

Article



Social Media + Society January-March 2024: I-14 © The Author(s) 2024 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/20563051231224272 journals.sagepub.com/home/sms



Streaming Platforms

Make-Do-With Listening: Competence,

Distinction, and Resignation on Music

Massimiliano Raffa

Abstract

In an age where music streaming platforms have become the primary media for music listening, the experiences of musically competent users are often overlooked. Employing a mix of research methods (semi-structured interviews, reflective diaries, and analysis of on-platform-activity metadata provided by Spotify's APIs), this contribution aims to explore the viewpoints of musically competent users from Italy, the United Kingdom, and the Netherlands regarding music streaming platforms. Through critical analysis, the study investigates both the subjective and objective aspects of their listening experience, as well as their interpretation of algorithmic mediation and platform affordances. The findings illustrate that competent users perceive the usage patterns afforded by streaming services to be insufficient in meeting their needs and the platforms to have been progressively diluting the quality of their listening experiences. Despite this, the study shows that streaming platforms lack alternatives to such an extent that even knowledgeable subjects prefer making do with this condition they consider appropriate to their current lifestyle—rather than striving to enhance their consumption experiences. Furthermore, hypotheses are posited, suggesting that adopting a "platform criticism" stance may be a distinction marker of competence status.

Keywords

music listening, music competence, music streaming platforms, cultural sociology, algorithmic media, Spotify, distinction

Introduction

The digital reconfiguration of the music industry resulting from the emergence of music streaming services has sparked significant debate on platforms' impact on music listening practices. Music streaming platforms afford undeniable benefits to listeners, such as ubiquitous access to a seemingly infinite catalog of music and the ability to personalize users' experience, thereby enhancing convenience and accessibility. Nonetheless, numerous studies and social commentaries have highlighted several critical issues. These include the supposed capability of platforms to reinforce social divisions among listeners (Prey, 2016), the alleged homogenization of musical taste resulting from recommendation systems' bias and platform curatorship (The Economist, 2018; European Commission, 2020; The Guardian, 2019), the perceived reduction of exploratory approaches to music discovery practices (Ratliff, 2016, p. 6-7; Snickars, 2017), the assumed decline of culturally meaningful experiences with music products (Chodos, 2019; Rekret, 2019), the purported tendency of platforms to disfavor listening to niche artists (Chambers, 2023; Mulligan, 2014), or the presumed transformation of recorded music into a surveillance device (Drott, 2018), among other concerns (Hesmondhalgh, 2022).

Against this backdrop, this empirical article examines the experiences of "musically competent" subjects, specifically music students from the United Kingdom, Netherlands, and Italy, who are heavy users of Spotify. Combining qualitative interviews, reflective diaries, and analysis of metadata provided by Spotify's API, the research presents a theory grounded in users' perceptions. This approach enables exploration of how users engage with platforms' affordances and the impact of algorithmic decision-making, curation, and personalization on musical taste. The article contributes to the existing literature by providing empirical evidence that

University of Insubria, Italy

Corresponding Author:

Massimiliano Raffa, Department of Law, Economics and Culture, University of Insubria, Via Sant'Abbondio, 12, 22100 Como, Italy. Email: massimiliano.raffa@uninsubria.it



can inform ongoing debates about the role of platformization in shaping musical experiences in knowledgeable users. It recognizes that users with musical competence can serve as valuable observers, as they may exhibit critical negotiation strategies when engaging with platform affordances or mobilize their taste in specific, unexplored ways. The research approach adopted in the study was inductive, whereby the conceptualization process evolved alongside the analysis of the collected data.

Why Question Musically Competent Users?

Digitization and platformization have stimulated a proliferation of literature on music listening. Although music consumption choices are now more predictable and, according to some, more orientable than ever before, the understanding of the listening habits that have recently taken root in the contemporary Western world has so far been limited, given the adventitious, fragmented, heterogeneous nature of the practices that define them. Novak (2016), in line with DeNora's (1999, 2000) previous work, has studied in detail how digitization has transformed the relationship that individuals develop with the musical technologies available to them within everyday contexts. Krause and Caldwell Brown (2019) claimed that consumers' music listening choices are increasingly influenced by usability, discovery, functional utility, flexibility, connectedness, social norms, value for money, and playback options diversification. Studies have examined playback technologies and media (Adveef, 2014; Bartmanski & Woodward, 2015; Bull, 2007; Kibby, 2009; Magaudda, 2011; Prior, 2014; Yang & Teng, 2015) as well as algorithmic environments and their impact on genre boundaries (Airoldi, 2021), cultural categorizations (Flynn, 2017), and users' perceptions (Siles et al., 2020). Kamalzadeh et al. (2016) highlighted the increasing demand for user-friendly interfaces that enable music listeners to effortlessly control various aspects of tracks, such as duration, genre, speed, and mood. This desire arises from the need to seamlessly integrate music consumption into desired situations with minimal effort and fewer mobile devices. Scholars have expressed concerns about potential adverse effects on listening experiences and music discovery, such as cognitive overload and reduced attention (Fleischer, 2017; Klingberg, 2009). The concept of "ubiquitous listening" (Kassabian, 2013) emphasizes the transformation of individuals' relationship with music due to its constant presence in modern life (Pontara & Volgsten, 2017). Despite the illusion of control provided by platforms (Herbert, 2011; Markham et al., 2020, pp. 29–46), this shift seems to confirm the collapse in the perceived value of recorded music and its representation of social values (Marshall, 2019).

Although there is a wealth of literature on online music consumption, studies have yet to explore whether users with advanced musical skills develop a different relationship with platforms. Both optimistic views that recognize

platforms as having high potential for taste diversification, customization, and discovery (Bourreau et al., 2022; Knox & Datta, 2020), as well as more critical perspectives suggesting that platforms have led to more standardized consumption patterns or commodified connections to music (Morris & Powers, 2015; Prey, 2019; Seaver, 2019), a clear reflection on the role of cultural capital in shaping media consumption practices and influencing users' interpretive processes seems to be lacking. Drawing on Bourdieu's (1984) essential work, studies on music listening have consistently explored the intricate relationship between taste and social status, class, and distinction (Prior, 2011). Even following a changing scenario that has amplified the challenge of applying established conceptual categories to increasingly fragmented cultural audiences, research in this vein has continued to bloom (Bryson, 1996; Holt, 1997; Van Eijck, 2001; Shin-Kap, 2003; Jarness, 2015), often illuminating new consumer figures such as "omnivorous listeners" (Barna, 2020; Coulangeon, 2017; Peterson and Kern, 1996; Rimmer, 2012; Savage & Gayo, 2011). As highlighted by Webster (2020, 2023), the pursuit of distinction remains crucial even in the context of music streaming services, where new forms of distinction may emerge in response to the personalizing power of platforms or to reaffirm listeners' identities as cultural consumers.

The notion of "distinction" in music streaming platforms may refer to users' intentional efforts to express their identity or convey particular cultural affiliations through their music consumption habits. Users may actively curate their digital personas, playlists, and listening histories to communicate something about themselves to their social circles within the platform and beyond. Moreover, users may resist conforming to mainstream homogeny and seek out alternative or niche music, sharing their curated content and attempting to gain recognition for their distinctive musical choices. Generally, collaborative playlists, sharing functionalities, and participation in music-related communities may serve as tools through which users actively construct and communicate their personality as cultural consumers. Through engagement with these features, users might transform their act of listening into a communal experience, garnering recognition and validation for their distinctive musical choices. However, a need remains to delve further into the study of specific groups whose consumption practices might suggest new uses or whose perceptions might unveil hitherto unexplored emerging narratives surrounding the platform system, such as "musically competent" users. As in the past with previous media, musically competent users might be crucial subjects to observe as they may demonstrate strategies of critical negotiation with the affordances of the platforms, renew the range of consumption patterns, reshape the possibilities offered by these technologies, and strategically adopt unique positions to differentiate themselves from other groups or their peers, thereby serving as essential informants on the ongoing platform discourse.

