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Abstract

The Pulse of the Earth

***A Sound-Based Performative Object as a Development
of Reflection on Land Art***

The doctoral dissertation titled *“The Pulse of the Earth. A Sonic Performative Object as an Extension of Reflection on Land Art”* is an interdisciplinary artistic study that combines land art with contemporary technologies and the philosophy of embodied experience. The core idea of the project is to create resonance between the rhythm of the human body and the rhythm of nature, made tangible through an interactive artistic form. The main objective was to construct a sonic performative object—an installation that responds to the heartbeat of the viewer and translates it into physical vibrations, allowing for a profound, multisensory experience of art.

The work is structured into six chapters. The first two explore the theoretical and artistic foundations of the project. They address themes such as the Earth's rhythm, the symbolism of the heartbeat, embodiment in art, and the human relationship with the landscape. Key philosophical frameworks are drawn from Maurice Merleau-Ponty's phenomenology and the rhizome concept of Deleuze and Guattari, which underpin the reflection on multisensory interaction with space. The study also highlights interactive land art as a form of total art that engages not only sight but also touch, hearing, and the sense of movement.

The following chapters document the research and practical realization of the work. Various biometric sensors, sound transducers, and vibration systems were tested. The final version utilizes a PPG heartbeat sensor with illumination, a Raspberry Pi microcontroller, and a high-quality subwoofer powered by the Deaf Bonce Atom 2000.1 Pro amplifier. The installation consists of a horizontal steel plate measuring 120 × 120 cm and a vertical frame measuring 176 × 176 cm, made from steel profiles. The plate is mounted on a rubber base and buried in the ground, and the entire structure was installed on the artist's family land—a site deeply connected with his memory and identity. This personal rooting adds another layer of meaning, linking contemporary art practice with biographical and emotional connection to place.

The artistic documentation includes both the construction process and the reception of the installation in a public space. Observations show that viewers experience the artwork not only on a sensory level but also emotionally and symbolically. The installation invites reflection on the body, the rhythm of life, and the relationship with nature. Participants engaged in physical experimentation, observing how their movement or accelerated heartbeat influenced the vibrations—thus turning the installation into a performative and bodily experiment.

In the final chapter, the project's development potential is evaluated. The installation can be scaled, adapted to different environments, and enriched with new media, including augmented reality (AR) or virtual reality (VR). The author also emphasizes the social value of land art as a medium for building community, enhancing ecological awareness, and transcending the limits of traditional artistic forms.

This work contributes a new quality to the discourse on contemporary art, offering not only a physical artifact but also a reflection on embodiment, memory of place, and the deep connection between humans and the Earth's rhythm. *The Pulse of the Earth* becomes more than an artwork—it is an open, evolving experience for the body, the senses, and the mind; simultaneously intimate and collective.