

Technological engagement and musical eclecticism: An examination of contemporary listening practices

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Abstract

The ways in which technology mediates the relationship between people and music has increasingly evolved since the advent of playback devices. With the arrival of digital music, and its inherent culture of digitality, new issues have emerged regarding musical engagement at the level of fan and/or consumer. This paper will explore how and what people are engaging with music, as mediated by technology. These two issues will be categorized by: (1) the immense quantity of popular music available digitally is promoting a culture of eclecticism, whereby people are not tied to specific genres when defining their tastes. Personal genre alliance has fallen out of favour, and replaced by fluid definitions of genres and artists, that are user-driven and highly personalized and subjective: for example, folksonomies. (2) One of the primary ways in which people consume music is through portable media devices, such as the iPods. It is shown that there are statistically significant differences in genre preference between those who use MP3 players and those who do not. This paper utilises a dataset comprised from both qualitative and quantitative means.

Keywords: Digitality; Genre; iPod; Taste; Engagement; Consumption; Empirical; Subjectivity; Youth.

Introduction

Without engagement, music essentially becomes meaningless. The ways in which people consume music is an important aspect of why we study it, why we listen to it, and why it is distributed. The evolution of digital technologies has altered the creation and distribution of music, ultimately affecting how people consume it. (Ayers; Coleman; Taylor) Musical engagement is technologically dependent, and the technology we use to engage with music is altering the manner by which we define our engagement, on multiple levels. Much

speculation has occurred surrounding the democratisation of taste, which is perceived to be a result of digital downloading, as well as the shuffle functions promoted by digital playback devices, such as the iPod. This paper seeks to address musical engagement from a taste perspective, as mediated through digital playback technologies. It will be argued that an overriding culture of eclecticism (Avdeeff) is translating into a myriad of ways in which people engage with music and music playback technologies. This translates into a sense that value laden, genre-based definitions have become less important and freer of commercially imposed labels, in regards to how people define their musical tastes.

To examine technology's influence on taste distinctions, a certain amount of technological determinism should be taken into account. Within the discourse surrounding technology and its relationship with social processes, it is widely acknowledged that technological determinism is problematic in that it implies that technology directly influences society. Counter to that, social constructivist theories of technology, while acknowledging that the relationship between society and technology is complex and symbiotic, ignore the *consequences* of technology. This paper, however, encourages an examination of the consequences of technology, or simply, how technology is affecting musical taste. It will focus on primary sources in order to engage with contemporary music listening practices, and taste distinctions. The relationship between people, technology, and the music that they listen to, has consequences, which are explored below. People engage with music through technology, thereby influencing *where*, *how*, and perhaps *what*, they are listening to.

Background

In 2000, Steve Jones' article, 'Music and the Internet', examined the potential evolution of the study of popular music in relation to digital technology, such as online downloading. Jones' separation of the field into music *creation*, *consumption* and *distribution* afforded one view into the processes involved in music engagement but, in a sense, by focusing on the need for a scholarly focus on distribution, I find that he sets aside the notion that these three processes are intimately intertwined and mutually dependent. While it is true that without the creation and distribution of music, there can be no consumption, it also follows that without consumption, there can be no meaning. It must be noted, however, that meaning is subjective, so we should not impose value judgments on *what* or *how* people find meaning in music.

In Jones' call for a focus on the academic study of online musical distribution, he also inadvertently draws attention to the fact that musical engagement in digitality remains an understudied area, even twelve years later. Jones acknowledges that musical consumption is of primary importance to the music industry, so why is it on the periphery of academic investigation? The study of digital music technology often examines online distribution through resources such as Napster and other P2P music sharing software/sites and, as a result, Copyright issues have come to the forefront of popular music studies. This is not to say that distribution and Copyright are not, indeed, important issues, both academically and

commercially, but that musical engagement should hold a place of study and interest beyond those who actually produce and consume the music.

What remains applicable in Jones' article, in regards to music consumption, is his discussion of the role of technology in musical engagement and its influence on the alteration of musical taste definitions. Jones notes that the abundance of music available online delivers potentially endless choice for music consumers. While he does not directly address the issue of changing genre definitions, with the ever increasing accessibility of music since his paper in 2000, as well as artist and genre crossovers, we are in a better position to document that change and examine the technological reasons surrounding it.

Jones' article begs the questions: how are consumers defining musical taste in the wake of wide-spread music downloading and the proliferation of choice; are defining characteristics of taste becoming as wide-spread as choice; and do people consider their own tastes to be eclectic? Since Bourdieu's sociological examination of musical taste, the correlation between the likes and dislikes of various genres and age, gender, socioeconomic status and other social markers, has become well documented, not only within sociomusicology (DeNora; Frith; Coulangeon and Lemel), but also music-psychology (North and Hargreaves 1999, 2007; Van Eijk; North, Hargreaves and O'Neill; Bryson; Savage and Gayo). Where these studies often become problematic, however, is in their dependence on participants selecting from a small, select, pre-determined list of genres in order to determine musical taste. Studies concerned with musical taste do not generally rely on spontaneous disclosure by participants, which is due, in part, to the fact that talking about musical taste is notoriously difficult (Frith; Mithen). This applies not only to defining which genres we do and do not like, but also to simply defining 'music.' As noted by Steven Mithen:

The best definition we can attain is the phrase "I know it when I hear it". This allows for variations with regard to both cultural and individual tastes and, indeed, acceptance of what does and does not constitute music - but it is hardly very satisfactory (3).

