

# The art of collecting in the age of streaming music

How streaming music is affecting the notion of the personal music collection



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# Introduction

*“Because in the beginning, there was WinAmp. And it was good. But then there was iTunes. And Last.fm. And Pandora. And before you knew it, you were digging through five programs and six browser windows just to track down that '80s power ballad you've got stuck in your head. (Hint: it's Journey. It's always Journey.)”*

*(It takes Twones, 2009)*

As we may believe, the era of streaming music is coming and it will make listening to music possible anywhere, the music of artists easier to acquire and the recording industry profitable again. Newspapers are starting to write about it, big technology companies like Apple and MySpace are acquiring young and rebellious streaming music companies and the timing could not be better after a decade of illegal file sharing and the lawsuits this has entailed. It seems that if the music industry was ever in need for a new way to distribute and consume music, it is now. The amount of websites and applications focusing on facilitating streaming music is growing, albeit under difficult financial and regulatory circumstances, and is slowly introducing the average music lover to websites that ‘tap the music in the cloud’ (Van Buskirk, 2009).

In this environment, an Amsterdam based startup named Twones is trying to gain traction with their platform by plugging into the need of organizing a music collection that is scattered over *‘five programs and six browser windows’* as the popular lifestyle blog Urban Daddy said about the platform. After Twones announced the private beta version of the platform in December 2008, several sources reported about the platform as being a record collection of the digital era. An interesting idea, while a collection in *the cloud* could mean another development in the way music can be consumed and collected, after the commodification of music in the beginning of the last century, the transition from gramophone to vinyl, to tape, to cassette, to CD and finally to the hard drives of PCs.

All these elements (the discourse around streaming music, the startups and the idea of a shift in the personal music collection) bear the resemblance with a decade ago when

Julian Dibbel wrote the famous essay *Unpacking my record collection* (2000) on how his relation with his music collection was changing in the era of the compressed music format MPEG Layer-3 (MP3) and peer-to-peer (P2P) file sharing. Dibbel asked himself the question how the relationship between him and his music collection was changing after he had made his CD collection immaterial by ripping it to the hard drive of his personal computer and shared it with others via the P2P network Napster. Dibbel in his turn, drew on the famous 1931 essay *Unpacking my library* from Walter Benjamin that had explicated the the art of collecting decades before Dibbel.

In this tradition of exploring the way technology affects the way we perceive collections and the art of collecting, this is an interesting point in time to explore how streaming music may or may not affect the way we perceive our music collections. Indeed, the possibilities of having a music collection available in the cloud are increasing everyday. Next to my music collection that is stored in iTunes, I can listen to streaming music on the website Grooveshark, check out the latest music posted on blogs on the blog-aggregating platform Hypemachine, search for a music video on the video site YouTube and organize al this music in my Twones profile. What is left of the sense of ownership when a part of my music collection is not only immaterial but has also moved away from my hard disc and now essentially becomes just a collection of links?

When Twones is reported about as a possible music collection of the digital era however, which notion of a collection are we leaving? What is a collection actually and how has the notion and use of it been affected by cultural and technological changes in the past? To explore and answer these questions, this research will start by describing the notion of the collection as Benjamin did in 1931 and will travel further to the present by touching on the art of collecting in the age of MP3 and the developments in streaming music that can be seen in the last decade. Then, after describing the way Twones derives from these trends and diving deeper into the use that is made of the platform, the current art of collecting and the way we perceive collections in the age of streaming music will be discussed.

## Unpacking changing libraries

*'I am unpacking my library. Yes I am'*. This is how Walter Benjamin starts his famous essay *Unpacking My Library* written in 1931. Because of the instability caused by political and personal problems Benjamin's library has then been packed in boxes for over two years. When unpacking his book collection and having his books in his hands again, he recalls the places where he bought them, and with it his frame of mind at that time. It is at that moment that Benjamin starts to think about and wants to give the reader some insight in the relationship of a book collector to his possessions, *'into collecting rather than a collection'* (Benjamin, 1982: 59). Regarding himself a child of the twentieth century Benjamin writes:

*'Ownership is the most intimate relationship that one can have to objects. Not that they come alive in him; it is he who lives in them'*.

*(Benjamin, 1982: 67)*

With this poetic statement Benjamin gives insight in the way he strongly feels related to his collection. It also makes clear that his library is not only a data bank, it is a mnemonic device, a reflection of an intellectual's life and one's identity. Or as the German sociologist Niklas Luhmann said about his library full of books and written music: *'Er sei geradezu ein Wesen, mit dem man kommunizieren könne'* (Luhmann cited in Schmidt, 2006: 319). It is like a being, with who you can communicate.

When taking Benjamin's essay as a starting point in defining and understanding a collection, several elements can be distinguished. First, the collection must consist of multiple parts that are in some way related to each other and to the collector. With this the collection is not only a gathering of stuff but also a way to structure and visualize memories and images from the past. The collector who is the owner of the objects in the collection, feels related to them and without him, the collection would also lose a large part of its meaning. Furthermore, Benjamin describes how the passion in collecting is

expressed not only in the meaning of the collection but also in organizing and making a (personal) order in it.

Although Benjamin convinces the reader of the fun, the passion and importance that goes along with the process of collecting, he is also convinced that the private collector's passion will perish soon:

*'I do know that time is running out for the type that I am discussing here and have been representing before you a bit ex officio. But, as Hegel put it, only when it is dark does the owl of Minerva begin its flight. Only in extinction is the collector comprehended'*

(Benjamin, 1982, 66).

Compared to a private collection, a public collection, as Benjamin thinks will soon be the only collection left, could never hold the same intimate relationship between an individual and the collection. As time turned out however, the art of collecting and thus also the collector himself, continued to exist and the bond between a collection of physical objects and a person remained much like the one Benjamin described in his essay.

Nevertheless, the relationship between a collector and his collection has been questioned decades after Benjamin's essay and is explored in this research too. For as time went by, cultural and technological developments have changed the way we collect and therefore could have affected or can in the future affect the art of collecting and the way we relate to collections. When narrowing the scope to a musical collection, these developments for example changed the distribution, carriers and reception of collecting and the objects in the collection. Taking Benjamin as a starting point, the American technology journalist Julian Dibbel questioned the art of collecting in the age of the Internet, MP3s and file sharing. When the physical presence of the collection disappeared into a bulk of data, what was left of the attraction of collecting?

