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## **Streaming the Everyday Life**

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### **Introduction:**

Among contemporary music audiences, the use of music-streaming services has become an increasingly popular everyday activity.<sup>1</sup> In Norway, where this study is conducted, seven out of ten people access one of the two major services, Spotify and WiMP Music/Tidal (TNS Gallup, 2015).<sup>2</sup> Revenues from various music-streaming services counted for as much as 81 per cent of the total music sales in Norway in the first half of 2015 (IFPI Norge, 2015).

Music streaming hence provides a good starting point for studying individual music experiences and how listening achieves meaning in the digital realm of networked music cultures. Nevertheless we know little about how everyday streaming unfolds and how music is listened to on these services. In this chapter I therefore discuss how music streaming takes place in the everyday life of individual listeners. By exploring dedicated streaming-users' practices and experiences with music-streaming services, characteristic user-technology involvements will be revealed in light of what this listening format invites in diverse contexts. Further, I go on to discuss how the uses of music-streaming services influence listeners' relationships with music.

The study connects with previous research on individual music listening, conducted with emphasis on how people handle and experience their listening technologies (for example Bull, 2000; Williams, 2007) and how music in everyday life conveys meaning according to the listening context (DeNora, 2000; Hennion, 2012). It also follows up the identification of a missing link, between music experiences and material studies in analyses of everyday music reception (Nowak, 2014). The study specifically provides empirical understanding of music experiences derived from an *online technology*, applied on personal media devices. The

chapter offers concrete examples of how online media technologies in general, and music-streaming services in particular, take part in shaping our individual experiences and acquire meaning through their embedding in everyday life.

This perspective is inspired by sociological phenomenology, starting with an action-oriented understanding to meaningful everyday experiences (Schütz, 1967), which informs my analytical approach. I therefore use the concept of *the lifeworld* to address the a priori aspect of the everyday reality as acknowledged both by its common sense and by its taken-for-grantedness (Rasmussen, 2014, p. 46). More simply, lifeworld experiences encompass and label peoples' immediate interactions with their surroundings, which in contemporary contexts naturally involve the online technologies we use, including music-streaming services.

## **1. Music in the cloud**

'To stream' (music) refers to the process related to users' interaction with music-streaming services, delivery systems that enable vast amounts of digital data to be stored in the 'cloud'—that is, the large data centers comprised of networked servers connected to the Internet.<sup>3</sup> Service providers transfer service-hosted content from the cloud to users via broadband Internet connections. This makes the music available without the need to download the files. The content is instead experienced in real time as continuous streams of data, but listening can also happen *offline* (implying access to files downloaded to a local device without needing an Internet connection).

To use as little bandwidth as possible, music-streaming services tend to stream compressed audio files delivered in small 'packets' of data that can be buffered via Internet applications (apps). The apps are applied on AirPlay clients, desktops, laptops,

tablets, and increasingly on mobile smartphone systems (Maasø, 2014) such as Android and iPhone. For the end-users, the streaming technology means that vast music archives are made available via media devices that are often deeply embedded and heavily used in daily life. This suggests that music listening increasingly happens in multiple contexts and fills various purposes and roles within diverse modes.

Put differently, the cloud as environment for experiencing music indicates that several socio-technological arrangements compete in shaping user engagements with music-streaming services – including individual, contextual and musical aspects. These interact with the ways the technology takes on a somewhat uniform structure as a *listening format*. Like LPs, cassettes, CDs, and MP3 files, a music-streaming service also ‘denotes a whole range of decisions that affect the look, feel, experience, and workings of a medium. It also names a set of rules according to which a technology can operate’ (Sterne, 2012, p. 7). From a user perspective, the format defines how music streaming as an everyday activity includes certain possibilities for action, which I will address further through the concept of *affordances*.

Affordance theory was originally developed as an ‘ecological approach’ to how individuals visually perceive, and act within, their environments: ‘The *affordances* of the environment are what it *offers* the animal, what it *provides* or *furnishes*, either for good or ill’ (Gibson, 1986, p. 127). Gibson suggested that what individuals pay attention to when they look at objects are its affordances, not its qualities (1986, p. 134). The theory accounts for peoples’ interpretive capability and sociological gaze in understanding and experience, which enable technologies to be regarded in various ways according to the person's individual, social, cultural and contextual references. Hence different environments/things afford different behaviors to different people (Gibson, 1986, p.128–29).

