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Turning the Tables: Nightlife, DJing, and the Rise of Digital DJ Technologies

A dissertation submitted in partial satisfaction of the  
requirements for the degree Doctor of Philosophy

in

Communication

by

Kate R. Levitt

Committee in Charge:

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Professor Kelly Gates  
Professor Christo Sims  
Professor Timothy D. Taylor  
Professor K. Wayne Yang

2016

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Chair

University of California, San Diego  
2016



## DEDICATION

For my family

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Chapter Four in part contains material that has been co-authored with Christina Zanfagna and was published in 2014 in *The Oxford Handbook of Mobile Music Studies, Volume 2*.



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## ABSTRACT OF THE DISSERTATION

Turning the Tables: Nightlife, DJing, and the Rise of Digital DJ Technologies

by

Kate R. Levitt

Doctor of Philosophy in Communication

University of California, San Diego, 2016

Professor Chandra Mukerji, Chair

DJ culture experienced a crisis as it underwent rapid changes in its tools, practices, and communities in the 2000s, a process that is still unfolding in 2015. Historically, DJing as a musical and cultural practice shifted the emphasis of recorded music playback from a one-way flow of information to a multifaceted conversation between DJ and vinyl, turntables, mixer, dancers, and the urban environment. As a consequence, the significance of the DJ was not merely the ability to weave recorded songs, but the fact that he or she connected bodies, sounds and technology in an urban ecology, creating exciting new musical experiences. However, the rapid rise of digital DJ technologies in the 2000s

brought with it many new tools and formats, and economic revitalization has increasingly turned to DJ-driven nighttime entertainment. These forces have raised questions about what DJing means, who belongs in the community, and how to legitimize its practices.

This dissertation analyzes an artistic community as it navigates dramatic changes in its world, and considers the processes by which DJs contribute to, respond to, and reshape new technologies. It threads histories of nightlife's transgressive symbolism and DJ culture's privileging of irreverent remix into more recent controversies over what tools, techniques, and performance choices make some DJs more legitimate than others in the DJ world. Drawing from over a decade of research and participation in the DJ world, as well as dozens of interviews and observations, I examine the perspectives of those DJs who embrace new technologies as well as those who problematize the rise of digital DJing. The study offers a nuanced theorization of artistic practice and technology adoption that emphasizes the role of DJing's history, as well as the situated ways that communities define themselves in moments of flux.

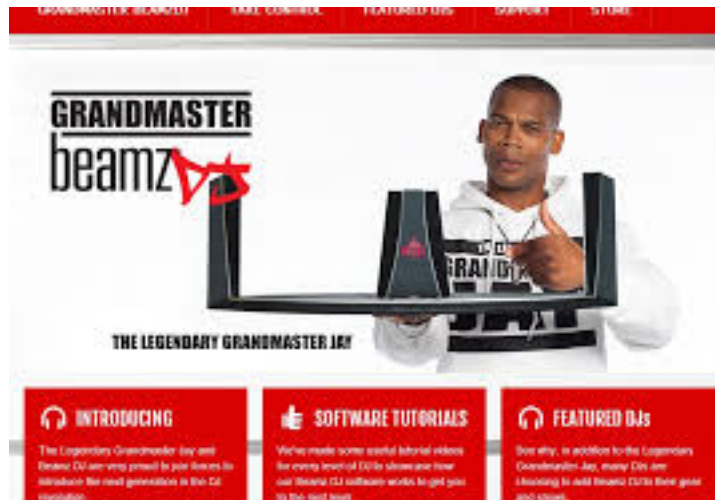
## Introduction

In October 2013, Beamz Interactive, Inc., a company based in Arizona that had previously made laser-controlled medical technologies, stirred up controversy in the DJ world. Their new product, Beamz DJ, used laser-controllers to allow people to orchestrate music and beats with just a few waves of the hand. Like a cross between a theramin, an air guitar, and a MIDI controller, the Beamz system's lasers responded to hand and finger movements to mimic scratching, beat juggling, and other mixing techniques created by DJs.

To sell their product, they first inked a deal with rapper Flo Rida, branded as "Beamz by Flo," on the Home Shopping Network (HSN), which promised viewers that "anyone could make music and look like a DJ."<sup>1</sup> But the real storm erupted amongst professional DJs when they unleashed a series of web-based commercials featuring the ignominious "Legendary Grandmaster Jay." With a name that sounded like a famous DJ and a performance that read as authentic, complete with shaved head, hoodie, hardened stare, and a little finesse in his movements, Grandmaster Jay marketed Beamz to an international audience.

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<sup>1</sup> "Beamz by Flo," *Home Shopping Network*, accessible online at <https://www.youtube.com/watch?v=asOteM42JPY>



**Image 1.1: Online ad for Beamz DJ featuring “the legendary” Grandmaster Jay**

But here’s the thing: Grandmaster Jay was not a DJ. His performance in the commercial sounded polished, with ample scratching and beat juggling of Run DMC’s “Peter Piper.” That’s because it was ripped off, verbatim, from *real* DJ Jazzy Jeff’s iconic routine with the same record, and then enacted by the fake Grandmaster Jay in the commercial. DJ Jazzy Jeff is a performer who began DJing and producing records in the early 1980s, once upon a time with Will Smith aka The Fresh Prince, and has made a career out of his professionalism and commitment to music. Grandmaster Jay, on the other hand, is an actor who claimed to be one of the founders of hip-hop on a Wikipedia page that was later taken down for false information. It is unclear if

Grandmaster Jay duped Beamz into thinking he was a legitimate star in order to ink an endorsement deal or if Beamz helped to manufacture a false DJ persona because, perhaps, they could not convince a real one to back them.

DJs across the world voiced their anger and frustration on every platform imaginable, lambasting both Beamz and Grandmaster Jay. They called him a fake on Facebook and a travesty on Twitter, they made confessional videos on Youtube accusing Beamz of being not only “a shit product,” but “a disservice to the art of DJing.”<sup>2</sup> Jazzy Jay protested publicly, as did hip-hop legend Grandmaster Flash and techno-king Armin Van Buuren. Rob Swift and Kuttin Kandi, two turntablists and internationally renowned DJs with huge social media followings, attacked both the product and its spokesperson for shamelessly exploiting an art form and culture.

These voices of protest contextualized the Beamz controversy in a larger and longer trajectory of debates over who can call themselves a DJ, what skills define the art of DJing, and what types of equipment are more legitimate than others among DJs. Their critiques also highlighted ongoing racialized processes of cultural appropriation and exploitation, where mainstream commercial interests seek to use – and disrespect – non-dominant, non-white cultural practices for profit. In a November 2013 Facebook post, Rob Swift explained,

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<sup>2</sup> DJ Iceman, Youtube video published on November 2, 2013, accessible online at <http://www.complex.com/music/2013/11/beamz-grandmaster-jay>

This whole fiasco brings to mind the Houdinis of the world. The best magicians succeed in fooling people because they get their audience to focus on the right hand while the left hand does all the trickery. In the case of this Beamz travesty, "Grand Master Jay" is the right hand y'all. He's just a pawn in one big trick. Instead of focusing your energy on him, re-direct your attention to the left hand, the entities responsible for exploiting the genre of Djing/Turntablism to make a quick buck.<sup>3</sup>

Kuttin Kandi added her two cents, linking the Beamz ads to a 1998 Heineken commercial that portrayed a DJ inventing the technique of scratching after spilling beer, thus erasing (or ignoring) the true story of Grandwizzard

Theodore's first scratch in the late 1970s:

This is bigger than we realize folks - this is co-optation... They take our music, our songs, our dance, our art, our culture, our lives... They claim it as their own and then claim us as their own... Then after they're through making their millions out of us... They blast our faces on television, mock our upbringings, and blame only us and our culture for the violence, materialism and sexism in our society.<sup>4</sup>

As for the product itself, reviews on DJ blogs and online music magazines called it "one of the worst things to happen to dance music," and while "conceptually sound," it is "cringeworthy" in its actual application.<sup>5</sup> Cheaply constructed and clunky, too big to fit in most DJ booths and too complicated for low-tech or newbie DJs, Beamz DJ seemed to vanish as quickly as it had arrived. A quick search around the Beamz International website sees it has

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<sup>3</sup> Comment posted to Facebook, November 5, 2013

<sup>4</sup> Comment posted to Facebook, November 1, 2013

<sup>5</sup> Multiple Youtube critiques and reviews are posted online, also collected in the article, "Idiots bought and reviewed Beamz so you don't have to," *StoneyRoads* website, September 13, 2013, accessible online at <http://stoneyroads.com/2013/09/idiots-bought-reviewed-flo-ridas-beamz>

since been rebranded as a tool for music therapy and education, and Grandmaster Jay, whoever he is, disappeared into an archive of social media vitriol.

The Beamz controversy provides a snapshot of the debates and processes that the rest of this dissertation will consider: a new technology is introduced into an artistic world through highly commercial marketing tactics, sparking debates over what skills, sounds, materials, and people belong in the world. The dissertation's starting point works to understand what standards and values DJs use to define their social world, particularly in a time of material and technological flux.<sup>6</sup> The aggravated reactions that so many DJs had to Beamz represent concerns over what skills and behaviors are necessary for practitioners to authentically call themselves DJs, often linked to the equipment they use. The acceptance and rejection of new technologies for musical performance in the DJ world stem from these constructions of legitimate DJ practices, as well as complex dynamics between historical fidelity and forward-thinking innovation, economic structures (to make money) and cultural transgressions (to throw a good party). Policing the borders of the

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<sup>6</sup> Anselm Strauss, "A Social World Perspective," *Studies in Symbolic Interaction*, Vol. 1, 1978, 119-128; "Social worlds and legitimation processes," *Studies in Symbolic Interaction*, Vol 4, 1982, 171-190. Strauss defines "social worlds" as "a set of common or joint activities or concerns, bound together by a network of communication. Strauss points out that "one of the most important features of social worlds is their inevitable differentiation into subworlds" (1982: 172). These worlds are evolving and developing, coming together and splintering off as various different factors challenge and redefine notions of belonging, authenticity, and legitimacy.



DJ world also requires careful attention to commodification and appropriation; as with Beamz, the commercialization of DJing strikes many practitioners as theft from non-dominant groups and non-white subcultures with long histories of oppression. Therefore, the act of rejecting a technology, such as found in the accusations of disrespect and trickery voiced by Kuttin Kandi and Rob Swift, becomes a means of protecting the borders and values of the DJ world.

However, as with other art worlds, the definition of a DJ world is multiple, variable, and changing over time.<sup>7</sup> It does not have sharp boundaries, but rather cooperative links and processes by which members draw lines about what is legitimate and what is not. It ripples across musical genres and intertwining histories of popular musics, burgeoning off into what Strauss calls sub-social worlds based on style and location and their own particular defining processes and negotiations. Should a DJ play on vinyl or CDs? With platters or buttons? Top 40 or more obscure songs? Can they scratch? Can they wire speakers? The DJ world loosely refers to people who perform and sequence recorded music for an audience in entertainment venues. It usually conjures up images of someone playing continuous music on turntables at a nightclub in front of a dancing crowd; whether hip hop or techno, the music is beat-driven, and the DJ is charged with weaving together and transforming the sounds so as to enhance the audience's experience.

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<sup>7</sup> Howard Becker, *Art Worlds*, 25<sup>th</sup> Anniversary Edition (Berkeley: University of California Press, 1982 and 2008). Becker's expansive study asserts, "art worlds do not have boundaries around them," but are the results of negotiations between conventions and change, and of the coordinated activities of networks of people (35).

One coordinating characteristic of DJs is their role as performers and artists who create nighttime entertainment worlds primarily through music and sound. Their profession is dedicated to producing spaces that counter the norms and structures of daytime industries, and is tied to long histories of nightlife as a time of transgression and freedom. Therefore, to be a DJ means to embrace this sense of festivity and carnival, and – at least symbolically – to defy mainstream culture. Yet DJing, like nightlife, exists because of what the daytime structures make possible; industrialization and urbanization, late capitalism, and technological advancement such as digitization. It depends on tools like turntables and speakers, recorded sound, built environments and dancefloors, and expendable income for participants to enjoy their leisure time. The tension between day and night results in the night's persistent need to define itself as other, even as it becomes more and more structured. Similarly, members of the DJ world must negotiate its commercialization and commodification, redefining itself and policing its boundaries based on an ever-changing set of principles, practices, and equipment. In the following chapters, I will demonstrate how this community of artists deals with changes in the technologies they use to produce their art, as well as the increasing commercialization of an art form that values associations with non-mainstream and non-dominant expressions.

Before digging further, it is important to include a very brief description of DJing, as well as an overview of the economic and material changes the

dissertation will analyze. In a little over a decade, between approximately 1998 and 2008, and continuing into the present, DJing's tools and techniques were profoundly transformed by digital technologies. What began as a performance art defined by its use of vinyl records, turntables, and a small variety of mixers, DJing has turned into countless digital programs and devices, handheld formats, and computerized playlists. It is now a rarity to see a DJ playing records and the DJ-device options available seem endless. With so much rapid change in the tools of the trade, it is not shocking that many DJs are still navigating the choices and negotiating their own feelings and attitudes about what constitutes DJing.

During this same era, DJing grew from an edgy subculture with a passionate but fairly small following into a mega-industry. *Forbes* magazine now publishes an "Electronic Cash Kings" list ranking the top-earning DJs – notably all men – in which the world's top 10 highest paid DJs took in more than \$274 million in 2014 – more than doubling their earnings of \$116 million from 2012. Calvin Harris, number one on the list, earned \$66 million, has endorsements with Armani, and is dating pop queen Taylor Swift.<sup>8</sup> These skyrocketing salaries occurred on the heels of video game phenomena like DJ Hero, a spinoff of the popular virtual guitar game Guitar Hero, and as DJ schools like Dubspot and Scratch Academy formalized and monetized

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<sup>8</sup> "Electronic Cash Kings 2015," *Forbes*, accessible online at <http://www.forbes.com/electronic-cash-kings/>

instruction in six-week “DJ 101” classes, enrolling more than 500,000 students at \$425 per class.<sup>9</sup>

All of these trends – the increasing digitalization of DJing, the proliferation of new DJ technologies, the rise of the rockstar DJ – have contributed to a crisis in the DJ world. The changes in DJ tools and techniques are linked to ways that an artistic community (writ very large, spanning multiple genres and many different aesthetical approaches) negotiates rapid transformation in how to define itself. Beamz DJ is an example of the extremes to which manufacturers go to create and market new DJ products, as well as the emotion and passion that infuses DJs’ reactions to these changes as they try to define and police the boundaries of their world. In this context, new technologies are both insults and opportunities, suspicious and enthralling.

My research began, years ago, as a question about the persistence of vinyl, or “old” media, in an increasingly digital art form using “new” media formats and technologies. Why were some DJs not only continuing to use vinyl but celebrating it in intensifying ways, such as vinyl-only and 45-only parties? What new or different meanings and values did DJs attach to records and analog playback tools in an era of digital DJing? However, the more I interviewed DJs and dug into this issue, I realized it demanded much bigger questions: what does this moment of transition between old and new media in

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<sup>9</sup> “DJing Starts Here,” *Scratch Academy Homepage*, accessible online at <https://www.scratch.com/>

DJing tell us about the social, cultural, and economic forces that shape the tools available to DJs, in turn structuring modes of listening to, performing, and consuming music? In addition, who gets to define what a DJ is, where and how they perform, and what tools they use?

What became clear in my work to answer these questions was a vision of DJing as a musical language of youth, outsiders, and communities on the fringes of mainstream society. Its technologies (turntables, mixers, and records) were its grammar, meant to be manipulated and reorganized into a slang of non-standard sounds and dance styles. The introduction of new technologies has produced a crisis in communication, in the sense that DJs' tools convey changing relationships with cultural history, market forces, and artistic expression. Digital DJ tools increase access to those without sprawling and expensive vinyl libraries, and they also facilitate new and faster ways of learning DJ skills by mechanizing practices that used to be done by individual performers, like counting beats per minute. They are also innovations that erase (and replace) some of the vocabulary once essential to DJing, making it unnecessary to collect records or own a turntable. In this sense, rather than democratizing access they gloss over a significant material history some see as fundamental to truly understanding the politics and poetics of DJing. Combined with powerful commercial and market-driven forces, they complicate DJing as a subversive language, often exploiting it to sell products and performers like Beamz and Grandmaster Jay.

DJing makes for an interesting case study to understand how social worlds develop and change over time, especially as they negotiate new technologies. This moment of DJing also illustrates processes of how histories, culture, and social norms help to construct the meanings and uses of these new technologies. The changing arrays of tools are infrastructures that organize artistic expression, modes of listening, and economic priorities. Digital DJing technologies facilitate the use of different music formats and privilege mobility, portability, and access. They also call attention to what they leave out, such as “old media” like records and turntables. In this process, DJ technologies call upon users to make choices about sound and music, performance and consumption, in ways that transform the language of DJing and reveal contentious responses to the art form’s history, its conventions, and the politics of musical entertainment in the 21<sup>st</sup> century.

### **Methodologies**

For the past six years, I have interviewed 78 DJs, observed dozens more, attended hundreds of events, and immersed myself in debates about DJing in multiple shapes, forms, and topics. I have discussed nuances of the sound quality of MP3s, argued about the magical “essence” of vinyl, and weighed the importance of technical skills versus song selection. I have played with virtual DJ tools and spent hours learning new DJ software. I have scoured social media and discussed hardware with sound engineers.

Having lived through the changes myself as a professional DJ, I draw upon my personal experiences and understandings as a foundation for my research. I was a practitioner before I was an observer and researcher, and this certainly shapes my subjectivity in analyzing and presenting the information I have collected over many years. However, it is this position that also strengthens my insights into the topic, deepens my understandings, and allows me to gather information from a large network of DJs and musicians with whom I have built longstanding and trusting relationships.

I began DJing in 1995 while still in high school, saving up money from my afterschool and weekend jobs at Starbucks and Miz Brown's Feed Bag to buy a pair of cheap, belt-drive Gemini turntables and a mixer. I set up this equipment on my bedroom floor and scavenged records from the dollar bins at local music stores to practice mixing songs together. I was as influenced by the Bay Area's raves and underground techno parties in Oakland warehouses as I was by the mobile hip-hop DJ crews that pioneered turntablism in Daly City, sneaking out on weekends to hear music at any venue that would accept my pathetic fake ID and immersing myself in the crammed record shelves of Amoeba, Rasputin, Zebra, Groove Merchant and countless other music shops. When I got to college in New York City in 1998, I joined the campus radio station and the hip-hop club, connecting with party organizers and beginning to DJ in clubs and bars. In New York, I dove into the deep house communities that were a generation removed from the city's funkier disco days and

learned to perform on large sound systems, with live percussion, and with an increasingly sophisticated array of equipment and tools.

I include my story to give context and acknowledge my own familiarity with what DJs might consider a more traditional setup. For personal, artistic, and financial reasons, I have had fairly limited forays into performing as a *digital* DJ – I have used CD turntables and now play quite frequently on the Serato digital vinyl system, which I will describe later in the dissertation, but I do not own or use any other digital technologies in my musical work.

Nonetheless, I have had ample opportunities to observe, test, and fiddle with many DJ tools and I am well versed as a user. My awareness of and involvement in the changes in DJ technologies led me to this dissertation topic and to a predominantly ethnographic approach based on immersive fieldwork and open-ended interviews – formally for six years while a graduate student and informally for nearly 20. However, in this case I began as a participant, spending countless hours in nightclubs and bars, venues and parties, hired to play music and organizing events of up to 5,000 people. While my years as a professional DJ were a form of early research, it was not until I committed to this project for my doctoral work that I began to conduct interviews and systematically analyze DJ practices, tools, and attitudes.

Beginning in 2008 and continuing into 2014, I conducted interviews with 78 professional DJs and observed dozens more in performances and nightlife venues. By professional, I mean DJs who earn money by performing



in venues such as nightclubs, bars, and live music event spaces. Each formal interview lasted between two and four hours, and I often spoke with DJs multiple times. In addition to interviews, I attended at least one event at which each DJ was performing in order to observe firsthand their use of DJ equipment and musical styles. I selected DJs based primarily on my own personal relationships and recommendations from others, most closely based on a snowball sampling approach. While I had met or was acquaintances with about two-thirds of the DJs prior to interviewing them, there was still one-third who I did not know before embarking on this research, and who were referred to me by other study subjects. I did work to make sure that I talked to a mix of veteran DJs, with more than 10 years of experience, as well as newer DJs with five years or less experience. In addition, I intentionally solicited DJs from multiple musical genres, including but not limited to hip-hop, house, techno, and the “catchall” Electronic Dance Music. Most DJs play a mix of different music genres and styles, however, and were reluctant to define themselves by one single category.

Looking at a wide cross-section of genres and styles illustrates some of the similarities in challenges and tensions that all DJs face, regardless of music scene. Concerns about authenticity, artistic identity, cultural commodification, and technological adoption cut across genres. While there are undoubtedly differences in reception and perception of changes in DJ culture that might be attributed to music style, I found that for the purposes of

this particular research topic it was more important to consider a variety of genres and scenes.

Similarly, I conducted my fieldwork and research in multiple sites in order to better understand consistencies in the changes in DJ culture and technologies. Geographically, my research focused on the United States, with the majority of DJs based in New York and California. The bulk of my fieldwork took place in New York City, San Francisco, Los Angeles, and San Diego, all cities where I lived, worked, and studied between 2008 and 2014. I also spent a significant amount of time doing fieldwork and interviews in Seattle, Chicago, Boston, Portland, Santa Fe, and Miami, locations where I had opportunities to perform or observe and meet with DJs interested in my research topic.

Nonetheless, while this study certainly considers DJing and nightlife in a global context and its conclusions may be useful for understanding changes in DJ technologies and cultures outside of the U.S., it is not intended to be an international survey. I quite clearly and intentionally focused on the United States, predominantly given its importance as an epicenter of DJ culture and the sheer number of DJs working here, but also because of its long history as an innovation hub for so many DJ movements. Considering how non-U.S. and, more importantly, non-Western DJ worlds negotiate changes in technologies and economics, as well as the processes by which they define themselves and their work, would be a fascinating topic for future research.

The present study, however, is an examination of how particular artists handle a moment of transformation, rather than representation of DJ culture on a global scale.

In addition to DJs, I interviewed several representatives from digital DJ technology manufacturers and made visits to their offices in the United States, specifically Rane, Ableton, and Native Instruments. These included two marketing executives, one user support manager, and two engineers.

While interviews and fieldwork comprised the bulk of my work, I also conducted extensive historical and textual analysis to craft the chapters on nightlife and early DJ tools. Both required a synthesis of primary and secondary texts from several centuries (nightlife) and several decades (DJing). These methods allow me to connect the practices and tools (of DJing, of nightlife) to much broader and deeper social realities.

In other words, this dissertation is an eclectic set of methods to study an eclectic set of practices and cultures. Part historical, part ethnographic, incorporating textual analysis from the internet and social media, gathered over many years: my dissertation digs into the social and cultural worlds of professional DJs to interpret how and by what standards they define themselves and their artistic practice. My research emerges from my own experiences as a professional DJ but extends across multiple genres, regions, and moments in order to draw out the ways in which a fairly informal artistic community works to police and protect its boundaries, as well as the

processes by which it differentiates and segments into new or different artistic forms and groups.

### **On Music, Technology, and Culture**

Musical instruments may have their own unique histories, but how they are used in a particular moment communicates the values, priorities, and principles of a group or community. Technology, as Tim Taylor points out, is not one thing and is not separate from the people who invented it, marketed it, tested it, or use it. It is connected to an entire social system, a web of people and places, and is never wholly new.<sup>10</sup> This is as true of symphony orchestras and Baroque quartets as it is of electronic music. In a slightly different twist, Jonathan Sterne posits that “technologies are repeatable social, cultural, and material processes crystallized into mechanisms.”<sup>11</sup> DJing encompasses both of these definitions; it is entirely reliant on fairly complex arrangements of technologies, yet it is as dependent on cultural and economic shifts – the forces that led to the first groups celebrating a disc jockey stringing together a mix of danceable songs, and the reasons why assembling sound equipment and vinyl records in concrete lots ignited youth imagination worldwide.

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<sup>10</sup> Timothy D. Taylor, *Strange Sounds: Music, Technology, and Culture* (New York: Routledge, 2001), 7.

<sup>11</sup> Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction*, Durham: Duke University Press, 2003), 8.

Technologies themselves do not determine their uses, influence, and trajectories – often their intended uses conflict with the ways they actually unfold in society, and from design, to production, to consumption, they are shaped by many layers factors – economic, political, cultural, and social. Nonetheless, technologies certainly play important roles in facilitating changes in communication and shaping our cultural and social worlds. For example, recorded sound, a phenomenon on which this entire dissertation is based, is just about 140 years old. On the heels of the player piano, in 1877-78, Thomas Edison haphazardly discovered sound recording while working on telephones and telegraphs. Similar to the processes by which the Gutenberg Press entered modern life, sound recording and reproduction has contributed to many of the ways that people consume, exchange, and create music. Print media greatly impacted human relations, allowing information and ideas to be disseminated on a scale only limited by the number of copies a machine could produce and the literacy of a population. The invention of the printing press played a major role in the Protestant Reformation, the Renaissance, and the Enlightenment.<sup>12</sup> With the gramophone, the production, storage, and

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<sup>12</sup> I seek to acknowledge the influence that new technologies have had on social life without disassociating them from the economic, political, and social forces that needed to be in place prior to their creation and that contribute to the variety of ways that technologies are used, transformed, and repurposed in everyday practices. Nonetheless, it is important to recognize great shifts in culture that are linked to and in dynamic with new technologies, such as the emergence of the printing press and the advent of recorded sound. Therefore, while I use Elizabeth Eisenstein's work, *The Printing Press as an Agent of Change*, (Cambridge: Cambridge University Press, 1979), I also rely on Lisa Gitelman and Jonathan Sterne, among others, to ground the study of technologies in their historical and socio-cultural contexts.

portability of sound played a part in political and cultural movements of the 20<sup>th</sup> century.<sup>13</sup>

The advent of recorded sound that could be played back shaped cultural life, including modes of knowledge, culture, and social organization. In the culture industries and the production of popular music, recorded sound's formats determined song lengths and styles, and bounded notions of fidelity and range. Jonathan Sterne and Lisa Gitelman have written extensively on the subjects of recorded sound and the gramophone, humanizing technology studies with a serious consideration of the ways in which individuals, groups, social and cultural norms, and political and economic forces determine the tools we use, how we use them, and how we come to understand them. Sterne in particular emphasizes the need to historicize technologies in order to reveal the ideologies and processes that created them, and factors that influenced how they were taken up and circulated.

This approach has been hugely influential in my consideration of DJ technologies, although I am aware my work falls short of achieving the exhaustive history and analysis that Sterne achieved in his study of mp3s. Both *The Audible Past* and *MP3: The Meaning of a Format* are exemplars of how to study sound and technology, models for how to examine the cultural origins of seemingly neutral formats and practices. For example, Sterne

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<sup>13</sup> Jacques Attali, *Noise: The Political Economy of Music*, (Minneapolis: University of Minnesota Press, 1985); Lisa Gitelman, *Always Already New*, (Cambridge: MIT Press, 2003); Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction*, Durham: Duke University Press, 2003.

asserts that the particular forms that sound media eventually take are less important than “the malleability of the form itself,” and the contingency between social relations and social practices.<sup>14</sup> In other words, the way a machine works and how it is used is not static or objective, but in a constant negotiation with modes of production and consumption, with people and places, with values and ethics. Sterne’s constant questioning of the decisions and ideologies that preceded and contributed to the rise of digital audio formats greatly informs my approach to looking at digital DJ equipment.

Similarly, Gitelman’s concept of the “always already new,” while at nearly a decade old itself not such a “new” account of new media, is a compelling argument for the importance of media history in moments of transition. She comments, “looking into the novelty years, transitional states, and identity crises of different media stands to tell us much, both about the course of media history and about the broad conditions by which media and communication are and have been shaped.”<sup>15</sup> The research in this dissertation is precisely that attempt to trace emergent forms of media use, to document the ways that new digital DJ technologies are accepted, rejected, and questioned, the panics and tensions they provoke as well as the possibilities and opportunities they open.

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<sup>14</sup> Sterne, 2003: 182.

<sup>15</sup> Lisa Gitelman, *Always Already New*, (Cambridge: MIT Press, 2003), 1.