Mithen then notes the irony in how we can define our musical tastes, with this very true statement: 'It is perhaps astonishing that we live surrounded by music, listening to and, for some, performing music, yet we can't really say what it is.' (3) To substantiate this belief, Greasley and Lamont found that the more people are engaged with music, the more difficulty they have defining their tastes within specific genre categories, often resorting to various subgenre categories, and that when discussing particular bands, would make note of how particular artists span various genres, or create new fusions of genres (956).

The acceptance of consumer-driven genre definitions, as seen in the use of online tagging, has further increased the confusion surrounding genre definitions. The subjective nature of genre definitions has reached new levels, with people defining their

tastes, not only by genre, but also in regards to what purpose the music serves for them. In other words, by tagging music for future retrieval, consumers often resort to tags completely unrelated to the musical aspects of the artist and/or song, but rather, through sites of engagement, which are correlated to ideal listening situations. For example, in addition to tagging something as 'rock' or 'pop', people will also employ terms such as 'party', 'dance', 'homework', 'sad', and so on. Although the use of tags in musical definitions has yet to be studied academically, its use for other media formats, such as photos, has garnered some interest, under the term folksonomy (Mathes; Vander Wal).

Coined by Thomas Vander Wal, folksonomy, a combination of 'folk' and 'taxonomy', characterises the way in which materials posted online are tagged or defined, and how they join a larger community. The use of tags in music is seen predominantly in sites such as last.fm and YouTube. As Sturtz notes, 'the centrally defining characteristics of folksonomies are thus their bottom-up construction, a lack of hierarchical structure, and their creation and use within a social context' (1). As opposed to an imposed classification system, this is a bottom-up approach, which is constantly evolving as users update their tags. In this sense, it is not unlike musical taste, in general, which changes with societal and generational demographics and shifts.

The results of the current study show that YouTube is one of the primary sites of musical engagement for youth and that the focus on consumer imposed tags, rather than commercially created genres, has intensified the difficulty in defining musical tastes. If each song is defined by a subjective set of parameters, then classifying music into an over-arching set of criteria becomes increasingly difficult, as does relaying this information to others. Consumers are also less likely to listen to full albums when they can focus their downloading and online purchasing power towards singles. The current digital landscape, coupled with MP3 based stores, illegal downloading and music streaming services, is promoting a singles-based culture, whereby allegiance is increasingly to the song, not the genre. In a sense, the industry has returned to the singles-based format utilised in the Top-40 market of the 1950s. What differs in the contemporary market is the means by which the music is disseminated, both in regards to the technology, as well as the sharing practices between consumers. Digital technology makes the process of acquiring and sharing music more immediate and transparent.

That being said, historically, the role of technology in genre definition and engagement is well documented. What remains to be studied is how playback technology affects musical engagement on a taste level. With increased music mobility comes the potential to have music on your person at any time, in order to be encapsulated in a personalised soundscape. Michael Bull, in his extensive study of iPod culture, defines the iPod as an urban device (Bull 2007; 2005), so how does this translate to the rural user, or those who have stepped outside its prescribed usage?

This article deals with the influence of technology on genre taste distinctions. Musical taste is explored, both quantitatively and qualitatively, employing methodologies

and data analysis techniques utilised primarily in the social sciences. What follows is an examination of contemporary listening practices via digital technology. It is not about what has changed since the proliferation of digital playback devices, but rather, that digital technology is the primary means by which most people consume music and, as such, it affects the relationship between music and listener. Primary attention is paid to MP3 players, as the results of the current study indicate that those who use MP3 players are more likely to listen to music, as well as be involved with digital technologies.

The process by which technology influences taste distinctions can be considered within a variety of theories in the study of technology (Oudshoorn and Pinch), most notably the social constructivist theory of technology (Bijker and Law; Bijker), and the social shaping theory of technology (Williams and Edge). Both acknowledge the part consumers play in the development and trajectory of a technology's lifespan, but where they fall short is in their consideration of consequences. Bijker and Law have argued that all technologies are shaped by, as well as mirror society, and that their importance lies in the choices that are made, which can be found at all levels of the narrative, from design to implementation and usage. Through an understanding of the technological narrative, a deeper understanding of social processes, or how society is organized, can be acquired.

