Vassar College

Digital Window @ Vassar

Senior Capstone Projects

2020

"Soundtrack your life with Spotify": music as a technology of the self in the age of affective algorithms

Amanda Fassler
Vassar College

Follow this and additional works at: https://digitalwindow.vassar.edu/senior_capstone

"Soundtrack Your Life with Spotify":

Music as a Technology of the Self in the Age of Affective Algorithms

A Senior Thesis submitted in partial fulfillment of the

requirements for the Bachelor of

Arts in Media Studies

by Amanda Fassler

Advised by Thomas Porcello

Vassar College

Poughkeepsie, New York

May 2020

Acknowledgements

I am so grateful to the many people who have inspired, engaged with, and helped me write this thesis, but I specifically want to say thank you…

 … to Tom Porcello for his patience and guidance with not only my thesis, but also

  media studies major as a whole, *and* my knowledge of sound studies

 … to Giovanna Borradori for her wisdom and gentle support through all of our

  endeavors, even when it means playing Wink Murder instead of holding class

 … to Paul Johnson for being a "lifetime investment" and encouraging me to get out of

  my academic comfort zone

 … to Louis Römer for inspiring and impacting my academic path at Vassar from my first

  semester at Vassar to the direction of this thesis.

Thank you…

 … to Ariana, Nadia, Gray, and Roayan for always being constant, positive presences in

my life, despite The Gloomy Nature of Gray's Name

 … to all of my friends who willingly participated in interviews and divulged their

incredibly personal Spotify listening behaviors to me

 … to my family who have always trusted the process and encouraged me to think outside

of the box

 … to everyone who has ever shared their music or playlists with me and inspired the

questions that I chose to pursue.

This thesis is dedicated to Ariana Salguero —

Since we basically share only one brain cell anyways, it only

seems fair that this thesis is for both of us.

Table of Contents

Introduction

"I use [Spotify] every single day, to listen to music when I'm getting ready in the morning on my
phone, when I'm going places in my headphones, on my computer when I'm doing homework
— it's great — **we have a very loving, mutual relationship**"
— 15,824 minutes

Deciding upon my thesis topic was a long and incredibly arduous, anxiety-inducing

experience. I wanted to write about a medium close to me, while also staying true to my

academic path at Vassar and being able to do justice for whatever topic I decided upon. I kept

coming back to writing about music, but despite being a frequent listener, writing about music

was incredibly intimidating. I didn't feel like I had an adequate technical background or

vocabulary to talk about the music itself. I had no idea what words like "timbre" meant until a

few months ago and do not know how to even begin to describe the sonic experience of my

favorite music. But, as a Media Studies student, I knew that I could always rely on our old friend,

Marshall McLuhan, and thought about how the medium might be the message.

I was drawn to Media Studies as a major because even at the young age of twenty-one,

I've witnessed media landscapes and my relationship to media change drastically, even since I

was a young teenager. When I think about how I've listened to music, I remember agonizing

over burning CDs for my friends, but I can also remember the novelty of getting my first iPod

shuffle, and, most influentially for this thesis, when I decided to download Spotify. Since

downloading the app in 2013, I have listened to music almost exclusively on Spotify, unless I

actively pursue a more physical listening experience or have technology constraints. However,

this means that I've lived almost my entire life being able to have individual control over the

music I listen to. I am almost always listening to something in headphones, whether I'm walking

around campus or even as I write this right now, I'm listening to music (Mitski, if you were

wondering).

I downloaded Spotify in when a friend told me it was "cheaper than iTunes" because you

had access to unlimited songs for a fixed price. As a fourteen year old with no income, I was

immediately sold without hearing any more about Spotify's capabilities. I vividly remember first

logging into the app and being prompted with album recommendations even though Spotify had

no information about my taste preferences. One of the recommendations was *Cupid Deluxe* by

Blood Orange, which has since become one of my favorite albums that has soundtracked some of

my favorite memories. I often wonder whether I first liked the album because it was actually

consistent with my taste at the time, or if I was drawn in by the immediacy of the album, which

then drove my taste and recommendations on the application since then. Over the past seven

years, Spotify has become a personal archive for me. Currently, I have 195 playlists that range

from "happy!!!! :)," which I made in 2013 to "songs with cool album covers," which I made last

year. My friends have pointed out to me that the number of Spotify playlists I create is borderline

obsessive, but I treasure having the opportunity to look back upon my taste over time and see

what exactly "happy!!! :)" sounded like to me when I was fifteen.

According to their website, the application now has almost 250 million users and 113

million premium subscribers, making them the "largest driver of revenue to the music business

today" (Spotify 2019). This statistic is striking and shows the strong trend away from consuming

music in physical, traditional forms of ownership and towards streaming. However, as the

biggest financial contributor the music industry, clearly Spotify is doing something right beyond

just streaming. To me, it always felt like Spotify was able to build a level of emotional

connection and attachment that other ways of listening to music were unable to. Like the

interview quote at the beginning of this section, I feel as though I have a relationship with

Spotify that is often loving, mutual, and validating.

In this thesis, I explore how Spotify as a medium creates a loving relationship with the

individual, and how the technological production of this affective attachment impacts our

understanding of music consumption as an aesthetic expression of subjectivity. I not only look at

how individuals utilize Spotify to understand and process their own affective states, but also how

Spotify datafies affect and capitalizes off of individuals' personal experiences with music.

I. Anytime, Anywhere: Mobile Listening Practices

"It's as though I can part the seas like Moses. It gives me and what's around me a literal rhythm,
I feel literally in my own world, as an observer. It helps to regulate my space so I can feel how I
want to feel"

— Karen (Bull 29)

In 350 B.C.E., Aristotle wrote, "What we have said makes it clear that music possesses

the power of producing an effect on the character of the soul" (DeNora 21). Music has a long

history of being understood as an affectively powerful medium. Aside from just affecting "the

character of the soul," music is often consumed by individuals as a way to construct and

understand their realities. As a mediator of moods and experience, music is often described as a

"technology of the self" that allows individuals to explore and reflect their identities through its

consumption. DeNora describes how "music can be used as a device for the reflexive process of

remembering/constructing who one is, a technology for spinning the apparently continuous tale

of who one is" (DeNora 63). DeNora draws upon Foucault's understanding of subjects as created

through practices of the self. Individuals use music as a way to realize their subjectivities by

constantly reflecting and constructing themselves through their consumption. Music is both an

aesthetic experience and a technological tool for individuals to define themselves and externalize

their subjectivity.

Mobile music devices, including Spotify, allow users unprecedented amounts of control

over where, when, and how they listen to music. Instead of having to purchase and carry around

CDs or wait for the right song to come on the radio, individuals can easily access virtually any

artist, album, or song from a streaming service right from their mobile device. The move towards

mobility and choice reflects a greater modern trend towards using technology to mediate and manage everyday experiences. The "ideology of immediate and ubiquitous access to music" through the model of "anytime, anywhere" listening directly reflects the modernist ideals of freedom and immediacy through individual agency (Gopinath & Stanyek 10-16). While mobile music gives listeners more unimpeded access to their libraries than ever before, it also increases the reliance upon products of the culture industry. Having the ability to listen to music anywhere and at any time encourages disconnecting from the outer world and tuning attention inward through media. While this is often an enjoyable practice, users' decisions to remain connected through mobile music reflects the increasing difficulty to have unmediated experiences. As Michael Bull writes, "the transformation of subjectivity through the use of new communication technologies potentially decreases the capacity of subjects to disconnect from their intoxicating use" (Bull 9). Applications like Spotify that encourage "anytime, anywhere" listening experience blur the boundary between subjectivity and media.

The invention of mobile listening devices revolutionized the affective connection between users and their music libraries. Instead of being confined to the physical limitations of size and technology, individuals now can engage with their personal libraries at any time and in any location. In his book, *Sound Moves,* Michael Bull likens iPods to "digital sherpas" that carry a user's entire music library and help guide them through emotionally regulating their external environment. Throughout *Sound Moves,* Bull explores how iPods mediate experiences with the city, which reflects the tethering of identity to media and the subsequent need to be able to control their experiences through media use. By listening to the iPod while walking through the city, individuals close their ears to the outside world, and instead shift their focus inward towards

their own thoughts. In this way, iPods and mobile listening devices can also be conceived of as heterotopic "time machines" — the listener can access music that transports them not only emotionally, but also temporally through the presence of their digital archive right in their pocket. Listeners often describe their iPod experiences as "dreamlike"; as if they were "living in an interiorized and pleasurable world of their own making, away from the historical contingency of the world … enclosed safely within their own private auditory soundscape" (Bull 123). Through their choice of music, individuals are able to tune their experiences to their mood and aestheticize their emotions and experiences. Individuals use music for aesthetic reflexivity — as they are increasingly alienated from the different spaces and spheres they move through, individuals utilize music to impart their aesthetic will upon their experiences. As DeNora writes, "aestheticization [becomes] a strategy for preserving identity and social boundaries under anonymous and often crowded conditions of existence" (DeNora 47). Individuals use music to mediate their feelings of isolation or loneliness by projecting their affective states onto their environments. While there are key differences in consumption between the iPod and Spotify, DeNora and Bull's work illuminate the key roles of mobile music devices as mediators of external experiences and insulators of internal turmoil.

