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# 1. Introduction

This thesis aims to compare analog and digital DJ technologies with regard to the performativity of the disc jockey. The DJ has been historically underrepresented in academic discourse despite his cultural relevance.[[1]](#footnote-1) The human ritual of collective dancing to music is an ancient pillar of culture and society. The emergence of the DJ in the twentieth century constituted a detachment of this ritual from the performance of live music in favor of recorded music. His peculiar postmodern function as a “meta-musician” has exerted considerable influence on dance culture and the development of numerous music genres.

Traditionally, the craft of DJing has been bound to vinyl records, but recent technological developments have increasingly digitalized the profession, which has facilitated access for aspiring DJs such as myself, but also generated some criticism for “devaluing” the art of DJing. As a digital DJ who has always worked with DJ-software and a MIDI controller instead of turntables, I have attempted to learn to mix songs in the traditional way of using vinyl records over the course of this project. I have also explored Traktor Scratch as a Digital Vinyl System (DVS), the popular hybrid of digital and analog DJing methods which enables DJs to use turntables to play digital music formats via timecode vinyl. My goal is to examine how the aesthetic and technological options and challenges of these different systems affect the performativity of the DJ as a collector, as a “composer” and as a mediator between the world of music and the audience.

The thesis will be divided into a creative and a theoretical part. The project will involve the real-time production of at least one DJ mix with each technology to illustrate the aesthetic differences I will describe in the theoretical analysis. The essence of DJing is invariably attached to the live performance in front of an audience, which loses its unique atmosphere in any recording. Nonetheless, most DJs develop, practice and expand their skills in solitude at home before they display them in front of an audience, a process about which I will provide some personal insights. Additionally, the recording of mixes to distribute for promotional purposes has been a widespread practice among DJs for decades, whether on tape, CD or online. However, I will also draw on my experience from live gigs, which were mostly conducted with a Mixvibes U-Mix Control Pro and the corresponding software Cross DJ, except at one recent private house party, where I played a spontaneous vinyl set. Unfortunately I did not have an opportunity to use vinyl, regular or timecode, in the context of a club appearance.

To ensure a reasonable scope I want to remain within the boundaries of just one genre, and I have chosen to confine myself to hip-hop music for a number of reasons: Most of all, since hip-hop is my favorite genre next to funk, privately as well as in the context of my DJ activity, it makes up the bulk of my music collection. As a loop-based genre, it is more DJ-friendly than funk and therefore more practical to learn beatmatching with. I also want to counterbalance the dominance of EDM (electronic dance music)[[2]](#footnote-2) in most general research on club culture. Where hip-hop DJs do get mentioned, the focus is usually on the art of turntablism, which originated in hip-hop culture but has become somewhat detached from the dancefloor and occupies a different niche than what I aim to investigate here. I am also excluding the aspect of production. Instead, I am restricting myself to the domain of the typical club DJ, the DJ in his essential, most basic function, as an archivist and performer, who plays a “collage” of songs or tracks by creating transitions through beatmatching or other methods.

In the theoretical component I will first provide a brief history of the DJ to establish a working definition of the term and illustrate his cultural significance. Following this, I will compare the aforementioned technologies – vinyl, controller and DVS - with regard to the three central aspects of DJing: preparation, composition, and presentation. My experimentation with vinyl took place in a domestic practice situation almost exclusively, but based on existing research, interviews I conducted with other DJs and my own continuous general performing experience I will transfer my observations to the realm of live performance as accurately as possible.

First, I will analyze how the shift from vinyl records to digital music formats impacts the DJ’s work outside of the club, both in relation to what is colloquially referred to as “digging” – the constant search for and acquisition of new music – and concerning the general preparation of the musical material that precedes every DJ performance. Secondly, I will describe the differences in how these technologies are used to produce a mix by arranging songs in a specific order while constructing transitions between songs or even creating mashups through beatmatching. Thirdly, I will discuss the wider context of the performance as an event that is constituted by the interaction of the DJ, the technology and the audience.

Even though objectivity is now widely considered a utopian academic ideal that can never be fully achieved, this study takes on a comparatively subjective perspective since I am simultaneously the observer and the target of observation. While I strive to gain a certain degree of distance through my readings, interviews and elaborate self-reflection, I also ­­­­­­­­want to embrace the individuality of this experience, simply *because* every DJ is different. In order for my observations and conclusions to be more comprehensible and hopefully relevant, I will first provide some context concerning my relationship with music and my development as a DJ.

Born in 1989, I have been obsessed with music since childhood - mostly music with a certain “black” aesthetic, starting with (in retrospect) latently funky teen pop during the nineties and gradually getting into genuine hip-hop and R&B in the early 2000s, followed by my discovery of the boombap sound of the 90s and a few years later, the wide world of more current underground hip-hop. My passion for music had been accompanied by a shy small-town enthusiasm for dancing as well, taking lessons in rock’n’roll dancing as a child and coming up with choreographies in the basement with my best friend as a teenager. Around the time I came of age these interests coalesced into an instant fascination with nightlife. I resolutely frequented and soon got organizationally involved in a nearby funk/soul/hip-hop party called *Soulfood* that ran regularly in the next biggest city. Back then it wouldn’t have occurred to me in my wildest dreams to be a DJ myself as I danced through the night and made friends with local hip-hop and funk DJs.

After I moved far away from my small town to attend university in Potsdam, in my second semester I followed an appeal to bring an external hard drive to the annual media studies summer party. That’s when I first saw and used DJ software (in this case, Virtual DJ). With no prior knowledge about the program or any DJing experience whatosever - and the extent of the girl’s instructions being limited to “press ‘sync’ and slowly move this thing in the middle to the other side” - I jumped in at the deep end. I kept the small crowd dancing with an array of crowd pleasers along the lines of Michael Jackson and MC Hammer despite my blatant deficiencies, such as cluelessly syncing two tracks that were 20 BPM apart with my tech-expert-underground-hip-hop boyfriend behind me quickly grasping the basic concept of the software and falling on deaf ears trying to explain it to me. I didn’t even know what BPM was. I got such a kick out of seeing people dance to music I selected that I made sure to get a DJ slot at every subsequent media studies party.

I soon acquired Virtual DJ myself, which I used with just a mouse and an increasing amount of keyboard shortcuts for two and a half years, mostly making hour-long mixes for campusradio podcasts and delightedly experimenting with mashups late at night in my dorm room (in addition to performing live at the semiannual media studies parties), until I finally gave in and bought my Mixvibes controller, even though I still didn’t conceive of myself as a DJ. DJs to me were the likes of the Soulfood guys with tons of fancy equipment who knew what they were doing; I felt I really didn’t know what I was doing except a little private tinkering and relying on the assumption that well-known songs make people dance (which is true).

The controller opened up a new world to me and over the years I started taking my DJing efforts more seriously, excessively cultivating countless playlists, thinking my selections through more than before, learning about bitrates and similar technicalities, getting small gigs through acquaintances. Eventually I ended up doing warm-up for my heroes, the Soulfood DJs, who were positively surprised by my endeavors and welcomed me to the stage with open arms.

I teamed up with a like-minded friend and fellow aspiring controller DJ, who also played at the media studies parties and participated in campusradio, to initiate our very own funk-based party in Potsdam, which recently celebrated its relatively successul premiere. So this is the stage I was at when I started working on this project: a young and motivated controller DJ trying to establish herself and to learn how to handle vinyl using her boyfriend’s turntables.

# 2. DJ history

Everybody, get in the groove and let the good times roll  
I'm gon’ stay here till I soothe my soul

If it takes all night long

Yeah, it might be one o'clock and it might be three

Time don't mean that much to me  
I ain’t had this much fun since I don’t know when

And I might not feel this good again

- Aretha Franklin, “Good Times”

In their extensive history of the DJ, Brewster and Broughton dive right in by wittily tracing the role of the DJ all the way back to the ancient shaman who conducted the musical accompaniment at mankind’s nocturnal rituals. Though it may seem a somewhat silly or far-fetched idea at first, on second thought it starts to ring stunningly true. In a *de facto* secularized world, we satisfy our spiritual needs through cultural products of the entertainment industry more than anything else. The target of our worship has shifted from deities towards artists and celebrities. Instead of with religion, the notion of “cult” is now associated with films, books, TV series, bands or music genres, even clothing brands; these are the new signifiers that define our identity and divide us into groups.

Our culture is undeniably no longer as deeply permeated by religion, and as a result our celebrations have become detached from their ancient function of worshipping the divine. Yet humanity has retained a deep-seated need for collectivity and transcendence, a desire to unwind after a hard day’s or week’s work, to socialize and perhaps use certain substances, to reconnect with one’s body, to forget about the anxieties of existence, to step out of the drudgery of the everyday and feel *alive*. Some people achieve this by exercising, pursuing a hobby, having dinner with their family, watching television on the couch, going to the movies or meeting their friends in a bar. But none of these activities come as close to the sublime exaltation of that ancient ritual of dancing around a bonfire as clubbing does: You put on your “mask” or “costume” as you carefully dress for the night to take on a different role from your everyday self. You make your way to a special place reserved for festivities, where you immerse yourself in the music and perhaps alter your state of mind with alcohol and other drugs. You let your body take over control of your entire being and you lose your sense of time as you dance through the night with your friends, but also form an unspoken ephemeral bond with a crowd of strangers. The figure who makes this entire experience possible is the DJ.

**On the air**

The story of the DJ is inherently tied to the story of recorded music as well as radio. There was a time when the reception of music was physically bound in time and space to the production of music. If you wanted to hear music, you had to perform it yourself or be within hearing distance of someone performing it. Until, one day in 1877, Thomas Edison recorded himself singing “Mary had a little lamb” onto a wax cylinder as “the first human being to record a sound and reproduce it,” albeit without the intention of using his invention to store music.[[3]](#footnote-3) Around three decades later, Canadian engineer Reginald Fessenden became the world’s first DJ by transmitting a cylinder recording of Handel’s *Largo* via radio waves “from Brant Rock near Boston, Massachusetts, to a number of astonished ships’ telegraph operators out in the Atlantic” who he had “equipped […] with the necessary receivers.”[[4]](#footnote-4)

In fact, radio was the realm the DJ first conquered, already raising suspicion among musicians and politicians alike because of the power he held “as the gatekeeper at the point where music met its audience.”[[5]](#footnote-5) I cannot go into detail here concerning the development of the radio DJ, but it is worth noting the central aspects of the craft that the radio DJ established – besides of course the term “disc jockey”, which is surrounded by a variety of origin stories.[[6]](#footnote-6) The DJ was characterized by his inherent advantage of being able to play more music more cheaply than any given live musician, as well as his function as a tastemaker and musical ambassador who can provide a platform for all the music that the world’s mainstream outlets are carelessly neglecting or deliberately suppressing. This ability has often put him in charge of the success (and later on even the creation) of entire genres, the first being 1940s rhythm and blues, which at the time meant little more than “records made by black people.”[[7]](#footnote-7) Interestingly, black music has always accompanied the development of the DJ, from reggae to hip-hop to disco to house, illustrating his role as an agent of counterculture - as also becomes evident in the historically strong connection of club culture with the homosexual scene.