The fields of Sound Studies and Science and Technology Studies (STS) with which the above authors are associated, are producing voluminous bodies of research and cutting edge scholarship on sound technologies. Both these studies emphasize technology in its social contexts, and depart from earlier traditions of technological determinism. Rather than a debate between technological determinism and user agency, the consideration of social, cultural, political, and economic processes allows for more nuanced and complex analyses of the factors that influence media production, uptake, and transformation. In this sense, digital DJ technologies cannot be credited as working alone to transform music-making among DJs, nor can we posit that DJs have used digital equipment in ways that are entirely isolated from the intentions of manufacturers, marketers, and historical and cultural traditions. Instead, digital DJing continues to occur and define itself in a negotiation between artists, engineers, market forces, and cultural specificities, not to mention legal conflicts and political struggles.

In addition to an emphasis on technology and media, anthropological and sociological research on music and youth culture form the pillars upon which I have conducted much of my investigations. Ethnomusicologist Tim Taylor's extensive work on the political economies of music, from the player piano to world music marketing to Goa trance, is a constant reminder of the economic forces at work in shaping cultural practices and musical instruments. However, Taylor's ability to weave field work, textual analysis, and historical



analysis into rich descriptions of musical phenomena never reduces his subjects to market effects; rather, his work serves as illuminating and empowering inquiries into cultural expression as both commodity and process. It is this approach that has allowed me read DJ communities through multiple lenses, as producers, consumers, and mediators caught in webs of anxiety, apathy, and wonderment over the markets for DJed music and new DJ products.

I also rely on many other accounts of musical cultures to scaffold and structure my understanding of the social, cultural, and political forces that have shaped the aesthetics and ethics of DJing, and the many other art forms with which it intersects. There is a long and robust body of work on hip-hop, dance, and electronic musics to which I am deeply indebted, many of which places considerations of social justice and the voices of the oppressed at its core. This is particularly relevant given the threats of cultural appropriation voiced by so many DJs in response to its growing commercialization and digitization (see comments from Kuttin Kandi and Rob Swift above). Scholars such as Jeff Chang, Tricia Rose, Tim Lawrence, and Kai Fikentscher have created exceptional histories of hip-hop, disco, and dance music that emphasizes the ways in which music, dance and culture empowers its participants, forms identity, and gives voice to marginalized communities.

This approach to studying popular culture and youth serves to consider its politics and ethics, its significance within communities as well as from a

larger, societal perspective. The politics of popular culture demonstrate that there is much at stake when it comes to studying what we might otherwise write off as superficial or commercial. Stuart Hall, Paul Gilroy, Angela McRobbie and Birmingham cultural studies figures heavily, in attributing meaning and significance to expressions normally filed away with disdain under “mass culture.” Their considerations of sexuality, gender, race, and youth balanced critique with appreciation for moments of resistance and transgression, valorizing the potential of (sub)cultures to resist conformity and complicate processes of hegemony.

Narrowing this lens even more, there is a growing body of work on electronic dance music and culture that began in the 1990s with Sarah Thornton’s *Club Cultures* and has multiplied in the past few years via the five-year-old *Dancecult: Journal of Electronic Dance Music Culture*. This scholarship on DJing is predominantly interdisciplinary, yet united in its prioritization of electronic dance music cultures. It tends to leave out questions of race and ethnicity, although some authors do consider gender. In addition, there is a notable gap between electronic dance music studies and hip-hop studies, perhaps because the latter tends to emphasize race, class, and ethnicity as fundamental in understanding hip-hop culture. I argue that these worlds do overlap, and while their different histories and trajectories have resulted in varying sounds and audiences, they nonetheless both intersect in the present analysis of DJ culture. Two very recent books begin to bridge this

divide, *Groove Music* by Mark Katz and *Legions of Boom* by Oliver Wang.

Both assess the DJ as central figure in musical scenes, tracing DJing out to its extensions in dance, sound, and community. It is with these two above accounts that I find my work most at home, although with more efforts to discuss electronic dance music such as techno, house, and EDM, as well as hip-hop.

This literature review is intended to highlight some of the scholarship, approaches, and theories that have influenced my study of DJs and the changes in DJ technologies. It would take a separate dissertation to comprehensively document the research that has inspired, complicated, and informed my graduate work. I chose to pursue a doctorate in Communications precisely because of its interdisciplinary approach, and I have made every attempt to weave multiple disciplines and methods into an analysis of DJ culture and its transformations. This section has tried to represent some of these approaches and the ways in which I use them in my own investigations.

### **Overview of Dissertation**

What follows are four chapters with very different approaches, which come together to narrate the various forces at work in the creation, segmentation, and policing of DJ worlds over the past few decades. They illustrate the processes by which practitioners in this art form negotiate new technologies and new markets in a moment of particularly rapid change. I

have chosen to write something akin to an inverted pyramid, moving from the very general topic of nightlife over centuries to the very specific phenomenon of all-vinyl DJ events in a few U.S. cities between 2010 and 2014. Each layer unpacks a different aspect of popular culture, a different lens on the role of music, dance, and technology in social life. It may not be a conventional approach to analyze changing DJ technologies, but given that I see DJ technologies in the context of larger and longer social and cultural processes, I have chosen to highlight these histories in addition to first person accounts of present-day uses. This thesis is an entry into a form of musical expression with a layered history and a variety of influences, tied to both the long duree of nightlife as a time of pleasure and escape, as well as to complex relationships with modern technology and sound.

The first chapter is what I have called at various times a genealogy of nightlife, an unpacking of night's symbolism as "other," as well as the trajectory of nighttime entertainment and its role in shaping pleasure, consumption, and expression. Nightlife has long been a time for exploring the taboo and for pushing the boundaries of cultural norms. With industrialization and urbanization, it became even more economically lucrative and culturally meaningful. Now, in what some call late modernity, cities have shaped themselves around growing nighttime industries, where nightclubs, bars, and entertainment venues transform former churches, for example, and pull in millions of people for an evening of drinking, dancing, and carousing. It is yet

another manifestation of the privatization and commercialization of leisure, a means of building skills and practicing behaviors necessary for success in an era where high-tech and service industries dominate, and a spiritual pilgrimage or desperate escape from a regimented political and economic order.

DJs have become symbols of this culture of leisure and consumption, yet in their repetitive sounds, their spinning records, they are more than symbols. Their control over music and sound in these heightened nightlife spaces is a tool, a power that when combined with specific equipment, practices, and rhythms, contains a potential for subversion, for losing oneself in an otherness outside of traditional time and space. DJs are sites of convergence between old and new, futurism and nostalgia, market forces and artistic agency. These tensions in nightlife, in the idealism of its possibilities and the fears of its decadence, are now woven into perceptions of DJing and what it means to perform as a professional DJ. This first chapter uses a historical analysis of nightlife to frame the role of the DJ in social and cultural life, an entertainer who also carries an additional symbolic purpose of amazing, dazzling, and creating experiences outside of mainstream structures. It sets up the tensions between night and day as linked to dilemmas between market forces and creative expression, commercialization necessary for and also at odds with DJs attempts to define their work's legitimacy.

The second chapter is a shorter interlude on DJing and technology, a history told through the range of tools that DJs chose to use to perform and develop their artistic practices. This reframed history establishes a foundation from which to analyze the tools and technologies that have come since, in order to contextualize the digital turn in DJ culture. It synthesizes the equipment, stylistic choices, and aural aesthetics of some of the first nightclub DJs in the disco scenes, as well as the founding fathers of hip-hop. I focus on disco and hip-hop here because these two genres have greatly defined the production and consumption of DJing, from exact techniques to artistic values to cultural representations. Part of this history emphasizes the DJ as innovator and designer, a musician who is seen and who sees themselves as more than a virtuoso skilled at his or her craft. These DJ-visionaries broke ties with conventions in equipment and sound in the 1970s, driven by curiosity, creativity, and the need to experiment. Some of this experimentation was born of necessity, as early DJs had limited access to resources and equipment to actually produce the sounds and scenes they imagined. In other ways, this innovation was shaped by psychological needs, as most of the first DJs were African-American, Latino, immigrants, gay, or poor, living in and hailing from communities outside of mainstream American (and Western) society. DJing and its ethos of remix became both a celebration of marginalized cultures and irreverence for convention, creating a forward-thinking soundtrack for communities to push back against economic, social, and cultural limitations.

In these earlier years, legitimizing the turntable as musical instrument and DJ as musician outside of the immediate communities and youth cultures in which they performed was a challenge; this made the turntable and DJ even more symbolic as both oppositions to dominant society and affirmations of the cultural practices of non-dominant and marginalized groups.

As DJ moved from underground to mainstream, so did its instruments, exploding the number of tools available to DJs and expanding the practice to new communities and cultural forms. The third chapter focuses on the era of transition to digital DJ technologies, a sign of DJing's commercialization as well as its democratization. However, in addition to asking what these technologies do, the chapter analyzes how they were created, how they have been adopted, how DJs utilize them, and what kinds of feelings they evoke in DJs. The chapter begins in the mid-1990s with the rise of CD turntables and the Pioneer CD-J in the early 2000s, and continues into the mid-2000s explosion of the laptop DJ with the entrance of digital vinyl simulation systems. Both of these shifts are notable in terms of changing the musical formats DJs could play, freeing DJs from vinyl-only performances, and they also introduced features that mechanized the work of the DJ, such as counting beats per minute and syncing the pitch on songs. However, both still emulated a turntable platter and the feel of DJing with vinyl. The next transition, to controllers and setups entirely removed from platter designs, has represented

a huge shift in both the work of the DJ and the practices that define what DJing is.

Amongst the DJs I interviewed and the field work I conducted, reception of these varying DJ technologies has spanned from hesitant embrace to evangelical praise. Their reactions reveal the fact that most users need time to adopt new technologies. More significantly, however, they demonstrate how technology adoption works in certain artistic communities, where word-of-mouth, influence, and endorsement have far more impact than other kinds of marketing techniques. In addition, the fact that DJ-oriented electronics manufacturers work closely with DJs, soliciting input in the design and engineering phases, has helped to create products more closely aligned with DJs' artistic and economic needs. Nonetheless, what the boom in DJ technologies in this chapter reveals is the huge market for DJs on a worldwide scale, and the dilemmas that many practitioners face in making choices about their equipment and responding to their art form's rapid commercialization and digitization.

It is not surprising that in the race to create and adopt the newest digital DJ gear, some have chosen to passionately stake claim to older traditions and practices. The digital vs. vinyl debate reached a fever pitch several years ago and has since calmed down, but all-vinyl parties continue to be popular events in cities around the world. Vinyl's resurgence, while limited when compared to the market for digital music, still marks a resignification of an old format, in



which DJs imbue it with meaning, value, and even magical qualities. Records become proof of history, and when DJs use vinyl they communicate their commitment to a culture and devotion to a sense of tradition in an art form that has long been associated with cutting edge.

The fourth and final chapter examines the more negative reaction to the dominance of digital DJ technologies. It describes the ways that vinyl DJs talk about their records, organize their collections and care for them, and it illustrates the events they create to gather around these materials. All-vinyl parties, particularly the I Love Vinyl events organized by a collective of DJs in New York City, are a celebration of underground sounds and non-dominant cultures facilitated by the use of vinyl records. They are a return to nightlife as other, all the while charging \$10 cover at venues hoping to cash in on DJ parties. These events convey more than nostalgia; rather they demonstrate how the meaning of technologies change over time, how cultures define and redefine materials in a rapidly transforming world.

As an art form, DJing is often critiqued and questioned – what is artistic and new about playing other people's music? What is interesting about loud, repetitive music? With the introduction of digital DJ tools, DJing has come under intensified attack, even from its own practitioners, as nothing but button-pushing. The machines, some DJs and music critics fear, have taken over and the skills required to be a DJ are becoming more difficult to justify. Yet the desire to DJ persists, as evidenced in the sheer numbers and dollars, in the

ever-growing body of remixes and DJ-produced songs populating online music exchanges like Soundcloud, Bandcamp, Mixcloud, and Podomatic. The significance of the DJ also manifests in the joy of its users, who speak with passion and dedication about their chosen artistic expression, as well as in the consumers, participants in DJ events who travel far and wide to see performances and revel in the flow of music. The DJ world is at once more established and popular than ever, and in crisis as its practitioners navigate changes in the world around them. What gets sorted out in this process will shape DJing, music, and technology for years to come.

## Chapter One: The Freaks Come Out at Night, A History of Nighttime Entertainment

*In the language of cities, Night has been reserved as the realm of time for chance and recreation. Night...sustains the ability to transform impotence into hallucination. Partying becomes the great vernacular of survival.*<sup>16</sup>

– Carlos Monsivais

The significance and symbolism of the DJ is rooted in a larger historical and contemporary context: nightlife. Nightlife is a tricky, sprawling term that can, presumably, encompass each and every activity that occurs when the sun sets. However, in this research and in the context of the DJ, nightlife explicitly references the nighttime entertainment industry. In other words, the clubs, bars, warehouse parties, dance events, and concerts that have come to dominate how many spend their evening hours.

The history of nighttime entertainment, or nightlife (a term I will use interchangeably at times), is one tied to the transformation of consumption, the role of pleasure, and the changing ways that we shape our identities and form communities. It is closely connected to processes of urbanization and industrialization, to capitalism and neoliberalism, to economic and political shifts as well as culture wars and identity politics. Nightlife can be a target to crystallize social anxieties, the moral panics that led to Prohibition in the 1920s and, more recently, the regulation of raves in the 1990s and 2000s.

Simultaneously, nighttime entertainment has become a crux of economic and

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<sup>16</sup> Monsivais, Carlos. (2004) "Metro Insurgentes." In *The Mexico City Reader*, ed. Ruben Gallo. Madison, WI: University of Wisconsin Press.

social life in the well-lit, fully-electrified, and globalized 21<sup>st</sup> century, where municipal growth strategies center on creating nightlife districts and how people spend their evenings come to define identity and community.

I will return to a more robust discussion of electronic music and DJs at the end of this chapter, when I consider nighttime entertainment at the end of the 20<sup>th</sup> century into the present. However, much of the chapter is a historical analysis I undertake in order to create what I believe is a necessary foundation in a study of contemporary popular culture, urban youth culture, dance music, and – particularly – electronic dance music. The themes of consumption, commodification, pleasure, identity, community, and resistance weave themselves into nightlife's varied histories, and are threads that continue into my research on and conversations with DJs in the 21<sup>st</sup> century, whose livelihoods both define and are defined by fluctuations in nighttime entertainment. Tricia Romano, a *Village Voice* columnist, wrote in 2006, "nightlife is a living, breathing, messy organism that is constantly changing."<sup>17</sup> Nightlife lives and breathes, then, because we do; it is mediated by our fears, dreams and desires and humanized by our practices. The following is a discussion of these fears, dreams, desires, and above all, practices.

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<sup>17</sup> Romano, Tricia. "You're Fired." *The Village Voice*. January 23, 2007.

### Way Back, Back into Time

Nighttime activities have historically been associated with otherworldliness and adventure, writ into the fabric of ominous medieval nights and early industrial celebrations. Until less than two centuries ago fire remained the only source of artificial light, making the night a consummately dark and shadowy time. In contrast to a celebration of light and, by extension, the day, ancient accounts of the night present it as a formidable enemy. The Greek Goddess of the night, Nyx, made even Zeus fearful, while other mythological figures representing the night in ancient Rome and Egypt wreaked havoc and spread chaos. Furthermore, in Christian myth and literature, such as Dante's *Inferno*, Christ and the Godhead were both associated with light while Satan reigned as the Prince of Darkness; in the eighth century Beowulf, which takes place at night, the villain Grendel attacks only after dark. It is not a stretch to conclude, as Alvarez asserts, "night was man's first necessary evil, our oldest and most haunting terror."<sup>18</sup>

Yet the night also held the possibility to "loosen the tethers of the visible world."<sup>19</sup> Roger Ekirch's study asserts that, in the early modern era, "Nighttime had deep symbolic value, its appeal owing much to its traditional association with licentiousness and disorder...Dusk represented a borderland

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<sup>18</sup> A. Alvarez, *Night: Night Language, Sleep and Dreams*. (New York: W.W. Norton & Company, 1996), 3.

<sup>19</sup> Roger Ekirch, *At Day's Close: Night in Times Past*. (New York: W.W. Norton & Company, 2005), 152.

between civility and freedom – freedom in both its benign and malignant qualities.”<sup>20</sup> Nightlife captured many elements of the carnivalesque, a concept linked to the function of Carnival in early modern society wherein the festival was a necessary pressure valve to expel the stresses, restraints, and suppressed desires of everyday life. As Bakhtin theorized, these often quite extreme acts of celebration and revelry were symbolic critiques of dominant ideology. Such characterization has paved the way for theoretical studies of ‘symbolic inversion’ and transgression.<sup>21</sup> Carnival’s reversal of many cultural codes can in fact be seen as a symbolic (and occasionally actual) protest against social norms in Europe between 1500 and 1800.<sup>22</sup>

While carnival offered a way of lifting taboos in order to emphasize them, some suggest these brief periods of impunity were necessary to sustain and stabilize power relations.<sup>23</sup> Like Carnival, Ekirch argues, “night was neither a set piece of ritual license nor a temporary escape from reality. Instead, it represented an alternate reality for a substantial segment of the

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<sup>20</sup> Ibid, 153.

<sup>21</sup> For further discussion of symbolic inversion, see Barbara Babcock, *The Reversible World: Symbolic Inversion in Art and Society*. (Ithaca, NY: Cornell University Press, 1978). On transgression and the carnivalesque, see Peter Stallybrass and Alan White, *The Politics and Poetics of Transgression*. (London: Methuen & Co, Ltd, 1986).

<sup>22</sup> Carnival was often the spark for organized riots against unpopular officials, cruel policies, food shortages and even foreigners, sometimes ending in unprecedented violence (see Ladurie, 1979).

<sup>23</sup> The emphasis on taboos in Carnival occurs in many texts, including Peter Burke, *Popular Culture in Early Modern Europe*. (London: Temple Smith, 1978); Gary Cross, *A Social History of Leisure since 1600*. (Venture Publishers, 1990), 23; and Victor Turner, *The Ritual Process: Structure and Anti-Structure*, (Chicago: Aldine Pub Co., 1969).

preindustrial population, a realm of its own that, at a minimum, implicitly challenged the institutions of the workaday world.”<sup>24</sup> These challenges entailed waste, excess and exposure to unpredictable forces, all dangerous in the harsh early modern landscape – and yet all precisely the things that are now essential to the functioning of modern capitalist urban centers and economies, and to nighttime entertainment as an economic and cultural force.

### **Industrialization and the Urban Nightlife Explosion**

While the early modern era underscores the themes of taboo, pleasure and consumption still associated with more contemporary nightlife, forces of industrialization truly transformed nighttime entertainment. In the late 1800s, the night became opportunity, a wilderness to both tame and explore through lighting, electricity, sound, and new industries.<sup>25</sup> Nightlife was a tool of development, with the promise of lucrative economic expansion into new forms of entertainment and pleasure blurring and redefining many of the moral boundaries that defined earlier eras.

Karl Polanyi has argued that changes in market systems have transformative impacts on the organization of all labor and society, a dependency that capitalism has embedded to a much greater extent than any

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<sup>24</sup> Roger Ekirch, *At Day's Close: Night in Times Past*. (New York: W.W. Norton & Company, 2005), 255.

<sup>25</sup> Murray Melbin (1988) compares the night to a land frontier, “an edge of expansion and development” (51).

other economic structure.<sup>26</sup> Hugh Cunningham adds that during the age of industrialization, “it was work which dictated the hours that were available for leisure, and more important the content and meaning of that leisure was always intimately related to the experience of work.”<sup>27</sup> The new divisions between work and leisure, as well as the emphasis on efficient and hyper-productive labor certainly had larger effects: “the physical instruments of production were seen as giving rise in a direct and more-or-less compulsive way to new social relationships, institutions and cultural modes.”<sup>28</sup> In other words, nascent capitalism transformed popular culture, encouraging consumption to the extent that the ‘problem’ of leisure became an economic and cultural pillar.<sup>29</sup>

For many, leisure was a defense of tradition and a necessary means of balancing the workday.<sup>30</sup> As Roy Rosenzweig notes, the development of the saloon as a leisure space temporally distinct from the workplace and spatially distinct from the home was symptomatic of the new industrial capitalist social

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<sup>26</sup> Polanyi concludes, “it means no less than the running of society as an adjunct to the market. Instead of economy being embedded in social relations, social relations are embedded in the economic system” (60). Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*. (Boston: Beacon Press, 1944, 1992), 60, 79.

<sup>27</sup> Hugh Cunningham, *Leisure in the Industrial Revolution, c.1780-c.1880*. (London: Taylor & Francis, 1980), 67.

<sup>28</sup> E.P Thompson, *The Making of the English Working Class*. New York: Vintage, 1966), 191.

<sup>29</sup> Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*. (Boston: Beacon Press, 1944, 1992); Many agree that the social and cultural changes linked to the industrial revolution and modernity are never complete or closed. Consequently, residual lifestyles remain, leading to ‘additive’ rather than ‘substitutive’ cultural changes, and the continuity of certain peasant or working class traditions and customs (Burke, 257; Thompson, 1966: 193; see also Cross).

<sup>30</sup> Hugh Cunningham, *Leisure in the Industrial Revolution, c.1780-c.1880*. (London: Taylor & Francis, 1980); E.P Thompson, *The Making of the English Working Class*. New York: Vintage, 1966)



order. He describes, “a decrease in control over work combined with an increase in free time; the demise of a traditional, home-centered, and sexually integrated gathering place along with the development of a more ample and comfortable public meeting spot,” all contributed to the saloon’s popularity among working class men.<sup>31</sup>

Concrete and practical factors were also at play in this resignification of nighttime pleasure. For example, lighting helped to constitute the dazzling feeling of being out at night.<sup>32</sup> Phil Hadfield provides a useful overview of night’s transformation in his book, *Bar Wars*. Drawing from Anthony Giddens and Gavin Weightman, he writes,

‘The invention of powerful, regularized modes of artificial lighting...dramatically expanded the potentialities of interaction settings in night hours,’ displacing a sense of time grounded in the natural rhythms of the diurnal cycle. The night was increasingly regarded as a time of commerce, entertainment and escape from the dark, squalid and dreary living conditions endured by much of the urban population. Compared to the working class home, even the gin shop was a ‘palace’ of warmth and glitter.<sup>33</sup>

The saloon was a paradoxical entity in the industrial age, a product of the era’s advances and an indication of its flaws. While democratic, the saloon was overwhelmingly exclusive and segregated by gender, ethnicity,

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<sup>31</sup> Roy Rosenzweig, *Eight Hours for What We Will: Workers and Leisure in an Industrial City*. (Cambridge: University of Cambridge Press, 2002), 46.

<sup>32</sup> Lewis Erenberg reports viewers of “The Great White Way” (Broadway) in New York City exclaiming, “When I turn into Broadway by night and am bathed in its Babylonian radiance, I want to shout with joy, it is so gay and beautiful” (1981: 118-9).

<sup>33</sup> Phil Hadfield, *Bar Wars: Contesting the Night in Contemporary British Cities*. (Clarendon, 2006).

race, class and even profession.<sup>34</sup> On the one hand it was the primary space of conspicuous consumption, thereby accommodating capitalist order, while on the other it was a symbol of laziness, resisting the era's zeitgeist of efficiency. For many critics, nightlife and leisure were predatory, draining away hard-earned money like parasites on the rising industrialized economy.<sup>35</sup> However, the turn to drinking was also a means of coping with the social and cultural changes brought about by the economy, for finding community or for accessing concrete services like toilets, food, check cashing, newspapers, and warmth.<sup>36</sup> Rather than conforming to dominant modes of consumption and acquisitive individualism, the saloon in the late nineteenth century was often a place for public conviviality and collectivity.

Thorstein Veblen's *The Theory of the Leisure Class*, remains an important study of conspicuous consumption, linking the rise of leisure and entertainment activities with property ownership and, more emphatically, capitalism. Leisure, here, was a sign of affluence, the direct manifestation of capitalist success rather than the maintenance of traditional customs and residual practices from early modern life or a transgressive display of alternative culture. It is, as Veblen writes, the "non-productive consumption of time," evidenced in immaterial goods of "quasi-scholarly or quasi-artistic

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<sup>34</sup> E.P Thompson, *The Making of the English Working Class*. New York: Vintage, 1966.

<sup>35</sup> Roy Rosenzweig, *Eight Hours for What We Will: Workers and Leisure in an Industrial City*. (Cambridge: University of Cambridge Press, 2002), 46.

<sup>36</sup> Ibid, 53.

accomplishments.”<sup>37</sup> The embrace of leisure stands diametrically opposed to an ideology of efficiency and productivity; furthermore, it is a status symbol linked to insidious forms of commodity fetishism and acquisitive individualism emerging during this era.

Processes of urbanization concurrent with industrialization consolidated communities and had significant impacts on the ways that people socialized and interacted.<sup>38</sup> Like industrial capitalism’s work conditions, urban leisure was quickly becoming standardized, systematized and commercialized to maximize profit. “Bawdiness,” Lewis Mumford writes, “becomes in itself a jaded, night-in-night-out part of metropolitan routine: it measures its titillations and charges accordingly.”<sup>39</sup> This reading parallels that of Georg Simmel (1903) in addition to the Chicago School’s early urban sociology, where the city becomes an impersonal space fostering asocial and even anti-social behavior.<sup>40</sup> The city as a spectacle, to be discussed in more detail below, had profound effects on popular culture, as well as on modes of expression and resistance. Richard Sennett critiques, “in a culture of personalities, freedom

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<sup>37</sup> Thorstein Veblen, *The Theory of the Leisure Class*. New York: Oxford University Press, 1912, 2008, 33-34.

<sup>38</sup> Urbanization implies enlarged cities as well as the spread and concentration of life in places outside the city center; however, I also refer to urbanization as the dispersal and diffusion of urban habits, and modern, anti-traditional forces (Sennett, 1977: 128; see also Charles Tilly, *An Urban World*).

<sup>39</sup> Lewis Mumford, *The Culture of Cities*. London:Secker & Warburg, 1940, 256.

<sup>40</sup> Georg Simmel, “The Metropolis and Mental Life,” in *The Sociology of Georg Simmel*, (New York: Free Press, 1950), 409-424. The Chicago School has a vast and extremely influential body of work on urban sociology in the 1920s, but here I will note Robert E. Park and Ernest W. Burgess, *Introduction to the Science of Sociology*, (Chicago: The University of Chicago Press, 1921, 1969).

becomes a matter of not behaving and appearing as others are; freedom becomes idiosyncratic expression.”<sup>41</sup> This narrow read of freedom and expression refuses to admit the deep and complex significance of expressions like fashion, music, and dance, and ignores the persistent need for seeking pleasure and community in a rapidly changing society.

### **Golden Age of Dreams, Pleasures, and Consumption**

The aggregation of the technologies of time, light and urbanization exploded in the early 1900s, giving rise to the so-called “Golden Age” of popular urban entertainment and leisure. Increased free time, disposable income, public transportation, the rise of advertising, growth in new sources of capital and an expanding class of female white collar workers all contributed to this gilded era.<sup>42</sup> According to David Nasaw, the city became a place of play as much as one of work.<sup>43</sup> The activities we now come to associate with urban nightlife – dining at restaurants, enjoying cocktails, watching live performances, dancing til the wee hours – cohered in the first decades of the twentieth century. This incredible burst of life at night was an effective means of laying claim to the dark hours. For savvy business types, dominating the night translated into increasing revenues, developing new ventures or

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<sup>41</sup> Richard Sennett, *The Fall of Public Man*. (New York: Norton, 1977, 1992), 190.

<sup>42</sup> John Hannigan, *Fantasy City: Pleasure and Profit in the Postmodern Metropolis*. (London and New York: Routledge, 1998), 15.

<sup>43</sup> David Nasaw, *Going Out: The Rise and Fall of Public Amusements*. Cambridge, MA: Harvard University Press, 1999), 9.

exploiting production and consumption. For reformers, the night's expansion had to be quelled, ordered externally through laws and internally through moral persuasion. And for the vast majority of people, appropriating the night was a display of personal identity, an escape from daytime duties in order to explore dreams, fantasies and methods of self-fashioning. As formal restrictions on conduct reluctantly loosened, leisure and entertainment facilitated the development of personality as we understand it today.<sup>44</sup>

While nightlife was growing in cities throughout the world, I draw heavily on literature from the United States, and particularly New York. During the decline of Victorianism in the early 1900s, a uniquely American celebration of consumption clashed with a lingering impetus on self-discipline, themes that have defined nightlife throughout the century. New York's grandiose hotels and restaurants "symbolized a renewed belief in the power of the American businessman to overcome social problems."<sup>45</sup> For example, building on Veblen, conspicuous consumption at restaurants presented eating as a way of mastering nature, wherein "the anarchic power of sensuality was channeled into eating," producing a culture of gluttonous self-gratification.<sup>46</sup> In particular, the roaring twenties "seemed to bring a wholesale reorientation of the average

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<sup>44</sup> Louis Erenberg, *Steppin' Out: New York Nightlife and the Transformation of American Culture*. (Chicago: University of Chicago Press, 1984), xiii.

