The Role and Responsibility of Mobile Music Listening Applications: A Case Study of NetEase Cloud Music

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Abstract: Studying music itself is definitely important for understanding how it works in people's minds, spirits, and society, however, studying the carrier or medium that is used to spread music is also important for the development of music research. This paper analyzes one mobile music-listening application and uses it as a case to discuss how the design of mobile applications could influence people's experience of listening.

Keywords: Mobile Music; NetEase Cloud Music; Role and Responsibility

Introduction

With the development and progress of science and technology, the way people listen to music has changed a lot. Nowadays, because of the combination of mobile communication technology and the internet, people can play music on mobile music-listening applications almost everywhere and anytime. They can also download music on their devices. Therefore, technology influences people's listening methods and habits to a large extent. By studying the new modes and approaches of listening to music, people can also assess the benefits and disadvantages of these technologies for people's experience of listening. In other words, it's important to evaluate whether the new technologies really help or improve people's music listening and appreciation.

1. Chinese Customers' Expectations for Music Listening Applications

Before discussing the research object and its issues, one important aspect is to understand what expectations Chinese customers have for these products. Although I did not find research data about Chinese customers' feedback about the application that this paper studies, I found one research about similar products in China, and it reflects the common and general expectations for music listening apps. In the article "Evaluating mobile music services in China: An exploration in user experience", Xiao Hu reports that many users of several dominant music listening apps complain about overabundant text and images, and they prefer a more concise interface. In addition, lots of negative feedback focus on the security of privacy such as their music listening habits and too many useless functions (Hu 23-24). This reflects that many users pay more attention to the activity of listening to the music itself instead of paying attention to information that is not related to themselves or exposing their listening data to others. The rest of this paper tries to use NetEase Cloud Music as an example to analyze whether it is consistent with people's expectations for music listening apps and tries to explore the internal reasons or logic of these expectations.

2. Research Object

The music listening application this paper analyzes is NetEase Cloud Music. There are two reasons that this paper chooses it as an example. On the one hand, NetEase Cloud Music has many common features with other dominant music listening applications in the Chinese market. On the other hand, it received a lot of attention and positive comments from the public when it was launched. At the same time, there were a huge number of active users who contributed a lot to the comment area, playlists, and the whole virtual community of this application. However, some aspects that used to receive positive comments, and some adjustments of interface, functions, and personal homepage make me feel not ideal as time passes. In other words, these aspects go the opposite way for a better music listening experience. After a long term of use, I also found that not all the users accept these changed features, which is reflected in the comment area of this app. I will try to explain the disadvantages of this app and argue why some features of this app create obstacles for people to achieve emotional, spiritual, and social functions by listening to music.

3. The Features of NetEase Cloud Music

The first characteristic of this app is that the categorized content is heavy and complex. When the users open it, they will see first the page which is named "finding". The categories and subsections of this page are a lot and include a total of 16 sections for recommendations. However, there are many overlaps of the content in different sections with only subtle differences. For example, the recommendations about playlists count for three sections, including "Playlists for Recommendation" (created and published by other users), "Radar Playlists" (created by the algorithm based on users' activities), and "Playlists for Particular Scenes" which are created by editors. For the sections about videos, there are also three, including "Selected Music Videos", live videos performed by users, and collections of videos based on various topics. There are also two sections of podcasts, two sections for rankings and some online singing functions, and the section for fan clubs. However, all of these sections or functions are not displayed or gathered by similar meanings or some specific order. Users cannot know the reasons for the irregular sort. At the bottom of the interface, users can switch from "Finding", "Podcast", "Mine", "Followed" and "Cloud Village", and on every page, people can find large numbers of subsections. On the page "Mine", users can see the playlists created by themselves, their liked music, collected playlists from others, and a section for music mini programs. When the user opens this section, there are 31 small mini programs listed. When listening to music, users can find the page of playing music. There are still a lot of buttons on this page. Besides the image of the album, buttons for collecting, downloading, and changing the mode of playing, there are also some buttons for singing, checking comments, lyrics, and related videos.