Without an examination of technological consequences, it becomes difficult to make the leap from engagement technologies, such as MP3 players, to their affects on musical taste. In an effort to dismiss technological determinism, by incorporating the agency of consumers and the social processes working on such technologies, consequences have been overlooked. (Winner) The technologies that people use to engage with music have altered the ways in which it is defined, such as the shuffle function on MP3 players, which has potentially increased eclecticism by encouraging consumers to focus on singles, as opposed as opposed to albums, and to juxtapose genres, without pause for historicity or genre cohesion. (Levy)

In order to add to the discussion of technology and musical engagement, this paper focuses on the results of an empirical study examining digitality, music, and eclecticism. Effectively, it looks at *what* and *how* people are engaging with music. After a discussion of the methodologies utilised for the study, I explore: which technologies people are using to consume music and how respondents represent their musical tastes.

Methodologies

The dataset for this paper originates from a large scale study completed at the University of Edinburgh, which examined digital technology, taste and sociability (Avdeeff). Using surveys and interviews, the dataset is comprised of 1243 completed surveys and 216 interviews. The location of data collection can be broken down into two main sources: (A) online and (B) in-person at two high schools: Lakes District Secondary School in Burns Lake, British Columbia, Canada and Prestonpans Secondary School in Edinburgh, United Kingdom. The surveys used for the quantitative data were from sources A and B. The interviews used for source A were exploratory, based on themes from the online interviews for source B. In

person interviews were conducted because an insufficient number of high school aged students were being reached online.

In total, data was acquired from 44 different countries, with 89% of responses originating from Canada (n=351, 28.2%), the United Kingdom (n=319, 25.7%), and the United States (n=432, 34.7%). A good gender balance was achieved, with males accounting for 51.8% (n=642) of respondents, and females 47.5% (n=596). Age ranged from 13 to 82, with a medium of 26 and a mean of 28. A standard deviation of 11.4 indicates that the ages are quite spread out, but there were clusters around those in their late teens to mid-twenties. Such a small difference between medium and mean age, however, indicates that the age range is quite balanced and representative of the natural population curve.

In order to examine musical and music technology engagement, this paper will only look at a small selection of data from the larger dataset. In particular, the focus will be on respondents' answers to the interview statements: (1) *I tend to stick to one type of music and I'm heavily influenced by my friends' musical preferences*, and (2) *I have an emotional connection with music. It occupies a lot of my time*. In regards to the survey questions, responses obtained for the musical genre section, where respondents were asked to rate their level of engagement with 86 genres¹, as well as a series of questions asking for participation levels with various music playback technologies, will be examined.

Musical Taste and the Culture of Eclecticism

In recent times, with the wide-spread adoption of digital culture and digitality, or the act of being engaged with digital culture, emergent theories and discourses have sprung up regarding the democratization of taste afforded by digital technologies. The internet and digital downloading are encouraging a more democratic taste formation process, in which people are free to listen to a multitude of genres, without aligning their taste preferences to a select few. Labelling this as a democratic process is problematic, however, in that it assumes all users have the same level of digital engagement and agency in their taste production. The process by which people encounter music, engage with it and define their tastes is complex, influenced by a myriad of factors beyond technological engagement, such as traditional media sources, social circles and environment. The process may be seen as democratic, in that listeners have listening *options*, but not democratic, in that listeners do not follow the same trajectory when developing their musical tastes.

For this reason, the term 'eclecticism' is arguable a better term to define the way in which listeners are now engaging with, and defining music. Tastes are said to be eclectic, in that people do not merely listen to one particular genre, but willingly engage with a variety of genres (Coulangeon and Lemel). Where the notion of eclecticism digresses from this simple concept, is in how it manifests within digitality. It goes beyond just having eclectic tastes into the ways in which people engage with multiple mediums and technologies. Just as there is no *correct* way to define taste or engagement with music, there is no singular way in which to engage with a technology, or the internet, for that matter. This sense of eclecticism is encouraged in digitality, so that users may become eclectic consumers of

technologies, engaged with the productive aspects of consumption, as opposed to only passive consumers of media.

To provide a sense of the overall musical engagement of those involved in the study, on a scale of 5, respondents reported listening to music with a mean frequency of 4.83, indicating a very high level of engagement. This listening is more likely to occur alone (mean= 4.58), as opposed to with friends (mean= 3.62). These are not mutually exclusive categories, as people reported a high level of listening to music alone and with friends, but statistically, reports of listening to music alone was greater. **Table 1**, below, shows the mean frequencies of use that respondents reported per playback technology. As demonstrated, listening to music on a computer was the highest-reported technology, followed closely by MP3 players/iPods. The high use of digital technologies for music engagement demonstrates a high level of involvement in digitality. That being said, involvement in digitality is often a prerequisite for engagement with music in the contemporary society, as older types of listening technologies are becoming outdated and obsolete. This should not be considered a clean break between analog and digital technologies, however, as earlier digital playback devices, such as the CD player, are also becoming obsolete, in favour of streaming audio, digital downloading and MP3 players.

