

Moving Forward: A Feminist Analysis of Mobile Music Streaming

Ann Werner

Abstract

The importance of understanding gender, space and mobility as co-constructed in public space has been emphasized by feminist researchers (Massey 2005; Hanson 2010). And within feminist theory materiality, affect and emotions have been described as central for experienced subjectivity (Ahmed 2012). Music listening while moving through public space has previously been studied as a way of creating a private auditory bubble for the individual (Bull 2000; Cahir & Werner 2013) and in this article feminist theory on emotion (Ahmed 2010) and space (Massey 2005) is employed in order to understand mobile music streaming. More specifically it discusses what can happen when mobile media technology is used to listen to music in public space and it investigates the interconnectedness of bodies, music, technology and space. The article is based on autoethnographic material of mobile music streaming in public and concludes that a forward movement shaped by happiness is one desired result of mobile music streaming. The positive value of ‘forward’ is critically examined with feminist theory and the failed music listening moments are discussed in terms of emotion and space.

Keywords: Apps, music, mobile phones, gender, space, emotion, streaming

Introduction

I am running up the escalators from the train station to my university, iPhone in my hand, my work bag is bouncing on my shoulder and through my white iPhone headphones Dorian Concept is playing. The song is called “Tropical hands” and it’s my favorite song this week. On my phone’s screen I can see the album cover; a colorful painting of cats, some of them smoking cigarettes, as it is presented with a black background, the interface of the Spotify app. Apart from the painting I can see how the 2 minutes and 6 seconds long song is proceeding. Will it last all the way to my office? I pick up the pace. When running up, my hips sway and my feet take the steps of the escalator in sync with the beats of the song, this song has ‘so very funky beats’ I am thinking. I am smiling at the strangers crowding the escalators, I feel unusually happy. It’s 8.11 am on a Monday morning.

Smartphones have since their introduction on the market increasingly occupied public space and can be said to be a commonplace cultural artifact today (Goggin 2011: 149). While some are using smartphones to listen to music while commuting to work or moving through public space for multiple reasons others are playing games, reading/writing e-mails and social media posts, uploading selfies and much more. Additionally people are still sending text messages and making phone calls. Smartphones combine and merge several previous media technologies (Bolter & Grusin 1999; Jenkins 2006) but are also devices in their own right with technology, design and functions shaping contemporary cultural patterns (Goggin 2011; Christensen & Prax 2012). This motivates researchers to ask questions about the online practices of mobile music streaming that smartphones provide. This article investigates the use of two smartphone applications (apps) for auditory music consumption, Spotify and VKontakte (VK), and how they function on a smartphone while the person listening is on the move in public space. Similarities between the apps are in focus, but some differences are also addressed.¹ Furthermore, the article performs a feminist analysis of how mobile music listening is shaped by, and shapes, gender, space and emotions in a particular case and what this case says about the meaning of emotional music streaming on the move. This is done in order to explore how cultural and media practices are always related to discursive and material power imbalances and to emphasize that the user is always situated.

The empirical material drawn upon is autoethnographic in order to get inside how mobile music use moves and feels. This autoethnographic material is part of a larger qualitative research project studying the Internet’s impact on music use in two cities: Stockholm and Moscow, conducted by a group of four researchers (Goldenzwaig 2014; Werner & Johansson 2014).² Even though this article is based on autoethnographic material it relates to the larger project in terms of aim and problems. Results from a focus groups study displayed the popularity of mobile music listening, and an importance of emotions and space in music listening, the aim of this article is thus related to findings in the overall project. The article consists of four parts. In the first part feminist theoretical concepts and methods

are introduced. The apps' design, architecture, use, possibilities and problems are discussed in the second part. Drawing on experiences recorded in field notes as well as the apps' structure documented with screenshots, the gendered space and emotions of travelling through public space while listening to music is analyzed in the third section. Finally, in the last section, the article is summarized and conclusions are drawn.

Theoretical Starting Points: Subjects, Space and Emotions

The analysis of mobile music listening, space and emotion performed here is inspired by research on mobile media mentioned above. But primarily it takes its starting point in feminist cultural theory. Cultural practices, such as mobile music listening, are within contemporary feminist theory understood as significant for the time and place they are performed in, affected by technological affordances and as immanent parts of subjectification processes. Cultural practices can be analyzed as displaying the logics of power in society and culture, and as changing them (Berlant 2008; McRobbie 2009). Subjectification in mobile music streaming is here seen as both discursive, creating meaning through already existing systems of signification, and material, a sensory and physical experience. In order to understand the relation between discourse and materiality Rosi Braidotti (2003) suggests that subjectification, the process of "becoming-woman", involves material bodies as well as discursive ideas. Braidotti (2003: 60) argues that embodiment is an interconnected material process where encounters and relations with others are keys to its' becoming, while the process of becoming is also interconnected with symbolic forces. The symbolic dimension of culture frame how we feel in already existing but always changing signs, categories and ideas.

