Napster functioned as entertainment and access to their favorite band's songs until they were released officially. Interestingly, in this post, titled "Downloading/Integrity/Ethics/Artists' Intentions," we see the vehement defense of their use of Napster that grapples with ethics and morality, as well as a justification of Napster as a tool for mega fans:

> I'm among those who downloaded Vapor Trails…and I was among the first to start posting quick descriptions as I played the songs for the first time. The fact is, I knew that it was out there and that I couldn't resist. That's the bottom line. Like I said in an earlier post, I could wait if the official version was to be released in a week or two, but I simply cannot hold out for 5 weeks.
>
> Do I feel guilty? Unethical? Not in the least. I've spent at least $1,000 directly on Rush – all CD's, then the Remasters, multiple shows (even in the same tour) T-shirts, Tourbooks, etc.…and God knows I've turned on a few new fans who in turn support Rush. And they'll get their share of another $18 or so on May 14, and 2-3 concert tix, T-shirt(s) and tourbook. I don't plan on using the mp3s for any purpose other than my entertainment for the next 5 weeks…no posting or sharing. It's not an ideal situation, but that's how it is. Those who even imply theft need to get a grip. If I burn 100 CDs and offer them on eBay, then come talk to me.
>
> Rush and other bands have every right to protect their material in the way that they deem best. If they have a negative attitude towards file swapping, then that's understandable. It's another argument altogether if Napster and the like hurt or help the industry. My use

> of it amounted to an easy way to sample new music. If I liked it, I bought the CD…Napster hasn't cost any artist any of my money.[58]

MTB, an avid Rush fan, discusses how he "couldn't resist" and "simply cannot hold out for 5 weeks" until a new album, *Vapor Trails*, was released.[59] One study found that "individuals who show high IDL [(standing for idolatry, attachment to or veneration for any person or thing)] behavior, wish to own commodities related to their idols in order to express identification and support."[60] With this ownership comes a "feeling of possession and of being closely connected to an object, the object thereby becoming part of the individual's extended self."[61] That MTB simply needed to have his favorite band's music in his possession as soon as possible, reveals his status as a mega fan. Napster then serves as a placeholder until the official album is released, allowing users to maintain their identity as fans in the interim. Further, for live recordings and music never released by bands, Napster allowed for fan ownership of music that may have never been made available for purchase.

MTB goes on to justify their behavior by outlining how much money they've spent on the band, how much more they plan on contributing to the band by way of concert tickets and merchandise, as well as all of the other fans they've helped garner for Rush, again establishing themselves as a mega fan. MTB states, "those who even imply theft need to get a grip," however they also note that "it's not an ideal situation."[62]

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[58] MTB, "Downloading/Integrity/Ethics/Artists' Intentions," April 10, 2002, https://groups.google.com/g/alt.music.rush/c/yISEa1gAfGE/m/xIfbgCNQ9eEJ.
[59] MTB, "Downloading/Integrity/Ethics/Artists' Intentions."
[60] DiImperi, King, and Dennis, "Toward a Framework for Identifying Attitudes and Intentions to Music Acquisition from Legal and Illegal Channels," 434.
[61] Sebastian Danckwerts and Peter Kenning, "'It's MY Service, It's MY Music': The Role of Psychological Ownership in Music Streaming Consumption," *Psychology & Marketing* 36, no. 9 (2019): 805, https://doi.org/10.1002/mar.21213.
[62] MTB, "Downloading/Integrity/Ethics/Artists' Intentions."

There is something going on here, and throughout many of these posts, however, that merits a deeper analysis. As the name of MTB's post indicates, this is a debate over the ethicality of Napster use. A concern that runs through many of the posts I found and is a response to the demonizing of Napster users by the R.I.A.A. Woodworth argues that:

> The discourse of piracy…relies upon a slide from behavior [to] identity. Where Napster users could be thought of as otherwise law-abiding people who occasionally engage in minor acts of copyright infringement, in the rhetoric of R.I.A.A. president Hilary Rosen and Judge Marilyn Patel of the Ninth District Court, they have been assigned a morally degenerate identity such as "pirate," "thief," or "hacker."[63]

It is in defense of their character and morality that many of these fans feel the need to justify their actions, which, as Woodworth argues, "testifies to the power of the pariah archetype" that is the pirate as constructed by the R.I.A.A.[64] "Piracy [as] a metaphor [was] selected by the powerful and imposed upon the weak," weaponizing fans' use of Napster against them.[65] These fans were not just defending their Napster use, but also their identities. MTB ends their post with a plea:

> If you choose to wait on ethical grounds or just because that's the way that you want to experience this event then that's fine—but ease up on trying to set yourselves apart from or above those of us who took the opportunity to get the mp3s.[66]

This Usenet post, along with the others discussed, reveals how much fans valued Napster and its function as a tool for them to share and discover live, unreleased, and new music from their favorite artists, old and new alike.

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[63] Woodworth, "Hackers, Users, and Suits," 175.
[64] Woodworth, "Hackers, Users, and Suits," 181.
[65] Nicholas A. John, *The Age of Sharing* (Polity Press, 2017), 129.
[66] MTB, "Downloading/Integrity/Ethics/Artists' Intentions."

A Culture Built and Centered around Community

Napster user culture valued community, by foregrounding fan community over their personal interests as well as by helping one another out. Related to the previous discussion of how fans contended with ethics and morality against attacks on their identity, Napster users also grappled with how their fan community would perceive their file sharing. While some were eager and ready to share and trade files, as was outlined in the previous section, others foregrounded community concerns, and asked for guidance in navigating Napster use. One user titles a post on the alt.fan.allman-brothers Usenet group, "a dreaded Napster question…."[67] This title reflects the fear that using Napster began to induce, as fans did not want to be shamed or rejected from their community for adopting the file sharing service. The post reads:

> I have a couple shows from the summer of 1998-2000. i have them stored on my hard drive so when i make copies, the quality does not get compromised. A few friends suggested that i convert the shows to mp3 format and make them available for napster.... would anyone object to this since napster is "evil"? i really don't care about it, but if it's bad karma or against tapers' etiquette then i won't do it.[68]

The use of the word "evil," reveals how the pariah archetype was influencing Napster users and impacting their identity.[69] Not wanting to bring shame upon their community by associating it with a service deemed deviant shows how fans struggled to defend their fan practices against the power of the term pirate. Further, this fan's concern for how their community would respond to the use of Napster shows how valued the fan community was over the user's personal interests.

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[67] ratch, "A Dreaded Napster Question.....," November 2000, https://groups.google.com/g/alt.fan.allman-brothers/c/_RKSJxyewkU/m/XoDp7jvUodoJ.
[68] ratch, "A Dreaded Napster Question....."
[69] ratch, "A Dreaded Napster Question....."

Doing right by the community was a big concern for these Napster users, as was doing right by their favorite artists. One discussion board discussed whether or not they should be listening to music from the Dave Matthews Band that had been leaked on Napster. The conversation pivoted around how the artist might feel about this. One poster said, "I really do not think Dave Matthews really cares - from the standpoint of his comments about napster, and being waay overpaid and free taping and spreading of his music - I really think he would not care."[70] The debate over whether or not the artist would mind the use of Napster to listen to these songs shows how much this community valued their artists' opinion. The community wanted to come to a consensus on appropriate use of Napster, based on their perception of how their artist would feel about their practices.

Similarly, in response to someone trying to find an Allman Brothers' recording, Cliff 'n Tina informs a fan that the Allman Brothers actually prefer that digital files of their songs are not shared.[71] The conversation continues with the original poster asking, "What about bootlegs? They allow people to record their shows. Why not allow them to be traded on Napster?"[72] To which Cliff 'n Tina responds, "Just their preference I guess."[73] This back and forth allows us to see how Napster users informed one another of appropriate file sharing use and practices based on community norms and artist desires. Both of these conversations exemplify how users foregrounded community, showing that fans were grappling with how they should incorporate Napster into their established fan cultures and communities. In short, it shows that these users had a conscience. This view complicates the notion that users were pirates, offering a more

[70] Fgssand, "Lillywhite Legal Thoughts (Please Add To This)."
[71] phil the pill, Cliff 'n Tina, and chris, "No Blue Sky on Napster," April 2001, https://groups.google.com/g/alt.fan.allman-brothers/c/ychVeT_GWic/m/fQ6WYah8LHgJ.
[72] phil the pill, Cliff 'n Tina, and chris, "No Blue Sky on Napster."
[73] phil the pill, Cliff 'n Tina, and chris, "No Blue Sky on Napster."

nuanced conceptualization of users as fans whose culture valued community and respected norms, as well as cared deeply about their respective artist's file sharing preferences.

Beyond foregrounding the fan community over their personal interests, Napster users also built a sense of community by simply connecting and helping each other out. Many users posted on Usenet groups in need of help finding a song or show. Figure 3 shows a conversation between fans looking for a show and trying to figure out how to navigate Napster.

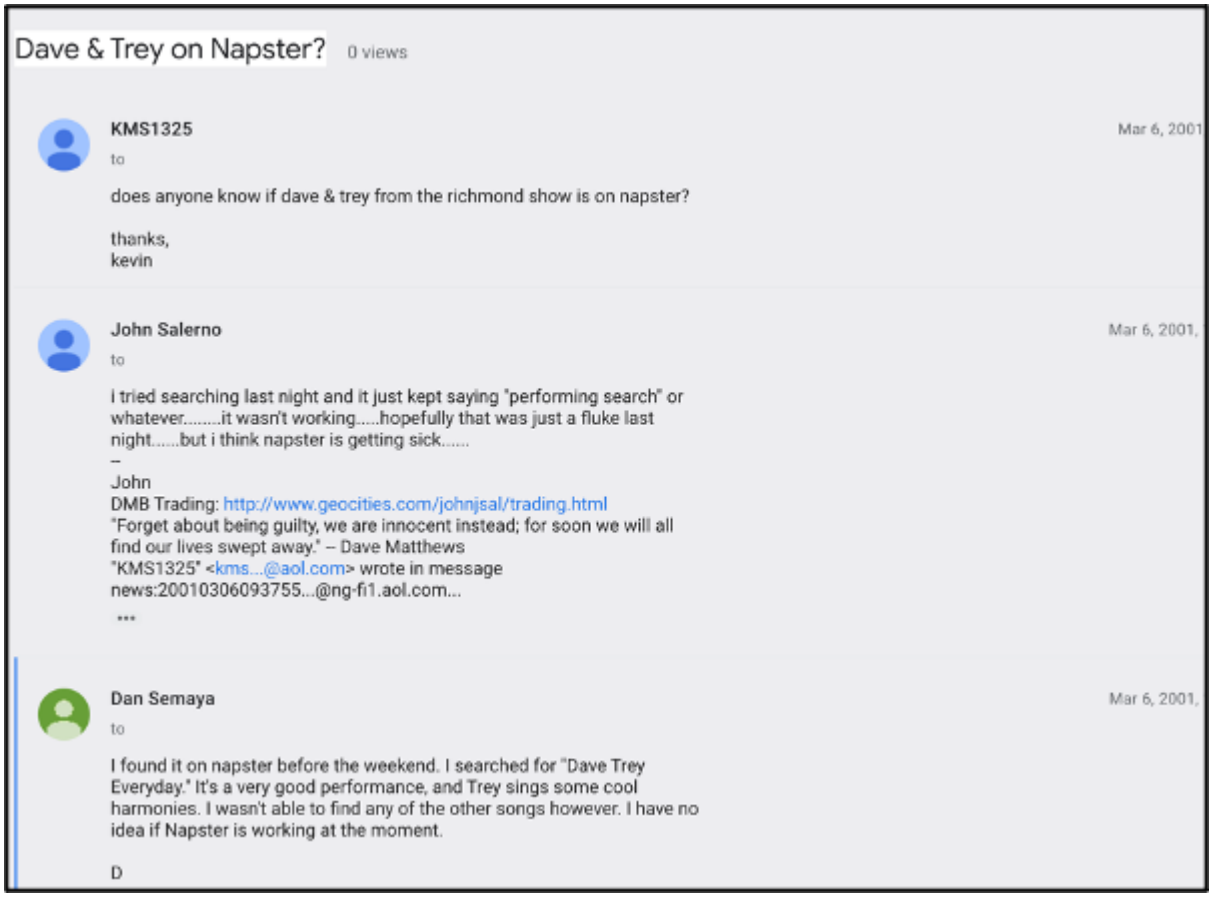

Fig. 3. Screenshot of an exchange between Napster users about how to find a song.

Here we see fans commiserating over the challenge of finding recordings, as well as a suggestion for a search term. Conversations like this were prevalent. Fans shared tips such as shorthand or terms that worked for them in locating something and even tricks for getting around copyright bans. One user calmed another's fears about being banned saying:

> Relax Jerry, even if you get yourself banned, you've come to the right place. We can point you to the registry hack and you'll be back on Napster in five minutes if you get banned. But to avoid getting banned, don't share or download files by Dr. Dre, Metallica, or Sade. There are others too, but those are the biggies as far as I know. But don't have a cow. If you get popped and dropped, post here and we'll fix your little program up…[74]

Other tips were shared about how to fix interruptions in downloading, such as finding the file from another server or downloading from multiple servers at once. One of the most interesting ways the community supported each other was through figuring out what song someone was trying to find based off of parsed lyrics. In a frantic post titled "HELP ME PLEASE!!!," a user writes:

> Ok, I need help finding this song, its on the remix with Prodigy Moby Fatboy Slim and Chemical Brothers called Herran but at the begining the lyrics to song I want go, "who is this doing this some kinda blah blah blah" Anyone know what the originals called and which artist it is?????[75]

Similar posts, such as those titled, "Song Title Plz" or "Another Hum!!," asked for the same help, some yielding results more successfully than others.[76] Napster users readily helped each other, whether it be through practical tips or educating fans on norms and etiquette.