Table 1: Mean Frequency of Use for Music Playback Devices

Playback Device	N	Mean Frequency of Use
Listen to music on computer	1201	4.23
Use an iPod	1203	3.39
Listen to the radio	1203	3.38
Listen to music on CD player	1201	3.10
Use an MP3 player (not iPod)	1200	2.02
Use phone to listen to music	1203	1.61
Use a walkman or discman	1203	1.44

It is a widely held belief that youth are the most active consumers, as well as prosumers of online music and downloading (Tapscott; Palfrey and Gasser), which is confirmed by this study. Comparing the mean frequencies of participation between those under and over the age of thirty displays striking differences between age groups. I have utilised thirty as the age cut-off point, as those under the age of thirty are often regarded as digital natives (Prensky), or, those who have grown up entirely immersed in digital culture. I am wary of essentialising large groups of people in such a manner, but my results indicate that there are statistically significant differences between them. While everyone is involved in digital culture, as it is a product of contemporary society, younger respondents are shown to be more *active* participants in digitality. Those under the age of thirty are statistically more

likely to: download music from illegal sources; use an iPod; use phone to listen to music; listen to music on a computer; and download single tracks, as opposed to albums, at a significant level, statistically. Those over the age of thirty, however, report a statistically higher level of participation in: downloading music from legal sources; buying CDs; listening to music on a CD player; and listening to radio. These results can be seen in **Table 2**, below.

Table 2: ANOVA Results: Participation in Musical Activities, Above and Below the Age of 30, Sig. > 0.02

Musical Activities	Sig.	Demographic
Listen to the radio	1.217E-09	older
Listen to music on CD player	1.233E-06	older
Buy CDs	0.0025715	older
Download music form legal sources	0.0194859	older
Listen to music on computer	1.669E-17	younger
Create music playlists on computer	2.35E-11	younger
Download music from illegal sources	3.519E-09	younger
Find new music on internet sites like myspace or LastFM	1.332E-07	younger
Use phone to listen to music	3.007E-07	younger
If you download music, how often do you download single tracks	5.844E-07	younger
Use an iPod	7.078E-05	younger

Another observation is that many high school-aged consumers are unaware of the amount of time they spend with digital technologies, especially the internet. When specifically asked how much time they spend online in a day, most students provided vague answers, demonstrating their lack of personal time-tracking. Oftentimes, they did not feel that it is imperative to limit, or observe the amount of time spent on the internet. The following is a selection of response received:

Male/Grade 9: About three hours per night.

Female/Grade 9: [I] talk to my boyfriend online everyday

Female/Grade 8: Depends if I have homework

Female/Grade 10: Sometimes when I get home, and then in the evening after I'm done homework, or after dinner, just kinda off and one when I have nothing else to do

Female/Grade 10: Usually in the evening for me, I dunno, just depends on who's on to talk to and what we're talking about.

The difficulty in describing time-spent with a technology, such as the internet, is due to its *invisibility*. Hoffman, Novak and Venkatesh describe the indispensability of the internet, remarking that the internet has become so familiar and ingrained in everyday life that our relationship to it has become irreversible. I would take this one step further, by contending that the internet has moved past this point of being indispensable to everyday life, to the point of invisibility. Youth, especially, who are highly involved in digital culture, as they have grown up fully immersed in digital technologies, do not focus on the technology used to acquire, engage with, or create media, but rather, focus on the media, itself. The technology, or for the sake of this paper, MP3 players such as the iPod, are back grounded in favour of the content being accessed.

This invisibility of technology translates into an invisibility of genre. As with assessing time spent on digital technologies, respondents struggled with verbalizing genre distinctions. This does not signify that people are not engaged with the music and genres that they listen to but, like the technology used to engage with music, the labels associated with styles are back grounded in favour of the media, in this case, the media of music.

With the majority of respondents stating that they do not stick to one type of music and, for the most part, would listen to anything, eight key trends emerged: (1) those who listen to anything, regardless; (2) those that mention specific genres/artists in their preferences; (3) those who feel their preferences change with age; (4) those who feel their preferences change according to mood/location/other outside factors; (5) those who are confused about genre classifications; (6) those who listen to everything, expect a few genres; (7) those who go through fads/phase in their musical tastes; and, finally (8) those who only listen to one type. This is not an attempt to essentialise, or stereotype individual musical engagement, as many responses could fall into more than one category.

Listen to anything, regardless

An overwhelming majority of respondents disclosed that they listened to all kinds of music, and that they felt that their tastes are quite diverse. This suggests that genre classification may be becoming less salient, in regards to taste distinctions. Respondents were open to listening to a wide variety of genres, basing their tastes not on genre-alliance, but instead on what they happen to enjoy listening to at any given moment. The sheer volume of music available, via the internet, is exposing people to music outside their usual comfort zones, there is less of an understanding of traditional, consumer-driven, labels, so they are becoming distorted or lost. The following are a selection of the responses that are contained within this category:

Female/41: My taste in music has always been vast. I love mostly everything.

Male/27: I listen to what my ears smile to.