<sup>45</sup> Ibid, 46.

<sup>46</sup> Ibid, 50.

day...making [people] into entirely nocturnal creatures.”<sup>47</sup> This transformation spurred from the economic need to extract capital from as many hours of the day as possible, but was equally driven by the desire to resist or escape rational, moral and industrial restraints. These two forces were bound to one another; consumption as power combined with leisure as personality to fuel the demand for a broad range of entertainment industries.

The rapid increase of young women in the workforce at the turn of the century clearly demonstrates these concurrent processes. With their newfound income and exposure to the public sphere, women crafted emergent forms of pleasure through fashion, trips to local amusement parks, movie theaters or dancing. These “cheap amusements” came to embody American culture and values of individualism, consumption and freedom while facilitating experimentation with culture, identity, sexuality and expression. Kathy Peiss singles out dancing from other modes of entertainment, noting that after a long day of work at the shop or factory, “the gaily decorated hall, riveting beat of the orchestra, and whirl of partners created a magical world of pleasure and romance.”<sup>48</sup> The halls also constituted spaces where the women could explore modern values and attitudes towards leisure, sexuality and personal fulfillment.<sup>49</sup> In particular, the dance styles themselves illustrated the

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<sup>47</sup> Burton W. Peretti, *Nightclub City: Politics and Amusement in Manhattan*. (Philadelphia: University of Pennsylvania Press, 2007), 8.

<sup>48</sup> Kathy Peiss, *Cheap Amusements: Working Women and Leisure in Turn-of-the-Century New York*. (Philadelphia: Temple University Press, 1987), 6, 88.

<sup>49</sup> *Ibid*, 90.

importance of physical proximity and loud music, with close contact between partners and fast, intense movements.<sup>50</sup>

These dances eventually transformed from small, local and community-based nights to more commercial, mass-marketed events targeted at working class men and women. While middle class observers considered the dance movements lurid and gender mixing immoral, participants found that the recreational pleasures far outweighed admonitions. Dancehalls were symbols of important shifts in female access to leisure and the night, as well as critical examples of the possibilities of self-fashioning.<sup>51</sup>

Cabarets also exemplified the push against social and moral boundaries, using the night as a temporary moment of release and a time of heightened meaning. For example, in cabarets, “self-expression was given freer rein...and was reevaluated as healthy and necessary.”<sup>52</sup> Once again, dancing was a central component of this sense of freedom, instigated by the prevalence of coed leisure and blurred boundaries between public and private behaviors. With the dance craze in the 1910s, “dancing’s regeneration

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<sup>50</sup> Peiss provides some examples of popular dances from the era, such as *spieling*. Many of the sensual dance styles migrated from San Francisco’s bawdy Barbary Coast, taking a slightly more subdued (although still risqué by the era’s standards) form in Midwest and East Coast cities.

<sup>51</sup> Maria Pini’s work on female subjectivity in nightclubs in the 1990s and early 2000s updates the ways in which women experience and explore identity at night, positioning raves and clubs as unique spaces for experimentation, collectivity and performance that may complicate heteronormative and traditional modes of femininity. Belinda Edmondson further problematizes femininity in clubs in her study of Jamaican dancehall, where racial politics and class conflicts shape sexualized dance performances.

<sup>52</sup> Louis Erenberg, *Steppin’ Out: New York Nightlife and the Transformation of American Culture*. (Chicago: University of Chicago Press, 1984), 132.

bespoke a society breaking from gentility and discovering new options and forms of behavior between the sexes.”<sup>53</sup> The leisure time afforded by the night catalyzed these changes in identity and behavior, combined with the night’s longstanding facilitation of exploration and escape.

Changes in entertainment coincided with a critical period when the United States “came of age as an urban-industrial society and its citizens eagerly but painfully adjusted to the new terms of American life.”<sup>54</sup> The sudden explosion of theaters, cabarets, vaudeville shows, jazz clubs and nickelodeons catered to the growing immigrant and working population, who sought release from the pressures of the workday. As noted in the examples above, the release was significant in that it also led to opportunities for exploring and redefining one’s identity, for meeting and experiencing new cultures and people, and for creating new modes of expression and community.

Still, for many 20<sup>th</sup> century critics, urban entertainment was an extension of capitalist accumulation that promoted a passive relationship with the environment, a mode of impersonal spectatorship based on distraction. It exploited promiscuity and superficiality for profit, degrading human relationships in the process. These arguments build upon the Progressive era reform movements and foreshadow a range of leisure criticism that extends to a study of nightlife, from the Frankfurt School’s unrelenting pessimism to the

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<sup>53</sup> Ibid, 151.

<sup>54</sup> John Kasson, *Coney Island at the Turn of the Century*. (New York: Hill and Wang, 1978), 3.



Situationists' disdain for the spectacle.<sup>55</sup> However, their negative evaluations do not consider the value of being able to “move in and out of the mosaic of contradictory moral worlds which constitute the city.”<sup>56</sup> Instead, the moral decay of urban society was evidenced in the inability to control nighttime entertainment, theoretically driven by greed, despair and lust.

The preoccupation with a vice-ridden nightlife finds its place in discussions on citizenship and participation. Debates questioned the nature of these mass-marketed leisure activities, often dismissing them as passive forms of play, as conforming to hegemonic capitalist forces, or as contributing to the crisis in civic life and, along with the mass media and bureaucracy, helping to shape apathy and disinterest among the population.<sup>57</sup> This critique of urban leisure and popular culture, or what Walter Lippman called the “acids of modernity” connected the fairly mundane world of nightclubs to larger debates about civic life.<sup>58</sup> Therefore, going out for pleasure tread a fine line between the proper and the risqué, with meticulously performed self-constraint

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<sup>55</sup> This contextualization draws from two main texts: T. Adorno and M. Horkheimer, “The Culture Industry: Enlightenment as Mass Deception,” in T. Adorno and M. Horkheimer. *Dialectics of Enlightenment*. 1944, Translated by John Cumming. (New York: Herder and Herder, 1972); and Guy Debord “The Theory of Derive.” K. Knabb (trans.), *Internationale Situationniste*, 2:1-4, 1958.

<sup>56</sup> Paul Cressey, *The Taxi-Dance Hall: A Sociological Study in Commercialized Recreation and City Life*. (Chicago: University of Chicago Press, 1932), 287.

<sup>57</sup> The critical theorists Adorno and Horkheimer (see footnote 40) drove the dismissal of commercial leisure activities, while their colleague Jurgen Habermas was instrumental in the critique of leisure as negatively impacting the public sphere. See Jurgen Habermas, “The Public Sphere.” In Mukerji, C. and Schudson, M. eds, *Rethinking Popular Culture*, (Berkeley and Los Angeles: University of California Press, 1991), 398-406.

<sup>58</sup> Walter Lippman, *A Preface to Morals*. Kessinger Publishing, 1982; see also Burton W. Peretti, *Nightclub City: Politics and Amusement in Manhattan*. (Philadelphia: University of Pennsylvania Press, 2007), xiv.

obscuring expressions of sexuality or excess.

For the dancers and revelers themselves, the night “presented a world of constant experience and action, where there was excitement at every turn and where the choices and sights could provide feelings of constant experiences of the self uprooted from a stable past.”<sup>59</sup> David Nasaw agrees, “going out provided a momentary escape, not just from one’s class or ethnic group, but from a society differentiated along these lines to ‘an alternative and more liberated way of being socially human.’”<sup>60</sup> In these terms, going out at night was certainly a way of conquering ambivalence towards modern life and asserting the pleasure – and even subversiveness - of play.<sup>61</sup> In the face of pressures about productivity, morality and decency, taking part in nightlife was not necessarily a manifestation of human alienation but the very opposite: for many, it was a statement about dreams, desires and a freer way of being socially human.

In addition to its playfulness, nightlife was a central space to assert personality. As Sennett and others (Bourdieu, 1984; Hebdige, 1979; Thornton, 1996) have observed in varying ways, personality and performance became primary modes of expressing oneself and engaging with the world in the

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<sup>59</sup> Louis Erenberg, *Steppin’ Out: New York Nightlife and the Transformation of American Culture*. (Chicago: University of Chicago Press, 1984), 74.

<sup>60</sup> David Nasaw, *Going Out: The Rise and Fall of Public Amusements*. (Cambridge, MA: Harvard University Press, 1999), 46.

<sup>61</sup> Joan Huizinga, *Homo Ludens: A Study of the Play Element in Culture*. Boston, MA: Beacon Press, 1955.

nineteenth and twentieth centuries.<sup>62</sup> We can supplement this importance with Erving Goffman's concept of 'action', in which individuals make consequential choices and take risks in order to fully define themselves.<sup>63</sup> The spontaneity and potential risk of amusements provided "new forms of heightened meaning," in contrast to everyday life routines at work, home and in the community.<sup>64</sup> Therefore, as corporate and social worlds became more rigid, people turned to culture and leisure in order to play with constraints or experiment with self-expression.<sup>65</sup> The sexuality and racial/ethnic mixing that so concerned conservative nightlife reformers was in fact what made the environment of risqué cabarets, vaudeville or leg shows meaningful for participants; the atmosphere of "vicarious action," allowed the audience to experience a sense of liberation from authority not present in their daily lives.<sup>66</sup>

### **Towards 24-Hour Party People**

The latter half of the 20<sup>th</sup> century and the first decade of the 21<sup>st</sup> century

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<sup>62</sup> Notably Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste*. (Cambridge, MA: Harvard University Press., 1987); Dick Hebdige, *Subculture: The Meaning of Style*. (London and New York: Routledge, 1979); Sarah Thornton, *Club Cultures: Music, Media and Subcultural Capital*. (Middletown, CT: Wesleyan University Press, 1996).

<sup>63</sup> Erving Goffman, *The Presentation of Self in Everyday Life*. (New York: Doubleday, 1959), 140. In addition, David Grazian has applied Goffman's action theory to the 'hustle' of nightlife in present-day Philadelphia, where the pursuit of "the euphoria of risk" drives nocturnal "sporting rituals" (199). Jack Katz has also elaborated on the appeal of "sneaky thrills," albeit in different urban contexts than nighttime entertainment.

<sup>64</sup> Louis Erenberg, *Steppin' Out: New York Nightlife and the Transformation of American Culture*. (Chicago: University of Chicago Press, 1984), 133.

<sup>65</sup> Thomas Frank's *The Conquest of Cool* explains the intersection of business and counterculture, in which by defining themselves against each other, both spheres of activity become more deeply connected.

<sup>66</sup> Erenberg, 151. See also Erving Goffman, *The Presentation of Self in Everyday Life*. (New York: Doubleday, 1959)

have both heightened the tensions of risk and risqué that nightlife symbolizes and normalized its transgressions in bursts of economic development and commercialization. At first, America's suburbanization further redefined the role of (urban) nightlife. If suburbs symbolized wholesome family values, it was only in contradistinction to the depravity of the city. Films from the 1960s, '70s, and early '80s, such as *Midnight Cowboy*, *Taxi Driver* and *The Warriors*, all depict a dark, seedy and dangerous urban underbelly full of prostitution, drug abuse, poverty and violence.

This moment coincided with the rise of globalization, neoliberalism, and a 24-hour culture that created a flexible workforce and a demand for labor at all times of the day.<sup>67</sup> The graveyard shift spanned a diverse range of industries, from services to manufacturing, hospitality to media.<sup>68</sup> Use of the night was fundamental in capitalism's expansion, enabling the necessary economic activity to support a culture of malls, disposable goods and home entertainment; these activities stood in stark contrast to nighttime entertainment, where pleasure and consumption produced changes in culture, community, and city life. First, I will consider urban nightlife as culture industry

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<sup>67</sup> On theories of globalization, see Anthony Giddens, *The Consequences of Modernity*. (Cambridge: Polity, 1990); for neoliberalism, I rely on David Harvey, particularly *The Condition of Postmodernity*. (Malden, MA and Oxford: Blackwell Publishing, Ltd, 1989) and *A Brief History of Neoliberalism*. (Oxford: Oxford University Press, 2007). Murray Melbin provides a history and overview of the "colonization of the night" as a frontier in late capitalism. Murray Melbin, *Night as Frontier: Colonizing the World After Dark*. (New York: Free Press, 1987).

<sup>68</sup> See Russell and Cheryl Sharman's, *Nightshift NYC* (Berkeley: University of California Press, 2008) for a discussion of the jobs and characters that populate the night in our "incessant organization" of society.

and focus on arguments on the commodification of creativity, as well as on the intersection between economic development and nighttime entertainment.

Following this, I will take an in-depth look at the cultural significance of nightlife beyond its economic impact: its meanings for participants, its role in popular music, and its persistence as a space-time of exploration and creativity.

Much has been written on the “creative class,” or the entanglement between what Frank Turner calls “bohemian idealism” and corporate interests, from high-tech to high-fashion, from Silicon Valley to Main Street. Richard Florida’s conclusions in the best-selling *The Rise of the Creative Class* (2002) draw on economist Alfred Marshall, urbanist Jane Jacobs, and many others who affirmed the importance of the knowledge-economy decades before him. Florida emphasizes “creative capital” and insists that creative people power economic growth, particularly in urban areas.<sup>69</sup> Other research suggests the central role of artistic creativity, social networks, and counter-cultural practices in late 20<sup>th</sup> (and early 21<sup>st</sup>) century production – the information and knowledge production economies.<sup>70</sup>

Commercial and mainstream culture has long relied on oppositional movements and counterhegemonic trends to define itself, whether to try on and experiment with identities or to emphasize exciting new messages. To say

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<sup>69</sup> Richard Florida, *The rise of the creative class: and how it's transforming work, leisure, community and everyday life*. (New York, NY: Basic Books, 2002).

<sup>70</sup> Fred Turner, “Burning Man at Google,” in *New Media & Society*, (11) 1&2, 2009, 73-94; Gina Neff, Elizabeth Wissinger and Sharon Zukin, “Entrepreneurial Labor among Cultural Producers: Cool Jobs in Hot Industries,” in *Social Semiotics*, (15) 3, 2005, 307-334.

nothing of its racialized argument, Norman Mailer's 1957 essay, "The White Negro," democratized 'hipness' as a means of combating suburban anomie and conformity.<sup>71</sup> Thomas Frank uses Mailer and others to demonstrate how this culture of 'cool', arising in opposition to the mainstream, actually helped to construct new business strategies and corporate expansion. Frank documents the 1960s and 70s, in which mainstream business culture embraced the tenets of hippie counterculture, throwing off conformity, routine and tradition in a struggle to reshape American consumerism and business.<sup>72</sup> Economic prosperity and the rise of consumer capitalism depended on the freedom to experiment with one's leisure time, to explore pleasure and create new modes of expression.

These analyses on the intersections between business and creativity, or the business of creativity, suggest that entertainment has become an instrument for economic development and that cultivating social and cultural capital (perhaps through participation in nightlife) is paramount in today's economy. This argument begins to explain how nighttime entertainment became such a fundamental component of urban revitalization in the 1990s. As John Hannigan outlines in *Fantasy City*, by the end of the twentieth century, urban renewal programs helped to produce cities driven by 24-hour entertainment developments. Mirroring the glitzy hotels and lobster palaces

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<sup>71</sup> Norman Mailer, *White Negro*. (San Francisco: City Lights, 1957).

<sup>72</sup> Thomas Frank, *The Conquest of Cool: Business Culture, Counterculture and the Rise of Hip Consumerism*. (Chicago, IL: University of Chicago Press, 1998), 9.

from earlier in the century, these redevelopment efforts capitalized on baby boomers' increasing disposable income. They pulled the middle class out of a mundane suburban milieu of shopping malls and traffic congestion, drawing them towards carefully designed spectacular entertainment zones.

Entertainment development was one attempt to kick-start stagnant economies across the United States when factories and other jobs were outsourced. Relying on short-term tourism and the localization of leisure, developers and planners sought to create a manufactured 'urban festival' through performance, music, lights, shopping and food. In these areas, the medium became the message, as technology and form were valued over quality. Again, we see the return to spectacle: Hannigan notes, "the global merchants of leisure...are creating a new kind of consumer who feels 'entitled' to a constant and technologically dazzling level of amusement (Christiansen and Brinkerhoff-Jacobs 1995:94) and who effortlessly incorporates entertainment experiences into their repertoire of cultural capital."<sup>73</sup> Like the social corruption of taxi-dance transactions,<sup>74</sup> or the ennui induced by roaring twenties cabarets,<sup>75</sup> critics contend that entertainment in the fantasy city corrupts potential for meaningful interaction through the built-in obsolescence

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<sup>73</sup> John Hannigan, *Fantasy City: Pleasure and Profit in the Postmodern Metropolis*. (London and New York: Routledge, 1998), 70.

<sup>74</sup> Paul Cressey, *The Taxi-Dance Hall: A Sociological Study in Commercialized Recreation and City Life*. (Chicago, IL: University of Chicago Press, 1932).

<sup>75</sup> Burton W. Peretti, *Nightclub City: Politics and Amusement in Manhattan*. (Philadelphia: University of Pennsylvania Press, 2007), xiv.

of its artificial sensory stimulation and the escalating demand for new modes of consumption.

Nightlife was and remains a central component of these fantasy cities, as developers heavily promoted themed nightclubs and entire late-night entertainment zones. According to industry reports, nighttime entertainment is a \$24 billion dollar per year business in the United States, with over 70,000 establishments and close to 400,000 employees (Nightlife Association website, accessed June 2015).<sup>76</sup> A 2013 *New Yorker* article found strong evidence that nightclubs brought in more revenue than gambling in Las Vegas. In these venues, a headline DJ might earn upwards of \$200,000 for a 4-hour performance. Several clubs on The Las Vegas Strip regularly draw in 8,000 patrons at their events and can make up to \$1 million in *profit* in one night.<sup>77</sup>

While the Nightlife Association's website boasts that the industry "is by its nature often raucous and colorful," many remain skeptical of this self-proclaimed color. Fantasy cities and the nightlife they support are part of a growing global market for experience that suffocated the deviance and desire that once defined nightlife.<sup>78</sup> They are the apex of "riskless risk," as embodied by the "sanitized razzmatazz" of Times Square.<sup>79</sup> David Grazian offers

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<sup>76</sup> *The Official Trade Organization of the Nightlife and Club Industry* website, [www.nciaa.org](http://www.nciaa.org), accessed June 2015.

<sup>77</sup> Josh Eels, "Nightclub Royale," in *The New Yorker*, September 30, 2013.

<sup>78</sup> John Hannigan, *Fantasy City: Pleasure and Profit in the Postmodern Metropolis*. (London and New York: Routledge, 1998).

<sup>79</sup> Russell Nye, "Eight Ways of Looking at an Amusement Park." *The Journal of Popular Culture*. 2004, 15(1): 63-75.



another perspective into contemporary nighttime entertainment, in which the “hustle” of urban nightlife is an expression of the anonymity of the city and new rituals of consumerism.<sup>80</sup>

The sanitization efforts employed by entertainment-focused development strategies create solipsistic cities. They isolate the area of choice from surrounding neighborhoods physically, economically and culturally, subsequently producing a “city of illusion” (borrowing from Christine Boyer) that ignores social problems and transforms public space into promotional space. As a result, nightlife’s most commercial developments come to be intensely private and segregated, consolidating power in the hands of just a few corporations, dutifully watched over by surveillance cameras, and policed by private security forces.<sup>81</sup>

Like nightlife more generally, the fantasy city reflects the history of America’s complex class relations and social values. It is, as Hannigan writes, “the end-product of a long-standing cultural contradiction in American society between the middle-class desire for experience and their parallel reluctance to take risks, especially those which involve contact with the ‘lower orders’ in cities.”<sup>82</sup> Therefore, they seek out activities that can dazzle and reassure at

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Herbert Muschamp, “A Flare for Fantasy: ‘Miami Vice’ Meets 42<sup>nd</sup> Street.” *New York Times*. May 21, 1995.

<sup>80</sup> David Grazian, *On the Make: The Hustle of Urban Nightlife*. (Chicago, IL: University of Chicago Press, 2008).

<sup>81</sup> Kelly Gates, “The Tampa ‘Smart CCTV’ Experiment,” in *Culture Unbound*, Volume 2, 2010, 67-89.

<sup>82</sup> John Hannigan, *Fantasy City: Pleasure and Profit in the Postmodern Metropolis*. (London and New York: Routledge, 1998), 7.

the same time, much like the urban bourgeois of the nineteenth century. Law scholars Paul Chatterton and Robert Hollands reinforce many of these assertions, claiming that cities are merely “urban playscapes” increasingly dominated by corporate influence. These corporate interests carefully manipulate the production, regulation and consumption of nightlife.<sup>83</sup>

Chatterton and Hollands link its economic and social significance not only to the development strategies of cities, but to an extended youth period (middle youth, or post-adolescence) and a flexible workforce based around services and knowledge.

Nightlife helps to illustrate the move away from Fordist models of production and towards flexible accumulation, niche markets, and brand development, as bars and clubs transform from male drinking pubs or mixed dance halls into an expansive array of subcultures.<sup>84</sup> As in analyses of amusements from earlier eras, some claim that the increase in options only appears to offer more choice; critics find that collectively the venues represent a “standardised, sanitised and non-local consumption experience.”<sup>85</sup> In these accounts, nightlife has become a consummate site of corporate domination, ruled by the economic interests of elite business and financed by the

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<sup>83</sup> Paul Chatterton and Robert Hollands, “Theorising Urban Playscapes: Producing, Regulating and Consuming Youthful Nightlife City Spaces.” *Urban Studies Journal* 39, 2002, 95-116.

<sup>84</sup> There is expansive literature on all of these themes, including David Harvey, *The Condition of Postmodernity*. (Malden, MA and Oxford: Blackwell Publishing, Ltd, 1989); Naomi Klein, *No Logo*. (Canada: Knopf, 2000); and Dick Hebdige, *Subculture: The Meaning of Style*. (London and New York: Routledge, 1979), as well as Sarah Thornton, *Club Cultures: Music, Media and Subcultural Capital*. (Middletown, CT: Wesleyan University Press, 1996).

<sup>85</sup> Paul Chatterton and Robert Hollands, “Theorising Urban Playscapes: Producing, Regulating and Consuming Youthful Nightlife City Spaces.” *Urban Studies Journal* 39, 2002, 102.

exploitation of human desire.<sup>86</sup> In some cases, as journalist Simon Reynolds admits in comparing nineties' rave culture with the hippie movement, "thirty years on, we're no nearer to overhauling the work/leisure structures of industrial society. Instead, all that rage and frustration is vented through going mental on the weekend."<sup>87</sup>

The above discussion is an important but narrow view of nightlife. An economic lens points to the market-driven commodification of entertainment as both cause and effect of nightlife's growth, but it oversimplifies the complex social and cultural dynamics that define participation. In addition, it does not consider real, lived, everynight practices that take place inside these districts, venues, and scenes – the music, dance, expression, artistry, freedom, otherness, and creativity that may become integral parts of economies but remain significant modes of identification, belonging, and even protest.

### **Tonight's going to be a good night, and how the DJ saved my life**

In New York City in the late 1960s and early 1970s, a music connoisseur named David Mancuso with a taste for the party life held a series of now legendary invitation-only events at his expansive downtown apartment. These came to be known as The Loft parties and they would last through the

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<sup>86</sup> See Phil Hadfield, *Bar Wars: Contesting the Night in Contemporary British Cities*. (London: Clarendon, 2006); Steven Hall and Simon Winlow. *Violent Night: Urban Leisure and Contemporary Culture*. (New York: Berg, 2006); George Rigakos, *Nightclub: Bouncers, Risk, and the Spectacle of Consumption*, (Montreal: McGill-Queens University Press, 2008).

<sup>87</sup> Simon Reynolds, *Generation Ecstasy*, (New York: Routledge, 1999), 239.

night, with Mancuso at the helm of a basic stereo system weaving classic rock and R'n'B for his band of revelers. The Loft eventually grew in size and reputation, but it was the precursor for what would become a full-fledged underground dance music movement and eventually mainstream disco, house and techno scenes. At these parties, Mancuso describes, “nobody had inhibitions, nobody was insecure...and there were no clocks to tell the time. You went though the looking glass.” The same time metaphor found itself in the form of Salvador Dali’s melting clocks on the party’s promotional flyers, and filtered into the experience of the night itself – as author Tim Lawrence wrote about the events, “time starts to dissolve, and this provided the dancers at the Loft with an opportunity to forget their socialized selves [i.e., getting up, going to work, eating lunch at certain times] and experiment with a different cycle.”<sup>88</sup>

In this instance and many other accounts of nightclubbing both in my own research and that of other authors, the night becomes a very salient temporal experience, mediated by the social and economic changes in cities as well as the night’s symbolic and material connection to experimentation and otherness. As Mancuso’s Loft parties in New York City reveal, the night was distinct in that it allowed time to ‘dissolve’ and became a means of forgetting the daily routine in order to explore different cycles linked to repetitive beats, body movements and the escape of drugs and alcohol. I use it as one

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<sup>88</sup> Tim Lawrence, *Love Saves the Day*. (Raleigh, NC: Duke University Press, 2003), 24.

example of the reconfiguration of time in the city at night, when dance music culture and nighttime entertainment combine to reinforce, restructure and negotiate the norms of the day.

Many narratives of nightlife position it as a vital counterpart to the constraints of a city organized by its economic struggles and social pressures. These messages emphasize the night as function and symbol, a means of expanding capital or economic opportunity and a necessary temporal space for renegotiating what it means to live and get by in the city. They are colored by nostalgia and longing, a need to fill spaces for community and pleasure that are difficult to encounter elsewhere. They facilitate explorations of gender and sexuality, provide steps towards coming of age, redefine non-secular spirituality, and produce joy and pleasure.<sup>89</sup>

For example, Ben Malbon's research on nightlife finds that, "clubbing matters...it constitute[s] one source of vitality and an important form of self-expression."<sup>90</sup> David Grazian's study in Philadelphia is a more measured analysis, but does admit that urban nightlife "provides the opportunity for young people to publicly explore their own sense of themselves on the road to

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<sup>89</sup> See Kai Fikentscher, *You Better Work! Underground Dance Music in New York City*. (Hanover, NH: Wesleyan University Press, 2000); Ben Malbon, *Clubbing: Dancing, Ecstasy and Vitality*. (London and New York: Routledge, 1999).

Maria Pini, *Club Cultures and Female Subjectivity: The Move from Home to House*. (New York: Palgrave Macmillan, 2001).

<sup>90</sup> Ben Malbon, *Clubbing: Dancing, Ecstasy and Vitality*. (London and New York: Routledge, 1999), 180.

achieving adulthood.”<sup>91</sup> Both Malbon’s and Grazian’s observations prove themselves in a variety of examples, from the early disco era in which people found more freedom to express their sexuality and skin color, to hip-hop when whole communities confronted oppression through music, to electronic dance music clubs as necessary spaces of letting go. Whether a source of vitality or a means of self-exploration, it is clear that nightlife does matter beyond its economic impact.

Many of these music scenes mentioned above were havens for different urban populations, providing a space for community and expression in poor inner city areas defined by violence, machismo and competitive individualism. As evidenced in Loft parties, Bill Brewster and Frank Broughton describe disco as “revolution...freedom...dirty, spiritual, thrilling, powerful...secret, underground, dangerous.”<sup>92</sup> Long before *Saturday Night Fever*, disco was a nighttime culture that originally brought together outsiders and misfits, uniting them on a dancefloor and presided over by the star-like club DJ. Even *Saturday Night Fever*, for all of the disdain the film receives as a commercialized Hollywood representation of disco culture, nonetheless illustrates the hunger and need that so many youth had for congregating and reveling on the dancefloor at night.

The energy at many disco nightclubs was described as communal and

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<sup>91</sup> David Grazian, *On the Make: The Hustle of Urban Nightlife*. (Chicago, IL: University of Chicago Press, 2008), 22.