As mediators of everyday experiences and emotions, mobile music devices and streaming services are often seen as escapes from the everyday world — when their experiences become too overwhelming, individuals turn their attention inwards through the mediation of their mobile music devices. In her exploration of the relationship between media and identity formation for teenage girls, Aimee Rickman coins the term "media migration" to describe how individuals, particularly with marginalized identities, use media to flee the external spaces they are excluded

from and move into media "spaces" where they can perform their identities freely (Rickman 3).

Regardless of the challenges in the external world, mobile music devices allow individuals to

have an escape to another space insulated by their own affective curation. As Bull writes, "in

tune with their thoughts… their chosen music enables them to focus on their feelings, desires,

and auditory memories" (Bull 4). By soundtracking their experiences, individuals mediate their

experiences and escape into their own thoughts while also continuing the cycle of affective

mediation through music by forming new connections and associations to the media they

consume. The use of mobile music devices as self-constructed affective heterotopias encourages

users to build affective ties with not only music but also the devices themselves. The use of

mobile music devices to control mood and soundtrack life illustrates how media is increasingly

becoming a means to aestheticize external experiences through control and escape to other

constructed affective landscapes. Particularly in youth and marginalized groups, media migration

and this bond between individual and media through media migration is a key facet of identity

formation. If one feels like they can only truly be themselves through media, then the absence of

media also implies an absence of identity and individuality.

II. Spotify

"Honestly, Spotify knows me better than a lot of my friends."

— 84,938 minutes

Spotify was launched in Stockholm in 2008 and gets its name from a fitting combination of the words "spot" and "identify" (Ek). Spotify undoubtedly has revolutionized the mobile listening experience and understanding of our relationship with collecting music. By providing unrestricted access to a wide range of music, Spotify seeks to democratize individuals' relationship with music. As a cloud-based application, virtually all music is available to listeners as long as they have an internet connection. As Morris describes, music is often seen as a "technology of the self," so Spotify presents the perfect opportunity for an "anytime, anywhere" model of ubiquitous listening where users can constantly rely upon music to validate and explore their emotions (Morris 176). Spotify acknowledges and uses the notion of the "technology of the self" in its branding and marketing to differentiate their application from others. In their "About Us" section of their website, Spotify fittingly advertises how users can "soundtrack your life with Spotify" (Spotify 2019). Through its design, technological capabilities, and company mission, Spotify encourages users to remediate everyday experiences and tether their identity to media, as Bull describes. The app not only allows you to listen to music at all times, but it encourages you to.

Spotify follows a "freemium" model where users can listen to music for free, but need to subscribe to Premium for perks and in order have ownership over their libraries (Dhaenens & Burgess 1194). By paying for a subscription, users are not necessarily paying for more access to

music, but instead paying for greater control over their listening experience. While paying to

remove advertisements is not a new phenomenon, Spotify diverges from the historical business

model of music consumption where individuals pay to own musical texts, such as CDs or songs

on iTunes. On Spotify, anyone can make a free account and have access to the same amount of

music as people who are paying for subscriptions, but they can only play their music on shuffle

and have to listen to advertisements. Additionally, free users cannot download their music for

offline playing. In this way, the business model of Spotify creates an experience that is more

similar to piracy than to earlier, legal, music consumption. While there are key differences

between Spotify and piracy, Spotify comes with the same promise of access to all music at

virtually no cost except for inconvenience. Spotify situated itself as "the antidote to online piracy

and a platform giving fans relief from the immorality of sharing illicit files" (Eriksson &

Johansson 69). However, in order to reap the full benefits of the platform, individuals have to

pay their monthly dues.

However, the discourse and practices surrounding previous digital music consumption,

through piracy and iTunes, emphasize the view of music as a digital commodity that one can

download and have ownership over. As a cloud based listening service, Spotify represents the

shift towards music being "something users can access rather than acquire" and therefore more

of a service than a good (Morris 169). Although one can access the music for free, in order to

have any ownership over the songs, even just being able to listen to them without cell service,

and individual listening experience, they have to subscribe. Through the cloud model, music is

simultaneously always available but also never truly there. Kassabian describes this as the

"sourcelessness" of cloud music listening, where music seems to be "everywhere and nowhere"

concurrently (Kassabian, 16). Music is more accessible and present than ever through the cloud, but its accessibility comes ta the cost of tangibility and ownership. Once a subscription is ended or a user deletes the Spotify application, their entire archive ceases to exist. In his meditation on book collecting, *Unpacking My Library*, Walter Benjamin writes, "The phenomenon of collecting loses its meaning as it loses its owner" (Benjamin 67). From this perspective, there is an inherent loss of meaning for individuals who "collect" their music libraries on cloud services like Spotify. Benjamin asserts that ownership is key in the creation of affective attachment in the act of creating a collection. Although individuals assemble and collect their music on Spotify in deeply personal ways, they can never truly "own" their collections, despite the feeling that the collections are perpetually available.

As an application that requires a mobile phone or wifi-enabled device, Spotify differentiates the mobile listening experience from the iPod. Instead of being a physical device that serves solely the purpose of being a "digital sherpa" for music, Spotify is one of many applications and functions on a smartphone. The mobile listening experience is no longer distinct from routine uses of phones for communication or other social media. The duality of the smartphone enhances the possibility of media migration — an individual can insulate themselves from the outer world not only through plugging in their headphones, but they can also simultaneously access other applications and social media to further escape from their current situation. As a separate electronic device, the iPod encouraged affective attachment to it as an object and distinguished the experience of listening from the experience of being connected through a mobile phone. An individual could choose to only carry their iPods to listen to music, but leave their cell phones at home in an effort to "unplug" and distance themselves from

mediated communication. Now, Spotify inherently requires users to stay connected in order to play their music. The necessity for a smartphone or similar device in order to access one's library reflects the further mediation of the relationship between the individual and their libraries, as well as the relationship between the individual and the external world.

While music is often seen as an extension of the self, particularly in the context of media migration, cloud listening makes it easier to access music while also increasing the amount of intermediaries separating an individual from their music. In Michael Bull's exploration of iPods and the creation of auditory nostalgia, he quotes an interviewee who states, "the iPod is pretty much the diary or soundtrack to my life. There is a song for every situation in my life. Even if I might have forgotten about a certain time, person, or place, a song can trigger these memories back to me" (Bull 87). Bull's quote highlights how individuals view their musical archive as personal "time machines" that can transport them back to certain affective states. This effect is heightened through the creation of playlists, that illustrate past affective states. However, unlike the iPod, which you can purchase and own, Spotify and other cloud libraries are intangible and impermanent. As an individual uses Spotify more, they increasingly rely upon the application as a personal "diary" and become less likely to stop subscribing. Spotify becomes a remediated "digital sherpa" — if a user terminates their account, they lose access to all of their playlists, and therefore aspects of their own affective histories and memories. In an interview with a college-aged Spotify user who listened to 28,940 minutes of music in 2019, she expressed "I'm pretty committed to Spotify considering it's been almost 10 years. So many memories and playlists on there I would never want to lose… I kind of have grown up with the app" (Interview). Individuals develop a relationship where they feel tethered to Spotify through their desire to

maintain access to their own affective archives. Like Bull's interviewee, "28,940 minutes"

equates her Spotify library with her own memories and feels as though losing access to the

digital archive would also cut her off from accessing those memories and past feelings. The

reliance upon a mediator in order to look back through and listen to one's affective collection

illustrates Benjamin's belief that the purpose of collection is derived through the act of

ownership. Despite the affective process of meaning creation that individuals go through as they

search for new music and curate their libraries, the collection's meaning hinges upon the

individual's continued contract with Spotify, or else their library ceases to exist. Spotify's

function as a personal "diary" highlights the inherent contradiction between affective attachment

and cloud based music.

As a streaming service, Spotify's interface is designed to encourage diverse music

consumption modes that were not necessarily possible in previous mediums. On their home

page, users are prompted with the following sections: "Recently Played," with the user's recently

played albums and playlists, "Made for [their name]," which includes Daily Mixes and Discover

Weekly playlists, and "Uniquely Yours," which holds On Repeat, Repeat Rewind, and the user's

top songs playlists from 2016 to 2019. There are also various other recommendations that change

daily including "Your friends are listening to," which shows albums that the user's friends are

streaming, "Jump back in," which has playlists and albums the user used to stream often, and

"Recommended for today," which suggests artists and Spotify generated playlists that are similar

to the user's current listening patterns. If that seems like a lot already, that's only what is shown

on the "Home" page. The sidebar gives the user the option to look at the "Home," "Browse," or

"Radio," which hare featured above, again, "Made for You," "Recently Played," and all of the

user's liked songs, artists, and albums, and all of their playlists. The "Browse" page gives the user various options for finding new music, from playlists grouped by genre and mood to nearby concerts. The "Radio" page contains recommendations for radio stations based upon songs and artists that the user frequently streams. On the right side bar, "Friend Activity" displays a live feed of what people who an individual follows are currently listening to. Spotify's design is much more interactive and individualized than previous streaming services. Rather than displaying only the music that an individual has liked or grouping them by genre, Spotify provides a variety of listening modes that a user could choose to pursue. As I'm reading my own description of Spotify's display, I am realizing how overwhelming the amount of options Spotify presents to the user are. They not only have access to virtually all music, but they also must decide if they want to listen to their own saved music, search for specific music, or recommendations. Within recommendations, individuals still have to choose their preferred form and degree of personalization. Spotify encourages exploration and reinvents the "digital sherpa" to be oriented not only towards the individual's chosen library but also possibility and discovery. Individuals' affective experiences with music as a technology of self and actions as an aesthetic agent are influenced by the presentation of the music available to them.

