# Platform Determinism

the Role of Space in Understanding
Post-Internet Music

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Ab Gardner Jack Rees Leigh Davies Matt Lovett Miles Warren

# Original practical experiments/works that informed this paper can be found at:

https://gary-martin.world/platformdeterminism

#### Introduction

This paper sets out to explore contemporary and emerging musical practices in the post-internet age, and highlight how these are influenced by the means in which they are shared with their audiences, i.e. the structure and mechanics of their platforms. This is something I aim to explain with my protologism: *platform determinism*. This is the proposed premise that the role of a platform is considered to determine the nature of creative works that appear on or within it, to some extent

This idea emerged from identifying and questioning the emergence of new forms in popular music, and adapted music practices evident on social networking sites since they reached the point of ubiquity. These changes have begun to happen in recent years as the sites have now been around long enough that most of society is using them; "communications tools don't get socially interesting until they get technologically boring" (Shirky, 2008).

I first set out to give a definition of what platform determinism is, combining language used in discourse around the digital economy, and more traditional definitions of platforms that pre-date the internet. I will utilise Henri Lefebvre's critical theories on space for this too, to create a holistic definition that includes language to explain a platform's social qualities. I will also draw upon language used in the field of design to explain the ways that people are able to behave within a platform.

I then go on to test and apply this definition through a process of analysis of musical practices, or musical works that are typical of a certain practice. This includes contemporary music practices that utilise popular social networking sites like Instagram, internet genres found on online music distribution services, and pre-internet practices, to see whether post-internet terms can be used to analyse the conditions surrounding the emergence of musical works retro-spectively. And although stylistic qualities found within musical practices will be discussed, explaining compositional details are outside the remit of this essay.

It is my hypothesis that musical practices, in part, are informed by a set of conditions set out by the methods by which the music is shared, performed or presented. Supporting the idea that "music not only represents social relations, it also and simultaneously enacts them" (van Leeuwen, cited in Frith 1996). And with this idea "new uncategorisable music, the music of the future that does not fit into existing boxes" (Strachan, 2017), could possibly be predicted, as new means to present or share artistic works unfold, caused by technological, political or environmental change.

# Platform Design

The etymology of platform refers to a 'plan of action' or 'design' and, "from the Middle French, platte form, or, literally, a plateau or raised level surface" (Bratton, 2016). This aligns neatly with its use in the context of music performance, whereby a platform is a raised floor or stage used by performers so as to be clearly visible and audible by their audience.

In contemporary society, however, the word platform has been adopted by the world of economics to describe large, invisible "digital infrastructures that enable two or more groups to interact" (Srnicek, 2017). Examples from the mainstream include technology companies like Google, Facebook, and Amazon, and dynamic start-ups like Uber and AirBnB (Srnicek, 2017). These types of platforms work as intermediaries, allowing its users to communicate, share, trade, and build, by providing them with a system, designed to carry out these specific interactions.

The link between these definitions is clear, they both describe a framework or situated place, where an exchange or action is played out (Bratton, 2016). But the spaces provided to fuel "platform capitalism" (Srnicek, 2017) are "based on the global distribution of Interfaces and Users", and in this, they "resemble markets" (Bratton, 2016). Due to this recent application among digital economy discourse, there are now various theories and uses of platform as a term, "but considering the ubiquity of platforms and their power in our lives, they are not nearly robust enough" (Bratton, 2016).

The definition of platform in 'platform determinism', sits somewhere between the two described above; preserving and perpetuating its roots as a performative space, but also acknowledging its connection to virtual spaces constructed online, enabling the ubiquity of social networking sites as communications tools. This position deliberately avoids embracing technological determinism. I acknowledge that the development in creative technologies play a role in the production and consumption process of music, but I am arguing that the technical specifications of tools are just a contributing factor in constructing the broader conditions of a 'space'.

In doing so, this allows for the analysis of music practices pre and post-internet, acknowledging the similarities in the way constructed spaces afford social interactions, which Henri Lefebvre refers to as "spatial practices" (cited in Forman, 2002), and allow music cultures to develop offline in physical spaces as much as online. Following from his own simple definition of a platform, Srnicek himself continues to acknowledge that they "can exist in non-digital forms (e.g. shopping mall)" (2017).

