ACUPUNCTURE SONIFICATION

MY FAIR ACUPUNCTURE SONGS

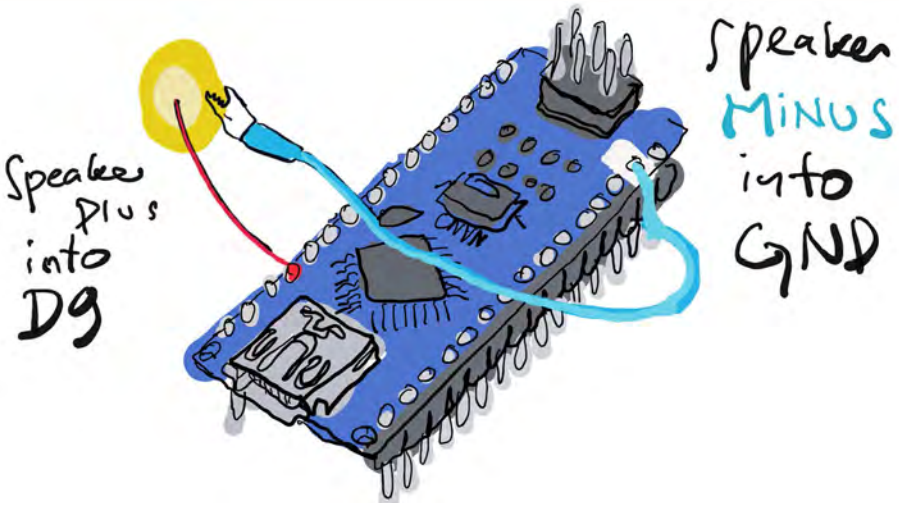
Are we hardware ourselves? Taking the body as input, perceiving it as a space to claim ownership over ('my body, my choice'), and as artistic material to explore and celebrate, is a relatively common approach among queer-feminist and trans-feminist artists and hackers. Resisting attempts to discipline, control, restrain and govern female-read bodies was a starting point for many legendary artists in the 1970s (Carolee Schneemann, Yoko Ono, Abramovic, etc..), who centred their artwork around their own bodies. Today, feminist hackers and biolab artists find inspiration in embodied technologies, embracing all of the fluids, phenomena and mysteries of the body.

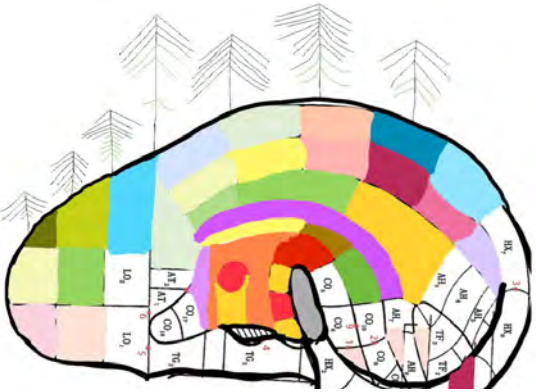
This particular project tackles the issue of technology as an extension of our bodies, and our bodies becoming an extension of technologies (McLuhan, 1964; Haraway, 2016). Even in their pre-technological form, our cells are sending and receiving signals, and tissue is organising around communicating neural networks connected to the brain. Our bodies are matter, matter that is sensitive to environmental changes and contamination. Our bodies are made of water (Neimanis, 2017) and therefore part of larger circles and entanglements. In traditional Chinese medicine (TCM), meridian networks are paths for chi — life energy — flowing through the body. Acupuncture points are located along these meridians and can be measured with devices called acupuncture locators. These electrical devices measure resistance on the skin and the capacity of the body to locate an acupuncture spot. We tried to imitate such a device in order to sonify its input. This DIY project uses a capacitor sensor to measure the skin's capacity and immediately translates it into sound frequencies. Our aim was to apply only fairly traded electronic components, as well as existing and recycled parts, to create this circuit. No acupuncture needles were involved in this project, not even recycled ones. Instead, we wanted to play with the notion of the body as a map of inner and outer sensa-