Playlists

"A playlist is simply a collection of songs. You can make your own, share them, and enjoy the millions of other playlists created by Spotify, artists, and other listeners worldwide."

— (Spotify 2019)

Unlike previous other music streaming services, like iTunes and Pandora, which privilege the consumption of music through artists and albums, Spotify emphasizes listening through the medium of playlists. Playlists represent the tensions about ownership in the cloud age — individuals no longer *own* their libraries and everyone on Spotify has access to the same music, therefore playlists become the sites of personalization and affective engagement. As Hagen writes, "While physical music collection has often been about the hunt for rare gems, playlist collecting involves imposing one's will (and one's self) upon an intangible realm of endless abundance" (Hagen 643). The creation of playlists and ownership of music on Spotify becomes less about what music one knows and more about how they package and share it within a playlist.

While identity used to be tethered to music collections through the ownership of certain records that reflected individual taste, the removal of gatekeepers and democratization of access to all music on Spotify means that playlists are now tasked with reflecting taste and identity formation. In his exploration on the role of music in young people's daily lives and identity formation, Dan Laughey describes the importance of cultural gatekeepers to certain styles of music, particularly alternative music, that lead to a sense of cultural capital and tethering of identity to choice of music. However, the equal accessibility of music on the internet for little to no charge dismantles the power of these figures and means that individuals have to find new

ways to identify with the music they listen to than just the style (Laughey 179). As McCourt writes, "In cyberspace, that is, people collect *lists* rather than objects, and those lists serve as a form of personal expression that derives from but also supersedes the record collection" (Hagen 629). The act of collection that Benjamin writes about no longer comes from the collection and ownership of individual objects, but rather the assemblage of unique groupings of music.

Additionally, playlists have a use value beyond just being possessions. As Sara Ahmed writes, "We are moved by things. And in being moved, we make things" (Ahmed 33). While part of playlists' meaning comes from the ability to own and access them, the more important connections to playlists come from the effort and thought put into creating them and the individual's enjoyment of listening to them later. Through the act of laboring to create something uniquely meaningful, music streamers compensate for the lack of physical ownership and create a new text that is affectively owned. Ahmed implies that the affective experience compels the individual to creative action, highlighting the affective nature of listening and adding songs to playlists. Arguably, this act of creation creates a stronger affective tie between the individual and their playlist than between the individual and their purchased music collection. Instead of being something you own, like an MP3 or a CD, playlists are something that you add value into in order to use and communicate aspects of your identity. Through the process of curation, playlists "encompass experiences of exclusivity and subjectivity that bring about, in turn, a felt ownership of the music, or even notions of self-identity reflected through the playlist" (Hagen 641). Despite having access to the same music as everyone else, the organization of songs into a personalized list infuses them with subjectivity and affective attachments of selfhood. Music as a whole is often understood as an affective medium, but because of the endless access to music on Spotify,

the specific combinations of songs in individuals' playlists become digital archives of their

subjectivities.

Instead of thinking about genre through stylistic differences in music, Ignacio Siles

advocates for the reconceptualization of playlists as "affective genres" in the age of streaming.

Stiles argues that "genres (such as playlists) are a means to cultivate affect to produce, capture,

and explore moods and emotions" (Siles 3). Since there are fewer restrictions imposed upon

what styles of music an individual has access to, playlists become much more relevant as a lens

to understand affect than musical style. However, the style of music is still important in

relationship to affect — individuals associate certain styles of music more strongly with certain

moods, but the choice to include a song is more determined by the affective interpretation of its

style than by the technical style itself. Siles' definition of genre reflects Raymond Williams'

notion of "structures of feeling" that capture affective processes rather than rigidly defined and

semantically available stylistic categories (Williams 69). The creation of playlists then becomes

an affective ritual for users to process, aestheticize, and communicate their emotions. Since

playlists are constantly being updated, deleted, and remade, they can be conceptualized as

dynamic affective processes that cultivate affect every time they are listened to or amended

(Siles 6). The "cultivation" of affect illustrates how playlists respond to affect, while also

preserving and intensifying emotions. Whether a playlist is explicitly organized by mood,

context, or style, its creation stems from an affective thread that is representative of the present

chapter of its maker's life. The notion of cultivation reflects Ahmed's understanding of affective

responses compelling actions that explore and prolong that experience. Playlists exemplify

Michael Bull's notion of mobile music devices as "time machines" — after the playlist remains,

it becomes a lens into its creator's affective state, which can then be conveyed to others by sharing the playlist. The affective "time machine" characteristic of Spotify playlists contributes to importance of the personal archive on Spotify and subsequent brand loyalty out of fear of losing important self-artifacts. Through the process of "producing," "capturing," and "exploring" moods, playlists become affective genres that transform affect into artifacts that can be revisited at later times (Siles 7).

Siles and Hagen's research into individuals' playlist creation practices both revealed the importance of individualization and affective genre, whether expressed explicitly in the title and purpose for the playlist, or through the choice of when and how to listen to it. Participants in the studies consistently expressed creating or altering previously made playlists as responses to affective stimuli, whether based upon mood, an event, or as a method of self-examination and documentation. Even the playlists that were centered around genres were individualized and affectively infused as individuals selected and added only their favorite songs from that genre as a way to reflect their own personality or created the playlist in response to a certain event or life event. Overall, the participants expressed that the main criteria for what songs fit within a playlist came from the "mood" they create or the emotions they stir. As 20-year old "Javier" reveals in Siles' study, "the 'genre' does not matter as much as what the song evokes in me" (Siles 6). "Javier's" sentiment is common and proves the hierarchy of the affective genre over the stylistic one in playlist creation. While style still plays a role in individual taste and associations, affect is the dominant factor considered when individuals create playlists.

Spotify and Playlists as Social Media

"The main focus is just music but it's an extra fun feature to see what friends are listening to and
be able to share my playlists with my friends and stuff. Everyone definitely judges people based
on their playlists and activity though"

— 86,030 minutes

Aside from capturing individual affect, playlists are also communicatory. Spotify's

interface is designed so an individual's profile displays the public playlists they've either created

or followed and recently played artists. However, the recently played artists section is easily and

frequently disabled, so playlists become the primary display on an individual's profile. When

making a playlist, users have the options to create a title, set it as private or public, write a

description, and add a cover image (if they elect not to, then the first four album covers of songs

on the playlists is displayed). Unlike other social media, it's not immediately apparent how many

followers an individual has — the main focus remains solely on their playlists. And, since the

home page is based off of individual recent listening and not others' posts, it's more common to

follow individual playlists rather than wholistic profiles. Like other social media, Spotify

functions as a panopticon. If we view playlists as affective genres, then viewing a profile gives

an intensely personal insight into its owner's affective life. Because of this, many people choose

to keep their playlists private. In my interview with a college-aged Spotify user with 21,690

minutes listened to in 2019, she expressed, "I start with private playlists with all the songs I

listen to and tailor smaller public playlist with just my favorites… I don't need everyone seeing

my guilty pleasures or my sad girl playlists" (Interview). While Spotify encourages users to

make affective and playlists, the social aspect of the application makes users cognizant of being

"watched" and therefore curate their content in a way that feels more presentable and less invasive. The curatorial practice of creating consumable playlists for others illustrates the fight for ownership over cloud music and the creation and sharing of self-identity tied to moments of subjectivity (Hagen 641). However, this curation also shows the boundaries that individuals draw between what is deemed "sharable" and what is embarrassing or might cause judgement.

On the side of the application, the "Friend Activity" gives live updates of what all the accounts someone follows is listening to. As Spotify writes, "Friend Activity" allows users to "Feast your eyes on your friends' ears!" (Spotify 2019). While "Friend Activity" gives individuals an unprecedented ability to share their current listening activity and favorite songs with others, it encourages voyeurism contributing to the construction of Spotify as an affective panopticon. As the interview quotes from "21,690" and "86,030 minutes" above illustrate, sharing activity implicitly comes with the expectation of judgement and an invasion of privacy.

While Spotify primarily brands itself as a way for individuals to "soundtrack their lives" by making playlists that capture affect, it also capitalizes off of the tethering of identity and mood to music and functions as social media. Once affect is transformed into artifact through the creation of a playlist, "Spotify then helps transform these possessions into commodities in a market of moods and emotions" (Siles 7). As a "technology of the self," Spotify encourages media migration and the use of music to create social bonds and express affective identity. However, the capitalization off of a "market of moods and emotions" highlights the tension between Spotify as a "technology of the self" and as a business. Aside from functioning as a "market of moods and emotions" in an economic sense, the phrase is also illustrative of the market for social capital. As shown in the previous interview quotes, individuals feel the need to

maintain a certain image through their playlists. There's a sense of social capital attached to certain types of playlists (e.g. not "guilty pleasures" or "sad girl playlists") that encourages users to share them while also hiding others. Because the only social aspects of the application come from viewing listening activity and public playlists, users are motivated to share content that they feel will be well received and admired by others. While Spotify doesn't place as much emphasis on followers as other social media, the ability to share and gain a following for an inherently affective curation often leads to a sense of pride for the recognition that individual creations gain. In Siles' study, he remarks that when asked to speak about their different playlists, multiple interviewees proudly declared how many followers they had on playlists, specifically the more popular ones (Siles 8). Spotify gives the individual a high degree of creative license over the playlist — not only can users select from virtually any music, which they can put in any order, but users can also change the titles, cover photos, and descriptions for playlists. In my interview with "21,960," she expressed how she would be more likely to make a playlist public if she had spent a long time making it look nice. Aestheticizing the playlist is "central to the process of turning digital, abstract and coded music into attractive goods and something that resembles physical commodities" (Eriksson & Johansson 70). As a "market of moods and emotions," Spotify allows users to create and circulate affective "goods" in exchange for social capital.