Common perception may be that mobile music listening with headphones is a withdrawal from surroundings - but arguably the listening body is still occupying space. Doreen Massey has developed a critical understanding of space where she proposes that space is a product of interrelations, that space is always multiplicity and always under construction (Massey 2005: 9). The first statement about space concludes that space is what it is because of interrelations between humans and non-humans and no space lie still waiting to be explored. When claiming that space is multiplicity Massey (2005: 12) argues that space has both multiple stories and trajectories, thus is temporally made by what has happened and what can come to happen. Trajectories implies the possible lines of flight in the space that is, not fantasies about the future. Claiming multiplicity is for Massey not an additive or developmental approach, space is not the sum of its stories or pointing toward development or progress, but rather Massey argues that space is open. It's an acknowledgment of the inherent difference in space and the potential there, for example for political change (Massey 2005: 59). Furthermore, space is temporal, since it is unfinished and always becoming. Drawing on Henri Bergson and Gilles

Deleuze Massey argues that space is a state of flux. Her three main definitions of space; as interrelations, multiplicity and becoming gives a radical anti-essentialist position with implications for how subjectivity can be understood. Subjectivity, for Massey like for Braidotti, is relational in the sense that one cannot become without relations to others – human and non-humans. Subjectivity is under construction when space takes form. In Massey's terms the space of a music streaming service provides human and non-human interrelations, plurality and constant change. Further, the interface mirrors stories about the user – for example who the user is friends with, what the user listens to or looks like.

By arguing that mobile music streaming is a cultural practice that shapes subjectivity through symbolic and material processes in space with human and non-human agents I have already hinted that it is not the same practice for everyone. When approaching music use experiences in focus group interviews me my colleagues and I found that enjoying music while moving in public space, and being emotional with music, were common and important experiences.³ But variations were found in regards to what kind of music the participants listened to on the move and perceived as emotional, what activities of movement they thought called for music and what space they preferred for music use (online and in the physical world). Sara Ahmed (2010) proposes a way of theorizing differentiation of cultural tastes and practices in terms of emotions and power. One thing that unites music listeners is that music is enjoyed, whether it is sad music for rainy days, upbeat dance music when going for a run, or calm music for studying. Ahmed (2010: 13) argues that where we find happiness teaches us what we value rather than what is of value, the feelings we feel are what make some things good and others bad. The good is what music users orient themselves toward, and there may be overlapping patterns as well as differences between users.⁴ Since happiness, as an emotion, shows us what we value, it also shows us how power operates affectively in culture and society (Ahmed 2010: 53). According to Ahmed desirable objects orient subjects toward certain femininities and masculinities, whiteness and middle class ideas. Questioning this happiness from a feminist critical perspective is to kill joy – and be a killjoy (Ahmed 2010: 20) and here I will proceed to question the joy and effects of mobile music streaming.

Autoethnography

Empirical materials drawn upon here consist of field notes and screenshots collected in 2013 while streaming music on two apps: VKontakte (VK) and Spotify, on an iPhone 5. The methodological approaches used were online ethnography and autoethnography. Online ethnography, being a popular method for investigating cultural and social patterns on the internet, involves doing research online and regarding the space there, chat rooms, communities, social networks or other, as the field of ethnographic study (Hine 2000). Research typically involves other

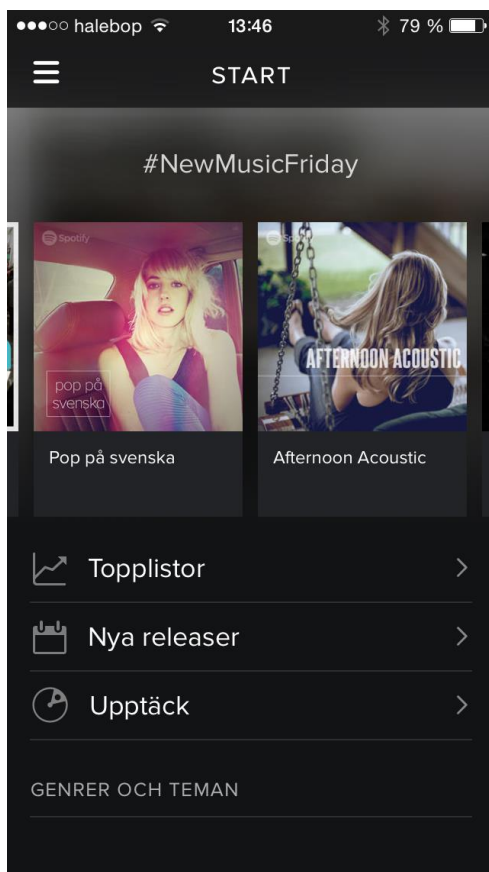
people than the researcher but not always subjects the researcher meets in real life: they can be encountered as online personas (ibid.). Though, research online can also be accompanied by off-line ethnographic work (Kendall 2002). Typically online ethnographers do not regard online subjectivity as less “real” but rather shaped by different cultural rules, technological and physical conditions. Doing research in online cultures emphasizes the question of the researcher’s position (Sundén 2012), a question important for any contemporary ethnographer. The online researcher may, however, shape the very conditions of the field by what the researcher does – especially in milieus controlled by generative algorithms. Autoethnography (Ellis 2004) therefore becomes relevant for online research, since the ethnographic study of one’s own practices and experiences in culture cannot be separated from the field of study. Being a woman-identified, white middleclass Swedish person in my 30s travelling most days on public transport to work at a university in Stockholm shapes my mobile music streaming. As a music researcher, and a devoted consumer of popular music, listening to music in public space was also not new to me. But I had not used the apps in this study prior to the start of the research project in 2012. Having a partner, colleagues and friends mostly in my own age group as my significant others online, as well as offline; shaped the space I listened to music in. So did the lack of children in my life. The time of day I streamed – often early mornings and afternoons – as well as the focus of my commuting – work – holds importance for the analysis made. While actively researching and using the apps of Spotify and VK my online behavior shaped not only my own playlists and folders but also the updates the platforms gave me, and the network patterns created by the user generated algorithms. As Lia Bryant and Mona Livhorts (2013) have shown the emotional use of mobile technology is a research area where autoethnographic work is imperative since the feelings must be experienced in order for analytic work to be possible. I argue, like Bryant and Livholts, that autoethnography is a necessary method for music streaming research, like for their telephone research, since apps and phones adapt to the user and are experienced in a closed system hard to observe for an outsider. Memory work and field notes about one’s own experiences are also methods for gathering empirical material in feminist research on emotions offline, for example in Ahmed’s (2012: 2) studies of racism in academia.