### **Collecting in the age of the MP3**

In March 2000, decades after Benjamin's *Unpacking my Library* and at the beginning of the era of P2P file sharing, Julian Dibbel asks himself what has become of the record

collectings physical attraction in the age of MP3 when *'All that is solid melts into digital air'* (Dibbel, 2000). Dibbel is unpacking his CD collection but not in the way Benjamin unpacked his book collection. He is setting free his music collection from the physical carriers they are on and making his music immaterial by ripping his CD collection to the hard disc of his computer:

*'The CDs pop back out intact, of course, but having given up their ghost to my machine, they no longer retain even the vestigial charisma that they had going in. My music collection, in principle, remains on my shelves, but increasingly it lives in my computer'*

(Dibbel, 2000).

When in the beginning of the twenty first century the process of ripping CDs to personal computers was getting more and more common, the music collection went trough not only the move from CDs to hard drives but with the rise of P2P file sharing networks became automatically available to others too by making it available for uploading:

*'For these are the times that try intellectual-property holders' souls, when music flies from hard drive to hard drive on wings of desire and in the face of every known law of copyright'*

(Dibbel, 2000).

What would Benjamin think of this and how did the transition from a physical to an immaterial collection affect the art of collecting?

Benjamin loved his books not so much for the words that were in it as for the way these books journeys brought them to his library. *'Could he possibly, then, have loved a collection as disembodied and dispersed as my growing library of MP3s? Would he even recognize this weightless, borderless cloud of data as a collection?'* Dibbel asks himself. His answer to this question is a yes. Dibbel even states that at the time of writing he believes that he stands on the threshold of an era in which collecting, the consummate act of consumption is more intense and intimate then ever. The pursue of information was never as vivid as in the age of P2P file sharing.

As he describes how he digitized his music collection and what he did with it after it, he touches on various aspects that make him come to the above conclusion. During the process of moving his music collection from his CDs to his hard drive he experienced the same thing as Benjamin experienced when he was unpacking his book collection. Relocating the items to another place felt less like getting the soul out of the carriers and more like renewing them again. Next to this, organizing and making order in the collection, a pleasure that has until then always has been a part of collecting's appeal, became even easier. His music collection was now just one click away from being played and organized in whatever order he wanted to.

Dibbel acknowledges that the disembodiment of the collectible has entailed a loss of the intimate, possessive touch. But despite this he also notices that setting his music free from dust and cracks has also infused it with new influences. The new infusion that Dibbel points on that has become a part of the pleasure of collecting is the social character that has been added when he connected his music collection to the P2P file sharing network Napster. As this application made searching in and connecting to other PCs possible, Dibbel watches what is being uploaded from his computer. Digitizing the collection and connecting it to Napster has added a new dimension to the art of collecting, a connection to fellow collectors. Dibbel describes this social element that has been added when he says:

*'Some days, when my downloading is done, I sit watching the uploads go out, wondering at the user names and their choices. (Who is this Beat Thief? Who is dkalfus, of the Leonard Cohen fixation? Who is Duchess and what does she want with all my bossa nova records?)'*

*(Dibbel, 2000).*

This social element has also added the attraction of realizing that his music collection is now available and ready to connect to anyone in the world having Napster installed on his computer. Instead of losing the eros that Benjamin describes, the personal music collection thus got infused with new influences and made the collector not only related to just objects but to other people too.

Despite the new infusions, collecting in the age of MP3 has also largely remained the same. The collection of MP3s still ‘feels’ like a collection because it is still gathered in one place and new ways of organizing and creating order have only increased the accessibility of its components. The search for new elements in a collection is still there but seems to have been ‘perverted’ as Dibbel describes it, making the journey that the information made to the collection less but the information itself more important. Finally, the social element has been made more visible and now plays an increasingly important role in the meaning of a collection. The expression of the social element being ‘more visible’ is on purpose here because although Dibbel does not mention it, this social element has always played a role in collecting. Talking and maybe even bragging about a collection has always been part of a collection, be it a physical or digital collection. But being connected to a possible worldwide public has definitely stressed this element in the art of collecting. As will be discussed in the next paragraphs, these infusions have in the years after Dibbel’s essay grown stronger and become more visible, as the blending of online social networks with increasingly public music collections have taken these influences to another level.

### **A close-up on the practice of collecting in the age of MP3**

In 2004, three years after the introduction of the digital media player iTunes, one year after the introduction of the iTunes store as being one of the first legal MP3 download stores and in a time where the illegal sharing of MP3s is still common use, Cunningham et al. publish the article *Organizing digital music for use: An examination of personal music collections* (2004). Unlike Dibbel that uses his personal experiences to understand the consequences of digitizing his music collection for the way he relates to his collection, Cunningham et al. have a very practical approach in understanding digital music collections. They analyze the organization and access techniques used to manage personal music collections and use this material to suggest user behaviors that should be supported in a personal music digital library. The research gives a welcome practical approach to understanding digital music collections here and broadens the understanding of the collection in the twenty first century.

The authors start by defining the personal music digital library, describing it as ‘*a collection of an individual’s music documents, owned, ‘used’, and organized by that*

*person*' (Cunningham et al., 2004: 1). Their definition is quite basic and practical but can be of use here as a starting point. They do not specify the term 'used' however, which is unfortunate because it generates some questions such as why would a CD not be part of a collection when it is played even just once? Cunningham et al. describe that they gathered information about personal music collections by conducting personal ethnographies such as interviews, observations of music collections and shopping behavior among the friends and relatives of their students human-computer interaction.

When they conclude and summarize the characteristics of music collections and the observed ways in which participants organize, search, browse and use their personal music collections, several interesting results appear. I will touch on some of these conclusions as they give a better insight in the meaning of a collection and the use that is made of it.

The first and interesting conclusion is that although collections vary widely in size, the organizational schemes employed were relatively consistent over a range of sizes, once more than a handful of music had been accumulated.