To explore the qualities of platforms as a space and to see how exactly they inform musical practices, I utilise the language and study of affordances to describe their mechanics. In the field of design, the term affordance "refers to the relationship between a physical object and a person (or for that matter, any interacting agent)" (Norman, 2013). Typically, this term helps explain the design of tools, and functional items that are created for retail purposes. "A chair affords ("is for") support and, therefore, affords sitting" (Norman, 2013). But if the chair is made of wood, it also affords combustion, therefore, affords fuel for a fire.

However, by opening its criteria up to beyond objects (or adapting our definition of an object), the properties of intangible or complex spaces can be analysed in hindsight, or designed in the future to create a certain set of conditions for its users. To note, this definition borders on overlapping that of 'experience design', which is largely used in business contexts or for the specific design of user interfaces for mobile apps, so this paper avoids its association with it.

When looking at the affordances of a space then, this means the term becomes to describe the relationship between properties of a "logical or continuous use of space", like physical places and objects, or an "alogical or discontinuous space", like the internet (Sontag, cited in Auslander 1999), and the capabilities of the person that determines just how they can be used.

In the analysis of post-internet music practices, social media platforms like Instagram are referred to as examples of these kinds of spaces that have structural qualities, or a "media grammar" (Anastasiadis et al, 2017), affording for a variety of interactions between its users via the Graphical User Interface (GUI). "The conception of media as environments then means that there is a relatively fixed set of characteristics of each medium" (Anastasiadis et al, 2017).

Looking at the media grammar of these post-internet platforms opens up the possibility to describe more clearly, how specific media affordances of platform media relate to the specific usage patterns and their social contexts (Anastasiadis et al, 2017).

#### Berlin Techno

Now with a definition of 'platform' that includes non-digital spaces and infrastructures, it can be used to analyse musical practices that predate Web 2.0 genres and processes. By looking at the affordances of the physical structures, and other environmental factors, available in Berlin during the rise of techno there, it's clear to see how the genre and surrounding culture developed the way it did.

On November 9th 1989, it was announced live on the news that people could freely travel between West and East Berlin, with immediate effect. Within a few hours, the wall that had divided the two parts of the city since 1945 started to come down. What followed was a period of unification, politically and culturally. Berliners were free to roam as they please, which created an incredible atmosphere that was expressed through parties in the streets.

These gatherings moved into many of the abandoned and derelict buildings on the border and suddenly became locations for illegal parties. Power plants, factories, bunkers, hangers and former military spaces were reclaimed by the city and became temporary clubs. Typically dark, solid and functional spaces, these buildings represented an authority which no longer existed, and is where two different youth cultures met to dance. Dancing became a way for young people to connect with each other, and techno in Berlin provided them with an opportunity to feel part of society in a way that perhaps politics did not.

Although techno music originated in Detroit in the late 1980s, its spread to West Germany gave Berliners a pulsing sound to dance to. And it was the environmental conditions of Berlin and the spaces that the youth occupied that led to its explosion and the prominence of the culture it still has there today.

Although these buildings were obviously physical places, it was the affordances of the constructed space within and surrounding these buildings that I argue helped create the set of conditions giving rise to the techno scene. The space itself is a cultural construct; the "product of a sequence and set of operations" (Lefebvre, cited in Forman 2002), and so is "bound up in cultural tensions and conflicts that, in their inherent fluctuations, invariably display spatial attributes" (Forman, 2002). The empty buildings alone did not lead to the techno raves.

The great level of vacancy available in these many buildings provided the opportunity for numerous parties and clubs, which led to an abundance of DJs emerging to fill all those spaces with music, all experimenting with their own flavour of techno; young people from East Berlin were pushing a much harder electronic sound to that which descended from Detroit - no vocals, harder basses.

The spaces themselves looked pretty much how they had been left, albeit unfurnished and more run down through neglect. And for the large part they were left that way, the aesthetic of the buildings didn't matter as clubs were best enjoyed in the dark, so all that was needed were a few club lights and an improvised bar. The attraction of the spaces were their emptiness, affording the youth of Berlin to dance in the space that remained.

And as these parties were illegal, there was no curfew or restrictions set for the spaces, which meant the parties went on through the night and into the following day. This lack of restriction on time helped form the longform and evolving nature of DJ sets and the tracks that populated them. Tracks were built around a groove that sounded good enough and had just the right amount of variation so that people could listen to it looped for several minutes on end. They also went on to develop a 1-2 minute intro and outro that were even less distinct to make it easier for DJs to mix between tracks.