Nevertheless, media, substances, surfaces, objects, places, other humans and also music bring with them affordances that partly determine their interaction with the individual. Consequently what the music-streaming services afford also constrains what the user can do with/in them, yet at the same time, they enable possibilities that have become inseparable from the user's way of life (Gibson, 1986, p. 139).

My interest is in the characteristics of use of music-streaming services, associated with an understanding of what those services *afford* – or more precisely, how the format triggers of distinct 'performances' of music relate to action in diverse everyday context. With this dynamic approach, the study takes into account the interactions arising within the socio-technological arrangement of each present moment of streaming music, including the services, the person, the music, and the context.

## **2. Conditions and capacities**

In starting to identify what the cloud implies as the environment for individual music listening, a first condition of music-streaming services involves *music abundance*.

Currently the most popular services, like Spotify, Apple Music and Tidal, each have more than thirty million songs in their databases – an amount of music far beyond anything both dedicated fans and casual listeners have accessed via other formats. As a service-condition, the abundance raises questions regarding the listeners' music management, service orientation and navigation, and affords user patterns influencing the music experience.

Music-streaming services, secondly, comprise *social network structures* generally integrated into the platform. This makes the music easy to share, and enables users to connect with one another within the service. Also, it forces forward social awareness in

one's online music listening, which afford individual and contextual (re-)negotiations of music as personal and social (Hagen and Lüders, in Hagen, 2015).

A third condition of the cloud concerns the *intangibility* of the streaming format. This includes flexibility and mobility for the users, via the ability to access and adapt music on diverse devices. In parallel, intangibility comprises notions of fluidity and ephemerality, as the streaming-service *business model* derives from this intangibility as well and implies a whole new economy based on subscriptions. This makes the users renters of music access rather than owners of a product or a file. In contrast to *ownership models* of music distribution (for example, iTunes or Amazon), where consumers purchase a permanent license to listen to a given song as many times as they want, music-streaming services provide consumers with access to every song in the music catalogue for a limited period (Wikström, 2013, p. 105).<sup>4</sup> The access is managed through various payment systems, like free advertising-based services, or monthly subscriber fees.

Furthermore, online subscription services follow distinct Internet configurations or *platform principles* (van Dijck, 2013; Gillespie et al., 2014), managed by the service providers as part of the business model. These are not always visible in the user interface, but nevertheless, they contribute to the composition of capacities for users to access, navigate, organize and listen to music.

The largest on-demand subscription services offer a set of features that represents a more or less standardized user-arrangement. Through features requiring active *participation*, users are encouraged to organize and customize the service account, for example by making personal playlists and marking favorite albums. Users can also *queue* the order of songs or *shuffle* the orders of album or playlist tracks during their listening. Most music-streaming services include a search field and browsers with which to look up music.

These interactive features often work in tandem with arrangements that include varying degrees of *automation*. Through pre-manipulated and pre-compiled suggestions, music-streaming services offer readily available selections highlighted by the service providers themselves. Carefully calculated metrics and algorithms shape the ways in which music is both supplied and accessed through these participatory and automated features. Providers analyze user data based on input from the past history of the subscribers (including listening patterns and social connections). The goal is to offer individualized content (Gillespie et al., 2014, p. 174), and continual adjustments are made accordingly, as happens elsewhere on the Internet, as aggregations of very dynamic processes and temporary arrangements are constantly tweaked in response to the users' needs and platform owners' objectives (Feenberg, 2009).

In sum, the cloud-conditions and platform-configurations constitute the technological foundation of the music-streaming services. This includes multiple capacities for the users to act upon, following also multiple experiences. These are additionally defined by the users' perception of the music-streaming service, which involves the notions of risk, benefit, opportunity, and constraint that arise in each context of use. The overall music-streaming user experience is therefore a result of an individual negotiation of subjectivity, ownership, autonomy, (in-)adequacy, knowledge, memory, history, skills, cleverness and so on, in the user-technology encounter.

