**Popular Music Reception: *Tools of Future-Making*, *Spaces,* and *Possibilities of Being***

Craig Hamilton and Sarah Raine, Birmingham City University

**Introduction**

Since the original publication of *Life Online* (Markham, 1998), internet use has become what Hine (2015) summarizes as embedded, embodied, and everyday. Websites and messageboards, once experienced as definitive spaces, are now connected with other platforms. Notions of individuality and agency have become entangled with processes of corporate data collection and analysis (Amatriain, 2013; Lynch, 2016). Algorithms loom in our everyday lives, enacting their role of gatekeepers of consequence (Tufekci, 2015:16).

These developments are particularly apparent in the field of popular music, where technologies are everyday, data infrastructures culturally ‘ordinary’ (Liu, 2016), and data collection ‘nestled into the comfort zone’ of many people (Van Dijck, 2014). The growing importance of, and commercial reliance upon data by and about listeners (see Webster et al, 2016; Thompson, 2014) invites us to revisit questions of how audiences derive meaning from popular music, and how scholars can understand the processes and conditions involved with this. How are listeners negotiating this shift in their everyday lives?

Returning to Markham’s original work, we contend that digital music technologies have travelled a path from ‘tool’, to ‘place’, to ‘ways of being’ since 1998. In this chapter, we consider the use of music listening technologies as acts of agency that can be understood as a process of conscious ‘*future-making’.* This process includes ‘*speculative, deliberate*’ tool use, and allows us to suggest additional metaphors to describe people’s everyday engagement with internet technologies. We suggest the terms ‘*space*’ and *‘possibilities of being’*. Each is difficult to conceptualise as any engagement with an imagined, speculative future occurs within platforms and systems driven by commercial and algorithmic logics: in other words, the ‘*speculative, deliberat*e’ tool use is never completely controllable.

1. **The Harkive Project, digital technologies, and music reception**

In order to understand the changes in popular music outlined above from the point of view of the everyday user, *The Harkive Project* ([www.harkive.org](http://www.harkive.org/)) has been gathering stories about everyday music listening since 2013. This online, crowdsourced project asks people to describe how, where, and why they listen to music, and explores our relationships with formats and technologies, and how these provide routes to meaning. Stories are submitted on a single day each year through a number of online channels and range from short tweets to long-form essays (Hamilton, 2019). Together they form a corpus revealing a myriad of practices occurring at the intersections of popular music reception technology, and everyday life. We define music reception as the way ‘people receive, interpret and use music as a cultural form while engaging in specific social activities’ (Negus, 1997: 9). This allows us to consider engagement with music not only as (commercial) consumption, or the physical, embodied act of listening, but also as the experiences surrounding discussing music with others, reading about artists, or reminiscing, which now often take place within interfaces where ‘data capture, analysis and outputs are integrated’ (Rieder, 2016). We suggest that these activities are acts of music reception occurring as everyday ‘ways of being’ through digital interfaces and connected devices. Listeners are communing with their digital selves through the use of digital music interfaces/services/devices.

**2. Music reception activities as ‘tool’, ‘place’ and ‘ways of being’**

The metaphor of tool – which Markham further elaborates (in 2003) into ideas of conduit, extension (prosthesis), and container – illuminates how technologies of music reception become useful and are used. Conduit implies movement: how things, people, and music get from A to B. We may consider the *Spotify* or *iTunes* (or similar) interfaces, as well as ubiquitous, connected devices such as the smartphone, as conduits through which large catalogues of music travel from A (rightholders, producers) to B (users, the self). The metaphor of extension helps us think about the abundant catalogues now available to listeners via these services, but also contemplate how the ‘digital self’ is negotiated and managed within online interfaces. Yet, music technologies are a “significantly more complex process than simply bundling, sending and receiving a package” (Markham 2003:6), which invites us to move towards Markham’s metaphor of ‘place’.