If we understand file sharing as "a term that…emerged bottom-up from the field," we can see how embracing the rhetoric of sharing allowed Napster users to counter accusations of privacy through two key aspects: they "[infused Napster] with the positive implications of that

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[74] Dav1936531, Mike Tindall, and BigB7, "I Don't Wanna Get Banned - How Do I Avoid?," October 2000, https://groups.google.com/g/alt.music.mp3.napster/c/aCSRzFEgeeU.
[75] zed_x19, "HELP ME PLEASE!!!," November 2000, https://groups.google.com/g/alt.napster/c/_pM7qcnzjvU.
[76] TB, "Song Title Plz," November 2000, https://groups.google.com/g/alt.napster/c/V9k0aJsWu1Q.; Billy Low and diggy, "Another Hum!!," October 2000, https://groups.google.com/g/alt.napster/c/hFR1QfZcr10.

term," and further foregrounded sharing "as a prosocial type of behaviour [that was] central to…interpersonal sociability."[77] This resulted, as we've seen, in community becoming central in user understandings of their use of the service and debates over their practices. Ultimately, the rhetoric of "sharing and caring" became an ethos of bootleg music subculture, shaping their online interactions and building a culture that was centered around community.[78]

A Culture Driven by an Anarchist Ideology

Napster user culture was driven by an underlying anarchist ideology. While often carrying a negative connotation, I propose that we consider anarchy as the antithesis to oligarchy. We can understand these two ideologies as dialectical in nature: "anarchy is a governing system that eschews authority. Oligarchy governs from, through, and for authorities."[79] Situated as two ends of a governing spectrum, the R.I.A.A. would sit on the side of oligarchy, Napster with anarchy. As we've seen through the R.I.A.A.'s deployment of pirate rhetoric, "oligarchy justifies itself through 'moral panics' over the potential effects of perceived or imagined anarchy."[80] On the other side of the spectrum, "anarchy justifies itself by reacting to alarming trends toward oligarchy," a dynamic and tension that was clear in Napster user Usenet conversations.[81]

As fans discussed the music crisis and the fate of Napster, they often expressed desire for the dismantling of the music industry. Many voiced how they felt the current industry structure was unfair, both for artists and fans, with one Pho writer referring to the major record labels as the "cartel."[82] In a Usenet post titled, "if you really appreciate music…," writer Gilbert

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[77] John, *The Age of Sharing*, 63, 129-130.
[78] John, *The Age of Sharing*, 63.
[79] Siva Vaidhyanathan, *The Anarchist in the Library: How the Clash Between Freedom and Control Is Hacking the Real World and Crashing the System* (New York: Basic Books, 2004), xi.
[80] Vaidhyanathan, *The Anarchist in the Library*, xi.
[81] Vaidhyanathan, *The Anarchist in the Library*, xi.
[82] Weisbard, "Keeping Up With the Napsters."

responded to the criticism that Napster users don't actually care about musicians and are in fact stealing music from the artists "that they 'supposedly' like and respect."[83] Gilbert countered with a scenario:

> Because of the way fame works the typical pop star and actor has had a very large share of the cake, leaving only crumbs for those artists that don't become a household name. Can you imagine people in other professions putting up with such an unfair distribution of earnings? Imagine a shop floor full of Lathes with an operator on each lathe. OK now imagine one or two of these operators were voted as the best, but instead of giving them a bonus and otherwise leaving their weekly wage the same as the others. Instead the bosses decided to pool the wages for the shop floor then, handed 95% of the money to the top two operators and shared the remaining 5% out to the rest. You would have an 'ALL TOOLS DOWN, NO C*NTS WORKING' strike on your hands. Maybe its time that the music business was based more on real talent and less on the lottery effect of who gets noticed...[84]

Gilbert is asking for more democratic access for all artists. Napster, he suggests, presents an opportunity to restructure the industry, giving more potential for exposure to more people, instead of only those artists that are industry approved.

This sentiment was echoed by other Usenet writers who believed, "Napster [would] force these record companies to give the public a [fairer] deal."[85] Yet another user, AJ, wrote:

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[83] Gilbert, "If You Really Appreciate Music.....," March 2001, https://groups.google.com/g/alt.peer-to-peer.napster/c/52u6_ngoyjA.
[84] "If You Really Appreciate Music.....". Censoring from original.
[85] joseph.wormall, "Napster in Court," November 13, 2000, https://groups.google.com/g/alt.napster/c/VAl8FGZi-2o.

> Napster did away with the middleman - the executives who rape the public - the artists see very little of the money from album sales and make most of their money on touring. Napster delivered the goods to the public cutting out the greedy middleman in a tie and that is why they had to shut down Napster. It threatened the executives.[86]

The intensity of the chosen language throughout these posts shows how fed-up Napster users were with feeling like the industry was too powerful and taking advantage of the public and artists. In an article by *Newsweek* shared on the Pho list titled, "It's the Music Stupid," file sharing was described as a "salvation" for artists that "levels the field for lesser-known acts and makes kids excited about discovering 'new' artists—no hype or slick packaging required."[87] One artist exclaimed, "'the record industry has to fail, get blown out of the water and start again.' And the meek shall inherit the music."[88] Napster users were defending themselves by redirecting the pariah archetype back onto the industry. Their practices weren't deviant, but revolutionary, taking the cartel head on and shattering the oligarchist control. Taylor et al. argues that "[Shawn] Fanning's youth and technological genius, combined with his desire to share copyrighted music, inspired Napster users to view both him and his technology as revolutionary."[89] The evidence presented here would support this claim, as anarchist calls to dismantle the music industry and give the right of ownership and fair use back to the artists and fans abounded across user discourse.

Fans did not only express discontent, but also engaged in discussions about how a new industry might work. Many expressed support for a new economic model that valued quality

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[86] Okada et al., "Napster Debate."
[87] Paul Schreiber, "'[DMCA_Discuss] Its The Music, Stupid' - MARC," September 2003, https://marc.info/?l=dmca-discuss&m=106374010606645&w=2.
[88] Schreiber, "'[DMCA_Discuss] Its The Music, Stupid' - MARC."
[89] Taylor et al., "New Media and the Circuit of Cyber-Culture," 616.

over quantity. On the Pho list, one user, Stephen, presented his "open resolution to this 'music crisis,' pass the 'Music Reform Act of 2001' (that I propose here)."[90] What followed was a fourteen-point manifesto, outlining all the ways that, in Stephen's eyes, the music industry should shift to adjust and accommodate for file sharing services like Napster. This list included ideas such as, "make a law that says a company can own only ONE record label. All the rest must be split up," "require that ARTISTS/SONGWRITERS own the copyrights to their music, not the record labels," and "require that 50% or more of all royalties collected for a song, go to the artists and songwriters."[91] Other points outlined ways to regulate file sharing services that benefited both users and artists, suggested allowing artists to decide what was considered fair use of their music, and structuring streaming in the same way as broadcasting, meaning the streaming service, not the fans, would pay royalties to artists. The presence of, and level of detail in, this outline of a bill by a user reveals the underlying dissatisfaction that many had with the music industry. Napster users felt the service offered an opportunity to change the status quo, and, as one user noted in response to Stephen's resolution, "there are a few of us interested in preserving the purity of it all…there are some people out there not interested in 21st century economics and just want to do good music and art."[92]

It's clear that many Napster users felt that the industry was sacrificing the quality of music for the quantity of sales. In fact, "for many users, it seemed that Napster's technology and Fanning's entrepreneurialism had wrought a brave new world of cyber-music. This world was profoundly anti-corporate: music was free, and Fanning/Napster enabled users to assume greater control over their music consumption."[93] File sharing was an example of "the engine of

[90] zarriello, "Re: [Rumori] Re: Pho: Re: My Open Resolution to the Online Music Crisis."
[91] zarriello, "Re: [Rumori] Re: Pho: Re: My Open Resolution to the Online Music Crisis."
[92] zarriello, "Re: [Rumori] Re: Pho: Re: My Open Resolution to the Online Music Crisis."
[93] Taylor et al., "New Media and the Circuit of Cyber-Culture," 616.

American ingenuity and innovation," providing artists with an opportunity to break into the industry and fans with the chance at having more autonomy over their music diet.[94] And they took this opportunity seriously: "in viewing Fanning/Napster as revolutionary, they understood this identity to involve fundamental social and political change oriented to justice and equality."[95] Fans were engaged online in debates about the crisis and tackled big issues like copyright and ownership. An underlying anarchist ideology fueled the discussion and support of Napster, but these were not users simply seeking chaos. Rather, this moment was "a rational revolt of passionate fans."[96]

One final quote embodies this anarchist ideal. The Pho list contributor, John Parres, writes:

> Uber-conclusion: Open the vaults; legalize the rarities: the live recordings, bootlegs, words-and-music, promo remixes – digitally undelete the deleted catalogs – open E-V-E-R-Y-T-H-I-N-G up to E-V-E-R-Y-O-N-E so as to increase global music consumption and thereby revenues. Cast off the 7.1¢ (3/4 rate!) deals-with-the-devil and liberate the stored performances masquerading as CD mechanicals. Let them all spread and grow like the viral revenue-generating wildfires they yearn to be (are!) Say Amen! People we are almost at the promised land, can't you SEE it??[97]

Calling for a revolution that carries the grassroots ideology of bootleg music subculture while proclaiming its power to benefit all stakeholders, Parres invokes religious terminology to preach an imperative of salvation forthcoming, so long as Napster and file sharing are embraced and no

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[94] Weisbard, "Keeping Up With the Napsters."
[95] Taylor et al., "New Media and the Circuit of Cyber-Culture," 616.
[96] Siva Vaidhyanathan, "MP3: It's Only Rock and Roll and The Kids Are Alright," July 13, 2000, https://www.thenation.com/article/archive/mp3-its-only-rock-and-roll-and-kids-are-alright/.
[97] Weisbard, "Keeping Up With the Napsters."

more deals are done with the "devil."[98] Users saw hope in Napster and "by identifying with Fanning, [they] acted as members of a populist-libertarian Net-izen subculture. In this logic, Fanning/Napster…appeared as a Robin Hood-like figure, taking music from an evil elite, and giving it to the noble oppressed."[99] Napster represented an opportunity, a moment for a complete shift in the world of music; an opportunity that Napster users seized and prided themselves in. Calling for increased exposure for artists, valuing the quality of music over its commodification and valorization as a product, and liberating music all reveal the underlying anarchist ideology driving Napster user culture.

CONCLUSION

In this section, I demonstrated that Napster users were first and foremost fans and music lovers for whom Napster functioned as a tool to extend their practices, and whose culture valued community and was driven by an underlying anarchist ideology. I first argued that Napster users were primarily fans and music lovers, not pirates and criminals trying to steal from artists. These fans used Napster as a tool to extend their already established tape sharing cultures online by allowing them to share and discover new music and find live recordings or deep tracks with more efficiency and at an increased scale. Secondly, I argued that Napster user culture valued community, evident in their foregrounding of fan community norms and etiquette over their personal interests, as well as, by helping one another out through practical tips. Finally, I argued that Napster, and therefore bootleg, user culture was driven by an underlying anarchist ideology made visible through their desires for increased access for artists to the industry, valuing the

[98] Weisbard, "Keeping Up With the Napsters."
[99] Taylor et al., "New Media and the Circuit of Cyber-Culture," 616.

quality of music over its commodification and valorization as a product, and the liberation of music for fans and listeners.

While these ideals didn't come into fruition for fans in Napster, the possibilities file sharing opened up transformed the music industry and its path into digital spaces. In fact, while bootleg music subculture users saw Napster as a moment to anarchize the industry, the network actually opened up new opportunities for commodification. Morris explains "how new technologies have a tendency to create an ecosystem that promotes added interactivity for users but depends highly on users surrendering their personal information to heavily monitored databases," described by the term "digital enclosures."[100] He goes on to say that "as anti-corporate as its image appeared, Napster was a prototypical version of a digital enclosure" laying the groundwork for how file sharing practices could be adopted by the industry and used for profitable ends.[101] And though Napster didn't intend to share the data it gathered on its users, "other companies looking to leech off of Napster emerged to use this cybernetic information."[102] While the industry framed bootleg music subculture file sharers as *pirates*, they were at the same time exploiting and adopting their practices "to work in service of commodification and…lay the foundation for practices and techniques that have become central [today]."[103] Napster users' vision of a digital music sharing platform was co-opted and taken from them.

But what of the subculture? Their values, identities, and practices did not stop with the shutdown of Napster. Rather, this community found new ways to share their music online. Some continued by turning to other file sharing services that popped up in Napster's wake or by

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[100] Jeremy Wade Morris, "Anti-Market Research: Piracy, New Media Metrics, and Commodity Communities," *Popular Communication* 13, no. 1 (January 2015): 35, https://doi.org/10.1080/15405702.2014.977998.
[101] Morris, "Anti-Market Research," 35.
[102] Morris, "Anti-Market Research," 35.
[103] Morris, "Anti-Market Research," 35.

exchanging torrents on fan created websites. Others turned their file sharing practices into a viable streaming service that exists today, the subject of our next section. Understanding this subculture's values as established in this section allows us to see how this streaming platform took shape. Led by their desire to share and discover new music, a commitment to their community and their fandoms, the streaming platform born out of bootleg music subculture pushes back against the popular streaming models of today, affording a different listening environment that values music beyond its money-making potential.

CONTROL CRISIS 2 – NUGS.NET AND ALTERNATIVE STREAMING MODELS

As outlined previously, industry rumblings about the state and fate of music streaming platforms are creating anxiety and an unstable ground in the music industry. This moment is being characterized as a "vacuum."[104] David Turner, industry critic and the creator of the music industry newsletter, *Penny Fractions*, explains:

> What's emerged rather quickly is now a vacuum where labels are the ones speaking against the current pro rata model and streaming platforms are being led by the nose towards new proposals. The voice clearly lacking here are musicians, or better put rights holders, getting a say in how they may be paid for their work.[105]

And compensation, as we've seen, is only part of the problem. Streaming platforms are changing the way artists and producers approach their craft, and music is increasingly functioning "as data."[106] Because of data's money-making potential, music on these platforms serves as a commodity and its aesthetic value and function as a resource for listeners is left deprioritized.