The Apps’ Functions, Structure and Design

The following sections of the article are based on my autoethnographic study of the two apps. First the Smartphone applications’ (apps’) functions and structure are described, and then space and emotions in experiences of using them are discussed as gendered. With this being a qualitative situated autoethnographic study, no general claims are made, results are shaped by my position as well as by aim and questions. With that said I compare material and analysis with previous re-

search in order to highlight similarities and map patterns that go beyond this article. I use selected quotes, examples and images to from my material.

The two app provided a number of similar functions for listening to streamed music.⁵ The designs of the interfaces were structured by these functions and therefore they, also, had similarities. Gerard Goggin (2011: 151) has noted that apps have their provenance in other media formats, and the apps discussed here draw on social media, radio as well as the design of records and computer interfaces. In VK the user could make “folders”, name them and order their favorite songs in them. The interface showed the songs as a list and the name – folder – was clearly inspired by the organizing system in the interface of a computer. In Spotify a similar function was “playlists”, visually it reminded me of playlists in iTunes. Both apps allowed the user/me to listen to and view existing folders/playlists on my profile as well as adding to them while on the go. The folders/playlists functioned similarly to a mixtape and both VK and Spotify apps had inboxes that allowed other users to send songs as gifts. In Spotify the user could follow playlists made by other users and artists but only those that were openly shared. On Spotify

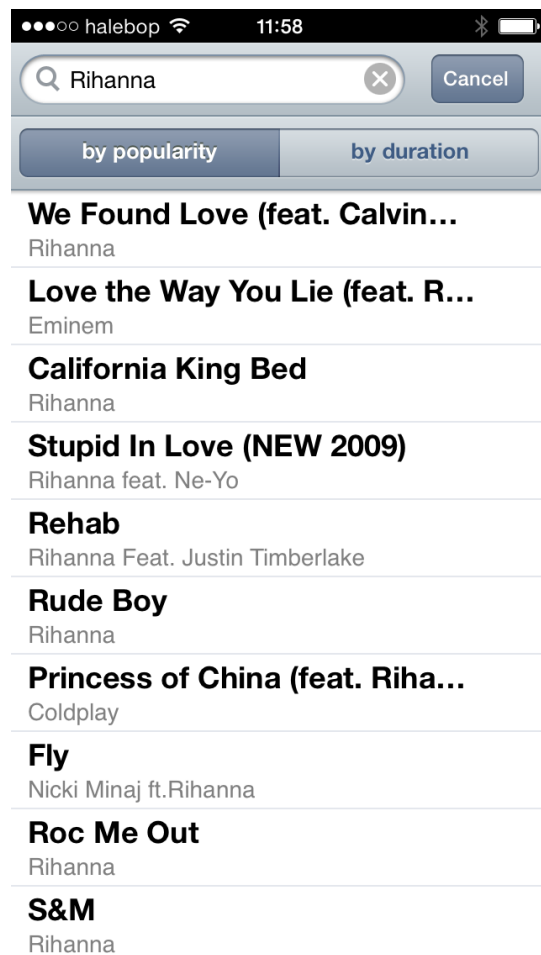


Two Spotify generated playlists as seen on my iPhone 5 a Friday afternoon.