Furthermore collections included a variety of media and were generally distributed over two sections: one with active items in it (tracks that are played regularly or occasionally) and archival items (music that is seldom or never listened to). The active sets were also frequently divided into sub-collections that were geographically distributed. Sets may also be associated with specific places such as the bedroom, the car or the living room. A degree of forward planning is thus necessary to ensure that the right music is in the correct location for listening. The geographical distribution of the personal music collection is generally viewed as an annoyance according to Cunningham et al. and although music got more and more portable in the last years this might still be a 'problem' that streaming music could solve.

Some other uses that Cunningham et al. reveal is that while individuals have their personal music collections, they may also participate in a shared collection with others. Therefore, music collections are often part of a social occasion. Browsing a friends music collection may provide an opportunity to learn more about a new type of music, or to re-think aspects of one's own tastes. Although Cunningham et al. describe the use that is made of

collections that have different media in it, this social character of a collection is part of the art of collecting. While Dibbel thus describes the social element of Napster as a new infusion in the art of collecting, this has actually always been an important aspect of it, though the ease of technology and the way online musical social networks are nowadays even more tangled up with social networks may have put the social aspects more to the front.

Although the focus of the research lies in the organization of albums, Cunningham et al. acknowledge that the organization of single tracks is becoming a more and more significant activity in personal music collections. But even though the album might play a smaller role in organizing music, individuals still want to organize their music which is visible in the rise of playlists and compilations. It seems that the collector wishes to access individual tunes but still wants to manipulate these individual songs into groups. These manipulated groups of songs or playlists are furthermore often associated with moods and occasions. To facilitate the creation of these playlists, the ability to add metadata is desired.

Cunningham et al. give an interesting practical view on how individuals manage their collections and show practices that show similarities with collecting decades before and collecting now, as will be discussed in the next paragraphs. Although the participants have large collections of digitized, immaterial music, often consisting of many individual songs, the need to organize these collections is still visible in the form of playlists and the desire to have the possibility to add metadata. A characteristic of Benjamins view on the personal collection, the mnemonic power it holds, becomes even more visible by the practice of creating playlists that suit moods, occasions and specific times. The social element that Dibbel describes is even more stressed here, integrating the offline sharing of music.

## **Collecting in the age of streaming music**

When looking at the 'problem' the founders Tim Heineke and Diederik Martens want to solve with the platform Twones, one can quickly see resemblances with the notion and art of collecting in the ages before streaming online music. Their goals are built on the properties of collecting that have been explicated in the above paragraphs and show

several reoccurring aspects of the art of collecting in the age of material and immaterial collections.

But when thinking of collecting in the age of streaming music, an important thesis from Benjamin comes to mind. As described in the first paragraph, Benjamin stated that compared to a private collection, a public collection could never hold the same intimate relationship between the collector and the collected. When in the age of streaming music, music is not even owned in the sense of having the information stored on a physical device, the hard drive, Benjamins thesis gets challenged.

Dibbels characterization of his MP3 collection as being '*a weightless cloud of data*' seems even more applicable to the music collection in the age of streaming music. The potential collection of a Twones user now not only is available for everyone, it is also not owned anymore in a way that a collection is always available for the user and for one user only. The personal collection is in the case of Twones made available only through organizing links to music that is publicly available on the web. Music is not owned in a strict way because a collection in Twones, and in many other online streaming applications, consists of a collection of links to music files.

Benjamin stated that '*ownership is the most intimate relationship that one can have to objects. Not that they come alive in him, he comes alive in them*' (Benjamin, 1982: 67). Although Benjamin seems to indulge himself in a prosaic description of the books in his collection, I believe that he meant to say that the mnemonic function of in this case his books, is possible only through the establishment of an intimate relationship between the collector and the collected. In short, Benjamin thought that the mnemonic function was exclusively bound to the physical objects in a collection. This brings up the question if this is really true when looking at the streaming music collection and how the streaming music collector copes with this 'problem'.

Before elaborating on this issue and describing the practices of actual Twones users to analyze how they use their accounts to organize music, the next section will first discuss some of the trends that are visible when analyzing ten years of online music, starting from the rise of Napster in the year 1999. This to get more insight in the way music has moved

online and the technological and cultural developments that affected the current ways of collecting music. Which vectors in time can be distinguished, which discourse surrounds streaming music and how may individual music collections eventually be affected by these developments?

## **The digital decade**

To come to a better understanding of the online music landscape in which Twones and its users operate, this section discusses three general trends of the last decade that can all be seen as actors in shaping the online music landscape as it is now. This without trying to reveal a teleological path to streaming music and also without the illusion that giving an encompassing overview of cultural and technological developments in the rapid changing online world would be possible. Rather, this section focuses on three important actors and the developments they went through the last decade in order to create a better understanding of the current online streaming music landscape.

The three interrelated actors that will be touched on here are: The music consumer that is getting used to the ubiquitous and often free access to music, the development of technology that affects the way music can be distributed and consumed, and the record industry that is on the one hand trying to control illegal ways of distributing copyrighted music and on the other hand is trying to find new ways in exploiting their music. This overview of course misses the influence of legislation, artists, labels, individuals and of course the music itself but a focus on these three actors will lead to a better understanding of today's discourse as will be discussed in the next paragraph.

In analyzing these trends I made use of three sources that all give a slightly different view on a decade of online music. The first source that was used is Music Ally's *Exclusive series - a look back at "The Digital Decade"*, an overview of ten years of digital music, published throughout December 2009. Music Ally is a company that publishes researches and news about the music industry. In their series they give an overview of the developments in the music industry as they reported about it at that time. Because of this, this source gave a good view on the popular interest in the music industry during these years. The second source that was used is the German music encyclopedia *Musik*

*und Kulturbetrieb - Medien, Märkte, Institutionen* (2006) that gives an objective overview of facts about a large part of this decade in music. The third source is an interview I did with Heineke and Martens, the founders of Twones. As they were keeping a close eye on the developments in the online music industry and are a part of it themselves for several years now they gave an insight in the 'entrepreneurs' side of this decade of online music. By combining and analyzing these sources the next section describes three interrelated general trends that are considered important here in a way that they helped to shape the discourse and online music industry as it is now.