The concept of "musical competence" is characterized by a plurality of interpretations, which are often contingent upon the theoretical frameworks and methodologies applied within distinct scholarly and pedagogical approaches. One prevalent approach, rooted in cognitive sciences, delves into the processes underlying musical perception and production, exploring the neural substrates and psychological processes that underpin musical competence, often through quantitative analysis (Hansen et al., 2013; Law & Zentner, 2012; Swaminathan & Schellenberg, 2018; Wallentin et al., 2010). Conversely, socio-cultural perspectives on musical knowledge emphasize the social context within which musical practices unfold. From this viewpoint, competence is intricately linked to communal norms and societal expectations within specific cultural groups, exploring the role of apprenticeship and systems of communications in shaping musical expertise (Brinner, 1995; Hargreaves, 1996; Small, 1998; Sterne, 2003, p. 92). Moreover, there is substantial variation in the approaches to musical competence, spanning from skill-based methodologies focused on formal knowledge of music theory and proficiency in musical performance, to culture-centered models that emphasize music as a domain of knowledge or a complex set of social practices.

Providing a definition of "musical competence" falls outside the scope of this work, not only because musical competence can be attributed to various individuals and groups (such as music fans or subcultures displaying expertise in their specific field) but also because participant selection was conducted without adhering to specific indicators. Likewise, no particular indicators of musical competence will be put forth.

In this study, subjects deemed "musically competent" will be those who self-identify as such and possess expertise in music owing to their educational background and past experiences. Following Tagg's (2009) constructs, "musically competent users" will possess both "knowledge *in* music" ("poïetic competence" of creating/composing music and "aesthesic competence" of recognizing the culturally

specific connotations of the music they listen to or produce) and "knowledge *about* music" (ability to address both *musical metadiscourse*, i.e., music in its formal aspects, and *contextual metadiscourse*, i.e., music in its cultural, social, economic, industrial implications).

Methodology

This study involved 12 volunteers equally distributed across the Netherlands, Italy, and the United Kingdom, students at three different universities (Utrecht University, IULM University of Milan and the University of Liverpool), hailing from eight different countries. Given the small sample size, the study did not intend to highlight geographical or cultural differences. Instead, it aimed to identify common themes.

Participants were selected based on three criteria: they all were Spotify premium heavy users; they were all postgraduate or doctoral students in music-related fields; they were all considered "musically competent." Each participant possessed a background as a musician or had received formal musical training. Some had industry experience, such as working as event organizers or for record companies. Others indicated their past involvement in distinct music subcultures or their status as fans of particular music niches, which played a role in shaping their self-perceived identities. Thus, it can be inferred that the participants in this research generally exhibit both the knowledge "in" and "about" music mentioned above. Analyzing the perspective of students of music-related subjects or musicians has proven to be a methodologically reliable practice (Juslin & Isaksson, 2014), particularly regarding the relationship between music and the devices that mediate its enjoyment (Flynn, 2016). In contrast to previous studies, which often included music students for convenience within course assignments, this study deliberately selected competent participants without any obligations toward the researcher.

Volunteers' generic profiles are summarized in Table 1.

Table I. Research Sample.

	Gen.	Age	Origin	Residence	Education	Field	Work experience
PI	М	33	Brazil	NL	Research MA	Music Industry	Yes
P2	F	23	France	NL	Research MA	Musicology	No
P3	F	32	NL	NL	MA	Musicology	Yes
P4	F	25	NL	NL	MSc	Music Psychology	No
P5	M	25	Italy	Italy	MA	Music Business	Yes
P6	M	23	Italy	Italy	MA	Music Business	Yes
P7	M	26	Italy	Italy	MA	Music Business	Yes
P8	F	26	Italy	Italy	MA	Music Business	Yes
P9	F	27	India	UK	MA	Music Industry	No
PI0	M	28	UK	UK	PhD	Musicology	Yes
PII	М	27	Japan	UK	MA	Composition	Yes
PI2	F	23	Ukraine	UK	MA	Music Industry	No

This study employed three methods:

- 1. Semi-structured interviews. Around 60-min face-to-face interviews were conducted. The interviews were divided into four macro-areas: personal background, esthetic judgments, listening habits, and streaming platform usage. The interviews were recorded, transcribed by an AI speech recognition app, edited by manual review, and analyzed using NVivo with codes determined according to Strauss and Corbin (1998) and Flick et al. (2004: 253–258) guidelines.
- Reflective diaries. Participants were asked to keep weekly reflective diaries on their music listening experiences, including consumption contexts, moods, and technologies used. They provided a more open and conscious presentation of participants' perceptions. The methodological principles were mainly based on Couldry et al.'s (2007) approach.
- On-platform-activity data analysis. Volunteers were requested to provide five datasets ("Inferences," "Playlists," "StreamingHistory," "SearchQueries," and "YourLibrary") obtained querying Spotify's Web API. Metadata was then aggregated. The programming language used for the calculations was Python.

Each method accesses different perspectives of the informants. While interviews and diaries express a subjective standpoint (albeit of varying intensity), the digital method offers a more objective one. A comparison was sought between these various levels of analysis. To the best of current knowledge, the combined use of these three methods has not yet found application in this specific field of study; the integration of the data obtained from each of them has been carried out as a validation strategy, as an approach to the generalization of the evidence that has emerged and as a pathway to further knowledge.

It is essential to clarify that volunteers' privileged status carries specific implications regarding how they exercise their agency on the platform and how they react to and interpret the affordances of the platforms. For this reason, this study's research design was structured to capture both objective and subjective aspects of their platform experience. In contrast to interviews, diaries afford participants greater freedom in articulating their thoughts about specific situations, enabling them to externalize their considerations in real-time as events transpire, allowing volunteers to rationalize, correct, and revise their entries, resulting in a more conscious presentation of their perceptions. This method proves valuable for gaining a close understanding of how listening practices unfold within the everyday context, offering an immediate self-representation of usage contexts, reflecting users "intrapersonal subjectivity." Interviews, on the contrary, offer a space for users to articulate their broader views on platform affordances, biases, expectations, and tastebuilding behaviors, thereby illustrating their "interpersonal

subjectivity" more explicitly. Within this design, the API data analysis function is implemented to offer an objective portrayal of user activity. This analysis identifies discrepancies between users' actual behaviors and their perception or desire to self-represent their music consumption experience.

Prior to data acquisition, the study did not set out to answer a specific research question. An approach inspired by the principles of grounded theory (Glaser, 1992; Oktay, 2012) was favored. This study aspires to understand how the structures of algorithmic systems interact with a particular type of user who experiences them daily, the emergent sensemaking processes, and the reflexive interpretation of users' agency while discovering and consuming platform cultural content (Kennedy & Hill, 2018). In line with Hagen's (2015, pp. 41-44) previous study, this research sought to adopt a phenomenological approach that finds its epistemological basis in the principles set out in 1932 by Alfred Schütz (1967). Consequently, the objectively and subjectively meaningful interpretations of reality reported by users were understood in their intersubjective dimension, making them both empirical sources and analytical objects of the study.

Data were collected between December 2021 and August 2022 and analyzed between June and November 2022. The study was carried out after collecting participants' informed consent. Informants voluntarily participated in the study, aware that no information given could be traced back to their identity. The language used for interviews and diaries was English, apart from the interviews conducted in Italy, which have been in Italian and then translated as literally as possible. Previous studies (Hagen, 2016, 2022) with similar research designs support the adequacy of the sample size.