All the while, the recommendation systems embedded in these streaming services are reshaping the musical landscape for users, promising on-demand content, curated just for you. Music streaming platforms alone are used by 82 million Americans and make up 84% of the U.S. music industry's revenue.[107] One of the heavy weights in the market, Spotify, is tied for second with Amazon Music as the most used service, with a 35% share of all monthly music streamers

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[104] David Turner, "The Payment Model Debate Isn't Over," Penny Fractions, August 23, 2023, https://pennyfractions.ghost.io/the-payment-model-debate-isnt-over/.
[105] Turner, "The Payment Model Debate Isn't Over."
[106] Morris, "Music Platforms and the Optimization of Culture," 1.
[107] Ana Durrani, "The Average American Spends Over 13 Hours A Day Using Digital Media—Here's What They're Streaming," Forbes Home, March 27, 2023, https://www.forbes.com/home-improvement/internet/streaming-stats/.

in the U.S.[108] Spotify promises to offer a "soundtrack" for users' everyday through "editorially curated playlists…or personal machine-generated playlists."[109] Scholars have argued that these "algotorial" recommendations – that is algorithmically generated editorial curations – support a kind of inattentive listening that has been termed "ubiquitous listening," where music blends into the situational context in which it is being played.[110] This is fundamentally changing how music is experienced, producing listeners that care less about what is playing and more that there is simply something on. In tandem with Morris's argument that streaming platforms add "pressure on musicians and producers to think and act like software developers," it's evident that popular music streaming services are shifting artists' and listeners' music habits through its platform design and construction, impacting the music industry writ large.[111]

This moment of crisis is also an opportunity to rethink how our music streaming platforms are structured. To begin to develop alternative models that might interrupt dominant practices, we continue our journey with bootleg music subculture and analyze the streaming platform born out of their community: nugs.net, a live music streaming platform. Brad Serling created nugs.net in 1993 as a peer-to-peer file sharing platform that allowed tape sharers to move their practices online. Like Napster, the original nugs.net was a tool for bootleg music subculture to extend and scale their practices in a digital space. Unlike Napster, nugs.net was able to adapt their file sharing platform to fit the changing music landscape and establish themselves as the leading streaming service for live music. nugs.net was designed by bootleg music subculture for bootleg music subculture and traces of their practices are evident in the construction and mission

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[108] Nick Routley, "Ranked: The Top Online Music Services in the U.S. by Monthly Users," Visual Capitalist, February 3, 2023, https://www.visualcapitalist.com/top-online-music-services-us/.
[109] Rasmus Rex Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," *MedieKultur: Journal of Media & Communication Research* 36, no. 69 (December 2020): 78.
[110] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 72.
[111] Morris, "Music Platforms and the Optimization of Culture," 2.

of the website still today. To interrogate this model, I analyze nugs.net's affordances and features to discover how it conceptualizes its everyday use and user. This allows me to look critically at the platform's intended use, revealing what kind of behaviors and interactions this model privileges. I ask to what extent does nugs.net prioritize or discourage the ubiquitous listening model in its construction? I argue that the way nugs.net conceptualizes its everyday use and user does not privilege the ubiquitous listening model, but rather encourages attentive listening and engagement.

Current Theories of Music Streaming

While there is no research on nugs.net specifically as of now, there is ample research on streaming services. Work in this area has largely focused on how music streaming services use data collected from their listeners to construct their sites and in so doing visualize their ideal user. Robert Prey argues that "on contemporary music streaming services what our listening data say about us is fused with what it can infer 'about who we might be – on our very proclivities and potentialities.'"[112] Further, he concludes "an analysis of personalized music streaming platforms reveals that there are in fact no individuals, there are only ways of seeing individuals. There is only algorithmic individuation."[113] Relatedly, in the article, "Why the Next Song Matters: Streaming, Recommendation, and Scarcity," Eric Drott looks at the music streaming services Spotify, Deezer, and Apple Music, and uncovers how their appeals to the personalization of music functions as subjective hailing, effectively constructing their average user. Along with DeNora, these articles informed how I analyzed nugs.net's conceptualization of

[112] Robert Prey, "Nothing Personal: Algorithmic Individuation on Music Streaming Platforms," *Media, Culture & Society* 40, no. 7 (October 2018): 1097, https://doi.org/10.1177/0163443717745147.
[113] Prey, "Nothing Personal," 1098.

its everyday user by underscoring how data practices and curation function on the platform and construct a normative listener.

In the article, "Music as a Technology of Surveillance," referenced in the introduction, Eric Drott outlines the financial models of streaming platforms, noting that the data platforms collect on users functions as a commodity for these services. The data loop that music streaming platforms deploy – one that curates music for listeners based on that input and then commodifies that increased engagement – affords the platform with a particular kind of surveillance. My findings are shaped by this understanding, in that I was able to trace the phenomenon of data production and construction onto nugs.net to see how its design and platform affordances engage with user data.

Most pertinent to this section, however, is the article, "Datafication and the Push for Ubiquitous Listening in Music Streaming," by Rasmus Pedersen. I use this research as a framework for understanding what kind of listening nugs.net affords. Pedersen's work seeks to "reflect on how Spotify uses data to construct specific implied listeners, and how these datafied notions of listening potentially shape how users explore, experience and interact with music—and thereby also the ontology and epistemology of music listening."[114] He argues "that data-driven curatorial practices shape conceptions of relevance of music recommendations in ways that amplify and encourage user practices of ubiquitous listening."[115] It is this idea of ubiquitous listening that I shape my research around. Pederson explains that ubiquitous listening is the kind of inattentive listening we engage with when we encounter music in our everyday lives.[116] Thus, the music that we encounter but don't attend to can be understood as ubiquitous music. Pedersen

[114] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 72.
[115] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 73.
[116] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 73.

argues that "ubiquitous music is closely related to the practice of creating a personal soundtrack for our lives," emphasizing how "the constant availability of music in the digital age…enables individualistic listening practices across social situations."[117] Importantly, "ubiquitous listening is a concept concerned more with modes of listening than the aesthetic qualities of the music."[118] It is with this understanding that I analyze nugs.net and illuminate how it conceptualizes its everyday use and everyday user's music listening habits.

Echoing other research in the field, Pedersen notes that Spotify uses data to make recommendations for its listeners and works "as a basis for decisions about the interface design as well as priorities in editorial recommendations."[119] What's important here is the finding that the affordances Spotify offers its listeners lend itself to ubiquitous listening. The emphasis on genre and mood promotes playlists that blend into situations. This shapes user listening habits, increasing the time spent streaming on Spotify by privileging playlists that can be played for any occasion or context. This does not afford attentive listening, but rather an always-on streaming. Pedersen concludes:

> Spotify takes a listening approach to datafication in which the normative listener…is a listener for whom music discovery and engagement with the platform offer [mutual] reinforcement. By measuring engagement primarily by means of quantitative data from implicit feedback from users…Spotify also potentially ends up prioritizing a specific form of music discovery that prompts users to spend more time listening and expend less effort choosing what to listen to next. When Spotify invites users to use the platform to 'soundtrack their day' with a combination of contextual and personal playlists, it is doing

[117] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 76.
[118] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 74.
[119] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 77.

> exactly this. However, if we follow Drott's suggestion and understand music recommendation as a subjectification process, we must also be aware that the normative listener that Spotify constructs is a listener that engages in ubiquitous listening.[120]

The implication of this kind of streaming is that music begins to function as a commodity, something that it used as a means to an end for platforms, rather than focusing on "music's aesthetic value and the depth of the emotions it produces as an object of contemplation and attentive listening."[121] It is with this understanding of ubiquitous listening, and the framework offered by Pedersen in how to uncover the kind of listening habits a platform affords, that I analyze nugs.net's conceptualization of its everyday use and user, and the type of listening it privileges.

Method

To answer my research questions - how does nugs.net conceptualize its everyday use and user, and to what extent does nugs.net resemble the ubiquitous listening model in its construction - I conducted a platform analysis and collected data in the Spring of 2023. In doing so, I adapted the walkthrough method to be applied to a website. The walkthrough method, an approach designed for software application research presented by Ben Light, Jean Burgess, and Stefanie Duguay, offers "a way of engaging directly with an app's interface to examine its technological mechanisms and embedded cultural references to understand how it guides users and shapes their experiences."[122] Paying attention to nugs.net's "vision, operating model and governance," I

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[120] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 85.
[121] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 87.
[122] Ben Light, Jean Burgess, and Stefanie Duguay, "The Walkthrough Method: An Approach to the Study of Apps," *New Media & Society* 20, no. 3 (March 1, 2018): 882, https://doi.org/10.1177/1461444816675438.

walked through registration of an account on the website, its everyday use, and how to deactivate or leave the platform, as suggested by the method.[123] Importantly, this process allows for the examination of the "*environment of intended use* – how app [or in this case a music streaming platform] provider anticipates it will be received, generate profit or other forms of benefit and regulate user activity."[124] This method "[slows] down the mundane actions and interactions that form part of normal app use in order to make them salient and therefore available for critical analysis."[125]

Throughout my walkthrough of nugs.net, I paid special attention to the platform's environment of intended use, noting affordances and features and how they shaped user engagement and revealed the platform's conceptualization of its everyday user. This method allowed me to analyze the platform design while also considering its intended use and if this lent itself to the ubiquitous listening model. I argue that the way nugs.net conceptualizes its everyday use and user does not privilege the ubiquitous listening model, but rather encourages attentive listening and engagement. I outline my findings by first discussing nugs.net's conceptualization of its everyday user as a fan and member of bootleg music subculture, and how that shapes its normative user as an attentive listener. Second, I look at how nugs.net's emphasis on live music and its archival structure privilege its everyday use as an activity of attentive listening.

Everyday User Constructed as a Fan

Nugs.net conceptualizes its everyday user as an attentive listener through its appeal to fans. From the beginning, nugs.net hails its potential user as a fan saying, "stream official concert audio and

[123] Light, Burgess, and Duguay, "The Walkthrough Method: An Approach to the Study of Apps," 883.
[124] Light, Burgess, and Duguay, "The Walkthrough Method: An Approach to the Study of Apps," 883.
[125] Light, Burgess, and Duguay, "The Walkthrough Method: An Approach to the Study of Apps," 882.

video of music you love."[126] nugs.net frames their platform as a space to "watch your favorite artists perform live," saying "whether you can't make the show in person or simply prefer to enjoy a concert from the comfort of your living room, nugs.net also enables front row access to your favorite artist's concerts streamed live as they happen."[127] From the outset, it is clear that nugs.net is for those who want to invest their time in their favorite artists. It's made for fans, calling on their affective sensibilities by offering them the experience of watching their favorite artist live and up-close, again extending bootleg music subcultural practices as Napster had.[128]

Once an account is established, nugs.net prompts users to select their favorite artist as their homepage (see fig. 4).

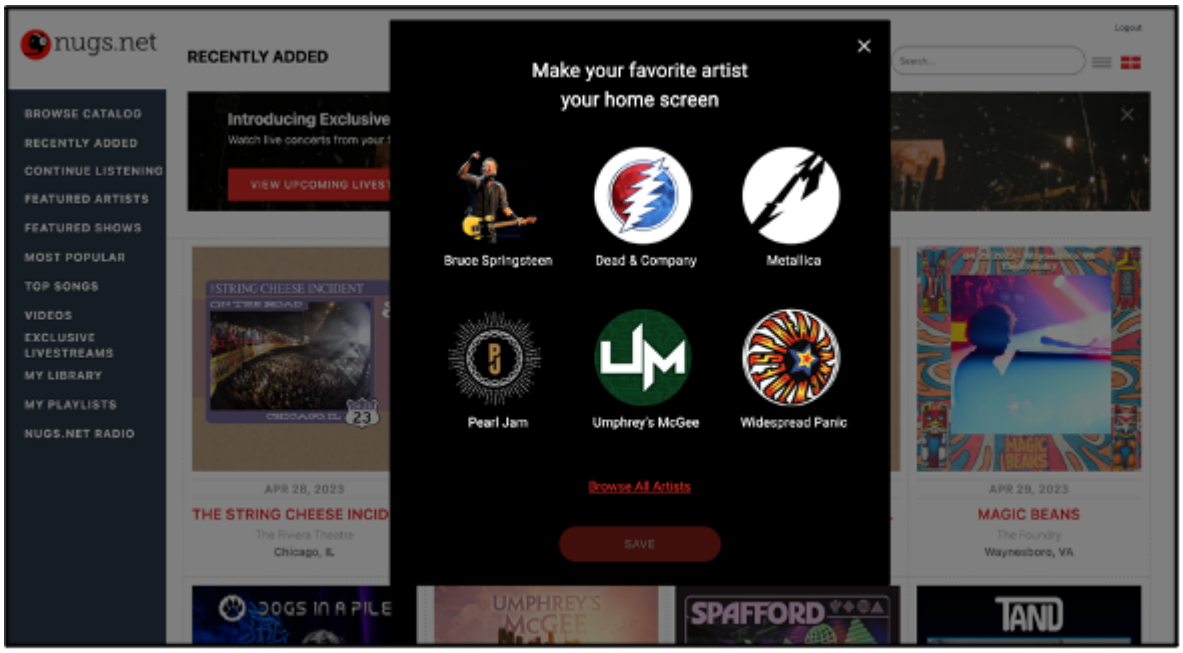

Fig. 4. Screenshot of the prompt for users to select their favorite artist.

After selection, the artist's name becomes the first tab of the control panel on the left, and their list of recently added shows becomes the homepage that nugs.net opens too (see fig. 5).

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[126] "Live Music Streaming Online | Live Concert Streams | Nugs.Net," nugs.net, accessed May 7, 2023, https://www.nugs.net/.
[127] "Our Mission Is Simple: To Spread the Joy of Live Music," nugs.net, accessed May 7, 2023, https://www.nugs.net/about-us.html.
[128] Grossberg, "Is there a Fan in the House?: The Affective Sensibility of Fandom."

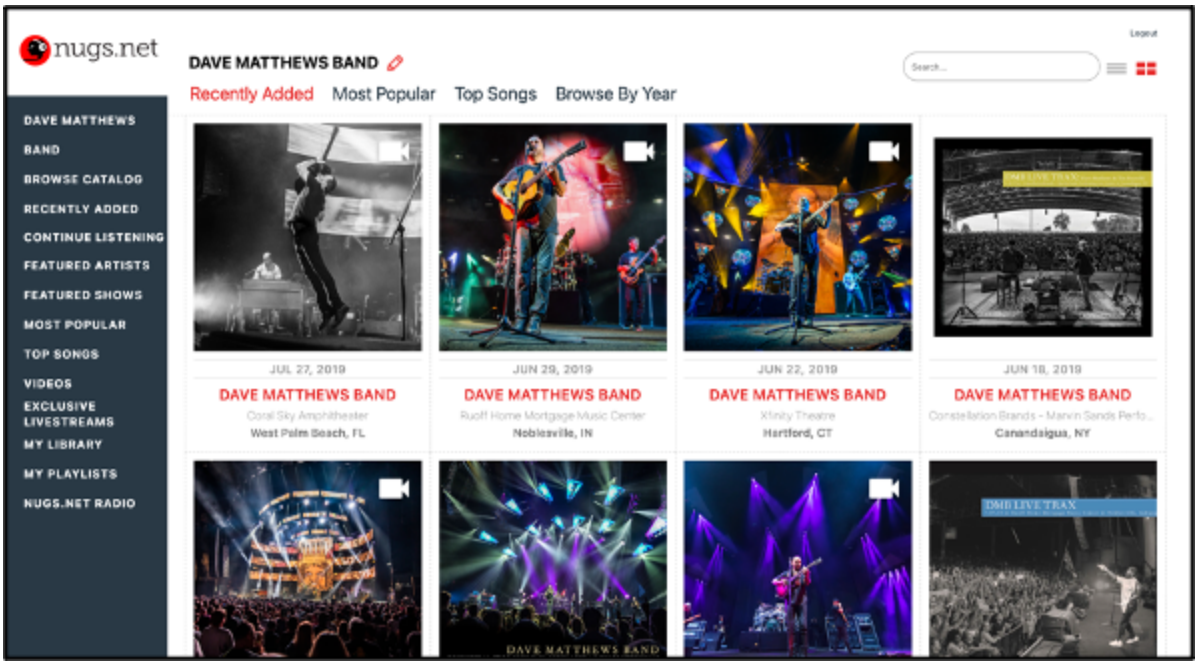

Fig. 5. Screenshot of homepage once user has logged into account, post selection of their favorite artist.