### **The road to streaming music**

When looking back at a decade of online music what can be seen is the increasing public access to digital music, often driven by illegal initiatives. When Dibbel wrote his essay in the year 2000 he describes the platform that had a big influence on making digital music available for consumers: Napster. The P2P file sharing application that appeared in 1999 and was developed by the then 19-year old student Shawn Fanning, alerted the record industry and forced it to pay attention to the increasing digitization of music. Napster was first used on American colleges but managed to quickly gain a lot of attention, not in the last place because popular bands like Metallica filed lawsuits against the service in 2000. The service peaked at a verified use of 26,4 million users worldwide in February 2001 (Jupiter Media Metrix, 2001) and had to close their illegal service in July 2001.

Notable is that when college students in the US in 2001 are asked by research company Webnoize whether they are prepared to pay a subscription to continue to use Napster, 58.8% says yes, mentioning an average amount of \$15 a month. From then on until today, several initiatives have been started to develop legal, subscription based services that offer unlimited downloads. While Napster and record labels make several attempts to go legit, several other P2P file trading applications are developed that continue to facilitate individuals to illegally trade music files with each other.

The hunger for digital music only increases with the introduction of the iPod in 2001 that introduces a new era in portable music and influences listening behavior. With the new keyword 'portability' being the talk of the town, individuals also get access to the first

online music shops that are selling tracks in the easy-to-copy MP3 format. Because of the dot com crash the record industry is still tentative to get involved in online music but that individuals want access to digital music and even want to pay for it when it is done well is proven by the success of the iTunes Music Store. After being launched in 2003, the online music store reaches 500 million downloads halfway 2005. *“So far, we’re the only bright light [the industry has] right now in terms of legal online downloading as an alternative to illegal online downloading”* says Apple boss Steve Jobs in an interview with the Los Angeles Times (Healey, 2003). Meanwhile, more companies announce subscription based services offering unlimited music downloads, often coupled with some restrictions in copying and burning the acquired music to CD.

While the record industry is slowly moving towards digital revenue models, they also try to prevent illegal copying by letting the Digital Right Management System (DRM) active on CDs. To fight illegal downloading, all over the world U.S.-style lawsuits appear against individual file sharers. When in 2005 the BitTorrent technology comes along, BitTorrent users are not only sharing individual tracks but are packaging up entire albums, often at very high quality bitrates. Box sets, collections of albums and full discographies featuring a bands entire recorded output are traded.

From the second half of the decade on, several streaming music initiatives start, making it possible for individuals to listen to music online without having to download it. In 2005 the American website Pandora launches as a personal web radio station and when in 2006 the video sharing website YouTube is rapidly growing, it gets clear that users do not only use it for uploading videos but also for uploading music, making it a hotbed of unauthorized material and a useful source for accessing music quick, easy, free and in streaming format.

The year 2007 sees the opening of the iPhone for developers giving access to services like Last.fm, MOG and Pandora to build music applications for it. Also, the BBC introduces the iPlayer that offers the on demand streaming viewing of programs. The American platform iMeem, that is first presented as a community for creative tastemakers, becomes the first-ever online music site that secures licenses from all four U.S. major music labels to offer their music catalogues for free streaming and sharing on

the web. With 5 million tracks available for streaming the platform is even not far from the 6 million tracks that are being sold on iTunes, making the start of a streaming music collection an attractive one.

With DRM on its way out in 2008 and the record industry finally fully embracing MP3, the London based website Last.fm also announces free streaming music. Mobile deals are closed with the Finnish mobile phone manufacturer Nokia introducing the service *Nokia comes with music* that offers free mobile downloads of music files. The idea of asking monthly fees for unlimited access to music gets talks going about bundling a monthly fee into consumers' Internet-service bills. This is based on the view that there is little value to be had in continuing to pursue the *a la carte* purchasing consumption model, and is seen as the only effective way of dealing with file sharing. The Swedish music service Spotify launches an application for streaming music and raises the question how they will monetize their app and succeed in a landscape with fierce competition.

While there are dozens of websites that offer free access to online streaming music at the end of 2008, Twones launches in December. The founders see music increasingly moving online and also experience that all their music is spread over several websites now. They launch their service as:

*'A new way to store, organize, find & share music, both online and offline. Twones gathers your real-time music activity stream, lets you share it in real time with your buddies and store it like you own it'*

(Amsterdam Startup Goes Into Private Beta, 2008).

Remarkable here is the last section mentioning storing the music *'like you own it'*, a hint to Benjamin? Finally, 2009 sees the rise of streaming music services Spotify and Pandora and the fall of several of their rivals. Online (streaming) music gets even more popular as can be seen in the dozens of music startups around the world that offer music charts, hand-picked music and playlist generators to music lovers. While the discourse around streaming music is very positive there is still a huge debate around the economics of streaming music with ad revenues nowhere close to paying for the licensing costs. The idea of asking a monthly fee is returning in the form of *freemium* models. Meanwhile The

Pirate Bay faces music industry lawyers in court and governments around the world are thinking about ways to tackle piracy. Also, Google who now owns YouTube, has troubles with the record industry and sees premium music videos removed from the UK and German YouTube due to licensing disputes. Eventually, Google gets involved in several positive partnerships with the music business, helps UMG to get the video portal Vevo up and running and unveils music features for its main search engine to drive traffic to legal download stores.

When looking back at these developments it is interesting to see how the idea of a subscription based music service is a recurring meme. As different technological developments like CD copiers, P2P file sharing applications, BitTorrent and (embedded) music streams made the illegal distribution of copyrighted music possible and also meet the 'need' of individuals to have access to music anywhere anytime, the idea of subscription based services also seems a logical next step in music consumption. Also, it is interesting to see how the Internet first is used as a new way for distributing music and slowly evolves into a place where music is consumed. While the first subscription based online music services were platforms where individuals could get unlimited downloads of music, the subscription based services slowly move towards consumption based models where the platform becomes a place to listen to music instead of to download it from.