III. "Made for You": Using Recommender Algorithms to Capture, Recreate, and Direct Affect

"In the beginning, I'm just trying to get you hooked"

— "Mike," Chief Scientist of personalized radio company (Seaver 422)

In 2019, Spotify had 124 million paid subscribers while Apple Music, Amazon Music, and Youtube Music only had 120 million between the three of them combined (cherie). Since all streaming services have access to essentially the same music libraries and the same functionality, what sets Spotify apart to be outperforming its peers so significantly?

Many, including Spotify themselves, would argue that Spotify rises from the competition due to the accuracy of their individualized recommendations. Streaming services differ from previous media consumption techniques through their use of recommender algorithms to target and modify content towards specific individuals. Instead of relying upon the radio or recommendations from friends, users have unlimited access to personalized media. As the individual continues to stream, subscribe, and provide feedback on ore tracks, the recommender algorithm learns their preferences and tailors future suggestions to content that it thinks the individual will like. The better the recommendation, and the more seen the individual feels, the more likely they are to continue paying for the streaming service. This builds an affective cycle between the user and the algorithm — the more you stream, the better we know you, and the more you will be motivated to continue streaming.

"Algorithm" can be kind of a scary word to someone who studies media. On a basic level, algorithms are just sets of rules that tell a computer how to carry out a function or solve a problem. On streaming platforms, the "problem" that the algorithm is attempting to solve is

understanding and predicting the individual in order to provide them the bet future

recommendation. Rather than conceiving of users as only subscribers of the service, algorithmic

recommendation engages them as producers of their own content and data. Users then have a

"data double" — a version of them that emerges through the sociotechnical process of converting

the individual into data. While data is often only looked through an objective and scientific

framework, individuals are subjectified by their data doubles, which are used to

While data is often thought of as objective, individuals are actually subjectified by their data

doubles, which are used to put them into categories and labels that filter their experience with

media content. These identities are not necessarily ones that are claimed by or clear to the

individual, rather they are constructed through performance.

Using data for recommender algorithms is not a new phenomenon for music or the

streaming industry. Earlier recommender algorithms, like Netflix's original model of mailing

DVDs, aimed to recommend content based upon users' ratings of past suggestions and

anticipated future reviews. However, algorithmic recommendations have shifted from projecting

the future to retaining attention in the present as a means to keep users interested and

subscribing. BJ Fogg coined the term "captology" at his Stanford Lab as an acronym for

"Computers as Persuasive Technology," which aptly describes the current goals of algorithmic

recommendations (Seaver 422). Within captology, engineers evaluate "captivation metrics" that

measure the ability of a system to hold user attention. Applications seek to create "sticky"

technologies that capture and enchant individuals on a pre-subjective level, where individuals'

constant attention is the end goal. In his popular book *Hooked,* Nir Eyal, a Silicon Valley expert

and entrepreneur advises readers how to create "first to mind" technologies where users "feel a

pang of loneliness and before rational thought occurs, they are scrolling through their

[feeds]" (Seaver 422). Through constant and personal recommendations, streaming technologies

like Spotify aim to affectively root themselves within individuals' lives to the point where their

decision to engage is no longer even cognizant. Instead of analyzing explicit reviews,

algorithmic recommendation has turned towards using implicit data like how long an individual

plays a song for, whether they add it to a playlist, or if they skip songs. The turn towards implicit

data reflects the desire for captivation — without even having to tell the machine, it understands

what you like, what makes you tick, and what turns you off. Part of the formula for success in

algorithmic recommendation is staying as invisible as possible.

Before Spotify, Pandora revolutionized music recommendation on streaming platforms

through the incredibly labor intensive Music Genome Project. As an internet radio service,

Pandora needed to differentiate themselves from their satellite radio predecessors by designing

an unprecedentedly accurate and personalized system of recommendation. Pandora conceives of

music like DNA — as having a sort of "genetic code" creating the sound of the song that can be

deciphered and transformed into data, which can then be analyzed to approximate the

individual's taste. Instead of categorizing music by genre, Pandora has employees manually label

each aural feature of a song as a "gene" within the Music Genome Project. "Genes" can describe

the tempo of the song, timbre in the lead singer's voice, or what instruments are audible (Prey

1089). When a user begins a station, the algorithm decodes the starting song's "genes" and looks

for songs with similar patterns of traits, which get more individualized as the user listens and

interacts with more songs through likes, saves, and skips. If a user gives a "thumbs up" to a

certain song, the algorithm weights the traits that song shares with the original song more heavily

for future recommendations. While the Music Genome Project is successful in predicting the sounds of songs that an individual might enjoy, the genes are so specific that little of the breakdown of a song is reflective of how a human would verbally describe their taste. With the Music Genome Project, Pandora conceptualizes the individual listener as having an essential taste in music that boils down strictly to quantifiable sonic features. They predict that if a user likes a song that contains a specific set of genes, they will also like the song with the most related genetic code. The Music Genome seeks to answer the question of how to understand and predict what songs an individual might like by only accounting for aural features that may go beyond even what the individual articulates as enjoying.

Spotify's effective recommender model can be highlighted through how the app differentiates themselves from their predecessors through their understanding of the individual. Unlike Pandora's essential view of music taste depending upon only sonic traits, Spotify understands music taste as a cultural and social process. In 2014, Spotify made the monumental acquisition of the Echo Nest, a MIT Media Lab data analytics start-up. The Echo Nest built off of and improved upon the Music Genome Project's classification of "genes" by building software to analyze and break down music into specific "events." "Events" are conceptually similar to "genes," but they are much more specific and qualitative, measuring information as specific as a song's "danceability" (Prey 1090). The Echo Nest's "events" also take into account the structure and connection between "events." Additionally, the Echo Nest accounts for how music tastes are culturally produced. Their program runs semantic analysis on all digital discourse about music, ranging from tweets to magazine reviews to understand what future music an individual might like from a cultural dimension to "turn both conversations about music, and music itself, into

quantifiable data" (1091). If a subscriber likes songs that share an event structure that

traditionally belongs to indie music, the Echo Nest predicts that they will like not only songs

with similar aural progressions, but also songs that their indie-loving peers are talking about

online. The data collected from events and online discussions about music are used to construct

individual "Taste Profiles," which map the dimensions of the subscriber's music taste. Instead of

being fixed upon specific sonic features of music like Pandora's recommendations, the "Taste

Profile" is a nuanced and dynamic record of identity that evolves over time as the individual

interacts with the app. *Quartz*'s Adam Pasick asked Spotify to show him his own taste profile,

which is depicted below. His taste profile shows how more weight is given to specific genres that

he listens to most often, while other genres he
listens to are smaller but still present. Pasick
admits that he has "no idea what 'chamber pop'
or some of the other genres might be, by the
way, but according to my Spotify listening
data, [he's] a big fan" (Pasick). Pasick's
statement reflects how the data double is
constructed and subjectified in a way that goes
deeper beyond how an individual might even

Figure 1. Adam Pasick's Taste Profile
Pasick, Adam. "The magic that makes Spotify's Discover Weekly playlists so damn good." *Quartz.* 21 December 2015.

understand themselves. Without even knowing what chamber pop is or being able to verbalize

what about the genre resonates with him, Adam Pasick is labelled as a fan and identified as
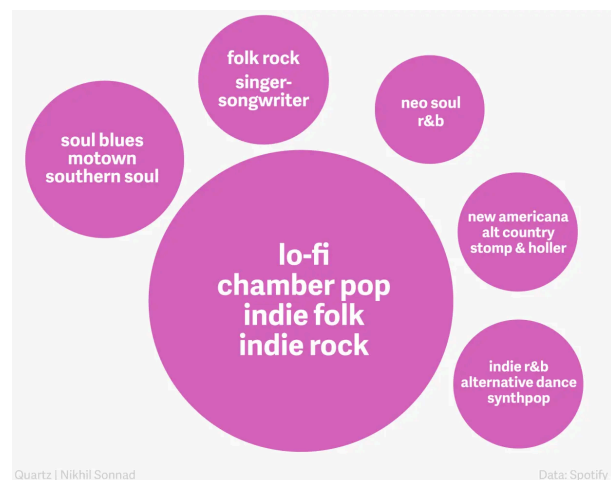
similar to others who talk about it online.