Another characteristic of this app is the large portion of social functions. First, when users created their own accounts, they can actively add content to their profile page and input the information they want to demonstrate. However, the information shown can also be their photos, videos, and text rather than only information about their music activity history. At the same time, users can browse the posts from their friends or followed artists. Besides, users can also chat with the people they followed through chatting, sing with others in the virtual singing rooms and comment on the songs they listen to or reply to others' comments. All these functions can be used to communicate with others and for social purposes.

The third characteristic of this music listening app is the potential exposure of personal data about listening activity details. When the user logs in to their account, the app does not provide the presetting function for hiding or showing various personal information. Users can only change the setting of much information after they used it for a while and found the displaying information on their personal page. The personal information that can be hidden in the setting includes the songs they liked, their playlists, collected playlists, and listening rankings in a week, and the total using time. The information also includes the user's generation, gender, and location. However, it is hard for users to find the area on the interface where they can hide the information. The app does not give obvious hints for changing the setting.

4. Issues of NetEase Cloud Music and Their Implications

4.1 Users Cannot Concentrate on Listening

After introducing the features of NetEase Cloud Music, this section discusses how these features and design cause problems for users' listening experience. The last section concludes one important feature of this app, which is the heavy and complex content and overabundant functions. To be more specific, there are too many sections on the layout, while every section has overlapped with each other to some extent. This feature makes users spend more time browsing, searching, and screening the content they really care about and like. More importantly, many functions are not closely related to the music itself, such as other users' or stars' posts, recommended videos, and live videos. This feature and design show that the company deliberately weakened many users' needs for concentrating on listening to music. Even when the users open the page of the song they are listening to, they can still see a lot of irrelevant information, such as the small icons showing someone else who is on a live video, whether there are new hot comments and the icon that stimulates listener's interests in singing the song by themselves. All the information and suggestions can be a form of disturb for users who really want to concentrate on appreciating music itself or learning about the lyrics, and this disturb is without permission and hard to remove. Immersing in the music itself can still bring a lot of fun and joy and is also an important purpose for using the music listening app. Mia Kuch and Clemens Wöllner refer to Bull Michael's opinion in their research about mobile music listening. They argue that important reasons for people to use mobile devices to listen to music are using music as the "boundary demarcator" to keep a distance between

listeners and the surroundings or to mix the music and their own memories to create an "imaginary present" that overrides the "actual present", or to combine the emotions and feelings in the music to produce their imagination like daydreaming. All these strategies are used to escape reality temporarily and "focus on their own concerns" (Kuch and Wöllner 3). In other words, the purpose of listening to music through mobile apps is to create a space that belongs to someone's self and will not be disturbed by others and enjoy in this space. However, if the music app puts too many texts and images in front of listeners, the information will distract their attention, thus weakening their attention on the music and weakening their imagination provoked by the music they are listening to. Therefore, it is better to simplify the interface or display minimal elements on the interface of music listening apps to facilitate listeners' purpose of creating an imaginary space where they can find pure peace and joy.