The emphasis and focus on a user's favorite band reveals that nugs.net visualizes its users first and foremost as fans. Interestingly, you can only select one artist as your favorite, which would indicate that these users are thought to have a strong affinity for only one artist. This would suggest that the platform is geared toward a user who values depth over breadth and wants to engage extensively with a single artists' content and performance archive. These users might be understood as "musical savants," which Seaver describes as "listeners…who were extremely avid and knowledgeable – whose 'whole identity is wrapped up in music' …as people who 'live for music.'"[129] Ultimately, this normative user justifies nugs.net's content offerings. Similar to how Napster functioned for this fan base previously, this is not a streaming service for the casual listener who "might just want some music to play inoffensively in the background, without much

[129] Nick Seaver, *Computing Taste: Algorithms and the Makers of Music Recommendation* (Chicago, IL: University of Chicago Press, 2022), 78.

effort."[130] Rather nugs.net is designed for someone who is willing to listen attentively and actively wants to spend time engaging with the platform and its contents.

This is best reflected in the archival structure of nugs.net. The platform's conceptualization of its everyday use is grounded in user choice, exploration, and discovery, a point I will elaborate on in the next section. This would mean that the ideal user is one that wants to do research and explore the archive. nugs.net is for the fan that's looking to use the streaming platform as they used Napster: to find the deep track, listen to different live versions of songs, and discover unreleased or never studio recorded tracks. Further, their user is a fan who wants to feel engaged in their fandom by witnessing live performances. The live performances on this platform function as a way to connect disparate fans and make them feel a part of something that they may not have physically been able to attend. As Lupinacci tells us, it "is through 'the live' that we gain access 'to something of broader…significance, which is worth accessing now, not later.'"[131] While the livestreams, as we'll see, certainly allow for this immediate access, I argue that the live recordings function to the same end. Just as Paddy Scannell contends that "the now of the event is not somehow more real or genuine than the now of television," I suggest that the remediated live event still allows for access to the greater significance and experience of connecting with other fans.[132] It does this by allowing users to relive moments, even if not in real time, providing the pseudo experience of having been there and keeping fans in the know. The archival structure and the emphasis on live music are features constructed for the fan and attentive listener.

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[130] Seaver, *Computing Taste*, 79.
[131] Ludmila Lupinacci, "'Absentmindedly Scrolling through Nothing': Liveness and Compulsory Continuous Connectedness in Social Media," *Media, Culture & Society* 43, no. 2 (March 1, 2021): 278, https://doi.org/10.1177/0163443720939454.
[132] Paddy Scannell, *Television and the Meaning of Live: An Enquiry into the Human Situation* (Cambridge: Polity Press, 2014), 175.

Additionally, a glance at nugs.net's "ABOUT US" page, reveals the history of the platform, and in so doing informs who their ideal user is.[133] Created in 1993, nugs.net was originally a peer-to-peer file sharing platform that allowed tape sharers to move their practices online. As described previously, tape sharing was a practice among fans of jam bands, most notably the Grateful Dead, in which fans recorded concerts and shared them amongst each other. "Today," as the website tells us, "115 million downloads later, hundreds of artists and labels partner directly with nugs.net to distribute music directly to their fans."[134] What's of note here is that this website was originally created to support bootleg music subculture practices, and traces of these practices are evident in the construction and mission of the website today. Therefore, the ideal user is the fan who, if they did not ever physically exchange tapes, appreciates the grassroots history of their favorite artists, and still wants to engage in the practice today. nugs.net, like Napster before it, allows bootleg music subculture members opportunities to connect with their community, past and present, and feel a part of their individual fandoms.

Additionally, because artists partner directly with the website, users can feel like they are more directly supporting their favorite artist more than they would on another streaming platform. Described as "an online music venue," nugs.net is getting praise from music industry critics for paying "artists directly instead of going through a record label" like most other platforms.[135] Their privacy policy states: "we may collect, share, use or otherwise process personal data about you…to calculate royalty and other payments to the content rights holders and other third parties."[136] While we don't know exactly what this calculation looks like, Serling

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[133] "Our Mission Is Simple: To Spread the Joy of Live Music."
[134] "Our Mission Is Simple: To Spread the Joy of Live Music."
[135] Oscar Hartzog, "RS Recommends: Want to Stream Concerts On-Demand? Nugs.Net Has You Covered," *Rolling Stone* (blog), April 13, 2022, https://www.rollingstone.com/product-recommendations/lifestyle/nugs-music-review-1304512/.
[136] "Privacy Policy | Nugs.Net," accessed October 22, 2023, https://www.nugs.net/privacy-policy.html.

was quoted saying, "the artist is our client," and that nugs.net "pays triple Spotify's rate for streams."[137] He goes on to explain that partnering directly with them "allows bands to exploit their archives and add an additional revenue stream to the live concert experience. Nothing is more valuable to a band than three hours in a room with their fans."[138] Serling notes that this additional revenue stream "provides artists a consistent way to stay relevant — and get paid — even while off the road."[139] By securing "performance rights directly from artists it works with," nugs.net is giving artists a bigger share of user payments.[140] Additionally, nugs.net sells artists' albums on the platform, offering another source of revenue for musicians.[141] All this, however, comes at an increased cost to users. Starting at $12.99 and going up to $24.99 a month, nugs.net subscription prices run a few dollars steeper than other popular music streaming services that start around $10.99.[142] This doesn't seem to be stopping fans, though, with Serling describing attraction to the website during the pandemic as an "eye opener…[to] the intensity of the fan interaction during the archival streams," with some shows garnering "30 million viewers worldwide."[143]

These features mitigate Napster era concerns for community norms and etiquette in digital distribution spaces as this platform is explicitly endorsed by their artists. Further, it

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[137] Cathy Applefeld Olson, "Nugs.Net Enlists LiveLike To Amp Interactivity As It Moves Concerts Behind Pay Wall," Forbes, accessed October 22, 2023, https://www.forbes.com/sites/cathyolson/2021/01/29/nugsnet-enlists-livelike-to-amp-interactivity-as-it-moves-concerts-behind-pay-wall/.; Fred Goodman, "Concert Audio Hub Nugs.Net Has Doubled Its Subscriber Base in Just a Few Months," *Billboard* (blog), November 14, 2019, https://www.billboard.com/pro/nugs-net-live-streaming-downloads-video-subscriber-growth/.
[138] Olson, "Nugs.Net Enlists LiveLike To Amp Interactivity As It Moves Concerts Behind Pay Wall."
[139] Goodman, "Concert Audio Hub Nugs.Net Has Doubled Its Subscriber Base in Just a Few Months."
[140] Olson, "Nugs.Net Enlists LiveLike To Amp Interactivity As It Moves Concerts Behind Pay Wall."
[141] Hartzog, "RS Recommends."
[142] Hartzog, "RS Recommends."; "Spotify Premium - Try Free for 2 Months," Spotify, accessed October 24, 2023, https://www.spotify.com/us/premium/.
[143] Olson, "Nugs.Net Enlists LiveLike To Amp Interactivity As It Moves Concerts Behind Pay Wall."

realizes Napster users' calls to cut "out the greedy middleman in a tie."[144] nugs.net extends bootleg music subculture's anarchist ideology to streaming platforms by pushing streaming conventions and lowering the barriers to entry for artists to distribute their music. While we don't know how low the barriers are exactly, the criteria for how nugs.net determines which artist they will partner with, or what percentage of the revenue they give to "content rights holders," the fact that artists can partner directly with the service, without a middle man, pushes our conceptualizations of how music streaming models can and should work.[145] On nugs.net more of the money a user pays to the platform presumably goes directly to their favorite artists, so they can feel good about their streaming.

Their history also informs the type of artist and music selection available on the platform. Upon analyzing their catalog, it becomes evident that nugs.net mainly features jam bands, and therefore appeals to the bootleg music subculture and these bands' cult-like followings. Featured bands include tape sharing endorsers like the Grateful Dead, Phish, and Dave Matthews Band, as well as other jam bands like Widespread Panic and Billy Strings. While not strictly for jam bands, nugs.net's genre selection also reflects the extensive presence of this type of artist. Genres that might otherwise be considered one in the same, are split down even further, spreading the jam band genre across numerous selections. These selections include, "ALT & INDIE ROCK," "AMERICANA," "BLUEGRASS," "GRATEFUL DEAD FAMILY," "JAMBANDS," "JAMGRASS," and "JAMTRONICA."[146] While this certainly reveals the type of listener nugs.net expects to appeal to, (i.e. fans of these genres) it also shows that nugs.net emphasizes the aesthetic value of their music selection.

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[144] Okada et al., "Napster Debate."
[145] "Privacy Policy | Nugs.Net."
[146] "Live Music Streaming Online | Live Concert Streams | Nugs.Net."

Seaver discusses genre's role in mapping musical landscapes and digital music space, recognizing its sticky relationship with classification and the fact that "labels…[participate] in broader discourse that [interpret] them in the frame of a more rigid kind of genre realism."[147] The concern with genre on music streaming platforms then is that "publicly manifesting categories, through interfaces to listeners or through 'artist dashboards' to musicians and music industry executives, could clearly encourage musicking practices to organize along those lines."[148] However, the genre list on nugs.net suggests a more grassroots approach to genre making than a predetermined classification system. That jam bands have separated into "jamgrass" and "jamtronica," suggests that these categories are "intrinsically emergent phenomenon rather than a set of strict boxes [that] would free listeners (and potentially musicians) from its constraints…allowing artists and genres to evolve over time."[149] Seaver ultimately rejects this claim, noting that the "concern is with the way that space is constituted and measured because…there are choices to be made in the production of such spaces, and these choices can easily come to be seen as objective and natural, thanks to the intuitiveness of the spaces they create."[150] While I agree wholeheartedly with this argument, I suggest that nugs.net is different from other streaming platforms in that its main audience is members of bootleg music subculture. This is a musical space by and for them, therefore genre work here is expanding organically from the center, rather than relying on "the post-colonial geography of music production and listening," that seeks to categorize "unknown" music through a process of claiming and civilizing.[151]

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[147] Seaver, *Computing Taste*, 134.
[148] Seaver, *Computing Taste*, 135.
[149] Seaver, *Computing Taste*, 132.
[150] Seaver, *Computing Taste*, 136.
[151] Seaver, *Computing Taste*, 139.

Further, what's notable here is that when a genre is selected, artists appear underneath, and a specific show must be selected to play music. Users cannot stream entire genres, like on Spotify. Because nugs.net is centered around their artist selection, as opposed to the situational context, mood, or all music within a genre, they prioritize what is being streamed and not just that something is being streamed. This lessens the pressure on artists to fit within a predetermined category, as it is one of many other ways to browse the catalog and is not the only way for listeners to discover music. While on Spotify musicians are pushed to approach their music as software engineers in an effort to get their music included on a genre specific playlist, nugs.net allows artists more freedom to explore genre, style, and artistry.[152] By not pigeonholing musicians to predetermined categories in the same way as other popular music streaming services, nugs.net realizes Napster era ideals of an industry that values the quality of music over the quantity of sales. Whereas ubiquitous music can be understood "as background music…music by original artists [can be] conceived as foreground music," meaning the selection of music on nugs.net is meant to be paid attention to and is valued for its aesthetic qualities.[153] Further, this foreground music is selected by a person who wants to engage with their favorite artist. This emphasis on the aesthetic value of the music also works to reinforce listener identity as a fan. As DeNora reminds us, "music can be used as a device for the reflexive process of remembering/constructing who one is, a technology for spinning the apparently continuous tale of who one is."[154] When the fan engages with nugs.net they reinforce their identity as fan, situating themselves as part of both their favorite bands history, and the history of a bootleg

[152] Morris, "Music Platforms and the Optimization of Culture."
[153] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 73.
[154] DeNora, *Music in Everyday Life*, 63.

subculture more broadly. All of this reveals that nugs.net's conceptualization of their everyday user is a fan, and therefore, an attentive listener.

Everyday Use as Liveness

Nugs.net conceptualizes its everyday use as an activity of attentive listening through its emphasis on live music and its function as an archive. This is most evident in its emphasis on live performances throughout the platform and available content. nugs.net positions itself as a live music streaming platform, welcoming users on the homepage with the slogan "Live Music Lives Here" (see fig. 6).[155]

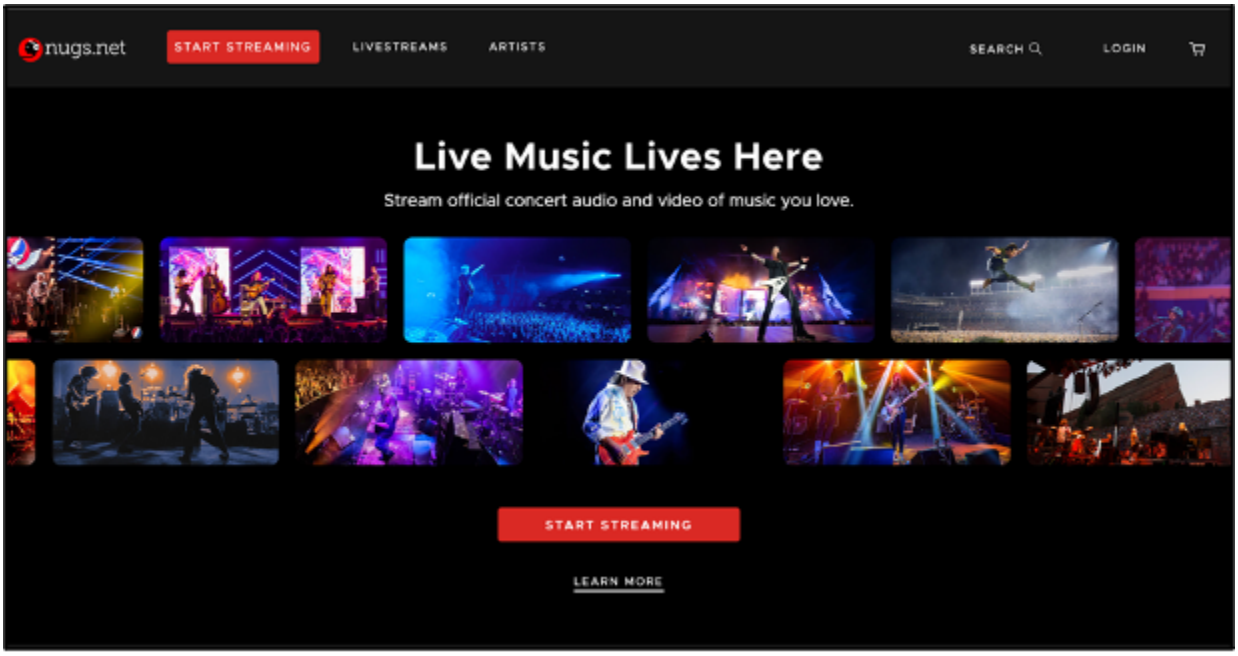

Fig. 6. Screenshot of the nugs.net homepage prior to logging in or creating an account.