Here we can envisage discovering music through *Spotify*, searching for old vinyl on *Discogs*, or engaging in conversations about music with friends on social media as online ‘places,’ where ‘one can spend time wandering, navigating, and otherwise exploring’ (Markham 2003:7). However, to understand ‘place’ we need to think not just of architectural boundaries (on/offline, in/out of the *Spotify* interface) but also of ‘a sense of presence with others’ (Markham 2003:8). The emergence of large-scale data collection activities and their outcomes have shifted how we conceptualize the self and the other – both now encompassing numerous iterations of digital selves. The following extract demonstrates how the respondent engages with digital others via numerous platforms, with others in ‘real life’, and also with a version of their digital self through the interface of a ‘personalised’ streaming service.

*Start the day with a look at Twitter, catching up with the people I follow.  I see that Jah Wobble has posting a YouTube video of an old piece he did with Eno and then I'm down the rabbit hole for the foreseeable, clicking on related stuff. I love the way people have used YouTube to archive obscure music, and before long I'm listening to private press psychedelia of the early '70s, Japanese post-punk/freejazz,...Later on, I listen to a few favourite MP3s with my wife via Winamp. In the late evening I turn to personalised streaming radio.*

Based on the example above, we can argue that internet technologies of music reception have reached what Markham described as the ‘ways of being’, where individuals’ relationships to technologies become enfolded within their everyday routines, almost going unnoticed as either tools or places. The focus for users is no longer on the technologies concerned, but instead on the expression of the self (and engagement with others) through technologies.

Over the twenty year period that began with the emergence of Napster and MP3 technologies – which coincided with Markham’s original publication – and through the incremental (although comparatively rapid) establishment of new forms of distribution and consumption via downloads, and then access/streaming models, the centrality of data collection and analysis has been established. The ways in which the self is conceived, managed, and expressed through dynamic digital interfaces under these new conditions are an intriguing area of enquiry. In what follows, we engage with *Harkive* reflections to offer a speculative update of Markham’s original metaphorical model for explaining how people engage with and make sense of the internet.

**3. Towards a speculative update of Markham’s model**

The Harkive Project respondents engage in music reception that attempts to influence their future listening experiences. Relegating or pushing particular songs through replays, for example, informs future playlists *and* an imagined, future self that may manifest both as an embodied listener receiving automated recommendations, and as a digital self through public profiles indicating one’s musical taste and activity. This future engagement is made possible through what could be called an ‘entanglement with practice’ (e.g., Gillespie, 2014). As described in the following example, explicit and implicit logging of preferences through digital interfaces helps guide activity as yet only imagined:

*…for my commute I usually set my phone to play music in a random shuffle manner, from song to song. This has an added bonus that actually quite a sizable portion of my music collection I’ve never actually heard before - so it’s as good a way of making new discoveries as the traditional way of listening to the radio! In order to log what I’ve heard, I use the iTunes star rating system on each track as it plays \_ basically one star indicates I intend to delete the track...from the library, two stars puts the album or the artist at risk of deletion, three is my basic default of yes, I like this, four is an indication of ‘So, this is interesting’...and five stars is a log that the track is a definite favourite with me.*

By engaging with music in this manner, individuals are not so much drawing upon, or creating memories. Instead, they are creating an experience that enfolds digital monitoring and the logging of preferences to inform activities they engage in once ‘back’ in the ‘real world’ at some future, imagined point. However, to what extent are respondents aware of and comfortable with communicating with their future digital selves like this?

Although popular music is largely created and disseminated through processes of capitalism and mass production, it is simultaneously elevated through shared discourses of value that have become central to explaining and justifying (Potter & Wetherell, 1987) one’s musical taste and listening activities (see, for example, van Eijck 2001; Hennion 2001; and Ruud 1997). By engaging in music reception through online platforms, the meaningful experiences of the musical self and others are translated into data and then subsequently offered back to the individual/group, who attempt to make sense of what these engagements mean in relation to shared discourses of taste and identity. ‘Music to drive to’ or as a ‘curated’ soundscape to one’s morning coffee purport to offer a personalised experience, but the ability to connect listening to social media platforms also facilitates public showcasing of identity and musical taste. And all of these processes feed algorithms with data.

