

Machinic rhythms: Improvisational systems and more-than-human participation

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Disciplinary background A. The first disciplinary background is philosophy of technology. My academic background is in continental philosophy, and my recent research, as part of the research project 'The Future of Indeterminacy: Datification, Memory, Bio-Politics', has been increasingly concerned with how the study of technology and digital cultures contributes to a rethinking of themes of action and perception across biological and technological boundaries.

Disciplinary background B. The second disciplinary background is improvisation studies. I have a long-standing interdisciplinary interest in experimental music and philosophy, and I have developed this in a recent collaboration with the composer and theorist Professor Peter Nelson (University of Edinburgh).

Abstract

This paper aims to bring recent philosophical and interdisciplinary research on technology to bear on practices of improvising with non-human, technological partners. It addresses two examples in the historical work of David Behrman and the ongoing work of George E. Lewis in order to highlight some key features of what it means to participate in more-than-human improvisational situations.

In this paper I reflect on the interactive computer-based improvisational music systems of David Behrman and George E. Lewis to ask questions of what it means to participate in an improvisation – questions including, Who or what are the participants here? How can we understand their 'entanglement' and what constitutes their relations? What does it mean to act in such an entanglement? How do the participants negotiate with their partners in the improvising situation? I examine the system set up by Behrman for pieces including the evocatively-titled *Interspecies Smalltalk* (1984), performed with the violinist Takehisa Kosugi, and Lewis's constantly evolving *Voyager* software (1987-), and draw from recent theorisations of more-than-human and distributed perception in order to give an account of the complex, diverse, intersubjective, multi-scalar relations that are enacted in the improvising situations these works take place through.

In particular I work with a semiotic notion of 'rhythm' that I have recently developed with the composer and theorist Peter Nelson, drawing from performance studies and the philosophy and theory of time, in order to reflect the contingent, dynamic ecology of mutable participants that make up these improvising situations. In using this account to explicate the diverse human, non- or more-than-human biological, and technological forms of participation that are evidenced in these improvising situations, I integrate challenges to the centrality of the human made by posthumanist, materialist, and other theoretical movements, but also counter the rejection of subjectivity sometimes present in those discourses. By studying simple interactive systems, in Behrman's case, and systems in process, in Lewis's case, I aim to provide suggestive hints for how interaction and participation can be conceived in the more complex and sometimes less, or differently, interactive systems used in contemporary musical practices dealing with machine learning and other AI processes.

Interdisciplinary implications. This paper will contribute to bringing improvisation studies into closer and more rigorous dialogue with philosophy of technology and other contemporary work in digital culture. It will build on fledgling work thinking of improvisation involving more-than-human

participants, building on my research specialisms in philosophy and my interdisciplinary work with music and art scholars.

References

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