

THE MUSIC BATTLE: HUMAN VS. MACHINE

The Music Battle: Human vs. Machine

Berklee Online, Music Law - Lesson 1

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Abstract

In this paper, the author will offer a speculative analysis based on trends of how our society might pay for and engage with music in 2035, what impact this could have on musicians and composers as the music industry landscape changes, and what debates will take place along the way as we try to reconcile innovation of machine vs. replacement of man in various facets of the music industry.

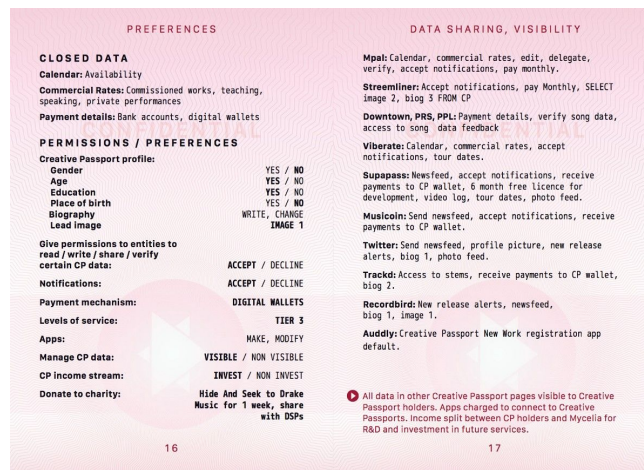
Background

The four areas for which the author believes will have the most impact in the years leading up to 2035, in no particular order, are as follows:

1. Artificial intelligence and machine learning
2. Blockchain technology and universal database.
3. Voice search and human playlist implants
4. Virtual reality for more immersive live-to-digital experience

Analysis

The author attended a Mycelia event at UCLA for a discussion about a universal ID called a Creative Passport that would eventually link with a universal database to increase efficiency from the beginning of production all the way to distribution and marketing, streamlining social and collaborative communications in a meaningful way that would break through the noise.



(Mouazan, n.d.)

Questions arose as to how we protect from hacking, choose what gets publicly shared to make the passport valuable vs. what is kept permission based, and how to add or remove applications via a universally agreed upon API integration protocol. Luckily, it may be less complicated than we think.

Blockchain technology (Rumburg, 2019) is being deployed with platforms such as RChain and Emanate in the music industry, so the idea of securely tracking rights and royalties from start to finish, exposing fat checks by labels and inefficiencies in human error of manual performance rights organizations' (PROs) entries, has caused quite a buzz among musicians and music investors.

It is the author's prediction that by 2035, individuals will be able to log into a cloud universal database backed by blockchain to both create and listen to music in real-time. We already see companies like BandLab leading the way in the real-time cloud recording space. Thus, how industry professionals and musicians get paid will be more accurate and streamlined, automatically tracked and processed by what some have called "unhackable" smart contracts.

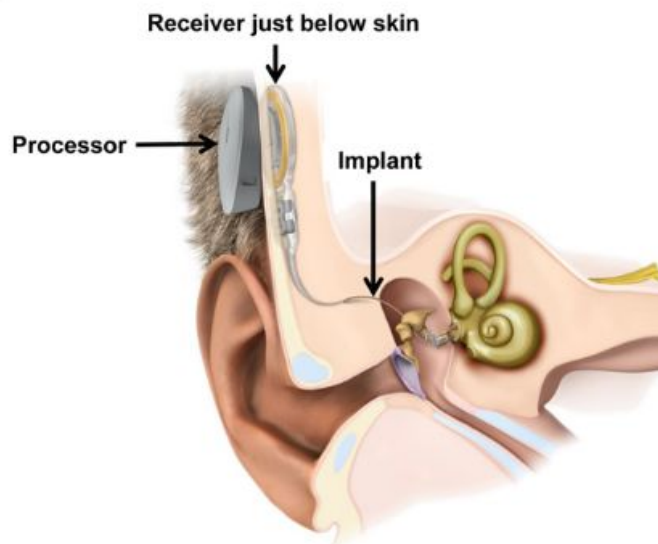
The debates the author anticipates will be how to get major labels on board who stand to gain from a "black box" of unclaimed royalties, and how to handle any job replacements due to technology taking over so that our unemployment rate doesn't go up and negatively impact the music ecosystem as a whole. There will be a shift from those in power who rely on their gut feelings to those who are tech savvy and data driven. With the rise of a split A&R position, traditional A&R vs. research A&R, this already seems to be taking place -- so the goal would be to just shift people to new roles.