Findings

The aggregated data analysis immediately highlighted notable differences in the habits of the volunteers compared with the general public. For instance, the analysis of API data revealed a minimal overlap between the 50 most-listened-to artists by participants and the global 50 most-listened-to artists during the same period. The users' behaviors further validate the distinctiveness of the sample, as evidenced by their preferences for niche magazines, gig attendance, engagement in the local music scene, motivations for purchasing physical records, and the marked preference for genres such as jazz, classical music, film music, and especially alternative rock. A similar outcome would have been attained had the 50 most-listened-to artists from any other listener niche, regardless of their musical expertise, been considered. However, in this particular instance, such a specification carries precise implications. Indeed, despite the interviewees' reluctance to hierarchise music based on its commercial achievement, there exists a prevailing sentiment among the volunteers that engaging with mainstream pop may serve as a means to showcase a sense of intellectual openness (as a participant puts it in their diary, "I hate how people pretend

to be all edgy by listening to Taylor Swift instead of [list of independent/non-mainstream artists], it's just fake intellectualism"). This position aligns with Barna's (2020, p. 90) observation that "[t]he main paradox of the poptimist stance is that [. . .] it [. . .] entails the demonstration of elevated levels of cultural capital and distinction."

The qualitative data yielded a multitude of insights. Each transcription underwent separate coding, followed by a comprehensive comparison of the codes. By aligning the raw data with the labels and definitions of emerging themes, 12 distinct themes were identified and subsequently organized into two primary thematic areas. The first area concerns users' perceptions of how platforms have impacted their listening habits, specifically transforming or conditioning their relationship with recorded music industry products. The second area focuses on participants' perceptions of platform affordances and the necessary efforts to achieve a more fulfilling listening experience.

Do Platforms Improve Consumer Experiences?

The impact of algorithmic media on participants' listening habits is a recurring theme in their reflections, frequently juxtaposed with their past experiences. As the employed analysis prioritizes participants' perceptions, it is essential to acknowledge that time perception is subjective; thus, the past is subjectively understood as a phase preceding the introduction of current technologies and media. Considering the diversity of age groups among the respondents, the reflections on changes in their listening habits may encompass experiences that occurred during their teenage years or just a few years prior. This approach ensures a nuanced understanding of each participant's experience.

Participants' reflection on how platforms impacted their consumption styles primarily concerns playback technologies, emotional engagement while listening, and new music discovery strategies. The initial two will be addressed in this section. Volunteers agree that their training has made them more demanding during their formative years. Simultaneously, they perceive their expertise has been fostered by their proactive quest for more conducive listening conditions, as well as the necessity to make efforts to discover non-mainstream music.

Most participants indicated a significant decline in their use of high-end playback technologies. While audiophile-grade stereo systems and hi-fi headphones are still preferred, the majority now rely less on them since using digital media, settling for lower quality standards that suit their current consumption habits:

I used to focus on the quality of the stereo system and the bitrate when downloading music, I now find myself adapting to cloud-based services. [. . .] I used to prefer FLAC format for my albums, I no longer store files and have adjusted my listening habits accordingly. (P5, diary)

Most participants demonstrate a sound comprehension of the advantages of employing high-end technology in terms of the quality of listening experience and the ability to mobilize technologies and media, particularly vinyl records, as markers of distinction. However, diary analysis revealed that listening to physical records through stereo systems has practically disappeared from the volunteers' habits, underscoring a notable disparity between their perceived aspirations and current practical needs. Interviewees themselves, mostly students residing in shared accommodations, consistently attribute their limited use of hi-fi systems to economic and logistical constraints. Moreover, volunteers have reported that reducing the playback quality of their listening experiences is also correlated with a decline in the quality of their engagement:

My appreciation is definitely heightened when listening through superior technology, like through a better system because I'm potentially receiving more sonic information. (P10, interview)

Through analysis of interviews and diaries, previous research findings were confirmed, suggesting that contemporary technologies, including streaming platforms, tend to foster a disengaged listening approach accompanied by reduced emotional intensity. However, it is vital to acknowledge that the decrease in listening intensity is not exclusively dependent on technology. Competent listeners, in particular, tend to cultivate an elevated sense of their preferences over time, which leads to a more rational and analytical approach to music. Particularly in their diaries, volunteers have recognized that they primarily utilize recorded music as a backdrop for other tasks. The situational aspect of listening, which is influenced by circumstances or moods, has emerged as the primary mode of listening for the participants, in contrast to the past:

I have a playlist for when I paint and one for when I do chores. One for when I shower and one for when I go running. One for when I'm in a good mood and one for when I'm in a bad mood. One for social situations and one while studying alone. I also have one with songs that my dog howls, yes, so we can sing them together. (P4, interview)

Music has become a background for getting from point A to point B, and the emotional level is very low. . . but it's much higher if I listen to vinyl records, and very high at gigs. (P6, interview)

Respondents concur that listening via platforms generates distracting and compulsive experiences, which they balance out by engaging in other activities that are not strictly related to recorded music, such as attending concerts. This allows them to re-establish an unmediated connection with music through moments of aggregation or buying merchandise gadgets and physical records (although records are widely perceived as too dear to be purchased regularly). Participants

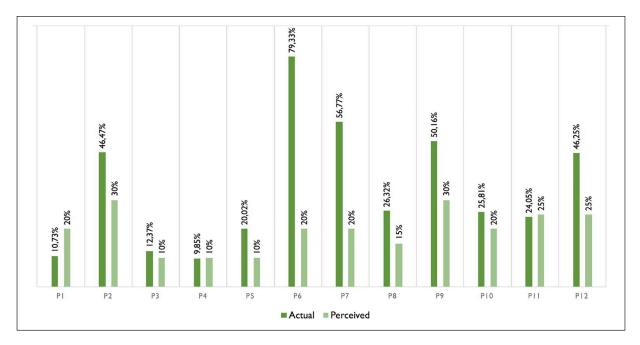


Figure 1. 30-s skip rate from smartphone.

also acknowledge that they tend to listen to recorded music more erratic and frenzied than they would like, often switching to another track after listening for just a few seconds or halfway through a song to assess its worthiness for more attentive listening:

I still struggle to understand how to explore Spotify properly because it forces me to be in a hurry, to listen to everything for three seconds, because everything is there. It takes the magic out of me. (P9, interview)

The "skip rate," or the average length of time a user listens to a recording before moving on to the next, is a crucial parameter for Spotify's algorithmic system. Indeed, to profile users' tastes and accrue royalties for rights holders, tracks must be listened to for at least 30 s. The participants' skip rates were analyzed using metadata provided by users after querying Spotify's API, considering all the tracks listened to. The data under consideration are aggregated and encompasses all tracks listened to by the participants. It is evident, therefore, that when users listen to albums or playlists as background to other activities without directly browsing the platform, the skip rate is lower. Therefore, high skip rates do not necessarily correspond to low levels of engagement, as the "listening context" plays a key role in defining both the intensity of the musical experience (Chirico et al., 2015; Stockfelt, 1997) and the use of platform features to switch between tracks. During the interview, participants were asked to hypothesize—also considering those flow experiences in which the skip rate is necessarily lower—what percentage of the total number of tracks played were listened to for less than 30 s. Interestingly, participants' estimations of their own 30-s skips were significantly lower than what the API data analysis revealed. Therefore, it could be argued that the platform encourages superficial listening more than participants acknowledge, even during flow experiences when the skip rate is lower (see Figure 1).

Upon closer examination of the data, it is observed that track skipping takes place considerably prior to 30 s. Figure 2 shows that the majority of next-track skips happen during the initial moments of track playback, with a gradual decrease thereafter.