<sup>92</sup> Bill Brewster and Frank Broughton, *Last Night a DJ Saved My Life*, (New York: Grove Press, 2001), 126.

social, not individualistic, and the music helped to produce this culture. Some describe it as both tribal and sexual, blurring the boundaries between dance, music, and worship.<sup>93</sup> In one account, disco DJ legend Nicky Siano describes a Fourth of July party as his nightclub the Gallery, where attendees rewrote the Declaration of Independence to say, “We the people of the Gallery...we want to dance all night.” Siano DJed in a Statue of Liberty costume, and, in his words, “people went bananas.” Bob Casey, a nightclub sound engineer in the disco heyday, added, “every Joe’s Pizzeria in town is now hooking up a couple of turntables and calling itself a discotheque,” and as part of a post-Vietnam war trend for people to “lose themselves.”<sup>94</sup>

Hip-hop’s early years were also fueled by the power of dance and community at night, a culture that Debbie Harry described in her chart-topping 1981 hit, “wall to wall, people hypnotized, and they’re stepping lightly, hang each night in rapture.” The clubs of hip-hop’s birthplace in the Bronx, as well as in venues in downtown Manhattan several years later, emerged from a desire to throw a better party than anyone else. On the dance floor, some described it as “a whole new experience,” where “like-minded scenesters” could “meet on equal terms,” complicating the trends towards geographic and economic segregation that had so impacted New York City in the 1970s and

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<sup>93</sup> Kai Fikentscher, *You Better Work! Underground Dance Music in New York City*. (Hanover, NH: Wesleyan University Press, 2000)

<sup>94</sup> Quoted in Tim Lawrence, *Love Saves the Day*. (Raleigh, NC: Duke University Press, 2003).

80s.<sup>95</sup> According to Chi Chi Valenti, a famous clubgoer and scenester in hip-hop's earliest years, "the Roxy [nightclub] embodied a certain vision of what New York could be – a multiracial center of a world culture, running on a current of flaming, uncompromised youth."<sup>96</sup>

Similarly, the techno scene coming out of inner Detroit in the early-to-mid-1980s, with its frenetic pace, tech-heavy sounds and trance-like repetition, articulated the city's mood of simultaneous paranoia, desolation and euphoria.<sup>97</sup> Perhaps these specific music-driven (re)turns to celebrating at night were accelerated by the rise of neoliberalism – as youth (and particularly minorities) were "unwanted as workers, underfunded as students, and undermined as citizens."<sup>98</sup> As moral panics around youth behavior – gangs, drug use, teen pregnancy, and so many other behaviors – increased, as the demonization of youth by neoconservative and neoliberal policies grew, so too did the turn to alternative means of congregating and forming community. In response, through music cultures like disco, hip-hop, house, and techno, "materially deprived and culturally despised youths have seized the most advanced forms of modern technology to present their experiences and aspirations to a wider world."<sup>99</sup>

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<sup>95</sup> Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation*. (New York: St. Martin's Press, 2005), 169-70.

<sup>96</sup> Ibid

<sup>97</sup> Simon Reynolds, *Generation Ecstasy*, (New York: Routledge, 1999), 19.

<sup>98</sup> George Lipsitz, "We Know What Time It is," in *Microphone Fiends*, (New York: Routledge, 1994), 19.

<sup>99</sup> Ibid, 20



The people grasping these technologies, remixing them, and presenting them to the crowds were DJs. In these nightclubs and parties, DJs not only controlled the music but were often the central figures of these music-driven nighttime cultures. Hip-hop's founding fathers – Kool Herc, Afrika Bambaataa, and Grandmaster Flash – were all DJs. At the first hip-hop clubs, the DJ was not hidden in a booth but featured in the center of the dancefloor, and “elevated to rock star status,” according to organizer Kool Lady Blue.<sup>100</sup> In disco, and the house, techno, and countless electronic music genres that followed, the DJ is a “the latest incarnation of an ancient role,” linking shamans and pagan high priests to turntable controllers via jazz's bandleaders, country's dance callers, and all types of Masters of Ceremonies over time.<sup>101</sup>

This connection between DJs and priests, gods, or shamans is perhaps another response to social, cultural, and economic changes. Descriptions of parties, events and sounds have become increasingly tied to the sacred, imbuing nightlife with an imagined sense of ritual.<sup>102</sup> This trend exemplifies how nightlife embodies ambivalence towards modern conceptions of progress, as well as how participants appropriate the night in order to explore this conflict. Interestingly, this occurs amidst a celebration of technologies in music production and performance to help shape an anachronistic cultural

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<sup>100</sup> Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation*. (New York: St. Martin's Press, 2005).

<sup>101</sup> Bill Brewster and Frank Broughton, *Last Night a DJ Saved My Life*, (New York: Grove Press, 2001), 5, 164.

<sup>102</sup> Kai Fikentscher, *You Better Work! Underground Dance Music in New York City*. (Hanover, NH: Wesleyan University Press, 2000); also interviews by the author 2011-15.

experience.

The sonic and performative elements of club culture create a cyclical, repetitive relationship with time, using “sound and rhythm to construct psychic landscapes of exile and utopia.”<sup>103</sup> Going out at night has also been described as intransitive, a practice “about the celebration of celebration, about an intensity without pretext or context.”<sup>104</sup> In this ultimate sense, the materials of the nighttime rave or club reappropriate the repeating structures of capitalist modernity on their terms and contest a discourse of rational progress found in work and school.

In Robert Fink’s terms, a culture of repetition “becomes salient in its own right, experienced directly as constituent of subjectivity; it is in this sense that we are constantly ‘repeating ourselves,’ fashioning and regulating our lived selves through manifold experiences of repetition.”<sup>105</sup> Accordingly, the sense of return that constitutes the nightclub – its spinning DJs, repetitious beats, strobe lights and corresponding dance moves - is not necessarily a canned display of false consciousness, as many critics would argue. It can be read as a response to the repetitive logic of post-industrial consumer society, one that reproduces these structures in its own terms. Furthermore, it points to a youth culture searching for messages of community and spirituality in the mass-marketed pop of late capitalism and its technocratic rationality. In fact,

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<sup>103</sup> Simon Reynolds, *Generation Ecstasy*, (New York: Routledge, 1999), 10.

<sup>104</sup> *Ibid*, 243.

<sup>105</sup> Robert Fink, *Repeating Ourselves*. (Berkeley, CA: University of California Press, 2005), 4.

the height of rave culture in the nineties amounted “to...a survival strategy for the generation that grew up under Thatcher.”<sup>106</sup>

Transgressive plenitude it may not be, as nighttime entertainment’s bend towards exclusivity can often create layers and hierarchies of haves and have-nots; but the night persists as a time of escape and a mode of participation in urban entertainment economies and culture. The sounds and experiences of nightclubs and parties emerge from the cities, frenetic, loud and repetitive. DJs preside over these programs, selecting some combination of house, techno and electronica - musics almost always devoid of lyrics and almost never overtly political. As DJ Angola, who has played at Spirit and many other nightclubs in New York, commented, “the music I play is repetitive, but it doesn’t feel boring. It helps to create a journey, an escape where everyone gets to create their own pure expression. In a great club with good music, you don’t just hear the music, you see it, taste it, with all your senses, and surrounded by so many people. Where else can you do that these days?”

The nightclub’s sonic and spatial mechanics supplement this argument. Whether played by a DJ using turntables or an electronic musician working with a laptop and assortment of filtering devices, the musics in these venues are defined by mechanical repetition, synthetic textures and a rootlessness tied to practices of sampling and remixing. In particular, sampling pulls the past into the present, and can shrink distances through an

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<sup>106</sup> Simon Reynolds, *Generation Ecstasy*, (New York: Routledge, 1999), 382.

aural soundtrack of patchworked global moments. However, as the remix alludes to, it does so with an eye towards imagined possibility, emphasizing a song's reinterpretation and reinvention. In short, these very repetitive music experiences actually help to structure contemporary nightclub culture, along with the strobe lights and disorienting flash of laser and lighting systems. Accordingly, the sense of return that constitutes the nightclub – its spinning DJs, repetitious beats, strobe lights and corresponding dance moves - can be read, in some moments, as a response to and reappropriation of the repetitive logic of post-industrial consumer society.

The language of nightlife – from its practitioners and critics alike – conveys an eerie insistence on night's meaning as something *other* and its use as a means of *survival*. Not only do “most clubbers and ravers see themselves as outside and in opposition to the mainstream,”<sup>107</sup> but nightlife more broadly “represents a constant renegotiation and subversion of codes, styles and rules.”<sup>108</sup> The events themselves create environments where “time starts to dissolve, [providing] an opportunity to forget their socialized selves...and experiment with a different cycle.”<sup>109</sup> As “partying becomes the great vernacular of survival,” nightlife has “the ability to transform impotence

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<sup>107</sup> Sarah Thornton, *Club Cultures: Music, Media and Subcultural Capital*. Middletown, CT: Wesleyan University Press, 1996), 99.

<sup>108</sup> Paul Chatterton and Robert Hollands, Robert. (2002) “Theorising Urban Playscapes: Producing, Regulating and Consuming Youthful Nightlife City Spaces.” *Urban Studies Journal* 39, 2002, 95-116.

<sup>109</sup> Tim Lawrence, *Love Saves the Day*. (Raleigh, NC: Duke University Press, 2003), 24.

into hallucination.”<sup>110</sup> The night has been referred to as mystical, enchanted, magical. It is used to forget, escape and survive. It speaks to the human need for experimentation and experience beyond the rational.

As Lipsitz also points out, youth music and culture expose contradictions through an embrace of commercial culture, an approach that while innovative and unique, diverting power away from mainstream culture, nonetheless “threatens to mimic rather than transform the dominant society.”<sup>111</sup> Whether disco or hip-hop, their commercial appeal was an irresistible sales opportunity for music and nighttime entertainment businesses. Nightlife, driven by disco DJs and propelled by the burgeoning hip-hop scene, continued to be big business – but this time with a DJ at the helm overlooking a sea of dancers and mastering the art of sequencing ongoing, throbbing beats.

## **Conclusions**

At more than 8.7 million hits, the best-selling download in music history is “I Gotta Feeling,” a catchy, uptempo dance song by the group Black Eyed Peas that celebrates nightlife with the following lyrics:<sup>112</sup>

I gotta feeling/that tonight’s gonna be a good night/

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<sup>110</sup> Carlos Monsivais, “Metro Insurgentes.” In *The Mexico City Reader*, ed. Ruben Gallo. (Madison, WI: University of Wisconsin Press, 2004), 192.

<sup>111</sup> George Lipsitz, “We Know What Time It is,” in *Microphone Fiends*, (New York: Routledge, 1994), 25.

<sup>112</sup> <http://www.billboard.com/articles/columns/chart-beat/6590883/wiz-khalifa-see-you-again-no-1-hot-100>. Accessed on July 15, 2015

that tonight's gonna be a good, good night/  
 ...I know that we'll have a ball/  
 If we get down and go out and just lose it all/  
 I feel stressed out, I wanna let it go/  
 Let's go way out spaced out and losing all control.

Its music video, also with nearly 9 million views, showcases a collage of nightlife characters primping themselves, drinking, dancing, making out, and DJing. After the song was released in 2009 it was everywhere; in groceries stores and taxi cabs, advertising and the Superbowl, bars and clubs.

I refer to this nightlife anthem not because of its artistic quality or musicianship, which tend to fall squarely in pop dance formulas designed to sell hits, but because its extraordinary popularity demonstrates the way in which the 'subversive' night's symbolism persists in mainstream culture. Its lyrical, visual, and musical messages capture the aesthetics of excess, pleasure, experimentation, and freedom that have been associated with many of nightlife's practices. Of course, "I Gotta Feeling" also speaks to the less celebratory trends in nightlife in the 21<sup>st</sup> century: the pervasive commodification of subcultures, the mechanization and lack of creativity in artistic expression, the apolitical checking-out of meaningful social participation, and a hedonism that borders on abuse.

Taking the long view and assessing centuries of nightlife contextualizes its many complexities. We see the persistent need for escape and celebration just as we see the sublimation of transgression in various processes of

industrialization, urbanization, and neoliberalization. Overall, this chapter weaves a number of practices and phenomena into a set of narratives about the significance of nightlife in society and popular culture.

As we settle back into the present, if there is one figure that has come to symbolize nightlife in the contemporary moment it is the DJ. While the people pulling some of the (purse)strings in the background may be club owners, managers, real estate developers, public officials, the huge popularity in nighttime entertainment is driven by its music and dance. Whether a high-tech music programmer or a new-jack “shaman” of the nightclub, DJs are simultaneously products and producers of nightlife, and the sounds and experiences that drive nighttime entertainment. If, as Carlos Monsivais insists, nightlife and partying has become the great vernacular for survival, then the DJ is its translator and spokesperson.

## **Chapter Two: Adventures on the Wheels of Steel**

### *An Interlude on Format, Innovation, and the History of DJ Equipment*

The DJ has come to symbolize contemporary nightlife – the purveyor of non-stop sound whose job is to create dance floors, whose role is not an accessory to the pleasure and consumption linked to nighttime entertainment but a central force in the industry itself. The present chapter provides a necessary link between nightlife, DJs, and a history of the tools and technologies early DJs shaped into standard-issue equipment. A DJ's tools are his or her instruments, from the turntables to the mixer, the music itself to the tiny stylus that rides a record's groove. Here, I will review and synthesize various histories of DJ technologies and techniques, particularly linked to U.S.-based disco and hip-hop music scenes in the 1960s, 70s, and 80s. The context provides a necessary base for understanding the significance of subsequent, more recent changes in DJ equipment and performance, as well as reactions to the turn to digital DJing.

Let's start with the premise that a DJ's goal is, in the most general sense, to create a vibe for an audience, usually on a dancefloor. This vibe, however, requires a very sophisticated knowledge of sound, music, and complex machinery. It demands at least some understanding of electrical and sound engineering and of the ways that multiple pieces of equipment interact. In addition, it is enhanced by a desire to innovate on these tools and technologies, to make them different, better, or more unique. For several



decades, a basic DJ setup included a pair of turntables, a mixer to connect them and feed sound out to a PA system, a decent pair of needles to read the records, some headphones, and, of course, music. It was analog, it was clunky, and it was a fascinating display of the way multiple, layered technology manipulation - driven by users and supported by manufacturers - created a dramatic cultural shift in the aesthetics of musical creation and consumption.

**Radiowaves, Disc Jockeys, and the earliest ripples of DJ technologies**

In their expansive and celebratory tome on DJing, *Last Night a DJ Saved My Life*, Bill Brewster and Frank Broughton trace the origins of the “first DJ” back to Christmas Eve, 1906, when an engineer and former Edison employee, Reginald M. Fessenden, transmitted a recording of Handel’s Largo from Boston into the Atlantic Ocean, intending for it to reach Scotland. This prototype developed into a more familiar (and fitting) incarnation in the American radio disco jockey, emerging in the 1920s and flourishing in the 1940s and 50s.

Early on, radio disc jockeys did not play records; recorded music was viewed with suspicion and DJs were seen as enemies of “real” musicians.<sup>113</sup>

Radio personalities may have been a step towards what we now understand as a DJ, and in 1941 *Variety* magazine used the term “disc jockey” for the first

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<sup>113</sup> On August 1, 1942, musicians in the United States went on strike over the issue of recorded music, banning members of the American Federation of Musicians from making records until labels agreed to pay greater royalties to artists. Earlier still, in 1922, ASCAP fought against radio stations playing ASCAP-licensed songs, in order to lobby for higher fees.

time, playing with the meaning of a horse rider and someone known for “skillful maneuvering,” as well as “hustling” - in this case, of records.<sup>114</sup>

In the 1940s and 50s, radio disc jockeys were hit makers and breakers, eventually becoming core parts of the music industry and some of the most influential decision makers about artists and music. What they played, when they played it, how they introduced it, and what they endorsed led to some of the biggest music trends in the world - including rock’n’roll, a genre whose name came from Alan Freed’s incredibly popular radio shows in the 1950s.<sup>115</sup>

Apart from these radio personalities, whose function was to bring music into the personal and private space of the home, the true first DJ was a machine. The jukebox was patented in 1889 by Louis Glass and installed in a saloon in San Francisco, initiating an acceptance of playing pre-recorded music (rather than hiring a live band). Jukeboxes flooded bars, restaurants, and taverns after the repeal of Prohibition at the beginning of 1933 and persisted during (and well after) the Depression, when it was much cheaper to play records than hire a live performer. The jukebox style of continuous play was later reproduced in Sock Hop dances, by live “DJs” who would introduce each song

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<sup>114</sup> Bill Brewster and Frank Broughton, *Last Night a DJ Saved My Life*, (New York: Grove Press, 2001), 27-8.

<sup>115</sup> Steve Chapple and Reebee Garafolo, *Rock’n’Roll is Here to Pay*. (Chicago: Nelson Hall, 1977); Susan Douglas, *Listening In: Radio and the American Imagination*. (Minneapolis: University of Minnesota Press, 2004).

or encourage the crowd to dance, occasionally even rigging up ways to connect two record players in order to keep the music playing continuously.<sup>116</sup>

### **Disco inferno**

Early disco DJs in the 1960s were among the first to begin to transform the practice of playing pre-recorded music for a live audience, rewiring sound systems and mixing songs in ways that broke with traditional formats. They were not just playing records they liked, as in the case of radio disc jockeys, but weaving the ends and beginnings of songs together to create a continuous playlist, often sequenced in surprising ways that complicated accepted musical genres and styles, and at levels and noise configurations that sought to fully envelop the listeners (and dancers). These techniques were early efforts to innovate on existing tools in order to create exciting sonic and entertainment experiences for crowds.

Many argue that Francis Grasso was the archetype for the modern DJ. Francis, according to several accounts, transformed a DJ from merely playing records to using them as instruments in creating a unique and different soundscape for an audience. In particular, he was known for his ability to

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<sup>116</sup> Versions of this history are found in numerous accounts, most notably Bill Brewster and Frank Broughton, *Last Night a DJ Saved My Life*, (New York: Grove Press, 2001); Tim Lawrence, *Love Saves the Day*. (Raleigh, NC: Duke University Press, 2003); Kerry Segrave, *Jukeboxes: an American social history*. (Jefferson, N.C.: McFarland, 2002); Katrina Hazzard-Gordon, *Jookin: The Rise of Social Dance Formations*, (Philadelphia: Temple University Press, 1990).

beat-mix, one of the most fundamental techniques in DJing. Beat mixing (or beatmatching) means syncing up the drumbeats on two different records in order to create a smooth transition between songs, most frequently done by listening to the cue record in headphones and speeding it up or slowing it down to match with the record playing on the PA system. A mixer connected the two turntables and allowed DJs to play both records at the same time using volume controls and crossfaders; if both songs were in sync, the DJ could sequence and layer the songs so smoothly that the audience might not be able to tell they were both playing.

It is notable that Grasso's ability to beatmix was helped along by technological innovations. In 1971, audio engineer Alex Rosner built Grasso a basic – but customized - three-channel mixer with a slider to move between turntable inputs and a cueing function he named a “Rosie.” At the same time, in consultation with DJs, another club audio engineer named Louie Bozak produced the first commercially available mixer, weighing 25 pounds and modeled after radio soundboards with knobs to control each channel's volume.<sup>117</sup> The mixer was the absolute nexus of a DJ's tools, and these products represent some of the first attempts to create equipment directly

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<sup>117</sup> David Cross, “A History of the Development of the DJ Mixer Features: An S&TS Perspective,” (B.A. Thesis, Cornell University, 2003). Available online at [www.zenknee.com/DJ\\_Mixer\\_History.pdf](http://www.zenknee.com/DJ_Mixer_History.pdf); Joshua Glazer, “A Brief History of the DJ Mixer,” *Medium*, April 22, 2015. Available online at <https://medium.com/cuepoint/a-brief-history-of-the-dj-mixer-4d3b8154dde0>

targeted at DJs. They also point to the influence that DJs themselves have in the creation of new technologies and in the market for DJ-related products.

Nonetheless, despite these technological advances, Grasso and his DJ peers were performing great feats of musical performance with what now seems like rather primitive equipment. They used turntables with much stiffer, less responsive platters with very little pitch control range to speed up and slow down the song, as the industry standard Technics 1200SL was not released until 1972 and took several years to rise in popularity. They were also playing music recorded with live drummers, whose rhythms fluctuated enough to make it even more challenging to keep the beats matched. It took an incredible understanding of each record and attention to detail to beat-mix in these circumstances, combined with innovations like slip-cueing (touching the record platter and slipmat to release a song in a more precise way). These techniques, birthed in the mostly gay, very underground clubs of New York and other major cities in the late 1960s and early 1970s, became essential to DJing and remixing in dance music to this day.<sup>118</sup>

Add in David Mancuso's sound experiments in his rent party-turned-nightclub, the Loft, and you get a more complete picture of the small but important innovations that led to what have become standards in DJing practice. Mancuso, for example, elevated audience expectations, creating

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<sup>118</sup> Bill Brewster and Frank Broughton, *Last Night a DJ Saved My Life*, (New York: Grove Press, 2001); Tim Lawrence, *Love Saves the Day*. (Raleigh, NC: Duke University Press, 2003); Alice Echols, *Hot Stuff: Disco and the Remaking of American Culture*, (New York: W.W. Norton & Company, 2010).

expansive soundscapes to mold dancer experiences through amplification, speaker placement, and modifications like extra high-end tweeters. As disco evolved over the 1970s, its innovators were often young, inner city Latin and African American DJs like Frankie Knuckles, Larry Levan, and Jellybean Benitez. These trendsetters used basic turntables and mixers to create new DJing techniques, such as phasing - playing two records at the same time, but just off enough to create a flange sound effect – splicing parts of songs and drumbeats together, and playing with high, mid, and bass levels. House, techno, and every sub-genre of Electronic Dance Music (EDM) from dubstep to grimecore are direct descendants of disco's four-on-the-floor beats and continuous mix, its creative use of music playback technologies and sound amplification. However, just as disco was peaking, early hip-hop pioneers were blazing a technology-driven DJ path of their own. While disco may have elevated the role of the DJ in the club and laid the foundation for the style of continuous, all-night mixing and cross-genre pollination, it was hip-hop that truly marked the DJ as artist and the turntable as instrument.

### **Hip-hop and the street-grown high-tech**

The emerging hip-hop scene in 1970s New York was heavily influenced by disco, but without access to the high-end turntables and mixers that profitable nightclubs were able to purchase, hip-hop's first practitioners were left to innovate and create parties in the streets, on the block, and with

whatever tools they had. Mostly black and brown youth growing up in the rough streets of New York's South Bronx, they did not have the funds or networks to venture downtown for entertainment in the early 1970s. But there were still parties uptown, and a legacy of Caribbean culture that privileged giant sound systems and copious dancing.

The role of Jamaican sound systems and dub music is central in understanding DJing's aesthetics and its philosophies around technologies.<sup>119</sup> In Jamaica, music was a central part of social life, but by the mid-1960s sound systems had largely replaced live bands. Sound systems were large stacks of homemade speakers and powerful amplifiers that, when paired with a selector (DJ) and records, transformed the low-income yards of Kingston, equivalent to inner city housing projects. As Jeff Chang writes, "the sound systems democratized pleasure and leisure by making dance entertainment available to the downtown sufferers and strivers."<sup>120</sup> The owners and engineers of these sound systems were fiercely competitive, and fought to be louder, bigger, and better than each other by playing with wiring and amplification methods.

In addition to the expanded playback capacities of sound systems, Jamaican musicians' experiments with recording technologies led to new

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<sup>119</sup> David Toop, *The Rap Attack: African Jive to New York Hip Hop*, (New York: Pluto Press, 1984); Dick Hebdige, *Cut'n'Mix: Culture, Identity, and Caribbean Music*. (London and New York: Routledge, 1987).

<sup>120</sup> Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation*. (New York: St. Martin's Press, 2005), 29.

sounds and music formats. A typical story references the creation of dub plates, or instrumental versions of songs that can be remixed with different vocals, as the products of one of reggae's preeminent sound engineers simply forgetting to turn on the vocal track during recording. While this may explain the literal production of dub plates, their rise in popularity was linked to many other factors, including an early appreciation of remix, a desire for creativity, and an embrace of experimentation. For example, Lee "Scratch" Perry's Black Ark studio was a "gloriously weird place" that used a cheap four-track mixing desk to produce some of the most interesting and unusual bass-heavy loops people had ever heard. Its emphasis on the B-side of records, on an otherness and darkness, celebrated unusual sonic experiences, the stretching of time, and the use of exclusives.<sup>121</sup>

Hip-hop's creators, many the children of Jamaican immigrants or immigrants themselves, drew liberally from the traditions of sound systems and versions, the creative use and re-use of technologies, and an ethos of innovation and "designing" that long preceded the current zeitgeist of innovation-speak and design-thinking. As has been documented quite thoroughly, hip-hop was born and grew up in the South Bronx, where the block party became the space of possibility when the city and its politicians had so

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<sup>121</sup> Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation*. (New York: St. Martin's Press, 2005), Michael Veal, *Dub: Soundscapes and Shattered Songs in Jamaican Reggae*. (Middletown, CT: Wesleyan University Press, 2007); Stuart Baker and Steve Barrow, *Reggae 45 Soundsystem*, (London: Soul Jazz Records, 2012).



brutally failed black and brown youth.<sup>122</sup> This space of hope and possibility was led by the DJ, who figured out how to steal electricity from the city's lampposts in order to power their homemade speakers and equipment. It was the DJ who stood at the forefront of hip-hop, ushering in its vibrancy and nurturing its roots through these growing chains of neighborhood parties in New York City.

There are a few notable forefathers whose interventions in the art of DJing must be considered. DJ Kool Herc remains the figurehead of hip-hop DJs, whose story has become integral to the mythology and history of hip-hop. At the end of summer in 1973, Herc's sister Cindy threw a party to earn money for new clothes for the coming school year, and she enlisted her brother to play. Herc had grown up in Jamaica and experienced sound systems firsthand; in the Bronx, he was exposed to radio DJs like Cousin Brucie and Wolfman Jack, as well as countless neighborhood house parties and his father's "garage" R&B band's shows. Inspired by the speaker-fiddling and tweaking he saw so many sound system masters attempt in Jamaica, Kool Herc tried the same on his dad's PA system. With a little experimentation to

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<sup>122</sup> In the 1950s and 60s, the Cross-Bronx Expressway's construction, led by New York's Transportation Commissioner Robert Moses, plowed apart the Bronx. Combined with an explosion of "high modernist" dense public housing towers, an exodus of middle-class and white, immigrant families, and a devastating economic recession that wiped out jobs and slashed public resources, the South Bronx was transformed into a sprawling ghetto that literally burned with gang violence, extreme poverty, and lack of resources. Jeff Chang, *Can't Stop Won't Stop: A History of the Hip-Hop Generation*. (New York: St. Martin's Press, 2005), 65; Tricia Rose. *Black noise: rap music and black culture in contemporary America*. (Hanover, NH: University Press of New England, 1994).

“jack it into one of the channels,” Herc managed to create a powerful sound that became the envy of the neighborhood. In addition, Herc used Jamaican practices of hooking up microphones and adding reverb and echo effects, in order to distinguish himself from disco DJs.<sup>123</sup>



**Image 2.1: Kool Herc, the block party, and the early DJ music rig**

More importantly, Herc’s emphasis on the “break” and his use of technology to capture and prolong that break were revolutionary. He observed dancers and realized they were waiting for certain parts of the record – the break – to really get down and let loose. Therefore, he began only playing

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<sup>123</sup> Kool Herc’s story and narrative of early hip-hop DJing has been well-covered in journalistic and academic work, including Jeff Chang, *Can’t Stop Won’t Stop: A History of the Hip-Hop Generation*. (New York: St. Martin’s Press, 2005); Nelson George, *Hip Hop’s Founding Fathers Speak the Truth*, in *That’s the Joint! Hip-Hop Studies Reader*, Murray Forman and Mark Anthony Neal, eds. (New York: Routledge, 2004), 46-57; Mark Katz, *Groove Music: The Art and Culture of the Hip-Hop DJ*. (New York: Oxford University Press, 2012).

breaks, often using doubles of the same record to extend and repeat the break, facilitated by the use of a newly-introduced GLI mixer. The GLI mixer was a “poor man’s Bozak,” the hefty 25-pound knob-driven mixer Louie Bozak had created for disco club DJs; it was cheaper and replaced knobs with the more affordable (although less durable) slider, the first of its kind to market to aspiring DJs, rather than those with established formal nightclub residencies.