### **3. Methods**

The shifting nature of individual music reception, our everyday contexts and experiences, and also the music-streaming technology operating according to changing platform principles, are all variables of an in-flux character, which challenge an explicit depiction of the researched

phenomenon. This backdrop motivated me to combine several methods, because I aimed to capture both the user narratives *in* the moments of listening, and the musical, circumstantial and technological contexts of these experiences. Also, it inclined me to dig deep into a restricted sample rather than to develop a broader cross-section.

Recruitment of informants happened from visits to high schools, and releasing information about the study on Facebook and Twitter. The sample was skewed young, so as to guarantee data from individuals who turned to online platforms exclusively for their music experiences. These were complemented with people who had experience with physical music formats and pre-streaming online music formats too.

I ended up with eight Spotify and four WiMP Music users (ages 17 to 60, five male and seven female), who had maintained their subscriptions for at least one year, and now streamed music almost daily. These ‘heavy users’ presumably would be able to exploit the streaming-technology and make deliberate choices according to their musical and contextual needs. The sample therefore reflects users who probably invest more time and effort than most in their streaming services, in terms of developing innovative, distinct and skilled streaming-practices. Importantly, the informants also stated themselves willing to share their thoughts and practices around this socio-technological interplay in their actual contexts of music streaming. All the informants turned out to be passionate music fans and produced reflections multiple times a day.

To avoid the potential distortions associated with retrospective inquiries (Hektner et al., 2007, p. 7), I began the data gathering with a diary study. Self-reported informant diaries also represent ‘insider’ accounts that the researcher cannot acquire in any other way. During four sampling periods (of two-three days apiece) I asked the informants to write diary-entries on every music-listening session using their streaming services. The beginning and end of these periods were signaled via SMS and email.

The entries followed seven pre-supplied questions that revolved around the context (location, date, time), the music (what music, from which source, why listen to it now, how the music was found), and the listening (a description of music use, parallel activities, the social or personal setting, distractions, related emotions and so on). The diary procedures were tailored to provide informants with optimal opportunities to report seamlessly during everyday-life situations, adapted according to individual preference and already-established media habits. Entries therefore took the form of handwriting in notebooks, emails, word documents, screenshots from personal media devices, or replies in spreadsheets created in Google Docs.

To complement the diary entries, I observed the informants' Spotify and WiMP Music accounts and their Facebook profiles. I had obtained consent to do this, both from the users and from the Privacy Issues Unit at the Norwegian Social Data Service. I also logged their listening via the 'scrobble' feature in the music service Last.fm, which enabled me to process and distribute information directly from the informants' music streaming. As a tracking mechanism, this allowed me to determine that listening patterns did not change significantly during the testing period, and to control the diary-entries against the tracked listening.

I followed up with in-depth semi-structured interviews, looking at the informants' streaming accounts as we were talking. We were then able to discuss choices and experiences specifically in relation to the content and features embedded in the service. The interviews were recorded, transcribed verbatim, and coded in HyperResearch. All of the informants are anonymized.

In coding and analyzing the data, I began to unpack the human-technology encounters between listeners and music-streaming services, encompassing evolving and contextualized experiences with both the music and the streaming technology. The present empirical account is neither comprehensive nor mutually exclusive with regard to possible everyday music-



streaming experiences, but it is an important place to start assessing the significance and societal influence of music through this hugely popular technology and pastime.

Overall, the diary method and Last.fm scrobbling represented a productive model for studies of online-music listening habits that stand to benefit from immediate sampling. Furthermore, the combination of methods allowed for an accumulated understanding to emerge from the informants' personal reflections and my impressions of their online presence and mediated lives. The method design meant embracing and grappling with complexity in creative processes of interpretation from a complex, often-messy field of data. Such thick-description analyses are, however, particularly relevant when the research object is fragmentary and ephemeral, and the goal is a precise description of a point in time: producing a fleeting and contextual understanding of the world that resonates with informants' lifeworld (for more, see Hagen, 2015).