*3.1. Speculative and deliberate: tools of future-making*

We suggest that some listeners are engaging with the algorithmic assemblages and interfaces of digital music platforms in a ‘*speculative and deliberate*’ manner. Through ‘the algorithmic imaginary’ (Bucher 2016) some listeners become familiar with the algorithmic systems and the ways in which their actions influence their present and future listening. In the context of Markham’s framework - the internet as a ‘tool’ becomes apparent again in a new guise. This new ‘tool’ offers avenues for both present *and* future agency, but requires a personalised understanding of how platforms function as ‘tools’ in the present, of the platform(s) as ‘places’ that can be influenced by listener action, and how these tools/places become enfolded into one’s ‘ways of being’. We suggest that this kind of listener engagement with platforms is best described by a metaphor of ‘*future-making*’. Across platforms, likes and dislikes, plays and skips, opinions and critique are displayed to present and potential future others via the public broadcasting of activity, the conscious management of a new facet of one’s desired digital self.

Further to the above, the ‘*speculative and deliberate*’ actions of users are disrupted by the influence of algorithms and other technological/commercial assemblages. Increasing personalisation and a considered engagement with options to influence algorithmic processes offer new tools for engagement with future listening, ultimately leading towards *‘possibilities of being’*: a future, imagined self and potential future listening experiences. The following example serves to illustrate this idea:

*The final musical act of the day is to sync the iPod to iTunes which then communicates my latest plays to the Last.FM website to eventually be published, league table style, to my Twitter and Facebook accounts.  I will imagine my networks will ooh and ahh at my adventurous, intelligent and oh so credible choices of excellent music.  Or mostly ignore the guy who publishes pretty meaningless statistics of musicians that they've neither heard of or care about.*

We acknowledge, however, that these speculative processes of future making encounter tensions between what Gillespie (2014) calls ‘editorial’ and ‘algorithmic’ logics: the aims of large corporations to sell and maintain subscriptions jarring with listeners’ intentions to influence the music they will hear in the future, and the value placed upon music as a meaningful element in identity construction. It is at this point in our tentative update of Markham’s original model that the creation and maintenance of an individualised and knowable ‘*space*’ – in which users can exert agency and control through these ‘*tools of future-making*’ – emerges. This ‘space’, however, can only ever be partially realised within listening platforms organised through externally produced and controlled algorithms; it is permanently in flux, always imagined. Here we can consider the differences between space and place in terms of De Certeau’s (1984) conception of constant negotiation, or in Lefebvre’s (1991) theorisation (utilised effectively by Prey (2015)) of the tensions between abstract, lived, and social space. *Harkive* respondents constantly negotiate these tensions in numerous online services (often simultaneously) as they dexterously switch from one digital service to another. This complicates our understanding and requires a theorisation that is able to take into account the multitude of locations that contemporary listeners find themselves (and their digital selves) within.

*3.2 Digital listening as tool-place-way of being*

In the following examples, we can first of all see respondents engaging with technologies in ways that highlight how the levels of tool/place/ways-of-being ‘collapse.’ Distinctions between technology, everyday life, the self, and others, fall away. The first respondent below uses playlists stored within their Spotify account on one level as a ‘tool’ to negotiate their morning routine, but simultaneously describes the ‘usual ADHD scramble’ that suggests Spotify is a familiar, everyday *‘*place’ (personalised through the creation of numerous playlists) to which they can turn for suitable music to enfold into their everyday routine, thus becoming ‘ways of being’. The second respondent displays a similar multi-level engagement, and in finding themselves ‘tired’ of their available music subsequently allocates the selection task to an aggregated list within the *Songza* interface. This, too, is on one hand suggestive of ‘tool’ use, but simultaneously indicative of everyday, enfolded familiarity and trust in the curatorial efficacy of a digital platform that highlights how systems (‘tools’ and ‘places’) of this kind have become enfolded into everyday ‘ways of being’.