One of the major affordances of nugs.net is that fans can tune into livestreams of concerts. This act of tuning into a livestream requires attention, both in the act of selection and viewing, and is in fact one of the main reasons one tunes into a live event, to watch it happen and unfold in real

[155] "Live Music Streaming Online | Live Concert Streams | Nugs.Net."

time with others from afar. Paddy Scannell describes this moment of liveness saying, "the moment of the coming into being of an utterance/event is the *living* moment in which human concerns come expressively to life, in which they are realized: in which they are made *real*."[156] Watching a livestream of a concert, then, functions to make us feel our aliveness, to make us feel real. This is fundamentally a phenomenological experience, as it "is concerned with the 'feltness' of life to us."[157] This feltness is an "awareness of the world…made present to us through our senses," making the experiences of liveness an inherently embodied one.[158] To be aware of the world through the senses is to be aware of the world through the body. In short, the livestream, as a fundamentally embodied experience, can do nothing but bring our attention to it. To experience something live is to pay it attention. This immediately indicates that nugs.net is intended for attentive listening and watching, as opposed to the ubiquitous listening of selecting a mood or moment specific playlist.

Further, these moments of mediated liveness allow for "connection in contexts of remoteness, (co)presence at a distance, and synchronicity of experienced temporalities."[159] In fact, as Ludmila Lupinacci explains:

> in spite of its conceptual elasticity, the different uses of the word 'live' have in common the idea of 'a connection of people to people [. . .] and/or of people to a "natural" (i.e. not pre-recorded in any of its components) event, through technology'…Directly associated with liveness is, therefore, the sense of simultaneous, shared experiencing – the awareness that others are accessing the same thing, at the same time.[160]

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[156] Scannell, *Television and the Meaning of Live: An Enquiry into the Human Situation*, 94.
[157] Lupinacci, "'Absentmindedly Scrolling through Nothing,'" 278.
[158] Lupinacci, "'Absentmindedly Scrolling through Nothing,'" 278.
[159] Lupinacci, "'Absentmindedly Scrolling through Nothing,'" 278.
[160] Lupinacci, "'Absentmindedly Scrolling through Nothing,'" 278.

Watching a concert as it unfolds in real time via a livestream allows users to feel this "transcendent sense of togetherness," to be a part of a moment, to share in something bigger and beyond the isolated self.[161]

Additionally, nugs.net, functioning as an archive, houses numerous videos of full concerts. With this structure around videos of performances, it becomes clear that nugs.net conceptualizes its use as an act requiring an audience member's full attention. A user puts a video on to watch an entire show, getting the full experience of that concert moment, and again, not just selecting a playlist that fades into the background. Further, there is no shuffle feature on nugs.net, so one cannot shuffle between concerts, artists, or even shows themselves. Videos of performances, then, are made to be watched and listened to as if they were happening in real time. Their presence "recreates moments in which time is reversed and we live again – not once, but twice and three times over – a moment in its absolute purity."[162] The prioritizing of this purity, of the integrity of the performance and an artist's vision, show that nugs.net is geared towards the aesthetic of the music and show. While a platform like Spotify "is…concerned more with modes of listening than the aesthetic qualities of the music," nugs.net values the latter.[163] It is more concerned with allowing users to re-experience a moment as it was, "the most perishable of things and yet imperishable: a never to be forgotten moment of pure, ecstatic delight."[164] To select to listen to an archived video of a concert is to choose to relive this moment of ecstasy, to re-experience it, to listen to it attentively.

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[161] Nancy K. Baym, *Playing to the Crowd: Musicians, Audiences, and the Intimate Work of Connection* (NYU Press, 2018), 144, https://www.jstor.org/stable/j.ctv12pnpcg.
[162] Scannell, *Television and the Meaning of Live: An Enquiry into the Human Situation*, 174.
[163] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 74.
[164] Scannell, *Television and the Meaning of Live: An Enquiry into the Human Situation*, 173.

Beyond livestreams and concert videos, users can also simply stream music without visuals. However, this too is only live music available in concert format. There are no studio recordings to stream on nugs.net and therefore the catalog is not organized by album. Rather, when navigating through the platform, all music is organized by show (see fig. 7).

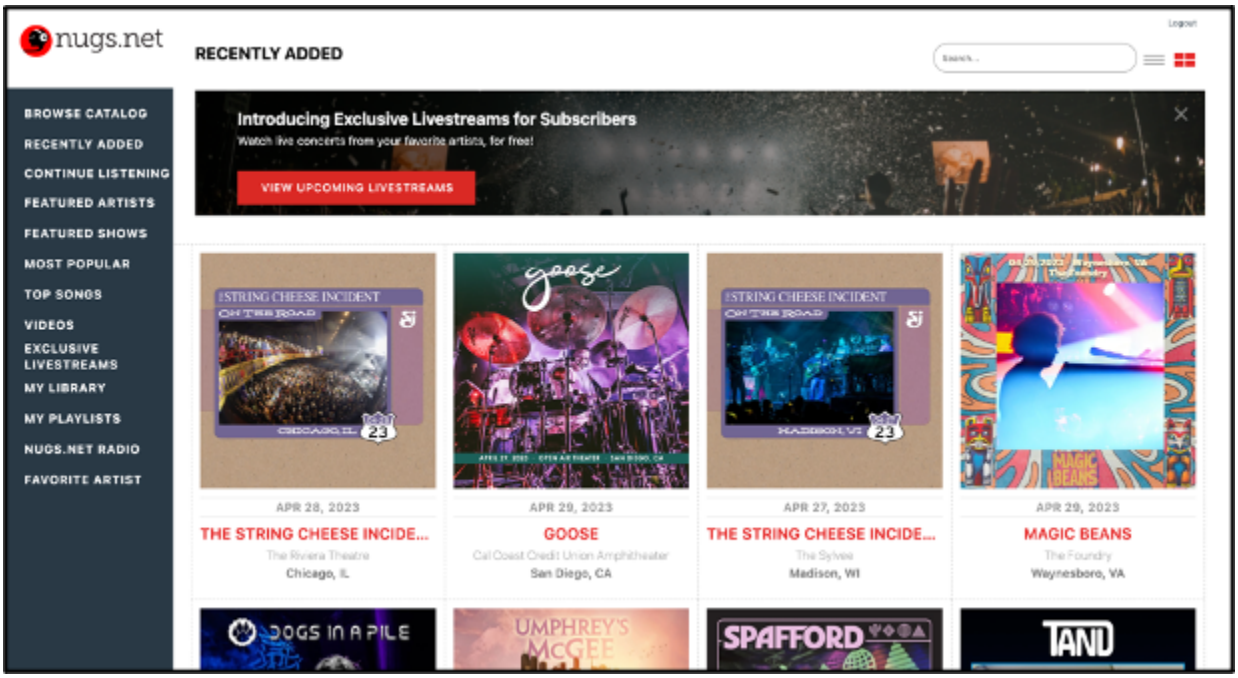

Fig. 7. Screenshot of homepage once user has logged into account, prior to a selection of their favorite artist.

Once a show is selected, the only action a user can select is play. There is no shuffle or skip button upon selection of a show, however, a skip forward and back button does become visible once a song is playing (see fig. 8). Additionally, individual songs in a show can be selected, but they will still continue in the order of the concert. There is never the opportunity to shuffle songs within a show or between concerts, emphasizing nugs.net's priority of maintaining the integrity of the whole performance. Users can add a show or individual song to their own playlist (still no shuffle option is available there) or share a link to the show via socials, but the emphasis remains on the live performance as a whole, with individual songs always contextualized in reference to the show they are from. Again, nugs.net is conceptualizing its everyday use as a reliving of a

moment, "the moment of magic…a moment 'freed from the order of time' in which we ourselves are free from time and necessity. Such a moment," Scannell tells us, "is 'deathless.'"[165] nugs.net allows users to experience a moment "situated outside time," offering an escape into a piece of the past, where the future, though defined, is irrelevant in the reliving.[166] A moment as powerful as this requires, nay begs for attentive listening.

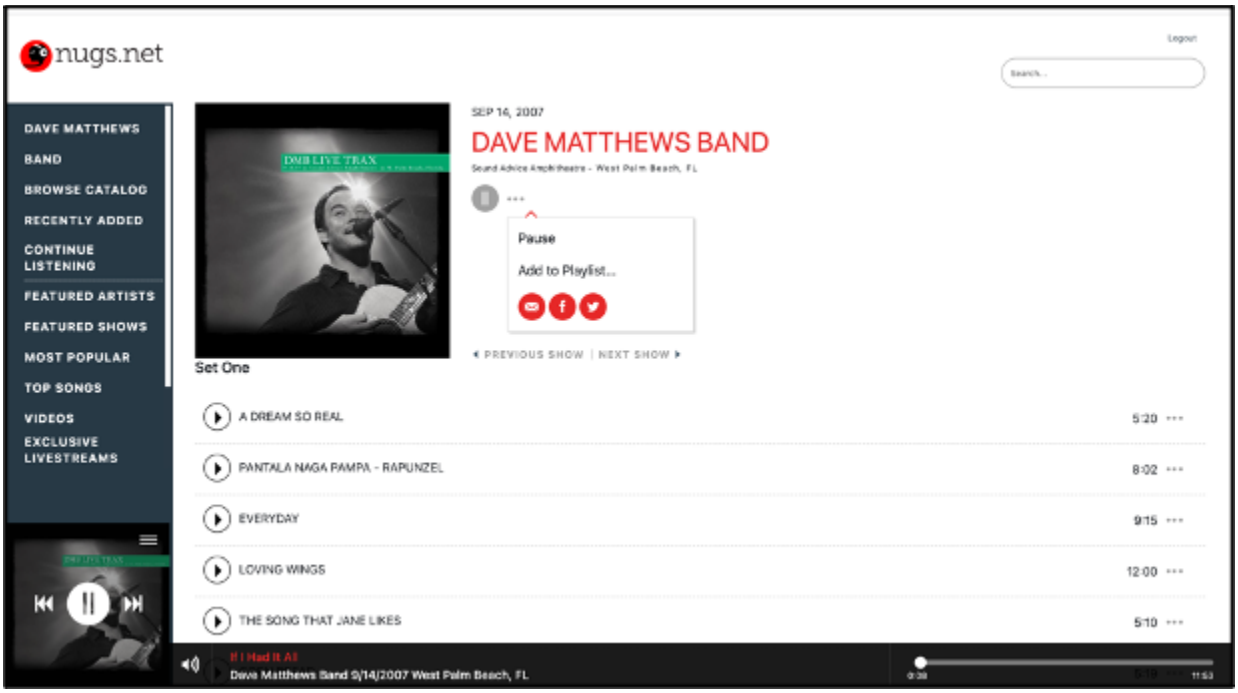

Fig. 8. Screenshot of a selected show for streaming.

Liveness is further prioritized by nugs.net's commitment to "premium sound quality."[167] The platform offers two subscription options: premium, for $12.99 a month, and hi-fi streaming, purportedly for "audiophiles," at $24.99 a month.[168] While both offer "professionally mixed soundboard audio," the hi-fi option gives users access to lossless and MQA 24-bit audio.[169] Because these audio formats don't sacrifice data during file compression, they reproduce higher

[165] Scannell, *Television and the Meaning of Live: An Enquiry into the Human Situation*, 173.
[166] Scannell, *Television and the Meaning of Live: An Enquiry into the Human Situation*, 173.
[167] "Live Music Streaming Online | Live Concert Streams | Nugs.Net."
[168] "Create Account | Nugs.Net," accessed April 30, 2023, https://get.nugs.net/checkout/standard
[169] "Live Music Streaming Online | Live Concert Streams | Nugs.Net."

quality tracks that "bring you as close as possible to being there for real."[170] The reproduction of liveness, then, isn't only in the content offered on nugs.net but also in the aural experience it affords. Replicating the concert through audio quality allows the music on nugs.net to affect a listener's body as if they were experiencing the show in real time and place. Because "music is a physical medium…that consists of sound waves, vibrations that the body may feel even when it cannot hear…the aural is never distinct from the tactile as a sensuous domain."[171] In other words, music is inherently embodied: "people make music that resonates as sound waves, listeners feel those energetic waves and send them back, inflected with their own energies."[172] DeNora reminds us that "music is an accomplice of body configuration. It is a technology of body building, a device that affords capacity, motivation, co-ordination, energy and endurance."[173] Through this technology, listeners are "enabled and empowered, their capacities are enhanced; they are afforded "embodied agency.""[174] And because nugs.net more closely replicates live concert audio, users are able to physically experience the "ritualized special event" when streaming music more so than when using other platforms.[175] By affecting the physical body, music on nugs.net allows for "life being fully lived because it is being abundantly experienced."[176] This embodiment inherently calls a user's attention, involving their full physical being.

