



Plants, Fungi, and Music

Can Vitality be Made Perceivable with *Biodata Sonification*?

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Contents

- What is *Biodata Sonification*?
- Short Video Example
- Research Questions
- Eco-Phenomenology as a theoretical framework
- Method

What is *Biodata Sonification*?

- Two electrodes are attached to a mushroom or a plant (or animal, any organic surface)
- The electrodes measure changes in the electrical conductivity in the organism/on its surface
- These measurements can be used by synth modules like this one as „musically useful control signals“ (instruomodular.com)
- They can influence e.g. the pitch, rhythm, timbre, loudness, etc.



First Research Question

- How is this kind of music, especially in form of video content, experienced by people?

Suitable Method? -> Phenomenology

Eco-Phenomenology as a Theoretical Framework

- Eco-Phenomenology asks: Which narratives (formed and reproduced by experiences) about nature form the way in which people treat their environment/nature? (Bannon 2024)
- Distinguishing between destructive and and constructive narratives concerning sustainable (human) life on earth
- Creating counter-narratives against destructive ones

Second Research Question

- Can the experience of *biodata sonification* have transformative elements concerning prior existing narratives of nature, plants and fungi (e.g. as noiseless, non-sentient, in-the-background)?

Method

Semi-structured interviews:

- 6 participants in total
- Lab setting
- Each one watched four different videos of *biodata sonification*
- then: 30-40 minute interview about the experience

Sources: Videos and Websites

- „Five Minutes of Pink Oyster Mushroom Playing Modular Synthesizer“, uploaded by *MycoLyco* on 20/11/2020, <https://www.youtube.com/watch?v=hIQHYtncww>, last access on 07/12/2025
- „SCÍON“, on *Instruomodular.com*, Link: <https://www.instruomodular.com/product/scion/>, last access 08/12/2025

Selected Literature

- Bannon, Bryan E., Ecology and the Environment, in: Steffen Hermann et. al. (ed.), *The Routledge Handbook of Political Phenomenology*, New York 2024, pp. 469-482
- Brown, Charles S., Toadvine, Ted, *Eco-Phenomenology. Back to the Earth Itself*, Albany 2003
- Ryan, John Charles, „Passive Flora? Reconsidering Nature’s Agency through Human-Plant Studies (HPS)“, in: *Societies*, vol. 2 (3), August 2012, pp. 101–21, <https://doi.org/10.3390/soc2030101>