**Before the DJ**

Recorded music found its calling as a medium of entertainment only a couple of years after it had been invented: Patented in 1889, the jukebox merely lacked the technology of amplification until it gained widespread popularity in the 1920s, conquering a variety of estalishments such as saloons and cafés, so that “ironically, the DJ’s role was automated even before it came into existence.” Both music and DJ culture, each as an art and as an industry, owe a great deal to this machine. The jukebox not only kept record sales going in the Depression era, but also allowed for cheap and adventurous musical programming by the establishments’ proprietors, who determined the selection of their jukebox and thus were basically just one step removed from being DJs.

In an entirely different context, the early twentieth century witnessed a peculiar setting in which people gathered to listen to recorded music. Starting with the “tone tests” held for the Edison Diamond Disc Phonograph from 1915 onwards, new sound recording technologies were often introduced to a group of invited guests at staged demonstrations, not to dance and have fun but to be amazed by the “realistic” reproduction of live music. In this context the technology did not serve the purpose of enjoying music, but music was a means of experiencing the technology. However, Edison was also already interested in the effect the music itself had on the guests, intuitively formulating the essential concern of the future club DJ: to guide the audience’s emotions. He paid psychology professors to study the mood changes triggered by music, one of whom “developed a Mood Change Chart that Edison dealers were encouraged to use at Mood Change Parties, to show their ‘Analysis of Mental Reactions to Music, as Re-Created by the New Edison, the Phonograph with a Soul.’”[[8]](#footnote-8) *The Phonograph with a Soul*. A simple marketing phrase that carries so much baggage, considering the eternal accusation of technology threatening our humanity, which has permeated the discourse surrounding not only the history of recorded music, but also the role of the DJ himself as well as the technologies he uses.

**The human jukebox and post-war partying**

In 1943, the first official dance event based on recorded music had six couples dancing to a small selection of swing records in a small town in Northern England. This “Grand Record Dance” in Leeds, UK, was organized by “eccentric young entrepreneur” Jimmy Savile, who “hit upon the bright idea of playing records live, armed only with brittle 78s and a makeshift disco unit,” a home-made fusion of a gramophone and a valve radio. Unfortunately the party soon came to an end as the equipment “had melted at several soldered points and died quietly, but not before giving a final electric shock to its inventor, causing him to weep openly.’” Nevertheless, the club DJ was born that night - a downright revolutionary incident, because after all “transposing the idea [of the radio DJ] to a live format required a quantum leap of imagination.”[[9]](#footnote-9) Savile proceeded to successfully spread his alternative to live music events all over the country, confusing technicians by having them set up the record player on stage instead of in the lighting man’s booth and even adding a second one to reduce the gaps between records, which he filled with talking. Eventually, he launched a successful career in media as a radio DJ and the first host of *Top of the Pops*, making him the “first superstar DJ.”

While Savile was instituting the bandless dance in dance halls across the UK, American radio DJs in the fifties promoted their shows at so-called “sock hops” in high school gymnasiums, where guests had to take off their shoes for the sake of the flooring material. It didn’t take long for the concept to catch on, as amateur DJs emerged on the scene. Eventually it also occurred to one of them to use twin turntables, even with separate volume controls, and to talk between records.

Despite these developments in the anglophone world, the origin of the disothèque is to be found in continental Europe, where the Nazi regime banned jazz musicians from playing and left rebellious young jazz lovers in Germany and occupied France no choice but to sneak their swing records into cafés and basements to dance to them.[[10]](#footnote-10) The word “discothèque”, which tanslates to “record library”, referred to both a collection of records and the place where it was stored. Although the term only started being used for dance venues after the war, “the first place to employ the word is said to have been La Discothèque, a tiny bar in the rue Hachette in occupied Paris, where you could order your favourite jazz 78 along with your drink.”

In the Post-World War II Era a multitude of discothèques opened up in France - such as the legendary Whiskey-A-Go-Go in Paris - and the UK, where “the first British all-nighters took place” (a party format that later came to be primarily associated with the Northern Soul scene).[[11]](#footnote-11) While New York’s underground was partying heavily in small live music clubs to the new sensation called bebop, it took until 1960 for a DJ-based discothèque to open on the western side of the Atlantic: frenchman Oliver Coquelin’s Le Club. Meanwhile, Jamaican DJs were turning up the bass and battling each other on their cutting-edge sound systems, revolutionizing DJ culture unnoticed by the Western world as they invented the remix before disco did and the MC (Master of Cerermony) before hip-hop did: “[Reggae] laid down the principles of remixing, it made an artist and a star of the producer, it transformed playing records into live performance, and it showed how music could be propelled into whole new genres by the needs of the dancefloor.”[[12]](#footnote-12)

**The nightclub comes of age**

The sixties were a defining decade for DJ and club culture in a number of ways. The symbiosis between American and European dance cultures continued to blossom, with the US usually supplying the content, i.e. music (and often the dance styles), which the European underground, especially in the UK, fed off as it kept raising club culture to new heights: “It was in Britain that club culture was founded, even if the records which filled it were from across the Atlantic.”[[13]](#footnote-13) With its impressive architecture and music connoisseur Ian “Sammy” Samwell on the decks playing American rhythm and blues rarities at lunchtime, the Lyceum in London “was the first place in which all the recognisable elements of a modern club – lights, up-front dance records, disc jockey and dancefloor – came together.”[[14]](#footnote-14) Other clubs like the Scene, the Flamingo, the Roaring Twenties and Tiles made history with phenomenal DJ sets and drug-fueled all-nighters and/or lunchtime dances that partygoers merged into three-day weekends. This British club culture was largely dominated by the "mods", a young, hip working-class subculture defined by their love of black American music, fashion and amphetamines.

Even in the States, a striking number of the initial groundbreaking clubs were owned by Europeans, such as Oliver Coquelin’s aforementioned Le Club in New York and later Cheetah during the acid craze in San Francisco, or British celebrity divorcee Sybil Burton’s illustrious club Arthur in Manhattan, where Terry Noel, “the prototype of the modern DJ”, was the first DJ to mix records and take full control of the lights and sound system, turning the dance night into a spectacle.

Starting at New York’s Peppermint Lounge, the sixties also hit both sides of the Atlantic with a dance revolution. Dancefloors were liberated from step-based couples’ dancing when a certain new solo dance called the twist “dropped an H-bomb on dance conservatism.”[[15]](#footnote-15) A few years later, the new chemical drug LSD spread from San Francisco to New York and London, temporarily saturating club culture with bizarre sensory journeys and increasingly undanceable psychedelic rock music at places like the Electric Circus in New York or UFO in London. It was time for the transition into new territories.

**The DJ comes of age**

“In less than a quarter of a century, the idea of dancing to someone playing records had evolved form a bizarre experiement in a Yorkshire function room to an intricate world of nightclubs, DJs, drugs and music.”[[16]](#footnote-16) The seventies solidified the basic characteristics of the DJ that had surfaced in the previous decade and have defined the craft to this day: The obsession with unearthing rare treasures, the art of mixing and beatmatching and last but not least, the skill of manipulating the crowd through the power of music.

As London and the rest of Southern England got caught up in flower power, the mods proceeded to establish the world’s first real rave culture as they carried on dancing to their beloved sixties soul “stompers” in otherwise unremarkable Northern small towns, unperturbed by the popular music industry and the new developments of funk and disco. The DJ’s quest for rarities was practically built into the nature of the scene as black music in America moved on from the uptempo soul that had defined the Motown sound of the sixties and its unsuccessful imitators. Finding “new” songs could only be achieved by digging deeper and deeper into an ultimately finite pool of music from an era that was already over. Dancers drove for hours to clubs like the Twisted Wheel, the Catacombs, the Torch, the Wigan Casino and the Blackpool Mecca just to hear certain records that literally could not be heard anywhere else in the country or sometimes even in any of the other clubs, because the only available copy was in the hands of a single DJ, such as Blackpool’s Ian Levine, who had rescued it from a scruffy record store in New Orleans. Suddenly, dance music was about more than just “playing the hits of the day”, and connoisseurship was the primary way for a DJ to distinguish himself.

On the other side of the ocean, as the newly liberated blacks and gays were flooding New York’s nightclubs, the burgeoning disco scene changed DJing forever. To begin with, the “godfather” of the modern DJ, Francis Grasso, “stormed the profession out of servitude and made the DJ the musical head chef.”[[17]](#footnote-17) Taking the throne from Terry Noel at the Salvation club and later perfecting his skills at the Sanctuary, he was the first to put flow in the DJ’s performance, to take the crowd on a musical journey through the night with his unique musical programming: “Before him, people had played records as if they were discrete little performances, Francis treated them like movements in a symphony; continuous elements in a grand whole.”[[18]](#footnote-18) He also claims to be the first DJ who was able to beat-mix, even without being able to adjust the tempo of records or touch them while they were playing: “All you had to do was start at the right moment.”[[19]](#footnote-19)

There’s a long line of legendary DJs that passed the torch to each other and shaped the disco era: Francis Grasso establishing beatmixing and teaching it to his disciples Michael Capello and Steve D’Acquisto; David Mancuso creating an inclusive, emotional atmosphere at his private parties at the Loft; Nicky Siano tranferring Mancuso’s message of love and unity to a more commercial setting at the Gallery; Walter Gibbons creating live remixes at Galaxy 21; Tee Scott overlaying records into long blends at Better Days; David Rodriguez joyously challenging the crowd at the Ginza; Larry Levan championing the original disco sound at the Paradise Garage even after its commercial overkill.

Today, disco is one of the historically most misunderstood genres of all time, still suffering from the lingering echo of the heavy backlash that followed its commercial appropriation triggered by the hit film *Saturday Night Fever*. It was the first time club music conquered the mainstream, as the DJ fully revealed his promotional power and tastemaking influence. The era witnessed the rise of the mix tape, the extended dance remix, the 12-inch single and independent labels. Disco also introduced the repetitive kick drum accentuating the exact individual beats of a bar in four-four time, thereby prefiguring the rhythmic style of house and other future EDM genres, which are essentially all rooted in disco.

**Hip-hop**

In the late seventies, disco and most of all funk provided the bulk of the source material for the Bronx DJs that created hip-hop music. In a way it was the first truly postmodern music genre, the first to base its entire creative process on the rearrangement of building blocks from existing recordings. Fueled by dance, it was a purely DJ-driven meta-genre, an “*omnigenre*” that introduced a “genreless concept of music.”[[20]](#footnote-20) The central foundation of hip-hop music was the break, referring to the stripped down drum passages with no or minimal instrumentation that appear frequently in funk songs, but can be found in a lot of different genres, from latin music to rock and others. In his historical portrait of the hip-hop DJ, musicologist Mark Katz elaborates on the notion of “funkiness” as a “rhythmic, textural, and timbral profile characteristic of funk” that hip-hop DJs looked for and discovered in all kinds of music.[[21]](#footnote-21)

DJ Kool Herc was the first to reduce records to the drum breaks that he noticed certain dancers waiting for, although still without the quick cutting and precise beatmatching of his successors. Being from Jamaica, he incorporated elements of reggae culture such as the elaborate sound system and the accompaniment of a “Master of Ceremony” rhyming to entertain the crowd. It was Grandmaster Flash who, inspired by Herc and tutored by beatmixing expert Pete Jones, spent months locked up in his room developing the technique of “manual sampling and looping of a record […] without losing the beat,” only to be disappointed by the public’s initial lack of enthusiasm that preceded the eventual hype.[[22]](#footnote-22) Afrika Bambaata, aside from founding the Zulu Nation, enriched hip-hop parties and surprised the crowd with unusual selections from his vast and infamous record collection.