Herc’s new style was hugely popular, bringing packed crowds to his events and inspiring competing crews to find their own breaks and engineer their own sound systems. It seemed the “man with the records had replaced the man with the colors,” transforming the Bronx’s gang-heavy landscape.<sup>124</sup> And this man was a master of rewiring and controlling technologies, part sound engineer and part musical genius.

Kool Herc was just one of several to mix irreverence with musical talent and technological innovation. Afrika Bambaataa and Grandmaster Flash added their own contributions to shaping DJing practices and philosophies, often battling against each other in those mid-1970s parties. Bambaataa was seen as a programming genius, someone who cared little about musical conventions and dedicated himself entirely to the practice of mixing the weird with the wonderful, the uncanny with the essential. Grandmaster Flash (aka Joseph Saddler) approached DJing from an engineer’s perspective. He describes, “I was a scientist looking for something,” in the insides of machines

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<sup>124</sup> Jeff Chang, *Can’t Stop Won’t Stop: A History of the Hip-Hop Generation*. (New York: St. Martin’s Press, 2005), 82.

and radios, in junkyards and lots. “I wanted to know, what’s a resistor? What’s a capacitor? What’s a transformer? What’s AC? What’s DC? Why do these things do what they do?”<sup>125</sup>

Flash reinterpreted Herc’s technique of sampling breaks and disco DJs’ style of seamlessly extending grooves by mixing two copies of the same record together. By combining the two approaches, he could more expertly sample and select parts of songs and smoothly transition them into sampled segments of other songs. In order to do this, and without access to the expensive equipment professional nightclub DJs played on, Flash made a number of modifications in his bedroom. He retooled his mixer to include a headphone cue, studied the turntable to understand how to make it and the needle cartridges & styli more durable, to figure out the torque. Through this deep study of the equipment and sound technology, he invented the “quick mix,” and started incorporating flashy tricks into his performances – doing ballet-style turns while cutting between songs, scratching with his elbows, moving the cross-fader with his back.

His style inspired Grandwizzard Theodore, who is responsible for the nearly mythologized origin story of the scratch. The account goes that Grandwizzard Theodore invented the scratch in his bedroom while pausing the record with his hand as his mom yelled at him to turn the music down.

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<sup>125</sup> Quoted in Chang, 2005; an additional discussion of Grandmaster Flash can be found in two books by Mark Katz, *Capturing Sound: How Technology Has Changed Music*. (Berkeley: University of California Press, 2004), as well as *Groove Music: The Art and Culture of the Hip-Hop DJ*. (New York: Oxford University Press, 2012).

Listening to her yell, he slowly moved the record back and forth and realized the sound that movement created – a whoosh of noise – could be used to embellish his DJ performances and set him apart from others.<sup>126</sup>

The creative use of technology factored into every stage of DJing's emergence as part of a new and irreverent hip-hop culture in the 1970s and 1980s. Hip-hop DJs illegally hijacked into lampposts to source electricity from the city, doing so to power rewired speakers and homemade sound systems. They reconfigured turntables into "wheels of steel," to not only play continuous music but do so in an entirely unique way, with scratching and quick mixing. They retooled the music itself, chopping up songs and notes. Their curiosity was boundless. As Murray Forman comments, "Rap music traditionally relies on the appropriation and reassignment of music technologies, especially the turntable, mixer, and vinyl record, which...were employed in ways unforeseen by corporate manufacturers."<sup>127</sup> These practices were rooted in the specific challenges and contexts of that era; George Lipsitz notes, "young people being trained in vocational high schools in obsolete technologies responded to their marginalization by mastering modern new technologies like digital samplers. They combined some of the oldest African American oral traditions with some

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<sup>126</sup> Accounts drawn from Jim Fricke and Charlie Ahearn's *Yes, Yes, Y'all: The Experience Music Project Oral History of Hip-Hop's First Decade*. (Cambridge, MA: Da Capo Books, 2002), and also from the documentary *Scratch* (2001).

<sup>127</sup> Murray Forman, *That's the Joint! Hip-Hop Studies Reader*. (New York: Routledge, 2004), 389

of the newest creations of electronic, digital, and fiber-optic and computer-chip mass-media technology.”<sup>128</sup>

Nonetheless, by the late 1970s, these DJs fixed the turntable-as-instrument and along with their disco counterparts legitimized the DJ as an artist in his (and occasionally her) own right. The turntable’s mainstream birth as instrument, as opposed to playback device, became commercially official during the 1983 Grammy performance, when Herbie Hancock’s “Rockit” showcased Grandmaster DST’s alien-like scratching on live, national television (as excerpted in the 2001 documentary on turntablism, *Scratch*). This moment catalyzed the turntablism movement, originally an offshoot of hip-hop DJing that uses records as raw parts for constructing songs and sounds entirely through scratching, beat matching, and other techniques. Turntablists and the culture of which they are a part reinforced the central role of the DJ in determining and expanding technology’s use and applications.<sup>129</sup> As Katz notes in his in-depth studies of hip hop DJs, “in their utter subversion of the phonograph’s intended function, turntablists have developed a rich

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<sup>128</sup> George Lipsitz, “We Know What Time It is: Race, Class, and Youth Culture in the Nineties,” in *Microphone Fiends: Youth Music and Youth Culture*. Tricia Rose and Andrew Ross, eds. (New York: Routledge, 1994), 20.

<sup>129</sup> The emergence (and quick fall) of *Grammaphonmusik* in Germany in the 1930s presaged the use of the turntable as its own electronic instrument, and particularly as an instrument of composition. It represented a movement to experiment with music technologies and push boundaries outside normal traditions in order to create music independent of live instrumental performance. More analysis on this historical moment in Mark Katz, *Capturing Sound: How Technology Has Changed Music*. (Berkeley: University of California Press, 2004), 113.

musical and social discourse on their own terms.” Well-known DJ Kid Koala noted, “it’s always about how the DJ can outthink the machine.”<sup>130</sup>

DJs have made many changes and improvements to the “original” equipment over the years, tweaking their gear to better facilitate sound production. They added slip mats to help the record spin more smoothly during scratching and backspinning, they weighted down needles with pennies to keep them from skipping, they spent hours fiddling with the faders on mixers to get them to the perfect smoothness. Some turntablists rewired their mixers by plugging in turntables into opposite inputs, thus creating what has become known as playing “hamster” style.

DJs and electronics manufacturers seemed to work in call and response to each other, in a relay of user-driven innovations followed by formalized product functions, followed by tool reworking, and so on. Sometimes the technology contained functions that greatly influenced DJ practice, such as the way that the arc on a crossfader shapes the speed and frequency a turntablist is able to scratch or beat juggle. Sometimes the technology mimicked DJ practices and made them just a little easier, such as the introduction of separate EQs for each audio channel by electronic companies in the 1980s, which allowed a DJ to “drop the bass” on individual tracks rather than on the entire sound system. And sometimes DJs pushed the technology, inventing new uses such as the reverse-wired “hamster”

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<sup>130</sup> Quoted in Ibid, 115.

setup, which eventually became built into the mixer itself through a “reverse” button.

By the early 1990s electronics manufacturers like Vestax, Numark, and Pioneer all started adding features built specifically with DJs in mind – extra controllers, more sensitive cartridges and needles, new functions and switches on mixers to better control crossfading curves. Often, these companies sought out famous DJs to gather input and inform their design and engineering process.<sup>131</sup> Since then, DJ technologies have grown exponentially, both in terms of function and market. As disco turned into electronica and hip-hop became the multi-billion dollar industry it is today, as nightclubs have become cultural and economic pillars in cities, it is no surprise that DJing has also skyrocketed into an artform that permeates contemporary musical performance and how we think about sound experiences.

### **Conclusions and summaries**

Most narratives of DJing reference a version of “tool reinvention,” “twisting technology,” “subversive material use,” and “technological manipulation.”<sup>132</sup> These user-oriented narratives of DJs twisting, manipulating,

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<sup>131</sup> Chad Simer, Rane staff member, interview with author September 2013; DJ Q-Bert interview with author November 2013; see similar accounts in Mark Katz, *Groove Music: The Art and Culture of the Hip-Hop DJ*. (New York: Oxford University Press, 2012), and Joshua Glazer, “A Brief History of the DJ Mixer,” *Medium*, April 22, 2015.

<sup>132</sup> This language finds itself in practically every history of DJing and is most pronounced in literature that focuses on hip-hop DJs. A sampling of texts using this narrative includes the Brewster & Broughton, Tim Lawrence, Murray Forman, Mark Katz, and Jeff Chang texts cited throughout this chapter, as well as: Iain Chambers *Urban Rhythms: Pop Music and Popular Culture*. (London: Macmillan; New York: St. Martin's Press. 1985); Jeremy Gilbert and Ewan



and experimenting are a fundamental part of DJing's history and evolution. DJing, with its massive sound systems, turntables, spliced up records, and scratching was an oppositional sound, one that relied on the creative and experimental use of technology to create a similarly experimental culture of dance, performance, art and fashion. It celebrated otherness, imagination, and ingenuity; it resignified urban place and space. The early technology of DJs mediated this imagination and creativity, the vision of a new musical sound and style that has multiplied and bifurcated in endless iterations in the subsequent decades.

Borrowing from historian Rayvon Fouche, as well as Mark Katz, DJs reconceived and recreated technology to create this musical practice. They reinterpreted the turntable in a way that transgressed its dominant meaning and usage, using it as a battle weapon and music-making machine. They then recreated it, altering it physically by adding new features, rewiring it, and rigging it up with other equipment, to give it a whole new and different function.<sup>133</sup> Aesthetically, DJs exemplified postmodern collage in the art of the sonic remix; they took texts from their original sources, cut and combined them using technologies and technical skills, and generated new meanings -

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Pearson, *Discographies: Dance, Music, Culture, and the Politics of Sound*. (London and New York: Routledge, 1999); Joseph Schloss, *Making Beats: The Art of Sample-Based Hip-Hop*. (Middletown, CT: Wesleyan University Press, 2004); Oliver Wang, *Legions of Boom: Filipino American DJ Crews in the San Francisco Bay Area*. (North Carolina: Duke University Press, 2014).

<sup>133</sup> As quoted in Mark Katz, *Groove Music: The Art and Culture of the Hip-Hop DJ*. (New York: Oxford University Press, 2012), 67-8.

whether controlling a dancefloor's flow, facilitating breakdancing battles, or splicing samples together as performative quotation.

Manipulation, experimentation, innovation, creativity, curiosity. Rule-breaking and bending. DJs in the 1970s and 1980s were irreverent and transgressive, pushing the boundaries of technologies and the aesthetics of music. Their experiments proved to be exceptionally successful, at once responding to the desire for a new, youth-driven mode of musical performance and consumption, and blazing a path of their own that was embraced and elevated. What began as an embrace turned into an explosion, and the tools available to DJs have multiplied, presenting DJs with new decisions and questions about the materials themselves, as well as the subversive spirit of invention that motivated early DJing experiments.

### **Chapter Three: Plug + Play**

#### *Producing the Magic of and Markets for Digital DJing*

*Right now, every day I wake up and I got to get myself  
ready for some crazy shit that is going to happen.*

*- DJ Sake-1, September 2013  
Interview with author*

*Technological media turn magic into a daily routine.*

*- Friedrich Kittler*

In 2010, DJ Ruckus sold 2,025 records, almost 80% of his record collection. It was, according to Ruckus, a long overdue “firesale;” he hadn’t been using vinyl for more than five years and the collection was taking up space and gathering dust in his cramped home. Several buyers gathered in his apartment in Queens, NY, on a Sunday afternoon to pick through the records, bargaining and making offers until they whittled the thousands down to the last two crates. Ruckus put the crates in his car and decided to drop them off at Goodwill the next day, already researching discounts on new digital DJ equipment as he chatted about ideas for how to use the newly-freed space in his living room.

Around the same time, DJ Lady B was getting her first paid gig in San Diego, a five-hour set at a sushi restaurant that catered to a young crowd and liked to feature a live DJ during primetime dinner hours on the weekends. She arrived at 7pm clutching a medium-sized purse, from which she pulled a pair of headphones and two flash drives. The entirety of her gear for the night, including more than 11 hours of music, fit into a bag the

size (and weight) of a loaf of bread. Lady B plugged into the system and cued up her first track. She had already organized her playlists and arranged songs by BPM, pitch, and style, loosely in the order in which she planned to play them. As the first song filtered into the dining room, she leaned back and let go of what she called her “performance anxiety,” nodding her head and fiddling with a couple knobs on the Numark Mixtrack equipment.

Meanwhile, E-Man, a 10-year veteran DJ, showed up to a club in San Francisco at 9:30pm on a foggy Saturday night prepared to throw down his best set for a packed dance floor. He greeted the manager like an old friend, with a pound and a hug, and grabbed a glass of water before heading back to the DJ booth. Once there, he flipped open his laptop and connected it to the club’s mixer, took out his Control records, and started his work night. He hunkered down for six hours of mixing, expecting to have to peak the music around 12:30am, and – just as he did at his other 3 gigs each week – said a little prayer to the “DJ gods” that his DJ software wouldn’t freeze and that all the technology would work flawlessly.

Ruckus selling records. Lady B learning to DJ with flash drives. E-Man adjusting to both vinyl and laptop DJing. Their stories tell the arc of changing DJ technologies, the processes by which DJs choose to adopt and use new digital formats, and the forces at work in creating these technological shifts. This chapter draws heavily on the accounts of Ruckus, Lady B and E-

Man, but it is equally informed by the interviews I conducted with 78 other DJs through the United States between 2008 and 2014, as well as from my own experiences as a professional (and eventually semi-retired) DJ since 1996.

The past fifteen years have seen a tremendous growth in DJ technologies, giving practitioners many different choices about how they DJ, what musical and technical skills they need develop, as well as what musical formats to use. For example, in June 2015 the Apple Store alone featured 100 different kinds of DJ apps for smart phones and tablets, while the 2014 National Association of Music Merchants (NAMM) conference in December hosted a record high of 325 DJ-related brands. As NAMM reports, since 2009, sales of DJ equipment have risen by \$34 million, with sales of digital DJ controllers and related digital DJ gear more than doubling since they were first tracked in 2010.<sup>134</sup> And they are not cheap: the majority of digital DJ products run in the hundreds, if not thousands, of dollars. The list price alone for a Rane Sixty-Two Performance Mixer with Serato Live (a professional caliber mixer that allows DJs to play music from their laptops) runs \$2,499, while the more basic and all-inclusive Numark MixDeck controller costs about \$500.

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<sup>134</sup> “Electronic Dance Music’s Rising Popularity Fuels Growth in DJ Product Segment at the NAMM Show,” Press Release from the National Association of Music Merchants, December 18, 2013. Accessed online at <https://www.namm.org/news/press-releases/electronic-dance-musics-rising-popularity-fuels>



**Image 3.1: Rane 62 Mixer for Digital DJing**



**Image 3.2: Numark MixDeck Express for Digital DJing**

These technologies span a variety of functions, sometimes interfacing between vinyl-based turntables and digital music files stored on a laptop, other times transferring the entire DJ setup onto a tablet screen or shrinking an expansive vinyl library into a pocket-sized flash drive. They are black boxes with flashing buttons, they are touch screens with icons, they are cables and drives containing hundreds of gigabytes of information. They can compute

Beats Per Minute in milliseconds — or instantly process embedded metadata in the music files — and read pitch in surprisingly smart ways. They allow for the reorganization and annotation of music in a patchwork of color-tagged and geo-tagged and keyword-tagged systems, carved up into musical loops, samples, and breakdowns.

This chapter provides a detailed look at digital DJing technologies and the ways in which the industry tools have transformed and exploded in number and variety in the past decade. The quick pace at which DJs embraced and employed these various technologies is striking, as has been the transformation of DJ practice and performance. The chapter considers various facets of digital DJing, exploring the processes by which DJs navigate, celebrate, and assess changes in equipment. In what ways have they transformed the ways in which a DJ performs, from the sonic qualities of the music to technical capabilities? What is the relationship between the commercialization of DJing and the digitization of its tools? Which new technologies have been more accepted than others and why?

As with any rapid change in a now middle-aged art (DJing is 45-50 years old), there is a real, lived anxiety linked to the quick fire explosion of digital DJ tools, which the chapter addresses and which will be discussed in more depth in the following chapter and conclusion. Before assessing these reactions, however, it is necessary to understand what the tools are, how they were designed and produced, how they were received, and, concretely, how

they have changed DJing techniques.

### **Phase 1: CDJs, a “Digital Gateway Drug”**

As Ruckus put it, “the rise of Pioneer CDJs was like a gateway drug to everything else digital that has come since.” Prior to about 1998, when CD turntables hit the market, the basic DJ setup was a pair of turntables, a mixer to connect them and feed sound out to a PA system, a decent pair of needles to read the records, some headphones, and, of course, music.

The turn to digital DJing is tied to commercial trends in music formats. CD sales overtook vinyl in 1988 and remained the dominant format for music through 2000. With new recordable technologies in the mid-1990s, including CD burners, even amateur artists could easily (albeit informally) distribute their music more widely. With the increase in music available on CD came the need to DJ with CDs, and the market responded by creating CD players intended for DJs in 1994.

DJs’ personal stories echo these market trends. Ruckus recalled, “I started to mix with CDs in 1996 or ‘97. People were giving me promos on CD or bootleg type shit, and so I wanted to play that out. It was the music format that really drove that shift.” He was not particularly enthusiastic about the early CD turntable prototypes; given that he had spent years building his skills playing vinyl on record players, he felt like the initial CD players were “almost a step backwards.” Yet, because the music he wanted to play was increasingly



arriving on CDs, he realized it was necessary to find a way to mix it during his radio and nightclub performances.

In the mid-1990s, these first CD turntables were sturdy CD-playback cubes that included a pitch control to speed up and slow down the BPM in order to match songs more smoothly, similar to the pitch control function on a turntable that Technics had introduced in 1978. Like Ruckus, early adopters celebrated the ability to play with CDs, which were easier to transport than bulky records, and also the opportunities to quickly and easily burn new CDs or play music not released on (more expensive) vinyl. From a consumer standpoint, using CDs made sense, as the format had become the global norm for music recording and playback. Veteran radio and club DJ Jeannie Hopper, who has been running the popular Liquid Sound Lounge show on WBAI since 1993, described her embrace of CD turntables as “tied entirely to the format on which I was getting my music from labels and other musicians, especially since I was interested in playing new and underground tracks.” Jeannie found digital DJing to be “inevitable, given changes in the music industry, but also constantly changing.”

The CD turntable evolved over several years, as companies competed to add bells and whistles to help DJs control sound and mix music. In 2001 Japanese electronics giant Pioneer debuted its CD-J 1000, a new product that included a jog wheel, a circular platter on the top of the machine that looked like a smaller, static turntable and allowed the DJ to stop and

manipulate music using touch. It was very similar to a vinyl turntable, although the DJ was not actually touching the CD as she would a record. Rather, the wheel simulated this effect, and would move the digital timecode of the CD when touched accordingly. This was a watershed development, and nearly half of the DJs with whom I spoke cited the Pioneer CD-J 1000 as the product that convinced them it would be possible to shift away from vinyl.



**Image 3.3: Evolution of Pioneer's CDJs 1992-2012**

*Image credit to housecallfm.com*

The wheel instructs the machine to manipulate the digital data on the CD. As Mark Katz describes in his 2013 account of hip-hop DJs, “the manipulability of digital sound is the basis for these players’ most valuable

features. Most notably, cueing and looping are much simpler than on traditional turntables.”<sup>135</sup> In other words, the DJ does not have to move the turntable arm and needle around to find the correct start position but can set up these cue points in advance, or repeat sections of the song, using different buttons that essentially sample and digitally mark the CD playing. Sampling becomes a matter of pushing a button a couple times – on beat, of course, and with an understanding of the song – rather than the longer act of backspinning or moving the needle.

With the jog wheel “platter” mimicking a vinyl turntable, the movements and motions of a DJ performance stayed fairly similar. As DJ Ruckus shared, “when I first started using the CDJ, I pretty much ignored most of its functions and used it like a turntable. No sampling, no looping, none of that. Just played with the pitch and scratched, like I would with vinyl.” As DJs became more comfortable with the new technology, many became more ambitious. Ruckus continues, “after a few months of playing with CDs, I started experimenting more — what could I do with sampling and using loops on the CDJ? I got a little more okay with looking at BPM and stuff on the screen. I started to appreciate some of the functionality that I didn’t have with a record player, you know? And now, look at me, 10, 12 years later...selling off all my records!”

As Ruckus describes, CDJ machines included additional features to enhance the work of the DJ. Their LED displays indicated the BPM as well as

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<sup>135</sup> Mark Katz, *Groove Music: The Art and Culture of the Hip-Hop DJ*. (New York: Oxford University Press, 2012), 217.

the exact percentage of tempo change based on pitch control movements. These tools helped DJs more easily sync music and avoid the dreaded “trainwreck,” in which the rhythms of the two songs being mixed are just off enough to create a jarring cacophony. These features, literally built into the hardware, aim to reduce what some see as an essential “risk of failure.”<sup>136</sup> In minimizing the risk of failure, though, the technologies create possibilities for users – and especially novices – to master basic skills more quickly and easily.

Nonetheless, for more experienced DJs, the initial appeal of CD turntables lay in the format itself rather than in the new beatmatching and sampling features. The ability to play and mix with CDs during performances, as mentioned earlier by Ruckus, was a critical development as music became increasingly – and sometimes only – available on compact disc. Ruckus elaborates, “there was some good shit coming out on CDs, or unreleased tracks people would give me, and as a DJ, what am I gonna do? Not play good music? Hell no. I am gonna find a way to play music I think is gonna rock a party, I don’t care if it’s an 8-track! I’ll find a way!”

Other DJs affirmed this sentiment, in line with Jeannie Hopper’s comments above. E-man laughed, “I like CDJs because...well, you can play CDs!” Some cited the ability to make playlists and burn customized playlists on CDs, which helped to curate the music for a gig. In addition, because CDs

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<sup>136</sup> Bernardo Attias, *DJ Culture in the Mix: Power, Technology, and Social Change in Electronic Dance Music*. (New York and London: Bloomsbury, 2013), 24.

lighter and easier to transport, DJs could carry a wider variety of music with them than using vinyl. According to OBaH, “I was so happy when the CD-J became the norm. It saved my back, literally. I could carry all my music so easily, just one bag. I also think I started playing different kinds of music, maybe because I could bring more with me. I experimented and mixed up genres more than I had with my records. In fact, I still use CD-Js a lot, but now I don’t even bring CDs, just my thumb drives.”

The CD-J was both a physical shift to using different materials and becoming more comfortable with the differences between analog and digital playback, as well as a mental shift in the work of the DJ. Was tapping a looping button to repeat a song segment cheating? Could DJs scratch as well if using CDs? These questions permeated the scene, with few certain answers. Ruckus recalls his initial transition with a smile, “I didn’t *trust* the CD player at first, but I used it. I probably didn’t even maximize the possibilities it gave me, but it’s because it didn’t really matter. The CD turntable was a vehicle and only a vehicle for playing CDs...it really was not an instrument the way a turntable was to me early on.”

The equipment shift happened fairly quickly, though. By 2003, most venues made sure to have CD turntables in addition to vinyl turntables. Alejandro Torio, a promoter who worked extensively throughout New York City in the 1990s and 2000s, remembers the first time a DJ demanded to play on CDs in 1999:

All we could do was connect a DiscMan through an auxiliary cable and hope that it sounded alright on the club's sound system. We just had not had the request before and I was not going to go out and buy a brand new CDJ, which cost like almost \$1,000 at the time. It was a total disaster, the thing kept skipping and eventually he stormed out, and luckily the other DJs had vinyl and stepped in. But after that, when we booked a show with venues, we always asked about the equipment — and I would say within two years of that incident everyone had CDJs and about half of our DJs were using CDs in some way, if not for their full sets then at least for some of their performance.

As a gateway drug, Pioneer CDJs provided the first step away from vinyl and towards digital DJing. They closely mimicked the functionality of a more traditional DJ setup, particularly given the precision of the top platter that approximated a record player's tactility. At his record "firesale," Ruckus discussed the rise of the CD-J with one of the buyers, a former DJ who had never used CDs. "You don't understand, man, it really didn't feel that different. Still had my mixer, still could scratch and beat juggle. But once that break with vinyl started....well....it was over..." The buyer heaved a crate of records up and nodded, "yup, you can say that again." Ruckus seemed equal parts nostalgic and defensive as he reminisced about that first break with vinyl. Yet, as soon as the buyer left and he surveyed the new space in his living room, he smiled, "Gotta keep moving on and get with the future!"

In a musical practice and a form of artistic expression so deeply tied to its original instruments — vinyl and turntables — the transition to new media and digital formats was often erratic, contested, and today remains incomplete.

The cost of purchasing new equipment, the time needed to learn how to use the gear, and the functionality and authenticity of older tools, all impacted the initial wave of digitized DJing. And yet, with the first dose of digital firmly in place by the end of the 1990s and with the concurrent rise in personal computers and laptops, it was not long before the CD gave way to the mp3 and the rise of digital vinyl simulation.

## **Phase 2: Simulated Vinyl Systems**

“Hell yeah I remember my first time!” E-Man shared. “It was December 2001. I got my hands on a copy of Final Scratch, popped that baby on my laptop, fiddled around with my setup for a while connecting cables with the equipment that got the computer talking with the records, and got to playing my music from my computer on my turntables.”

“It was crazy,” Eman continued. “It was pretty mind-blowing, to not be using vinyl, at least in the traditional way. It was exciting and weird. Kinda crazy that was over ten years ago...So much has changed, it’s almost like the real thing now. Now, actually, you’ve got like a hundred different options of gear to use, one more advanced than the next. A basic computer almost seems old school!” He continued in more detail, explaining that the computer made it easier for him to beatmatch songs and to remix songs in more innovative ways, some of the core skills of DJing. “I just feel like my DJing is a little better with the computer programs and the digital gear. Don’t get me

wrong, I could rock it with just vinyl, but I get to do a lot more with the digital stuff. It's freeing."

It's 11:30pm on that same Saturday night mentioned earlier, and E-man finally has the packed dance floor he anticipated when he showed up for work. He uses a laptop loaded with Serato Scratch Live, a DVS system that plugs directly into a high-end Rane mixer - no interface necessary - and connects to two vinyl turntables and two CD turntables, as well as a MIDI controller. Recall that E-man arrived to set up and do a quick sound check at 9:30pm carrying only a small backpack with his computer, a set of special timecoded records, a pair of needles and his headphones. It was a far cry from the days of lugging multiple crates of records in several trips to a venue simply to be able to make it through a six-hour set. At the height of the night, he mixes songs quickly, sometimes only playing 15-20 seconds of a track before flipping to the next hit. On the computer the screen, he drags songs from his vast collection to the virtual turntables, manages colorful tabs with pre-programmed cue points, throws in effects and loops sounds with the quick touch of a button, and eyes the rainbow of soundwaves scrolling across the window to help him beatmatch more quickly and smoothly.

E-Man DJs 3-4 times per week and supports himself almost entirely through his music gigs. He was successful as a vinyl DJ, but reports he's "able to DJ longer now, definitely more often, and until I'm a lot older" because of DVS. "I download music, no more long trips digging through record store



crates. It's cheaper, and I can get music for free from websites like Soundcloud and Bandcamp. And of course, it's way lighter and easier to travel with a laptop than with a couple hundred records." This lighter-faster argument comes up often, and has been cited by many others who have conducted interview-based and ethnographic work to write about changes in DJ technologies.<sup>137</sup> Travel ease is particularly important; when a DJ has multiple gigs each week, and especially if he or she has to fly to a gig, baggage bulk and mobility are central issues. The embrace of Digital Vinyl Simulation was often tied to practical concerns, although similar to the CDJ, the development of its format and interface – namely its allegiance to turntables and traditional DJ setups – were of central importance.

### *A Brief History*

Nipping at the heels of the CDJs described earlier, unrelated startups based in The Netherlands and New Zealand developed digital DJing software to facilitate Digital Vinyl Simulation (DVS), a technological innovation that marked a critical shift in the history of DJing in the late 90s and early 2000s.