As per some platform developers (Lamere, 2014), high skip rates do not necessarily indicate a hurried, disengaged, or passive listening approach. Instead, they could indicate greater user involvement in organizing and selecting preferred tracks. This is partially supported by the observation of higher skip rates among younger individuals and those with more leisure time. The participants in the study exhibit a differing perception, as frequent switching between songs is viewed by them not as a sign of refined taste but rather as a decline in attention retention.

Implementing a cross-referencing approach provided insights into the significance of users' expertise in their consumption habits and subsequent evolution. Flynn's (2016) framework was deemed the most adequate to classify listening styles. It has been observed that competence is often linked to a reluctance to adopt "prescriptive" listening positions characterized by minimal control, typically limited to channel switching. However, the increased utilization of platforms has likely given rise to other forms of passive listening that unconsciously reflect their competence. One such style is "decisive" listening, which lacks deep contemplation and active participation but involves the purposeful use of

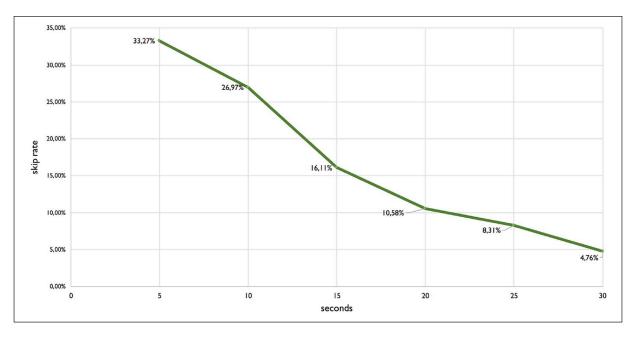


Figure 2. Skips distribution within the first 30s.

music to connect with one's memories or moods. We noted this listening style among participants who employed it specifically with familiar music, utilizing it for mental singing or as a motivational aid.

A slightly more active position, allowing users to tap into their cultural capital, is termed "narrative listening," whereby the listener appears to respond to an innate search for a personal story through their music selection. Participants predominantly assumed this position when consuming their self-composed playlists, which evoked memories or influenced their daily activities. These listening experiences involved a moderate level of emotional engagement and were employed by participants to align their daily lives with their moods. Despite Kamalzadeh et al.'s (2016) argument that the abundance of recorded music disseminated by platforms may discourage the exploration of new music and reinforce existing personal taste preferences, competent listeners consistently aspire to discover novel musical experiences. They strive to establish an emotionally charged connection with musical novelty, driven by a paradoxically nostalgic attitude that links this desire to their past. Although many participants believe that contemporary music is of lesser quality than an idealized past, they continue to exhibit a strong inclination to explore new offerings. This desire becomes evident when their listening mode becomes "impactive," centered around seeking sonic information that can captivate their interest in an unfamiliar piece. Often, this occurs while navigating through the algorithmic flow in search of timbral elements that pique their curiosity.

Informants, while claiming to sometimes resort to an immersive type of listening, say not only that they have found themselves in that position more frequently in the past

but that the systematic assumption of that position has been fundamental to the development of their listener personality and the definition of their general relationship with music:

I think of the records that changed my life . . . that made me who I am today. They were records that needed much listening before being appreciated and understood. Take "The Velvet Underground & Nico" . . . it opened up a world for me, but I didn't get it straight away . . . it took me dozens and dozens of listens. With digital music, that kind of attention is simply impossible. (P5, interview)

Maybe if I had Spotify at the time when I got into music, I wouldn't have gotten into music, because I wouldn't have come to know those things that you discover when you listen carefully and when you have the strength to filter independently everything that the music scene has to offer. (P3, interview)

In sum, competent listeners have a fairly clear idea of how platforms have intervened in their listening habits. In some of these cases, the intervention of algorithmic media is evaluated positively as convenient in terms of costs, logistics, and accessibility:

I should be supporting the industry more, but streaming platforms' convenience is overwhelming. And I do have to think about the financial outlay. The idea of having to purchase all of that media individually wouldn't be viable financially. (P10, interview)

In most cases, the participants' judgment is more pessimistic, as in their perception, the current media ecology would favor more distracted and situational listening, with lower emotional participation, with worse-performing

playback devices. Nevertheless, none of the respondents declared their intention to stop using streaming platforms in the short term, primarily due to a lack of alternatives.

The critical analysis of users' listening habits, framed within Flynn's (2016) classification, provided insights into how users may deliberately deploy their competence through actions and expressions to differentiate themselves as part of their identity-building projects. However, the performance of distinction appears loosely tied to specific platform uses, thereby precluding the assertion of "distinction through the platform." In this case, the exception is represented by the claim made by some participants of sharing their Spotify Unwrapped (the viral campaign enabling users to view and share their platform activity highlights from the past year) on social media. Instead, this performance of distinction primarily seems to occur through the adoption of a "platform criticism" stance, which involves users explicitly distancing themselves from certain platform services perceived as homogenizing, such as editorial playlists, a sentiment corroborated by the analysis of API data indicating limited participants' engagement with these playlists. Therefore, user dissatisfaction with the platform's service can be understood in two ways: either users' "performance of competence" implies a "platform criticism" stance, or the inherent features of music streaming services, despite their perceived indispensability, may not fully meet the requirements of specific user groups.

Are Music Platforms Suitable for "Musically Competent" Users?

As emerged from the analysis of respondents' perceptions, most believe that platforms like Spotify are structured to serve inexperienced users while forcing more knowledgeable listeners to conform to standardized consumption styles. Similar listening positions can be observed in both digital and analog media consumption. Flynn (2016, pp. 51–52) argued that a particular listening position termed "conversive listening" has emerged in the current platform context. Regardless of the users' listening position, streaming platforms use algorithms to capture and datafy user behavior to increase their emotional involvement, leading to a conflict between the platform's taste profile and the individual taste cognition of the user. Such a dynamic would lead to a flexible, adaptable, and personalized experience based on a combination of the emotional expectations algorithmically generated by the platform based on the user's behavior, allowing for real-time customization.

Data analysis showed that users are cognizant of the described mechanisms but perceive them as a platform vulnerability. Indeed, participants appeared to be aware that both trending and collaborative filtering algorithms operate to increase platform traffic by prioritizing data based on their quantitative salience. For this reason, most of them believe that platforms have a limited ability to understand

tastes that differ from those of less demanding users, since trained users would have different needs from users who are satisfied with the content that generates the most traffic. Particularly, volunteers expressed discontent with the platform's recommendation system, which they felt deprived them of the delight of discovery. They believe that Spotify's algorithm treats all users equally, regardless of their music preferences or consumption style. Participants think the system caters only to those with low demands, who are interested in listening to popular tracks rather than discovering new, diverse artists. They argue that the algorithm should recommend a broader range of tracks to make the listening experience more varied:

I hate Spotify's algorithm, [...] it wants to get you into tunnel vision, but with people who know a lot of music and listen for specific reasons it [...] constantly makes wrong associations. [...] I think it's tailored for people who know little about music, and then it ends up making them even more conformist. (P8, interview)

If you listen to niche genres, Spotify will give you indications by making wrong correlations. For example, if I listen to an electronic music producer who has collaborated with a bigger rapper, it will give me music from that rapper's circuit. And if I try to make the algorithm realise that it is wrong and I listen to another similar but Swedish electronic artist, as a related artist, it will give me some Swedish, again failing to understand what I really want. (P5, diary)

Spotify often recommends either stuff that is too famous or irrelevant to what I'm listening to. [. . .] In general, it seems to me to encourage stuff that's already famous. There's a lot of bias towards the mainstream, whereas I'm looking for something more sophisticated. (P7, diary)

Some participants expressed their discontent with the vagueness of the recommenders in specific musical and stylistic contexts. Classical music listeners usually raise such a remark:

You notice Spotify's tendency to undervalue the complexity of users and level them off. You see it with classical music. There can be a thousand reasons why I'm listening to that specific Beethoven piece. If you immediately after suggest a Mozart piece in a different form, it means you are trivialising me as a listener. (P11, interview)

I think Spotify should bring in musicologists to work more on the classical music algorithm. The correlations it makes are surreal. Why does it suggest 19th-century French opera after a Renaissance Italian composer? Can something as broad as Western classical music be classified so vaguely? (P2, interview)

Although Airoldi (2016, pp. 1–13) suggested that YouTube's recommendation system, while more crowd-generated, is associated with fragmented and situational consumption patterns as well (at least among the general public),

most participants expressed a preference for the YouTube recommendation system over Spotify's for discovering new music, as it creates more opportunity for out-of-print or peripheral music, even if of lower audio quality or illegally uploaded. Participants perceived the inability to use YouTube from smartphones in the background as indicative of a more active approach to listening and discovery. Participants' preference for an algorithm perceived as more "human" than Spotify's highlights a tendency to value recommendations based on the level of disintermediation and user effort required for the search. In other words, a recommendation from a trusted acquaintance or reference music journalist would have a more substantial impact on users' tastes and inspire more active search and discovery efforts. In contrast, Spotify's algorithm would have a weaker effect. This suggests that activities such as reading books or magazines or visiting record shops, which serve as essential aggregative functions (Timberg, 2015, p. 64), can have greater persuasive force than an automated and depersonalized process, leading to positive cultural transmission dynamics:

Spotify's algorithm flattens discovery by converging processes, diminishing effort to find hidden gems. [. . .] [T]he single digital environment takes away the value of searching, which can also affect the quality of the music you have discovered. (P5, interview)

The more it gets human and material, the more my appreciation grows. (P7, diary)

Quite a few users even claim that, if they could, they would prevent platforms from suggesting related content, so they would only have to resort to sources that would make their discovery processes more articulate and meaningful:

I have installed some extensions on my laptop's browser so that [...] the recommendations section is blocked. [...] I wish the same could be done with Spotify. A Spotify without recommendations. (P3, diary)

Interestingly, competent users have a different relationship with Spotify playlists than the general public. The curatorial power of platforms through playlists is widely recognized among scholars. In fact, playlists perform a gate-keeping function (Bonini & Gandini, 2019), mediate between platform markets (Prey, 2020), logistically facilitate both users (Barna, 2017) and the platforms (Eriksson, 2020), and contribute to generating new cultural imaginaries (Raffa & Pronzato, 2021) and affective horizons (Siles et al., 2019). Nevertheless, as mentioned above, respondents showed indifference toward editorial playlists, as editorial playlists are deemed to be primarily designed for inexperienced users and not particularly satisfying for those with more advanced competencies.

Participants credit their "listener personality" to growing up with record albums instead of singles. The emergence of

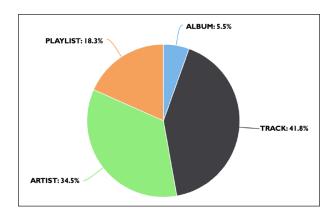


Figure 3. Query-content interaction.

record albums in the second half of the 20th century is believed to have advanced popular music by providing more comprehensive and diverse products with varying artistic and cultural content. However, the digital transition has favored the consumption of singles, associated with less demanding audiences (Blake, 2020; Chang, 2022; Negus, 1992, pp. 54–56), and volunteers have expressed concerns about this:

The need for three-minute and 33-second songs has always existed in pop. But there were alternatives. There were albums in which you could explore new directions. [. . .] I don't understand how the tightening of structures can generate innovation. (P6, interview)

Some respondents believe platforms technically discourage playing albums in full by promoting individual track listening. API data analysis (see Figure 3) revealed that only 5.5% of queries on the platform result in interaction with an album, compared with 42% for single tracks and 34.5% for artists. Surprisingly, 18% of queries result in interaction with a playlist, a form of content participants say they search for much less frequently than albums. The cause of this discrepancy between user perception and actual behavior remains unclear, and it is challenging to determine whether platforms limit album discovery or if it reflects user preference.

More generally, participants' platform interaction does not seem to be optimal. As indicated in Table 2, only half of the queries result in a listening.

Overall, informants believe that music streaming platforms are not catering to the needs of musically competent users. This perception, although partially substantiated by the low levels of positive interaction between queries and results, could once again be indicative of a desire for distinction and a willingness to appear averse to conforming to a mainstream platform, as users persist in utilizing the service and continue to discern tangible advantages. However, what proves particularly intriguing is that it emerges a shared feeling according to which greater levels of control over the devices mediating the search for and listening to recorded music imply lower levels of engagement:

Table 2. Negative Query Interaction.

Participant	% negative interaction		
PI	16.58		
P2	39.44		
P3	89.58		
P4	33.64		
P5	53.19		
P6	34.38		
P7	43.21		
P8	43.09		
P9	58.75		
PI0	66.02		
PII	52.14		
PI2	72.43		
X	50.20		

The less I hold my phone, the less I use Spotify as if it were Instagram or Facebook, and therefore the more I enjoy listening. (P2, diary)

These views align with prior research (Flynn, 2020), which suggests that while streaming platforms allow for the personalization of music choices, they increasingly reduce the knowledge, skills, and time investment required from users. Competent users' concern is that this constant simplification of the user experience for less demanding users may lead to a generalized simplification of the relationship between cultural product and user, resulting in a progressive lowering of the demand for more nuanced and meaning-rich music content that require more interpretive work from listeners. According to most respondents, this dynamic could be detrimental to any type of user, but also to artists and music as an art form. There are also intermediate positions that propose that the cultural value of platforms is contingent on how their users employ them, while for users who do not engage in exploration, platforms provide resources that are similar to those available prior to the advent of music streaming:

One thing that worries me about Spotify is its ability to meddle in cultural processes. For example, through playlists, Spotify has practically created genres [. . .] born from the activity of musicians or labels but from a platform that creates its correlations to control the market algorithmically. (P5, interview)

Spotify, as well as social media, create bubbles . . . like cultural confirmation biases. We have seen the terrible effects of these processes on politics, why shouldn't they have on culture? (P8, interview)

Some participants do not share such a pessimistic perspective. A minority believe that the platforms' modes of discovery and listening could afford even less knowledgeable listeners to broaden their musical horizons. This is due to the

limitless supply of content, which allows even niche artists to be discovered, and the reduction of certain symbolic and material costs enabled by the platforms. In their opinion, despite potential drawbacks, ease of access to cultural content, self-determination of choice, and affordability may outweigh any negatives. In general, however, these views remain rather isolated and, moreover, indicate a potential for platforms to favor users in disadvantaged positions, but do not refute the perception that the affordances of streaming services, particularly algorithms, are designed for less competent users. Moreover, the platform's affordances would not spur average users to more meaningful uses, but on the contrary, would push competent users to more cursory ones.

Conclusion

In sum, competent users have expressed concerns that music streaming services worsen knowledgeable consumer experience and undervalue knowledgeable users' needs. The central question that has preoccupied these users, particularly in their diaries, is whether such platforms can genuinely be considered cultural resources. However, while only a few hold a favorable view, most users do not intend to abandon music streaming services:

Despite all these hassles and my dissatisfaction, I don't think I can do without Spotify anymore . . . mine is a kind of [. . .] makedo-with listening. (P6, interview)

This study has revealed a widespread ambivalence toward platforms among participants. While they view them as valuable tools that cannot be renounced, they also see them as potentially threatening devices for musicians, listeners, and esthetic forms. The "make-do-with listening" referred to by the participant (and that resonates in the perceptions of many) characterizes a type of consciously submissive listening to which there is no alternative but which the users themselves have little interest in overcoming. Although it is considered impoverishing, regressive, and left to the arbitrariness of algorithms, it is also considered necessary and appropriate to current lifestyles.