The style of hip-hop DJs was soon transferred to the level of production, where the sampler enabled DJ-producers to carefully loop and layer pieces of music in a new way. Over time, hip-hop music has expanded its style way beyond breakbeats, but the looped sample has remained the essential structural element of the hip-hop beat. Turntablism became a niche as DJs were no longer needed to create the beats live on stage, so today people speaking of a “hip-hop DJ” usually refer to a DJ who plays hip-hop tracks, not a live recomposition of other genres. The non-live production of hip-hop music has introduced an additional step between the original source music and the hip-hop DJ in the club. This is the perspective I am taking in this project.

# 3. DJing – analog vs. digital

In the following chapters I will examine the differences beween analog and digital DJ technologies ­­in reference to the performativity of the DJ. I will deal with the three basic categories of the club DJ’s craft: 1) The *invisible* work of collecting and archiving music, 2) the *audible* work of mixing and 3) the *visible* work of performing in front of an audience.

I am approaching the analysis both theoretically and empirically. In a somewhat ethnographic mindset, I have employed practices similar to those of an anthropologist’s “participant observation” which could in this case perhaps be summarized as “self-experience”. I have made myself the subject, instrument and object of observation: For the past few months, I have been teaching myself how to mix with vinyl records on a traditional setup of two turntables connected to an analog mixer.[[23]](#footnote-23) During this process, I have filmed some and recorded all of my practice sessions and kept a diary documenting my progress. After I perceived my skills to have reached a basic functional level, I planned and recorded a DJ-mix. Following this, I proceeded to explore a Digital Vinyl System: I purchased a Traktor control Z2 (including the corresponding software Traktor 2), a device that functions as a DJ mixer, a DVS interface and a controller at the same time, thus uniting elements of both vinyl- and controller-based DJing. Using this technology, I produced a second DJ-mix with the same selection of songs in the same order. Finally, I recreated the mix a third time with the MIDI controller I have been using for years. Occasionally I will refer to CDs, but blabla explain

In addition to my own experiments, I conducted several interviews with DJs specializing in funk, soul and/or hip-hop, two male and one female, who I know personally and who have been active much longer than myself. They all started DJing with records and eventually switched to a DVS – as I discovered, with various motivations and degrees of initial resistance. Two of them additionally used CDs to some extent before the DVS emerged. These two also regularly host radio shows at non-profit community radio stations. The interviews were conducted either in person or on skype. They were recorded and transcribed with minor cosmetic adjustments for the sake of readability.

My theoretical foundation consists of literature on DJ culture and performance theory. The former is itself often based on anecdotes and interviews or some form of participant observation. The latter stems from the field of theatre studies and will have to be adjusted as I apply it to elements of the DJ performance.

In the context of this study, “performativity” is to be understood on three levels. First, it relates to the *situation* of the performance in the classical sense - to put it simply: people going to a place to watch somebody do something. Secondly, it indicates a specific *quality* of an action, a unique and fleeting event-like process. This description certainly applies to most of the things a DJ does, considering his medium is the ever-elusive world of sound. And finally, in the sense the word “performative” was first transferred from linguistics to cultural studies, it points to how actions *constitute reality*, shaping identities and cultural norms.

\*festival, ritual?

## 3.1 Digging

Your job starts in the record store, not on the decks. Your worth as a DJ begins and ends with what’s on your shelves and in your bag. For every overpaid hour in a club, a good DJ spends days, months, and years picking out tunes and learning about music.[[24]](#footnote-24)

If the DJ is a modern-day shaman, the superior world he delves into and channels for his audience is not the world of gods or spirits, but the entire universe of recorded music.[[25]](#footnote-25) The human lifespan is barely long enough to listen to a fraction of the world’s virtually infinite and constantly growing music archive, therefore the DJ’s eternal struggle to “distil musical greatness” is doomed to imperfection (but not necessarily failure). The product that the crowd receives on the dancefloor is the result of what really makes up the bulk of a good DJ’s work: a certain activity called “digging”. Although it happens outside of the performance itself, it is a highly performative process because collecting, listening to and getting to know music is what really shapes DJ’s identity before he ever steps in the booth. As I will elaborate later, the facilitation of beatmatching through visual aids has refocused the importance of musical programming in the DJ’s skill triangle that I’m basing the structure of this thesis on.[[26]](#footnote-26) Digging, of course, is the foundation of programming – no digging, no music.

Technically, a DJ can keep playing basically the same set with minimal variation from a small music collection he barely cultivates, especially if he plays to changing audiences, but he would not be considered a “real” DJ by most of his peers. This is one of the many unwritten, but definitely not unspoken rules of DJ culture: a DJ must be on the constant quest for new music. “New” can mean “recently released”, but it can also refer to old music that might be new to the DJ and hopefully his audience. Like myself, most DJs are obsessive music collectors first – as they should be - so digging is not a burdensome chore, but a natural instinct we can barely stifle. The desire to dig is part of a DJ’s identity. In fact, only a dedicated and regular audience would notice the same music being played repeatedly, but the DJ also needs to keep it interesting for himself to avoid getting bored, which is not a good vibe to radiate onto a dancefloor.

Obviously, the more music a DJ collects, the more challenging the task of organizing it and distilling it into a set becomes. A helpful, if not indispensable trait for a DJ to complement this compulsive obsession is a sense of order, ideally coupled with some actual organizational talent for the benefit of thouroughness and efficiency. Digital music formats have revolutionized the way music is distributed as well as how it can be stored and filed. In the following chapters, I am going to examine how the internet has transformed the practice of digging and how DJs organize their digital as opposed to their physical music libaries.

### 3.1.1 Acquiring music

I […] spent time searching for records to scratch and mix in record stores, thrift shops, library sales, and the homes of friends and relatives. DJs call this *digging in the crates*, the ‘crates’ referring to the typical way records are stored. As I discovered, it’s called digging for a reason – it’s tiring, hard on the back, and often leaves the digger with dirty hands. But it can also be hugely rewarding, and plays an important role in the education of DJs.[[27]](#footnote-27)

For his book about the hip-hop DJ, Mark Katz did some “lab” research as well, dabbling in scratching and mixing – but unlike myself, he did it from a non-DJ’s perspective. He names a lot of the typical places where vinyl DJs go hunting for records, but the most iconic one is definitely the record store. If you were a DJ before the internet, the record store was your second home, a holy institution you frequented as devoutly as your god-fearing grandmother attended church.

**Strategies**

The northern soul DJs in the UK were the first real diggers and gave digging its essential interpretation. To them, it actually meant digging up something “dead” from its grave – they “exhumed”[[28]](#footnote-28) not only a genre of music that no longer existed, but also the discarded work of unsuccessful victims of the entertainment industry. To this day, a passionate digger considers it a very serious mission to bring forgotten music back to life and give it another “chance to shine,”[[29]](#footnote-29) in the case of hip-hop *musicians* (turntablists and beatmakers) even by reworking it into entirely new pieces of music.[[30]](#footnote-30) Here is where my initial distinction between the kinds of hip-hop DJs matters to avoid confusion: The hip-hop DJ in the traditional sense digs for *fragments* of songs, and he does so within music genres that provide the *source material* for hip-hop beats. He digs into all kinds of genres and can make use of an otherwise terrible record as long as there’s a good break or sample on it. Conversely, a hip-hop club DJ like myself, who plays their *product* - ready-made rap records - understands digging like club DJs of all genres do: as finding good tracks that will work on the dancefloor. However, the basic mindset is the same for all DJs: to celebrate great music and to distinguish yourself from other DJs by finding things they don’t.

In my research I have discovered an elaborate culture of record digging that as a digital DJ, I was not previously aware of to this extent. DJs used to go to great lengths to protect their discoveries: The practice of covering up a record’s label was introduced to the UK club scene in the sixties by Jamaican DJ Count Suckle, popularized by the Northern Soul DJs and quickly established among the early hip-hop DJs as well, who took it even farther. Competition, especially in the form of battles, is central to hip-hop culture because of its roots as an alternative to gang violence, and digging was not exempt from this. The strategies surrounding it were elaborate, as DJs not only tried to shield their treasures’ identities from others, but actually sabotaged each other like Mario Kart players dropping banana peels in front of their opponents: For example, Afrika Bambaata used to buy useless records to lead astray other DJs who followed him into the record store to buy the same records he bought;[[31]](#footnote-31) North Carolina’s T-Ray tore out pages from phonebooks to prevent visiting diggers from locating any record stores.[[32]](#footnote-32) Such extreme practices have dwindled with the circumstances that enabled them in the first place. Ruby Jane raved about a special, “dirt cheap” record store that once you knew about, you would keep a secret from other DJs: “I didn’t even tell my boyfriend when I first started dating him. Because it was a secret. I was sworn to secrecy by my friend Mary.”

Nevertheless, digging is a skill, and as such it is associated with certain techniques. A quick google search for “record digging tips” produces a sheer endless list of articles, blog posts and forum discussions going into incredible detail about how and where to find records – though largely directed at beatmakers looking for samples, most of them apply to club DJs as well. When you boil them down, the basic tips make just as much sense for digital DJs as they do for vinyl diggers:

1) Look in a variety of places, 2) know what you want, but stay open-minded, 3) orientate yourself by basic information: year, label, genre, musicians and instrumentation, 4) try to listen before you buy (or download), 5) make sure you’re getting good sound quality and 6) take the time to listen to and get to know your acquirements. On this abstract level, digital and analog digging follow the same basic principles. However, the two present very different experiences and challenges due to the emergence of the internet and the nature of the media themselves.

**Availability & storage**

The two crucial conditions that affect digging as an activity are availability and storage. The former has been revolutionized by the internet and concerns not only virtual files, but also physical media. Online shops and platforms like discogs, where people sell records and CDs second-hand down to the most obscure rarity, have facilitated the acquisition of physical copies enormously. And of course digital music files can be easily purchased online at overall reasonable prices. The internet has democratized the production, distribution and consumption of music. By not going to the record store, one bypasses the store owner as a gatekeeper of music who limits the available selection. Additionally, producers and consumers alike are able to bypass an even more influential gatekeeper, the record company. Much like the increased flexibility and affordability of production equipment has created the “bedroom” producer, digital formats and the internet have created the bedroom *distributor*, as anyone with a computer, some audio software and an internet connection can upload their music, whether for free (e.g. soundcloud) or for sale (e.g. bandcamp).

Montreal funk DJ Ruby Jane cited access to a wider range of music as her primary motivation in switching to Serato, because it enabled her to keep up with new music and play remixes only available digitally:

All convenience aside, the one thing that pushed me to going digital was the fact that there was so much new music out there. So many awesome remixes. I had no problem playing remixes or mashups. I love that stuff. Keeps things fresh! And I had no way to compete with DJs who were playing with Serato or Traktor if I was just gonna stick to vinyl.