Female/26: I love many many different kinds of music.

What these results also draw attention to, however, is that many respondents may espouse that they listen to ‘everything’ merely out of ease of description. Considering the difficulty that arises in defining one’s tastes, it is often out of ease that people respond with ‘everything’. These results do not indicate a change between how people defined their tastes pre-digitality; they demonstrate how the majority of respondents document their contemporary musical taste distinctions: subjective enjoyment rather than allegiance to specific genres/bands.

Specific genre indications

Genre classification was still important to a large number of respondents, though. Following those who would listen to anything, the next largest group was those who listen to a wide variety of music, but who also mentioned specific genres and/or artists in their answers. Many of these respondents made it clear that their tastes were eclectic, by acknowledging various genres which would not normally be thought of as compatible. Responses included:

Male/43: I listen to everything from 70s punk to steampunk to classical to rock to country ... I won’t listen to stuff I don’t like in order to fit in.

Male/16: I listen to everything from death metal to folk, I don’t limit myself to one genre, that would be like only eating steak, you got to have a good caesar salad to complete the meal.

Male/65: I’ll always be a 50s 60s 70s rock ‘n’ roll / pop music fan and proud of it. Quite simply, the songs of those eras had a melody line and a simple – easy-to-listen to story line. I mean, “I Wanna Hold Your Hand” ~ we’ve all had that feeling.

Male/22: I just can’t stay away from prog rock. I’ll always enjoy it.

Listing specific genres was predominantly a male phenomenon, which could possibly relate back to album collecting as a male phenomenon, and the importance of specific knowledges within that field (Straw). The male respondents clearly felt more of a need to display their knowledge about music and musical genres, whereas the females were more likely to say they enjoyed everything, or mentioned specific artists and bands.

Tastes change with age

A small number of respondents focused on how, while taste is a lifelong evolution, their musical tastes were fairly secured by their twenties. This makes sense, as identity formation goes through a discovery period during the teenage years and starts a process of becoming

more solidified in the twenties, while still remaining a life-long process. Respondents iterated this by noting:

Male/30: I try to listen to different stuff, but I have become more selective over the years, so I turn to the music I like (at least to put on my MP3)

Male/62: Through my mid-twenties radio stations to which I listened played all jazz, rockabilly, traditional country & rock 'n roll. My parents listened to classical music. I can, however, recall my parents laughing at Little Anthony & the Imperials 'Shimmy, Shimmy, Ko-ko Bop,' & telling me about a song from their youth 'I Wish I could Shimmy Like My Sister Kate,' which my father proceeded to sing while attempting to shimmy.

Female/32: I think I just keep listening to the music that I 'settled on' in my late teens/early 20s: I don't feel like my tastes have changed much, though I am perhaps less likely to put on as much hard rock as I would have been then (the 'folk' singer/songwriter style has won out over time!). The most significant change in my music 'library' (to borrow an iTunes term) has been the addition of big-band swing music to my music collection. I have become more interested in it as I have learnt to dance lindy hop and balboa over the past few years.

The memories and relationships people have with music, as they relate to life experiences, would undoubtedly remain with one throughout life, and are something one would turn to throughout.

Tastes change from outside factors

Similar to the above category, a group of respondents felt their musical taste changes, or has changed, according to various outside factors, such as location, mood and occupation. As our environments change, it would naturally follow that our relationship with music would follow, as a way to adapt:

Male/29: I do not stick to one type of music. My interest in different styles, sounds, eras intensifies or changes as a result of many factors, such as access, knowledge, surprise, spontaneity, nostalgia, age.

Female/24: ...working in the music industry and interacting primarily with music aficionados, I am constantly exposed to a wider range of music than 95% of the human race. Yes that sounds conceited, but it's somewhat true... Personally I'm a huge fan of Tool & Slayer, but I reckon next week's My Morning Jacket show will reduce me to tears and I can't get enough of Aussie hip-hop, Midnight Juggernauts, or TV on the Radio.

Female/26: I listen to many types of music, but it just depends on the mood I am in or the activity I am doing while listening to music. If I am exercising I listen to Britney spears and the pussycat dolls, and other pop music that I would normally never listen to otherwise, but listen to it then because it has a good beat.

Throughout, mood was often put forth as a determinant of what a respondent listened to in any particular environment. Interestingly, music was used both as a mood enhancer, such as listening to sad music when feeling down, or as a way to alter mood, such as: listening to happy music when feeling sad to feel uplifted.

Confused about genre distinctions

It was highlighted by a number of respondents, in the follow-up interview, that they are confused about genre distinctions and how to classify music, probably because of the cross over between genres. The subjective nature of genre definitions was addressed by respondents, often through an awareness that their peers either do not understand their tastes in music, or might define genres differently than themselves. Although those who mentioned liking specific genres tended to be males, those expressing confusion in how to define genres had a fairly equal distribution between male and female:

Male/29: I do prefer lots of different types of music ranging from jazz to hip hop to rock to metal to chart pop to soul etc etc. however I do find myself listening mostly to rock or rock-oriented pop (genre-classifications are always difficult!).

