

Objects Move Faster Than the Eyes That Observe Them



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As a result of the accumulation of partial developments and the implementation of private sector investment policies, sound-related technologies have experienced several prominent moments throughout their history. Two of these moments largely define the current conditions of sound production, storage, distribution, and listening. The first was a shift in sound inscription: the change from analog to digital systems. The second was a shift in distribution: the global connection of computers due to the emergence of the Internet. Both events, along with a plethora of converging technological innovations that continue to emerge everywhere, are now present in all aspects of sound processing –both musical and non-musical–, raising questions and causing theoretical, methodological, and practical adjustments in both the disciplines interested in sound and in the fields dedicated to sound storage and preservation.

Today, we are at the dawn of a technological development that promises to be as prominent and transformative as its predecessors, or even more. I am referring to the application of artificial intelligence to various aspects of everyday life. Its emergence has generated a wide range of opinions, with advocates of its potential benefits on one end and critics of its dangers on the other –some even calling for the halt of its development. On one side, there is apotheosis and fascination; on the other, fear and paralysis. However, some voices calling for reason are trying to remind us that this new development is neither as praiseworthy nor as deplorable as it might seem, since many of the attributes ascribed to it are more limited or powerless than they appear to be. In this regard, it has been explained (Novais, 2024) that AI does not possess human-like intelligence because it does not make decisions based on emotion or intuition, it is not completely artificial because its development requires natural resources, it is not conscious because it operates according to models and rules,

it is not creative in the human sense –although it can create musical works– because it does not operate with inspiration, it is not autonomous because it requires programming, training, and human supervision, and it is not omniscient because its knowledge is limited to what has previously been given to it and what it has learned.

Even when evaluated properly, it is clear that the current version of AI with learning capability –cognitive AI– has a strong impact on several areas of music, such as composition, the completion of unfinished works, teaching, recommendation systems used by music distribution platforms, and many others. Its use, rapidly and unexpectedly expanding, along with the constant emergence of new devices –and transformations of existing ones–, frequent changes in marketing and distribution policies, and the ever-increasing connectivity –whether we are aware of it or not, directly or indirectly, make us live in a state of constant connection –and other factors create a constantly changing environment. In this environment, everything moves and diversifies at a dizzying pace, from musical composition to listening experiences.

Are the disciplines focused on the study of sound flexible enough to keep up with the speed of these changes? What specific tools does historical musicology have to explain the effects of the platformization of the classical repertoire? What methods does ethnomusicology use to address technological conversion and the remediation processes of the musics that were historically its subjects of study? Do the so-called sound studies already have a particular perspective for analyzing the consequences of AI application in listening experiences? Can the sociology of music provide a specific explanation for the use of AI and robots to create apocryphal songs and earn royalties from streaming platforms?

Some readers might consider that none of these topics fall within the purview of the mentioned disciplines. However, this judgment would be akin to declaring the end of research, as the conversion of music to the current technological environment is tending to become a global phenomenon. In a few years, there may no longer be musical expressions that, in some aspects of production, distribution, and consumption, do not depend on the scenario described in the previous paragraphs. It is evident that colleagues trained in traditional disciplines have shown interest in these topics, and their work has yielded good results. But have they managed to maintain the specificity of their disciplines? At first glance, it seems they have not, as they have had to draw from areas of knowledge such as media studies, semiotics, Big Data processing tools, AI studies, and even

philosophy. The fact that expressions historically studied are moving faster than the eyes that observe and scrutinize them seems to be leading several fields of knowledge toward obsolescence, or at best, towards losing their specificity. This is a question that concerns the present and near future of our work and requires discussion.

Bibliography

- » Novais, P. 2024. "The Implications of the AI Era: Risks, Control, and (Technological) Independence". Ponencia presentada en *Research Summit, 50 Years of Reserach at UA: Challeges for the Future*. July 16-19, University of Aveiro. Aveiro, Portugal.