The impact of this increased availability of music is amplified by the unprecedented and exponentially increasing storage capacity of both the sellers’ servers and the consumers’ hard drives. The size of an MP3 file of a four minute track amounts to approximately 10MB at a bitrate of 320 kbps.[[33]](#footnote-33) One terabyte, the currently applicable size unit of external hard drives, can hold 100.000 of those tracks. Played back to back with no repetition, that roughly amounts to 6667 hours, or 278 days of music – three quarters of a year. I don’t know any DJ, including myself, whose collection comes near such figures – they probably exist, but hardly make up a majority, and it is doubtful they actually make use of all of it.

Today, a DJ’s digital collection is only limited to how much he manages to accumulate, which he can achieve faster and more conveniently than a vinyl DJ thanks to the internet, and because its size is completely detached from how much physical space it takes up. Still, one DJ’s vinyl collection can outnumber another DJ’s hard drive content. Jazzy Jay has over 300.000 records[[34]](#footnote-34) – ten times more than I have files in my music folder. I have a little over 200 GB of music (30.000 tracks), including a lot of things whose existence I am not aware of or which I have never listened to, which, in Professor Groove’s words, “doesn’t count.” This is because a DJ’s *actual* music collection is the one *inside his head*. It makes sense: You would not play something you’ve never listened to, therefore you might as well not have it. The music *becomes* music to you, becomes *real* to you, through the act of listening. Whether played from a vinyl record or an computer, the actual sound waves need to travel through your ear to create a copy of the music in your brain. So at the end of the day, digging is always analog.

**The human factor**

Dr. Best, a club and radio DJ from Nuremberg with roughly 25 years of experience as a DJ, an all-rounder in all things funky who currently owns approximately 5000 records, but uses Traktor Scratch for DJing, fondly recalled his trips to the record store during our interview:

That for me is the absolutely negative aspect of this digital shit. I used to love it, going to the record store. At least three days a week I hung out in some record store. When I was in a different city, it was the greatest thing, checking out what kinds of record stores there were and what they had on their shelves. It was so much fun looking for new music. And there was this record store in Nuremberg, that was back in my day when I played breakbeats, they had a lot of that stuff. And it was always like this: It was clear the record shipments always came in on Thursday or Friday, so when you went into the store on Friday afternoon around half past three, there was a DJ-gathering, because all the DJs from Nuremberg were stocking up before the weekend. There was this social component. You really knew all the DJs in Nuremberg by name. You talk for a bit, then you listen to some records, talk some more and also exchange tips and so on. And that has disappeared because I look for my music online now, alone at home.”

Meeting at the record store was a weekly ritual that brought together a tight-knit community – and this phenomenon was not exclusive to Nuremberg.[[35]](#footnote-35) Such an idea had never occurred to me until he brought it up. I’m familiar with the concept of spending afternoons in a music store – as a teenager, I used to go to the multimedia department of the local drugstore regularly and listen to CDs for hours, but I wasn’t a DJ then and it was hardly the kind of place where DJs go digging.

I have always been a “lonely” digital DJ. I know some DJs through other channels, but I am not automatically participating in any DJ community just by collecting music. For Dr. Best, this circumstance not only mattered in terms of enjoying each other’s company and exchanging nerdy small talk, but also in terms of casual networking, a useful side effect of the record store gatherings:

I’ll say there were about 80% DJs, buying their records on Fridays and Saturdays. Everybody knew each other. And back then a lot of DJing opportunities arose as a result because of this record store, because you were standing outside talking and it didn’t matter, the barriers you usually have, like “well they’re more in the house scene and I’m in the breakbeat scene”. So it happened often, that you’d be standing outside of the store smoking and some house promoter would say “hey man, I’m still looking for something for the second floor, something different, not more house again, and you do breakbeats, right, you feel like doing it?” So a lot of DJ gigs came out of that exchange at the record store, which has died out today. At least to that extent. Unfortunately.

In his case, there was a direct causal relationship between the act of digging and the actual performance, which would not have taken place if it weren’t for the limited availability of the music. Every DJ was forced to leave his home to acquire new music. The record store functioned as a bottleneck, an anchor point where all the DJs’ paths crossed to form new alliances. In my case, the act of digging has never produced an opportunity to play somewhere. I get my gigs through friends and acquaintances who are involved in an event in one way or another and recommend me. Blabla some academic theory here?

The aforementioned elimination of the store owner as a gatekeeper also has its downside: Record store owners and clerks, at least in a good store, know their collection well and cater to a certain taste. When you come in regularly, they will often make useful recommendations or set aside new releases that might be interesting to you. Digital DJs can compensate this to a certain degree with algorithms based on overlaps with other listeners’ tastes, but in the end, a computer can never achieve the necessary empathy and emotional receptivity to music. Dr. Best told me he actually has to invest more time digging online to discover something obscure than he used to in the record store because the online shop has *everything*, so he can easily spend five to six hours following recommended links and prelistening “music music music” until he comes across something worth keeping.

### 3.1.2 Organizing

The new challenge of the digital DJ is keeping up with massive amounts of data. After all, with great freedom comes great responsibility. It’s easy to download the entire discography of James Brown in a matter of hours, but merely possessing music does not automatically make this music useful, let alone make anyone a good DJ. Developing an ear and a feel for music takes years, no matter which medium the music comes from. As Dr. Best pointed out:

Today, with this digital DJing, any 18-year-old can load his hard drive full of funk and soul on a Saturday afternoon. You couldn’t do that with records back then. And that’s maybe the point where I can distinguish myself, because I have experience. Because I used to DJ seriously in different genres, I got a different feel for it. He may have a full hard drive, but the question is if he can really handle the music seriously. You have to feel the music, and just because he- I don’t think that’s possible. So I think that’s the kind of thing where you can distinguish yourself today, when you mix across genres, from old to new music. That’s a unique style that maybe not everyone can imitate.

This experience with DJing and knowledge of music are crucial factors in maintaining a digital music library, because you listen more efficiently. The better you understand musical styles, structures and textures, as well as how music influences the energy level on a dancefloor, the quicker you can judge a track, an artist, or a label. If digital DJs want to take advantage of the ability to collect more music, they correspondingly need to either spend more time listening to music overall or dedicate less time to individual tracks for it to make a difference in their programming. Keeping up with a digital collection is a constant uphill battle, because it’s nearly impossible for most DJs to avoid accumulating files they don’t get around to listening to. Not all digital music is acquired with a great deal of consideration and careful choosing, partially because it is cheap and sometimes even free - whether through promotional releases, free downloads from independent artists, or “donations” from friends (an area with differing shades of grey in different countries concerning legality).

The journey of digital music files from the vast archive of the internet to the dancer’s ear (and feet) passes through several stages of treatment, most of which are essentially the same for all DJs. New acquisitions arrive in some sort of unorganized pool – some DJs keep them in a designated folder, I always import them into iTunes, where I can access recent additions easily by sorting the library by the “Date Added” column. The next step is gradually working your way through them by listening to them, evaluating them and organizing them into broad categories, usually genres (Ruby Jane uses dance styles). Most DJs delete music they aren’t going to use. Vinyl collectors are no strangers to having to listen to excessive amounts of music at a time and discarding a lot of it – just look at the record store basement where DJ Shadow goes digging.[[36]](#footnote-36) However, they rarely run the risk of taking home loads of unidentified, completely unfamiliar records unless they buy crates of used records from someone, or get extremely carried away in dollar bins. But even that is not standard procedure. The tendency is clear: with vinyl digging, there is a different ratio and chronology of listening and acquiring.

As for the listening itself, digital music offers new possibilities besides listening to one track or album after another, such as listening to a folder or playlist full of music - or even your entire collection - in shuffle mode while busying yourself otherwise, waiting for a track to catch your attention. This listening mode introduces a randomness that could yield unexpected discoveries. While it is important to spend time listening to music attentively and without distraction, a deliberate lack of attention can help distinguish outstanding tracks that have that certain “je ne sais quoi”.

The next step after the initial broad categorization is determining which tracks are suitable for DJing and separating them from those one wants to keep for personal enjoyment. Technically, you can access your entire hard drive from any DJ software, but it would be inconvenient and overwhelming to be confronted with your complete music collection during a live set. Therefore you need to take precautions to ensure your on-hand selection is manageable. The layout of DJ software suggests to import tracks and create folders and playlists within the program’s own browser. This is the approach I have taken. Professor Groove has an external hard drive just for DJing, Dr. Best even uses a separate laptop.

An essential advantage of digital files over vinyl in terms of filing is the ability to access a file from various locations without having to create extra copies of it. Adding a track to a playlist merely creates a shortcut to that file, so a DJ can work with a virtually infinite array of playlists (or “crates”, as they are called in Serato). This allows DJs to stay versatile in a very organized way. You can maintain playlists on various levels, such as persistent, more general ones for basic situations or specific playlists for individual gigs. Ruby Jane, who plays a monthly gig, has a Serato crate named “tonight” that she updates every time to make sure she rotates through her collection without repeating the same tracks too much.

Dr. Best has a “gigantic folder system” of about 30 (sub)genres, some of which he made up himself to suit his purposes. He tries to deal with new music as soon as possible and works hard to cultivate ID tags.[[37]](#footnote-37) He switched to a DVS (in his case, Traktor) for a number of reasons, but mostly to avoid having to transport heavy record crates to gigs and to protect his “holy” treasures – after all, records wear out the more often you play them, not to mention the potential risk of damage through spilled beverages and similar threats. In addition, he appreciates the flexibility of having his entire DJ collection with him:

Back in the day you just packed your record bag. And there were definitely moments when I thought: ‘If only I had taken that one record with me, why did I leave that one at home?!’ or when it didn’t go so well and people weren’t getting into the sound I planned, so I had to play B-sides or something to make it through the night.

But he stresses that this advantage comes with a price, namely the time he invests in processing the files, as opposed to just buying a record and playing it. What takes up a lot of time in my filing process is that I run all of my DJ tracks through an MP3 gain adjustment application to ensure they all play at the same volume.

It seems natural to assume digital DJing makes everything easier, until you realize that whatever work or worries the computer takes off your hands during a live set usually translate directly to a different kind of effort you have to put in beforehand.

Performativity?

Organizing records? (stickers, BPM)

## 3.2 Mixing

I had a guy at a party one time come over to me and he’s like “Oh, you’re using Serato, not a lot of people use that.” And I actually didn’t even bring my turntables, I was just using my laptop that day, 'cause it was like a house party. So I was like I'll take the opportunity to just practice playing through my laptop and just using hot keys, like commands. […] But anyway, he came up to me and he's like: "Where's your sync button?" And I was like: "What do you mean?" He's like: "Well how do you lock the pitches so that both tracks are beatmatched?" I'm like: "I'm doing it manually." He's like "*WHAT?!*" *(laughs*) He didn't know that people did that. […] I'm like: "I'm old school, guy". And the funny thing is *I* didn't even know that it existed! So *he* didn't know that it didn't exist, and *I* didn't know that it was possible to have that.

- Ruby Jane

Beatmatching enables a DJ to create seamless transitions between two consecutive tracks by leveling their tempo to the same BPM[[38]](#footnote-38) value and aligning the beats so that when he fades from one song to the next, the tracks merge into a sort of mini-mashup while playing simultaneously. This technique generates a non-stop flow of music that keeps the dancers going without interruption. It is generally considered a required skill for a DJ, even though there are (and alwas have been) plenty of excellent DJs who could not or chose not to do it. Ever since it first emerged in the disco scene, a variety of technologies have simplified this practice a great deal, each one of them triggering similar patterns of unfavorable reactions from purists.