#### **4. Streaming the everyday life**

A main observation in the study relates to the many situations where music streaming intersects with everyday life. The majority of the informants claim to listen to more music, more often, thanks to music streaming, a pattern also supported in related research (Maasø, 2014). The cloud-conditions of the streaming technology handled via personal media devices invite individual music managements that enable music to follow listeners closely and flexibly in various contexts. Through executions that are routinized or happen at a whim, music streaming melds into what people do in the mundane. With (more or less) tactically operated personal practices, users draw on the services' multiple potential for music-related action, to respond to their contextual calls for music in any given moment.

The users' experiential responses to these processes depend on the perceived relationship between the music, the context, the listener and the technology. For example,

service hindrances to expected listening can trigger harm and annoyance, as when certain music cannot be accessed because the Internet connection is insufficient, or when no music can be accessed at all because the streaming-device battery is flat.

However, when music streaming happens satisfactorily, listening develops various roles and functions along the way, as is also the case with the technology. The music-streaming service hence ties into notions of identity and self-image, and relates to how individuals look at others. In short, music streaming is expected as a part of the changing rhythms of everyday life.

For example, morning rituals go in parallel with acts of music streaming, a pattern that makes the streaming practice a ritual in itself. While Nathalie (age 17) puts her make-up on, she always puts a playlist on as well, or queues a few preferred tracks. In contrast, Louise (17) listens to the same single in the shower every morning, and enjoys singing along. The length of the track helps her bathroom routine to keep on track. Anne (35) compares her morning listening with having a cigarette or cup of coffee. Just as deprivation of nicotine and caffeine makes addicts stressed - this is also the consequence of missing morning-music to Anne. Her morning-listening practices normally alternate between profound, orderly album listening and restless playlist-skipping and shuffling, depending on her daily condition.

Likewise, music streaming is a bedtime ritual, intended to lull the informants to sleep. On his playlist, called *The Fleabag*, Erik (18) has compiled music 'that in a sense lowers the pulse a bit' (interview). Jenny (18) instead prefers to browse for 'sleeping-playlists' in the steaming network. By typing strategic words like 'sleep' and 'relax' in the search field, she explores appropriate music from her bedside, until she falls asleep. With one of Nina's (27) scrobble-reports, a diary-note follows that describes a 'pillow talk':

*My husband and I have just gone to bed. We are soon sleeping. I tell him about the*

*release of the new The Strokes-album on WiMP, and play One Way Trigger for him. Then I play Edie's Dream by Suuns that I found earlier today [...]. I would like to hear his opinions - and he likes them. [...] We talk about the tracks, and agree about The Strokes' heavy A-ha-references. But we are tired now, so we turn off the music and fall asleep (21 March 2013, 12:09 am).*

Multiple diary-notes describe how music streaming regularly fills gaps in the informants' everyday life. When Emma (18) has 'four minutes doing nothing, or maybe I wash the dishes or something, then I just put something on' (interview). Filling time with music also connects to the related notion of *killing time*, in tedious tasks and in commuting. Streaming along with riding the bus, the train, the tram and driving the car is extensive, and playlists designed for commuting, and practices of casual listening to random tracks and profound album listening, are integrated in the informants' recurring routines.

What *the music* affords in these situations, however, or how its properties work on the listener (DeNora, 2000), varies individually, and also inherently from one time to the next. Some informants emphasize that music streaming in such fragments of the everyday represents disentanglement from the presence of people. Others claim that the music makes the time fly faster and the surroundings appear more interesting and meaningful, as *everyday mediations* that mold the listeners' immediate perceptions.

Also, the music affects the listeners' experiences of their body and self. For example, streaming can arouse in high-energy activities, like training, walking, and running, because the music distracts and entertains: 'it makes me *not* focus on how hard the workout is' (Nathalie, 17, interview). Otherwise, the music augments the activity itself when energies, tempos and styles are matching: 'with high intensity [music] I walk faster, hence I always catch the bus' (Erik, 18, interview). Similarly, music stimulates concentration and relaxation,

and helps listeners unwind from disturbing surroundings with streaming patterns customized for focus or recreation. To Nina (27) the music-streaming service appears as a mental safeguard, shielding her from the noises and disruptions of the city. Music streaming makes her more confident to face people and challenging situations, she writes, and the music helps her hold focus when competing tasks seek her attention (diary note).