However, not all listening data is created equal. Spotify understands and accounts for how context affects listening patterns. By creating genre clusters, as shown in Pasick's diagram, Spotify seeks to discern "listening modes," through using "big data and clustering algorithms to figure out how the totality of music we consume breaks down into clusters of artists" (FiveThirtyEight). Spotify understands that certain songs or genres might be outliers — for example, someone might listen to classical music a lot while doing work while not necessarily having any sort of attachment to the genre as a whole. As shown through their online semantic analysis, Spotify seeks to identify cultural similarity as much as sonic similarity. Through looking for cultural similarity, Spotify wants to understand each portion of an individual's taste, which they recognize as an aggregation of many interests that are also dependent upon context.In his interview with a Spotify engineer, Walt Hickey explains how there are three categories of music: "the music that you tell people you listen to, the music that you *think* you listen to, and the music that you *actually* listen to" (538). While Spotify receives only data about the music you actually listen to, they focus on context to try to understand how, when, and why you choose to listen to certain music to understand taste on a wholistic level to give better recommendations.

How do users access recommendations? Like Pandora, Spotify has the popular Radio feature that allows an individual to begin a radio station using any song, artist, playlist, or album that they are currently listening to to create an endless stream of similar music. However, as shown through the descriptions of Spotify's recommender algorithm, Spotify's radio differs from Pandora's by understanding cultural context and the listener's consumption over time. Spotify also offers the user a variety of formats for users to explore new recommendations. Instead of

being confined to radios like Pandora, Spotify users can also utilize pre-made playlists focused

on a certain genre or event, get recommendations based upon their friends' listening habits, or

explore the plethora of frequently updated and personalized recommendations.

Discover Weekly

> "It's scary how well @Spotify Discover Weekly playlists know me. Like former-lover-who-
> lived-through-a-near-death-experience-with-me-well."

> — dave horowitz (@Dave_Horowitz)

In 2015, Spotify launched one of its most successful projects to date, the Discover

Weekly playlist. As Adam Pasick describes, every Monday morning Spotify users receive "30

songs that feel like a gift from a music-loving friend, who might once have made a cassette tape

with your name scrawled across the front" (Pasick). While previous streaming services, like

Pandora, have succeeded in recommending music that is similar to a user's likes or dislikes,

Discover Weekly represents a heightened new level of personalization. If we continue to view

playlists as affective genres, Discover Weekly illustrates Spotify's ability to understand and

reconstruct affective connection.

Discover Weekly is constructed through a hybrid recommender system that continues

Spotify's recommendation of music based upon a combination of sonic, cultural, and contextual

indicators. The Discover Weekly algorithm differs from Spotify's usual recommender algorithm

by crowd-sourcing through other users' already created playlists (Prey 1088). The algorithm

analyzes one individual's taste profile and specific songs they listen to, then look for other

playlists where combinations of the same songs appear. Once it has aggregated enough data

about other people's playlists, the algorithm constructs a brand new playlist that includes songs

that appear most often on playlists that are consistent with the subscriber's taste profile. Again,

Spotify views individual music tastes as culturally produced and contingent upon what their

peers like, instead of just understanding taste from an aural perspective. Discover Weekly

accounts more for the combination of aural "genes" by trying to make sense of and place the individual within a cultural moment.

As Ogle describes, "Some people have said, 'Oh, all three of us had this track on our Discover Weekly, did someone put it there?… And the answer is yes, someone put it there: other Spotify users who were playlisting, which means that something is happening in music culture" (Pasick). Discover Weekly stays true to the Echo Nest model of trying to understand and engage the listener as part of a greater cultural group, once again reflecting the notion of the affective common and feeling together. Discover Weekly aims to recommend music that not only captures the individual's sonic preferences, but also reproduces current structures of feeling. However, Spotify gives additional weight to playlists that have the most followers or are sponsored by brand partners. Although being executed by computer algorithms, which are commonly conceived of as "objective," the recommendations are still contingent upon the popularity of those users who were "playlisting" and what songs appeared on branded playlists, reflecting the still existing social hierarchy and business interests on the application.

In Pasick's article, he additionally included a "Spotify blob" he received that represents how his musical tastes are factored into Discover Weekly playlists (Pasick). The blob is formed from Pasick's taste profile categories spread out and colored based upon density of listens, with white lines running through to represent where Discover Weekly songs
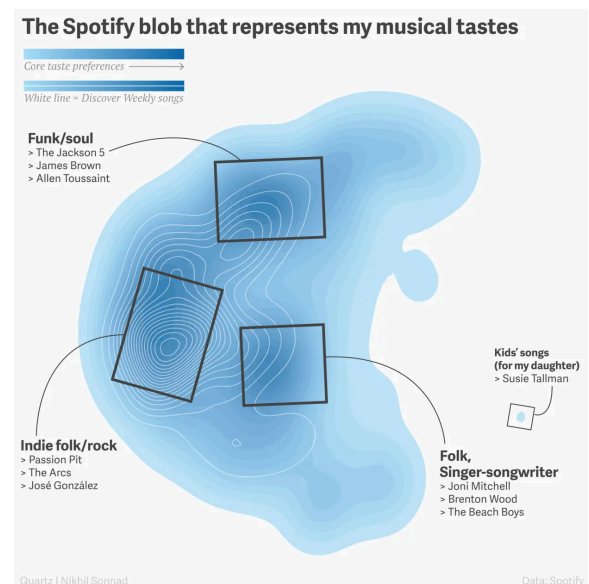

Figure 2. Adam Pasick's "Blob"
ibid.

lie in relation to the genres. There's a notably small second blob down to the right for kids' songs, which Spotify recognizes as an outlier for Pasick's music taste that is based upon isolated contexts and therefore has no bearing upon Discover Weekly. The flow of white Discover Weekly lines illustrate the breadth of recommendations. While most are centered within the indie folk/rock square, they expand and connect between all three of his main taste categories.

Discover Weekly complicates the understanding of playlists as affective genres outlined in the previous chapter. While playlists feel very personal and can be set to private to keep other users from seeing them, Spotify still has access to collect and analyze data from them. The curation of songs on your most intimate playlist gives Spotify's algorithm insights to understand you further and might just be generating someone else's weekly recommendations. While Discover Weekly playlists are incredibly personalized, because they are crowdsourced, it's very possible that two individuals who may not even identify as having the same taste in music could share nearly identical Discover Weekly playlists. In his conversation with the Spotify engineer, Adam Pasick dissects the bizarre experience of hearing a stranger's Discover Weekly, which contained almost the exact same songs as his, playing in a cafe. While he eventually learned that this happens relatively frequently for people who share similar music tastes because of how the algorithm weights recommendations from popular playlists, he describes the experience as oddly invasive. Pasick writes, "There's a strange feeling of unease that comes with listening to a mix that is optimized for someone else's subjective tastes and unconscious preferences" (Pasick). Because Discover Weekly playlists are constructed through collections of pre-subjective data about individuals' listening behaviors that they may not even articulate or recognize, listening to a playlist created for someone else feels like a trip into their psyche. As Walt Hickey previously

explained, there is often more of a gap than expected between music you think and say you listen to and music you actually listen to. An algorithmically optimized collection based upon data that only reflects music you actually listen to could be the most "objective" insight into someone's taste.

Moments of music discovery hold a lot of affective meaning and impact an individual's connection to that piece of music and understanding of their own taste. In order for a music discovery to matter, it has to be memorable by eliciting some sort of affective response. Because of this, as Nowak writes, "affects must be the primary variable upon which any definition of music discovery can be suggested" (Nowak 143). Nowak discusses how new music may be recommended or consumed before becoming an explicit "discovery," which occurs when an individual connects with a piece of music enough to want to categorize it as part of their library. The framing of Discover Weekly, then, is not accidental. Spotify describes the playlist as "Your weekly mixtape of fresh music. Enjoy new discoveries and deep cuts chosen just for you" (Spotify). With Discover Weekly, Spotify aims to not only recommend new music, as it does for song or artist radio stations, but to reproduce the moment of affective connection that constitutes a discovery.

Music discovery has also historically been a socially rooted and produced process. Having a more expansive music library and wider breadth of discoveries often gives individuals clout and credibility for their taste in music. Long before Pandora and Spotify emerged with their differing understandings of what factors shape individual taste, theorists have debated whether taste is an essential individual preference or culturally formed. Richard Peterson proposed a "model of double-inverted pyramids where the less numerous upper social classes have a broader

and 'omnivorous' taste in music while the more numerous lower classes have a more specialized

and 'univorous' taste in music" (Nowak 139). While part of this ideology could stem from

requiring a certain degree of wealth into order to access more music before streaming, it

highlights how "taste" as a whole goes beyond only what an individual deems as sonically

attractive. Discover Weekly disrupts the view of taste being contingent upon cultural identity by

providing simulated recommendations through crowdsourcing regardless of whether the user

actually belongs to those groups. However, through the process of digitally constructing a data

double that algorithmically belongs to certain groups, Discover Weekly participates in and

reproduces these social patterns and relationships. The contents of Discover Weekly depend on

how the user has consumed in the past and predicts how they will and should continue to

consume music. Aside from making individuals feel seen and understood, Spotify also boxes

individuals into algorithmically simulated social categories.

While the algorithm that makes Discover Weekly is constructed around the notion of

music as a social activity, it also in many ways upends the exact social process of sharing music.