In the following chapters, I will first discuss how and why technological facilitation is perceived as a threat to the DJ’s identity, then relate my own experiences with the different technologies.

### 3.2.1 The format wars

Ever since the Industrial Revolution, mankind has had an ambiguous relationship with technology, one which is often motivated by pride. On the one hand, civilization has been fascinated by it and enjoyed its benefits, if not downright defined itself through it. Progress is the imperative of the modern world, and technological advancement is the most lucrative kind. On the other hand, there is a deep-seated fear of being dependent on the machines we’ve built, because *we are special, we can do whatever we want and we do not need any help doing it, thank you very much*. Most of all, people hate being replaced by machines - which happens all the time - because they cannot stand the idea that a machine can do something better than they can, because *we’re special* *and we can do anything and nobody can do it better than us*. There has rarely been a new technology that did not have to overcome a heavy backlash before it established itself because of this and because people simply tend to be suspicious of unfamiliar things.

This paradoxical love-hate-relationship gets even more complicated within technology-oriented communities such as the audiophile one, which has seen many wars of opinion about storage formats and their sound quality since Edison’s phonograph was first challenged by Berliner’s Diamond Disc. History has shown a strong tendency for convenience to win out over what conservative audiophiles tend to call the “soul” of sound. The DJ community could hardly avoid getting caught up in such battles, considering its entire existence is based on recordings. Naturally they took the debates to a whole new level since every format comes with a corresponding playback device for the DJ to use. Since the 1990s, the traditional turntables have been joined by a variety of digital equipment - the CDJ, the controller and the DVS – offering various visual aids and automations and thus plenty of room for debate about their “authenticity”.

The issue at the core of this discussion is the very humanity of the DJ himself. Any technological assistance can be considered “cheating” because it allegedly compromises his authenticity by redefining established DJ practices and his virtuosity by reducing the risk of failure.[[39]](#footnote-39) However there is a fundamental flaw in such considerations:

Essential to such arguments is an unstated warrant: musicianship is a matter of human skill, a *techne* in the classical Greek sense, a creative practice, that nevertheless seems corrupted by the influence of technology. This warrant presumes a clear opposition between a human *techne* and an inhuman *technology*; ultimately, its advocates assume that it is acceptable for humans to enlist the assistance of technology to achieve some goals but not others.[[40]](#footnote-40)

This notion constitutes a fundamental “category error” that can only lead the controversy in endless circles until it makes a mockery of itself. The “acceptable” balance between the human and the machine can only be defined arbitrarily and pointlessly, and this ideological dichotomy could easily lead one to questioning the existence of the DJ himself by asking: “Why is it acceptable to play pre-recorded songs in the first place?”[[41]](#footnote-41) The machine is not the DJ’s enemy, on the contrary, DJs have always excelled at exploring the different creative possibilities of various machines. It is understandable that a DJ who spent months learning how to beatmatch with vinyl resents another DJ who bypasses this learning process and presses a button to achieve the same, but this perspective

privileges one particular technical skill, matching tempos, over other skills that have been developed by CD DJs and controllerists. So-called ‘buttonistas’ may not be matching beats by ear, but they have demonstrated an impressive array of new skills and tricks that are simply not possible using traditional DJ gear. […] They just run the risk of failing at something other than syncing beats.[[42]](#footnote-42)

Aside from these political quarrels that Dr. Best aptly called a “DJ kindergarten”, the resistance against some digital technologies is rooted in simple vinyl fetishism, but it is also a matter of muscle memory. It is no coincidence that the EDM scene largely embraced CDs while hip-hop DJs could only be convinced of “going digital” with vinyl emulation systems, though not without a good deal of initial hesitation. Vinyl is a fundamental building block of hip-hop culture because it “was present at and largely responsible for the birth of hip-hop,” so it “carries with it the whole history, the DNA, of hip-hop.”[[43]](#footnote-43) Furthermore, a hip-hop DJ is used to a specific “immediacy and tactility”, his internalized gestures are programmed for vinyl. In the end, the DVS gained acceptance because it “allows DJs to keep what they love about vinyl – its feel, look, and authenticity – and avoid what they don’t love about it – its weight, cost, and inconvenience.” Both Dr. Best and Ruby Jane, who play hip-hop among various other funky genres, initially refused to switch to a digital system. As Ruby Jane admitted:

I was very proud- I loved vinyl so much. And I was one of the later bloomers when it came to switching to digital. I really resisted it. And I talked shit about Serato and I'd say things like: 'You're playing in your own city, you can bring a crate!' But then I realized that, you know, the world is changing, everything's getting digital...

A lot of DJs have an intense attachment to vinyl, to the extent where it becomes a part of their identity. Through timecode technology, its basic handling has been transferred convincingly to a digital system, but accepting the computer into the equation is a somewhat emotional step for some. Its role has shifted from “storing music” to being an exchangeable “control device”, but through “losing its distinctiveness […] it gains flexibility, and thus power.”[[44]](#footnote-44) The identity of vinyl has been transposed, and the DJ’s identity has shifted along with it.

### 3.2.2 Beatmatching with vinyl

Back in the day when I had my friend tell me “count out the beats” I was like: “How is math gonna get me to be a good DJ?” It’s not like I can count it and then compute as I’m mixing that this is faster than the other. […] But if I moved my hips, I could tell that one song was off-beat, you know? Like taking the time to feel it in my body. It’s something that’s internal. And relying on software to beatmatch doesn’t always help you understand the nature of the rhythms. – Ruby Jane

**Metaphorical brain surgery**

When I started learning to mix with vinyl, I knew I would have to rely on my ears instead of my eyes. I was used to seeing the waveform of both tracks running parallel to each other, indicating whether or not the tracks were matched up. Cross DJ creates a so-called beatgrid for each track, marking beats and bars. However, this is not always reliable. The crucial elements are the parallel waveform display, which allows for visual beatmatching through aligning the corresponding peaks, and the BPM analysis. Using vinyl, I would have to learn a completely new skill that involves nothing short of “rewiring my brain,”[[45]](#footnote-45) and that would take a lot of practice. I basically knew how mixing with vinyl worked, it was “only” a matter of making my body do it.

My learning process is documented in detail in the “Vinyl Diary”. I began practicing with instrumental beats, which are included on most 12-inch hip-hop singles, so I could crossfade at any point during the track structure. I used a small selection, mixing back and forth between a pair of tracks for up to 30 minutes until I moved on to another pair. Basically, it is a learning process on two levels, cognitive and physical. The cognitive element involves “rewiring the brain” to be able to discern a number of factors in a specific order:

1) Are the tracks matched up or not?

2) If not, is it due to mismatched tempo or misaligned beats?

3) Which track is faster or ahead of the other?

The physical component concerns the dexterity required to react to these observations, or in my case, to compensate for my lack of cognitive ability by answering those questions through repeated trial and error. My technique was to capture the snare drum by holding and rewinding the record, then letting it go in time with the other snare. Each time I adjusted the pitch faders differently and wrote down the values that seemed to come close enough. The fact that changing the tempo also alters the pitch took some getting used to, considering that software is able to separate those two parameters.

Trying to listen to two things at once and perceive them separately is exhausting, and I often got frustrated. But knowing that it would gradually get better with practice helped me cope with it. What irritated me the most was the cumbersome handling of vinyl before I could even get to the beatmatching part. Figuring out which side is which, placing the needle in the right groove and fast forwarding through lengthy intros consumed a lot of time. Tracks are easy to find in any DJ software’s browser by scrolling or typing the title in the search bar. Then you just load it onto the virtual decks and start it at the cue point set to wherever you want the track to begin playing. Useless intros (and outros) are easy to identify and bypass. When I moved on from pairs to mixing a sequence of songs, I also quickly became annoyed with the exercise of flipping through the records in my crate, even after I had assembled them in the order I needed them, as well as taking them out of their sleeves and putting them back in, which rarely went smoothly and effortlessly. In addition to the frustration and strain of my slow learning curve, all of this resulted in my increased disenchantment with this previously fascinating and sublime medium that carries so much historic significance.

**Cue points & Looping**

The step from instrumentals to regular tracks brought new complications, such as having to anticipate suitable points of transition within the track structures. Because I had to rewind the cued-up record manually after every trial run in my headphones, I soon missed the computer’s ability to loop the beginning of a track and/or jump back to the initial cue point with the press of a button. Looping is arguably the greatest improvement of DJ software as far as mixing is concerned. It automates an extremely difficult technique that involves two copies of the same record – looping two vinyl records at the same time would even require four turntables and two very well coordinated DJs.

My interview partners all expressed appreciation for the possibility of repeating parts of songs, especially for less “DJ-friendly” tracks with short intros and outros.[[46]](#footnote-46) I often use it to match up tracks early and sprinkle snippets of the upcoming track throughout the active track, or simply to enjoy myself listening to the mashup in my headphones between transitions. Matching up tracks in advance has the added benefit of freeing me up to equalize transitions in creative ways, although it can lead me to forget about disabling the loop after the transition. The ensuing monotony can quickly suck the energy from a dancefloor. Professor Groove likes to point out how important it is to structure transitions so that exciting parts follow each other without a drop in energy in between. In DJ software, the size of the waveform is a useful indicator for the progressing density of a track, but you still need to understand and sense the typical 16-bar patterns.

I also encountered a variety of unexpected difficulties that are mostly related to the materiality of vinyl and had simply never occurred to me before. Most of all, I discovered not all records are the same. Some records feel lighter than others on the turntable and require different handling. Some records are louder than others. Some records are pressed in lower quality than others. All of them need to be kept clean. The familiar hissing and crackling that so many people associate fondly with vinyl suddenly turned into a disturbance that needed to be fixed. Dust accumulates on the needle in a tiny ball of fluff that eventually causes the needle to lose contact with the groove and go skidding towards the center of the platter. Greasy stains cause the needle to skip. After extensive online research, I soon found myself running all over town buying distilled water and a polishing cloth at the drug store, ethyl alcohol at the pharmacy, a small spray flask at the dollar store, and copper cable at the hardware store to replace a ground wire because even the turntable setup itself has its quirks that require maintenance.

All of these complications are only the proverbial tip of the iceberg, the rest is to be found in the “Vinyl Diary”. Learning to mix with vinyl has not been simple, and I am still far from doing it with ease. I managed to record a carefully planned mix in one take, but making clean transitions spontaneously and consistently will take a lot more practice. Nevertheless, it is a valuable experience for a digital DJ like myself, because as I discovered later, learning to rely on my ears instead of my eyes has actually benefited my controller skills. Even though I have rarely used the infamous “sync”-button for practical reasons, I still depended on the waveform and BPM display. The latter can be trusted with hip-hop, but not with music that involves a live drummer and/or complex rhythms, such as funk. No software can keep up with that. As a result, I never attempted to beatmatch that kind of music and resorted to doing a quick blend at the end of a song. A few times I tried adjusting the tempo so the peaks in the waveform lined up, but they would drift apart quickly. If I could not lean on the precision of the computer, I preferred not to risk anything. Mixing funk is no longer an insurmountable barrier that I do not dare approach, it has become doable. I still rely on the parallel waveforms to some extent and I could not do it as well with vinyl. But the comfort zone of my controller has expanded: I no longer shy away from matching the tempo myself, even if only approximately, and making adjustments on the go using the jogwheels, which I rarely touched before. Generally, I am much less afraid to ignore the program with the same attitude I put on when I disable spell-checking: *Thank you, machine, but I can do this better than you*.