Maintaining a certain detachment when interpreting users' opinions is necessary, as platform criticism can be biased. As Hesmondhalgh (2022) pointed out, such criticism often relies on past interpretative categories, selectivity of evidentiary examples, vague demonstrative criteria, snobbery, and a lack of consideration of broader social processes. Participants in this study also exhibited rhetorical-argumentative fallacies in their views, including statistical generalizations, cherry-picking, misconceptions of composition, and post hoc correlations. Despite the potential bias inherent in their judgments, the insights collected proved invaluable. These participant perspectives facilitated the development of a theory grounded in users' perceptions and feelings analysis. Data examination showed that music

Raffa II

streaming services' affordances may negatively impact listening experiences. Interestingly, however, the same findings also suggest that adopting a critical stance toward platforms can serve as a distinction marker among specific listener groups.

The study of the relationship between a limited number of subjects which contribute to the techno-cultural structure of the platform macrosystem (Van Dijck, 2013, p. 25) and the way in which they critically relate to the technical and socio-economic structures of the platforms can indeed reveal many critical aspects of the current cultural system beyond the conditioning, prejudices, and ideologies of the users. What emerged is that most of the participants in this study expressed concerns regarding the opacity of platform processes. However, while respondents recognize the problems that datafication brings, including user surveillance normalization (Drott, 2018, pp. 233-267; Zuboff, 2019), a lack of clear regulatory principles (Van Dijck et al., 2018), oppressive and discriminatory effects on the public sphere (Milan & Treré, 2019; Noble, 2018; Vaidhyanathan, 2018), and excessive interference of algorithmic power on esthetic experience (Hanrahan, 2018, 2019), they also express a feeling of "digital resignation" (Draper & Turow, 2019).

In conclusion, this study has highlighted two particular issues. First, musically competent users felt that platforms have impoverished their consumption experience by reducing adventurous search strategies, lowering technological standards for audio playback quality and limiting the consumption of less stereotypical music materials. Second, platform infrastructures are perceived to be predisposed to users with reduced cultural demands, resulting in less consideration for particular consumer groups, such as classical music listeners. In both cases, as evidenced by apparent discrepancies in both intrasubjective and intersubjective perceptions of agency in comparison to actual agency, the idea that platforms do a disservice to users' idealized sense of taste may reveal a proclivity toward the pursuit of distinction and a deliberate distancing from mainstream media, strategically enacted to assert participants' status of "competent user." These issues, examined through the lens of on-platform activity analysis that revealed the objective aspects of participants' consumption experiences, converge on a final question. The initial premise of this study posited that knowledgeable consumers possess the ability to reconfigure the functionalities of cultural consumption technologies strategically. This study suggests that music streaming platforms might be structured as media entities with inflexible affordances that limit opportunities for critical negotiation and the violation of their rigid structures. Nevertheless, surprisingly, even individuals potentially interested in critically reassessing their relationship with these media platforms tend to resign themselves, relinquish their agency expansion, and conform to the platform's prescribed norms. It cannot be conclusively stated that proficient users

privately appreciate platforms while publicly expressing disdain to avoid appearing conformist. However, the absence of overt resistance to the affordances of streaming services or attempts at "tactical" circumvention of their constraints raises questions and warrants consideration for future research.

The significance of this study lies not only in its findings but also in its methodology. The aim was to explore the sense-making dynamics of platform users by examining the relationship between the objective and subjective aspects of their consumption experience and to construct a theory based on these diverse perceptions. This research's mixed use of interviews, reflective diaries, and API data presents a novel approach not documented in prior studies. Through its implementation, this study has demonstrated the efficacy of this method in comprehending the intricate connection between individuals' agency and the affordances offered by digital media. Thus, the methodology employed presents a promising avenue for both appraising biases in platform criticism and uncovering the concealed influence wielded by algorithmic media. Within the scope of this study, this approach helped evaluate inherent prejudices in platform criticism, particularly in gauging whether users' perceptions are influenced by narratives that diverge from their actual platform usage. Concurrently, it enhanced our comprehension of how platforms may covertly exert influence to shape user behavior. Subsequent investigations could further verify this research design's methodological validity and applicability.

Prior research has suggested various pathways for the evolution of music consumption, which bear some similarities to the findings of this study. Specifically, enduring technologies are anticipated to continue to simplify the consumption process, reducing users' expected expertise. However, the cultural implications of these trends remain incompletely comprehended and, as such, have emerged as a subject of growing scientific interest, prompting a surge of academic investigation across multiple disciplines. This research seeks to add to this burgeoning field of studies in a meaningful, albeit limited, manner.

Acknowledgements

The author thanks Mathew Flynn, Michiel Kamp, and Tom Ter Bogt for their support.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Massimiliano Raffa (D) https://orcid.org/0000-0003-1264-3460

References

- Adveef, M. (2014). Young people's musical engagement and technologies of taste. In A. Bennett & B. Robards (Eds.), *Mediated youth cultures: The Internet, belonging and new cultural configurations* (pp. 130–145). Palgrave Macmillan.
- Airoldi, M. (2021). The techno-social reproduction of taste boundaries on digital platforms: The case of music on YouTube. *Poetics*, 89, Article 101563. https://doi.org/10.1016/j.poetic. 2021.101563
- Airoldi, M., Beraldo, D., & Gandini, A. (2016). Follow the algorithm: An exploratory investigation of music on YouTube. Poetics, 57, 1–13. https://doi.org/10.1016/j.poetic.2016.05.001
- Barna, E. (2017). "The perfect guide in a crowded musical land-scape": Online music platforms and curatorship. *First Monday*, 22(4), Article 6914. https://doi.org/10.5210/fm.v22i4.6914
- Barna, E. (2020). The relentless rise of the poptimist omnivore: Taste, symbolic power, and the digitization of the music industries. In T. Tofalvy & E. Barna (Eds.), *Popular music, technology, and the changing Media ecosystem* (pp. 79–95). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-44659-8 5
- Bartmanski, D., & Woodward, I. (2015). The vinyl: The analogue medium in the age of digital reproduction. *Journal of Consumer Culture*, *15*(1), 3–27. https://doi.org/10.1177/1469 540513488403
- Blake, E. (2020, October 29). Who listens to albums anymore? *Rolling Stone*. https://www.rollingstone.com/music/music-features/who-listens-to-albums-anymore-1082287/
- Bonini, T., & Gandini, A. (2019). "First week is editorial, second week is algorithmic": Platform gatekeepers and the platformization of music curation. *Social Media* + *Society*, 5(4), 1–11. https://doi.org/10.1177/2056305119880006
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Harvard University Press.
- Bourreau, M., Moreau, F., & Wikström, P. (2022). Does digitization lead to the homogenization of cultural content? *Economic Inquiry*, 60(1), 427–453. https://doi.org/10.1111/ecin.13015
- Brinner, B. (1995). *Knowing music, making music: Javanese gamelan and the theory of music competence and interaction.*The University of Chicago Press.
- Bryson, B. (1996). Anything but heavy metal: Symbolic exclusion and musical tastes. *American Sociological Review*, 61(5), 884–899. https://doi.org/10.2307/2096459
- Bull, M. (2007). Sound moves: IPod culture and urban experience. Routledge.
- Chambers, S. (2023). The curation of music discovery: The presentation of unfamiliar classical music on radio, digital playlists and concert programmes. *Empirical Studies of the Arts*, 41(1), 304–326. https://doi.org/10.1177/02762374221128729
- Chang, S. (2022). Two faces of decomposability in organizational search: Evidence from singles versus albums in the music industry 1995–20. *Journal of Strategic Management*, *15*(1), 1–54. http://doi.org/10.2139/ssrn.3621084
- Chirico, A., Serino, S., Cipresso, P., Gaggioli, A., & Riva, G. (2015). When music "flows." State and trait in musical performance, composition and listening: A systematic review. Frontiers in Psychology, 6, Article 906. https://doi.org/10.3389/fpsyg.2015.00906