*my morning commute was soundtracked by the usual ADHD scramble amongst Spotify playlists on my iPhone, throwing up Ian Dury & The Blockheads, Hiatus, Public Enemy and Ghostface Killah & Adrian Younge*

*Even later, still at work: After having 'Mandatory Fun' on repeat for most of the day, I needed something low-key to get me through the rest of the day, but I was tired of all my current playlists. So it was time for Songza. Today I chose the 'Blogged 50' playlist and it delivered as usual. Found some great new tracks & artists to check out. This playlist got me all the way through my drive home as well*

People responding to Harkive appear to have dexterously taken to an everyday, mundane use of systems of this kind, indicative of an increasing familiarity with and ‘domestication’ of digital and internet technologies (Baym, 2010). However, it is in the manner that respondents are equally exhibiting a similar degree of familiarity with the more recent technologies of data collection and analysis that allows us to move towards our speculative update of Markham’s model

*3.3. Digital listening as ‘tools of future-making’*

*Harkive* respondents demonstrate a level of familiarity, dexterity and trust in terms of engaging in everyday communication with digital abstractions of their music reception practices. Furthermore, they are engaging in activities that can be read as attempts to replicate the algorithmic/computational work of recommendation systems. For example, the respondents below describe management of their abundant music collections through the use of interfaces and cloud storage services that render music they ‘own’ in terms of music provided by services via ‘access’ models.

*Pretty much all my listening these days is via my 160GB iPod, but as it's hard to remember everything that's on there (currently over 25,000 tracks), here's what I do... every so often I compile a list of albums to listen to, mostly ones I've bought since my last list, but supplemented with old albums I've recently been reminded of, ones I think deserve another listen.... that list is my "Bible", and what I concentrate on listening to, until I've listened to everything at least 3 times, then it's time for a new list!*

*..listened to my music, held on a server (over 800 CDs worth) and played on a Logitech Radio in a random way.. In about an hour of music heard some Blues, some Latin and various old early 60's pop tracks..plus one or two tracks of African music - I have catholic tastes! I'll be listening to more as I work on the PC again this evening - but probably played through a tablet, connected to music centre and playing from 'Google Play Music', which accesses my collection as well - and a very good system it is - makes interesting playlist suggestions too.*

The engagements above are seemingly executed by respondents because they have the potential to influence both future listening and the ‘version’ of the future digital self that may be visible to others. As Magaudda (2011) observes, in a 'circuit of practices' the material objects of music consumption are now no longer just the records, CDs, radios, and stereos, but also multi‐function devices, and online services, all of which create new and diverse pathways to meaning. In the following example, we can observe echoes of precisely this. The respondent exerts their agency through a variety of digital, analogue, online and offline modes of reception – each of which are to varying extents visible to others, including to data-collection mechanisms – that in turn will inform both construction of digital selves and future listening possibilities via automated recommendations.

*For my commute I listened to the new Slow Club album 'Complete Surrender' on Spotify. Tuesday is 6 Music day on the office radio so I get in and switch that on which will be playing in the background all day. After lunch I popped on the Alvvays album which was streaming in advance of release on NPR.org. After that..it was back to 6 Music on the office radio again. 3:30pm..checked out the new Lykke Li video for 'Gunshot' on YouTube. This was swiftly followed by the La Roux album which was streaming directly from the artist's official site. Back to Spotify to listen to playlist 'Top of The Poptastic 2014' compiled by pop blogger @Poptastic.*

However, the conceptual, future ‘spaces’ we suggest users move towards are only partially influenced by the speculative actions of the user. While the speculative actions of future-making can sometimes influence future listenings and digital selves on public display – a form of Gillespie’s ‘editorial logic’ – at other points these actions can also be overridden by the ‘algorithmic logic’ of the very same platforms. Listeners paradoxically become enfolded within the latter through their deliberate and speculative use of technology as ‘tools of future-making’ via attempts to carve out their own, unique ‘space’. The manifestations of digital selves we see in the following example are thus simultaneously ‘real’ – in the sense of being imagined by and engaged with by users – but also fluid/abstracted via respondents’ use of and/or attempts to replicate the functional operations and outcomes of algorithmic assemblages.