\* know styles, know what fits together

## 3.3 The spectacle

The DJ is not the source of the experience, but one among several nodes in a cluster of sounds, technologies, and bodies moving through space. The creative subjectivity at work comes not from the human agent alone (nor the machines, nor the dancing audience) but from the interactions among them all.[[47]](#footnote-47)

Ever since superstar DJs have embraced their convenience for touring internationally, digital DJ systems have gained acceptance within the community, or at least a begrudging tolerance. The passionate resistance these technologies encountered (and sometimes still encounter) have been well documented by scholars of DJ culture, who have found countless examples of sceptical vinyl purists complaining about digital DJs appearing to be “playing pac-man” or “checking their email” while possibly playing pre-recorded sets and essentially “getting paid to do nothing.”[[48]](#footnote-48)

This discourse implies a fundamental concern with how the DJ’s performance is perceived. There would be no reason to even care what other DJs do unless the very prestige of the art of DJing was at stake. But curiously, in my research I have not come across any surveys of the actual *audience*, the clubgoers themselves, or any indication that the DJs in question are basing their angst on any evidence instead of narrow-minded paranoia. Unfortunately, since I did not have the time or resources to conduct such a study myself, I am limited to my own observations of the crowds I have witnessed being entertained by laptop DJs, including myself.

The previous chapters addressed the DJ’s work outside of the club and his composition techniques. The following chapters deal with the role of the different technologies in shaping the *appearance* of the DJ’s performance and his interplay with the dancers. Performance theory will provide a theoretical framework that I will filter through the lens of my experience.

Presence

### 3.3.1 The ecstasy of things

Analog turntables leave the record in plain view of spectators, foregrounding the spatiality inherent in the technology of the record. Digital music in play, however, is largely or totally invisible […]. A number of [DJs] argue that visible recognition of the playback process is vital to the art of DJing.[[49]](#footnote-49)

My primary motivation to learn using vinyl was an inferiority complex. It took a long time, at least three to four years overall, for me to consider myself a DJ more comfortably after I had acquired a set of skills that every DJ needs, digital or analog. Yet I still felt like a second-rate DJ whenever I was the only one in a line-up not to use the turntables. I would free up a small space for my laptop and controller on the side, and the entire time I was playing I felt dwarfed by the silent, majestic turntables staring at me from the side, subliminally ridiculing this *toy* I was using in their stead and reminding me of a bigger challenge I had not faced – literallybigger. My controller is half the size of one turntable. But their *presence* was not just an intimidation, it was also an invitation. They fascinated me, they drew me towards them, they dared me to touch them and bring them to life. They had a similar effect on me as an actual tractor has on a child that loves playing with toy tractors.

**turntables**

I am using the word “presence” here for a reason. “Presence”, or “presentness”, is an aesthetic quality ascribed to performance in the discourse of theater studies. It refers to an intense, contagious energy circulating in the performance space that affects the spectators. Fischer-Lichte interprets this effect on several levels, but one context is particularly interesting concerning the turntable. Drawing from Boehme, she suggests that all performative spaces have distinct atmospheres, which are created by a configuration of things and people emanating a tangible energy, or “presence”. The concept is basically a remix of Benjamin’s aura. In reference to objects, not humans, Boehme specifies the term “ecstasy”. It means that in a performative context, an object affects people beyond their mere (audio-)visual perception of it: “In their state of ecstasy, things have an immense effect on anyone perceiving them because they appear as particularly present.” An object’s form “practically radiates into its environment,” its volume and dimension “can be felt from without, they bestow weight and orientation on the room in which the thing is present.”[[50]](#footnote-50)

The turntable certainly “pours” a lot of presence into a room through its physical properties. I want to supplement these abstract notions with a few concrete observations about the turntable. The simplest of them is to say that a turntable setup is an eye-catcher. If the DJ is a shaman or witchdoctor or priest, the turntable is his shrine or altar. It draws attention to itself with its sheer size and obvious sophistication, a heavily built body crowned by a delicate apparatus and hypnotically rotating shiny black disk. The point of contact where the sound medium meets its playback device is exposed, visualizing an obvious causality.

When I turned my bedroom into a dancefloor for a recent house party, arriving guests were immediately impressed by the turntables that had not been there during the previous party.(?) This is not just due to the equipment’s size. Turntables trigger specific associations. Because they are the machines that DJing was built on, they are imbued with historic significance. They have shaped the aesthetic of the DJ’s performance, even the definition of what DJing is. DJs used to have no other choice but to play records, so records accompanied the DJ’s rise to stardom. For a long time, DJing was not even a visual spectacle. It was common for the DJ to be hidden from sight in his booth - until he became the rock star of dance music.[[51]](#footnote-51) Consequently, “it is the turntable that has become the central ‘tool’ of the DJ and that has achieved a wide degree of cultural recognition, in much the same way as the electric guitar is perceived as being integral to rock music culture.”[[52]](#footnote-52) A turntable *transforms* a space by defining it as a DJ’s space, and by using it a person validates themselves as a DJ. When those people entered my room, they knew to expect a DJ performance.

**digital**

Now that I have divided the turntable’s “ecstasy” into its physical appearance and the meaning ascribed to it, the question arises as to how the controller and the DVS relate to those categories in combination with the laptop. Let’s examine the tool that unites them first. First of all, the laptop is small – small enough to fit on a person’s lap, as the name says. It is compact, its components hidden in a smooth, solid frame. As a thing in itself, it radiates a rather blank, nondescript vibe. Second of all, it is a multifunctional device so ubiquitous in everyday contexts that no one can be expected to be struck with awe by its appearance. While people who are not DJs do not have turntables at home and only see them in specific situations, almost everyone has a laptop and use it on a daily basis. Its ordinariness and familiarity results in a lack of fascination with it. Furthermore, its user interface is monodirectional, so anything unfamiliar and potentially fascinating that might be happening on the screen is concealed by the back of the lid. To see what a laptop DJ is doing, one has to trespass into his territory, which some curious guests do when the booth is not too demonstratively elevated or walled off.

As opposed to a turntable, a controller is not an autonomous playback device, it simply controls the actual playback device, the computer. Structurally speaking, it is no different from a video game controller. The gaming aesthetic becomes particularly obvious when comparing the DJ controller to a *DJ Hero* controller, which looks like an extremely simplified version of it, featuring a jogwheel and a few colorful buttons. Watching someone play a video game primarily means watching what happens on the screen, not the person operating the controller. Taking this analogy to an extreme, one could imply that the controller DJ offers no spectacle whatsoever because there is no visible causality between his gestures and the sounds coming from the speakers. One could also wonder how a crowd would react to the DJ’s screen being projected on the wall - an interesting experiment I have yet to witness.

It is harder to analyze the controller’s presence or “ecstasy” because it is a relatively young phenomenon of the late 2000s that has just started to accumulate its own meanings beyond those of the re-contextualized devices that inspired it:

The controllerist […] may have started as a hobbyist, jury-rigging MIDI keyboards and gamepads for use as DJ controllers, but an entire industry of gadgets has since emerged, bringing to market a dizzying array of tools to give the DJ tactile interaction with computer programs.[[53]](#footnote-53)

As for the aspect of physical appearance, no statement can be made about *the* controller because there are many different types of different sizes. Some are almost as large as a set of turntables and are equipped with an impressive array of knobs, buttons and faders. Naturally, they draw more attention to them than their smaller and simpler versions. Earlier, I referred to my controller as a toy. In some ways, this is a suitable analogy. A lot of toys serve the purpose of emulating “real” things (or people) by reducing them to a few selected superficial properties, replacing machinery with buttons and knobs and usually stripping away their primary function. For instance, DJ controllers are often equipped with so-called jogwheels. They are not necessary, and they do not rotate on their own, but they are tangible round surfaces that can be used for sound manipulation. The primary function that has been removed is that of playback. Yet the toy metaphor is predominantly influenced by concerns of size more so than by a gaming aesthetic or toy-ish imitation of certain functions or properties. I would not call a controller eight times the size of mine a toy, let alone a DVS, even though “the moment you drop control vinyl on your deck, […] you’ve converted your turntable into a controller.” Because size matters, large controllers and especially vinyl emulation systems can “borrow” from the turntable’s ecstasy.

As Adamowsky remarks,

back then, when there were still live performances in clubs, the stage was the center that everyone homed in on. […] As opposed to the pop musicians on stage, equipped with a microphone and animating the crowd with their voices and bodies, the DJ disappears behind his technical equipment acting cool. Not himself, but his sound system is the eye-catcher, and this elaborate apparatus is a constant reminder of the technological expenditure the dancing pleasure is based on.[[54]](#footnote-54)

Although this is a rather simplified statement that ignores both the history of talking DJs and the modern DJ on stage - as well as the way a DJ’s behavior affects a crowd, which I’ll get to in the next chapter – there is an undeniable truth to it. Whether or not the dancers notice the DJ’s equipment consciously, it shapes the atmosphere in the room.

### 3.3.2 The audience is the performance

I think that [not looking at the laptop too much] is something that DJs should be conscientious of, because you don't wanna feel like the DJ is withdrawn from the crowd and just inside this electronic box the whole time. I think the crowd can tell whether you're paying attention to them. And if a DJ doesn't seem like they're paying attention to the crowd, then you don't feel like it's a shared experience as much. You know what I mean? Like, that the DJ's in the same moment as you are. That's when a DJ- you feel like they're kind of in the wrong space. So it's not as fun anymore, whereas a DJ that you can see that they're into the music and they're enjoying it at the same moments as you are and they kind of look up at the crowd often enough, that they're like, "wow, we're all experiencing this together" then you can feed off their energy, they're feeding off of your energy, and there's just this kind of communication, I guess, or interaction. I think the essential part is just to feel like the energy's going back and forth between the DJ and the crowd. – Professor Groove

For the early performance theorists, the DJ would have been an analytical goldmine, had they not been so focused on theater. While avant-garde theater was revolutionizing the “passive” role of the audience, which finally gained relevance in academic discourses, clubgoers were already way ahead of them. What happens in a club is performance at its finest; it is processuality, corporeality, spatiality, transcendence, energy, dramaturgy, rhythm, ritual, celebration, play. For every coughing guest in a theater, there’s a dancer in a club jumping up and down. The club audience takes everything a theater audience does to the extreme.

**DJ theory?**

Unfortunately, there is no such thing as a performative theory about the DJ. There are a number of possible reasons for this – the official performative turn of the 1960s and 1970s was too busy reversing the hierarchy between text and performance, a dichotomy that does not concern the DJ because there *is* no text, just music, which is performative in itself. Ironically, this pure performativity may just be the reason why the DJ does not receive the same academic treatment as the “high arts” do. Poschardt perceptively argues that the “wordless” culture of the DJ simply does lend itself to being forced into a theoretical corset.[[55]](#footnote-55) Instead, “the truth about DJs has to be experienced when you can watch the DJ at work and dance to his music.”