Before the age of algorithmic recommendation, music discovery was almost always a social

process. Instead of having a brand new personalized playlist just appear every Monday,

individuals received recommendations through friends, family members, and radio stations. If we

continue to conceptualize playlists as affective genres, creating and sharing a playlist for a friend

goes beyond just giving music recommendations to form an affective bond between both

individuals. While friends don't have the same intimate knowledge of your listening data or the

ability to break down all aural and cultural events within a song like an algorithm, their

recommendations are more affective than, for example, a song on a Spotify radio because of your

relationship with them. Even if a song that a friend recommends is not particularly within your taste profile, the memory of sharing that experience is often enough to constitute a memorable moment of discovery and shape your opinion about the song. Through the affective genre of the playlist, Discover Weekly has found a way to reconstruct this experience of discovery that extends beyond just a recommendation on a song radio to reach individuals on a personal level. As Pasick writes, Discover Weekly feels like "a gift from a music-loving friend" (Pasick). By engaging in the social process of creating and exchanging playlists, Spotify forms an emotional bond with the individual.

In the first chapter, I explored how playlists are an affective genre and used to enhance or create social bonds between individuals. Pasick's description of Discover Weekly highlights how effective the algorithm is at building individual attachment, but also poses the question of whether Discover Weekly and recommender algorithms act as substitutes for socially exchanged music with friends, i.e. is Discover Weekly actually as good as a gift from a music-loving friend? While I would certainly argue that it is not, the success of Discover Weekly illustrates how Spotify has found a way to reproduce our affective connection to playlists and discoveries, creating a sort of "friendship" and understanding between the user and the algorithm.

Daily Mixes

Aside from Discover Weekly Playlists, the "Made for You" page also provides up to six Daily Mix playlists based upon the user's different "listening modes" (Spotify). Each mix features a group of artists and songs that are similar to their sounds that the user frequently listens to or saves music from. The suggested songs are determined through algorithmically

crowdsourcing from others' playlists, but Daily Mixes serve more as categorizations of a user's

existing library, rather than an introduction to new music. Unlike Discover Weekly, Daily Mixes

reintroduce the listener to their past favorites and intend to capture indefinite attention so, as

Spotify writes, "the head-bopping never stops" (Spotify). Daily Mixes are, in many ways,

emblematic of the streaming experience. While all of the songs are coming from the individual's

"library," the lack of ownership or ability to physically collect the songs means that the user may

have lost track of them or forgotten that they had previously streamed them. Spotify reintroduces

them and repackages the user's listening history in a new playlist that would be impossible for a

human to curate and that encourages the individual to listen indefinitely.

The combinations of artists for each Daily Mix are often quite random — again, Spotify

prioritizes individual listening behavior and preferences over defined genres. The mixes are

numbered 1-6 with Daily Mix 1 having artists you listen to the most frequently and 6 having

artists you listen to more infrequently. Not every individual has all six mixes either — the

number of mixes depends upon how diverse the user's listening activity is. If someone listens

exclusively to one or two genres, they receive fewer, more specific mixes containing music only

from those genres (Spotify). Daily Mixes intend to capture each

individual's diverse listening habits. For example, my Daily Mix 3 for

today is listed as "Mitski, Doja Cat, Edward Sharpe & The Magnetic

Zeros and more" (Spotify). While this isn't the craziest grouping of

artists I've ever received, I would definitely consider all three of them

to be from different genres. I also have not listened to Edward Sharpe

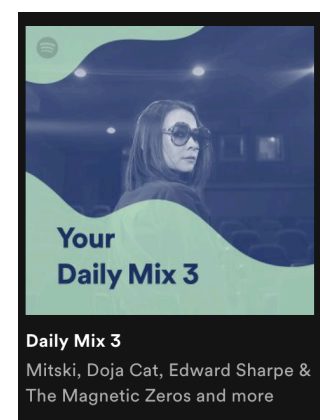& The Magnetic Zeros probably since 2014. Upon closer inspection,

Figure 3. "Daily Mix 3"
Spotify. 9 May 2020

the playlist is just full of indie-adjacent music I listen to relatively frequently, but the confusing

grouping of artists in the description reflects Spotify's desire to prioritize knowledge of the

individual's history over explicit genres. The user is defined by their past music consumption as

much as their presence. By including artists I have not listened to in years and grouping

individuals I would not have thought of, Spotify showcases how their algorithm "just gets

you" (Spotify).

Genres, Moods, and Branded Playlists

"Millennials intentionally use music streaming to escape daily pressures or to enhance
moments the enjoy. Their relationship to audio streaming contrasts to social media, which 48%
of millennials worry brings them negative effects… **For marketers, this is a chance to reach
millennials through a medium they trust and see as a positive enhancer or tool**"

— Spotify for Brands

Aside from user-created content and personalized recommendations, Spotify also has

Featured Playlists that are sponsored by Spotify and other brand partners that are intended for

certain activities, moods, or genres. On the "Browse" page, there are many affective and musical

genres a user can select to view more recommendations. The genres include a wide range of

options, including "Pop," "Mood," "Student," and even, for the month of May, "AAPI Heritage

Month." Within these genres, users have access to a plethora of playlists that fit the theme. For

example, within the "Student" category, there are playlists for "Dorm Party," "All Nighter," and

"Tailgate Party." While these are fairly generic and quite successful playlists with many

followers, they adhere to a hegemonic idea of what "the college experience" is like. These

playlists transport "affectual ideals, notions of 'the good life,' and conceptions of time (and time

well spent)" (Eriksson & Johansson 70). Although users have freedom over which playlists they

choose and when they choose them, Spotify's Featured playlists prescribe ideals upon

individuals' and experiences. Like many other new technologies, Spotify operates with the

promise of digital democracy — users have access to all music for free. However, these playlists

emerged out of early criticisms of Spotify for not adding enough guidance for listeners before the

invention of Discover Weekly or Daily Mix playlists. The shift from providing "free" access to

new forms of directed consumption reflects how Spotify acts as a mediator between the

individual and their musical experience and not just a digital resource for accessing music.

Featured Playlists provide a drastically different kind of guidance for listeners than personalized

recommendations on Discover Weekly or Daily Mix playlists by focusing on context,

functionality, and temporality over individual taste. Nick Seaver quotes Eliot van Buskirk's

assertion that "If the first streaming music revolution was about access… the second one is about

context" (Seaver 1102). On top of using context to understand individuals' listening preferences,

Spotify tries to understand listening behavior within the context of certain activities or moods to

more effectively capture affect and reap advertising revenues. Spotify for Brands has an entire

page dedicated to "Stream of Context," which details how context can be exploited for

advertising. Spotify writes, "multi-device users stream Spotify for 2.5 hours per day, which

means we're constantly learning about how people listen in real-time through our streaming

intelligence — first-party, contextual data that reveals moods, mindsets, habits and tastes in the

moment" (Spotify).

Spotify brands their Featured Playlists as a way for users to "discover and maybe even

rediscover music for every moment" (Spotify). They stay true to their attempt to find music for

every moment by trying to recreate the aura of specific activities, times, and moods. Featured

Playlists understand the individual in a constant state of becoming, with varied preferences and

tastes that are dependent upon their situation. Pagano describes context-based recommendation

as the understanding that "people have more in common with other people in the same situation,

or with the same goals, than they do with past versions of themselves" (Prey 1092). While

Spotify heavily factors past versions of listeners into their personalized recommendations,

Featured Playlists target listeners as only affected by their current situation or mood. In addition

to trying to cover every activity, Spotify recommends different Featured Playlists depending

upon the time of day to match the affective state of the listener. By changing their suggested

playlists throughout the day, Spotify aims to advertise for certain kinds of "normal" activities

rather than specific individuals. Eriksson and Johansson studied the temporality of

recommendations by creating three Spotify accounts with identical demographic information

aside from country of residence and found that the structure of the "Home" page and Featured

Playlists depended upon the time of day and day of the week. For example, on weekday

mornings, Spotify suggested playlists like "Wake up to good vibes" or "Wake up and Smell the

Coffee," while suggesting "Hangover Friendly" playlists on the weekends (Eriksson &

Johansson 72). Similarly, sleep playlists were suggested on weekday nights, while playlists

related to partying or romance were suggested on weekend nights. Playlists are also introduced

or reorganized depending upon the time of year and current affairs, as evidenced through the

inclusion of an "AAPI Heritage Month" genre.

  As Paul Allen Anderson writes, streaming platforms strive to "create musical moodscapes

for their users in which music recommendations can be understood as 'products for affect

management and mood elevation'" (Eriksson & Johansson 74). Spotify's Featured Playlists

cover virtually any activity that is often soundtracked — working out, studying, partying,

commuting, or even sleeping. Playlists, particularly those within the "Mood" category, provide

pre-made moodscapes that are often uncannily specific. The design of playlists is intentional;

aestheticizing the playlist is "central to the process of turning digital, abstract and coded music

into attractive goods and something that resembles physical commodities" (Eriksson &

Johansson 70). Each playlist comes with a catchy title and short line of copy that addresses the

user directly, as if the playlist is being generated just for them. My personal favorite line comes

from the description of "You & Me," which is filled with alternative love songs. The playlist

description reads, "It's just us — and this awesome alt soundtrack" (Spotify). While it can be

inferred that the "us" in this playlist is probably referring to the user and whoever they are

romanticizing, the use of first person interjects Spotify into the experience, as if the "me" in the

playlist could be Spotify and the "you" is the consumer. Since mobile music is so frequently

streamed individually, there are probably many people who listened to this playlist alone,

effectively making it just them and Spotify — and their awesome alt soundtrack.