and VK the users could add images to their profiles, when browsing I could see how other users choose to visually represent themselves, and musically through their folders/playlists. On Spotify the platform also generated its' own playlists: named and visually represented with pictures. The names as well as the images were colored by gendered (and racialized) ideas about genres and places; for example the playlist “Pop på svenska” (Pop in Swedish) had an image of a young white blond girl in the backseat of a car while “Hot Alternative” was represented by a black and white photograph of a male white rock band on stage, the central figure, a man with a beard and an electric guitar. The examples gender pop as feminine and rock as masculine, both genres as white in line with popular music studies discussions on gender, race and genre (Railton 2001) VK’s app didnot have visual elements in the music folders in 2013, nor any VK generated folders with music. Both apps included search functions that allowed me to find new music and instant-

ly listen to what I found. Spotify's search function divided searches by artist/album/track while VK divided searches by popularity/duration. In 2014 the search function on VK's app no longer allowed me to find new music, but only to listen to the music I had already saved on the computer version of VK. Spotify provided the possibility to find the whole production of one artist through a single search – at least the part of the artist's production that had been obtained by contract. As a user you may find your favorite album or artist missing if Spotify does not have a contract with the record company that owns the copyright, also music may disappear that was previously available due to change in legal agreements. The VK search engine worked through what the files had been named by the user that uploaded them, like a peer-to-peer network, how long and how popular the songs were.

VK did not have contracts with copyright owners since it is a user generated collection of music to stream, and therefore the service legal status is doubtful and VK is involved in court battles at the time of writing. The result of a VK-search



Searching for Rihanna, as seen on VK when
“by popularity” is chosen.

could (in 2013) result in finding several files containing the same song due to this. Another issue was that a search for the artist Banks would give irrelevant results listed first: tracks from Lloyd Banks and Azealia Banks, because these songs were more popular and the sorting was done by popularity (or duration), not artist. However, Spotify's division of artists was ultimately based on naming too, though the software ordering the names was slightly more sophisticated. This became apparent when several different artists have the same name and Spotify failed to distinguish them from each other. A search for "Omar" in November 2013 provided me with a profile of the artist that included mainly the British based soul artist Omar, but also an album released by the Slovenian singer Omar Naber who participated in the Eurovision Song Contest 2005. The search functions did not seem to adapt their results or ordering of results to the user like for example Google does (Pariser 2011) but the search function

algorithms of both apps are, however, continuously being rewritten. Generally they can both be said to, during the time of study, premiere the the popular, which is shaped by ideas of a western popular music tradition. A popular music tradition where binaries like rock/pop and hip hop/R&B are gendered as well as racialized and valued differently (Perry 2004; Railton 2001; Whitley 1997). Less famous artists, artists with unclear genre affiliations or very new artists proved more difficult to locate.

The third and final function I want to address here is the suggestion function. Both apps (claimed to) provide the user with suggestions of what to listen to, suggestions that were based on what they had listened to before (in both apps), what was popular (in VK) and what their friends had listened to (in Spotify). The function seemed to personalize the app for the user, actively partaking in the users' subjectification process. Mobile music listening is a personalized practice (Audeff 2011: 20) and with the suggestions the apps can be understood as trying to meet the need of a personal music companion. In Spotify's app the suggestion function was called "discover" (the function has changed since 2013) and it suggested artists and tracks that Spotify deemed similar to artists and tracks I had already listened to. The interface suggested an artist with a text: "Like Bruno Mars and Lily Allen? Check out Katy Perry" accompanied by a picture of Perry and a link to her music. Spotify did already know that I had listened to Bruno Mars and Lily Allen – however, the algorithms have a hard time knowing if I liked what I listened to or will like the music that is deemed similar. Spotify also suggested artists/songs my friends had listened to, and artists/songs that I had listened to previously. VK's app had a function called "suggested music" but it did not work for me, and I was unsure if this was because it was a new function (it had recently been introduced in 2013) or if it was not working properly on my phone, or in my country. The function suggested music was on the other hand functional on the VK computer interface and suggested tracks (not artists) though a list with no pictures or motivations for why these particular songs had been chosen for you. When analyzing the selection it seemed to be a mix of artists that I had already listened to and new popular songs by random artists and from random genres. I am here assuming that this is how the function was supposed to work on the app as well. Both the discover function in Spotify and the suggested music function in VK can thus be understood as based on 1) same-ness and 2) popularity. The algorithms were written to generate suggested music that was considered similar to music I had already listened to. VK also suggested unrelated but popular music while Spotify did not, instead Spotify suggested the latest releases and top lists on the "browse" page. The algorithms of discover were at least in part user generated on Spotify – artists that were new and unknown were not suggested and artists that many listened to were often suggested. VK's suggestion algorithms seemed to be based on artist names and also generate songs that were played a lot at the time of the study.