All of these platform offerings emphasize the value nugs.net places on live music. In fact, its construction directly imitates the taping practices of bootleg music subculture. Live

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[170] "Our Mission Is Simple: To Spread the Joy of Live Music."
[171] DeNora, *Music in Everyday Life*, 86.
[172] Baym, *Playing to the Crowd*, 31.
[173] DeNora, *Music in Everyday Life*, 102.
[174] DeNora, *Music in Everyday Life*, 103, 107.
[175] Baym, *Playing to the Crowd*, 163.
[176] Baym, *Playing to the Crowd*, 25.

recordings in their entirety, organized by show, are an extension of the concert taping, both predigitally and digitally through file sharing, that fans would share with one another. Liveness on this platform reveals bootleg music subculture's long-standing practices and shows how file sharing in their community inspired their digital music streaming and listening format of today. Consequently, their mission statement is, "to spread the joy of live music," in which they state:

> Each live music experience creates a unique, wild and unpredictable moment in time. nugs.net delivers those moments to fans anytime, anywhere…nugs.net offers immediate access to an unmatched catalog of live music, as it happens or on-demand; your one-stop shop for live music streaming.[177]

nugs.net functions to bring those "wild and unpredictable moments" to users at any point in their everyday life, a possibility Napster made possible.[178] As one study found, "hearing music performed live was associated with a high degree of choice, [as well as] the greatest degree of attention and was also considered highly arousing."[179] And this was true for both "live music in public and personal computer collections."[180] Further, the study suggests "that…recorded music (out of the listener's control [i.e. not live]) does not promote these kinds of [attentive] listening."[181] To be live is to embody a moment, to be fully present in the experience. Inherently, liveness requires attention. Therefore, nugs.net's conceptualization of its everyday use as a provider of live music innately calls for attentive listening.

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[177] "Our Mission Is Simple: To Spread the Joy of Live Music."
[178] "Our Mission Is Simple: To Spread the Joy of Live Music."
[179] Amanda E. Krause, Adrian C. North, and Lauren Y. Hewitt, "Music-Listening in Everyday Life: Devices and Choice," *Psychology of Music* 43, no. 2 (March 2015): 166, https://doi.org/10.1177/0305735613496860.
[180] Krause, North, and Hewitt, "Music-Listening in Everyday Life," 165.
[181] Krause, North, and Hewitt, "Music-Listening in Everyday Life," 165.

Everyday Use as an Archive

A second way that nugs.net conceptualizes its everyday use as an act of attentive listening is through its functioning as an archive. As mentioned previously, nugs.net houses live concert audio and visual recordings that go as far back as 1959, offering an archive of live music for users. Upon starting an account and logging in for the first time, the platform opens to the "Browse Catalog tab," the first option on the side bar. The catalog can be explored by looking at music from specific artists, searching for certain songs, or by year and all results are listed by show. The catalog feature encourages users to discover recordings and explore nugs.net's selection. Another way the website encourages exploration is through the "Recently Added," "Featured Artists," "Featured Shows," "Most Popular," "Top Songs," and "Videos" tabs, each of which allow users to navigate the archive through different avenues. Encouraging users to comb through various tabs to find artists, new shows, or music, as opposed to being able to shuffle the archive or playing the catalog at random, emphasizes user agency and choice in what is listened to. That this streaming platform is structured as an archive for user exploration reveals that nugs.net's conceptualization of its everyday use is grounded in user choice and discovery, offering "greater control over…music consumption" and extending the subcultural vision they had for Napster as a tool for discovery.[182] And while popular streaming service discourse centers around the need for algorithmic curation to help users deal with the overwhelming amount of music available, one study found that "66% of all streaming consumption comes from the back catalog."[183] This stat counters the narrative of overwhelm and supports the viability of an archival structure for streaming services. It suggests that listeners want to seek out older music

[182] Taylor et al., "New Media and the Circuit of Cyber-Culture," 616.
[183] Seaver, *Computing Taste*.; Cherie Hu, "Just How Difficult Is It to Make a Sustainable Living from Streaming?," Water & Music, September 27, 2021, https://www.waterandmusic.com/just-how-difficult-is-it-to-make-a-sustainable-living-from-streaming/.

they know or perhaps explore more of an artist's work, and don't solely rely on algotorial recommendations in streaming. Additionally, user choice and control, a study found, "[promotes] *both* actively engaged listening and purposive listening."[184] The prioritization of user-controlled engagement inherently yields attention, again showing that nugs.net's intended everyday use is an activity of attentive listening.

The resistance to curation on the platform also lends nugs.net to attentive listening. The archive, as previously established, affords and privileges user choice. There is no way to shuffle the catalog by artist, concert, mood, or situation. Rather, music only gets played by individual selection of an artist, show, or song. This is fundamentally different from the construction of other popular streaming models, which "transfigure plenitude into a form of lack," effectively creating their own problem by offering massive catalogs for discovery but "framing choice as a 'burden' to be relieved [by the platform] rather than as a location of users' agency."[185] Through myths of overload, popular streaming platforms and their recommendation systems understand the world as "informatic," in which "to exist is to be overwhelmed."[186] These platforms promote themselves on their extensive catalog offerings and understand their users as people who want to explore all of the available music. But they then frame this vast collection as a problem for users that only they can solve through their platform curations and recommendation systems. However, nugs.net approaches their users, and therefore their platform, differently. Instead, they see their extensive catalog as an opportunity to privilege user autonomy, acknowledging their archive as a resource and not an obstacle. There are no selections of music curated by the platform, just live performances available for users to explore and choose from.

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[184] Krause, North, and Hewitt, "Music-Listening in Everyday Life," 165.
[185] Seaver, *Computing Taste*, 29.
[186] Seaver, *Computing Taste*, 20.

Further, while popular music streaming services frame their recommendation systems as improving a user's listening experience, they are actually constructing who their average user is and can be. Eric Drott explains that appeals to the personalization of music function as subjective hailing, saying, "recommendations can be pitched not just at the individual level, but at what Deleuzians call the dividual level – that is, at the level of the subcomponents into which individuals can be – and have been – discomposed."[187] Through the datafication of user activity, popular streaming services are effectively "pigeonholing listeners into categories that they then seek to relativize."[188] That nugs.net does not subdivide its listeners beyond the category of fan through the hailing of recommended playlists or specific songs, means that they not only offer listeners more individual freedom and autonomy over their streaming and music consumption, but also over their digital selves.

We can understand digital selves as constructed by the interpolation of users through datafication of their interactions online. In this process "an interpolated subject is only talked *about*, not *to*," meaning that "who we are as data" and what that says about us is the result of "another's algorithm interpretation" and is out of our control.[189] The power here lies with the platform as it "[checks] up on us each and every time we make a datafied step…power becomes exceptionally intimate and efficient. It knows us. It learns from us. It becomes an author of our lives' knowledges."[190] This level of intimacy, paired with our understanding of music as a technology of the self, raises concerns over the integrity of users and their individual autonomy. Because, "music [affords] access to our innermost lives, to our hidden psychic depths, to an

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[187] Eric Drott, "Why the Next Song Matters: Streaming, Recommendation, Scarcity," *Twentieth-Century Music* 15, no. 3 (October 2018): 335, https://doi.org/10.1017/S1478572218000245.
[188] Seaver, *Computing Taste*, 75.
[189] John Cheney-Lippold, *We Are Data: Algorithms and The Making of Our Digital Selves* (New York: New York University Press, 2017), 170.; Cheney-Lippold, *We Are Data*, 116.
[190] Cheney-Lippold, *We Are Data*, 107.

extent that other media cannot replicate," the data collected on us from our interactions with music streaming platforms surrenders highly personal information to the hands of a powerful few.[191] What's done with that information is unknowable to a user, but harnesses subversive potential as "streaming platforms…repurpose [the affordances of music as a technology of the self] as an equally powerful technology of surveillance."[192]

What's more is that users are continually "expressed as a type of composite algorithmic identity: the particularity of one's individual identity is replaced by an aboutness of one's identifications."[193] This datafication seems to be the opposite of how users engage with music as a technology of the self. As referenced in the introduction of this thesis, Tia DeNora offers the concept of "music as a technology of the self" in understanding music's role in everyday life.[194] She describes this term saying, "music is appropriated by individuals as a resource for the ongoing constitution of themselves and their social psychological, physiological and emotional states."[195] While a listener streams songs as a way to mitigate and manage identity formation, the streaming platforms are effectively redefining that listener in anything but their own terms. This distance between how the user identifies themselves and how they are identified in a single moment brings to mind, as Cheney-Lippold elucidates, Walter Benjamin's concept of the aura.[196]

In talking about art, Benjamin describes the aura as "its presence in time and space, its unique existence at the place where it happens to be."[197] He goes on to say that "the presence of

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[191] Drott, "Music as a Technology of Surveillance," 261.
[192] Drott, "Music as a Technology of Surveillance," 262.
[193] Cheney-Lippold, *We Are Data*, 170.
[194] DeNora, *Music in Everyday Life*, 47.
[195] DeNora, *Music in Everyday Life*, 47.
[196] Cheney-Lippold, *We Are Data*, 145.
[197] Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," *Illuminations*, ed. Hannah Arendt (Harcourt, Brace & World, Inc., 1968), 222.

the original is the prerequisite to the concept of authenticity."[198] Calling on notions of uniqueness, originality, and authenticity, he argues that aura lies not only in content or structure, but also in its singularity, temporality, and context.[199] Benjamin explains, "an aura can be viewed as 'the unique phenomenon of a distance, however close it may be.'"[200] That is, to have this distance is to "[avoid] a precise, tangible quality."[201] It is undefinable. The experience of a thing, be it art or a "mountain" in a specific location, at a specific time is what gives it meaning, and to reproduce it would be to "lose its essence," its aura.[202]

Though originally describing art, I suggest that we can extend the concept of the aura to the individual user when considering how streaming platforms interpolate the subject through data. The distance between the user's physical self and digital self is then open to criticism. While the distance between the user and their digital self might suggest the presence of an aura, it is through the process of reproducing the individual in data that the aura is degraded. The digital self is recontextualized, redetermined, and, as Benjamin so poignantly described, is "[pried]...from its shell."[203] He explains, "to destroy its aura, is the mark of a perception whose 'sense of the universal equality of things' has increased to such a degree that it extracts it even from a unique object by means of reproduction."[204] The process of datafication and interpolation renders a digital self that "rebuffs their auras with an immediate empiricism."[205] The digital self is locatable, definable, if only for a fleeting moment, and therefore no longer represents the

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[198] Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 222.
[199] Meenakshi Gigi Durham and Douglas M. Kellner, *Media and Cultural Studies: KeyWorks*, Revised Edition (Blackwell Publishing, 2006), xviii.; Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 219-53.
[200] Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 224.
[201] Cheney-Lippold, *We Are Data*, 145.
[202] Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 225.; Cheney-Lippold, *We Are Data*, 145.
[203] Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 225.
[204] Benjamin, "The Work of Art in the Age of Mechanical Reproduction," 225.
[205] Cheney-Lippold, *We Are Data*, 146.

individual's aura. Further, this constructed digital self loses the nuance and complexity of the individual through the process of reproducing them in data. The digital self, then, does have a distance from the individual, but it might be better understood as simply a difference. This, as Cheney-Lippold notes, isn't to say that "algorithmic interpretations" are not real, but rather there is a difference between "life and algorithmic life," the latter of which "locate us in novel subject positions that we can never be too sure of."[206] While we can't know exactly how the data is being used, the lack of recommendation systems on nugs.net suggests that when engaged in the intimate work of identity formation through streaming music on their platform, listeners are not being datafied, surveilled, or redefined, to the same extent that they are on other popular platforms. They are given the digital space to maintain their aura.

Members of bootleg music subculture seemed keenly aware of this even as early as the introduction of digital networks. A Usenet user signed one of their posts, "the goal is soul," after having defended Napster as a tool for discovery.[207] The call to the soul points to this user's concern about, what they saw as, the overreaching control of music distribution. Understanding soul as the immaterial piece of human beings, I suggest that soul can also be seen as a synonym for aura. It seems this user was getting at the sense they had that, taken too far, the commodification of something so deeply intimate and personally powerful as music would have negative effects on this ineffable piece of humanity: it would compromise the aura. And while this concern was expressed long before the datafication practices we know today, it reveals the subculture's desire to maintain their individual integrities in the face of commercialization. nugs.net's model is one that privileges this user integrity and affords listeners more autonomy over who they are, both physically and digitally.

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[206] Cheney-Lippold, *We Are Data*, 146.
[207] Okada et al., "Napster Debate."

That said, there is one feature through which nugs.net offers recommendations, the "Recommended" tab. This tab is not present upon registering an account with nugs.net, and only appears after a user has selected their favorite artist and interacted with the platform for a bit. It suggests concerts by artists you've engaged with so far or bands that other listeners with your same listening habits enjoy. The sudden appearance of this tab exposes the fact that nugs.net does curate in an attempt to make the content feel relevant and appealing to users. Their privacy policy explains that they "may collect, share, use or otherwise process personal data about you to provide our Services and products to you; [and] to personalize our websites, Services and product offerings to you."[208] Such a policy reveals that nugs.net collects user data in an effort to curate platform offerings to their subscribers. This supports the fact that "the driving force behind the datafication of listening is an intention to create more engaged users."[209]

However, as Pedersen notes, there are two types of engagement, qualitative and quantitative. While a platform like Spotify "relies on a quantitative measure that understands engagement in relation to time spent on the platform," I contend that nugs.net measures engagement qualitatively, focusing on "the level of attention that a listener allocates to the music."[210] This would mean that the platform focuses on what kind of music a listener is streaming and recommending things they may like based off of that, rather than just *that* a user is streaming and engaging in a curatorial process that increases that amount of time. The focus on qualitative engagement allows users to choose more music that they can attend to instead of streaming music mindlessly.

[208] "Privacy Policy | Nugs.Net."
[209] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 84.
[210] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 84.

Relatedly, a notable absence on nugs.net are playlists. While a user can curate their own playlist, the platform does not engage in any playlist curation itself. Pedersen notes, playlists curated by platforms, especially those geared toward a situation lend themselves "to the lean-back ubiquitous listening."[211] He explains:

> By encouraging users to engage in music listening alongside or simultaneously with everyday situations and activities like driving the car, cooking, dining, studying, working out or even sleeping, Spotify gently pushes users towards treating music as a quality of the situational environment.[212]

Platform curated playlists lend themselves to ubiquitous listening, in that they can be played through any situation and blend with the scenery in a way that renders inattentive listening and treats music as a commodity.