Final Scratch was the first system to hit the market, developed by the small Amsterdam-based company N2IT. While it was the first to make a commercial mark, different claims about the birth of DVS circulate and hotly

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<sup>137</sup> Attias, et al, 2013; Katz, 2012; Ed Montano, 2010. "How do you know he's not playing Pac Man while he's supposed to be DJing?": Technology, formats, and the digital future of DJ culture," *Popular Music*. (29)3: 397-416.

contest its origins.<sup>138</sup> Backstabbing patent claims and rival scientific discoveries aside, in 1998 N2IT created the prototype of FinalScratch for BeOS, a now obsolete computer operating system, and debuted it at the COMDEX music conference in Las Vegas that year. Soon thereafter, electronics giant Stanton Magnetics purchased FinalScratch from N2IT and released the official Version 1.0 in 2002 at the winter National Association of Music Merchants conference. Since 2002, FinalScratch was plagued with troubles, including its ties to Linux operating systems and a short-lived partnership to develop user interface software with tech company Native Instruments that ended in a bitter dispute and lawsuit in 2007.

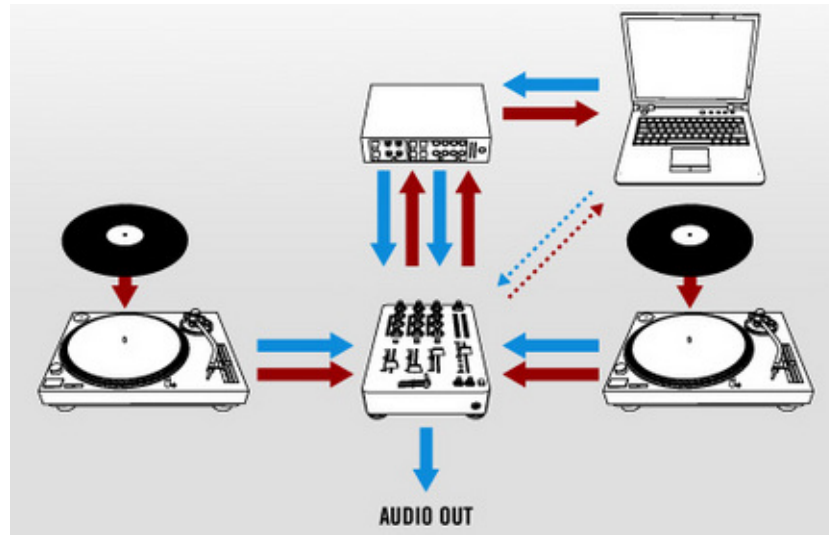
FinalScratch was a notable but ultimately relatively low profile player in the digital DJing market. Arising around the same time Serato, a company based in New Zealand, created its own DVS audio software for DJs and partnered with Rane, a Seattle manufacturer of high-end DJ mixers and sound equipment, to produce the hardware interface for turntables. Based on algorithms similar to that of FinalScratch, the Scratch Live software worked by reading timecode pressed onto vinyl records, filtered by a control tone based on a resonating frequency with multiple position indicators. In other words, the

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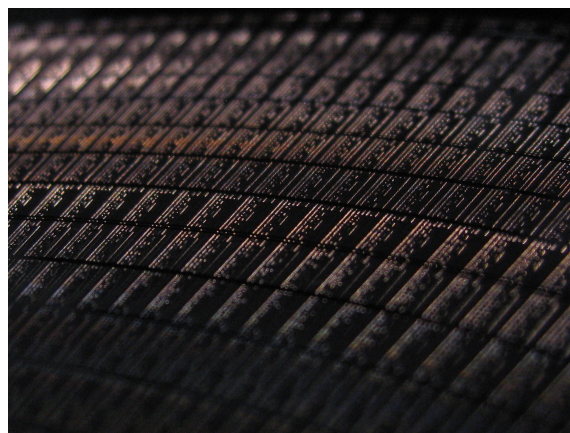
<sup>138</sup> Peter Kirn, "Meet the Digital Vinyl Systems that Predated N2IT's Patent," *Create Digital Music website*, December 14, 2009. Accessed online at <http://createdigitalmusic.com/2009/12/meet-the-digital-vinyl-systems-that-predated-n2its-patent/>. See also the Serato website "About" section, accessible online at <https://serato.com/about>, as well as contentious claims by Steve Carroll in "Who Invented Digital Vinyl," a 2010 website accessed at <http://who-invented-digital-vinyl.co.uk/>. Bernardo Attias a summary account and analysis in *DJ Culture in the Mix: Power, Technology, and Social Change in Electronic Dance Music*. (New York and London: Bloomsbury, 2013).

tone pressed on the record communicates needle position, playback direction, and speed in very sophisticated and precise ways.

According to interviews with Rane and Serato staff in 2013, their goal was to create an “extremely reliable and user-friendly system that was responsive and deeply connected to the needs of DJs.” With DVS, the control records look and feel exactly like 12” records and can be played on traditional turntables using regular needles — so a DJ’s basic setup can stay the same, as long as they add in a computer and DVS interface. The control records are imprinted with tiny pieces of timecode data and a pitch tone that describes the needle’s precise location on the record, as well as the speed and direction of playback. The needle sends this information through an interface either in the mixer or to an external device linked from the mixer to the computer, which maps it onto a digital music file the DJ selects from their computer. The software interface creates “Crates”, or folders for DJs to organize their music, and is driven by two virtual turntables on the screen, onto which the DJ drags songs. As the actual control record spins, so does the virtual record on the computer screen, which also tells the user information on remaining time, playback speed. And yet these are only the most basic functions of the programs, which also include tools to create loops, tag and break up songs, add effects, and more.



**Image 3.4: Digital Vinyl Simulation System Diagram**



**Image 3.5: Closeup of timecode record**

In 2004, Serato and Rane inked their first partnership to create and commercialize DVS software-hardware packages. Two years later, 2006 marks the “year it all changed.” That is the year at which just about every DJ I spoke with converted to some kind of digital-oriented system. There were earlier adopters, like Boon and others who switched to non-vinyl rigs prior to

2006. But by the middle of the first decade of the 21<sup>st</sup> century, computer DJ systems – in particular DVS – reached their tipping point and became widely used.

Like the CDJ in the early 2000s, DVS systems have been exceptionally well received by professional and veteran DJs because, “a vinyl record was the ultimate control surface for manipulating the playback of audio, as it was a tried and tested interface, and was extremely tactile and intuitive.”<sup>139</sup> Overall, it has been DVS’ ability to balance a sense of tradition to turntable setups with an easy-to-use computer system that has made it an ideal bridge between analog and computer-based setups. As Attias describes it, “the laptop crept into mainstream DJ culture almost surreptitiously through the hip-hop scene thanks to the advent of the Digital Vinyl System (DVS).”<sup>140</sup> I would argue it was not a surreptitious creep but a well-engineered and planned takeover by a handful of companies and artists who understood the central role of technology in music, the need for a digital shift in DJing, and the importance of maintaining a connection with vinyl in the first wave of computer-based DJ programs.

39 of the 78 DJs I interviewed had used or purchased a DVS system by 2006, and by 2010 the number was up to 76. According to E-man, “it caught quick, and we all jumped on. My homies and I would trade hard drives and

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<sup>139</sup> Chris Bauer, “The Spacedeck Project,” 1998 and 2009, accessed online at <http://www.bauerindustries.com/the-spacedeck-project/>

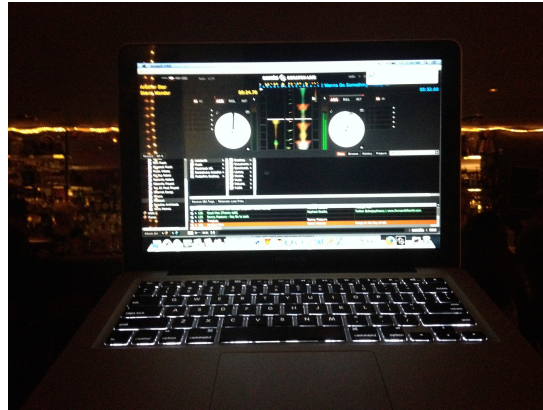
<sup>140</sup> Attias, 25.

just like that, bam, you'd have 4,000 new tracks in your collection to play." In most cases, the conversion to DVS was tied to the rise of the digital audio file. Sake-1 notes, "it took me just a few weeks to build up a solid digital music collection. Once I had that, and realized how easy it was to get music online, it was like....why not get Serato?" Playing a song was as easy as dragging and dropping it onto one of the virtual turntables spinning on the screen. The control records had the exact same touch and feel as regular vinyl, and were usable on any turntable so long as it was hooked up via interface to DVS software like Serato or Traktor.

Scratch Live also offered even more features than CD-Js. E-man elaborates,

I have all my songs BPM-ed and organized in multiple crates, and I can rock doubles by just dragging the same song onto both records. I put cue points on all my songs to mark different breakdowns and sections, which allows me to sample quickly, change tracks easier, and just read my music better. And then I sometimes use sync, which kinda automatically matches up two tracks, so it is a little easier to beat match. I definitely feel like a better DJ.

DVS software also read the song's soundwaves, displaying them on the computer screen in color code as a visual aid.



**Image 3.6: Serato DVS Software on Laptop Screen**



**Image 3.7: Closeup of Serato DVS Software soundwaves and cue points**

Macoe, a San Diego DJ who started performing in 2008, shared that she often mixes visually instead of in her headphones – the standard way of listening to and matching beats between two songs. “I can look at the soundwaves and see when the downbeats sync up,” she describes, “and then I speed up or slow down the song depending on what they look like.” She adds, “I know a few people, DJs who are newer and learned exclusively on Serato, who mix visually like that instead of in the headphones.”

The approach to beatmatching is different, but soundwise, the result is

remarkably similar. Listening to Macoe and her DJ partners at a gig one Thursday evening in San Diego, her performance was marked by the same flow you would hear in almost any club or bar – songs well-matched with similar beats, flowing into each other, layered with just enough difference to signal they were not the same song. In these moments, I forced myself to listen to a live DJ performance without looking at the DJ booth and assessing every piece of equipment. The experience of the attendee does not necessarily change based on the equipment being used by the performer; in fact many attendees I casually conversed with while conducting field work were fairly indifferent to the type of tools the DJs were using. One dancer told me, “as long as I like the music, as long as they’re playing with some skill and originality, I don’t care what they use.”

Music venues began installing computer stands and even Serato Scratch Live-specific hardware so that DJs would not have to bring their own DVS setup. Alejandro Torio recalls that transition, as well, remarking, “and suddenly, we had so many DJs coming in with all these cords and wires and cables, all using Serato. So we just got a mixer that had Serato installed inside it, all you needed to do was plug your turntable in. We figured it was a nice thing to do for the DJs, and easier for us, too.” The three-year period from 2006 to 2009 represents a time when DJs became more comfortable with digital-analog combination setups, learning the software functions and experimenting with the possibilities these new technologies offered. The



laptop has become a common fixture in any DJ performance; in fact, it is rare to go to a club or venue with a DJ where the characteristic glow of a screen or the faint outline of the Apple insignia doesn't subtly frame the DJ booth. We owe DVS systems for making this transition so expansive and commonplace.

Overall, the creation and refinement of DVS – as with CDJs – aimed to enhance an experience that honored the conventions around – and demand for - vinyl while allowing for the convenience of digital, portable media. These “gateway drugs” and “game changers” presented a huge new range of skills and techniques for DJs to master, as well as massive digital music collections to coordinate. They laid the foundation for the third phase in digital DJing, what I will call here, in oversimplified terminology, “button-pushing.”

### **Phase 3: Button-Pushing**



**Image 3.8.: Traktor Kontrol F1, a button-based DJ controller**

If CDJs and DVS systems prioritized merging the tradition of vinyl and

turntables with the convenience of digital audio formats, the new waves of controllers and software seek to remove the role of the turntable entirely.

Many DJs are thrilled with these new products, full of buttons and knobs and blinking lights. Controllers mimic the function of the turntable in a DVS setup, but displace records with dials, buttons, pads, and tablets. The image here features the Traktor Kontrol F1, an all-digital controller that uses pads, buttons, faders, and knobs to control the flow of sound from a computer input. The appeal of these controllers is that they completely eliminate the need for vinyl and its accessories – no turntables necessary, no special control records, no needles. For many, this is a welcome transition. As one online review celebrates, “Controllers in particular are responsible for bringing the craft closer to the masses: they're bedroom-friendly, full of gadgetry and they bring the time honored two-decks-and-a-mixer set up into the 21st century.”<sup>141</sup>

In other words, there is no longer the need for vinyl or anything simulating vinyl at all. If 2006 saw the tipping point to simulated vinyl, 2014 may well be the moment that swayed DJs to no vinyl. DJ Lady B, mentioned above, who played her first professional gig at a trendy San Diego restaurant, shrugs at the idea:

I never bought records in the first place! But I loved the idea of DJing and making my own sounds out of other people's music, and I had a lot of music on my computer, so I downloaded a few programs I could use on my iPad. Once I got the hang of

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<sup>141</sup> James Trew, “Native Instruments Traktor Kontrol Review,” *Engadget*. November 9, 2011. Accessed online at <http://www.engadget.com/2011/11/09/native-instruments-traktor-kontrol-s2-review/>

it, I started mixing with other equipment. But why would I ever try vinyl? I don't need to.

Lady B is a classically trained cellist who happened to stumble into and fall in love with electronic music. After that first gig, where she made \$200 and was invited back to play every Friday evening, she began exploring different types of DJ equipment and software – none of which used vinyl or turntables or involved needing a mixer. In fact, she later transitioned to Ableton Live, a computer-based music software for composing and arranging that has been adopted by DJs as a way to sequence and mix songs in live performances.

According to Lady B,

I still call myself a DJ. But Ableton speaks to the musician in me, and I can do more with the program than I can with just normal controllers and gear. I think I can make more complex arrangements, have more control over how I remix music, and I become a more interesting musician. But instead of turntables, my instruments are this software, and my computer, and my music files.

Lady B shares that she chose Ableton because a friend was an expert *Ninja* – what the company calls those users who get specific training to then go out and teach the program to others. She had never been tied to turntables or records, and was comfortable using her computer and other digital instruments when performing. Therefore, it was a matter of investing the time to learn the software, with help from her expert friend. She also notes that, “as a former cellist, I think I find the computer enables me to do more of my own unique instrumentation than the more standard controllers or virtual DJ

programs.”

Whether or not musical training and background determine what instruments DJs chose is not clear; however, it is certainly apparent that in this third phase, the equipment you use has very little bearing on whether or not you can call yourself a DJ. In addition, many are attracted to the new tools and equipment because it expands their ability to DJ in more complex and different ways.

In 2012, a debate erupted in the press over these so-called “Button Pushers,” when outspoken dance producer (and DJ) Deadmau5 (real name Joel Zimmerman) accused both himself and other similar performers of doing little more than “pressing play” on stage. The “We All Hit Play” controversy emerged out of a *Rolling Stone* article in which Zimmerman belittled electronic dance music, a genre whose performers make hundreds of thousands of dollars in one night but often – according to Zimmerman – do little more than press play in a computer program.<sup>142</sup> Because Ableton and similar software can automate mixing, live performers can work out many kinks in advance – programming the computer on when and how to sync songs, when to add effects, and even what songs to play in what order. What it boils down to, for skeptics and even for performers themselves, is the artistry and skill of “button pushing” in an era where the demand for DJs and the electronic music they play has exploded.

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<sup>142</sup> “The Rise of Deadmau5,” in *Rolling Stone*, June 20, 2012.

The debate rippled out into social media, with responses from some of the world's top-paid DJs and electronic producers, who argued about the meaning of "live performance" ("live doesn't mean anything anymore," according to A-Trak), and the definition of work ("we have six CD players and four hands, it takes a lot" defended Swedish House Mafia).<sup>143</sup> It hit a nerve that continues to cause controversy in DJ scenes on more local levels and across all genres, directly tied to the rise of entirely digital DJ setups. What is the work of the DJ? What makes an authentic DJ?

Ultimately, the Button Pushing debate engaged a number of prominent DJs in conversations around their work. It revealed the number of hours and intensity of preparation that goes into planning and programming their digital sets. The pre-production of live performance can take days, even weeks, to create the multiple-hour sets and complex audio-visual arrangements attendees have come to expect. While the DJing itself may look like little more than live button-pushing, it obscures the time and effort invested in planning the performance, and the sophisticated understanding of complex musical software and DJ programs that certainly goes beyond pushing play.

While many defend digital DJing's complexity, its equivalence to the authentic work of its analog and turntable-driven predecessors, others seek to

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<sup>143</sup> The debate sprawled across multiple social media sites and online blogs, although several pieces attempted to summarize the many comments on the topic, including Ean Golden's "Is Deadmau5 right? The 'We All Hit Play' Debate," on *DJ Tech Tools* website, July 2, 2012. Accessible online at <http://djtechtools.com/2012/07/02/is-deadmau5-right-the-we-all-hit-play-debate/>

celebrate its ease and simplicity. The Pokket Mixer aims to allow anyone to blend music and DJ from their phones, while DJ Mouse purports to facilitate scratching and beat juggling with just a few clicks of one hand. These are just two of dozens of slightly confusing and creatively dysfunctional DJ tools designed to capitalize on the growing market for DJ products.



Image 3.9: DJ Mouse Advertisement



Image 3.10: PokketMixer website

DJ technologies promise to simultaneously make it possible for anyone to become a DJ *and* to dramatically enhance the performance capabilities of experts and professionals. Many commercially-marketed products place a dual emphasis on instant gratification (“plug play mix and rock!”) and digital sophistication (specific references to technical enhancements and features for expert users). The two processes are often in tension with one another, vying for simplicity to cater to newbies while also highlighting complicated functions made possible by well-designed digital programming.

The term “Plug + Play” encapsulates the priorities of many of the digital DJ technologies on the market - mixers, controllers, digital vinyl systems, computer software, smart phone and tablet applications, among others. They all seek to make DJing seem as easy as “plugging in”, responding to shifts in digital and computing tools in other areas of life, such as mobile phones and quickstart laptops. Yet Plug + Play obscures the complexity of designing and implementing these machines, and the level of engineering sophistication and artistic dedication it takes to truly master the many music-making possibilities that new technologies open.

Of course, those tools that oversimplify DJing to “plug + play” and “button-pushing,” end up being the least successful and accepted forms of DJing technology in professional communities. It is challenging to attach concrete data to the market success of various products and the companies that make them: most companies producing DJ software and hardware are

privately held; representatives from Serato, Native Instruments, Ableton, Rane, Numark, and Vestax all refused to share revenues or sales information for their DJ-related products. Those companies that are public, such as large electronics firm Pioneer, do not differentiate between products and would not share specific information on sales of DJ-related products like their CD-J line or controllers. Furthermore, the most dominant companies invest very little in direct advertising and marketing, meaning there are few or no advertisements or commercials in any format (print, digital, or TV) for virtual DJ and digital DJ products.

Instead, these companies have invested in product placement and celebrity sponsorship. The Rane headquarters, nestled in a sleepy suburb about 45 minutes outside of Seattle, decorates its walls with autographed posters and photographs from the hundreds of celebrity DJs who use and promote its products. According to their DJ outreach coordinator, Chad Simer, they directly contact and cultivate relationships with some of the most well-known DJs in the world.

It started off in the 1990s, when we worked with a few New York hip-hop DJs, Sugar Cuts and Jazzy Jay, who helped us create and test the TTM 56 mixer. We took their input seriously and incorporated it back into the design. And so when it hit the market, everyone knew it was a DJ-approved mixer and it had more credibility...We work with dozens of DJs around the world now, sometimes to get input on our products but mostly to promote what we make and raise our profile. Having professional DJs endorse Rane ripples out into our sales to everyone.



The Rane website features profiles of seven well-known DJs from around the world, and includes a “Community” section where DJs can upload pictures of themselves using Rane equipment and describing their passion for music, DJing, and their gear. Ableton takes a similar approach, featuring a handful of stories on famous artists who use the software to perform. According to their Director of Marketing, Coleman Goughtry, “we don’t invest in advertising, per se. We work directly with artists and promote the ways they use our products. The artists themselves drive our growth. And we train people to go out into the world and train others – we call them Ninjas, the most expert users who travel their region or the world and teach other people to use Live and other Ableton products.”

Rane, Serato, Ableton, Native Instruments, Numark, Vestax, and Pioneer all focus on product placement and event sponsorship, as well. They target DJ competitions and music festivals that feature DJs, sometimes sponsoring events with a cash or in-kind donation, in exchange for banner and product placement at the event. The Native Instruments marketing contact asked to remain anonymous, but commented, “we map out electronic music events and festivals, and sometimes we even organize our own events just so we can make sure people are using our software and that our name is plastered everywhere.”

By promoting the artists who use their products, Digital DJ companies are able to maintain authority and credibility in the larger DJ community. The

“influencer” approach seems to be more effective in confronting anxieties around new media products and DJ technologies than traditional advertising. Furthermore, it underscores the fact that at the heart of technological change are people who make choices and express values about what is important to them.

The arc of digital DJing is tied to media formats (the need to be able to play CDs and mp3s), issues of practicality (travel, mobility), and – in the earlier stages – a connection to the methods and aesthetics of turntables and vinyl. It is also a reflection of the changing values and priorities of DJ communities as they adopt new techniques and adapt to digital formats. Changes in technologies, and the concomitant shifts in practices to which they are linked, occur through changes in the social, cultural, and economic worlds of DJs.

To summarize, the CD-J and Digital Vinyl Systems both emphasized the role of the platter and maintained the centrality of the mixer. Both allowed DJs to replicate the two-turntables-mixer setup, and let DJs choose the degree to which they wanted to use digital features such as BPM-calculation, auto-syncing songs, creating loops and digital cue points, and adding effects. These two technologies constitute what I call the first and second phases in the transition to digital DJing, and are arguably fundamental to the adoption of subsequent digital DJ technologies. They were necessary stepping stones to screen and computer formats, and I believe that the third phase, with its more radical departure from the traditional DJ setup, would have been met with

more resistance had DJ not already been comfortable using CD and DVS formats.

While the adoption of new technologies has raised many questions around authenticity and the work of the DJ, digital DJing has also expanded practices and opportunities. The technologies have facilitated easier access to digital music and offer exciting methods of sequencing and mixing sounds that analog setups simply do not allow. In addition, the companies producing these new technologies have very carefully fostered relationships with professional artists both as a means of improving product development so that it is more in line with user needs and also as a way of influencing product adoption more broadly. In doing so, corporations have mitigated some of the anxieties around new technologies, creating products responsive to consumer needs and respectful of artistic concerns.

The progression of DJ culture, technologically speaking, has embraced the use of new formats and tools, albeit often with hesitation and with a slow learning curve. To some degree, the association of vinyl and turntables with authentic skill and artistry in DJ scenes has and continues to hold back the widespread acceptance of new technologies and digital methods of performance. Nonetheless, the trend continues to move towards more and different forms of digital DJing. What, then, happens to vinyl and the older setups?

## Chapter Four: I Love Vinyl, Vinyl Wars, and Waxing Nostalgic on Analog

It's almost midnight in downtown Manhattan on a summer evening so hot and steamy it simultaneously induces lethargy and also makes it impossible to sit still. At the club Le Poisson Rouge (LPR) a line of those energized by July's sultry nightlife snakes onto the sidewalk. It is a well-dressed and moneyed clientele, comfortable in the hippest parts of New York City and happy to pay \$10 cover charges and \$12 drinks until the club closes at 4am. They are young, of all skin tones, with dreads, afros, shaved heads, piercings, tattoos, designer jeans, polished high-heels, spotless limited edition Adidas sneakers, perhaps what Richard Florida would describe as the "creative class" core of urban revitalization. They wait in line, sometimes laughing, checking their smart phones to send a text, post an Instagram photo, add their status on Facebook: "At I Love Vinyl party! Ready to DANCE!"



**Image 4.1: DJ OP and Twilite Tone at I Love Vinyl party in New York City, Summer 2013**

Inside, OP is on the decks. He is playing a funky and lesser-known song by Kool and the Gang. The dance floor is packed, and it's as hot and sweaty as it is outside despite the venue's attempts at air conditioning. Twilite Tone gets on the mic, "welcome to I LOOOOOOVE VIIIIINYL!! You are listening to vinyl, that's right!" The crowd cheers. A massive banner hanging behind the DJ booth proudly announces, "**I Love Vinyl: No Laptops Since 2009.**" Two camera-men are filming the event. Five other DJs flank OP as he plays. Excited dancers rush the performance area as the song peaks. It's a scene, a spectacle, and it's all in the name of vinyl.

Ten years ago, this type of event would not have been anything special. DJs playing on turntables using vinyl records was a commonplace mode of entertainment in clubs and bars throughout most cities in the United States. Vinyl was appreciated and often celebrated but mainly it was functional. It was the tool with which DJs could perform their work, the task of providing music to an audience. And, along with a pair of turntables, it was the only means of doing this work until very recently. While performance DJing – mixing music on two turntables for an audience in a public or commercial space - began in the 1970s, it was not until the late 1990s that DJs began to radically modify the vinyl-turntables-and-mixer setup that had long dominated the musical practice. A detailed discussion of changes in DJ technologies is the focus of the previous chapter. The rise of digital DJing laid the foundation for vinyl's virtual

“death” and subsequent resurrection several years later in the form of events, parties, and media coverage.

*I Love Vinyl* is one of the longer-running all-vinyl parties, but it is certainly not unique in its branding. All-vinyl parties in Atlanta, Austin, Honolulu, Houston, San Diego, Seattle, and cities in between began popping up in 2010 and this trend only seems to be growing. In an age of digital and computer DJing, many DJs are choosing to prioritize vinyl as a means of legitimizing their professional work and artistic voice. Vinyl DJs cite a number of intersecting reasons to justify their rejection (even if usually temporary) of digital formats, including sound fidelity, sensory fullness, and a commitment to tradition and history.

Vinyl’s “resurgence” became a buzz in 2011 when vinyl sales hit their highest peak since 1997 and its comeback really made headlines in 2013, when Daft Punk’s *Random Access Memories* sold more than 19,000 vinyl copies in its first week. Vinyl sales rose 36% from 2011 to 2012, and another 11% between 2012 and 2013. Record Store Day, conceived by independent music store owners in 2007, takes place on the third Saturday in April each year and boasts increasing vinyl sales and media attention. While still a niche market, vinyl sales often remain larger than the sum of their dollars, occupying a symbolic role in the music industry. Vinyl persists: as tape cassettes fade in most parts of the world, 8 tracks never really caught on, and CD sales are starting to dwindle, vinyl seems to be the format that won’t go away. A 2013

*Christian Science Monitor* editorial announced triumphantly, “analog lives,” and continued the format gives you, “something that leaves a mark, a half a pound of vinyl that says, ‘This music exists.’...Vinyl becomes personal in a way that digital music never does.”<sup>144</sup> This perspective illustrates the broader phenomenon of analog culture and a technostalgia/analog fetishism that does find its way into the all-vinyl DJ scene. However, what emerges in conversations with and observations of performance DJs is less fetish or obsession, and more a measured, thoughtful dedication to a format in a period of extreme artistic flux.

But let’s go back to that hot summer night. *I Love Vinyl* began in 2009, when founder Ben Goldfarb (aka DJ Scribe) reached out to a few different DJs he admired to see if they had any interest in collaborating on an all-vinyl party. The impetus came from a simple desire: to play records. An avid and careful music collector since the 1980s, and a DJ since the 1990s, DJ Scribe boasts an impressive 10,000 record collection. Yet for two solid years, from about 2007 through 2009, he had switched to DJing solely using Serato, the digital vinyl simulation interface that only required a laptop and an MP3 collection. Scribe remarked, “I had stopped playing records. I had stopped buying records. I had stopped even having the urge to look if I passed by someone with a box of records on the street. I just wasn’t using them, so I lost my

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<sup>144</sup> Jim Sollisch, “The Resurgence of Vinyl Records: Why Analog Lives On.” *Christian Science Monitor*, April 26, 2013.

digging instinct. At the time, I wasn't really aware that I missed it."<sup>145</sup> He goes on to describe that transition as becoming a "lazy DJ," who avoided the effort of having to carry heavy, cumbersome bags of records to gigs.

Yet on a rare occasion when he was hired to do a shorter, hour-long performance, Scribe decided to bring vinyl because he only needed enough to fill 60 minutes and therefore the physical exertion was not as demanding. "As soon as I started going through the records, it really hit me how much I missed them. Even just touching them, looking at them. I just felt that these were familiar friends and I had forgotten how much value they had. Or maybe I had taken them for granted because I had never taken the time without them" (Interview July 23, 2013). And from that moment, a party was born.

Scribe's 10,000 records fill up an entire room in his apartment on Manhattan's Upper West Side. They rise on sturdy shelves up to the ceiling and encircle a well-organized DJ and music production setup. Each has its own plastic sleeve protecting it from dust and scratches and is nestled neatly into a 14x12-inch cube. The titles span across genres and decades, from 1940s blues and jazz to 1990s independent hip hop. Scanning the collection, it is impossible to calculate the number of hours and amount of money that Scribe spent acquiring each record. What is clear, however, is how massive and physically present the music feels in relation to the space of Scribe's apartment; it is hard to focus on anything else but the vinyl records when

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<sup>145</sup> Interview with author, July 2013.