A few months ago, I was casually browsing my "Home" page, and, in addition to the

usual recommended listening headings, I received the section "Sad songs" with the description

"Music for dark days" (Spotify). I was a bit alarmed – I was not feeling particularly sad that day

and I was not sure what part of my listening activity gave Spotify that impression. Spotify not

only recommended me sad music, but also recommended specific playlists that were accurate to

what I probably would be listening to if I was actually sad. I looked further into Spotify

generated "sad" playlists, and there were many others that had far more followers (such as "All

the Feels") that could have been recommended to me. Yet, Spotify recommended "Devastating" and "Sad Indie," which actually both had many songs that I listen to when I'm feeling down. Inspired by the articles I had read, I took a step back and looked at temporality and context. I received this suggestion on a rainy afternoon on a Monday in February. Perhaps Spotify inferred that it might be a dark day as a gloomy winter day?
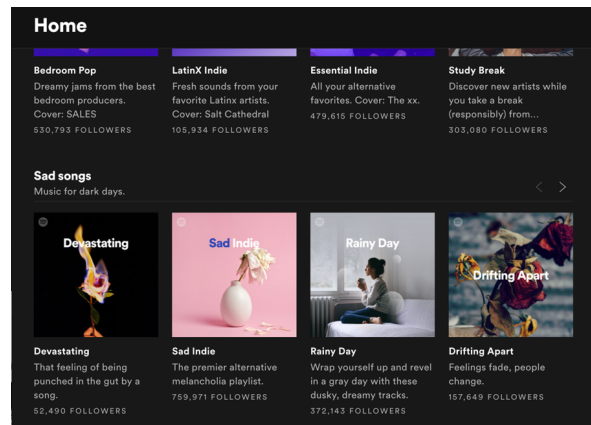

Figure 4. "Sad songs"
Spotify. 10 February 2020.

While I do not have a concrete answer why Spotify decided to recommend these playlists to me on this specific day, this experience highlights the tension between uses of music as a technology of self through aesthetic agency and Spotify's sponsored playlists. Through her interviews about when people choose to consume certain kinds of music, DeNora illustrates how "music is an accomplish for attaining, enhancing and maintaining desired states of feeling and bodily energy; it is a vehicle they use to move out of dispreferred states" (DeNora 53). Individuals' subjective relationship with music is rooted in their aesthetic agency and ability to use music to amplify, change, or set the scene for a certain mood. While the structure of Spotify and the fact that they have mood playlists encourages these uses of music, their curated and selectively recommended playlists dictate a norm for how and when these affective states should be experienced. I may not have been feeling sad before going on Spotify, but after seeing these playlists recommended to me on my "Home" page, I might have decided to explore them and ultimately feel "devastated" or melancholy after as a result.

Featured Playlists, Discover Weekly, and Daily Mixes all appropriate the affective genre of the playlist to make listeners profitable. While most playlists are just "by" Spotify, there are also a number of playlists that are sponsored by specific brands. The sponsorships are strategically divided amongst the "Branded Moments" — Bacardi sponsors "Party," while Gatorade sponsors "Workout," and Bose sponsors "Chill" (Prey 1094). Even within "Party," Bacardi has been able to discern nine different types of "party-people" using Spotify's listener data, giving them the ability to target and market towards each type of person differently (Prey 1094). I will explore Spotify for Brands further in the next chapter, but the use of playlists for sponsorships and brand deals highlights how, despite depicting themselves as the antidote to piracy and as a democratic form of music consumption, Spotify imposes their own economic interests upon the listeners' experience and affective state. While seeing a Bacardi "Party" playlist alone may not be enough on its own to convince the individual to go out or consume Bacardi, they might be more likely to listen to this playlist the next time they go out or feel gratified by seeing their specific party style reflected in their recommendations. As Eriksson and Johansson write:

> By being structured and named in ways that are akin to personally crafted music collections, playlists borrow their aura — a process which can be seen as a kind of appropriation of non-commercial social relations and their practices of sharing amongst fans. (Eriksson & Johansson 77)

As explored in previous chapters, playlists are affective genres that define the individual's library and listening experience on streaming services. Spotify not only suggests certain activities, moods, and schedules, but they do so through an incredibly personal and trusted medium.

IV. Soundtracking Culture: The Millennial Edition

"They turn to streaming to enhance and regulate every moment. **Spotify is the indispensable part of their lives that they never get bored with, rely on and trust.**"

— Spotify

On their website, Spotify has a separate portal, "Spotify for Brands," which details how Spotify as a medium can be a prime avenue for advertising. The page features various statistics about listening practices and cultural trends to give insights into how this data can be used to the brand's advantage. One section of the site reads:

> There's a palpable strain of melancholy running through culture today that Gen Zs and millennials are openly addressing. Not only are they tuning into their bag playlists (sad music) and listening to emo-rap (Spotify's #1 rising genre in 2018), they're also proactively taking steps to improve their mental wellness. Plus, they're finding deep camaraderie in openly expressing their feelings… 59% OF GEN ZS AND MILLENNIALS TOLD US THEY TURN TO MUSIC TO HELP THEM COPE WHEN THEY ARE SAD.

> Brand Takeaway: Consider finding moments to uplift this audience — music is a great place to start. Our audience turns to Spotify to enhance their moods and moments, and the "happy" mood is something we're inviting advertisers into. Our "Level Up" package uses Spotify's streaming intelligence to target listeners during good vibes playlists, and serves an ad that matches the same upbeat mood. (Spotify)

By using aggregated listener data, Spotify approximates the affect of entire generations and turns them into marketing opportunities. Moodscapes in Featured Playlists are intentionally created for individuals' affective regulation and branded accordingly. The language of the brand takeaway also reflects how Spotify portrays playlists as functional goods that can be used in order to manage mood. Music becomes a tool that can be used to uplift individuals and help them cope to "get over" any negative emotions. As individuals increasingly trust streaming to "enhance and regulate every moment," they are also giving Spotify more ability to algorithmically organize media, group people, and control affect management.

In 2017, Spotify collaborated with Ypulse, a marketing research group that specializes in youth, to create "Understanding People Through Music: Millennial Edition," which is available for any company to download (I made one up). Spotify and Ypulse used thousands of qualitative interviews, Spotify's own streaming statistics, and third-party data providers to get a comprehensive idea of millennials' beliefs, lifestyles, and listening

Figure 6. "Defining Millennials"
Spotify. March 2020

habits to provide a guide for behavioral marketing. The guide is only six pages long, but it is

filled with incredibly detailed information that often feels quite Orwellian. Before moving

towards specific statistics or listener data, Spotify makes several blanket statements to define

millennials as optimistic and "Steeped in a culture of discovery, engagement and sharing, [and

how] along with mad tech skills, millennials have a voracious appetite for music, with music

streaming as their preferred consumption platform" (Spotify). Spotify also references aspects of

"millennial identity," like being more tolerant of different identities or likely to travel to make

causal links to music taste. Because millennials are more open to people from different

backgrounds, they must also be more willing to listen to different genres of music (Spotify).

Through the "Millennial Edition," Spotify goes beyond trying to understand individual listening preferences to attempting to define the cultural values of an entire generation and relate them back to music.

Figure 7. "A Day in the Life"
Spotify. March 2020

Within the "Millennial Edition," Spotify provides charts the daily consumption patterns of three different
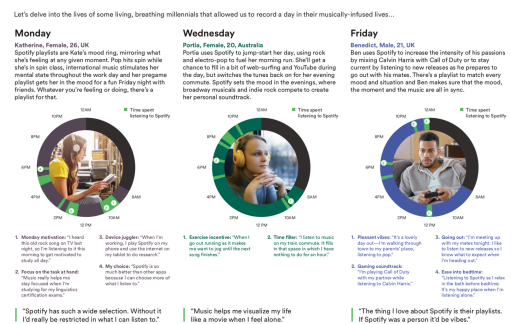
Figure 8. "Millennial Streaming Playbook"
Spotify. March 2020

individuals who participated in the study, and a "Millennial Streaming Playbook" that uses all of the data to give a clean visualization of how to target different activities by platform, time of day, and genre. The specificity within the "Millennial Streaming Playbook" exemplify Eriksson and Johansson and Prey's assertions that Spotify uses the functionality and intimacy of playlists to impart hegemonic ideals of how individuals should behave and when. The "Millennial Edition" as a whole once again shows the importance of context and the increasing prevalence of behavioral advertising that uses detailed data to understand the individual as a set of routine behaviors and affective dispositions. As products of their contexts, individual listeners are understood to be in a constant state of becoming, rather than possessing essential individual tastes or distinctions.

Even during the pandemic, Spotify continues to attempt to judge structures of feeling and greater cultural affect through listening data. In the past month, they've published the articles "How Social Distancing Has Shifted Spotify Streaming" and "Spotify Listeners Are Getting Nostalgic: Behavioral Science Writer David DiSalvo and Cyndi Lauper Share Why." Since widespread stay at home orders in the end of March, Spotify listeners have apparently increased their interest in news podcasts, generally consume more "chill" music, and are sharing and collaborating on more playlists. There has also been an increase in streaming throwback songs. The return to throwback tunes from previous decades led David DiSalvo to infer that the uncertainty of the current moment has made listeners more nostalgic for better times, leading

them to consume music as a form of escapism. While it seems fairly obvious that people would

want to consume music that uplifts their mood or share music with friends to stay connected

during a lockdown, these articles once again reveal how subscribers use Spotify as an outlet for

their feelings and end up as unaware statistics in a greater argument about culture and media

consumption.