Female/27: Well, it depends what you mean by 'one type of music'. If 'one type of music' is all contemporary popular music since 1955, then, yes I tend to stick to one type of music (basically: 'rock music'). But in this contemporary popular music done since 1955 there are all kinds of music : rock, pop, rap, heavy metal, techno...I basically enjoy all that, and tend to judge songs instead of musicians (for example, I don't hate all of Celine Dion's repertoire...I do enjoy some of her songs).

While it is interesting to note that the way in which people define their genre preferences may be influenced by gender, further discussion of this point is outside the scope of this paper.

Listen to everything, except a few specific genres

The smallest category of listeners would be those who listen to everything, except for a specific few genres. While I suspect that more people feel this way than actually reported, only a select few stated this sentiment in their answer. For those falling into this category, answers included:

Female/26: I tend to love ALL types of music, while about 5 main genres are on my regular play lists.

Female/46: Though there are some genres I don't listen to because I have liked little to no music I've heard in that genre, I do have a relatively wide variety of music tastes so I would not say I stick to one type of music.

Most people, when asked, will say that they listen to everything, out of ease of answering, but I would argue that genuinely liking every genre of music is quite rare.

Fads and phases

The category of people whose music tastes vary according to phases or fads, was also quite small, but again, I would argue that this is probably a more accurate way for people to describe their listening habits. Just as tastes change according to outside factors, such as mood or location, the same holds true for those who are easily swayed by fads or are seeking a certain peer or social acceptance. As someone is made aware of a new artist or genre, they may immerse themselves in that music, but quickly move on to the next artist. These phases and fads have a clear progression, as noted below, with phases lasting a day or so for the 19 year old, to a few weeks or months for the 24 year old, and a few years for the 28 year old:

Female/19: I definitely do not stick to one type of music. I listen to rock, country, 80s, and pop music. My favourites are Taylor Swift and Theory Of A Deadman. I will agree that sometimes I get stuck on a genre for a day or two.

Male/24: I have a habit of rotating through different types of music. I'll latch onto something for a few weeks or months, actively leaning more about the genre and major artists until either I get bored or something else catches my eye.

Female/28: I go in fads, one year I surround myself with certain genres, and then I switch it up depending on my mood...but lately I've been stuck on the folk-type music...I'd say for the last 2 years

The increased length of musical phases with age correlates to previous answers identifying age as a determinant of musical preference. As was noted above, respondents felt that their tastes were solidified in their twenties, a time in which identity formation becomes more settled. Younger agents are experiencing a time of exploration, of both music and identity and, as such, would search through different styles at a much faster rate, in order to 'find themselves'. The responses suggest that as one gets older, the search for an identity becomes less immediate, leading to prolonged phases in musical preference and taste, in general.

Listen to only one type of music

The last category is those who stated that they only listen to one type of music. Although there was no one who genuinely thought they only listened to one type, there were those who quantified their yes response by stating they were open to suggestions from friends and family. It would be quite difficult, in theory, to listen to only one type of music, as people are exposed to wide varieties in the public domain, such as through work, Muzac, friends, public venues, etc. While we may, or may not, enjoy the music we hear, it will affect us, nonetheless, especially as to how we position ourselves within our immediate environment. Also, with the argument that people are less aware of genre distinctions, they may not even realise that they are listening to more than one type. This acceptance of other people's tastes was expressed by:

Female/24: I tend to stick to one type of music (classical)...although I do like to listen to other people's music.

Male/22: I do tend to stick to one type of music, and generally look to people online for music recommendations and preferences. That said, I'm generally open to many types of music and am willing to listen to a variety of genres.

Male/56: My main preference is the Classical genre (which includes 'serious' music from time immemorial to the present day), however I also work in Music Theatre, Jazz and Pop professionally.

Male/31: I stick to what I like and I am open to listening to a friend's music but I would never play it on my own if I didn't like it.

The high level of respondents reporting an eclecticism of tastes is reflected in the survey answers utilised for this dataset. Respondents were asked to rate, on a 5-point scale, ranging from never to very often, how often they listened to music from a list of 86 genres. Before completing this section, though, they were asked to list their three favourite genres. **Table 3**, below, contains the results of the top self-reported genres, in descending frequency.