*I spent the morning working from home with Spotify to keep me company. Chet Faker’s ‘Built On Glass’ has been sat on my ‘New stuff to listen to playlist’ for a while so I put that on. It’s later moved over to the Good stuff 2014 list. The 'New stuff’ list is usually populated from within Spotify these days, via Spotify’s New Releases page...Sometimes recommendations creep in and, when they do, it’s via Twitter.*

Our suggestion is that Markham’s ‘ways of being’ are complicated by the speculative and imagined nature of user attempts to engage with a future, as well as a present, and this is especially so since the process can never fully be under the control of the user – despite the advertised rhetorics of personalisation and control offered by platform operators. These actions therefore can be understood to construct only ‘possibilities of being’; actions that may or may not influence desired, future listening experiences, and that may or may not contribute successfully to the construction and communication of a desired digital self.

**Conclusion**

In this chapter we have proposed a new application of Markham’s 1998/2003 model that takes into consideration the ways contemporary music listeners are engaging in ‘speculative and deliberate’ actions for ‘future-making’. The snapshots of digital listening as narrated through the stories of The Harkive Project provide a useful way of exploring a particular, crucial moment in the development of music reception as a cultural and commercial activity.

Following a movement from the unknown to the known, from a novice to an integrated, knowledgeable user in Markham’s original model, the use of listening platforms as ‘tools of future making’ represents an engagement with a new and unknown future of lesser and greater possibilities. Action is always speculative, its outcome desired rather than guaranteed, and its influence on the future something that may be as equally thwarted as constructive. Our reading of the Harkive narratives suggests that respondents are comfortable in communicating with their present and imagined future digital selves (both real and abstracted), and that this is becoming a central, conscious, and seemingly reflexive element of music reception activity. The opportunities to influence their own future listening practices, or in Markham’s words, ‘to gain a certain measure of control from technology’ (1998:114), are simultaneously made possible and precarious by the interconnected capabilities of audio and social media platforms.

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**Craig Hamilton**, PhD, Research Fellow, Birmingham Centre for Media and Cultural Research, Birmingham City University, UK, Craig.Hamilton@bcu.ac.uk

Craig Hamilton is a Research Fellow at the Birmingham Centre for Media and Cultural Research, Birmingham City University (UK). His research is built around The Harkive Project and takes an experimental methodological approach derived from the use of data collection and machine-learning algorithms in the study of popular music. Craig is also the co-Managing Editor of *Riffs: Experimental writing on popular music* and the project co-ordinator for the AHRC-funded Songwriting Studies Research Network.

**Sarah Raine,** PhD, Research Fellow,  Birmingham Centre for Media and Cultural Research (BCMCR), Birmingham City University, UK, Sarah.Raine@bcu.ac.uk

Sarah Raineis a Research Fellow at Birmingham Centre for Media and Cultural Research (BCMCR), Birmingham City University. Her research primarily explores multigenerational music scenes, focusing on issues of gender and generation. Sarah is co-Managing Editor of *Riffs: Experimental writing on popular music*, Review Editor for *Popular Music History* and a Book Series Editor for Equinox Publishing. Alongside Dr. Catherine Strong, she co-edited *Towards Gender Equality in the Music Industry* (Bloomsbury: 2019) and a special issue of IASPM@Journal on ‘Gender politics in the music industry’ (2018). Sarah is also one of the editors of *The Northern Soul Scene* (Equinox: 2019).