- Chodos, A. T. (2019). What does music mean to Spotify? An essay on musical significance in the era of digital curation. *INSAM Journal of Contemporary Music, Art and Technology*, 2(2), 36–64. https://doi.org/10.51191/issn.2637-1898.2019.2.2.36
- Coulangeon, P. (2017). Cultural openness as an emerging form of cultural capital in contemporary France. *Cultural Sociology*, 11(2). https://doi.org/10.1177/1749975516680518
- Couldry, N., Livingstone, S., & Markham, T. (2007). *Media consumption and public engagement: Beyond the presumption of attention*. Palgrave Macmillan.
- DeNora, T. (1999). Music as a technology of the self. *Poetics*, 27(1), 31–56. https://doi.org/10.1016/S0304-422X(99)00017-0
- DeNora, T. (2000). Music in everyday life. Oxford University Press.
 Draper, N. A., & Turow, J. (2019). The corporate cultivation of digital resignation. New Media & Society, 21(8), 1824–1839. https://doi.org/10.1177/1461444819833331
- Drott, E. A. (2018). Music as a technology of surveillance. *Journal of the Society for American Music*, 12(3), 233–267. https://doi.org/10.1017/S1752196318000196
- The Economist. (2018, January 11). Having rescued recorded music, Spotify may upend the industry again. https://www.economist.com/business/2018/01/11/having-rescued-recorded-music-spotify-may-upend-the-industry-again
- Eriksson, M. (2020). The editorial playlist as container technology: On Spotify and the logistical role of digital music packages. *Journal of Cultural Economy*, 13(4), 415–427. https://doi.org/ 10.1080/17530350.2019.1708780
- European Commission. (2020). Work stream on differentiated treatment: Expert group for the observatory on the online plat-form economy. https://ec.europa.eu/newsroom/dae/document. cfm?doc id=68355
- Fleischer, R. (2017). If the song has no price, is it still a commodity? Rethinking the commodification of digital music. *Culture Unbound: Journal of Current Cultural Research*, *9*(2), 146–162. https://doi.org/10.3384/cu.2000.1525.1792146
- Flick, U., von Kardoff, E., & Steinke, I. (2004). *A companion to qualitative research*. Sage.
- Flynn, M. (2016). Accounting for listening: How music streaming has changed what it means to listen. *Kinephanos—Journal of Media Studies and Popular Culture*, 6, 36–59.
- Flynn, M. (2017). Accounting for genre: How genre awareness and affinity affects music streaming use. In H. Barlow & D. Rowland (Eds.), *Listening to music: People, practices and experiences.* https://ledbooks.org/proceedings2017
- Flynn, M. (2020). *Back to the future: Proposing a heuristic for predicting the future of recorded music use.* In E. Mazierska, L. Gillon, & T. Rigg (Eds.), *Popular music in the post digital age* (pp. 211–234). Bloomsbury Publishing.
- Glaser, B. (1992). Basics of grounded theory analysis. Sociology Press.
- The Guardian. (2019, January 2). The guardian view on Spotify: I have a stream. https://www.theguardian.com/commentis-free/2019/jan/02/the-guardian-view-on-spotify-i-have-a-stream
- Hagen, A. N. (2015). Using music streaming services: Practices, experiences and the lifeworld of musicking [PhD thesis, University of Oslo, Oslo]. https://www.academia.edu/

- 21823524/Using_Music_Streaming_Services_Practices_ Experiences and the Lifeworld of Musicking
- Hagen, A. N. (2016). The metaphors we stream by: Making sense of music streaming. *First Monday*, 21(3), Article 6005. https:// doi.org/10.5210/fm.v0i0.6005
- Hagen, A. N. (2022). Datafication, literacy, and democratization in the music industry. *Popular Music and Society*, 45(2), 184– 201. https://doi.org/10.1080/03007766.2021.1989558
- Hanrahan, N. W. (2018). Hearing the contradictions: Aesthetic experience, music and digitization. *Cultural Sociology*, 12(3), 289–302. https://doi.org/10.1177/1749975518776517
- Hanrahan, N. W. (2019). Digitized music and the aesthetic experience of difference. In D. Arditi & J. Miller (Eds.), *The dialectic of digital culture* (pp. 165–176). Lexington Book Company.
- Hansen, M., Wallentin, M., & Vuust, P. (2013). Working memory and musical competence of musicians and non-musicians. *Psychology of Music*, 41(6), 779–793. https://doi.org/10.1177/0305735612452186
- Hargreaves, D. J. (1996). *The development of artistic and musical competence*. Oxford University Press.
- Herbert, R. (2011). Everyday music listening: Absorption, dissociation and trancing. Routledge.
- Hesmondhalgh, D. (2022). Streaming's effects on music culture: Old anxieties and new simplifications. *Cultural Sociology*, 16(1), 3–24. https://doi.org/10.1177/17499755211019974
- Holt, D. B. (1997). Distinction in America? Recovering Bourdieu's theory of tastes from its critics. *Poetics*, 25(2-3), 93–120. https://doi.org/10.1016/S0304-422X(97)00010-7
- Jarness, V. (2015). Modes of consumption: From 'what' to 'how' in cultural stratification research. *Poetics*, 53, 65–79. https://doi. org/10.1016/j.poetic.2015.08.002
- Juslin, P. N., & Isaksson, S. (2014). Subjective criteria for choice and aesthetic judgment of music: A comparison of psychology and music students. *Research Studies in Music Education*, 36(2), 179–198. https://doi.org/10.1177/1321103X14540259
- Kamalzadeh, M., Baur, D., & Möller, T. (2016). Listen or interact? A large-scale survey on music listening and management behaviours. *Journal of New Music Research*, 45(1), 42–67. https://doi.org/10.1080/09298215.2015.1133655
- Kassabian, A. (2013). Ubiquitous listening: Affect, attention, and distributed subjectivity. University of California Press.
- Kennedy, H., & Hill, R. L. (2018). The feeling of numbers: Emotions in everyday engagements with data and their visualisation. *Sociology*, 52(4), 830–848. https://doi.org/10.1177/0038038516674675
- Kibby, M. (2009). Collecting yourself: Negotiating personal music archives. *Information, Communication and Society*, *12*(3), 428–443. https://doi.org/10.1080/13691180802660644
- Klingberg, T. (2009). *The overflowing brain: Information overload and the limits of working memory*. Oxford University Press.
- Knox, G., & Datta, H. (2020). Streaming services and the homogenization of music consumption. Tilburg University. https:// research.tilburguniversity.edu/en/publications/streaming-services-and-the-homogenization-of-music-consumption
- Krause, A., & Caldwell Brown, S. (2019). A "uses and gratifications" approach to considering the music formats that people use most of ten. *Psychology of Music*, 49(3), 547–566. https://doi.org/10.1177/0305735619880608
- Lamere, P. (2014, May 2). *The skip*. Music Machinery. https://musicmachinery.com/2014/05/02/the-skip/