Already this step is visible in the current online music landscape with the dozens of websites that give (free) access to music and often get revenue from advertisements. The music and thus the 'potential collection' has increasingly moved online and the Internet is becoming a place to listen to music more and more next to a place for acquiring music. It is this trend that also made Heineke and Martens wanting to build a place where all this music could be organized. While music is increasingly 'out there', several elements from the earlier described meaning of the musical collection are still absent. Nevertheless, the discourse around streaming music is still very positive about the developments and predicts a golden future for streaming music as is shown in the next paragraph.

## The discourse around streaming music

*'Music is moving away from the file and into the browser'*

(Heineke cited in Warren, 2009).

The year 2009 *may* within some years be remembered as the start of the streaming music era. It was a year in which millions of music lovers were adopting streaming music websites and applications, in which the American streaming personalized radio website Pandora had almost 5 million unique visitors every month according to statistics from Quantcast and the Swedish streaming music application Spotify was buzzed throughout the year in media reporting about technology and music. It was the year in which dozens of music startups just like Twones grew and became more and more popular. But it also was the year in which the well funded streaming music companies iLike and iMeem were sold to MySpace with a loss, in which another streaming music company named Lala was sold to Apple and YouTube, owned by Google, had hard times closing a deal with one of the big three record companies, EMI to get their music videos featured online.

After describing several cultural and technological developments of the last decade in the previous paragraph that influenced the way music is consumed and maybe also the art of collecting, this section discusses the discourse surrounding streaming music. Analyzing the discourse might reveal the 'needs' of the music consumer, or at least the prescribed needs, and might therefore show some important things affecting the art of collecting.

In the light of the previously discussed trends in digital music the most common vision expressed that streaming music is determined to become *the* way in which we all will consume music in the near future comes not unexpected. But it is surely remarkable that when looking at the above examples of the hard times some big players in the streaming music industry had last year to keep their heads above the water, the discourse surrounding streaming music appears to stay convinced of the successes to come for streaming music.

While Wired magazine included streaming music in their *Top 7 Disruptions of the Year* (2009) article, they also characterized 2009 as the year in which *'streaming really took off'*. Next to this the leading technology magazine saw the earlier mentioned acquisitions as *'a sign that the big players recognize that the future belongs not to iTunes and iPods, but to web-based services and connected devices'*.

Not only Wired is so sure about the future of streaming music. Also Music Ally stated in their 2009 year review that *'it seems [...] certain that streaming has a significant role to play in the future of the music industry'*. Even one of the biggest newspapers of America, *USA Today*, wrote after the acquisition of Lala by Apple that *'maybe music consumers don't have to own their songs anymore'* (Graham, 2009). The American music magazine depicted the growth of the adoption of streaming music in 2009 by saying *'one of the unforeseen impacts of the global economic downturn on the music industry is the accelerated rate of consumers' adoption of streaming music'* (McDaniels, 2009).

The online music magazine NME in January 2009 also reports on streaming music. Their article *'Spotify And The 14 Best Online Music Services'* is introduced by the following passage:

*'The significance of Spotify is that it points the way to a post-MP3 future, where music becomes, as David Bowie so perceptively predicted in 2002, "like running water or electricity", a near-infinite resource. In this scenario, the key activity is not downloading, but rather streaming. Right now the prospect of streaming music on the go – via your iPhone, say – is not an attractive one. It's too slow. But that will change. And once you can legally stream almost any song in the world, as Spotify (which currently has the backing of all the major labels) will soon enable you to do, it's possible to envisage a world in which iTunes, with its emphasis on space-hogging music files, will seem impossibly outdated.*

(Lewis, 2009).

When looking at an article on another popular tech blog Mashable, they also mention the not infinite storage space as a reason for switching to streaming music:

*'Recently we brought you a list of free & legal music downloads, but we understand that not everyone wants to eat up space on their hard drive or MP3 player. So we've compiled a list of 30+ awesome streaming music sites we know you'll enjoy'*

(Aune, 2009).

The discourse around streaming music seems to be focused around two things, a problem and a solution. The 'problem' is the limited amount of storage space on several devices such as the PC, the portable music player and the mobile phone. Another part of this problem is not having access to all music possible, something that is perceived to be possible when having access to streaming music. The solution of these problems lies in a recurring meme that is also bound to mobile media; the meme of always being connected and by being connected having access to everything. When this idea is applied to music, the discourse that results from this is a future in which every individual always has access to all the music, and if possible for free.

In the discourse surrounding streaming music payment methods are surprisingly often omitted. Something that is also not often part of the discourse is the mnemonic power of music and of collections and the way streaming music will affect this. When we believe the discourse, it seems as if Benjamin's theories were right. When Benjamin said that *'Ownership is the most intimate relation one can have to an object'* (Benjamin, 1982: 67), is this intimate bond to a collection when it is public, like in the case of streaming music, lost?

When an analysis is made from the behavior of Twones users, how are the above mentioned elements reflected in the daily practice of a platform that facilitates the art of collecting in the streaming music era? When the discourse does hardly mention the mnemonic power of a collection and everything that is written on having access to public music libraries, how do individuals recreate the mnemonic power in a streaming music collection? And does the discourse of the needs as mentioned get mirrored in Twones?

## A collection of links: Twones

*"First it was, "Fans want to feel it."  
Then it was, "Fans want to own it."  
Now it's, "Why own when I can save?"*

(McDaniels, 2009)

When during the last years streaming music applications and websites became more and more popular, the founders of Twones saw the rise of a problem. When the music you encounter is scattered over multiple applications and websites, where do you organize all this music? The initial idea of Twones was to provide a solution for this problem. Although the specific execution of this solution has been changing multiple times since the start of the company the main goal has always been related to this original goal: Twones will be the place where people who listen to music on multiple online music platforms can keep track of, organize and share their music.

To realize this goal, Twones created a website and an associated software tool, the so-called Twones Tracker that comes in the form of a browser add-on. The Twones Tracker ideally recognizes the music you are listening to on any platform or application but in practice tracks about twenty websites. When music is played on one of those websites or in one of the popular offline players (WinAmp, Windows Media Player and iTunes) the tracker will register this. After that a song is being listened to for more than fifty seconds the Tracker will track the song to a personal profile page on the Twones website. This website is designed as the place where all the incoming music is shown, coupled with some customizable personal information.

