

Computational Listening
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Approximations to Wellbeing

Reflection / Abstract

The unreal feeling when you hear a track in a playlist or on the radio and you are relatively sure that you know the song. This feeling disappears after a few beats and you are left with a feeling of helplessness that makes you think of senility. Given the possible intervals and cadences of the major and minor scales predominant in pop music, this feeling should occur much more often, but our hearing is extremely sensitive and differentiates the finest nuances and timbre variations. This means that we can immediately recognize and distinguish between dozens of versions of the same song without any effort. Even if there are of course differences and exceptions, it is quite likely that we can recognize "Where is my mind" by the Pixies from the local cover band. This might become more difficult in the future when more and more music is composed that is oriented to the listening habits of the consumers. What is meant by this is the following:

An archive of the pop hits of the last 20 years is created and fed into a neural network that is technically so advanced that one cannot tell if the generated music has been produced or if it is music that is purely synthetic.

The OpenAI research and deploy company OpenAI, for example, has crawled 1.2 million songs from the web¹ to train a model that can create new versions as well as completely new pieces from different genres and the mixture of those genres. The model is available in an open API but is not really consumer friendly yet. Nevertheless, with little effort you can create a synthesized audio file with hundreds of artists and styles to choose from. So if you want a song that is a mixture of Cher and Bach, or Mozart and Drake, this would be possible but probably not necessary. The interesting thing is that this music always sounds like it already exists, because in the end it does nothing but recycle music that already exists. So what you generate is always just an approximation of the familiar feeling that has developed over decades of pop cultural listening. These generated fragments currently still have a relatively low quality and can definitely be distinguished as an AI experiment, but this should only be a matter of time until complete albums can be generated that can no longer be differentiated.

Social and cultural devolution through technical evolution. When music exists only as an emotional substitute to subject us as digital nomads to a melancholic nostalgia. A convoluted digital fabric that always suggests that you are at home or at least in an environment that seems familiar to you. No more overstimulation and no more surprises please. Muzak for the Metaverse.

¹ <https://openai.com/blog/jukebox/>

Boomy and its Playlistability

The process of this has already started more than a decade ago. Since you get the promise of salvation from various streambait platforms as "Feeling Myself" or "LoFi Dreaming" titled playlists², it is clear that a different and until now not quite understandable ductus in the music economy is on the rise. Such playlists promise the perfectly optimized haze to completely abandon one's individual musical tastes and support monetization processes that drain the water from artists not suitable for playlists. By creating this Celestial Jukebox it is no longer necessary to convince others of your exceptional music taste at the house party but you get this comfortably handled by a trained latent space that has a much better approximation to the music taste of a group than you could ever have. Nevertheless, there are still no automated processes that can adapt fluidly to interpersonal relationships. A question of time, one might think. Until there is enough data to have tracked a large part of the common situations from the different cultures. So the more data, the better representative models can depict abstract emotional states. So more and more information is collected which is then used to feed and train neural networks which in turn are "hopefully" able to make music that sounds like it fits seamlessly into these playlists. Only this time without commission for artists, labels or distribution and the whole rat's tail that is dragged behind the music industry.

For the economic model of these streaming giants, this would be economically highly desirable and, so to speak, like a perpetuum mobile or rather an incestuous Eigenblutdoping³. In order to create such a construct, however, it is first necessary to collect as much information as possible about users and their interactions with the respective platform. Different platforms have different methods for this. Spotify, for example, uses 3 different processes to create the most accurate forecast possible, which then creates songs for the Discover Weekly playlists, and provides you with 30 songs each week that fit into the grid of your taste. This grid, created by coordinating different filters, is actually nothing more than an aesthetic ratification based on sensory and emotional values defined by user interaction with the platform. This ratification is also highly interesting for other models such as the music production platform Boomy. Boomy is the world's largest record label, with 3.2 million titles, according to CEO Alex Mitchell⁴. According to the platform's calculations, these 3.2 million titles are responsible for 3.57% of the music that has been released on Earth so far⁵.