Even the realm of ritual studies, the emergence of which constituted a performative turn of its own in the early twentieth century,[[56]](#footnote-56) has ignored the DJ; he is probably the victim of a pessimistic view of the secularization of festival culture, which is apparently considered a “decline” by some scholars.[[57]](#footnote-57) The only people that consider club culture as a valuable modern-day response to the deep-seated human need for “holy time” are the people actually involved in it, those who are “worshipping life through dance and music.”[[58]](#footnote-58) In the meantime, city administrators are imposing curfews and noise restrictions to protect reasonable hard-working citizens from being disturbed by those raucous hedonistic drug addicts who are probably doing unspeakable things down there in addition to severely damaging their hearing ability.

While the DJ pops up from time to time in pop culture theory, most of what has been written about him as the central subject is historical and anecdotal, though decorated with occasional abstract musings, such as the shaman metaphor, which appears in Brewster and Broughton’s introduction to their extensive history of the DJ, among others. However, in my research I have encountered numerous concepts surrounding ritual and theater that reminded me of the DJ, a lot of which I recognized in Adamowsky’s and Klein’s forays into club culture. One of the universal characteristics is the temporal and spatial separation from the everyday, including the suspension of its rules, which provides the breeding ground for the “liminoid” experience of being part of a community that enables the “leveling of all differences in an ecstasy that so often characterizes performing.”[[59]](#footnote-59) This is accompanied by a specific corporeality that produces a transcendant state, an intense experience of the present and a heightened sense of self as mind and body melt into each other. Another common theme is the dramaturgy of tension and release, which repeats itself in small fluctuating units throughout the event, but also constitutes the structure of the event as a whole in an Aristotelian sense: There is always a beginning, middle and end, or in DJ terms warm-up, peak time and cool-down.

All of this is made possible by the “bodily co-presence of actors and spectators [that] enables and constitutes performance,”[[60]](#footnote-60) whether the performance in question be an ancient rite of passage that transforms the status of a member in the eyes of the community or a theatrical performance that “infects” its audience with a “contagious” energy and passion.[[61]](#footnote-61) As far as the DJ is concerned, the audience truly *is* the performance. Without trying to dismiss the special relationship between actors and spectators in a theater, I want to point out the peculiarity of the dancing crowd in the club context, whose default mode is not “sitting down and watching” by any means. The roles are reversed: The DJ is rooted to the spot in his booth - it even used to be common for the DJ to sit down – whereas the dancers move across the space. Theater spectators “generate the performance” from a reception theory perspective and in some cases through genuine audience participation, but a DJ’s audience possesses an inherent power over his performance because of their ability to judge him immediately and visibly through the way they dance or don’t dance, which (ideally) influences his decisions.

**Interaction with the crowd**

There are two ways a DJ interacts with a crowd: indirectly, through the music he plays, and directly, and through the way his body behaves. Since we’re already talking about performance theory, let’s begin with the latter. I have already mentioned that the DJ used to be hidden from sight, which is generally no longer the case. Now that his body is visible, it can’t *not* have an effect on the crowd, even if the space is decentralized because dancers can choose an “arbitrary spatial perspective”.[[62]](#footnote-62) As Professor Groove pointed out at the beginning of this chapter, a DJ’s enthusiasm is crucial to creating a “shared experience” where the DJ and crowd “feed off” each other’s energy. Without knowing it, he basically paraphrased Fischer-Lichte:

The “magic” of presence therefore lies in the performer’s particular ability to generate energy so that it can be sensed by the spectators as it circulates in space and affects, even tinges them. This energy constitutes the force emanating from the performer. Insofar as it animates the spectators to generate energy themselves, they will perceive the actor as a source of power. This unexpected energy flow thus transforms actor and spectator alike.

This does not necessarily mean jumping around and “doing wild arm motions and stuff as it seems like it's trendy to do these days,”[[63]](#footnote-63) it is much more subtle than that. It is about body language and facial expressions that convey enjoyment of the music and attentiveness towards the crowd. In my experience, technology is not the decisive factor when it comes to this. It could be argued that the laptop can constitute a “barrier between the DJ and the crowd” when placed at eye level.[[64]](#footnote-64) I have never seen a DJ’s laptop positioned above the mixer right in front of the DJ’s face – it is usually placed at an angle from the side, probably because most DJs are either aware of their visual impact on the crowd or simply want to be able to see the crowd.

Aside from the technology’s “aura” discussed in the previous chapter, it is the way the DJ *uses* it that shapes his interaction with the crowd. Digital DJs certainly “risk getting lost in their screens,” but it is up them to become aware of this risk and learn to avoid it.[[65]](#footnote-65) Staring at your equipment too intently is not an exclusively digital problem. I have seen vinyl DJs completely absorbed in their activity, lacking the connection with the crowd. Ruby Jane admits to being a “stone face”:

I guess I’m concentrating and I’m thinking and I’m like ‘okay, what am I gonna play next?’ I don’t really look like I’m enjoying myself. (*laughs*) […] I do look at the audience, but I’m observing them critically to see if they’re responding to the music. I actually don’t look that much at the laptop, I spend more time looking at the mixer.”

She states that the laptop is not the culprit in this case, although she concedes that it “probably doesn’t help” and that it distracts her from interacting with the crowd when she plays *internally* on the laptop, without turntables as an external control device. Furthermore, as Katz remarks,

using digital vinyl can potentially free a DJ to interact *more* with a crowd [because] using a DVS means spending less time flipping through crates, switching records, and cueing them up, and more time gauging and engaging the audience.[[66]](#footnote-66)

When DJing with my controller, I enjoy phases of inactivity as far as handling the music is concerned, because I am free to move my body and engage with the crowd. When I played records at the aforementioned house party, I was constantly busy, which was certainly due to my inexperience and lack of preparation – I had planned on using Traktor, but technical difficulties forced me to pull a spontaneous set from my shelf – but nevertheless, even a highly skilled DJ has to perform the physical action of turning around, picking a record from his crate and preparing it for playback. Even during mixing, it is doubtful that a vinyl DJ is focusing on the crowd in the absence of a laptop, because beatmatching requires so much concentration that the brain blocks out the environment to a certain degree, and if he’s equalizing the transition he’s looking at the knobs on the mixer. Getting the next track ready and making transitions distracts a DJ from the crowd with all technologies. The degree of interaction with the crowd depends on his skill and efficiency, but it is also a conscious effort. However, the “obvious physical movement” of a vinyl DJ presents more of a spectacle to the crowd while he’s busy.[[67]](#footnote-67)

The general rule is: The more skilled a DJ is with his technology, the more leeway he has to focus on other aspects of his performance.

\* controller: in addition to DVS -> touching laptop less

**Working the crowd**

The shaman’s journeys are neither gratuitous nor for private use. He goes to get something and he must deliver what he gets back to his people – he must teach them what he learns. His work is social work.[[68]](#footnote-68)

I don't think music is ever like an "eat your vegetables" kind of thing. I think a DJ that has that kind of mindset is not really going to connect with people. – Professor G.

The crowd may be looking at the DJ or not, but they cannot turn away their ears. In a dance club, the volume level of the music ensures that it fills the room and envelops the crowd completely. With his music, the DJ practically penetrates every body in the room: “When a sound resounds in the listeners’ chests, […] they no longer hear it as something entering their ears from outside but feel it from within as a physical process creating oceanic sensations.”[[69]](#footnote-69) Music is a powerful tool for steering people’s moods and emotions, and ultimately sometimes even their actions. Edison knew this when he came up with his “Mood Change Parties”, advertisers know it, store owners know it, filmmakers know it, therapists know it, but the DJ knows it most of all. In the club, he has to translate his digging work into an unrepeatable experience, a unique musical journey that originates from a special feedback loop with the dancers in that place at that time.

Nowadays, the task of keeping a crowd entertained throughout the night is usually divided between several DJs as opposed to the traditional residency of a single DJ responsible for the entire night. In combination with the increased availability of music, this development has gradually created an “inverse relationship between available playing time and available music.”[[70]](#footnote-70) This means that most of today’s DJs have to structure their programming differently than their forefathers, who had more control over the overall dramaturgy, but also enables them to condense their individuality more noticeably. Instead of creating a “flow” over the course of several hours, a DJ now has to construct his set to meet the requirements of the time of night he is playing and take into consideration the style of the DJs before and after him. At first sight, the peak time slots would seem like the most desirable, but while “the energy of a crowd in the middle of the night is so rewarding,”[[71]](#footnote-71) the pressure to keep the crowd going allows for less experimentation than the start and the end of the night do. The DJs I interviewed unanimously voiced their appreciation for those times when there is less traffic on the dancefloor, because it allows them to play beloved tracks that would not be appropriate during peak time.

Generally, it makes the most sense to prepare a selection thouroughly, but flexibly. Vinyl DJs are forced to limit their available selection for the sake of transportability (and therefore, ironically, benefit from new situation), whereas a digital DJ is automatically more flexible because he can have his entire collection at his disposal. As I touched upon in the first chapter, digital DJs generally separate their DJ music from the rest of their collection and categorize it to have easy access to the music they need at any given moment. Often they also create a playlist for an individual night to cater to a specific situation or to ensure a balanced rotation and maximize their collection’s exposure. In a way, they emulate what vinyl DJs do, except that they have a safety net. This flexibility, combined with the democratization of digging, creates the “potential for a set to be generated that has a greater diversity and variety than a performance based solely on the playing of vinyl.”[[72]](#footnote-72) In addition, digital DJs have quicker and cheaper access to new releases.[[73]](#footnote-73)

**The DJ is not a jukebox**

Creating a dramaturgy for the night is a perpetual balancing act between tension and release, leading and following, preparation and spontaneity, pleasing and challenging. It is about controlling a certain group dynamic, because “the audience responds not only to the actors’ physical actions but also to the behavior of other spectators.”[[74]](#footnote-74) Performance scholars often describe the atmosphere in a theater as “infectious” or “contagious”.[[75]](#footnote-75) This phenomenon is what makes the DJ’s work possible. Since everybody has different musical preferences, a DJ cannot please every single person on the dancefloor. But if he keeps enough dancers going, others will be motivated to dance by the atmosphere.

The easiest way to please people is by playing things they are familiar with, but it is pointless to base one’s programming on this realization. Brewster and Broughton’s DJ guide rightfully warns against the “big-tune syndrome”, which means playing “crowd pleaser after crowd pleaser” and “will wear out” the crowd.[[76]](#footnote-76) One of the biggest challenges for a lot of DJs, including myself, is fulfilling their function as a musical “missionary” and keeping a crowd entertained with tracks that are musically great, but that the audience is not necessarily familiar with. Professor Groove deals with the fact that the music he is “most enthusiastic about is not necessarily familiar to people” by finding the middle ground:

I spend a lot of time getting to know my music and understand which songs I have that, even if you have never heard it before, there's something in that song that is accessible and that makes you wanna move and makes you happy and all of that. As long as people are open to it, as long it's not the kind of situation where people expect that they're gonna hear stuff that they can sing along to, as long as people are just expecting to be hearing good music that's fun and they're gonna dance, I have songs that it doesn't matter whether they know it or not, they're gonna love it.