As the design of the website changed three times during monitoring the platform, the features and characteristics of the latest design, that was launched on October 28, 2009, will be used here to describe the platform. This since the latest website-update had more features in it and can be considered the most 'complete' version of Twones thus far.

## **Monitoring the platform**

During a period of three months I got to know Twones and the team behind it very well and monitored the behavior of its users by conducting a virtual ethnography in order to find out which elements infused the art of collecting in the age of streaming music. As will be made clear in the following sections, the observations resulted in a better understanding of the true use of the platform, as opposed to what was the initial aim of the founders. The virtual ethnography was conducted by monitoring the behavior of the users in a standardized way and by actively participating on the platform myself as well.

At least once a week I took a sample of the behavior of twenty 'active' users. Since it is hard to clearly define an active user as opposed to an inactive, I chose twenty active users by selecting those that had added the latest incoming plays. Because these users had tracked music with the Twones add-on most recently I considered them active users. According to the Google Analytics website statistics of Twones most users are residents of the US and because of this I took user samples at times when most American users were awake. The overall user behavior can therefore also be best credited to U.S. citizens.

After selecting the users, I explored and analyzed their profiles in a standard way by noting down how they used their profile information, which websites and players they had used recently, how many other users they were following and finally by checking if and how they used the *favorite* option to create playlists.

## **The design**

Since the platform was still in private beta during monitoring it, users first had to find an invite code to get access to the website. After major website updates these invite codes were spread over several popular technology blogs and websites such as the popular sites Lifehacker and Mashable. This system of invites was chosen to let a limited amount of users test the platform, to prevent the servers from too much requests, to find out which elements 'worked' with a small group of users before going public and finally because of the rumor and attention it causes online. After publications on these popular blogs both the amount of new users and unique visitors would generally climb up. After people had

signed up they received ten invites to give to their friends or to give away and trade for other invites on online social networks.

### **Creating an account and managing one's identity**

People that manage to get hold of an invite are able to sign up for Twones and are asked to choose a username, password and to download the Twones Tracker. On every profile, users can upload their own avatar. Next to their avatar their username is shown and a short description can be given. Every profile also shows how many followers a user has, how many users they are following themselves, how many tracks are favorited and how many services the user wants to be tracked to his or her profile.

Although the founders of Twones aimed at the platform as being a personal library that reflects an individual, most usernames were often not real names but typical Internet aliases such as names followed by a number. This could indicate that users are first trying out the service before they connect it to their general on and offline identity to it or it could mean that most users have standard Internet aliases that they use for logging into different online platforms.

Although real names were not so common about two third of the users did connect their profile to other personal websites and profiles. The settings page allows users to fill in not only their username and a description but has also the option to add a website. While only half of the users had added a description to their profile, two third of the users had added an avatar and a URL. By following the URLs two things became clear. The first was that the majority of the users were people that were active in new media and communications as a profession as many users linked their accounts to personal blogs. This is probably caused by the tech-blogs that spread the invites and often have a core group of Internet enthusiasts as their readers. Also, the platform was still in private beta resulting not only in a limited amount of users but also in people that like to test software before it is free of error.

The second thing that became clear by analyzing the added personal information was that users often connected their Twones profile to pages on the Internet that gave a (better)

representation of who they are. URLs would often lead to Twitter accounts, personal blogs, online portfolios, social network profiles and finally to Last.fm profiles. Although the site was thus primarily built around facilitating individuals to organize their personal music a clear element of social infusions and online identity management was visible.

### **The meaning of plays**

When a user plays music on a website or on an offline player the music gets tracked to their personal Twones page. Here, plays appear in a reversed timeline with the last play featured on top of the page, comparable with blogs and Twitter. The plays show information about the track (artist and title), the source of the play (which website or type of player) and the time when the play got registered. Also, a bar is shown under each play with three icons that reveal how many times a song has been played, *favorited* and *shouted* by other users. Favoriting a song can be done both in the plugin in the browser when listening to music and on the personal profile itself. Shouts can be added only when on twones.com.

In front of every play, the avatar of the user and a playbutton is shown. When clicking on the play button, a playbar appears at the bottom of the site, playing the song using the APIs of YouTube or iMeem. Also, this playbar gives users the ability to buy the song they are playing from Amazon or to send a Tweet to their Twitter or Facebook accounts showing of what song they are listening to right now. Once again a direct connection to social networks is visible here.

When a song is played in Twones, an info column appears next to the plays giving information about the artist of the song that is played. The information in this column is automatically generated from several sources such as Wikipedia, Flickr, Last.fm and Twitter and when combined is aimed at giving a complete image of the artist that the user is listening to. Here the growing importance of metadata is also revealed, connecting the personal music library to other (non-music) online platforms.

As said, Twones can register music being played at several on and offline sources and by doing this provide a decent platform where users can potentially organize all their music.

What is striking when analyzing the plays of the users was that users tracked almost only offline players instead of multiple online sources. Often most users had tracked only offline players, some had off and online plays and rarely users had only online plays. When looking at the online plays, these also often came from a limited amount of sources such as YouTube, MySpace or the Dutch website 3voor12. Other online music applications such as Blip.fm, Deezer or Grooveshark were seldom seen in the incoming plays of Twones users.

There are several explanations possible for this observations. When the earlier mentioned Cunningham et al. analyzed the organization of music collections in 2005, they note that *'the participant generally viewed having subsets of their collection in more than one spot as an annoyance'* (Cunningham et al., 2005: 3). When applied to streaming music and to Twones this could mean that the typical user might not like to have music spread over several applications in the first place, might therefore not even start listening to music on several platforms and is more likely to search and play music on one platform. Drawing from this it can also indicate that users used Twones not primarily as a place to organize their music but rather as a musical social network to show their friends and an invisible potential public what music they listen to as a way to extend their already existent online identity.

When looking at people saying something about their Twones use on Twitter, this form of identity management is clearly visible. Take a look at the following examples that reveal this:

*'Wondering if I should have taken Twones offline before I listened to George Baker Selection's Una Paloma Blanca'*

(@acomputerpro on Twitter, 2009);

*'There is no way I'm exposing my secret fondness for Enya to my friends. The jokes will never end!'*

(Comment on Schonfeld, 2008).