4.2 It is Hard to Facilitate the Things that Users are Doing

If creating a space belongs to oneself and immersing in the music itself is only for joy, listening to music could also be used for promoting our daily work, study, and lives. In a practical sense, music might also promote the pace and tempo of our lives. In Ann Werner's "Moving Forward: A Feminist Analysis of Mobile Music Streaming", she explores the influence of using mobile music streaming apps such as Spotify on her life from a female's perspective. In her view, she argues that effective experience of using music streaming app means she can have a positive and energetic emotion which makes the things she is doing move forward. In terms of the phrase "moving forward" and her feeling for using the apps, she explains: "Forward direction could for me be going to work, but also going home, or going for a run. Music listening provided a feeling of effortlessness when it made the commuter train and the trip 'mine', a push of a button brought on my prepared music and set the mood for commuting and moving forward. The emotions here were positive, and the space around me changed from mundane and dreary: it became my own movie scene with a soundtrack" (Werner 207). She also points out that the effect of "moving forward" in work usually means "a useful labor subject, happy to go and be productive" (207), and she feels that "music and sound changed the perceived space and direction and got me ready for work" (207). In other words, the positive experience of listening on music apps means that it can help users to adjust their emotions and be prepared for the things they are going to do. However, she also feels that the technical shortages of the apps can frustrate her sometimes (209). When applying this theory to the study of NetEase Cloud Music, I found that it rarely brings more feelings of moving forward in the things I was doing. Instead, because of the disturbance from the irrelevant information, it causes me to spend more time browsing the text, images, videos and thus forgetting the things I need to finish. I still remember that when I was studying in the library and opened the app for listening, the pictures and text on the "finding" page appear. Then I was usually attracted and would spend some extra time looking before studying. Although I cannot argue that this app has the whole responsibility for my procrastination, the various functions, and the excessively entertaining content are not helpful for adjusting my emotion and attitude towards the work I need to do. Therefore, the implication for this issue is that music listening applications should deliver more positive effects for users because many users will listen to music when they are doing other things such as commuting, running, or reading. If the layout and the content on the app cannot promote their activities and instead, absorb and take up too much of their time, it might not be useful for improving their efficiency even the apps do have some playlists that are titled for particular using purposes.

4.3 The Problems of Sharing Music Online

In the article "The iTunization of pop: Mobile music and youth social networks", Anthony Y.H. Fung argues that the emergence of mobile music listening programs like iTunes has become a personalized music organization tool. Users, especially young people, use this tool to build their individual playlists and share them with their real-life friends, thus strengthening their cultural and social networks. However, the sharing that the author refers to here mainly refers to the situation that after the creation of the playlist, people share the playlists or songs face to face with their peers in the real world (Fung 32-33). When considering Chinese music listening applications, there is a trend that listening to music is combined with more social functions. The online forms of sharing music with friends became a common feature of these apps. NetEase Cloud Music has the functions of sharing music through chatting, creating playlists with others, and listening to music synchronously with another person. This paper does not totally disagree with online social functions and the effect of building social networks in the virtual world. However, I still agree with the idea that online sharing cannot replace face-to-face interaction with people. This can also be extended into musical activities. Because when sharing something online, people cannot fully feel others' expressions and movements and perceive their emotional attitudes towards something. Instead, if

people watch a live show or performance together, they can immediately share their thoughts, and their common experiences will be more realistic. They can feel the resonance or their different understanding of the music through their facial expressions, gestures and words. The common environment also facilitates their understanding of each other. Besides, people already have enough social media or platforms to share music or music videos via the links. Thus, people usually use music listening applications just for listening. I realize that many people even do not pay attention or want to add friends' accounts on the music listening apps. Also, some users of NetEase Cloud Music do not check the messages on the app frequently. Thus, this paper believes that online music sharing in music applications may not play a great role in consolidating people's original social networks. The music listening applications may consider methods for facilitating people's face-to-face communication.

