Performative transactions: worlding compositional ecosystems
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Citation

Summary

This doctorate project in artistic research, undertaken by a music composer, pursued a practice-led investigation into how the roles of artists and their compositional practices transform in response to emerging technologies, with a particular focus on artificial intelligence and blockchain. Through a combination of compositional experimentation, philosophical inquiry, and the development of an experimental educational course (Posthuman Creativity Labs: Artificial Intelligence and Blockchain in Music), the research led to the definition of four redefined artistic roles: artists as operators of tools, curators of agential assemblages, system-builders, and initiators of new artistic ecosystems (in the process described as worlding artistic ecosystems). For each of these roles, new compositional methods were proposed and critically explored.

By analysing both practical and conceptual challenges posed by contemporary artistic engagements with technology, the research identified the need for a new kind of artistic ecosystem—one in which human and non-human agents can transparently build upon one another's contributions. In response to this need, this doctoral trajectory employed methods such as creative prototyping, artistic self-reflection, speculative design, and iterative technical development to envision and construct such an ecosystem. It first proposed a conceptual abstract machine—the Autopoietic Rhizomatic Metamodelling Machine (ARMM)—drawing on the notion of abstract machines. The abstract ARMM was then operationalised in the concept of Decentralised Creative Networks (DCNs): blockchain-based ecosystems for music composition in which humans and AI agents co-compose generative and self-modifying structures in a creative mode conceptualised as allagmatic composition. At the core of this system is the concept of Performative Transactions (PTs): modular, executable contributions that encode and transform compositional processes.

By both analysing existing artistic practices and composing new music through the systems it proposed, this thesis contributed a new model of posthuman compositional practice grounded in procedural transparency, recursive design, and decentralised collaboration.