The above examples show that a public personal musical collection also alerts individuals that they can be judged on their listening behavior. Although a public musical social network like Twones reveals the awareness of individuals of the identity management that is done with a music collection, this is not a feature exclusively bound to *online* music collections. Cunningham et al. show that the same thing also occurs with offline music collections when they state: *'Another reason cited for reluctance to allow others to browse a personal collection is self-consciousness about one's musical tastes'* (Cunningham et al., 2005: 2). They also quote several participants in their research that show a similar tone:

*'My collection also contains [...] CDs I sometimes play but am embarrassed to possess (see: Chris Isaac)'*

(Cunningham et al, 2005: 4);

*'I feel that my character is partially judged on the contents of my collection, as I myself consider the contents of a persons music collection when evaluating what type of person they are'*

(Cunningham et al, 2005: 4).

In *Scrobbling Identity: Impression management on Last.fm* (2008) Colin Fitzpatrick, an undergraduate ethnomusicology researcher, analyses the musical social network Last.fm on a similar aspect and describes how a profile on the musical social network Last.fm can be seen as a form of impression management. Last.fm is comparable with Twones on several points. When users register for Last.fm they download the Last.fm scrobber, a software tool that tracks music that is played on several offline sources to a personal profile. In contrast with Twones however, Last.fm's primary focus is to give statistics and information about one's listening behavior where Twones focuses on organizing the music of different platforms in one place.

*'The more users scrobble, the more they change their profile and represent their offline experiences online'* says Fitzpatrick and this observation can possibly also be used to describe the practices of Twones users. A Twones profile is not only a tool to organize a music collection but is also mirroring listening habits creating an image of the musical taste of the user. Comparable with the above sentiments on Twones and collection management

as analyzed by Cunningham et al., Fitzpatrick describes the habit of Last.fm users to intentionally not scrobble a track. By selecting the tracks that become featured on their personal profile page, users can manage the impression the page gives to (imaginative) visitors.

Although personal music collections have always been part of the identity of an individual and have been influenced by their offline social network, this social element has been amplified in the age of P2P file sharing as Dibbel pointed out and has only increased with the use of online musical social networks like Last.fm and Twones. This can be further explained by referring to the influential book *'Life on the screen: Identity in the Age of the Internet'* (1997) by Sherry Turkle. Turkle describes how the way we view the notion of the self is changing from a modernist calculation toward a postmodern simulation where the self is a multiple, distributed system. Especially the tenth chapter *Identity Crisis* of this book is useful here, since Turkle here describes how in the age of the Internet this notion of the (multiple) self is explicitly visible in online worlds. On the Internet one can construct a homepage as a home identity that consists of virtual objects that connect to one's interests. In this way, *'one's identity emerges from whom one knows, one's associations and connections'* (Turkle, 1997: 258).

When applied to the social network MySpace, it helps the social media researcher Danah Boyd in the article *'Friends, Friendsters, and Top 8, Writing community into being on social network sites'* (2006) to understand what friendship means in the context of MySpace. Boyd uses Turkle to show how the associations and connections that a person has (on MySpace called *friends*) represents one's identity and is thus more than a list of people that are considered friends in the offline world. Having a band or celebrity in your friends list shows the visitors of your profile that you know and even might like them. Participants are able to express who they are and to locate themselves culturally through the egocentric communities of online social networks.

When applying this to Twones, the songs that are played and maybe even the sources of these plays can culturally locate the user, especially in the case of already heavy culturally loaded music. This way, the fear to reveal 'bad' taste in music and the habit to only carefully add favorites becomes easier to explain.

## **Adding favorites and creating playlists**

Next to tracking music that is listened to to a personal profile and sharing it with others in real-time, users can favorite tracks and add tags to these favorites to create playlists. When users have created these playlists the items in it can be played one after another by using the playbar. In this way, the website also functions as a streaming music site.

Although organizing plays into playlists seems a basic activity when considering Twones as a real music collection but it turns out that most of the users do not use the favorite and playlist option much. The consequent monitoring of the behavior on the platform revealed that only a quarter of the users had added favorites to their profiles and when they had added favorites at all, users had a maximum of five to ten songs. These songs were rarely subdivided into playlists. It seems like the favorite option was used by the users more as way to emphasize the songs that they really liked and wanted to be connected to their account (and thus their online identity) rather than to create playlists with. This is actually even emphasized by the option to syndicate (auto-share) favorites to the social networks Facebook and Twitter as will be discussed in the following section.

## **Following other music timelines**

The social infusion gets extended by the option to follow other users' timelines in real-time. Users can follow other users by visiting their profile pages and clicking on the follow button. When other users are followed the 'on air' section of their profiles subsequently show not only the plays of the users themselves but also from the people that they follow. This way, users can see in real-time which music the people they are following are playing and which platforms and players they are using for this. The music that is played by others is also easily accessible. In front of every play a play-icon is shown and clicking on it will make the requested song play in the playbar on the bottom of the page. This way users can not only follow the musical behavior of others but they can also immediately check out what the music they listen to sounds like.

Unlike the previously mentioned possibilities the option to follow others was used quite regularly by the users. When exploring the profiles about two third of the users followed others and often they followed between five and ten users. This could be affected however by the steps a new users walks trough when signing up. After that a new user signed up and was introduced to Twones by a quick walk-through, the user would land on a page saying *'these users are currently ruling Twones'*, followed by a list of highlighted users such as known persons, magazines and festival bookers. The quite low amount of people followed could subsequently be influenced by the closed and new character of the platform.

### **Other options**

Above the play column two bars give the user access to one's realtime activities, favorites and shouts, all also in reversed chronological order. Under this, the button 'popular' sends users to a page where they can see what's popular (by day, week and alltime) and the 'on-air' button gives access to a page where plays from people followed or all users active at that time are shown. Next to this, users have the opportunity to search the website. When they search for an artist, the previously mentioned infocolumn is shown and the play column shows which users listened to that artist most recently.