- Law, L. N. C., & Zentner, M. (2012). Assessing musical abilities objectively: Construction and validation of the profile of music perception skills. *PLOS ONE*, 7(12), Article e52508. https://doi.org/10.1371/journal.pone.0052508
- Magaudda, P. (2011). When materiality "bites back": Digital music consumption practices in the age of dematerialization. *Journal of Consumer Culture*, 11(1), 15–36. https://doi.org/10.1177/1469540510390499
- Markham, A., & Plothe, T. (2020). Netflix at the Nexus content, practice, and production in the age of streaming television. Peter Lang Publishing.
- Marshall, L. (2019). Do people value popular music? *Cultural Sociology*, *13*(2), 141–158. https://doi.org/10.1177/1749975 519839524
- Milan, S., & Treré, E. (2019). Big data from the south(s): Beyond data universalism. *Television & New Media*, 20(4), 319–335. https://doi.org/10.1177/1527476419837739
- Morris, J. W., & Powers, D. (2015). Control, curation and musical experience in streaming music services. *Creative Industries Journal*, 8(2), 106–122. https://doi.org/10.1080/17510694.2015.1090222
- Mulligan, M. (2014, July 14). *The death of the long tail: The super-star music economy*. Midia Research. https://www.midiaresearch.com/reports/the-death-of-the-long-tail
- Negus, K. (1992). Producing pop culture and conflict in the popular music industry. Edward Arnold Publishers.
- Noble, S. U. (2018). Algorithms of oppression: How search engines reinforce racism. New York University Press.
- Novak, R. (2016). Consuming music in the digital age: Technologies, roles and everyday life. Palgrave Macmillan.
- Oktay, J. S. (2012). Grounded theory. Oxford University Press.
- Peterson, R. A., & Kern, R. M. (1996). Changing highbrow taste: From snob to omnivore. *American Sociological Review*, 61(5), 900–907. https://doi.org/10.2307/2096460
- Pontara, T., & Volgsten, U. (2017). Musicalization and mediatization. In O. Driessens, G. Bolin, A. Hepp, & S. Hjarvard (Eds.), Dynamics of mediatization: Institutional change and everyday transformations in a digital age (pp. 247–269). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-62983-4 12
- Prey, R. (2016). Musica analytica: The datafication of listening. In R. Nowak & A. Whelan (Eds.), *Networked music* (pp. 31–48). Palgrave Macmillan.
- Prey, R. (2019). Knowing me, knowing you: Datafication on music streaming platforms. In L. Ahlers, L. Grünewald-Schukalla, M. Lücke, & M. Rauch (Eds.), *Big data und Musik* (pp. 9–21). Springer.
- Prey, R. (2020). Locating power in platformization: Music streaming playlists and curatorial power. *Social Media + Society*, 6(2), 1–11. https://doi.org/10.1177/2056305120933291
- Prior, N. (2011). Critique and renewal in the sociology of music: Bourdieu and beyond. *Cultural Sociology*, *5*(1), 121–138. https://doi.org/10.1177/1749975510389723
- Prior, N. (2014). The plural iPod: A study of technology in action. *Poetics*, 42, 22–39. https://doi.org/10.1016/j.poetic. 2013.11.001
- Raffa, M., & Pronzato, R. (2021). The algorithmic imaginary of cultural producers. Towards platform-optimized music? *H-ermes: Journal of Communication*, 19(2), 293–321. https://doi.org/10.1285/i22840753n19p293

- Ratliff, B. (2016). Every song ever. Picador.
- Rekret, P. (2019). Melodies wander around as ghosts. On playlist as cultural form. *Critical Quarterly*, 61(2), 56–76. https://doi. org/10.1111/criq.12471
- Rimmer, M. (2012). Beyond Omnivores and Univores: *The promise of a concept of musical habitus. Cultural Sociology*, 6(3), 299–318. https://doi.org/10.1177/1749975511401278
- Savage, M., & Gayo, M. (2011). Unravelling the omnivore: *A field analysis of contemporary musical taste in the United Kingdom. Poetics*, 39(5), 337–357. https://doi.org/10.1016/j.poetic.2011.07.001
- Schutz, A. (1967). *The phenomenology of the social world*. Northwestern University Press.
- Seaver, N. (2019). Captivating algorithms: Recommender systems as traps. *Journal of Material Culture*, 24(4), 421–436. https://doi.org/10.1177/1359183518820366
- Shin-Kap, H. (2003). Unraveling the brow: What and how of choice in musical preference. *Sociological Perspectives*, 46(4), 435– 459. https://doi.org/10.1525/sop.2003.46.4.435
- Siles, I., Segura-Castillo, A., Sancho, M., & Solís-Quesada, R. (2019). Genres as social affect: Cultivating moods and emotions through playlists on Spotify. *Social Media + Society*, *5*(2), 1–11. https://doi.org/10.1177/2056305119847514
- Siles, I., Segura-Castillo, A., Solís, R., & Sancho, M. (2020). Folk theories of algorithmic recommendations on Spotify: Enacting data assemblages in the global South. *Big Data & Society*, 7(1), 1–15. https://doi.org/10.1177/2053951720923377
- Small, C. (1998). Musicking. The meanings of performing and listening. Wesleyan University Press.
- Snickars, P. (2017). More of the same—On Spotify radio. Culture Unbound: Journal of Current Cultural Research, 9(2), 184– 211. https://doi.org/10.3384/cu.2000.1525.1792184
- Sterne, J. (2003). *The audible past: Cultural origins of sound reproduction*. Duke University Press.
- Stockfelt, O. (1997). Adequate modes of listening. In D. Schwarz, A. Kassabian, & L. Siegel (Eds.), *Keeping score* (pp. 88–93). University Press of Virginia.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory. Sage.
- Swaminathan, S., & Schellenberg, E. G. (2018). Musical competence is predicted by music training, cognitive abilities, and personality. *Scientific Reports*, 8(1), Article 9223. https://doi.org/10.1038/s41598-018-27571-2

Tagg, P. (2009). Music analysis for "non-musos." Popular perception as a basis for understanding musical structure and signification. https://www.tagg.org/xpdfs/CardiffLBH2.pdf

- Timberg, S. (2015). *Culture crash: The killing of the creative class*. Yale University Press.
- Vaidhyanathan, S. (2018). Antisocial media: How Facebook disconnects us and undermines democracy. Oxford University Press.
- Van Dijck, J. (2013). The culture of connectivity: A critical history of social media. Oxford University Press.
- Van Dijck, J., de Waal, M., & Poell, T. (2018). The platform society: Public values in a connective world. Oxford University Press.
- Van Eijck, K. (2001). Social differentiation in musical taste patterns. Social Forces, 79(3), 1163–1184. https://doi.org/10.1353/ sof.2001.0017
- Wallentin, M., Nielsen, A. H., Friis-Olivarius, M., Vuust, C., & Vuust, P. (2010). The musical ear test: A new reliable test for measuring musical competence. *Learning and Individual Differences*, 20(3), 188–196. https://doi.org/10.1016/j.lindif.2010.02.004
- Webster, J. (2020). Taste in the platform age: Music streaming services and new forms of class distinction. *Information, Communication & Society*, 23(13), 1909–1924. https://doi.org/10.1080/1369118X.2019.1622763
- Webster, J. (2023). The promise of personalisation: Exploring how music streaming platforms are shaping the performance of class identities and distinction. *New Media & Society*, 25(8), 2140–2162. https://doi.org/10.1177/14614448211027863
- Yang, Y. H., & Teng, Y. C. (2015). Quantitative study of music listening behavior in a smartphone context. ACM Transactions on Interactive Intelligent Systems, 5(3), 1–30. https://dl.acm.org/doi/10.1145/2738220. https://doi.org/10.1145/2738220
- Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new Frontier of Power. Profile Books.

Author Biography

Massimiliano Raffa (PhD, IULM University of Milan) is a Research Fellow at the University of Insubria (Como, Italy). His research interests include the interplay of media ecologies and music production—consumption, social esthetics, and critical digital studies.