In all these examples, the streaming technology, navigated through distinct, personalized streaming practices, affords patterns of listening that modify the listeners' attention and present perception of the mundane. The properties of the music often relate to the listeners' moods in these contexts. Music (with its qualities for human moods or states of mind) is chosen purposely to fit certain moods or to achieve them. In parallel, the moods are mirrored as planned executions in the music-streaming service, and some informants therefore explain that the service appears as an extension of their emotional life.

In other words, the music follows the streaming users' small and big everyday fluctuations, including celebrations, motivations, stimulations, joys, sorrows, disappointments, hardships, affairs and so on. As such the service becomes an everyday companionship used to actively enhance, mold or avoid certain moods. This manifests everyday music-streaming experiences as highly personal and self-referential, as parts of the listeners' selfhood, sociality and everyday way of being.

The material reveals that attention towards the music often tends to be limited and fragmented when everyday life intrudes upon the listening. Music streaming as a *secondary* activity is highly apparent. Therefore, a sense of 'backgroundedness' influences how individual streaming practices develop and perform. For example, some users compose distinct playlists for *secondary listening*. Others prefer to rely on the service-suggestions and algorithm-driven features to effortlessly provide them with (more or less) random music. The

potential to exploit the automated part of the technology also afford seamless listening to benefit dinner dates, parties and other social gatherings. The music then represents desired atmospheres as a background element to informants' social contexts.

Interestingly, casual streaming, background listening, and listening initiated with functional purposes, also often include strong *aesthetic dimensions*. When the music strikes the listener and modifies his or her perceptions of the mundane, some refer to mind-altering moments of great aesthetic value, particularly when the experience occurs serendipitously.

Aesthetically oriented music streaming otherwise tends to be performed as planned acts of listening, aligning with what some call streaming for basically *listening to music*. Music streaming executed for pure listening and aesthetic responses triggers distinct practices to those associated with functional and casual streaming, for example: 'When I *actively* listen to music, then I turn up the volume and my attention and focus is different than when I stream music out and about' (Erik, 18, interview).

People attach diverse everyday activities to their acts of *profound listening*. Nina (27) and her husband create small quizzes related to the tracks they stream, and WiMP Music is regarded as a social hub to gather around at home. Profound listening also follows activities like cooking, cleaning, dishwashing and so on, in addition to more individualized activities. Louise (17) associates profound music streaming with her singing exercises, and Håkon (17) applies it as a tool along with practicing his bass. Marius (24) and Jon (60) execute music streaming for pre- and post-listening (Kjus and Danielsen, 2014) related to the live concerts they are attending.

Related to the ways music streaming in daily life contexts tends to develop with pragmatic and personal practices attached, the specific mode of *music exploration* also seems to foreground customized streaming practices. Then the music is always in focus, yet it varies whether the exploration is facilitated primarily by the service solutions or motivated by users

themselves. In this distinction, practices of music exploration strongly connect to the users' notion of trust in the service, versus their sense of credibility and confidence in oneself or others, for the purpose of discovering music.

In order to conveniently retrieve preferred music, some users apply inherent 'saving mechanisms' offered by the streaming services (for example, starring tracks or saving favorite albums). Others produce playlists, and these range from permanent ones made for keeping, to temporary ones, made for some single use before being deleted. Labeling playlists with compelling and personal titles is another way to ensure efficient everyday overviews of the music, on the go, in the flow, and while doing something else.

Overall, music streaming happens with purposes and practices that vary from morning to evening, and between weekdays and weekends. Music streaming also provokes experiences that alter in emphasis between the technology, individuals, moments, purposes and contexts. Some user practices can be considered as processes of rendering streaming services more straightforward, to use and to access the right music for any given listening context. Other practices appear with logics that can be regarded as extensions of the everyday life itself. These include tasks, privacy, sociality, moods and relationships, and routines and habits, as when weekly planning happens in accordance with streaming service updates. In their attachment to the perception of everyday life, music-streaming experiences often come to symbolize an imprint of the listeners' current notions of themselves and their lives, when recalled at later stages in life.