As Cheney-Lippold writes, "streaming music services simultaneously draw on a vision of

free and unlimited access and on regulatory practices that select and privilege certain content,

collect user metrics, and deploy algorithmic ways of organizing information" (Eriksson &

Johansson 68). By giving the user virtually unlimited access to music, Spotify assumes that the

listeners are in turn consuming at a true, uninhibited state that directly reflects their affective

states, and that these states can be monetized. Spotify, then, depends upon the user being willing

to remain intimate and affectively honest. Most of these brand insights are based upon the

assumption that individuals do in fact change their listening behaviors based upon moods in a

consistent way, and that the data collected from Spotify accurately represents those moodscapes.

Users impose their affective will upon the application to create "data doubles" that

digitalize their subjective states for advertisers to quantify and examine for trends. The data

double is always in a constant state of becoming. Gilbert describes becoming as "not a relation of

imitation, but a process which is always understood to occur *between* two terms, and which

destabilizes the clear identity of either, involving the mobilization of various affective

potentialities of the bodies concerned" (Gilbert 154). Users on Spotify are caught between their

"true" selves and their data doubles through the process of transforming the listener into

quantifiable data. In the age of "ubiquitous surveillance, who we are is not only what we think

we are, who we are is what our data is made to say about us" (Cheney-Lippold xii). Music

consumption on streaming sites goes beyond being a "technology of the self" in the traditional

sense by also creating a second technological self. While the user reinforces their subjectivity

through consuming music, their subjectivity is also being structured through the process of

datafication. Spotify exemplifies how mediated consumption of music and affective expression

becomes a reciprocal process where the individual constructs a "self," while also being

constructed. The question now becomes not only how do we consume music and use it to

mediate our emotions, but also how is this mediation being reflected back and controlled? How

do we reconceptualize our relationship with music as aesthetic agents through an increasingly

mediated and datafied landscape? Algorithmic control, like affect, operates invisibly at a pre-

subjective, pre-rational level. While individuals are aware that Spotify collects their listening

data to make recommendations, most (including me before researching for my thesis) do not

know the degree to which their data is culturally contextualized and used to draw greater social

observations. When asked about her opinions on Spotify's data collection for recommendations,

a user who listened to 15,824 minutes of music in 2019 answered, "I don't really understand it

and it's quite spooky but I'm into it because it also makes me feel really happy… it makes me

feel really seen and validated, you know what I mean?" (Interview). Music consumption on

Spotify complicates previous understandings of music as an affective medium and technology of

the self through the construction and regulation of data doubles. While the greater degree of

individualization and accuracy of recommendations are validating and engaging, they are

designed to capture attention to further Spotify's economic interests. The increasing amount of

algorithmically control and surveillance creates a "spooky" paradox for the consumption of

music, which has been so historically tied to affect and one's "true" self.

Works Cited

Benjamin, Walter. "Unpacking My Library: A Talk about Book Collecting." *The Object Reader*, edited by Fiona Candlin and Raiford Guins, pp. 257–62. New York: Routledge, 2009.

Bull, Michael. *Sound Moves: iPod Culture and Urban Experience*. New York: Routledge, 2007.

Bull, Michael. "The Auditory Nostalgia of iPod Culture" *Sound Souvenirs: Audio Technologies, Memory and Cultural Practices,* Amsterdam University Press, Amsterdam, 2009, pp. 83-93. JSTOR, www.jstor.org/stable/j.ctt45kf7f10.

Cheney-Lippold, John. *We Are Data: Algorithms and the Making of Our Digital Selves*. New York University Press, 2019.

Connolly, Amanda. "Spotify Launches Playlist Targeting for Brands." The Next Web, 16 Apr. 2015, thenextweb.com/apps/2015/04/16/spotifys-new-playlist-targeting-means-brands can-tailor-ads-based-on-your-mood/#gret.

DeNora, Tia. *Music in Everyday Life*. Cambridge University Press, 2013.

Dhaenens, Frederik, and Jean Burgess. "'Press Play for Pride': The Cultural Logics of LGBTQ Themed Playlists on Spotify." *New Media & Society,* vol. 21, no. 6, June 2019, pp. 1192 1211, doi:10.1177/1461444818808094.

Eriksson, Maria and Anna Johansson. "'Keep Smiling!: Time, Functionality, and Intimacy in Spotify's Featured Playlists." *Cultural Analysis,* vol. 16, no. 1, 2017, pp. 67-82.

Gopinath, Sumanth, and Jason Stanyek. "Anytime, Anywhere?" A*n Introduction to the Devices, Markets and Theories of Mobile Music. Vol. 1*. New York: Oxford University Press, 2014a.

Hagen, Anja Nylund. "The Playlist Experience: Personal Playlists in Music Streaming

      Services." *Popular Music and Society*, vol. 38, no. 5, 2015, pp. 2625-645, DOI

      10.1080/03007766.2015.1021174

Hickey, Walt. "Spotify Knows Me Better Than I Know Myself." *FiveThirtyEight*, 16 Sept. 2014,

      fivethirtyeight.com/features/spotify-knows-me-better-than-i-know-myself/.

Kassabian, Anahid. "Ubiquitous Listening and Networked Subjectivity." *Echo: A Music-*

      Centered Journal, vol. 3, no. 2 (2001): www.echo.ucla.edu/Volume3-issue2/kassabian/.

Laughey, Dan. "Music Media in Young People's Everyday Lives." *Music, Sound and*

      Multimedia: From the Live to the Virtual, edited by Jamie Sexton, Edinburgh

      University Press, Edinburgh, 2007, pp. 172–187. JSTOR, www.jstor.org/stable/10.3366

      j.ctt1g0b5k8.15.

Morris, Jeremy Wade. "Music in the Cloud." *Selling Digital Music, Formatting Culture,* 1st ed.,

      University of California Press, Oakland, California, 2015, pp. 166–191. JSTOR,

      www.jstor.org/stable/10.1525/j.ctv1xxx9f.11.

Pasick, Adam. "The Magic That Makes Spotify's Discover Weekly Playlists so Damn Good."

      Quartz, Quartz, 25 June 2019,

      qz.com/571007/the-magic-that-makes-spotifys-discover-weekly-playlists-so-damn-good/.

Peterson, Tim. "Spotify to Use Playlists as Proxy for Targeting Ads to Activities, Moods." *Ad*

      Age, 16 Apr. 2015, adage.com/article/digital/spotify-playlists-gauge-moods-ad-targeting

      298066.

Rickman, Aimee. *Adolescence, Girlhood, and Media Migration: US Teens' Use of Social Media*

      to Negotiate Offline Struggles, Lexington Books, 2018.

Seaver, Nick. "Algorithms as Culture: Some Tactics for the Ethnography of Algorithmic

Systems." Big Data & Society, vol. 4, no. 2, 2017, p. 205395171773810., doi:

    10.1177/2053951717738104.

Seaver, Nick. "Captivating Algorithms: Recommender Systems as Traps." *Journal of Material*

    Culture, vol. 24, no. 4, 2018, pp. 421–436., doi:10.1177/1359183518820366.

Seaver, Nick. "The Nice Thing about Context Is That Everyone Has It." *Media, Culture &*

    Society, vol. 37, no. 7, 2015, pp. 1101–1109., doi:10.1177/0163443715594102.

Siles, Ignacio, et al. "Genres as Social Affect: Cultivating Moods and Emotions through Playlists

    on Spotify." *Social Media + Society*, Apr. 2019, doi:10.1177/2056305119847514.

Spotify. *About Us,* 2019. https://www.spotify.com/us/about-us/contact/

    _ga=2.37819105.311730580.1576979357-2001338602.1576979357

Spotify. *Company Info,* 2019. https://newsroom.spotify.com/company-info/

Spotify. *Playlists,* 2019. https://support.spotify. com/us/using_spotify/playlists/

Spotify. *The Millennial Edition*, 2019. Retrieved from https://newsroom.spotify.com/category

    trends-data/

Spotify. "Spotify Listeners Are Getting Nostalgic: Behavioral Science Writer David DiSalvo and

    Cyndi Lauper Share Why", 2020. https://newsroom.spotify.com

    2020-04-14/spotify-listeners-are-getting-nostalgic-behavioral-science-writer-david

    disalvo-and-cyndi-lauper-share-why/

Spotify. "How Social Distancing Has Shifted Social Streaming," 2020. https:/

    newsroom.spotify.com/2020-03-30/how-social-distancing-has-shifted-spotify-streaming/

Spotify. "How Your Daily Mix 'Just Gets You'," 18 May 2018. Retrieved from: https:/

newsroom.spotify.com/2018-05-18/how-your-daily-mix-just-gets-you/

Thomes, TP. "An Economic Analysis of Online Streaming Services," *Information*

Economics and Policy, vol. 25, no. 2, 2013, pp. 81-91.

Warman, Matt. "Spotify Browse Suggests Music for Your Mood." The Telegraph, Telegraph

Media Group, 5 Aug. 2013, www.telegraph.co.uk/technology/news/10222908/Spotify

Browse-suggests-music-for-your-mood.html.