The function discover/suggested music assumed one user per account, if you share your account at home with for example a child the suggestions will become slightly schizophrenic. Other steaming services, like Netflix, have solved this dilemma by allowing several user profiles on the same account. The ideas of sameness were primarily shaped around genres in Spotify, and around artists in VK. As noted before assumptions about genres include assumptions about gender and race, as well as decade or generation. In Spotify rock music produced by men in the 70s led me to more rock music produced by men in the 70s, to take one example. While using the functions my experience was that the functions were helpful precisely because I could find more of the same. This was also discussed in the focus group interviews in the larger study. While Spotify's discover function was more elaborate in its' design it did not take into account what was popular at the time, while VK's suggestions of new music could be less precise in terms of genre and artist. This illustrates the impact the algorithms have on the user's ability to move through large libraries of music, they could at the same time be a source of annoyance when perceived as inaccurate in terms of taste and subject position since they claimed to fitted for me.

I will conclude this section by discussing overall structure and design of the apps. While Spotify is a music streaming service, VK is a social network. They both had left hand side menus at the time. VK's menu had "music" as one choice and all the other alternatives were not focusing on music streaming, Spotify had "search", "discover" and several other music functions on the menu.⁶ In Spotify's app the main colors were green and black and the interface contained many photos, of artists, albums and music related situations. VK's interface was in white and blue – similar to the colors used in Facebook's interface – and there were no images in the app's music functions. But if I for example visited the page of an artist on VK there were a lot of images as well as videos. The content and range of music was organized similarly between the apps through the functions described above, but Spotify had additional functions like "radio" that based a radio flow on a genre or artist by randomly selecting music deemed similar for the user. The music content differed, VK included artists and songs that were released by small independent record labels with no Spotify contract, also VK often had a song before it was released officially. On VK I could also find music videos; these are not included in the discussion in this article, and recordings from live performances. The opposite was also true: Spotify had music impossible to find on VK. VK often lacked music produced in Sweden, for example, but provided a lot of Russian and internationally popular music. Spotify has been nationally adapted to the countries it provides service in which means that the music popular in the country the user resides in is promoted through Spotify's interface for example on "top lists". While I found Spotify to be a colorful and intricately designed network of links, where I could connect to so-called "related" artists from the page of an artist I favored, VK had a simpler system for music listening and functioned more like a

p2p network. The VK interface provided less handholding but a wider a range of new music that was not part of the mainstream.

Significant for both apps was the absence of visible agents; the suggestions and network had no visible senders or editors. This can be compared with Wimp and Soundcloud, services that to a higher degree have named persons making the playlists and suggestions. VK and Spotify appear to be neutral engines of music, when in fact the selection, suggestion and search results depend on algorithms, friends and self-made folder/playlists as well as one's user behavior. In this respect the apps are spaces shaped by historical subject positions of the users – myself and all the others that the algorithms generate information from – providing certain possibilities for future choices (Massey 2005). If I spend a lot of time listening to male singer-songwriters, maybe even following them, these will shape the future space in the apps for me. Some music is always shown and other is hidden. The interrelations of the space were shaped by me, the software technology and other users, in order to become future suggestions and listening. As the choices of music and representation of them are embedded in gendered and racialized genre classifications the becoming also shapes cultural patterns of power and difference.

The Happiness of Moving Forward

When moving through public space and listening to music at the same time some experiences may be general, related to music listening in public space as an activity, and some may be specific for the app that is used, the subject position of the person listening, the public space in question or the music listened to. In my field notes from 2013 two emotional experiences from my music listening on the move stood out: happiness and anger. These emotions will be examined here, but they are not the only emotions relevant for music listening, or my only emotions while streaming music during a year. I felt sadness, love, hate and much more. Rather, these emotions deserve attention because they were prominent and they oriented me in this particular cultural practice.

Key to understanding music listening in public space is the experience of making public space your “own” space (Bull 2000; Weber 2009) by adding audio that is familiar to you. Mobile music streaming is an activity that contributes to the interrelations (Massey 2005) in space when used. Consider the introductory example from this article along with this quote from my field notes: “When moving through the train the loud music in my ears makes the motion effortless and enjoyable, I move, the train moves. The emotion of joy and the forward motion is seamless in the light of an early spring morning, the half empty train and the song I love changes the space. A morning train may be dreary but with my music the train transforms. It is mine”. Not only the happiness and the familiarity mobile music streaming takes part in creating in space are worth noting here – the for-

ward motion was an important feature in many field notes. Forward direction could for me be going to work, but also going home, or going for a run. Music listening provided a feeling of effortlessness when it made the commuter train and the trip “mine”, a push of a button brought on my prepared music and set the mood for commuting and moving forward. The emotions here were positive, and the space around me changed from mundane and dreary: it became my own movie scene with a soundtrack. The object of happiness in a situation like this can be understood as the song, the space is a train and the destination this morning is my work place, the university. What does this type of situation say about gendering music and emotions? Emotions and bodies are generally inscribed with associations to femininity and racial others (Ahmed 2004: 170) but even though I could argue that dancing through the commuter train in sync with the music is always a gendered practice – in affinity with femininity and low value – the morning commute deserves a more in-depth analysis.