The fall of the wall provided a politically charged fuel that was ignited by the party sounds of techno from Detroit, which was then able to grow and spread due to the conditions of the spaces and environments the youth of Berlin had access to.

#### **Online Genres**

Vaporwave, pioneered in the early 2010s by artists like Ramona Xavier (of Vektroid and Macintosh Plus), is a musical genre taking its aesthetic influence from 80s Italian disco and Chillwave. Soon after its emergence it gave birth to several other microgenres, such as Hardvapor, and inspired others like seapunk, a sub-culture on Tumblr that formed in 2011 associated with an aquatic-themed style of fashion. Vaporwave grew in popularity over the following years, with increasing interest in its visual aesthetic, combining glitch art with 80s and 90s internet-inspired graphics, featuring bulky computers and Renaissance-era statues.

The sonic aesthetic of Vaporwave itself is reminiscent of elevator music; stylistically it's not quite EDM, but clearly inspired by it. Produced by layering slowed-down easy listening tracks with heavy samples taken from R&B and lounge music, it's creators developed a nostalgic lo-fi retro-futurism sound world. Similar to the music made by Muzak in the mid-1930s, and contemporary compositions by the now rebranded Mood Media, Vaporwave is essentially background music, or at least that's the function it served for its audience; a musical accompaniment while focusing on another activity in your bedroom. It speaks to music lovers who don't always need a 'drop'.

Because Vaporwave has such distinct sonic characteristics and recognisable visual imagery, it's easy to focus on it as 'content' as opposed to looking at the conditions that allowed it to thrive, and so quickly. Vaporwave as a genre originated on online forums and "exists entirely online; there are no live concerts, only streamed or downloadable tracks" (McLeod, 2018). Its lack of attention in academia has even, in part, been attributed to "its non-traditional location" (McLeod, 2018). Its exclusively online existence is "tied to a notion of online anonymity with producers and online consumers often using a variety of aliases" (McLeod, 2018).

The audio files containing this music were being rapidly created and easily uploaded, shared and streamed, which "has had a fundamental effect upon listening practices, the economies of music and even the ontology of the musical work" (Strachan, 2017). Listeners accessed albums and tracks mainly via YouTube and Bandcamp, two quite different platforms in many ways, but both allowing artists making Vaporwave to provide access to their music through streaming and downloads for free.

YouTube's free to use model, for creators and consumers, is supported financially through advertisements that appear on the homepage and within videos that are monetised by the creator. This affordance played a role in the boom in the mass-amateurisation of digital content being created and shared circa 2007. Bandcamp is free of advertising and allows creators to upload music (and merchandise) for free, and for the artist to set their own price for it. Bandcamp then takes a 15% revenue share of digital sales, 10% for merchandise.

These conditions massively contributed to the birth and rise of Vaporwave music and its affordable access to it, through streaming via YouTube, and the "name your price policy" on Bandcamp. As artists utilised these mechanics for distributing releases, the free access to streams or downloads became a part of the Vaporwave identity; its inherent promulgation of the capitalist consumption of music (McLeod, 2018).

However the 'message' of Vaporwave is also commonly linked to accelerationist social trends, influenced by the philosophical works of Gilles Deleuze and Nick Land, pushing for the intensification of technology and capitalism as a means to a revolution against both, or their logical conclusion. The affordances of Bandcamp and Youtube here allow for the fast publishing and fast sharing of musical works, and therefore the acceleration of the rate that new genres can emerge and spread online (McLeod, 2018).

Though, despite its quick rise to popularity in the early 2010s, the genre simply isn't as popular as it was a few years ago. It has already been (and gone) viral. Like so many other culturally significant artefacts or trends that are born online, internet-memes can disappear as fast as they appear.

### **Contemporary Popular Music**

A common thread amongst many emerging musical practices online is the short duration of musical works being created, relative to the average length of popular songs. In his book 'Noise: The Political Economy of Music, Jacques Attali noted and predicted that popular music practices would yield to the "valorisation of very short works" (1985).

Lil Pump is an American rapper and songwriter, creating music associated within the Mumble Rap scene, a loosely defined microgenre of hip hop that largely spread on the online audio distribution platform SoundCloud in the 2010s. The term implies a mumbling or unclear vocal delivery by artists in contrast to more traditionally direct styles of rapping. His album 'Harverd Dropout', released in 2019 features 16 songs, many of which reach around the 2 minute mark in duration. The average length of a track on the album is 2 minutes 30 seconds. His music, amongst others in the mumble rap scene, features the noticeable repetition of short phrases. In his song 'Gucci Gang', the title phrase is repeated over 40 times, something which has been mocked online through the editing of his music video to eliminate sections of the song that are repeated, highlighting the arguable overuse of the phrase.

