

# AN ANALYSIS OF USER BEHAVIOR IN CO-CURATION OF MUSIC THROUGH COLLABORATIVE PLAYLISTS

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## ABSTRACT

Collaborative music consumption behavior has morphed drastically with the availability of customized recommendations and online platforms for co-creating playlists. In this pilot study, we find that not only have the practices of collaborative curation changed, but the emotions associated with the songs and playlists have also been affected. Considering users' innate desires with respect to social factors and implications is crucial to developing music technologies for today. Further investigation is needed to gain more nuanced understandings of the habits and emotions of today's collaborative music curators.

## 1. INTRODUCTION

Sharing is a natural and substantial part of music consumption. Co-curation, propelled by the popularity of mixtapes and jukeboxes, is one such way of sharing music. Technological advances, including the internet and machine learning, have greatly altered our social behaviors around music. Playlists have risen in popularity as a music curation tool in online streaming services. In particular, the collaborative playlist as a form of social curation is gaining more relevance as services make "sharing and collaborative consumption" easy [1].

Research on collaborative playlists has to date focused on interactions around social sharing. Liu et al. designed "Social Playlist" to assess impacts of "a shared music channel where music is selected by its members" [4], Cunningham et al. identified software features that support music playing at parties [2], and Lenz et al. explored design features of a physical product that "explicitly addresses the social dimension of joint music listening" [3].

Despite the evolution in music consumption behavior, the lack of research on collaborative playlists and their constituent songs preclude insights regarding their usage, evolution, reception, and ownership. We need to acquire a better understanding of this altered landscape that new

technologies afford. In the present pilot study, we explore the landscape of collaborative music curators and their curations using qualitative research methods. To our knowledge this is the first study of its kind.

## 2. METHODS

We chose an exploratory study method, which would allow for more in-depth stories to be garnered through ethnographic interviews. We deemed a generative investigation appropriate for developing hypotheses for future studies without the restriction of insights. A total of 10 individuals displaying varying levels in co-curation of music were selected for the investigation. Each interview was between 60–120 minutes in length and the medium of choice—in-person or online—was not restricted. There was a set of basic questions that was asked for each interviewee to prompt narrative answers. The researchers also gained access to and observed the playlist formation and management for 5 of the 10 participants.

We also ensured inclusion of those we considered to be "extreme users", as such participants are considered to be particularly helpful in better understanding "latent needs and desires" as per common needfinding practices in design [5]. An example of one "extreme user" was an interviewee who built a playlist creation website from scratch in order to share and curate music with friends in ways that were more suitable for them.

## 3. RESULTS

From this preliminary study, we uncovered different patterns of use, behaviors, and emotions with respect to collaborative playlists, songs, and with music itself. We can largely group our insights that emerged from the preliminary study into three main categories: (1) changes in functionality of playlist, (2) patterns of usage and behavior, and (3) imbalance of contribution and feeling of ownership.

### 3.1 Changes in functionality of playlist

Findings suggest that collaborative playlists often morph into a product that takes on a role different from the collaborators' original intent. The dominant initial motivation for co-curation was to share music between collaborators and consume selected songs together. Playlists often become historical records of songs shared between collaborators



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over time. One interviewee used the co-curated playlist not as an object to be listened to, but rather a reminder of the range of music shared, progression of songs introduced, mood of collaborators at the time of curation, and feelings associated with the songs. For others, playlists are created to show collective music identity of the collaborators. For some, playlists took a more dynamic form, reflecting only present taste. No particular song was kept for permanent storage and was eliminated when one or more collaborators no longer deemed it suitable for current consumption.

### 3.2 Patterns of usage and behavior

We observed a pattern to each playlist—how, when, and by whom the playlist is started and managed. This largely reflected the natural ebb and flow of musical preference of the individuals. Consequently, some collaborators' social interactions recommenced when they wanted to “get back into” a genre of music they previously enjoyed together.

### 3.3 Imbalance of contribution and feeling of ownership

We found that playlist ownership and song contributions were not balanced and depended highly on collaborators' buy-in of the function. Consequently, the level of contributions also affected the enjoyment of these collaborative playlists. However, the effects of disproportionate contributions were different for each: one enjoyed having more of their own songs of choice included, whilst another was more frustrated at the lack of contribution of their co-curator and therefore did not enjoy the playlist as much.

Also, the emotions and attachment towards playlists depended highly on the memories with and the relationships between the collaborators. The frequency of listening to the playlists seemed to be not only dependent on the quality of the playlist (e.g., favorable transitions, songs, etc.), but also the relational aspect. In one case, the user felt “forced” to listen to songs that the collaborator had added, but was actually “glad” to have felt the “sense of obligation” to give a song multiple listens as they eventually came around to “really [like] the song”. As with additions in collaborators, there was a significant loss in feeling of ownership of the playlist and seemed to weaken the dyadic relationship between the two original collaborators (or “starters”) of the playlist.

## 4. DISCUSSION

We found various motivations for starting and maintaining collaborative playlists, that these motivations differ for individuals (even between collaborators of the same playlist), and that they evolve with time. Some start a collaborative playlist with the intent of finding songs all collaborators enjoy, or of spending equal time on each individual's songs when physically together. Regardless of original intent, playlists often became a medium for exploration between collaborators with similar musical tastes.

Co-curated songs also engendered feelings of “closer connection” with peers, and constant consumption of these

songs also bolstered emotional connections with these peers. This resulted in a cyclical positive reinforcement of feelings of intimacy. Furthermore, the sentimental values of songs curated by their peers shifted users' tastes.

Through these observations, we were able to gain first insights into crucial social implications for designing platforms for collaboration around music curation. However, we find that these factors are often not considered or prioritized as much as technological developments are. Moreover, through secondary research, we found that multiple virtual platforms that facilitated collaborative curation of music have disappeared. The multiple attempts of such platform creations may imply the need for the tool, but the disappearances indicate that these designs are not fully capturing users. One explanation suggested by our research is that users' latent needs and desires for social interactions in music co-curation are not well catered to.

## 5. FUTURE WORK

As future work, we will garner further nuanced understandings of user intentions, behaviors, and needs through in-depth qualitative study. This will include a longitudinal exploration of users' collaborative playlists with respect to their experiences and emotion journeys—stories that allow us to better make sense of the user patterns we detect.

In addition to qualitative research, analysis of user data will allow for assessment of the lifetime of playlists, how they are used, what songs are played and when, and frequency of use. These analyses will enable us to quantify user behaviors. Findings from this pilot study also point to areas for further investigation. These are ideas that aim to cater to and discover more latent needs and desires of music curators, one type of “extreme users” of music services. Through prototyping and observing these implementations, we can better understand both present and future social practices around music. In doing so, we hope to heighten the music consumption experience.

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