This strategy works because he has learned to judge the accessibility of music:

It's not just familiarity with the song, it's also familiarity with a style, you know? Or a style of production or something. […] There's different aspects of a song that even aside from whether they know the song itself, it could sound more familiar or accessible or more strange and not something that they were expecting to hear. So that's just kind of where reading the crowd comes in. Like just getting a feel for what's gonna work, what's gonna make them happy and what isn't.

The key to programming is understanding musical styles and how they impact the dancefloor, but predictions can only be based on experience. In their guide to DJing, Brewster and Broughton emphasize how every tracks sounds different on a club system as opposed to a home stereo, and how a track can affect a crowd differently than they affect the DJ himself. Only through “playing out” and remembering different crowd’s reactions to every track can a DJ start to build a mental “library of moods”.[[77]](#footnote-77)

This goes to show how much power crowds have over a DJs. A crowd doesn’t just influence a DJ’s present decisions based on an immediate feedback loop, but actually impacts his *future* programming. Every crowd a DJ experiences shapes his musical identity, one that is never static, but constantly shifting. Of course, this is not a one-way street. Step by step, the DJs of the world likewise influence the tastes of the crowds they entertain, to the point where they collectively shape new genres and subcultures because of their “direct impact on the music that participants in the scene are exposed to.”[[78]](#footnote-78) This is why the world of dance music depends on DJs to make adventurous programming decisions once in a while, even if they have to “struggle against the power of ingrained listening habits.”[[79]](#footnote-79) Professor Groove explains how this needs to be done by earning the trust of the crowd first, instead of forcing it on them:

I don't think music is ever like an "eat your vegetables" kind of thing. I think a DJ that has that kind of mindset is not really going to connect with people. […] Sometimes when I have a good feeling about the crowd, I put a song on that's maybe a slightly different direction and the energy dips. But I know this song builds, and it may take them a moment. It's not so bad that they're gonna suddenly clear off the dancefloor, I'm confident with that. I know that it's gonna take a moment for them to get into sync with this new thing but when they do, it's gonna be like a new direction and I know they’re gonna feel it and then we're gonna be able to go off in this other direction. If you can do that, that's when the crowd really begins to trust you, too, because you've given them something that was a little bit unfamiliar, and then they realized how amazing it is, and then the next time you throw something in they’re more like: "Okay, i'll go with this. Let's see where he's going with this”

This is a part of what makes clubbing a “liminal experience”, a term theater studies have adopted from ritual studies that describes how a performance is “capable of transforming the experiencing subject,” which is “of pivotal importance to the aesthetics of the performative as it captures the nature of performance as an event.”[[80]](#footnote-80) Both the DJ and his audience are exposed to new impulses in a constant state of negotiation. Each “transitional moment is accompanied by a profound sense of destabilization” until a balance is restored temporarily, only to be challenged again.

the visual performance associated with DJing is intrinsically linked to the skills associated with DJing.

The fundamental skills of DJing were established through the use of

vinyl, and thus, if there is a change to the use of a format other than vinyl, then there

are also changes to these fundamental skills.

# 4. Conclusion

The dj is not a jukebox

The DJ’s most powerful tool is the music itself, and his *most fundamental skill* is, and always will be, playing the right song at the right time. I want to make it clear from the start that no technology can ever replace this skill. Everything I have elaborated up until this point is really just splitting hairs, very nerdy hairs, because as experience has shown, the audience *does not care* about any of it. A transition may be a complete train wreck, an MP3 may be in bad quality, the DJ may pull a face as if his grandmother has just died. I have witnessed all of these mistakes, and done some of them myself (remember that first media studies party?). If it’s the right song, people *will dance*. The same applies vice versa: Perfect technique and charisma will not make the crowd dance if you’re playing the wrong song.

“You’ll be surprised how much easier it is to improvise when you have real-life dancing bodies in front of you. Have some fun. It’s not an exam. No one’s judging you on your trendiness or your amazing pyrotechnical mixing gymnastics. They just want to dance.” Htdjr 112

Don’t do what’s “right” or what other people tell you to do, do it the way it’s fun for you

Programming is the skill that will always secure the element of human agency within the craft of DJing, unperturbed by the comings and goings of technologies, and it will always be the key to true greatness.

I remember now how tentative and clumsy I was when I first sat on the tractor. My hands were trembling as I pulled a record from its sleeve, placed it on the platter, moved the tonearm, placed the needle at the rim and pressed “play”. I hardly dared touch the record – I wondered which fingers to use and where to place them. I was very tense when I held on to the snare, barely moving the record once I captured it for fear of losing it. Now, after four months, handling the records feels natural. I touch them a lot, spinning them backward and forward, giving them a push or slowing them down. I am not a perfect vinyl DJ by any means, but I have achieved a sufficient degree of control over the medium and equipment in a sterile practice situation. As I expected, mastering this machinery instills a strange sense of satisfaction:

Probably the most important reason for [the turntable’s] success is its physical immediacy. The hand rests comfortably on the grooved, slightly tacky surface of the record. That tactility is enormously important to DJs, who often wax eloquent about the intimable feel of vinyl. Pushing a record underneath a turntable needle, transforming the music held within its grooves, one has a sense of touching sound.[[81]](#footnote-81)

This tactility amplifies the godlike power the controller has given me only a taste of. To merge two grooves into one is to exert power over the music, and there is a very rewarding feedback loop involved when syncing beats with vinyl: When the rhythms are slightly off, you temporarily speed up or slow down a record’s rotation and/or adjust the pitch to hear it subsequently melt into the other one in perfect harmony, a harmony that *you* created with your hands.

1. Say something about gendered writing [↑](#footnote-ref-1)
2. Explain. [↑](#footnote-ref-2)
3. (Milner 2010, 4) [↑](#footnote-ref-3)
4. (Brewster and Broughton 2006, 28-29) [↑](#footnote-ref-4)
5. (Brewster and Broughton 2006, 30) [↑](#footnote-ref-5)
6. See Brewster first chapter [↑](#footnote-ref-6)
7. (Brewster and Broughton 2006, 39) [↑](#footnote-ref-7)
8. (Milner 2010, 47) [↑](#footnote-ref-8)
9. (Brewster and Broughton 2006, 56) [↑](#footnote-ref-9)
10. The Nazis also „grudgingly tolerated“ native jazz musicians playing in France. [↑](#footnote-ref-10)
11. (Brewster and Broughton 2006, 61-63) [↑](#footnote-ref-11)
12. (Brewster and Broughton 2006, 130) [↑](#footnote-ref-12)
13. (Brewster and Broughton 2006, 84) [↑](#footnote-ref-13)
14. (Brewster and Broughton 2006, 69-70) [↑](#footnote-ref-14)
15. (Brewster and Broughton, Last Night A DJ Saved My Life. The History Of The Disc Jockey 2006) [↑](#footnote-ref-15)
16. (Brewster and Broughton 2006, 83) [↑](#footnote-ref-16)
17. (Brewster and Broughton 2006, 139) [↑](#footnote-ref-17)
18. (Brewster and Broughton 2006, 141) [↑](#footnote-ref-18)
19. (Brewster and Broughton 2006, 145) [↑](#footnote-ref-19)
20. (Katz 2012, 24) [↑](#footnote-ref-20)
21. (Katz 2012, 24f) [↑](#footnote-ref-21)
22. (Brewster and Broughton 2006, 235-239) [↑](#footnote-ref-22)
23. The turntables: Vestax PDX-2300 and FDX-2300 MkII Pro, the mixer is a (???) [↑](#footnote-ref-23)
24. Htdjr 22 [↑](#footnote-ref-24)
25. Adam 151 [↑](#footnote-ref-25)
26. Mix 125 [↑](#footnote-ref-26)
27. (Katz 2012, 11) [↑](#footnote-ref-27)
28. (Brewster and Broughton, Last Night A DJ Saved My Life. The History Of The Disc Jockey 2006, 88) [↑](#footnote-ref-28)
29. Prof groove 09 [↑](#footnote-ref-29)
30. Ironically, they have had to deal with a heavy backlash from outsiders accusing them of disrespecting the records they are scratching or sampling, whereas they perceive it as salvaging whatever they can from a “pile of broken dreams” [↑](#footnote-ref-30)
31. Groove music [↑](#footnote-ref-31)
32. Scratch 54:00 [↑](#footnote-ref-32)
33. Kilo bytes per second. 320 recommended [↑](#footnote-ref-33)
34. scratch [↑](#footnote-ref-34)
35. (Montano 2010, 400) [↑](#footnote-ref-35)
36. scratch [↑](#footnote-ref-36)
37. Metadata of digital files containing artist, album etc. [↑](#footnote-ref-37)
38. Beats per minute [↑](#footnote-ref-38)
39. Mix 152 etc [↑](#footnote-ref-39)
40. Mix 29 [↑](#footnote-ref-40)
41. Mix 30 [↑](#footnote-ref-41)
42. Mix 29 [↑](#footnote-ref-42)
43. Katz 218 [↑](#footnote-ref-43)
44. Katz 229 [↑](#footnote-ref-44)
45. Htdjr 52 [↑](#footnote-ref-45)
46. Ruby jane [↑](#footnote-ref-46)
47. Mix 41 [↑](#footnote-ref-47)
48. Pacman, tracking [↑](#footnote-ref-48)
49. Tracking [↑](#footnote-ref-49)
50. Erika 116 [↑](#footnote-ref-50)
51. Find source [↑](#footnote-ref-51)
52. pacman [↑](#footnote-ref-52)
53. Mix 27 [↑](#footnote-ref-53)
54. Spielfiguren 168 [↑](#footnote-ref-54)
55. Ulf 17 [↑](#footnote-ref-55)
56. Erika [↑](#footnote-ref-56)
57. Spielfiguren 105f [↑](#footnote-ref-57)
58. Last night 13 [↑](#footnote-ref-58)
59. Schechner 119 [↑](#footnote-ref-59)
60. Erika 32 [↑](#footnote-ref-60)
61. Erika [↑](#footnote-ref-61)
62. Klein 168-169 [↑](#footnote-ref-62)
63. Professor Groove [↑](#footnote-ref-63)
64. Katz 226 [↑](#footnote-ref-64)
65. Katz 226 [↑](#footnote-ref-65)
66. Katz 227 [↑](#footnote-ref-66)
67. Pacman [↑](#footnote-ref-67)
68. Schechner 42 [↑](#footnote-ref-68)
69. Erika 119 [↑](#footnote-ref-69)
70. Mix 128 [↑](#footnote-ref-70)
71. Prof groove [↑](#footnote-ref-71)
72. pacman [↑](#footnote-ref-72)
73. Katz 228 [↑](#footnote-ref-73)
74. Erika 36 [↑](#footnote-ref-74)
75. Find source [↑](#footnote-ref-75)
76. Htdjr , 124, 134 [↑](#footnote-ref-76)
77. Htdjr 129 (und davor) [↑](#footnote-ref-77)
78. Pacman [↑](#footnote-ref-78)
79. Klein 180 [↑](#footnote-ref-79)
80. Erika 174 [↑](#footnote-ref-80)
81. Katz 64 [↑](#footnote-ref-81)