And in 2017 Louis Cole released a video on Facebook called 'Bank Account (short song)', that is just over a minute and a half in duration. It became a popular video on the social network and it was followed by a number of others similar in form, in addition to him being a live performer and producing recorded material.

At first, these platforms were utilised by established musicians as a promotional tool for other works elsewhere, often showing edited clips of works as a teaser for the real thing. But now, music creators are sharing music that was designed and composed/performed with the mechanics and affordances of the medium of these internet platforms in mind. These have become musical works in their own right, changing and expanding the definition of what a musical work is, a focus that Christopher Small attempts to redefine by coining the term 'musicking', a holistic term for engaging with music "in any capacity", whether by performing, listening or dancing (Small, 1998).

Another common trait amongst emerging works is the lo-fidelity aesthetic of the works. It could be argued that music released on these platforms are examples of a cold media, something Marshall McLuhan defines as 'high in participation, or completion by the audience' (1964). This is opposed to a hot media, like a physical photograph or radio that extends a single sense in 'high definition'. Being a cold media, it's common and acceptable for the audio quality or fidelity to be

compromised. Arguably this is because no one expects high quality audio from these works as the lowest common denominator medium of listening is the speakers of a smartphone device, which wouldn't portray the full audio quality of track produced to 'high-definition'.

This low fidelity aesthetic has been magnified through memes that embrace the low-fi production style by 'bass boosting' tracks with the result being tracks that have an overly distorted bass line.

These types of platforms, in particular non-music specific ones like Instagram, Facebook and TikTok have now been around long enough to reach the point of invisibility in Western cultures. In Here Comes Everybody, Clay Shirky explains that invisibility is a state beyond ubiquity, meaning a complete normalisation of their use (2009).

Another example of short musical works can be found in 'Whack World', the debut audiovisual album of the American rapper, Tierra Whack, released in 2018. Each of the 15 tracks on the album is approximately sixty seconds long, deliberately designed around the temporal restrictions of Instagram and TikTok, where (at the time of release) the maximum duration for a video upload for both platforms is one minute.

Tierra Whack uses these temporal constraints, the limitations of the platform as a space, as a creative restriction of the production of the album. It suggests that these platforms were planned to be the primary space to experience the songs, despite them later being released on streaming platforms such as Spotify and Apple Music, and as a physical release on vinyl.

On Instagram, the songs were uploaded one after another, with a section of the album artwork chosen as a cover image for the post. So when viewed on her profile, the full album artwork is displayed as 3 x 5 tiles (a user's profile has a width of three posts). Another feature afforded by the platform which gives users control over the content they see and hear, either via the main feed, consisting of a one-after-another scrolling stream of images or videos, or by looking at another user's profile, where the content can be viewed as a stream also, or in a grid view, making multiple media visible at the same time.

The visual element of the videos are as much a part of the experience as the audio; visual storytelling takes place in them as much as in traditional music videos released via Vevo on YouTube or on MTV. This strong sense of visual awareness

plays to the ocularcentric nature of Instagram's feed - its users favour visual content, the most popular of which aligns with the most recent trends in photographic composition, filter types and colour schemes. She uses this strong link between the visuals and the audio to layer the lyrics with double meanings, adding another dimension and further intrigue to the project; the lyrics themselves although quick-witted, appear serious and at times quite dark, while the visual counterpart represent the more playful and light hearted meanings to the songs. At one point, she cuts the strings from red helium balloons while comically singing with an excessive twang: "You remind me of my deadbeat dad."

With the average popular music song length ranging between 3 and 5 minutes, Tierra Whack condenses the form of popular song to around a third of this, with some songs seeming to end abruptly, collectively creating a mercurial album. But despite the brevity of each track, there is a lot packed into the minute-long vignettes, both musically and narratively, with huge revelations nestled in the frivolous sonic aesthetic. 'Pet Cemetery' blurs the line between mourning your dog and mourning your dawg. She also encourages self-care, and affirms that she cannot be defined. Short songs, while in vogue, seem to serve a certain purpose here

Where others, like Lil Pump, stretch and repeat small ideas, thinning them to be easily absorbed, Tierra Whack uses the time constraint to make her big ideas feel larger than the space they're allotted; each track gives just enough to present an idea before it morphs and catapults you to the next one. It's an audiovisual album optimised for social media consumption; each track and video stands on its own without losing sight of the larger picture.