Conversely, nugs.net only affords users the ability to build their own playlists. To make your own playlist requires time, energy, and one's own aesthetic curation, a process through which creates an intimacy between the person and the playlist. In fact, the work of curating often elicits "notions of self-identity through the playlist."[213] DeNora explains, "music is a material that actors use to elaborate, to fill out and fill in, to themselves and to others, modes of aesthetic agency and, with it, subjective stances and identities."[214] As people build their own playlist, they use music as a tool to express themselves, curating "music collections…tied to personal meanings and life narratives."[215] Further, Lüders notes, "by creating playlists, listeners create

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[211] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 75.
[212] Pedersen, "Datafication and the Push for Ubiquitous Listening in Music Streaming," 82.
[213] Marika Lüders, "Ubiquitous Tunes, Virtuous Archiving and Catering for Algorithms: The Tethered Affairs of People and Music Streaming Services," *Information, Communication & Society* 24, no. 15 (December 2021): 2345, https://doi.org/10.1080/1369118X.2020.1758742.
[214] DeNora, *Music in Everyday Life*, 74.
[215] Lüders, "Ubiquitous Tunes, Virtuous Archiving and Catering for Algorithms," 2345.

experiences of exclusivity and subjectivity 'that bring about, in turn, a felt ownership.'"[216] Just as Napster allowed for fan ownership of music that may have never been made available for purchase, nugs.net privileges the opportunity for fans to claim ownership over ephemeral live recordings that, without the platform, would otherwise not be obtainable.

While users don't actually own the music that makes up the playlists they create, there is still a sense of ownership. This is also referred to as "psychological ownership" and "is defined as 'the state in which individuals feel as though the target of ownership or a piece of that target is 'theirs.'"[217] Importantly, "the conceptual core of the state of ownership is the feeling of possession and of being closely connected to an object, the object thereby becoming part of the individual's extended self."[218] In short, as one works to create their playlist, they invest themselves in it and it becomes theirs; it functions as a piece of themselves. This level of personal investment produces a playlist that reflects oneself, one's narrative, and one's experiences. Listening back to such a playlist is inherently attentive, as music has the power to affect a listener through memory:

> At the most general and most basic level, music is a medium that can be and often is simply paired or associated with aspects of past experience. It was part of the past and so becomes an emblem of a larger interactional emotional complex. A good deal of music's affective powers come from its co-presence with other things – people, events, scenes… The link, or articulation, that is made – and which is so often biographically indelible – is initially arbitrary but is rendered symbolic (and hence evocatory).[219]

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[216] Lüders, "Ubiquitous Tunes, Virtuous Archiving and Catering for Algorithms," 2345.
[217] Danckwerts and Kenning, "'It's MY Service, It's MY Music,'" 805.
[218] Danckwerts and Kenning, "'It's MY Service, It's MY Music,'" 805.
[219] DeNora, *Music in Everyday Life*, 66.

The opportunity for users of nugs.net to engage in the construction of their own playlist inherently calls for attentive listening, as the music chosen reflects and extends oneself and personal narrative, affectively calling their attention and avoiding slipping into the background.

Relatedly, the curation of one's own playlist itself functions as an archive within an archive. These playlists can be "safe havens, places [users] know they can rely on for their music" as opposed to those curated for users over which they lack a sense of ownership and control.[220] This sense of control over music, moreover, has been linked to more positive listening experiences generally.[221] "Personal archives, whether in the form of the current lists of favourites or meticulously curated collections of music, come across as safe musical retreats."[222] nugs.net provides users with the opportunity to create these mini havens, effectively allowing listeners to build archives of the selves in which they gather a sense of ontological security.

Self-identity, Giddens explains, is a narrative:

> A person's identity is not to be found in behaviour, nor - important though this is - in the reactions of others, but in the capacity to keep a particular narrative going. The individual's biography, if she is to maintain regular interaction with others in the day-to-day world, cannot be wholly fictive. It must continually integrate events which occur in the external world, and sort them into the ongoing 'story' about the self.[223]

Our sense of self is "fragile, because the biography the individual reflexively holds in mind is only one 'story' among many other potential stories that could be told about her development as

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[220] Lüders, "Ubiquitous Tunes, Virtuous Archiving and Catering for Algorithms," 2353.
[221] Krause, North, and Hewitt, "Music-Listening in Everyday Life," 166.
[222] Lüders, "Ubiquitous Tunes, Virtuous Archiving and Catering for Algorithms," 2355.
[223] Anthony Giddens, "The Self: Ontological Security and Existential Anxiety," in *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Cambridge, U.K.: Polity Press in association with Basil Blackwell, 1991): 54.

a self."[224] As we've seen, music has a unique ability to help listeners "constitute the self," and is critical in the establishment and maintenance of self-identity.[225] In this way, the archives of the selves that can be built on nugs.net function as "protective cocoons," allowing users to continually access their sense of self and reinforce their self-narratives.[226] The security personal archives on nugs.net afford gears them toward attentive listening, in that one is able to actively use their playlists as tools to reaffirm the self, comfort themselves in unstable situations, and/or establish the ontological security necessary to function in the day to day. The archival structure and affordances of nugs.net privileges user choice and autonomy over platform curation and therefore privileges attentive listening.

Conclusion

These differences in platform affordances allow us to conceptualize alternative ways streaming services might treat user data. Pulling from their subcultural values of discovery, ownership, and autonomy, nugs.net focuses on qualitative data practices and does not subdivide listeners into dividuals. This points to a less invasive form of datafication that does not collect immensely intimate data on individual users, but rather understands listeners as fans and members of fan communities. Thinking of users this way allows us to combat music being used as a technology of surveillance, and rather privileges music as a technology of the self, emphasizing it as a resource for users in their processes of self-determination, not as a commodity for platforms and their affiliates.

In this section, I demonstrated that the way nugs.net conceptualizes its everyday use and user does not privilege the ubiquitous listening model, but rather encourages attentive listening

[224] Giddens, "The Self: Ontological Security and Existential Anxiety," 55.
[225] DeNora, *Music in Everyday Life*, 47.
[226] Giddens, "The Self: Ontological Security and Existential Anxiety," 40.

and engagement. Building on their subcultural practices, values, and ideologies, nugs.net's attentive listening model privileges user autonomy and choice, democratizes music access, decommodifies music, and values it for its aesthetics and function as a resource for users. The archive and lack of recommendation systems encourage discovery as well as urge us to consider alternative data practices that maintain user, music, and artist integrity. The platform's origin out of bootleg music subculture and their fan spaces allows for continued ground up, subculture expansion and musical exploration that pushes up against mainstream listening and streaming models. This analysis offers an example of how music streaming services can function differently and prevent the ubiquity of music from eclipsing listening habits that value what is listened to for its aesthetics, meaning, and power, over its worth as a commodity.

Conclusion

In an interview with CBS in 2019, Dave Matthews described his experience of making and playing live music as "freedom."[227] Dave explained that playing in syncopation with other artists onstage without plans or rehearsals is a kind of out of body experience that, for him, is "a way to be transformed by our humanity and what connects us."[228] Music allows Dave, and artists generally, to express and connect with others, just as it does for those that listen to it. It "is a way of communicating that somehow, by evoking without referring, has extraordinary power to help people find their deepest selves, bring them together, and feel connected to what feels most important."[229] It functions as a tool for listeners to understand themselves, their emotions, and who they are or want to be. Music is freedom, but in our streaming environment of today, this freedom is increasingly being encroached on. Musicians have less freedom to make music they want and maintain a living; music itself is shaped by the demands of platforms and treated as data; listeners are discouraged from engaging with music thoughtfully and are continually funneled into listening practices that make the music all at once ubiquitous yet somehow still forgettable. Music is not free, nor am I arguing that it should be. Even members of a subculture notorious for bootlegging, as we've seen, would agree that they want to compensate their artists for their work and contribution to music. But music can be freedom, and looking at a subculture that has challenged dominant forms of music distribution reminds us that this freedom is worth fighting for.

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[227] *Dave Matthews on the Joy and Freedom of Playing Music*, 2019, https://www.youtube.com/watch?v=Ezn-5b1egtI.
[228] *Dave Matthews on the Joy and Freedom of Playing Music*.
[229] Baym, *Playing to the Crowd*, 31.

This thesis has traced bootleg music subculture's media use from Napster to nugs.net, allowing us to consider alternative streaming platform models that value music beyond its function as a commodity. My exploration of Napster revealed bootleg music subculture's practices, values, and identity, which all shaped the development and construction of their own live music streaming platform, nugs.net. The analysis of which unveiled how an attentive listening model decommodifies music, privileges user autonomy and choice, democratizes music access, and values music for its aesthetic function and power. It's with this understanding that we can begin to reimagine what streaming platforms should look like and what the path forward for popular models might be. Reprioritizing music as a resource and technology of the self can help us value music's aesthetic power in constructing streaming platforms and not simply approach music for its money-making potential. It's worth far more.

Bootleg music subculture has been an innovator in digital streaming and distribution. Napster paved the way for the commodification of digital networks and control of music distribution in a digital space that, at first, seemed untamable, ultimately making way for the streaming platforms of today. nugs.net is again at the forefront of music streaming models, offering an alternative that may be vulnerable to the same co-option. Hints of this are evident in the platform's recent reshaping. The data presented in this thesis was collected in the spring of 2023, however, on August 31st of the same year, nugs.net announced a new web player. The new design featured aesthetic changes, like an all black background, as well as new platform features, like the ability to now shuffle playlists and queue songs.[230] While these changes may not seem significant on the surface, we have seen how small features have large implications and these recent changes do make the site feel more familiar to mainstream platforms. Such an

[230] "All New Web Player, App Queue, and Other Recent Enhancements," accessed October 29, 2023, https://www.nugs.net/08-31-2023-all-new-web-player-and-other-recent-enhancements.html.

update points to the fact that these streaming platforms are not set in stone and can at any point be redesigned. It's critical that we intervene for the sake of the music and to maintain the subculture's values and integrity in the face of creeping commodification.

Further, while this thesis offered ways to think about an alternative model for streaming services that works against ubiquitous listening habits, it is not without its limitations. Primarily, only the desktop web player of nugs.net was examined, as the name of the platform suggests that it is a website. However, in my research I found that there is a nugs.net app. Future research should investigate the extent to which the findings offered here track onto the app, as well as how the app functions differently than other streaming apps and its implications for listening habits, users, music, and artists. Current scholars might also deepen the research presented here by looking at additional bootleg music subculture digital platforms and considering the tension between data production and data brokerage. While this thesis has paid more attention to the latter, this subculture has many varied digital fan spaces that produce a lot of data. Investigating the motivations behind this production and how the resulting data is treated by the subculture and/or third parties might yield more insight into how platforms can best be designed to protect fans of music and their practices. Further, this research may be broadened through exploring streaming platforms from other subcultures, as "it is extremely important to analyze the spaces in which music is experienced because spatial arrangements impact the form and nature of community engagement."[231] Looking to alternative models and what values they may prioritize can allow us to interrogate different power arrangements, rituals, and how music mediates those relationships online.

[231] Baym, *Playing to the Crowd*, 140.

Realizing the ideal music streaming model remains out of most of our control. Yet there are still ways we can take action. First, we as users of these services should remain keenly aware of how these platforms function. This thesis has shown how affordances as seemingly simple as playlists can have vastly different effects depending on how they are structured. We need to continue to pay attention to these features and how they may evolve. Relatedly, we should keep an eye out for new platforms, their changes, and how their models compare to current music streaming services. The recent sale of the streaming service, Bandcamp, serves as a cautionary tale. Championed for "its commitment to ideals beyond the prioritization of profit, the editorial staff who functioned as human discovery engines in an age of algorithms, and, above all, the respect Bandcamp commanded from music lovers and musicians alike," Bandcamp appears to embody the same values as bootleg music subculture and nugs.net.[232] However, its acquisition by Songtradr and the subsequent layoffs are pointing to an inevitable restructuring of the site, leaving critics to decry capitalism as "inherently unable to recognize any value beyond the dollar sign."[233] It will be crucial to follow what happens with Bandcamp in order to understand how we might prevent a similar fate for nugs.net and any new platforms that attempt to value music beyond its money making potential.

Perhaps the most direct way to intervene is through consumer activism. Through continued awareness of streaming platforms and the listening habits they afford we can make informed decisions about which services we want to support. We can be vocal about features we like, and those that we don't, through where our money goes, effectively speaking the language

[232] Tom Hawking, "The Music Site Bandcamp Is Beloved and Unique. I Shudder at Its Corporate Takeover," *The Guardian*, October 27, 2023, sec. Opinion, https://www.theguardian.com/commentisfree/2023/oct/27/epic-games-bandcamp-acquired-sondtradr.
[233] Hawking, "The Music Site Bandcamp Is Beloved and Unique. I Shudder at Its Corporate Takeover."

of dominant streaming platforms in an effort to force them to reprioritize their values. We can go to more live shows, buy t-shirts, and find more ways to directly support the artists we love.

The next step for popular music streaming platforms matters. As they navigate this tumultuous period in the industry, some are turning to artificial intelligence (AI) to give their platforms a fresher appeal.[234] But such a move is furthering industry anxiety, being described as "the most disruptive technology for the music business since the Napster era of piracy."[235] Platforms have already been accused of pushing AI-generated music on their services and "the rise of auto-tuned vocals and drum loops in pop music have made humans easier for machines to imitate."[236] If embraced, AI would have serious implications for "traditional industry notions of creativity, ownership, attribution, and skill development."[237] But it would also have a huge impact on the music itself, taking it to the extreme ends of commercialization and only producing music deemed worthy if profitable. The time to intervene is now. For the sake of music we must establish more equitable streaming platforms that value music beyond its function as a commodity.

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[234] Lionel Laurent, "Spotify Needs to Profit From a Music Revolution," *Washington Post*, January 18, 2023, https://www.washingtonpost.com/business/spotify-needs-to-profit-from-a-music-revolution/2023/01/18/e71c548c-96ef-11ed-a173-61e055ec24ef_story.html.
[235] Water & Music, "Artificial Intelligence," accessed September 13, 2023, https://www.waterandmusic.com/category/artificial-intelligence/.
[236] Laurent, "Spotify Needs to Profit From a Music Revolution."
[237] Water & Music, "Artificial Intelligence."

BIBLIOGRAPHY

"All New Web Player, App Queue, and Other Recent Enhancements." Accessed October 29, 2023. https://www.nugs.net/08-31-2023-all-new-web-player-and-other-recent-enhancements.html.

Baym, Nancy K. *Playing to the Crowd: Musicians, Audiences, and the Intimate Work of Connection*. NYU Press, 2018. https://www.jstor.org/stable/j.ctv12pnpcg.

Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." In *Illuminations*, edited by Hannah Arendt, 219-53. New York: Harcourt, Brace & World, Inc, 1968.