It is a decentralized platform that anyone can use through their browser. It aims to make music making possible for everyone and tries to do so by utilizing AI. To make music with Boomy, no knowledge of music theory or anything else is required. This should reduce the entry barrier and create the broadest possible accessibility. Besides these noble approaches, there are some other disruptive sharklike interests. Boomy claims to give 80% of the royalties to the artists. From this, fees for distribution services such as Spotify, Amazon Music, Apple Music, Tidal, etc. are deducted. If you consider that Boomy is responsible for 3.57% of the music produced worldwide in its 3 years since its founding in 2018 and the credo of the company definitely has the maxim of quantity over quality, one becomes skeptical to what extent these interests can serve other than those of profit maximization. Boomy offers dare optimization and design options for the selection of parameters that are available to the "content creators". These parameters are then to be selected in the form of genre, BPM and various others. One can also choose the form of release as an album or a single and publish these releases directly to over 40 streaming platforms without labels or masteringstudios etc as middlemen. The platform promises unique results for each generated track that is also not subject to copyright.

² Playlists on Tidal Streaming Plattform

³ Diedrich Diederichsen - Eigenblutdoping

⁴ Protocol - Boomy's AI is making music way faster than humans, but it hasn't written any hits — yet <https://www.protocol.com/boomy-ai-music>

⁵ Ibid

Approach

The ApproximationToWellbeing mix uses this Spotify-esque and streambait-driven logic and is composed of music generated exclusively with this platform. Artists are no longer individually responsible for their decisions and are at best marginally used as an outlet to release music on streaming platforms. Since one cannot currently read to what extent rights of AI produced music work with the corporate policies of large streaming platforms, one could also assume that human interaction also only apparently serves as a facade to distribute this music en masse. Otherwise, it would certainly also be possible for Boomy to release purely machine-produced music on these platforms and completely exclude the "artists". To put the mix in a coherent narrative, music was collected over a month that was made with Boomy and is available on the platform Tidal. This compiled playlist consisting of several hundreds of tracks forms the basis for an automated DJ set. The DJing app Pro Djay offers advanced machine learning processes for DJs and can also function completely autonomously (*The mix is made with the Auto Mix function*). To create a framework and to keep the narrative to the streambait logic, the duration of each track is set to a maximum of 30 seconds before there is a transition. This duration is also titled "Executive Summary" by Charlie Hardling⁶. This means that the first 30 seconds of a song in a playlist give a preview of how the rest of the song works and sounds. This preview is supposed to be an overview, so that consumers can orientate themselves on whether they want to listen to the rest or not. These 30 seconds are used as a taste metronome in this mix to drift through an amalgamation of cloud based unagitated moodboards and generate a complete musical lack of identity based on the principles of Neo Muzak. Furthermore, some technical parameters are set in the DJ app that allow neural mixing of separated frequency ranges and other parameters that try to predict semantically meaningful developments. The result suggests a cloud-like structure that is constantly overtaking itself and cannot express a musical identity. Homeless sound fragments that, under the promise of hyper-individualized content, open up new forms of consumption and promise to become the soundtrack of a new economy.

Summary

Over the research period preceding this mix I have listened to countless hours of AI generated music. During this process, I have noticed several interesting conspicuities about this generated type of music. Each time I have tried to listen to this music out of musical interest I have encountered limitations that exploit the artificial nature of this music and thus take away the appeal of listening to it. But when I listen to this music in the background quietly during other processes and no interest pushes me to the music, the music is a pleasantly wobbling carpet. This non-affectedness actually reflects only the contemporary consumer behavior. Music gets several functional meanings and there is in my opinion in the future more and more music that fulfills a clear use instead of a pure aesthetic sensation to serve.

⁶ Listen to Lists - On the history of the Playlist. Kristoffer Cornils / Spector Books