The AI Imperative in Music

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The atmosphere in my academic institution here in China is at the threshold of a new revolution. From the 2025/2026 academic year onwards, every major on campus will have an introductory class in AI technology, while using AI in the design of courses may also soon be made compulsory. It is very indicative of this progressive move for the country towards fully integrating AI into every life sphere. But in our rush to embrace this technology, as transformational as it is, we must engage in some critical thinking regarding its wider implications. Greater diffusion of AI in music generation may irretrievably alter how we think about human creative work and artistic authenticity.

AI is irreversibly upending the music production world. Currently, tools like OpenAI's Jukebox, AIVA, and Suno have produced music with extraordinary sophistication—mastering tasks like creating stems, remixing tracks, and even inventing new genres—all in a fraction of the cost and time of its human counterpart. Democratizing this domain, framing this in a zero-sum relationship between AI versus human musicians glosses over an altogether more layered nature of cultural production. While sound itself, music is also about story, context, and connection. But whereas AI can mimic patterns, it cannot make meaning. It's bereft of that intentionality at the core of human creativity.

The assumption in the question that is made—that somehow the "human factor" behind the music creation is becoming immaterial—underestimates the strength of lasting emotional and cultural resonance. Audiences in studies continue to report music as important due not only to aesthetic appeal but also to its relationship to human experience (Hargreaves and North 1997). At the core, artists bring personal struggles, complex identities, and multifaceted histories within their work—qualities that algorithms currently cannot replicate. As Simon Frith noted, music "like identity, is both performance and story, describes the social in the individual and the individual in the social" (Frith 1996). Those genres that stress narration and authenticity—folk, jazz, indie rock—, and those that push the boundaries of sonic expression—like electroacoustic music—will keep their currency precisely because of the humanness and imperfection they convey.

In embracing AI so wholeheartedly, there are risks, particularly its potential to reinforce cultural homogenization. Because AI models are trained on historical data, they often replicate and amplify the patterns and biases embedded in that data—even when recombined via prompt in a mash-up of genres. This creates a troubling feedback loop in which niche and experimental genres are sidelined in favor of commercially viable but formulaic styles. While AI promises democratization and makes music most accessible, in reality, democratization requires diversity. Those local and folk traditions that are considered "minor markets" are essential to cultural resiliency; technologies that target mainstream appeal do so at the risk of erasing smaller communities' distinctiveness should they fail to move according to more inclusive design principles, as indicated by Pasquale (2020).

This is not the first time that there has been concern about AI flooding the music market with low-cost, undifferentiated content. The streaming platforms already face an oversupply of music, but they have devised ways of sorting through such plenty. Curated playlists, recommendations, and niche discovery platforms do indeed mean that quality and originality still manage to rise to the top (Aguiar and Waldfogel 2018). It might, however, be somewhat true with regard to AI dominating certain genres—for example, electronic mainstream music, since loops, samples, and autotune are already a big part of such genres. But even then, star artists in those fields have much more to their appeal than just the music. The persona and cultural relevance

continue to be important facets of their success—AI simply cannot compete on those levels. Moreover, in live contexts, AI faces significant challenges due to Moravec's paradox. While generating similar-sounding music is relatively simple for AI, replicating the advanced perception and motor skills needed to perform in a live setting remains far beyond current technological capabilities.

Another concern is that it devalues professional recording studios somehow, making them obsolete. Even though digital tools, along with AI, have opened access to many creative possibilities, the role of a professional studio goes much further than offering technical expertise. A studio is the place where ideas are shared between musicians, producers, and engineers to create something new. Jazz and classical music, along with many other genres, still rely on high-fidelity recording environments for their acoustic quality and live performance dynamics. In addition, the social aspect of studio work creates creative synergy that no algorithm can replace (Burgess 2013).

Fairly, AI's compelling role is augmentation, not replacement. The most promising path ahead is that of a hybrid model in which the AI acts as a tool to enhance the artistry. Artists could use the capabilities of AI to experiment with new sounds, accelerate production, and expand the creative horizon while remaining in control of the artistic process. For emerging artists, AI will reduce production costs and level the playing field by making high-quality outputs possible without access to an expensive studio. But all of this is a hybrid that requires thoughtful integration.

As my institution prepares to integrate AI into the curriculum, it is essential to move beyond a purely technical approach and focus also on the broader social, cultural, and economic implications of this technology. Students must not only develop technical proficiency but also engage in critical discussions about the ethical challenges and societal impacts of AI. Understanding how AI can shape labor markets, influence cultural production, and reinforce or challenge existing inequalities is crucial for equipping students to navigate an AI-driven future. By fostering this broader perspective, we can help students become thoughtful leaders equipped to address the multifaceted challenges and opportunities of AI. Their ability to navigate these complexities will play a pivotal role in shaping a future where AI serves as a force for progress, equity, and innovation in society.

References

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