Table 3: Self-Reported Favourite Genre

	Genre	N	Percentage of Total Responses
1	Rock	189	17.7
2	Indie/Indie Rock	134	12.6
3	Alternative/Alternative Rock	89	8.3
4	Pop	56	5.3
5	Rap/Hip-Hop	34	3.2
6	Metal/Heavy Metal	32	3
7	Folk	30	2.8
8	Country	29	2.7
9	Classical	28	2.6
10	Electronica	24	2.3
11	Punk	24	2.3
12	Jazz	20	1.9
	Total	689	64.7

When comparing these results to the top genres selected in the tick-box style survey, there are some noticeable discrepancies:

Table 4: Mean Frequency of Listening, Genres

	Genre	N	Mean
1	Rock	1109	3.97
2	Singer/Songwriter	1125	3.24
3	Pop	1112	3.14
4	Indie Rock	1126	3.11
5	Classic Rock	1128	3.1
6	Soundtracks	1106	2.74
7	Brit Rock	1124	2.67
8	Punk Rock	1035	2.67
9	Punk	1035	2.62
10	Brit Pop	1125	2.62
11	Classical	1116	2.61
12	Blues Rock	1126	2.61
13	Folk	1115	2.55
14	Prog Rock	1125	2.51

15	Jazz	1115	2.49
16	Dance	1114	2.49
17	Top-40 Pop	1127	2.48
18	Hip Hop	1128	2.45
19	Hip Hop/Rap	1117	2.44
20	Electronica	1126	2.41

Most noticeably, the presence of singer/songwriter as the number 2 selected genre, when it is not even present in the favourites list or the large number of rock subgenres; also, soundtracks at number 6, which isn't even a genre, per se, but a collection of musics used for film or TV. As well, the large number of subgenres present in the top 20 selected genres demonstrates a certain degree of variance of taste. This supports the hypothesis that (1) people are not aware of how they are defining their tastes, and (2) people's tastes are more varied than they report them as being.

In comparing the mean frequency of participation in genres between those who reported owning and/or having access to an iPod or MP3 player, versus those who do not, I have found that there is a larger number of genres that iPod/MP3 player owners listen to. An ANOVA test shows that iPod/MP3 player owners are more likely to listen to the following genres, at a high rate of significance:

Table 5: ANOVA Results: MP3 Player Owners and Genre Preference, Sig. > 0.02

Electronica	Indie Rock
Hip Hop/Rap	Indie Folk
Rap	Hip Hop
Brit Pop	Pop
Rock	Euro Pop
Brit Rock	Punk
Post Rock	Punk Rock
Soundtracks	Singer/Songwriter
Rap Rock	Prog Rock
	Non Musicals
Emo	Soundtracks

While non-iPod/MP3 player owners are statistically more likely to listen to:

Table 6: ANOVA Results: Non-MP3 Player Owners and Genre Preference, Sig. > 0.02

Baroque	Renaissance
Choral	Easy Listening
Early Music	Religious

What can be extrapolated from this data is that those who do not use iPods/MP3 players are more likely to have more traditional tastes. In other words, they are more likely to listen to music that is not defined as Pop, or even Popular. iPod/MP3 player owners, on the other hand, are statistically more likely to listen to a wider variety of genres, particularly a higher number of sub genres.

After eliminating genres which reported a mean frequency of participation below the level of 2, on a 5-point scale, 52 genres remained. Looking at the data on a case-by-case basis, the results were re-coded to represent which genres people selected at, or above 4 (Often, Very Often). These results show that, on average, respondents selected listening to 18.9% of the 52 genres at a high rate of participation. Although the data did not show any clear correlation between iPod/MP3 player ownership and likeliness to select more genres at a high rate of participation, the data did indicate a difference between groups: iPod/MP3 player owners selected 20.3% of the 52 genres at a high rate of participation, while non-owners selected 17.6%.

Discussion

After discussing musical eclecticism in digitality, the question then becomes: does the eclecticism and difficulty in defining genres relate to musical engagement through technology? I find that the technologies, themselves, are becoming a more dominant aspect of the gatekeeping process. While not a true democratic process, in that how people define their tastes is becoming increasingly individualised, it can, however, be seen as comparably homogenous. It is individualised, in the sense that listeners actively seek out sites of engagement online and offline, in order to construct their taste patterns. These sites of engagement could follow traditional trajectories, such as print media, television and social circles, or, increasingly, online and digital technologies, such as mobile playback devices, smartphones, SNS, etc.

It would be difficult to argue that digital music technologies and MP3 players, in particular, are the sole taste determinants, but they, nevertheless, play a part in the process. The eclecticism noted by the respondents could, in part, be an offshoot of the shuffle function of the iPod. Since 2001, iPods have encouraged users to shuffle their playlists, ultimately leading to a loss of historicity in musical taste, as well as the potential and often desire, to juxtapose diverse genres in both self-created and smart playlists. The interviews conducted with digital youth revealed that they used YouTube as a primary source of musical engagement after mobile music devices, such as the iPod. YouTube is where they found out about new music and so, perhaps, plays a distinct role in their taste development. If people are discovering new music in an arena that does not organise itself into genre categories, but rather, relies on user suggestions and tagging, it would naturally follow that genre discourses would be minimized. Genres may be confusing to some, especially youth, because they have less experience intellectually or verbally discussing their

preferences in those terms. A click on 'suggested videos' does not contain a genre preference, but a vaguely related video.