**Image 4.2: One wall of record shelves in DJ Scribe's apartment**

sitting in the room. It is also hard to believe they went unused for two full years. I repeated this experience dozens of times in my research, sitting in the homes and studios of working DJs, observing record collections that spanned multiple rooms, sprawled onto the floor, and towered in the thousands in organized cases.

*I Love Vinyl*, like other all-vinyl parties, was Scribe creating the opportunity to play records again. He assembled a collective of six different DJs, booked a space in a trendy downtown New York neighborhood, and began marketing the party. While the other DJs who collaborate on the event have different relationships with vinyl, Scribe reflects, “we all do truly *love* vinyl. We love our records and we love playing records.” Case in point is the *I Love Vinyl* self-produced video featured on the party’s website, a three-minute comical documentary that showcases the six DJs caressing records, gently

picking them out of the trash, courageously hauling them by the case onto the subway en route to a gig, and cleaning them like professional archivists, all to the Little Milton song, “That’s What Love Will Make You Do.”

Other all-vinyl parties in cities around the United States share similar origin stories, in that they emerge as mediums to play analog records again in an era of digital domination are often considered “labors” of love by their creators. *The 45 Sessions* founder DJ Platur notes, “I just wanted a place to be able to play the stuff I was collecting, nothing more than that.”<sup>146</sup> *The 45 Sessions* is a San Francisco Bay Area-based event that not only markets itself as all-vinyl, but also requires DJs play 45s, the 7-inch single records that were introduced in 1949, became popular in the 1950s and 60s, and remain a symbol of musical connoisseurship in the present. Given that they are smaller and spin faster than a 33 1/3 RPM 12-inch record, as well as the fact that they were produced in smaller quantities, 45s are often seen as the collector’s prize, treasures that are more difficult to track down and more challenging to play. Another popular 45s party in New York City, Mobile Mondays, calls itself a “true music movement. Our mission is to keep real music alive, celebrate and preserve DJ culture.”<sup>147</sup> They do this by making vinyl the centerpiece of their event, not merely a format for playing music but more importantly a symbol of what is the authentic, real, and “true vibe and soul” of nightlife.<sup>148</sup>

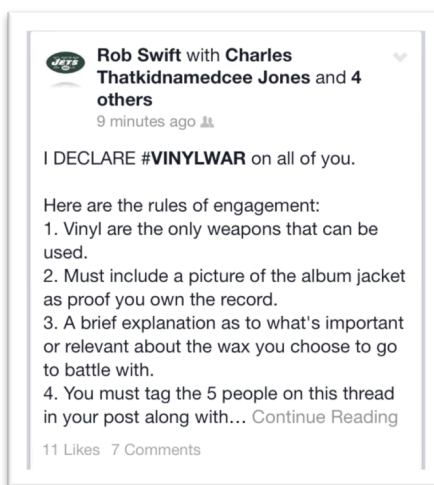
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<sup>146</sup> Interview with author, October 2013

<sup>147</sup> E-mail with author, October 15 2013

<sup>148</sup> Ibid

In the midst of these celebratory parties, other DJs are also taking to what they call “vinyl wars.” In the literal sense, this refers to friendly music collection competitions on social media sites like Facebook, Instagram, and Twitter. DJs challenge each other to select a small assortment of valuable albums or singles from their archives, post photos for proof that they own the records, and then write an explanation as to why these are their “battle” sounds, or music selections that are better than other DJs’. This spirit of boasting and musical taste combines with an emphasis on vinyl as format, and captures yet another element of the all-vinyl turn in the transition to digital DJing: a contentious confrontation with new formats, technologies, and methods of collecting and playing music. A battle between vinyl and digital that manifests via the assertion of records as weapons to preserve a sense of history and an attachment to form and sound, just as this history, format, and sound becomes less and less necessary and relevant in the present DJ era.



**Image 4.3: Rob Swift’s “Vinyl War” post on Facebook, Jan 2014**

The market and need for these all-vinyl engagements is notable, an important recent trend in a moment of transition from analog to digital DJ instruments. Are they glorified show-and-tells for aging DJs who can't fully jump on the digital train? Are they critical spaces to showcase connoisseurship and authenticity/professionalism in an era of "everyone's a DJ"? Are they important engagements with materials and equipment in response to button- and screen-driven technologies that reveal processes by which people adopt and adapt to media? Are they unequivocally retro? Undeniably cutting edge? The answer lies in a mix of all the above.

While the crowd seems to engage with the question of format on an as-needed basis – in other words, not much at all – the philosophy and drive that motivates the people organizing these events is strictly tied to format. Exploring the meaning of this difference and the importance of collecting vinyl as a format for DJs in the digital age is a key way of examining processes of how a community negotiates rapid changes in its culture and reshapes the meaning of a format in a moment of its supposed obsolescence.

### **Vinyl: Return of the Object**

In the context of DJing, recorded music is the "basis for creative individual musical expression."<sup>149</sup> Kai Fitkenscher's work on underground

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<sup>149</sup> Kai Fikentscher, *You Better Work! Underground Dance Music in New York City*. (Hanover, NH: Wesleyan University Press, 2000), 34.

dance music scenes in New York at the end of the 20<sup>th</sup> century underscores the role of vinyl, and particularly the 12-inch single, in the work – and art – of DJing. Despite its centrality in shaping the craft of dance music performance and DJing, in the early 1990s some predicted (according to Kai Fikentscher), “the vinyl record is going to be the black-and-white television set of the audio world.” Twenty years after this prediction, and despite the influx of so many digital technologies and formats, vinyl still persists. The reasons for vinyl’s resurgence include the importance of the physical properties of the record and the attachment users and DJs feel to its “thingness” and “objecthood.” A vinyl disc’s tangibility has long defined its significance; in the early 1900s its physicality sparked fundamental changes in the experience of music.<sup>150</sup> In the 1970s, Jacques Attali critiqued “the stockpiling of music” as a negative consequence of recorded sound; yet his preoccupation with this impulse to collect music certainly did not foresee the DJ-led movement to compose new sounds using these recorded stockpiles.

The question of what happens to music once you record it, once it becomes a “thing”, is at the core of the discussion on modernity’s impact on culture. These early conversations were concerned with the commodification of art, the degradation that might result from reproduction, and the alienating effects of mediation. An analysis of vinyl use among DJs in the 2010s both celebrates and complicates these concerns. Music is and has long been a

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<sup>150</sup> Mark Katz, *Groove Music: The Art and Culture of the Hip-Hop DJ*. (New York: Oxford University Press, 2012), 12.

thing and it is this relationship with recorded sound that makes the work of the DJ possible. Despite compelling work that argues that digital media are every bit as material as their analog counterparts, conversations with and observations of professional DJs reveal that many still make distinctions between digital and analog music based on evaluations of physical materiality, or the sheer size and space of things.<sup>151</sup> They talk about and use digital formats such as mp3s differently than vinyl records, drawing fundamental differences between analog and digital formats that rely on sensory perceptions, history and memory, and group practices. As DJ Eddyplenty reflects in a conversation about vinyl, “It feels more real. It feels tangible. It feels more permanent. It represents all the work you put in. Whereas digital online it’s not tangible it’s not a thing you can touch.”<sup>152</sup>

The following sections describe how DJs evaluate vinyl, give it meaning, and make it relevant in a digital era, focusing on interviews and event observations between 2010 and 2013. I begin with a focus on vinyl’s sensory qualities. The warmth, richness, and unique *feeling* of vinyl reappears time and again in discussions with professional DJs. As Maseo, the DJ from the best-selling hip-hop group De La Soul comments, “I like the feeling of that wax. Licking my fingers so I can get that grip on the record, spin it back and

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<sup>151</sup> Most notably, Jonathan Sterne’s work addresses the materiality of digital formats the processes that shape media, in particular the mp3. *MP3: The Meaning of a Format*, (North Carolina: Duke University Press, 2012); “The Death and Life of Digital Audio,” *Interdisciplinary Science Reviews* 31:4 (December 2006): 338-348.

<sup>152</sup> Interview with author, August 2013.

cut it up...Vinyl is the essence of DJing.”<sup>153</sup> This reference to essence gestures to the way that history and memory shapes DJ practices, filling vinyl with meaning which, in turn, contributes to – and often validates - a DJ’s work. In many of my interviews with DJs, as well as narratives found in articles and literature on DJs, vinyl is precious and fundamental, a constant in a world of changing formats, shifting techniques, and complex economic forces.

### **Warm Crackles: Analog Sound and Fidelity**

In my many conversations and interviews with DJs, they cite a preoccupation with format and sound that draws on decades-old debates over the superiority of analog or digital audio. These analog vs. digital debates began in the 1980s with the rise of the CD, where analog formats were both aging and rich while high-tech digital sound was unnatural and even unmusical. They continue throughout the music industry with Neil Young’s recent unveiling of Pono, which seeks to humanize “soulless” digital music with the creation of a new format and a \$6.3 million Kickstarter campaign.<sup>154</sup> In the DJ world, these tensions are lived out in the choices professionals make about format and tools.

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<sup>153</sup> Quoted in Mark Katz, *Groove Music: The Art and Culture of the Hip-Hop DJ*. (New York: Oxford University Press, 2012), 217.

<sup>154</sup> Hans Fantel, “Sound; Debate Over Analog vs. Digital May Be Pointless,” *New York Times*, June 8, 1986. Pono Music is a recent venture promoted by Neil Young that claims to help “your soul rediscover music,” through the creation of a new high-quality audio player. Accessed online at <https://www.kickstarter.com/projects/1003614822/ponomusic-where-your-soul-rediscovers-music>

A DJ can prove his or her value and commitment to the trade through attention to a depth of sound, a sense of sonic “care” that, according to vinyl-centric DJs, digital formats do not allow. Many of the DJs I spoke with cite scientific evidence of digital sound’s fractured sonic qualities, its very structure a fatal flaw. Here, analog sound waves produce a continuous sonic experience, whereas digital files break sound into samples. By definition, you are listening to fragments of music that do not account for ambient sound, air, inflection, and the other components of white noise that help produce analog’s oft-cited “richness.” MP3s further remove sound information; their small size results from a compression that essentially discards sound extremities. Digital sound is therefore sensory deprivation, although some suggest MP3 sound files preemptively remove data that the ear would likely discard anyway.<sup>155</sup>

Bob Garcia, aka Bobbito, is a notable critic of the digital turn in DJ culture. Famous for his long-running hip-hop radio show, music journalism and residencies in many of New York’s nightclubs, he has been involved in hip-hop culture and DJing since its early years. He comments, “I appreciate vinyl for its intrinsic physical qualities . . . an analog recording will hit the width and the sound wave and it will give you that warmth.” Continuing, he argues that, “my ear appreciates that warm sound, that once in a while little crackle, that signifier that it’s wax and not so perfectly compressed.”<sup>156</sup> For so many DJs, sound is physical and music immersive. As music theorist Ken Jordan

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<sup>155</sup> “The MP3 as Cultural Artifact,” *New Media and Society* 8:5 (November 2006): 825-842.

<sup>156</sup> Interview with author, February 17, 2009



writes, “sound is inherently physical. It is a vibration, it travels through the body, and evokes a bodily response.”<sup>157</sup> Consequently, wouldn’t more sound data travel more fully through our bodies and immerse us more deeply in the musical experience?

Jeannie Hopper, a veteran DJ in New York and creator of the Liquid Sound Lounge radio show, echoes this emphasis on the physical connection between sound and bodies. She is a sound engineer by training and a sound expert by trade, so Hopper takes this stuff seriously, pondering the effects of bass on listening experience, the role of format in DJing, and the trends in technology and sonic quality. She refers to the fact that our bodies are made of more than 50% percent water. Therefore, she concludes that bass – which reverberates – has a frequency that we “simply, unequivocally feel more strongly.” She continues, “Analog recordings allow for a fuller spectrum of bass,” and therefore affect us – as listeners or dancers in a club – more powerfully.<sup>158</sup>

DJ Scribe’s perspective also draws on science and sound engineering, referring to analog audios “potential to have a full spectrum of sound that can provide an aesthetically more pleasing experience.” He admits that upbringing and exposure – i.e. what you are used to – also shape sound preferences, as evidenced in studies that reveal that youth accustomed to listening to low

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<sup>157</sup> Ken Jordan, “Stop. Hey. What’s That Sound?”, in *Sound Unbound: Sampling digital music and culture*. DJ Spooky That Subliminal Kid, ed. (Cambridge, Mass: MIT Press, 2008), 246.

<sup>158</sup> Interview with author, July 2013.

bitrate MP3s on cheap earphones in digital players prefer that tinnier, trebly sound to the analog or a higher frequency digital file. Nonetheless, Scribe believes that there is a common “best” sound that trumps specificity or cultural construction of sound taste and preference. He argues that people feel analog audio is superior to digital because “our bodies, everything in nature is vibrating at various frequencies and the more closer to a natural reproduction of something the more your body is likely to welcome it.”

Whether or not Jeannie and Scribe are *right* is beside the point. What they and other DJs reveal is the relevance of psychoacoustics in DJing and electronic music. Psychoacoustics refers to what Ken Pohlmann calls, “the real business of sound,” which “takes places between the ears.”<sup>159</sup>

Psychoacoustics emphasizes the psychological responses humans have to sound. Whereas sound itself has a physical property, our response is purely subjective and shaped by very complex and interactive factors in our brains and nervous systems. Therefore, ultimately any musical experience is subjective.<sup>160</sup> It is the subjectivity of the vinyl listening experience – and in particular vinyl playback experience – that I am interested in as a way of better understanding how objects come to acquire meanings and value (in this case vinyl) and how people engage with new and old technology based on their own subjective approaches to the musical experience. What informs the

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<sup>159</sup> Ken C. Pohlmann, *Principles of Digital Audio*, Sixth Edition. (New York: McGraw-Hill, 2011), 14.

<sup>160</sup> *Ibid*, 12-14.

aesthetic decisions and taste assessments that DJs link with sound and format in a moment of increased tension between analog and digital audio?

As paid music professionals and performers, DJs have a stake in defining fidelity and paying attention to sound quality. Many MP3 files do in fact sound much worse than an original, well preserved analog recording, so transitioning to digital audio media requires close attention to compression rates and other factors affecting distortion and clarity. Professional DJs play on large high-fidelity sound systems, not the MP3 players and lo-fi headphones on which MP3s are meant to be listened; they simply need a fuller sound. However, the paradox in all this talk of physicality and depth and better sound is that 1) most DJs admit bar and nightclub sound systems really are not all they are cracked up to be and 2) they also admit that vinyl's distortions are what they truly adore about the medium.

As DJ Domewrecka notes with regard to vinyl, "I like the dirtiness. I like the snap crackle pop. I don't like the sound to be that clean. I like the grittiness...Music wasn't made to be polished. It isn't supposed to be polished."<sup>161</sup> Domewrecka grew up in Brooklyn in the 1970s during the heyday of disco and the birth of hip-hop. He specifically references the influence of block parties and pieced-together sound systems on his aesthetics and taste. In the 1970s, DJing emerged on a block-by-block basis, with micro-local neighborhood crews vying for the best sound by rigging up

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<sup>161</sup> Interview with author, August 2013.

turntables to lampposts for power and daisy-chaining speakers together. The result was not always clean and professional, but it worked, it was loud, and “we were used to the slight distortion, we appreciated the work that went into those setups.” DJ Eddyplenty echoes that sentiment, focusing on the “surface noise you hear, it’s warmer and it has that skip, crackle. It’s sexy. Life is full of surface noises, so vinyl is closer to a living, breathing sound.” Domewrecka continues, “For me, I guess I like imperfection. I like the human quality of it. Because humans are not perfect, like records are not perfect. They are meant to have mileage on them and own those little pops and scratches. An MP3 file can’t do that.”

### **Old Friends, History, and Vinyl’s Other Tangible/Sensory Qualities**

Sound is only one of many qualities that DJs refer to when discussing the significance of vinyl. Like Domewrecka’s link between vinyl’s “pops and scratches” and the celebration of human imperfection, DJs frequently personify records. DJ Scribe’s memories of returning to his record collection after going digital for years, described earlier, emphasize a connection with the format that goes beyond sound. Referring to his records, DJ Scribe “missed them” and “felt that these were familiar friends.” He later comments, “you recognize records the way you recognize someone’s face.” What becomes clear from the repetition of this sentiment is a deep bond with the format, an attachment that reveals the passion of DJs as collectors, as well as the long-

term emotional relationship they have developed in the process of performing with records. They are invested in their collection not only because they care about records as things, but because they actively use these objects as part of their music-making and professional careers. More than simple tools, however, like nails or hammers or guitar strings, they are alive with history and personality.

Records are more-than-sound and more-than-tools because they are rich with tangibility and history, which impacts DJ performances. The process of searching for records in crates is very different from looking for songs to play on a laptop, which requires you to type a word into a search bar or scroll up and down a list of names on a computer screen. Digital searches require computer-specific reading and writing skills; in contrast, looking at vinyl, “you’re not really thinking of how their name is spelled...you’re using the visual memory part of your brain, which I assume is a different part. It’s like this - ”

DJ Scribe mimes the action of flipping through a crate of records, a combination of grabbing and fast-paced finger-flicking that done virtually is not altogether that different in style from typing on a keyboard but which clearly feels starkly different to Scribe and other DJs.



**Image 4.4: DJ Domewrecka Searching for Records at Rock & Soul**

When you see DJs parse through record crates at gigs (or at stores, record fairs, and swap meets) the skill of the search is obvious. Practiced vinyl-seekers can rapidly scan through dozens of albums in seconds, giving only the briefest pause before extracting the record of choice. They take in characteristics like the color of the label, the imagery on the cover, the design of the font, and the weight of the record itself. Yet this process of identification occurs so quickly it hardly takes much effort. I ask Scribe what he looks for when he's going through his records. "You don't look for anything," he responds, "that's the thing. It's a totally subconscious process...If they're your records, you're familiar with them and you don't have to look at them...It's the whole image, whether the image has text on it or not. You're not so much reading as you are recognizing an image."

Even this search procedure has creative value and adds to his sense of being able to perform as an artist and musician. Scribe admits, "I feel like

being in that zone...puts me in a more creative mind state and makes me a little bit more free...you're in more of a sensory sphere, less cognitive. And you're more physically engaged with records." The physicality of records add yet another dimension to their significance.

In Serato's online message boards, vinyl recalls "getting fingers dusty," "warmth," and "remembering where we came from," a tangible root grounding DJ culture in its mythologized analog history. DJ Tabu reflects, "there's a certain thrill to hearing when the needle hits the record, that little crackling."

She continues,

there is a lot of fun in the surprise when you find a record that's in mint, pristine condition and you can smell, and touch it and it has that sound on it. [Serato] takes away from the beauty of it. It's like looking at a beautiful painting but the reproduction is on a computer. You'll never get that depth of color or see the strokes of the painter.<sup>162</sup>

Tabu invokes the persistence of an artistic "aura," a notion of originality in a world of incessant reproduction. The aura of the original version is devalued in subsequent copies, which become sensory degradations and therefore less powerful tools of the DJ trade. Particularly in an era when the digital production and reproduction of almost anything is possible, the analog-digital dichotomy tends to reinforce certain musical hierarchies of taste and value.

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<sup>162</sup> Interview with author, February 18, 2009.

## **History, Memory and Vinyl**

Vinyl enthusiasts in the DJ world reveal an attachment to the history – and stories - of their artifacts that in turn impacts the nature of their performance and musicianship. Although reproductions, there is still a limited supply of records. Each individual piece of vinyl is unique in that post-recording it has been manufactured, distributed, and sold in specific sites and places. This sequence – from the machines used to wrap the record in plastic to the boxes used to ship it across the country to the hands that unwrapped it and filed it in a store – create a unique moment of history. If something happens to that particular record, it cannot be replaced. Scribe notes, “both the record itself and the cover are continually degrading, and their degradation contributes to the experience as opposed to ruining it.” The uniqueness is then enriched by the histories of ownership. The trade in used records is robust and DJs affirm that they get the majority of their collections already used, either from people selling their collections to record stores and vendors, or giving their music away in “free bins” on the street or via a grandparent’s/aunt’s/uncle’s hand-me-downs.

Sitting in his music studio, Scribe hands me a Gloria Gaynor record.

Look at that – whoever owned that record wrote on it. You can’t do that with digital files. I mean, I guess you could write in the metadata or something and someone else might see it, but it’s totally different. This is so personal, it’s someone’s handwriting. For me, records trigger more memories, the specific place and time where I got that record. You know, where I found it or bought it,



who gave it to me, or some particular time that I played it. More so than when I look through my iTunes library, I don't think it's as easy for me to associate that download, like "where did I get that." It just doesn't make a lasting impression in the same way.

What amplifies this history is the fact that DJs feel they transfer it to the crowd. While most DJs admit that the audience is probably not that aware of or concerned with format, many still emphasize a subconscious or subtle way that format still impacts experience. For example, Scribe notes, "We are holistic beings. The history adds these different layers of richness to the experience for me and that has to translate into something that is coming across. My energy is going to be different, my thoughts. It puts you in a different state of mind." He later elaborates, "The soul of the record is not some mystical thing, really. To me, records are magical. But I don't think they are literally magical. They are affected by time and space and history and I think that's what is the soul of the record, and the magic. They have all these layers of experience that digital files just don't have."

In contrast, he describes a digital file as being "outside of time – the file can be deleted and you can get a new one. If your data degrades...you can just get a new one."

Rob Swift builds on this combination of history and tangibility.

When you take the record out of the sleeve and you study the grooves, already you're starting to foster a connection with the song. You start to look at the label and read the credits and you realize that Charlie Parker appears on this record...within minutes, you have a connection to that song that goes beyond just you

playing it at a nightclub. You yourself have a connection to the song and that always makes a difference when you're playing music or when you're altering music...I really attribute that to learning on turntables. Playing music. Listening to music. Touching vinyl. There's nothing like touching a piece of vinyl or looking at a record jacket and reading the cover art and the able and where it was recorded. Now you download an MP3 and there's no real connection.

Swift continues, describing the process of selecting a vinyl record from a crate, looking at the cover art and images.

Instantly, memories come to you while you're DJing and that enhances the experience of playing music because you know you are creating memories for the audience...It's not to say that you can't create memories playing an MP3 but I think it does something to you as the music controller and DJ when you're playing vinyl. It enhances the overall set and performance. That's something that only a vinyl lover, only a person that plays records, can understand. Someone that never learned on turntables will never really comprehend what it is that I'm saying.

Bobbito further critiques digital DJing, saying it's a loss of "the whole digging experience, and having a personal relationship with the record, and knowing where the break is, and knowing when it ends. Not a computer telling you all that. And that's not nostalgia. That's pure. This is our history. It's losing a part of history." For Bobbito, then, the work of the DJ is rooted in its use of a certain kind of format and a respect for a historical connection with vinyl.

### **Vinyl and the Work of the DJ**

Conversations about the format DJs use invoke preoccupations with shifting definitions of the work of the DJ in an increasingly digital age. In other

words, changes in DJ technologies and, therefore, audio formats have forced DJs to reevaluate and redefine what it means to be a good DJ. A notable 2005 study of a message board for techno DJs in Detroit was among the first to consider the impact of digital technologies on DJ culture and labor.<sup>163</sup> Farrugia and Swiss detail the activities and gate-keeping practices that participants on the message boards discussed and allude to the “crisis” in the work of the DJ in the very first years that digital DJing software was introduced.

Since 2005, the definition of the work of the DJ has continued to change and evolve. One part of this conversation involves the sound, history, and feel of analog vinyl. Yet DJs clearly find themselves caught among very different and expanding notions of what their work means, as is evident in their comments and their performances. Nearly every single one of the DJs I interviewed predominantly used digital technology and audio formats to perform. They are keenly aware of vinyl’s shortcomings – it’s backbreaking weight, it’s prohibitive cost, it’s precarious tendency towards scratches and warps. They opt to perform with a variety of different formats and often save their record collections for special all-vinyl parties or for home entertainment. Yet time and again, they define the authentic work of the DJ by its connection with vinyl – in other words, “real” DJs own vinyl, learned how to play on

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<sup>163</sup> Rebecca Farrugia and Thomas Swiss, “Tracking the DJs: Vinyl Records, Work, and the Debate over New Technologies,” *Journal of Popular Music Studies*. (17:1), April 2005, 30-44.

turntables with records, and feel a connection to shopping in record stores, admiring cover art, and collecting obscure albums.

For example, when the digital DJing program Final Scratch debuted at the 2002 DMC DJ battle, a competition that pits the world's best turntable masters against each other, it was initially rejected based on its "inauthentic" format. As they demonstrated the new product, the crowd angrily chanted, "we want vinyl! We want vinyl!" As Katz describes, "it wasn't just that the tools of the DJ's trade were changing, but their art and their way of life were being challenged as well."<sup>164</sup> The proliferation and normalization of digital DJing technologies has been characterized by "a lowering of barriers that gave rise to the notion that anyone can be a DJ."<sup>165</sup> The growth and mainstreaming of DJing as a culture and a market are significant factors in the ways that DJs redefine and revalorize their work, in this case through the reclamation of vinyl as more authentic than other formats.

Atlanta's "All Vinyl Everything" party defines itself in contrast to the "everyman" digital DJ. In 2012, Atlanta's DJ Dibiase wanted to create a party that brought back "the good ol' days" and honored DJs who still wanted to collect and play vinyl records. He boasts, "pretty much every DJ who matters in Atlanta has come, just to play their old records." Dibiase elaborates:

You can't really do that anywhere else because nowadays you can go to the Mac store, buy your Macbook, get Serato, get a hard

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<sup>164</sup> Mark Katz, *Groove Music: The Art and Culture of the Hip-Hop DJ*. (New York: Oxford University Press, 2012), 214.

<sup>165</sup> Ibid, 215.

drive, load a thousand songs up and now you're a DJ. With this, we are giving people who still dig for records, go to record stores across the country and have collections a chance to bring them back out. The sound quality from a vinyl record is 100 times better than a compressed mp3 that you downloaded off a website. It's just a different type of feeling.

The party laments, "Everybody is a DJ now. No, seriously, anybody with enough cash to buy a decent laptop, DJ software and a hard drive that can hold enough songs is suddenly a "DJ." These days, anybody can download the latest hit off the Internet, sometimes even during a party, and voila, he's "DJ'ing."<sup>166</sup> Here we see that vinyl is more than a format, but rather a symbol of the time, effort, and professionalism that validates a DJ's work and differentiates between good and bad performers. Similarly, according to Cleveland's *Secret Soul Club* party, "in a world where your average club DJ is pressing bright buttons and moving knobs hooks up to a laptop playing Top 40s tunes, it's refreshing to witness DJs doing it the old school way and rocking a party with just records and skill."<sup>167</sup>

In addition to representing the proof that a DJ cares about his or her trade and has invested in being a well-trained and skilled musical performer, vinyl demands a different physical engagement and stage presence. Some DJs described this above in the contrast between searching for a 12-inch

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<sup>166</sup> Maurice Garland, "Where the Party At? All Vinyl Everything," *MySpace* page, September 25, 2013. Accessible online at <https://myspace.com/article/2013/09/23/all-vinyl-everything-bet-hip-hop-awards-2013>

<sup>167</sup> "5 Great All Vinyl DJ Nights Worth Checking Out," *Localeur*, May 28, 2013. Accessible online at <http://www.localeur.com/recommendations/houston/entertainment/5-great-all-vinyl-dj-nights-worth-checking-out>

record in a crate and scanning a computer for a file. At a live gig, the DJ has to move to look through crates – often turning around to access music behind him and turning his back to the dancefloor. DJ Sake-1 notes a conversation he had with DJ Shortcut, in which they concluded,

you're a magician because you play the song when you vinyl and then you turn around and you pull out another piece and you turn around again. Like a magician, like "and for my next trick." With Serato [using a laptop], you never turn around or away from the crowd. So it's the turning away that's a breakage and a moment for the DJ to reflect, how am I doing....that changes things. The reflection moments are important. It's important to have an evaluation period.<sup>168</sup>

This moment of pause, of turning away, helps DJs to perform better and think through their sets. It also changes the relationship between the DJ and audience; those in the crowd who are paying attention notice when a DJ moves and physically searches through a crate, and they will excitedly wait for the DJ to "reveal" his next record.