The subject position moving forward to work is here that of a useful labor subject, happy to go and be productive. Angela McRobbie (2007) have argued that women today, particularly young women, are governed by a new sexual contract where career and meritocratic success is possible – but only under the condition that a feminist critique of patriarchy and other power imbalances are abandoned.⁷ In post-feminist employment McRobbie (2007: 733) concludes, young women become subjects of capacity. Their capacity and success earns them/me access to neo-liberal logics and consumer culture. Following McRobbie, Rosalind Gill (2014: 17) has suggested that the work cultures of academic work is not only structured by gender, class and race inequalities, these are also often unspeakable because of a condition she calls “gender fatigue”. Moving forward with happiness, toward work in the university, can for a female early career researcher thus be seen as reinforcing a position as a subject of capacity. Through the use of apps for over a year this experience of getting ready, moving forward to perform at work, showed to be one of the most common tropes of my mobile music listening: music and sound changed the perceived space and direction and got me ready for work.

Space is mnemonic and sensory, rooted in embodiment (Massey 2005), it comprises possible futures, and by adding audio some futures could be brought forward. When repeated the experience of getting ready and moving forward with happiness was enforced. For example I discovered that I regularly picked an up-tempo song with a message I found strengthening for the last leg of my journey to work, Rihanna’s “Hard” was such a song for a while, Buraka Som Sistema’s “Stoopid”, and Kat Dehli’s “Gangsta” too. My lines of flight toward capable professional femininity were already embedded in commuter space and brought to the forefront by combinations of music, space and embodied experience by these songs. The choices of music were similar when I went running – I made lists of solely up-tempo motivational songs like the ones I picked when going from the

commuter train to my office. Material factors in public space and mobile technology affordance are relevant for emotions and streaming, as are wider cultural contexts. A crowded train was different from a half-empty one, and a crowd generally made me turn up the volume. Crowds were during the field work with music streaming apps perceived as troubling even with loud music on, because the emotion changed and the listening became less enjoyable when motion was hindered: when there were people standing in my way.

Some previous studies have considered music listening as a form of mood management (for example Skånland 2012), and thus placed the agency of managing one's feelings with the user as a subject separate from the interrelations of space and technology. While emotions are integral to listening, proposing that moods can be easily controlled and mapped is to underestimate the cultural complexity of music and emotions (DeNora 2000). While my field work proved that happiness could be induced, there were also examples of when the playlist no longer felt exciting. When no song gave me the right feeling – and my mood could not be managed. To experience happiness is understood as something good in culture and society, and in order to feel good I was oriented toward different songs and playlists. It may seem like the songs made me happy, and changed the space around me, but really my happiness made the songs happy songs (Ahmed 2010). And happiness through orientation, toward the song, toward the motion of the train, is marked by material and discursive power structures. Ahmed has argued that happiness and happy objects are not neutral but displays normative power relations. Fulfilling forward motion and feeling happy while streaming music thus says something about normative subjectivity: it is good to move forward, to be happy, to run and to work. When mobile music streaming changes public space into a happy space it is not displaying the user's individual management of moods, but what is valued.

Anger as Subversion

The second emotional experience in mobile music streaming that I want to address here is anger, felt by me toward playlists, apps or artists, emotions common when the search for the perfect soundtrack comes up with nothing. I handled my need for variation in music by making new folders/playlists and rearranging the ones I already had. I found this practice time consuming and more easily done on the computer interfaces of both Spotify and VK. Because I did not always have a good new playlist/folder to stream there were many instances when I was on public transport, walking, running or waiting without enjoying my music, wanting something different. Once I found myself on a long walk bored with my (previously favorite) folder in VK and frustrated because I had to interrupt my exercise in order to search for new music, thus standing still on the side of the road. Mobile music streaming created emotions of anger in me when the search for music to

listen to took up time. This negative emotion allowed the other dimensions of public space to take over: other peoples' talk sounded louder, the run or walk seemed longer, the train dirtier and the weather worse. Space changed with the lack of good music, and sometimes when volume settings changed automatically or "bad" songs were played by mistake this affected my experience of space. Sometimes, as I just described, this anger, felt less intensely as frustration, was due to my own failure to manage the technology. But the apps also took part in inducing anger. The content, functions and design of both apps were updated several times during 2013, changing the results of searches, the design of the interface and the network paths. These continuous changes may have been improvements, but they still complicated the movement through the apps' spaces. Also, sometimes the apps did not function at all. VK required consistent internet connection and therefore a glitch in the connection stopped the music. Spotify had a more stable music flow even when the internet connection dipped; but a longer break in internet connection for example when moving from a building with wi fi to my regular mobile phone operator's internet service also affected Spotify streaming (unless the playlist I listened to had been saved for offline listening). Battery time was also a source of anger and negative emotions, the streaming required a lot of my battery time and it became a habit for me to always bring a charger. Technology could simply not be trusted; hardware nor software. In many studies of digital cultural consumption the devices and software are assumed to work. But failure is not an isolated event according to Peter Krapp (2011): but a significant structuring part of digital culture. He argues that all technology fail and instead of seeing these events as mistakes one should consider them as part of technology, affecting how humans and non-humans interact. Therefore shortened battery time and constant updates that make the apps hard to navigate are not issues separate from mobile music streaming, but part of what app technology is and does.