## **5. A lifeworld of Music Streaming**

Through the assorted examples I have presented in this analysis, the extensive role of music-streaming services in everyday life is demonstrated. The ways in which playlist structures,

streaming practices and musical content are intended to modify (or are modified according to) the rhythm of everyday life appears striking. Music streaming takes place in fragments of time, and is perceived as time in fragments. The uses and experiences flow into one another. Moreover, everyday music listening appears to arise naturally, immediately and conveniently, as affordances of the flexible and multifaceted music-streaming technology.

Individual music ‘performances’ are executed seamlessly in an array of contexts, positioning music streaming as an ‘infrastructure’, consisting of the streaming ‘artifacts’, the user activities, and the social arrangements developing around them (Livingstone, 2005). The streaming experiences then must be understood in relation to the ways in which they are relational, routinized, established, internalized and ultimately taken for granted in everyday life (Livingstone, 2005, p. 1). Put differently, through daily use, the integrated relationship developed between the users and the technology affords a particular kind of taken-for-granted ‘mode of access’ to music, which affects how the music is experienced.

Importantly, music is no *less* important because it is taken for granted. On the contrary, I claim that the flexible applicability and multiple uses of the streaming technology (that afford this taken-for-granted position) rather enhances music’s role in peoples' everyday life. Music experiences arise around simply listening to music, of course, but as part of daily tasks and activities music is also incorporated in the planning and execution of commonplace activities. Music hence underpins what belongs to the mundane, familiar and recurring: orders of everyday life that indeed deserve to be taken seriously, as the contexts where (many) people find themselves the most.

Streaming technology applied on personal media devices even seems to have become a part of what individuals expect of themselves, their time and their surroundings, and this makes the streaming experience intensely personal. Sloboda (2010, p. 501) confirms the self-referential level of mundane music experiences, where musical meaning predominantly

appears in relation to non-musical contexts (like the environment or the body). According to this study, however, this level of experience is highly important for the listeners' relationship to music, because the associated listening follows everyday life's schemes and structures, and shapes the individuals' immediate perceptions.

The music and the technology have thus both received a position that manifests the format as a lifeworld resource, including the 'personal, tacit and reflexive considerations of personal life and integrity in the "re-embedding" of agency in the world of social systems' (Rasmussen, 2014, p. 52). The experiences of the lifeworld capture how use of this technology confirms, challenges, molds, established and endorses notions of identity and sociality, presence and time, through the perception of music in the mundane. Creativity and personal politics also inform the lifeworld of music streaming, as does self-reflexivity deriving from personal preferences and tastes, and notions of the structures of small and big (daily) life events.

The analysis further demonstrates how music streaming as everyday experience relates to notions of *lived space*, *lived time*, *lived body* and *lived relations*, as the four so-called 'existentials' of the lifeworld (van Manen, 1990). Concerning the listeners' *felt space*, music streaming applies an essential influence to control, impact and regulate *lived spatiality* (van Manen, 1990, p. 102). Music opens up and closes, focuses and frames spaces—that is, music surrounds listeners in ways that modify their spatial attention, and ultimately their lived experiences of themselves in these spaces.

The second 'existential' defines individual notions of *lived time* as opposed to clock time or objective time (van Manen, 1990, p. 104). The experiences of an individual's temporal being in the world are impacted when music streams blend into the rhythms of everyday life. Further, music streaming impacts user experiences of the *lived body*, where the listener's *corporeality* is affected by music. For example, listeners feel fitter, happier, faster,



more productive, comfortable, capable, and so on, because music's properties and functionality induce or accompany experiences of a corporeal character, such as sleeping, concentrating, working out, running or dancing.

The last lifeworld 'existential' involves 'the lived relation we maintain with others in the interpersonal space that we share with them' (van Manen, 1990, p. 104). Notions of *relationality* can be addressed in all the present examples of music streaming. This suggests that our musically informed experiences of the *lived self* intensely relate to notions of the *lived other* and social relationships in diverse contexts with this format.