4.4 Publicity of Personal "Musical Property"

In the previous introduction to NetEase's music features, this paper pointed out the various social function, and I believe that the social part accounts for at least 1/2 of the application. These social elements are reflected in the disclosure of personal information, including age, gender, constellations, bound social accounts, etc., and the disclosure of personal music listening history and data, for example, music ranking, annual favorite song list automatically generated and published, review of personal music data at the end of the year, and personal collection of songs and playlists. The social elements also include the displaying of pictures, videos, and text shared with friends or the public. Although the disclosure of all these contents and data can be freely chosen by the users, the initial setting of the system does not ask the user's permission in advance, or intuitively and explicitly tell the user what will be made public or give the user the option to disclose the content in advance. Users usually need to carry out a certain amount of practice and operation step by step before they can understand the logic. I think if users choose to make these elements public, the goal may be to let others know more about themselves, let others know what they like and what they are doing, which may lead to further communication, and thus meet the needs of online social activities. However, in their article "Concepts, issues and research avenues for digital consumption, Ian Grant and Kathryn Waite points out that the uploading and editing of personal data by individual users on Online social networking sites (OSNs) can lead to a high level of self-disclosure, and this information may become an ideal target for commercial activity (Grant and Waite 334). However, with this high degree of self-disclosure, there is bound to be the risk and harm of leaking users' personal privacy. When looking at music listening applications like NetEase Music, I think it can also be called OSN because it integrates music listening and social functions, as well as huge social elements. However, unlike other social networking sites, it shows users more personal data related to music taste and listening histories. Then the problem arises. If users disclose their personal music-related privacy to meet their social purposes, will their data be used by unknown people or third parties, or be used for music market research and advertising purposes? The paper argues that users' personal music listening data is also personal property, just like the personal information disclosed by people on other social networking sites. If the data about individuals' listening activities are used only as a social aid, and the user is willing to do so, then it doesn't matter. However, if the disclosed data is not protected by the program development company and is used by others without the user's knowledge to achieve economic benefits, then the program violates the obligation to protect personal property. However, it is well known that the strength of business organizations is often very different from that of individuals, and the legislation and measures on the protection of personal privacy on social networking sites are still being discussed. Thus, it is still difficult to prevent these privacy leaks substantially. It is difficult to guarantee that companies will perform their duties or users can trust their commitment to protecting users' own data from abuse. Besides, the current situation is that if users do not agree with the privacy policies given by NetEase Cloud Music the first time when they log in, then users will not be able to use the application at all, including the social features. Therefore, the dilemma for users is that they must choose between satisfying social functions, listening to music, and preventing personal music property from being abused. If one need is realized, they are likely to be negatively affected on the other aspect. Therefore, this issue implies that music listening applications need to protect users' personal data better. If the leak of privacy is caused by users' behavior of showing some sensitive information by themselves when using the social functions, then at least, the application needs to give users more choices and instructions of hiding some information they do not want to display.

5. Conclusion

This paper takes NetEase Cloud Music as an example to analyze people's real expectations for mobile music listening programs.

Previous studies have found that the main purpose of people using mobile music listening apps is to enhance the experience of listening and to create a personal space that will not be disturbed by the outside world in the process of listening to music. Other important purposes include using music to adjust their mood and pace of doing things or building a common culture and consolidate personal social networks by sharing their playlists face to face with friends. However, through the investigation of NetEase Cloud Music, this paper finds that its design runs counter to these purposes. The main reason is that its function and layout are too complicated and entertaining so that users can not focus on listening to music or using music to adjust their emotions. On the contrary, users can be disturbed by irrelevant information to a great extent. At the same time, this paper believes that people's social networks are easier to consolidate when they communicate face-to-face, while online music sharing cannot consolidate the original social networks because of the lack of emotional feedback. In addition, this paper also argues that personal online music activities are also a kind of private property of individuals, and the use of the data by companies or third parties for commercial purposes without permission is an infringement of users' private resources and property. To solve these problems, this paper believes that applications should simplify their functions and interfaces as much as possible, while reducing entertainment information to better help users focus on and appreciate the music itself, or use music to create their own space, or meet their needs to adjust their mood and emotions. At the same time, this paper believes that the behavior of sharing music online will not be of great help to consolidate the existing social networks of users, so applications should consider how to enhance and assist people in face-to-face music sharing. In addition, because personal music data is also a kind of property that needs to be protected, applications should provide users with more choices and instructions, so as to prevent users' data from being leaked and abused.

These problems shared by NetEase Cloud Music or other similar apps should also give people vigilance and thinking. That is to say, when great changes have taken place in the form and technology of listening to music, what requirements should people put forward for these technologies, so as to reduce the disadvantages of technology that might weaken the various purposes of listening to music, or to restore and maintain people's true pursuit when listening to music as much as possible? All the pursuits and expectations can be summed up as the realization of personal happiness. Only when people's real purposes of listening to music are satisfied through these music listening applications, people will spend more time and thinking about music itself and its connotation.

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