Anger can be a productive emotion in that it may motivate action (Ahmed 2012) and reflection, but I did not perceive the failures to find good music, or to play my music, that led up to anger and frustration in my material as productive. Failure was just slowing me down (I thought). However, if the positive valuing of forward orientation is understood as above, as among other things reinforcing neo-liberal and gendered ideas about forward-ness and labor, the failures of technology and the anger it caused could be pockets of time for reflection on my orientation and direction. As such, failure can critically call cultural practices into question. Failure as an important cultural event of meaning has been theorized by Jack/Judith Halberstam (2011) who argues that failure is common and therefore central to culture and that it produces "gaps" with potential for political change in dominant discourses and ideas. The failure of effortless music streaming and forward motion, as frustrating as it was, could be such a gap where dominant discourses were made visible and change became possible. As such the anger felt in

the failed space of music listening contained other possible futures that do not succumb to normative ideals of forward-ness.

Happiness as well as anger was an important emotional experience when moving in public space while using two music streaming apps. Even though other users also experience emotions while listening to music their emotions may not be the same as mine, their taste in music may not be the same. Emotion, music and technology interplay in creating space, and as Massey (2005) argues space is multiple. Here the comfortable music listening on the way to work has been explored critically and contrasted with the failure, of technology or in finding the right musical experience and the two emotional experiences have been analyzed as orientations. In the final section the analysis will be summed up and conclusions will be drawn.

Motional and Emotional Streaming

I have here proposed understanding music streaming thorough apps as an emotional practice in public space: affecting the body's movement as well as subjects' being moved by feelings. In the analysis I used Sara Ahmed's (2010) definition of happiness as an orientation toward happy objects and her (2012) understanding of anger as a productive emotion together with Doreen Massey's (2005) theory of space in order to discuss the material at hand. The subjectivity achieved through happiness in mobile music streaming was here orienting me forward in space, and in achievement, when going to work, for a run or generally going somewhere. The anger was on the other hand induced by failure and made movement and achievements come to a halt. Emotions are thus understood here more broadly to be doing something with the listener's subjectivity: pushing me forward, to run faster, do better, get to work. Or stopping me, creating a space to reflect and be angry. Since subjectivity is always rendered in differences like those of gender and class to mention only two, the way of becoming in happy music listening is in my analysis to become an achiever. Happy mobile music streaming lead to embodiment of a known figure: the over-achieving young professional middle class woman, through music listening becoming a subject of capacity. The failed streaming experiences and the anger over them, on the other hand, halted this process, caused uncomfortable feelings and provided a possible space for reflection and alternative directions. The wider implications of this analysis is that the importance of mobile music streaming may not lie in the music chosen, or the software, or the listener, but in the practices and discourses shaping the lives of people streaming music. While these practices and discourses in play may vary, the idea of the music listener should be revisited by (feminist) cultural studies researchers in order to understand the role of music and media technology for subjectivity today.

Ann Werner is a senior lecturer in Gender Studies at Södertörn University in Sweden. She holds a Ph D in Culture Studies and has previously researched for example teenage girls' uses of music and dance videos on YouTube. Her current project is concerned with music consumption online and her work in the field of feminist cultural studies combines gender and media theory. E-mail: ann.werner@sh.se

Notes

¹ VK is a social network with music streaming functions, while Spotify is a program entirely constructed for music streaming. The choice of these apps and their design will be addressed further on in the article.

² The project "Music use in the online media age: A qualitative study of music cultures among young people in Moscow and Stockholm" involved four researchers aiming to understand the role of the Internet in music use. It was financed by The Swedish foundation for humanities and social science, *Riksbankens Jubileumsfond*. The project consisted of two parts; a focus group study and a cultural analysis of the three platforms most popular among participants: VKontakte, Spotify and YouTube.

³ The full project is presented and analyzed in a forthcoming book.

⁴ The constructions of good taste are not neutral. This is not a topic discussed in-depth here but since Bourdieu taste is understood to be shaped by power and music considered 'bad' or 'tasteless' by the majority is often associated with (and enjoyed by) the power-less: children, feminine subjects, the poor and the racialized.

⁵ All functions discussed in this article were in place in November 2013 and many of them were operating during all of 2013. Functions and interfaces of the apps were changing slightly with every program update during the research period and the changing character of the software will be addressed.

⁶ The interface described here is the interface on an iPhone 5, the Samsung phones, tablets of different brands and other smartphones have interfaces that are different while the main functions are the same. It is also the interface of late 2013. Even though I acknowledge rapid change I find it useful to provide a picture of what the apps looked like and provided at the time.