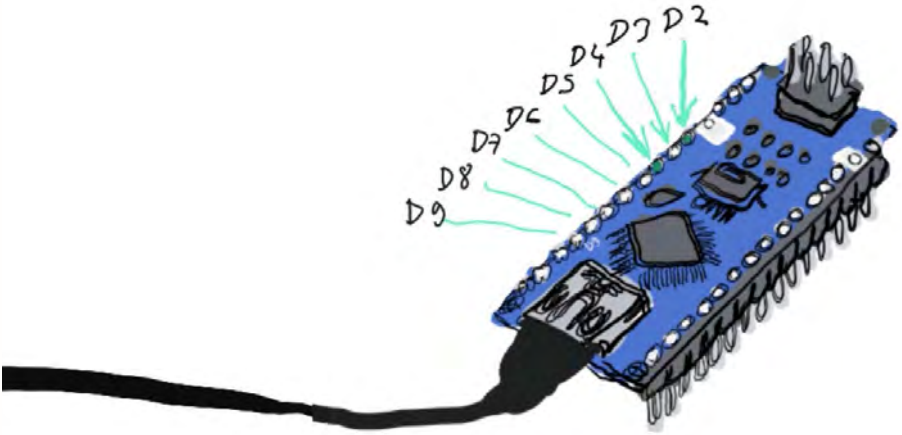
tions. The measurements can sonify acupuncture spots through differences in pitch (high or low sounds).

The open source microcontroller board Arduino compares the values coming in from two pins to see whether one of the electric fields is grounded (reaches equilibrium). The antenna of this capacitor sensor detects the body when the electric field around it gets close to the skin. The antenna that touches an acupuncture spot is grounded faster than it would be on a normal part of the skin. Based on this principle, we can measure different qualities of acupressure points and create music. In principle, we connect an antenna to our skin and listen. Depending on the capacity of the body using the Acupuncture sonification device, and depending on the resistance of the skin, the acupuncture points are translated into different sounds.

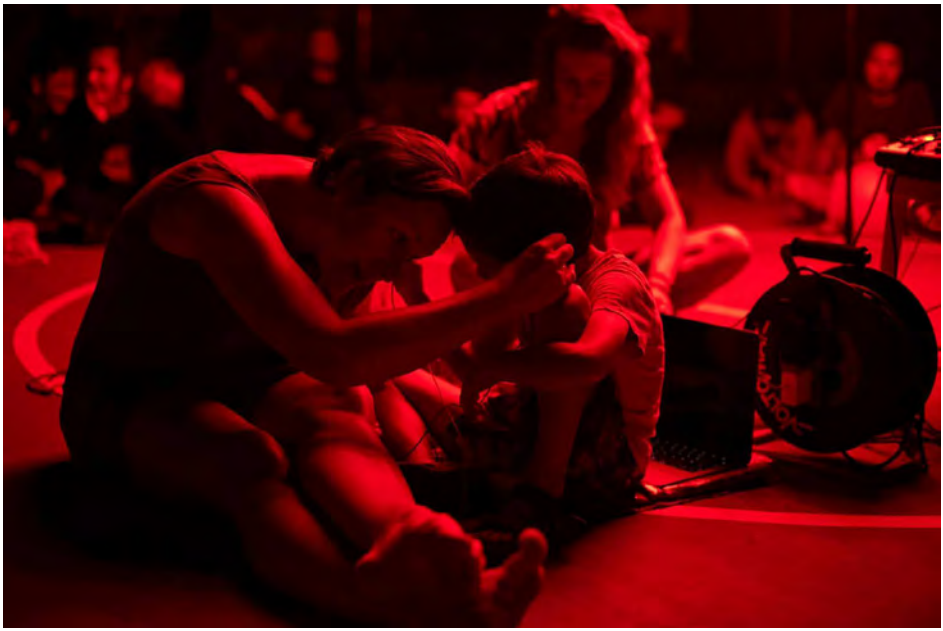
Illustrations by Stefanie Wuschitz, 2021







Performance by Stefanie Wuschitz with
her son Leo
Light installation by Janez Grošel,
2021
Photo at PIFcamp
Photo © Katja Goljat



Body Sonification Workshop at The Ludwig Foundation
by Patrícia J. Reis, Havana, Cuba, 2022
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