In my many observations of DJs playing both vinyl and digital formats, as well as from my own experience as a professional DJ, the appearance and physical gestures and movements of the DJ are different enough to warrant consideration. When using 12-inches and vinyl at gigs, DJs keep their materials apart from the playback equipment (turntables and mixer), which requires more noticeable movement. They take a few steps between the turntables and their record bags or crates. The weight of the records takes

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<sup>168</sup> Interview with author, October 2013.

more physical effort to sort than, say, typing on a computer or using a tracking pad on a laptop. Many DJs do turn around or take a step away from the crowd as they search for their next record, creating some distance between themselves and the audience. The crowd, in turn, often sneaks glances at the cases of vinyl; they see the corners of album covers sticking out at angles – the method many DJs use to track which records they have played or want to play – and can take stock of the label, color, and other markings (stickers, lines) that DJs employ to tag their music.

In contrast, digital DJs make tighter and more limited movements, working on laptops and digital controller machines. Their gaze concentrates on a computer screen, their hand and body motions tend to be smaller – the tap of a finger on a button, a swipe and click. Notably, they do not turn away from the crowd; however, many DJs with whom I spoke lamented the “glazed look” and “laptop stare” that makes them feel like they are at an office job, and some crowd members joked that they often wonder if DJs using digital equipment (especially laptops) are really updating their Facebook accounts or checking their e-mail. These comments demonstrate a fear of being less engaged with the dancers and crowd, despite the fact that digital DJs are more likely to remain face-to-face with their audiences. I will discuss their practices in depth in a later chapter, but the equipment DJs use shapes the physical differences of their performance styles. This physicality – the actual

movements DJs use to perform – is yet another factor in the valuation of what is authentic and real DJ work.

While the gestures and body movements may be slightly more exaggerated among vinyl DJs, the programming limitation when using vinyl is a recurring topic. Digital DJs carry thousands of songs with them, sometimes on flash drives that fit in their pockets, and many also download new songs to their laptops as they perform. The options are nearly infinite. In contrast, when playing vinyl, DJs are confined to use what they brought to the venue and what they can carry. This can be a few dozen records – a vast difference from thousands of MP3 files. It is not surprising this has an effect on performance style and artistic choices.

As Sake-1 explains, “with records, it’s like your gun is already loaded and you only have a few shots so you can only kill that number of bad guys.” The limitations of vinyl “can make you a better DJ because you’re forced to pull a set out of 50 of the wrong records...it makes you really have to think.” The idea that limitation enables creativity seems to be a consensus among most DJs, and ties back to the founding ethos of performance DJing. It is especially connected to the tradition of hip-hop DJs. For example, GrandWizzard Theodore, the inventor of the scratch in the early 1980s, recites, “hip-hop came from nothing. The people that created hip-hop *had* nothing. And what they did was, they created *something* from *nothing*.” Well known battle DJs Q-Bert and Shortkut echo, DJing comes from “that creativity



of trying to make something out of nothing. That's just what the whole DJ essence is about."<sup>169</sup>

Digital music's expanded access is "a gift and a curse," in DJ Center's words, "because you can get lost. It's kind of like less is more, because before what you brought was what you played and you made the most of that. Now, it's like in this ocean of music and sometimes it's like, damn, I'm lost in the sauce."<sup>170</sup> The very shift from the massive expanse of a record library to the compact cache of data files causes insecurity in a trade that has always existed in its sense of ownership of discrete objects.<sup>171</sup> Like media consumers' anxiety about the inundation of information in the internet age, DJs are experiencing the overwhelming effects of infinitely expandable music collections. In a matter of years, there is suddenly more "stuff" to play with, and it exists in an entirely different format; it is not a surprise that the transition can feel overwhelming and that this leads to a defense of limitation and a decision to actively bound musical choices.

Furthermore, DJing's history is tied to what Grandmixer D.ST describes as "sacred crates", or the records a professional collects carefully over time that make her unique. The records a DJ owns and uses are equally as (and

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<sup>169</sup> Quoted in Katz 2013: 147; also in Q-Bert interview with author, January 2014.

<sup>170</sup> Interview with author, February 2009; see also Kate Levitt and Christina Zanfagna, "Turning the Tables," *The Oxford Handbook of Mobile Music Studies*, Volume 2. Sumanth Gopinak and Jason Stanyek, eds (London: Oxford University Press, 2014).

<sup>171</sup> Jonathan Sterne, "The MP3 as Cultural Artifact," *New Media and Society* 8:5 (November 2006): 825-842; "The Death and Life of Digital Audio," *Interdisciplinary Science Reviews* 31:4 (December 2006): 338-348.

sometimes more) important than his or her skill level and technical ability.<sup>i</sup> As noted above, obtaining the equipment to DJ and a vast music collection is much easier and faster with digital technologies. Therefore, DJs who do have well-curated and thoughtful vinyl record collections often defend the time, effort, and research they have invested in amassing their music. This investment makes them more qualified as music programmers and better trained to make aesthetic assessments.<sup>172</sup>

Just as “sound is a product of perception, not a thing ‘out there,’”<sup>173</sup> the aesthetic tastes of DJs and the ways they define and defend their work are shaped by technological changes, cultural shifts, and links to a larger community/collective. Conversations that affirm the role of vinyl in DJing often ground themselves in larger communities.

Record stores have long been sites for exchanging and sharing expertise and for physically interacting with other DJs. As many describe, record shopping connects to a larger community, and it gives a “high” or lets people “relax.” Internationally known DJs like Z-Trip and Lee Burridge hesitantly adopted Serato as a more convenient way to tour, but miss “cool, groovy record stores.”<sup>174</sup> One notable example of the role of community in vinyl’s resurgence in the DJ world is the Beat Swap Meet, a traveling record

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<sup>172</sup> Notably, in 2013, one of hip-hop’s founding DJs, Afrika Bambaataa, sold his record collection to Cornell University, who archived it in a live performance art piece over several weeks at the Gavin Brown Gallery.

<sup>173</sup> Jonathan Sterne, “The MP3 as Cultural Artifact,” *New Media and Society* 8:5 (November 2006), 834.

<sup>174</sup> Deanna Rilling, “The Great DJ Debate,” in *Las Vegas Weekly*, June 2, 2008.

fair that began in 2007. It combines passionate vendors with DJ and music performances and a vinyl-centric culture that is impressively well-formed and well-attended in the MP3 era. At the September 2013 event held in Berkeley, the event filled La Peña Cultural Center and spilled over into the bar next door. Attendees loitered outside on the sidewalk and traded music tips, war stories from behind the decks, and greeted each other with big hugs, handshakes, and fist bumps. The Beat Swap Meet takes place around the country and has grown in the number of vendors, performers, and attendees each year. There is not a computer or digital controller in sight. Attendees connect over similar dedications to sound, format, and style.

In addition, going back to the all-vinyl parties that began this chapter, DJs create these performance spaces for themselves and each other as a means of validating a format that might otherwise become obsolete. It is a process that happens in conversation with many other DJs and demands the participation of multiple performers. In every instance, all-vinyl parties showcase multiple DJs, and often as many as six in one night. Other creative events celebrate DJing with vinyl vis a vis collaboration among DJs, dancers, and filmmakers. For example, the *24 Hours of Vinyl Project* travels to major cities in North America and unites about 15 different DJs to play vinyl for 24

hours straight, which is then videotaped and streamed live on the internet. It's an "hommage [sic] to the musical format that simply does not want to die."<sup>175</sup>

The recent trends in all-vinyl parties, record fairs, and other community-based events dispels the concern for "killing vinyl," or the symbolic violence of technology on analog's historical "roots." As "Sixxx" states on the Serato message boards, "There's NOT ONE THING IN PARTICULAR that can kill vinyl. If you really want to get technical . . . YOU AND ME ARE KILLING VINYL. Because if it wasn't for people like us who can accept new technology, then Serato or Final Scratch or whatever, would never sell."<sup>176</sup> Sixxx's comment illustrates a consensual vision of technologically determined progress, in which DJs are complicit in the violent transition from analog to digital. Perhaps it is this fear of a violent death that inspires collective action among DJs to mobilize vinyl-owning friends and create spaces for resurrecting and celebrating the medium.

### **Conclusion: Why does vinyl matter?**

The all-vinyl events, the meanings given to vinyl, and the heightened awareness of historical DJ practices are in fact new developments that emerged in the turn to digital DJing in the 2000s. They demonstrate methods by which DJs negotiate changes in their artistic practices, both defending

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<sup>175</sup> "24 Hours of Vinyl" website, accessible online at <http://24hoursofvinyl.com/about-the-24-hours-of-vinyl/>

<sup>176</sup> "Serato is Killing Vinyl!!!!" Post to Scratchlive Message Boards, November 29, 2006. <http://serato.com/forum/discussion/24672> (accessed March 3, 2009).

tradition and reinventing new conventions in efforts to more clearly define their work and artistry. Some denigrate vinyl culture and all-vinyl parties as niche, geeky, and elitist because they reinforce collecting and archiving only accessible to a privileged few; others claim that the vinyl resurgence is a media construction and an empty gesture of nostalgia that ignorantly resists change. I argue that these conversations and gatherings around vinyl are important illustrations of a community creating and navigating meanings and its own identity as its primary tools undergo extreme changes.

Ultimately, the patterns of adoption, adaptation and hesitation expressed by the DJs in this section reveal the paradoxically controversial role of digital technologies in DJ culture. While forward-thinking and dependent on mixing the new and old, DJ culture's attachment to its non-digital instruments may also signal the ways in which these musicians defend their work or seek to formalize and define their artistic practices in order to establish notions of legitimacy and authenticity. The persistence of vinyl tells us what some DJs value and prioritize as their tools and techniques evolve with the introduction of digital formats and modes of playback. Many of these DJs still use digital equipment and all play some form of music that was produced digitally, even if they use vinyl to do so.

Nonetheless, these cases show a need for DJs to humanize and historicize their practice, where records are evidence of a lived, shared past or are friends through which the DJ finds community. As DJs create all-vinyl

parties or choose to make their vinyl-playing intentional and even political, they are asserting their connection to a meaningful past and a craftsmanship in contention with the button-pushing of digital formats.

Chapter Four in part contains material that has been co-authored with Christina Zanfagna and was published in 2014 in *The Oxford Handbook of Mobile Music Studies, Volume 2*.

## Conclusion

*Changes in art occur through changes in worlds.*

- Howard Becker, *Art Worlds*<sup>177</sup>

For the past several years, I have worked to understand the worlds of dozens of DJs responding to changes in their profession, linked to technological developments, economic forces, and cultural shifts. These DJ worlds offer insights into the production and consumption of technologies, the commoditization and circulation of digital music, and the tensions between economic and artistic forces in a profession that has experienced incredible growth in the past few decades. Their stories and examples demonstrate a community struggling to simultaneously define itself and resist definition, to legitimize and professionalize artistic practices while embracing and even insisting on new modes of and materials for performance. The DJ community I studied has a frenetic energy to it, anxious about and sometimes offended by departures from certain longstanding traditions yet enthralled by and committed to a forward-thinking ethos of innovation and remix that rejects convention.

These dilemmas burst into life between seemingly opposing camps, the ‘traditionalists’ and the ‘button-pushers,’ who in fact have much more complex overlap and less contention than might seem the case. Nonetheless,

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<sup>177</sup> Howard Becker, *Art Worlds*, 25<sup>th</sup> Anniversary Edition (Berkeley: University of California Press, 1982 and 2008), 309.

controversy arises in passionate denunciations of “laptop DJs” who “use technology as a crutch,” as on the 603-member Facebook community entitled “I Hate Laptop DJs!” Choices are defended in popular online DJ forums like [www.digitaldjtips.com](http://www.digitaldjtips.com), where authors roll their eyes at “the old generation” of DJs whose commitment to vinyl is nothing but “kitsch novelty.”<sup>178</sup> Yet while it seems as if these are two opposing camps representing black-and-white divisions of old vs. new, or vinyl vs. digital, the reality as it is lived and experienced by most DJs is much more complex, a spectrum of opinions and multidimensional conversations around the what, where, how, and who of DJing. DJs must make countless choices about what materials to use, which technologies to master, what formats and types of music to play, where and when and how to perform. They must consider for whom they are performing, whether themselves alone or the crowd they are hired to entertain. Every one of these decisions communicates values about what DJing means, shapes the narratives that determine the meanings of DJing, and negotiates contentious dynamics around legitimacy and authenticity in this particular moment.

Studying this particular moment in DJing contributes to studies of musical communities and musical cultures as they adapt to changes in technologies. But more importantly, this dissertation is about the persistent need for non-dominant forms of expression and modes of gathering. It is about the anxieties produced by processes of commercialization that are

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<sup>178</sup> <http://www.digitaldjtips.com/2010/11/technics-digital-djing/>



linked to the rapid digitization not only of music and musical equipment, but of social and cultural communication. It is about the ways in which DJs seek to humanize and validate their work in the face of forces that often seem outside of their control, such as the shift to digital formats and the influx of corporate money into nightlife. And it is about the modes in which artists are able to inform and reshape technologies from both a grassroots approach (as in early hip-hop) and in coordination with industry producers (as with Rane's mixers and Ableton's software).

My research has circled around a fascination with trying to define DJing, both in my own attempts as well as in the efforts of many DJs I interviewed and many others who have shared their definitions elsewhere. This struggle to define DJing has both positive and negative consequences on the DJ world itself. Unlike pianists or violin players, there is no one single instrument that structures a DJ's practice. Instead, DJs rely on arrangements of multiple technologies connected together: turntables and CDJs, a mixer, newer controllers and beat machines, computers and iPads loaded with different kinds of software. This instrumental ambiguity is DJing's blessing and curse. The very emergence of DJing was based on a resignification of equipment and formats, transforming playback devices into instruments and weaving existing music into a unique sonic tableau. There was no single instrument because that was never the point; rather than mastering a specific piece of equipment and set of skills, DJing was an art form established in

opposition to prior traditions or conventions. Its mastery was measured by oppositional uses of materials and technologies, and unpredictable combinations of sounds.

This form of mastery, combined with the expectations for DJs to be both forward thinking and knowledgeable about the past, cut across DJing's rhizome of genres. DJing is an art form that encompasses hip-hop, reggae, dub, funk, soul, R 'n' B, house, techno, disco, drum 'n' bass, dubstep, trance, psytrance, goa, garage, grime, trap, hardstyle, moombahton, juke, breakbeat, downtempo, EDM, and ever more emerging subgenres. Each musical category has its own history, audience, location, dance, fashion, and customs, and warrants (or already has) its own separate study. This diversity and complexity makes DJing an exciting art form to participate in and observe, but its span across cultures, musics, equipment, and history also creates instability and perhaps more vulnerability than is the case in other musical practices. Therefore, the challenge of attaching one all-encompassing definition to DJing leads to a more complex, often contentious, and occasionally contradictory process for saying what is, and what is not, DJing.

Yet many have still tried to define DJing nonetheless, as explored in the pages of this dissertation and as articulated in other materials outside the scope of this project. One definition that seems to cohere a basic level of consensus is an understanding of a DJ, regardless of musical genre, as the person responsible for sequencing and performing music, a figurehead of the

immersive musical and entertainment experience that fans seek. For example, in Attack Magazine's recently published interviews with professional DJs from different genres, entitled "What Makes a Great DJ," some of the responses are:<sup>179</sup>

Selection is king all day long...great technique means nothing if your selection ain't on point. – Mr. G

The true art of the DJ should be a combination of education and amazement. - Spencer Parker

A DJ is someone who plays great music and who sets the atmosphere of a night, who is a slave to the location and the event and most of all to the crowd. - Serge

Or, as Brewster & Broughton pointed out in 2001, "a good DJ...is controlling the relationship between some music and hundreds of people."<sup>180</sup>

It is notable that none of these DJs refer to a specific technology or tool, nor to a set of discrete practices that one must learn, akin to playing scales on a piano. Rather, the DJ is an educator and entertainer, a relationship-builder charged with simultaneously amazing and serving the crowd. In this sense, these descriptions obviate many of the debates covered in the preceding chapters – why would analog vs. digital, or platter vs. button really matter if musical selection and the ability to read a crowd are what truly make a great DJ?

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<sup>179</sup> "What Makes a Great DJ," *Attack Magazine*, August 20, 2015. Accessible online at <http://www.attackmagazine.com/features/what-makes-a-great-dj/>

<sup>180</sup> Bill Brewster and Frank Broughton, *Last Night a DJ Saved My Life*, (New York: Grove Pres, 2001), 11.

These debates matter because they are linked to the very real everyday practices of DJs, who in the process of becoming adept crowd-amazors, must nonetheless make multiple choices about how and where to purchase the music they will play, about what equipment to buy to be able to perform, and about what skills to hone through hours of practice. They matter because these choices are shaping the industries and experiences of music, one piece in a broader shift around cultural production in the digital internet age.

### **DJs and the symbolism of the dazzling night**

Before turning to a discussion of technologies that is at the core of this research project, it is worthwhile to consider in more depth the notion of musical experience and the privileging of “relationship-building” and “amazing” as the unifying skills of good DJs. The consumption of popular music, particularly the electronic and digitally produced musics played and performed and produced by DJs, is driven more by the experiences in which the music is situated than by a concrete definition of artistic expertise. DJs, while consumers of music, are also one very powerful set of producers of these experiences, as evidenced in the ways that its own community members choose to define their profession and art practice. This definition of DJing, which emphasizes sound mixing’s magical potential, intentionally avoids specific references to tools, materials, techniques, and performance venues. It separates DJing from the parts of the art form that are most in flux right now.

In emphasizing this experiential talent over other aspects of DJing, many DJs seek to define their practice and community in ways that call upon a historical and persistent symbolism of night, and more specifically nighttime entertainment. The night, as I detail in Chapter 1, provides both time and space for release from the day's structures, and the more frustrating and alienating aspects of modern life. Historically, the night has represented chaos and desire. These moral themes persist to this day, where despite illumination and commercialization nocturnal living still remains somewhat unnatural, detrimental, and improper. As historian Roger Ekirch confirms, "Nighttime had deep symbolic value, its appeal owing much to its traditional association with licentiousness and disorder."<sup>181</sup> With the Enlightenment, the modernization of Western society led to mass illumination, and street lighting combined with the beginnings of a formalized police force aimed to reduce violence and disorder associated with night, to rationalize nighttime behavior by making the night more like the day. While the night has been 'colonized', as Murray Melbin argues, my research demonstrates that it remains a time of freedom for many - in particular young men and women coming of age and searching for ways to participate and find community in large cities. It is a collective experience of bounded risk-taking, an activity made permissible by the expansion of cultural industries into the night that is renegotiated by needs

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<sup>181</sup> Roger Ekirch, *At Day's Close: Night in Times Past*. (New York: W.W. Norton & Company: 2005), 153.

to claim an alternate identity, fantasize about possibility or perhaps do nothing at all.

The debates in DJ worlds that have arisen around new equipment and new markets are linked to desires to protect this space of possibility and otherness. An artistic practice that becomes too commercialized and too digitized loses some of its more human element and its significance as a cultural practice that emerged from and gave voice to non-dominant groups. Therefore, attacks on “fakers” who don’t take the time to learn histories and skills, or who cut corners and use technologies as a crutch, are also defensive attempts to save the space of nightlife and the role of the DJ as the creator of nighttime experiences of escape and community, particularly for marginalized groups. As described in the Introduction, this type of instability and threat is amplified in instances like Beamz, a digital DJing product created by a company with few connections to the DJ world, and that was marketed in deceptive ways. Beamz was a stark example of the ways that the commoditization of DJing tools can go very wrong, offensive in both its marketing and in its lack of attention to the DJ worlds’ deep connection to night as other.

Of course, the sense of vulnerability that leads to methods of protecting and differentiating “real” DJing from the “fake” and inauthentic emerges from the fact that nightlife, and DJing, exists in a dynamic wherein supposedly oppositional forces actually constitute each other. The symbolisms and actual

functions of Day and Night are deeply and structurally intertwined. No longer a “release valve” in the tradition of Carnival, nightlife is as much a product of the daytime’s structures as it is a symbol of opposition. Those structures seemingly distinct from the night – the progressive traditions of industrialization that led to electrification and urbanization, as well as the market forces of late capitalism – are precisely what animate its activities. They finance its buildings, deliver its inventory, and engineer its audio-visual equipment.

And yet these market forces and structures, among others, are what can threaten the DJ’s identity as artist and performer. Therefore, DJing requires a negotiation between these meanings – selecting gigs and tools and music as a means of establishing artistic integrity and communicating priorities about what DJing is and should be.

### **User-Producer Dynamics in Technology Development**

Processes that create and deploy new technologies amplify the processes of defining the DJ world and validating DJ practices. “Turning the tables” (the title of this dissertation) began as a consideration of mobile and portable DJ technologies and the ways in which DJ culture had responded to these new tools. It soon morphed into conversations about the many forces at work in DJing’s rapid transformation in a matter of years. Conclusions about technology consumption emerged in the sighs of relief many DJs shared in

describing how they alleviated back problems by shifting from bulky vinyl to portable digital. Conclusions about tool resignification and reinvention arose in conversations about the revival of vinyl. Ultimately, this moment in DJing illustrates ways in which communities and people shape the creation, use, and evolution of materials, as well as how materials themselves embody and embed a rich set of very specific cultural values and practices, which served to mediate (or communicate) the priorities of an artistic world in this moment.

As detailed in Chapters 2 and 3, on the history of DJ technologies and the more recent explosion of digital tools, DJs have played a very large role in the development and uses of the materials in their worlds. The more central that DJs have been in the development and testing of technologies, the more likely the tools are to be successfully integrated into and embraced by the DJ world. In other words, the members of an art world get to define what materials they use and how they want to perform their artistic practice.

For example, it has taken a while to get to the current “plug and play” moment of DJing as an artistic practice that includes (but is certainly not limited to) button-pushing – first there was a shift to CD turntables and the iconic CDJ, then the rise of digital vinyl simulation like Serato. These tools were both responses to a growing need to be able to use digital music formats, as well as calls for more options and new functions in DJ performance styles. They were marketed through networks of professional DJs and influencers, and privileged user input through extensive support



services and design processes. In other words, the tools emerged from and existed in processes of technological development and engineering that relied on user input and did not exist separate from the needs and demands of its consumers.

Nonetheless, the rapid expansion of DJ tools beyond this core set and the increased visibility of DJing and nightlife through the recent rise of EDM events has been particularly disruptive in the DJ world and has led to segmentation. This “digital DJ imposter” has become a trope as the larger DJ world negotiates changes and redefines itself. It is an easy way of saying, “this is NOT a DJ,” therefore avoiding the complicated and delicate task of establishing what IS a DJ.

Yet despite the many new digital technologies, the use of vinyl has experienced resurgence in the past few years and there are increasingly more vinyl-only events. And despite anxieties around technology as a crutch for less authentic performance, as my interviews reveal, most DJs who express negativity towards the digital turn still own massive digital music collections. Likewise, these same DJs and not only use but also deeply appreciate tools like CDJs and Serato. The digital turn in DJing has resulted in a long, ongoing debate that links choices in equipment with values, styles, and identities; it is a moment of change that has disrupted convention and produced new conversations around how to perform, share, and produce music.

### **Changes in worlds to overcome gaps in art**

And yet the conversations and decisions that emerge with new DJing tools, as well as its commercialization over the past decade, have also increased the formalization of DJing. Such digitization and formalization of DJing through mass markets has the potential to overcome longstanding issues of access in the DJ world. The past decade, for instance, has seen the creation of school-based instruction, DJ classes, and a proliferation of online resources and music databases.

One particularly revealing way that the formalization of DJing has destabilized entrance barriers to the profession is through opportunities for more female DJs. DJing has long been the domain of men, particularly in hip-hop and even more so in the worlds of turntablism and DJ battles.<sup>182</sup> DJ skills and knowledge tend to be passed down through networks and connections, making it more likely to reproduce gender and demographic dynamics over time. Without access to expensive turntables and bulky records, most people could not entertain learning the skills to become a DJ unless they happened to

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<sup>182</sup> Tricia Rose notes, “Women in general are not encouraged in and often actively discouraged from learning about and using mechanical equipment. This takes place informally in socialization and formally in gender-segregated vocational tracking in public school curriculum. Given rap music’s early reliance on stereo equipment, participating in rap music production requires mechanical and technical skills that women are much less likely to have developed.” *Black noise: rap music and black culture in contemporary America*. (Hanover, NH: University Press of New England: 1994), 57. This has shifted in the past two decades since Rose’s comments but the gender gap still persists and can be quite acute in certain DJ worlds, particularly turntablism and hip-hop, but also across the board in other dance music genres. For example, the Forbes list of top DJ earners does not include a single female DJ.

know someone who was willing to share equipment and knowledge with them. This reality has shifted with the increase in digital tools that facilitate DJing, more open access to music via online circulation, and the rise in DJ instruction both in-person through schools and online via Youtube and other video-based tutorials.

For example, DJ schools such as Dubspot and Scratch Academy employ professional DJs to teach history, music appreciation, and technical skills. DJ classes at the New School University and Scottsdale Community College, among many other higher education institutions, similarly combine historical, cultural, and technical practices as part of their general academic programming. Online videos and tutorials round out these opportunities to teach and learn how to DJ, where skills that were once passed down through networks and small communities are now available for the entire world. These developments reveal an urge within the DJ world to better structure and define their art form as access to DJ tools becomes easier and more open.

I believe that DJ schools and online communities have made the DJ world more coherent as it undergoes these changes. They allow for conversations and debates around meanings and belonging in the DJ world that do not exist in other places or would not have existed previously. For example, the Serato DJ online message boards are vibrant spaces of debate over who and what and how DJing defines itself, in addition to providing users with concrete troubleshooting tips and advice on how to use the technologies.

Not every comment is illuminating, and the boards can at times become spaces of the kind of disconnected venting, marketing, and rambling seen in open comment forums across the Internet. Still, this and many other web pages are examples of how users create different, customized modes of communication and community based around new technologies. These spaces open access and facilitate conversation necessary to help much larger groups of DJs negotiate changes and exchange, fix, or question legitimacy in their world.

Therefore, the shift to digital DJing opens up possibilities for more democratic involvement, particularly for women in what has long been a male-dominated art form, as well as for the growing dance music scenes around the globe. An art form that is untethered from weighty materials can be picked up and transformed, allowing new practitioners to define for themselves what is important and authentic in their performances. Expanding who has access to DJing practices is absolutely in the spirit of innovation and remix, and the kind of “disruption” that so many youth sought in the 1960s, 70s, and 80s as the art form emerged and took flight. Therefore, digital DJing may be precisely what we need to reenergize nightlife both in the cities I have discussed here and many others where access to turntables and vinyl may be limited. It could also lead to exciting sonic experiments and artistic practices. And isn’t that what DJing is all about?

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## **Appendix**

### ***List of DJs and others interviewed***

Alejandro Torio  
Anonymous from Native  
Instruments  
Blockhead  
Bobbito  
Boon  
Captain Planet  
Carol C  
Cato  
Chad Simer  
Chris Annibell  
Christian Martin  
Claude Vonstroke  
Coleman Goughtry  
D'Hana  
Dean Standing  
Dibiase  
Dionzinho  
DJ \$cotty  
DJ Abloon  
DJ Blaqwest  
DJ Center  
DJ Crimson  
DJ Dara  
DJ Excess  
DJ Fantom  
DJ Fattingaz  
DJ Hector  
DJ Milk Money  
DJ No Friends  
DJ Padati  
DJ Ramsey  
DJ Ruckus  
DJ Sabo  
DJ Scribe  
DJ Shakey  
DJ Shiftee  
DJ Spinna

DJ Williemaze  
Domewrecka  
E-man  
Eddie Turbo  
Eddy Plenty  
Hard Hittin Harry  
J Boogie  
J-Sole  
Jah Selectah  
Jaymz Nylon  
Jeannie Hopper  
Jon Oliver  
Kamala  
Kevlar  
Kuttin Kandi  
Lady B\*  
Le Chien  
Lee Reynolds  
Maoe  
Mark E Quark  
Melanie Moore  
Miranda Maxwell  
Mr. Lucky  
Nappy G  
Natasha Diggs  
Nickodemus  
OBaH  
Ojay  
OP  
Patricio  
Platurn  
Q-Bert  
Rabbi Darkside  
Rascue  
Rich Medina  
Ripley  
Rob Swift  
Sake-1  
Samala  
Steve Macatee  
Tabu  
Thanu



Timoteo Gigante  
Venus  
Walker Holland

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