



Sound Art from Scrap

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Subjects involved

- Circuit bending
- Sound art
 - «The glossary of the anthology Audio Culture describes it as a ‘general term for works of art that focus on sound and are often produced for gallery or museum installation’» (Licht, 2009)
- Collateral fields (philosophy, aesthetic, ecology, HCI, IT...)



“Speak N’ Spell”, still image from: https://www.youtube.com/watch?v=x_oVak2yBkQ

Key objectives



- We are producing e-waste with unsustainable rapidity
 - Can circuit bending-derived sound art help address this, and how?
- Circuit bending has both destructive and constructive environmental potential
 - Which strategies to implement to avoid the first eventuality?
 - Highlight the often overlooked environmental potential of circuit bending
- Get mixed knowledge through artistic-focused research

“The Furby Organ”, still image from: <https://www.youtube.com/watch?v=GyLBjScgb7o>



Mobilities, Movement, Movements

- De-contextualisation and Re-contextualisation of a device
- Shift in our perception (the way we perceive EED)
- Framework provided by Neo-Materialist philosophy: cast human qualities to EED
 - Reed Ghazala: BEAsape (BioElectroacousticAudiosapian)



Status of the research

- *NIME 2022: Circuit Bending and Environmental Sustainability: Current Situation and Steps Forward*
 - Review of the literature surrounding circuit bending and its environmental aspect
 - Proposed a comprehensive overview of the framework in which circuit bending fits
 - Developed four suggestions for an environmentally aware circuit bending practice
- **Planned**
 - Develop more specific and practical guidelines through focus group discussions
 - Implement them in artistic practice and register their effectiveness



Thank you!

Resources

- Cagol, M., & Dodman, M. (2015). Circuit-bending and sustainability transitions: Exploring ways of re-thinking and re-using technologies. *Visions for Sustainability*, 4, 13–21.
- Ghazala, Q. R. (2004). The folk music of chance electronics: Circuit-bending the modern coconut. *Leonardo Music Journal*, 14, 97–104.
- Cantrell, J. (2020). The Timbre of Trash: Rejecting Obsolescence Through Collaborative New Materialist Sound Production. *JAAAS: Journal of the Austrian Association for American Studies*, 1(2), 217–229.
- Andrews, Ian. "Post-digital aesthetics and the function of process." (2013).
- Skjulstad, J. (2016). Circuit bending as an aesthetic phenomenon (Master's thesis).
- Licht, A. (2009). Sound Art: Origins, development and ambiguities. *Organised Sound*, 14(1), 3-10.
- Premalatha, M., Tabassum-Abbasi, T., & Abbasi, S. A. (2014). The generation, impact, and management of e-waste: State of the art. *Critical Reviews in Environmental Science and Technology*, 44(14), 1577-1678.