In sum, human assumptions of what counts as real, normal, expected and preferred are stated in the lifeworld, and are here accompanied by music-streaming services. In this realm of experience, individuals' values, practices, habits, and rituals also emerge. With our notions of the everyday life tied to an online listening technology, the lifeworld is extended, differentiated and personalized. The notion of a music-streaming influenced lifeworld, by extension, therefore helps address music's affective impact upon everyday life, as an example of how 'media technologies mediate and reproduce the lifeworld in different ways' (Rasmussen, 2014, p. 45).

As self-referential and taken-for-granted, the musical meaning with streaming services increasingly come about in relation to the functions of the music in particular situations, as previously stated (for example by DeNora, 2000). Despite the parallel potential of strong aesthetic music experiences blending into people's everyday lives, the study adequately confirms Sloboda's claim that mundane music experiences are not always *primarily* aesthetic in nature, but rather relate to a functional mode that highlights goal achievement, including mood regulation (2010, p. 508).

The cloud-conditions of abundance and intangibility also allow for more prodigious listening. This weakens the relative intensity of the experiences: 'Frequent events tend to not

be very surprising, so they tend to elicit weaker emotions' (Sloboda, 2010, p. 495). This corresponds with music streaming as a *secondary* or *background* activity, perceived with fleeting or fragmented attention. Nevertheless, I maintain that these various listening experiences, shallow or profound, maintain strong music-listener relationships, because the listening has increasingly come to represent the *lived experience* of the users' everyday life.

### **Conclusion:**

Dynamic and competing socio-technological arrangements shape user involvements with music-streaming services, so the format is at heart used, experienced and made sense of *heterogeneously*. The cloud conditions foreground *ubiquity*, *flexibility* and *individuality* with regards to musical presence in the everyday life. Music is further provided with complexity, individuality, fluidity, and ephemerality, as well as *choices*, through a diversity of service features and user contexts. In fact, the socio-technological arrangement of music-streaming services makes heterogeneity an essence of the format itself. Listening therefore occurs along a spectrum of involvements, distinctively balancing the competing factors influencing and facilitating the user experience.

To conclude, I argue that music-streaming services do not afford single, fixed actions, but rather a range of *modes of action* that accommodate both careful planning and serendipitous encounters, as well as technology-facilitated practices and user-motivated ones. The music-streaming services in parallel afford diverse *modes of experience* that relate to listening and encountering music, as well as dealing with the technology. Any understanding of the actual nature of individual music streaming practices must emerge within these modes of experience and action.

Regarding how the *human-technology* relationship with streaming services potentially influences contemporary *music-listener* relationships; an answer is rather to point to a triple-fold *human-music-technology* relationship. This interconnection is so closely integrated that the relationship itself becomes an infrastructure in the user's daily life. From this position, users give manifold roles to the music - roles that are individual, aesthetical, and practical. Users' relationships with music therefore also appear ultimately heterogeneous, within changing contextual, emotional, attentional and affective frames.

Essentially, the music is thoroughly and strongly present in the streaming users' everyday life. Music streaming contributes greatly to people's daily life management, as shaped by adaptations and user habits, and by the perceptual, conceptual and practical understanding of what the technology *and* the music is and does for the user.

With this conclusion, the present chapter has not only offered insights into how people currently live with music in everyday life through streaming services, which is extensive, yet heterogeneous. It has also demonstrated how mediated interactions with the online technologies surrounding us have affective value within our immediate, individual processes of meaning making. More precisely, music-streaming services fill a role as a malleable lifeworld resource - a role that impacts personal integrity, identity and the lived experience of time, space, body and self - through involvements that are sensitive to moments, contexts, technology and music.

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<sup>2</sup> The TNS Gallup-numbers were counted just before *Apple Music* launched in July 2015.

<sup>3</sup> Definition borrowed from pcmag.com, retrieved 8 August 2015 at <http://www.pcmag.com/encyclopedia/term/39847/cloud>.

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<sup>4</sup> See Collins and O'Grady in this volume for a charts perspective on the music-streaming business model.

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