Cheney-Lippold, John. *We Are Data: Algorithms and The Making of Our Digital Selves*. New York: New York University Press, 2017.

"Create Account | Nugs.Net." Accessed April 30, 2023. https://get.nugs.net/checkout/standard.

Danckwerts, Sebastian, and Peter Kenning. "'It's MY Service, It's MY Music': The Role of Psychological Ownership in Music Streaming Consumption." *Psychology & Marketing* 36, no. 9 (2019): 803–16. https://doi.org/10.1002/mar.21213.

Dav1936531, Mike Tindall, and BigB7. "I Don't Wanna Get Banned - How Do I Avoid?," October 2000. https://groups.google.com/g/alt.music.mp3.napster/c/aCSRzFEgeeU.

Dave Matthews on the Joy and Freedom of Playing Music, 2019. https://www.youtube.com/watch?v=Ezn-5b1egtI.

DeNora, Tia. *Music in Everyday Life*. Cambridge University Press, 2000. *Cambridge University Press*, https://doi.org/10.1017/CBO9780511489433.

Dilmperi, Athina, Tamira King, and Charles Dennis. "Toward a Framework for Identifying Attitudes and Intentions to Music Acquisition from Legal and Illegal Channels." *Psychology & Marketing* 34, no. 4 (2017): 428–47. https://doi.org/10.1002/mar.20998.

dmbnatto. "I Have Bartender," March 26, 2001. https://groups.google.com/g/alt.music.dave-matthews/c/-fiN7pVufs4/m/4cJDAzMu3bgJ.

Drott, Eric A. "Music as a Technology of Surveillance." *Journal of the Society for American Music* 12, no. 3 (August 2018): 233–67. https://doi.org/10.1017/S1752196318000196.

Drott, Eric. "Why the Next Song Matters: Streaming, Recommendation, Scarcity." *Twentieth-Century Music* 15, no. 3 (October 2018): 325–57. https://doi.org/10.1017/S1478572218000245.

Durham, Meenakshi Gigi, and Douglas M. Kellner. *Media and Cultural Studies: KeyWorks*. Revised Edition. Blackwell Publishing, 2006.

Durrani, Ana. "The Average American Spends Over 13 Hours A Day Using Digital Media—Here's What They're Streaming." *Forbes Home*, March 27, 2023. https://www.forbes.com/home-improvement/internet/streaming-stats/.

Eliscu, Jenny. "Napster Fights Back." *Rolling Stone*, no. 843, 22 June 2000, p. 29.

Fgssand. "Lillywhite Legal Thoughts (Please Add To This)," March 2001. https://groups.google.com/g/alt.music.dave-matthews/c/W9ccpDdaR40/m/gjwaiKbOwUsJ.

Goodman, Fred. "Concert Audio Hub Nugs.Net Has Doubled Its Subscriber Base in Just a Few Months." *Billboard* (blog), November 14, 2019. https://www.billboard.com/pro/nugs-net-live-streaming-downloads-video-subscriber-growth/.

Giddens, Anthony. "The Self: Ontological Security and Existential Anxiety." In *Modernity and Self-Identity: Self and Society in the Late Modern Age*, 35-69. Cambridge, U.K.: Polity Press in association with Basil Blackwell, 1991.

Gilbert. "If You Really Appreciate Music.....," March 2001. https://groups.google.com/g/alt.peer-to-peer.napster/c/52u6_ngoyjA.

Grossberg, Lawrence. ""Is there a Fan in the House?: The Affective Sensibility of Fandom." In *The Adoring Audience: Fan Culture and Popular Media*, edited by Lisa A. Lewis, 50-65. London, UNITED KINGDOM: Taylor & Francis Group, 1992. http://ebookcentral.proquest.com/lib/uva/detail.action?docID=166134.

Hartzog, Oscar. "RS Recommends: Want to Stream Concerts On-Demand? Nugs.Net Has You Covered." *Rolling Stone* (blog), April 13, 2022. https://www.rollingstone.com/product-recommendations/lifestyle/nugs-music-review-1304512/.

Hawking, Tom. "The Music Site Bandcamp Is Beloved and Unique. I Shudder at Its Corporate Takeover." *The Guardian*, October 27, 2023, sec. Opinion. https://www.theguardian.com/commentisfree/2023/oct/27/epic-games-bandcamp-acquired-sondtradr.

Hebdige, Dick. 1991. *Subculture: The Meaning of Style*. New Accents. London; New York: Routledge.

Hosking, Trevor, Triari62299, and bug. "I Love Napster," December 2000. https://groups.google.com/g/alt.music.mp3.napster/c/nQIKrWvM6u8.

Hu, Cherie. “Just How Difficult Is It to Make a Sustainable Living from Streaming?” Water & Music, September 27, 2021. https://www.waterandmusic.com/just-how-difficult-is-it-to-make-a-sustainable-living-from-streaming/.

Instagram. “Jason Stessel on Instagram: ‘(Followup to Last Post) - On ~this Day in 2001, the Unfinished DMB Album “The Lillywhite Sessions” Leaked on Napster. Ironically, in This Rare VHS Clip from 2000, Napster Co-Founder Sean Parker Reveals How His Love for Dave Matthews Band & Tape Trading Played a Part in Inspiring Napster’s Creation. #DMB #DaveMatthewsBand #DaveMatthews #SeanParker #Napster #LillywhiteSessions,’” March 26, 2023. https://www.instagram.com/reel/CqQgWHxrpsi/.

Jenkins, Henry. *Textual Poachers: Television Fans & Participatory Culture. Studies in Culture and Communication.* New York: Routledge, 1992.

John, Nicholas A. *The Age of Sharing*. Polity Press, 2017.

joseph.wormall. “Napster in Court,” November 13, 2000. https://groups.google.com/g/alt.napster/c/VAl8FGZi-2o.

Krause, Amanda E., Adrian C. North, and Lauren Y. Hewitt. “Music-Listening in Everyday Life: Devices and Choice.” *Psychology of Music* 43, no. 2 (March 2015): 155–70. https://doi.org/10.1177/0305735613496860.

Laurent, Lionel. 2023. “Spotify Needs to Profit From a Music Revolution.” *Washington Post*, January 18, 2023. https://www.washingtonpost.com/business/spotify-needs-to-profit-from-a-music-revolution/2023/01/18/e71c548c-96ef-11ed-a173-61e055ec24ef_story.html.

Leeds, Jeff. “Record Industry Says Napster Hurt Sales.” *Los Angeles Times*, February 24, 2001. https://www.latimes.com/archives/la-xpm-2001-feb-24-fi-29694-story.html.

Light, Ben, Jean Burgess, and Stefanie Duguay. “The Walkthrough Method: An Approach to the Study of Apps.” *New Media & Society* 20, no. 3 (March 1, 2018): 881–900. https://doi.org/10.1177/1461444816675438.

Low, Billy, and diggy. “Another Hum!!,” October 2000. https://groups.google.com/g/alt.napster/c/hFR1QfZcr10.

Lüders, Marika. “Ubiquitous Tunes, Virtuous Archiving and Catering for Algorithms: The Tethered Affairs of People and Music Streaming Services.” *Information, Communication & Society* 24, no. 15 (December 2021): 2342–58. https://doi.org/10.1080/1369118X.2020.1758742.

Lupinacci, Ludmila. “‘Absentmindedly Scrolling through Nothing’: Liveness and Compulsory Continuous Connectedness in Social Media.” *Media, Culture & Society* 43, no. 2 (March 1, 2021): 273–90. https://doi.org/10.1177/0163443720939454.

Mann, Charles C. “The New Tastemakers: An e-Mail Exchange with Cherry Lane Digital’s Jim Griffin.” *The Atlantic online*, September 2000. https://www.theatlantic.com/past/docs/issues/2000/09/mann-griffin.htm.

Mejias, Ulises A., and Nick Couldry. 2019. “Datafication.” Internet Policy Review 8 (4). https://policyreview.info/concepts/datafication.

Morris, Jeremy Wade. “Anti-Market Research: Piracy, New Media Metrics, and Commodity Communities.” *Popular Communication* 13, no. 1 (January 2015): 32–44. https://doi.org/10.1080/15405702.2014.977998.

Morris, Jeremy Wade. “Music Platforms and the Optimization of Culture.” *Social Media + Society* 6, no. 3 (July 1, 2020): 1–10. https://doi.org/10.1177/2056305120940690.

MTB. “Downloading/Integrity/Ethics/Artists’ Intentions,” April 10, 2002. https://groups.google.com/g/alt.music.rush/c/yISEa1gAfGE/m/xIfbgCNQ9eEJ.

nugs.net. “Live Music Streaming Online | Live Concert Streams | Nugs.Net.” Accessed May 7, 2023. https://www.nugs.net/.

Okada, Jiro, Russ Steele, Beau, Thomas Hayden, ~Lori, Baboonboy, Jfaspen, Matt Dwyer, Brad Robertson, and AJ. “Napster Debate,” October 2001. https://groups.google.com/g/alt.music.dave-matthews/c/Xkl6lLTJu0E/m/YrXfqCB8qGIJ.

Olson, Cathy Applefeld. “Nugs.Net Enlists LiveLike To Amp Interactivity As It Moves Concerts Behind Pay Wall.” *Forbes*. Accessed October 22, 2023. https://www.forbes.com/sites/cathyolson/2021/01/29/nugsnet-enlists-livelike-to-amp-interactivity-as-it-moves-concerts-behind-pay-wall/.

“Our Mission Is Simple: To Spread the Joy of Live Music,” nugs.net, accessed May 7, 2023, https://www.nugs.net/about-us.html.

Pedersen, Rasmus Rex. “Datafication and the Push for Ubiquitous Listening in Music Streaming.” *MedieKultur: Journal of Media & Communication Research* 36, no. 69 (December 2020): 71–89.

phil the pill, Cliff ’n Tina, and chris. “No Blue Sky on Napster,” April 2001. https://groups.google.com/g/alt.fan.allman-brothers/c/ychVeT_GWic/m/fQ6WYah8LHgJ.

PHISH for DMB. “DOWNLOAD I DID IT FROM UVA ON NAPSTER,” April 22, 2001. https://groups.google.com/g/alt.music.dave-matthews/c/m78YUUIR8Bg/m/5rnUl15JFN0J.

Prey, Robert. “Nothing Personal: Algorithmic Individuation on Music Streaming Platforms.” *Media, Culture & Society* 40, no. 7 (October 2018): 1086–1100. https://doi.org/10.1177/0163443717745147.

“Privacy Policy | Nugs.Net.” Accessed October 22, 2023. https://www.nugs.net/privacy-policy.html.

ratch. “A Dreaded Napster Question.....,” November 2000. https://groups.google.com/g/alt.fan.allman-brothers/c/_RKSJxyewkU/m/XoDp7jvUodoJ.

Rolling Stone. “Napster’s Free-for-All: File-Sharing Service Spawns the MP3 Revolution.” New York, United States: Rolling Stone Licensing LLC, June 24, 2004.

Routley, Nick. “Ranked: The Top Online Music Services in the U.S. by Monthly Users.” *Visual Capitalist*, February 3, 2023. https://www.visualcapitalist.com/top-online-music-services-us/.

Rush Bootleg FTP. “Mp3 Bootlegs?,” June 22, 2001. https://groups.google.com/g/alt.music.rush/c/ny9NuHLaqIQ/m/z5AfQdTmH-8J.

Scannell, Paddy. *Television and the Meaning of Live: An Enquiry into the Human Situation*. Cambridge: Polity Press, 2014.

Schreiber, Paul. “‘[DMCA_Discuss] Its The Music, Stupid’ - MARC,” September 2003. https://marc.info/?l=dmca-discuss&m=106374010606645&w=2.

Seaver, Nick. *Computing Taste: Algorithms and the Makers of Music Recommendation*. Chicago, IL: University of Chicago Press, 2022.

Sisario, Ben. “Musicians Say Streaming Doesn’t Pay. Can the Industry Change?” *The New York Times*, May 7, 2021, sec. Arts. https://www.nytimes.com/2021/05/07/arts/music/streaming-music-payments.html.

Spotify. “Spotify Premium - Try Free for 2 Months.” Accessed October 24, 2023. https://www.spotify.com/us/premium/.

Taylor, Bryan C., Christof Demont-Heinrich, Kirsten J. Broadfoot, Jefferson Dodge, and Cuowei Jian. “New Media and the Circuit of Cyber-Culture: Conceptualizing Napster.” *Journal of Broadcasting & Electronic Media* 46, no. 4 (December 1, 2002): 607–29. https://doi.org/10.1207/s15506878jobem4604_7.

TB. “Song Title Plz,” November 2000. https://groups.google.com/g/alt.napster/c/V9k0aJsWu1Q.

Turner, David. “The Payment Model Debate Isn’t Over.” Penny Fractions, August 23, 2023. https://pennyfractions.ghost.io/the-payment-model-debate-isnt-over/.

Vaidhyanathan, Siva. “MP3: It’s Only Rock and Roll and The Kids Are Alright,” July 13, 2000. https://www.thenation.com/article/archive/mp3-its-only-rock-and-roll-and-kids-are-alright/.

Vaidhyanathan, Siva. *The Anarchist in the Library: How the Clash Between Freedom and Control Is Hacking the Real World and Crashing the System*. New York: Basic Books, 2004.

Water & Music. n.d. “Artificial Intelligence.” Accessed September 13, 2023. https://www.waterandmusic.com/category/artificial-intelligence/.

Water & Music. “Starter Pack: Music Streaming Platform Models.” Water & Music, July 14, 2023. https://www.waterandmusic.com/starter-pack-music-streaming-platform-models/.

Weisbard, Eric. “Keeping Up With the Napsters.” The Village Voice, May 10, 2000. https://www-rocksbackpages-com.proxy1.library.virginia.edu/Library/Article/keeping-up-with-the-napsters.

Witt, Stephen. *How Music Got Free: A Story of Obsession and Invention*. New York, NY: Penguin, 2016.

Woodworth, Griffin Mead. “Hackers, Users, and Suits: Napster and Representations of Identity.” *Popular Music and Society* 27, no. 2 (March 1, 2004): 161–84. https://doi.org/10.1080/0300776042000168581 3.

zarriello, keith. “Re: [Rumori] Re: Pho: Re: My Open Resolution to the Online Music Crisis,” June 2001. https://www.detritus.net/contact/rumori/200110/0076.html.

zed_x19. “HELP ME PLEASE!!!,” November 2000. https://groups.google.com/g/alt.napster/c/_pM7qcnzjvU.