In January 2017, Australian A.I.-music startup Popgun could predict melodies that come next after hearing a human play piano. By July 2019, it could compose several instruments together (Dredge, 2019). Daddy's Car was a song composed by an A.I. in the style of The Beatles (Goldhill, 2016). Not only that, but there have been tests run where an A.I. program could predict what elements of songs

would end up being popular, essentially making music production an even more formula based process for those trying to “make it big” (Nasreldin, 2018).

The debates taking place are that of when to rely on the machine and when to rely on our own creativity as well as copyright law such as if one can attribute an A.I. as an author to the song or if it would be attributed to the creator of said A.I. (Martinez, 2017)? This perhaps may make some believe they have less need for human composers, thus creating another potential unemployment issue. By 2035, it's the author's prediction A.I. will be used even more so to create music for those up against the clock. We've already seen a movement to electronic and hip-hop music, among many reasons, because the beats are quick and easy to get to market. Speed becomes even more crucial as we struggle to keep up with technology advances and on-demand, well, demands.

The cognitive and A.I. systems market will achieve 37.3% compound annual growth rate from 2017-2022 (Columbus, 2019). Since music streaming platforms like Spotify (Marr, 2017) have already been using A.I., machine learning and big data (in many ways ahead of major labels), the author's guess is the industry will keep some consolidation, but the control will continue to shift to end-user technology based platforms like Amazon and Apple Music who are able to bundle and personalize beyond what the majors currently can do with limited data. Majors will be forced to shift their business models.



(MED-EL, 2017)

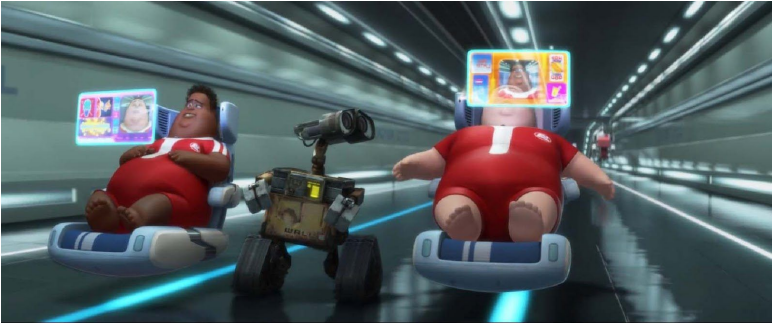
It's also the author's projection that by 2035, the idea of implanting custom A.I. chips designed just for individuals that connects the cochlea of the inner ear directly to the auditory cortex of both sides of the brain, springboarding from middle ear implants we already have for hearing loss or tracking chips we put in our pets, will be "implanted" in many science nerd's conversations. Elon Musk has already been on this path with his brain-machine interface start-up (Wong, 2019).

At the very least, the Internet of Things will progress to a point where we won't need as many external devices. Projections show that "50% of all searches will be voice searches" and "about 30% of all searches will be done without a screen by 2020" (Donnelly, 2019).

As of May 2019, the installed user base for AR-supporting mobile devices reached 1.5 billion (Makarov, 2019). Live Nation and NextVR have partnered to blend virtual reality with live performance. The author's guess is more sensory, all immersive, 4D and 5D experiences will become more common. You'll not only be able to stream a live show, but be able to do so perhaps without a clunky VR headset -- maybe instead 360-degree walls will display around your home and if you're connected to anything, they're sensor nodes to your body.

Conclusion

To sum this all up, the concerns lie as they have for some time in artificial intelligence surpassing human intelligence, the impact on the job market, whether creativity is lessened or enhanced by such innovations, does an A.I. deserve to have the same claim to rights and royalties as a human being, and will we become lazy, fat asses like in the movie Wall-E, constantly plugged in with escapism and forgetting about the perseverance of human life.



(Negroni, n.d.)

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