#### Social Network Music

Another sub-culture that has formed around the mechanics of Instagram, which is yet to be named or labelled as far as I can tell, is the creation and sharing of looping audiovisual works. Usually between 5 and 20 seconds, these types of works feature moving image and sound, presented together as a whole, as opposed to one being the focus and the other being an accompaniment. These types of works are usually shared by users that run 'content accounts' - the type of accounts where the user primarily posts platform-specific artistic works over any other type of content

Artists that regularly post works that fall under this category include: Brad Nath, whose practice involves inserting contact microphones into household objects and materials, then performing the interaction with those objects with his hands; Fynn Michlin, who creates stop-motion animations from his abstract paintings, paired with sound sketches of found and programmed sound; Veronika Raoul, layering and manipulating online video footage, paired with sampled and/or original audio compositions; David Glueck with a very similar process; and Osvaldo Cibils, who edits together sonically interesting splices of video footage of him creating sound with found objects and instruments, creating jarring staccato-like clips. I provide a list of a few examples here as, like Vaporwave, these types of works haven't entered the discourse of academia, or even reached relatively large popularity in the mainstream, so I considered context was necessary before taking a look at the role Instagram as a space played in their emergence.

Many works that fall under this category exploit the temporal mechanics of the space, where it seems that it's not essential that the audio is listened to all the way through. This clearly suggests that these users have developed a literacy in social media grammar (Anastasiadis et al, 2017), understanding that visual content is favoured on Instagram, and that their post could very quickly be scrolled by to reveal the next. This awareness of user behaviour has informed the increasing number of audiovisual works that feature 'non-linear' music, or music where traditional structures aren't present. New musical forms are being used in works that exploit the potentially limited, or indefinite amount of time someone could be watching/listening to the post. They include things like asynchronous rhythms or melodic material, and lack varying sections with unidentifiable start and end points.

To increase the chance of these works being seen by your audience, on a feed that displays posts according to algorithms, posting this type of work needs to become a regular occurrence. As unlike traditional web portfolios where works have a sense of permanency on their online home, the temporality of Instagram offers an

alternative to this practice, encouraging users to continually post new content in order for it to feature on the feeds of their audience. Posts in user's feeds are temporally positioned in relation to the current moment: '6 minutes ago', 4 hours ago', 3 days ago', and so on (although not in reverse chronological order).

What's arguably the most interesting aspect of these types of works, from a platform perspective, is their lack of similarity in stylistic qualities and visual or sonic aesthetic. It is the processes they follow to create the works that link them together; evidence of a post-genre musical subculture. Or perhaps it's not necessarily a subculture, rather a coincidence that numerous individuals are utilising the same affordances of the platform and creating content that has the same mechanics.

#### Conclusion

To conclude, this paper has offered a new term by which to analyse and predict musical practices: platform determinism. By taking and building on definitions from the field of product design, digital economy and philosophical explorations on space, this term provides a holistic framework for evaluating music forms in relation to the platform they are shared on, as opposed to the study of the content itself. "Platform media determine content and communicative practices via their specific logic, which can be understood as the implementation of a specific platform grammar" (Anastasiadis et al, 2017). I argue that this method of analysis provides for a richer understanding of musical practices, and agree that the "content" of a medium can blind us to the character of the medium itself (McLuhan, 1964).

It could be argued that the platforms themselves have had a far greater impact on the fundamental shape and nature of society than any individual message that is delivered via that platform. This isn't to discount the power of content, or the ideas they enact. While content is potent, it is comparatively slow; content shapes and mimics the ways of thought over time, but platforms can change the fundamental scale of those interactions. They shape the very nature of the content they deliver.

Non-music specific platforms like Instagram, Facebook and TikTok have provided musicians with another way of communicating with their existing and potential audiences. So for many contemporary musicians it is becoming increasingly common to see the release of various types of media that vary depending on the nature of the platform they are being released on, including streaming and purchase sites, live performances, and other content designed specifically for social media platforms. And it's not that these musics can't or don't get played in different across different mediums, but it's the medium they were designed for that informs the original creation.

Musical practices continue to develop and adapt to the changing physical and now digital landscape that forms our society. Post-internet music still "runs parallel to human society, is structured like it, and changes when it does" (Attali, 1985).

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