Furthermore, on the top of a profile page, users have access to their settings pages and to a find and invite page. Users can login with their existing Google, Twitter or Facebook accounts and perform a search in those networks for friends that are also active on Twones. Connecting their Twones profile to their Facebook or Twitter accounts also gives the users the possibility to syndicate (auto-update) their favorites to these profiles. With this another strong connection to the identity of users is shown, here initiated not by the users themselves as was the case with linking their Twones account to other webpages but initiated by the design of the platform itself.

## **Twones as a personal music collection**

When analyzing the characteristics of Twones and the use that is made of the platform it becomes clear that there is a certain contradiction between the way the platform is

intended to be used, as judging from the way Twones expresses itself to the outer world and from the original ideas of the founders, and the way the platform is used by its users. Not only this is an interesting observation that in the light of an Internet startup is likely to be quite common (but seldom actually seen and analyzed) and the private beta phase of the platform of course makes a premature judgement not appropriate. But the observations can definitely shed a light on the previously discussed trends and discussions.

Let's start with the actual characterization of the platform as a (part of a) personal music collection. As seen earlier, Cunningham et al. define the personal music library as '*a collection of an individual's music documents, owned, 'used', and organized by that person*' (Cunningham et al., 2005: 1). They also show that a personal music library often consists of several media of which a streaming music collection can nowadays be one. When analyzing the behavior of Twones users however, two elements (apart from the 'owning' part) seem to be missing: actually using and organizing the collection. Although users do track offline plays and sometimes online plays to one single place where they could potentially organize their music into a single collection, users rarely favorite songs and do not organize them into playlists at all. In contrast with Dibbel who pointed out that digitizing his music collection made him even closer to his collection and even perverted the activity of collecting and in contrast with the discourse around streaming music, the behavior of a typical Twones user does not show any signs of a need to organize all on and offline music into playlists that can be used and accessed everywhere when having access to the Internet. This can be influenced by the integration of the platform with other social networks, and by small things like the choice of the names of the buttons. The button 'favorite' seems to imply giving the song a special status instead of being a step to organizing the tracked music. The direct connection to other social networks as made possible through syndication strengthens this interpretation. This could deter users from freely favoriting songs to organize them into neat playlists subsequently.

The absence of playlists can also point at a lack of added context that triggers the mnemonic power of a collection. Therefore Twones can at this moment better be defined as an online musical social network that people connect to their already existing online

profiles to extend their online identity with their musical behavior, that currently primarily exists of playing music from a digitized but mainly offline MP3 collection.

This does certainly not mean that the analyzation of Twones does not shed an interesting light on the way streaming music might affect the art of collecting. The platform is still in private beta and is thus searching for the right combination of elements to make it a success. The infusion of the personal music collection with social networks seems to be a perversion of the social role music plays and the social status that derives from that just as connecting it to P2P networks did for the collecting itself. Via platforms like Twones and other initiatives such as playlist sharing sites individuals are becoming more and more accustomed to making their music collection public and sharing their musical interests (if appropriate) not only with their close friends that used to come by and discuss music on parties but with similar but unknown interested too.

## **Concluding**

The private music collection as it is today is as made clear in the foregoing not the same as it was when Benjamin wrote about his collection in 1932. By exploring the practices of collecting in the age of MP3 and the way the collection and the collected are affected by technological and cultural changes, it becomes clear that these changes have clearly altered its use. A present-day personal music collection is distributed and consumed over several carriers: CDs, MP3s and a streaming music library together form one personal music collection. Furthermore, the collection is connected to others, known and unknown, and is easier to (re)organize in digital music players such as iTunes but also with the more and more common use of playlists. Of course, the collection is largely not tactile anymore and in some cases not even free to use with the proliferation of freemium business models. Several elements that have always been a part of the art of collecting have been made easier. Music is easier to acquire and is becoming more and more ubiquitous. Finally, the social element that has always played an important role in music, has been put forward and has reached another level with the infusion of social networks.

But while the way a collection is built, looks and is used differs from Benjamins collection, has the notion of it also been changing? And is the passion, that has always been an

integral part of the art of collecting and the private collection, affected by these developments? While with Napster the personal collection became visible not only for friends and relatives but also for like-minded individuals, the social element in a personal streaming music collection has only been increasing as the design of the collection made the integration with other social networks possible and individuals themselves connected their now public music collection to their own identity as well. The collection can now be scrutinized by friends and like-minded people and thus the bond between the collector, fellow collectors and the collection itself only increases .

Also, the integration with automatically or self added metadata has been increasing the way a collection can be organized and also increases the mnemonic power of the objects in the collection as is visible in the creation of playlists that suit memories, occasions and specific moods. Organizing a collection can be done in many more ways now, increasing the possibilities of making meaning out of an otherwise chaotic gathering of objects.

Finally, the accessibility of the collection is even greater than in the era of P2P file sharing with the option of always having access to the collection (if connected to the Internet though) and with new objects to be added by only one click. When these uses are combined, reflected upon and seen as a visualization of the passion of managing a personal collection, it can be stated that the notion of collecting in the age of streaming music has remained the same. This, even when the collection is not owned in a traditional sense and essentially consists of a collection of links.

But when looking at the practice of the Twones users a part of this passion is not (yet) truly visible. This can be explained both by the early age of the platform and the integration (or confusion) with other known online social networks. On Twones organizing and making order in a personal music collection seems to clash with social networking. Caused by a combination of elements that are not all easy to distinguish such as the names of buttons to bigger but harder to prove influences like ease of use and the knowledge and expectation of the user, the initial aim of the founders to create a platform to organize all online music was not seen in the way the platform is used. Instead of being a place to organize music, Twones is used more as a public reflection of one's listening habits, highlighting those songs that fit the identity of the user by favoriting them and smuggling

away the music that does not fit the perceived own identity. These influences however also help shape the way we use and see the personal music collection as was made clear here. And initial misuses can eventually maybe even be seen as a new application; it is not an error, it is a feature.

Benjamin loved his books not so much for the words that were in it but as for the way these books journeys brought them to his library. Both when conceiving this journey as a spatial or spirited one, the journey has become easier to make and to file, giving way to a retention of the mnemonic power of the personal music library. New infusions have even made context easier to conglomerate with the objects, giving meaning to items that only the collector himself can understand. By herewith making the public private again, it is not the collector that comes alive in the links, it is the links that come alive in him.

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