⁷ Analysis is, here, on the one hand very personal: situated in my position. On the other hand it could be understood to say something more general about femininity in commuting to work while listening to music and the gendered expectations of labor and professional femininity.

References

- Ahmed, Sara (2004): *The Cultural Politics of Emotion*, Edinburgh: Edinburgh University Press.
----- (2010): *The Promise of Happiness*, Durham: Duke University Press.
----- (2012): *On Being Included: Racism and Diversity in Institutional Life*, Durham: Duke University Press.
Avdeeff, Melissa (2011): "Challenges Facing Musical Engagement and Taste in Digitality", *Situating Popular Musics: IASPM 16th International Conference Proceedings*, 15-23.
Berlant, Lauren (2008): *The Female Complaint: The Unfinished Business of Sentimentality in American Culture*, Durham: Duke University Press.
Bolter, Jay David & Richard Grusin (1999): *Remediation: Understanding New Media*, Cambridge: MIT Press.
Braidotti, Rosi (2003): "Becoming Woman: Or Sexual Difference Revisited", *Theory, Culture & Society*, 20:3, 43-64.

- Bryant, Lia & Mona Livholts (2013): "Location and Unlocation: Examining Gender and Telephony through Autoethnographic Textual and Visual Methods", *International Journal of Qualitative Methods*, 12:2013, 403-419.
- Bull, Michael (2000): *Sounding Out the City: Personal Stereos and the Management of Everyday Life*, Oxford: Berg.
- Cahir, Jayde & Ann Werner (2013): "Escaping the Everyday: Young People's Use of Text Messages and Songs", *Youth Studies Australia*, 32:2.
- Christensen, Christian & Patrick Prax (2012): "Assemblage, Adaptation and Apps: Smartphones and Mobile Gaming", *Continuum*, 26:5, 731-739.
- DeNora, Tia (2000): *Music in Everyday Life*, Cambridge: Cambridge University Press.
- Ellis, Carolyn (2004): *The Ethnographic I: A Methodological Novel about Autoethnography*, Walnut Creek: Altamira Press.
- Gill, Rosalind (2014): "Academics, Cultural Workers and Critical Labour Studies", *Journal of Cultural Economy*, 7:1, 12-30.
- Goggin, Gerard (2011): "Ubiquitous Apps: Politics of Openness in Global Mobile Cultures", *Digital Creativity*, 22:3, 148-159.
- Goldenzwaig, Gregory (2014): "Music Consumption Practices in the Age of the Cloud: Listening to Russia", *World of Media: Yearbook of Russian Media and Journalism Studies*, 2013, 39-59.
- Halberstam, Judith (2011): *The Queer Art of Failure*, Durham: Duke University Press.
- Hanson, Susan (2010): "Gender and mobility: New Approaches for Informing Sustainability", *Gender, Place and Culture*, 17:1, 5-23.
- Hine, Christine (2000): *Virtual Ethnography*, London: Sage.
- Jenkins, Henry (2006): *Convergence Culture: Where Old and New Media Collide*, New York: New York University Press.
- Kendall, Lori (2002): *Hanging Out in the Virtual Pub: Masculinities and Relationships Online*, Berkeley: University of California Press.
- Krapp, Peter (2011): *Noise Channels: Glitch and Error in Digital Cultures*, Minneapolis: University of Minnesota Press.
- Massey, Doreen (2005): *For Space*, London: Sage.
- McRobbie, Angela (2007): "Top Girls? Young Women and the Post-Feminist Sexual Contract", *Cultural Studies*, 21:4-5, 718-737.
- Pariser, Eli (2011): *The Filter Bubble: What the Internet is Hiding from You*, London: Viking.
- Perry, Imani (2004): *Prophets of the Hood: Politics and Poetics in Hip Hop*, Durham: Duke University Press.
- Railton, Dianne (2001): "The Gendered Carnival of Pop", *Popular Music*, 20:3, 321-331.
- Reed-Danahay, Deborah (1997): *Auto/Ethnography: Rewriting the Self and the Social*, Oxford: Berg.
- Skånland, Marie (2012): *A Technology of Well-Being: A Qualitative Study on the Use of MP3-Players as a Medium for Musical Self-Care*, Oslo: Norwegian Academy of Music.
- Sundén, Jenny (2012): "Desires at Play: On Closeness and Epistemological Uncertainty", *Games and Culture*, 7:2, 164-184.
- Weber, Heike (2009): "Taking Your Favorite Sound Along: Portable Audio Technologies for Mobile Music Listening", Karin Bijsterveld & José van Dijck (eds): *Sound Souvenirs: Audio Technologies, Memory and Cultural Practices*, Amsterdam: Amsterdam University Press, 69-82.
- Werner, Ann & Sofia Johansson (2014): "Experts, Dads and Technology: Gendered Talk about Online Music", *International Journal of Cultural Studies*, Online First, published ahead of print, doi: 10.1177/1367877914555463.
- Whiteley, Sheila (1997) (ed): *Sexing the Groove: Popular Music and Gender*, London: Routledge.