This study raises more questions than it answers, while laying the foundation for further study regarding the technological influence on taste formation. The next step would be to examine *what* people are listening to with *which* device, while considering the *where*, location-wise. Such a study would examine playback technology's potential influence on musical selection and environmental influences. Digital technology is typically studied from a social perspective, such as how it is incorporated into social relationships, with issues of taste often overlooked. Technology can be understood as mediating the relationship between people and their music, as well as interpersonally. This is particularly true of mobile technologies, such as the iPod, in which users often incorporate its presence into social situations, such as conversations.

Greasley and Lamont's study on musical preference in adulthood touched briefly on the potential impact of technology in taste formations. In their study, respondents indicated that music downloading was increasing the breadth of music they listened to and, subsequently, preferred. The internet, for them, became a gatekeeping filter for tastes, where they could 'try out' genres and/or artists, without the fear of spending money on music that they may, or may not enjoy. There would also be no need to purchase an entire album if they only wished to listen to one track (963). For these respondents, downloading increased the immediacy and ease with which they could explore new music. As the authors note:

This seems to have revolutionised people's engagement with music, as they no longer have to wait until the weekend to go and hunt through the record stores to find the music they like – within a matter of minutes, they can access and download the music onto computers, iPods, phones and various other pieces of technology that store, hold and playback music. The participants report using this process as a filter enabling them to listen to new music and decide whether they *really* like it before copying it to a CD, copying it from a friend or actually buying it (963).

Greasley and Lamont concluded that taste preferences cannot be easily categorised due, in part, to the complexities of the individual, their musical knowledge and subjective perspectives. Interestingly, though, they found that, regardless of the level of engagement, the respondents demonstrated very similar ways of engaging with music, in order to affect them on an emotional level (966).

What this paper presents is an alternative way of considering the role of technology in the creation of taste formation. The incorporation of technological determinism into the social constructivist theory of technology is essential. While it cannot be said that technology is fully accountable for musical taste or engagement, it does, however, exert its influence on *how* people listen to music, which ultimately affects their listening habits. It is

well documented that society and technology are constantly influencing each other, evolving in tandem, but it appears that musical taste affects the development of playback technologies at a slower pace than the corollary. Klein and Kleinman have noted that this is not a symbiotic relationship, and that 'at any given point in time...it is analytically possible to stop the process and ascertain, at least tentatively, what is affecting what' (35). The agency of users can only account for a portion of the way in which people engage with music and technology, and while devices can be used outside their original intent, there are limitations.

In closing, it should be noted that the complex relationship users have with playback technologies, such as the iPod, and the difficulty in characterizing taste formation, do not translate into a loss of meaningful relationship with music. I hesitate to use the term meaningful, as it could impose value judgment – how and what people find meaningful in music is as subjective as the way in which it is defined. Instead, the current study demonstrates that the majority of respondents have a deep emotional connection with music and technology, which imprints on their taste formation and daily life, as demonstrated by the following respondents:

Female/14: I think music is life. You can express yourself through music in so many ways and I just can't go without music. There's always something going on in your life, and you might as well have music help you out.

Female/29: It's not only like going to church, but it's having God come down from heaven and pulling you into his lap.

Biographical note:

Melissa Avdeeff's research focuses on the intersections between music, media, popular culture, and technology. In 2006 she completed an MA in Music Criticism at McMaster University. Her thesis examined the portrayal of women in music magazines, with case studies on Britney Spears, Gwen Stefani and Beyonce. Under the direction of Simon Frith at the University of Edinburgh, Melissa received a PhD degree for her thesis *Finding Meaning in the Masses: Issues of Taste, Identity and Sociability in Digitality*. Currently, she is a sessional instructor in the Music Department at the University of Alberta, Augustana Faculty. **Contact:** melissa.avdeeff@gmail.com.

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Notes:

¹ Blues; Classic blues; Contemporary blues; Classical; 21st century art music; Baroque; Choral; Early music; Minimalism; Orchestral; Renaissance; Opera; Country; Bluegrass; Old country; Contemporary country; Dance; House; Drum n bass; Techno; Trance; Easy listening; Lounge; Swing; Electronica; Ambient; Industrial; Folk; Traditional folk; Contemporary folk; Indie folk; Hip hop/rap; Hip hop; Gangsta rap; Old school rap (80s); Rap; Jazz; Contemporary jazz; Traditional jazz; New Age; Meditative; Pop; Brit pop; Euro pop; Girl groups; Boy bands; Singer/songwriter; Top-40 pop; B&B/soul; R&B; Disco; Funk; Motown; New soul; Soul; Reggae; Roots reggae; Dancehall; Dub; Ska; Rock; Blues rock; Death metal; Glam rock; Hair metal; Heavy metal; Jam Bands; Progressive rock; Rap rock; Emo; Brit rock; Classic rock; Post-rock; Indie rock; Country rock; Soundtracks; Musicals soundtracks; Non-musicals film soundtracks; TV soundtracks; Punk; Punk rock; 1970s punk; World; Religious; Christian rock; Christian pop.