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Reading Response #2

I thought this chapter posed many interesting questions about the role music has historically played in the lives of humans, and the role technology has played in the intertwined development of musical instruments and music's role in human society. Ge asks himself, "I wonder why people think what I do *threatens* traditional instruments?" (Ch. 2, Page 89), but I think that traditional instruments and their admirers do have much to 'fear'. However, I do not view this as a bad thing, nor do I believe this march of technology can or should be stymied. Traditional instruments such as the harpsichord, clavichord, and pipe organ were the cutting-edge keyboard instruments of their day, before the upstart pianoforte was invented and eclipsed their popularity. This in turn has spawned the development of countless innovations in keyboard-based instruments, and the cycle thus continues. Would music and society have been better off if the harpsichord had been puritanically preserved as the leading keyboard instrument?

I think also, when looking at the birth of mass consumption of music (Ch. 2, Page 92), that we should look even further back in history to see the full evolution of music from a pervasively participatory activity to one where the non-musician masses admire the talents of virtuosos. Our conversation from class where we discussed the role of religion in music's societal and technological development warrants further investigation here. Gregorian chants of the medieval period introduced countless conceptual innovations (modes, cadences, polyphony, among many other), though audience participation still remained prevalent. But fast forward to the 18th century, Bach is composing dazzling masterpieces of choral arrangements, accompanied by the building-sized technological marvel of the pipe organ, or an entire orchestra of high trained musicians playing a wide variety of expensive and difficult instruments. Where once the entire church shared in the music making, technology, in the form of compositional techniques, music theory, and musical instrument design, has created a high barrier between the typical churchgoer and musician. These musicians now often dedicated their entire lives to studying and playing music. This intense specialization, that musicians and composers were given such time and salaries to hone their crafts, allowed for the development of classical music outside of strictly religious settings, paving the way for countless new genres, roles for music and society, and technological innovations.

In the development of Indian classical music, we see a similar pattern emerge. Many compositions are of religious origin, derived from hymns found in the Hindu Vedas, and indeed the art of singing and the art of playing musical instruments are listed first and second respectively among the 64 sacred arts of Hindu learning.¹ Over time however, compositional

¹ [https://dharmawiki.org/index.php/64_Kalas_\(चतुःषष्टिः_कलाः\)](https://dharmawiki.org/index.php/64_Kalas_(चतुःषष्टिः_कलाः))

innovations such as the raga and tala systems, combined with technologically advanced instruments such as the sitar and tabla, turned music-making, along with the other traditional *kala*, into a highly specialized profession. Thus, as in European classical music, the development of music technology, and the resultant complexity, has led to the same performer-listener divide. So while the advent of recording technology has certainly galvanized the modern commodification of music, the catalyst for the modern virtuoso-audience paradigm was set thousands of years ago, and mirrors the technology driven hyper-specialization of society as a whole. And so, here we are in the 21st century, where raves and other social musical activities have filled the music-making void created by a culture of passive listening.^{2 3 4} But, I am hopeful that some recent music technology innovations have the potential to reverse this paradigm. Contributions such as the Lumi keyboard⁵, Piano Genie⁶, the widespread availability of free sheet music, tablature, and youtube lessons, software instruments, and the digital audio workstation among countless others have made music-making more attainable. I believe that the continued development of nascent technologies such as AI-assisted composition tools and expressive human-computer interfaces will continue this trend and allow more passive music consumers to become music-makers.

² Olaveson, T. (2004). 'Connectedness' and the rave experience: Rave as new religious movement?. In *Rave culture and religion* (pp. 85-106). Routledge.

³ Sylvan, R. (2013). *Trance formation: The spiritual and religious dimensions of global rave culture*. Routledge.

⁴ St John, G. (Ed.). (2004). *Rave culture and religion* (Vol. 8). London: Routledge.

⁵ https://roli.com/us/product/piano-m-learn?gad_source=1&gbraid=0AAAAAob8nBXT39N8ID_gnQ1ISFPYMnA6r&gclid=Cj0KCCQjw6oi4BhD1ARIsAL6pox32gsSs27R-u21rBoAnQSOHnQ5NGiFgfkSVqoc43I7gEDYET_ucPyAaAr_iEALw_wcB

⁶ Donahue, C., Simon, I., & Dieleman, S. (2019, March). Piano genie. In *Proceedings of the 24th International Conference on Intelligent User Interfaces* (pp. 160-164).