Day Three
WA SAMAKI REFLECTIONS

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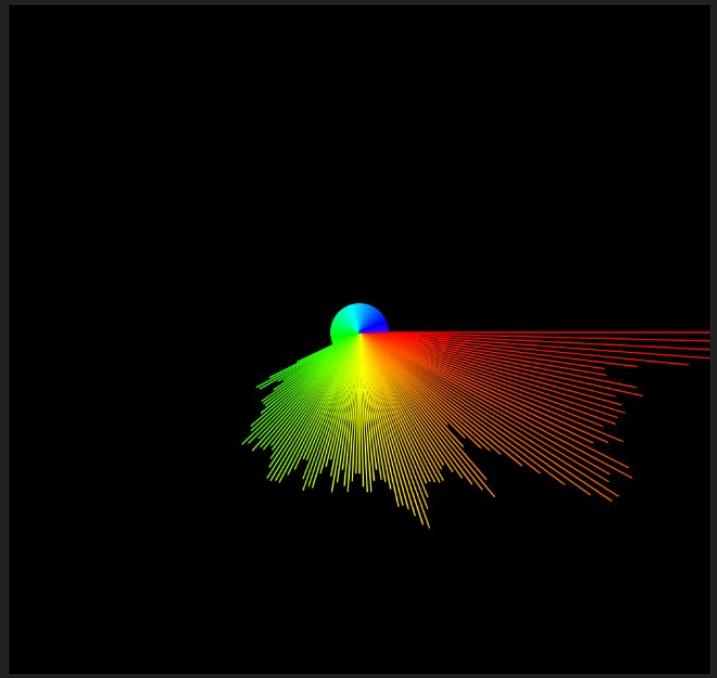
ENVR-3898-302 (Fall 2022)
Independent Study
Sustainability Design
Experiential Learning in Trinidad



Sound Frequency Analysis Visualization:
https://editor.p5js.org/LB/full/2bwSTv5p6
(Press toggle button 2x to run & start program)

Code:
https://editor.p5js.org/LB/sketches/2bwSTv5p6

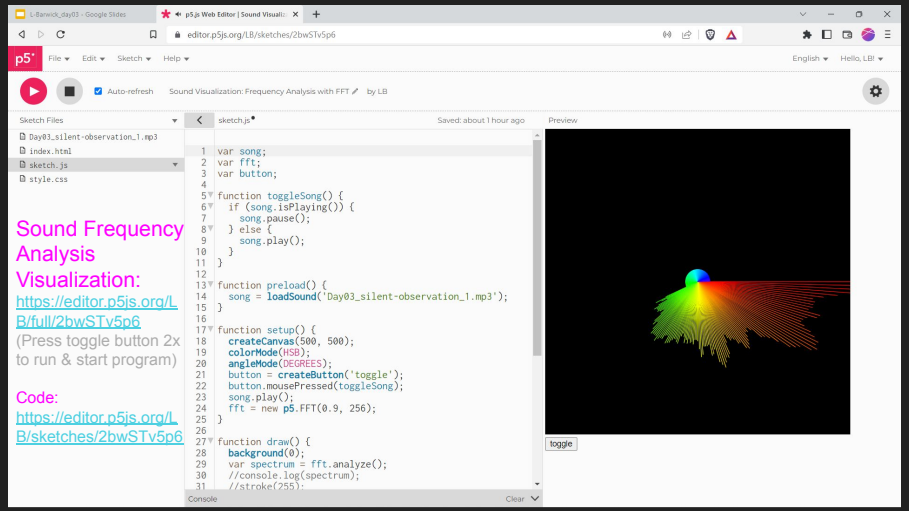
Silent Observation

An activity we did on day three at Wa Samaki Permaculture farm was thirty minutes of independent silent observation of the land.

This part of the learning really necessitates the need to listen and be open and aware of the ecosystems we find ourselves in and ponder what is going on with the land and the other species that utilize the environment, that may be non-human.

I sat near the kitchen and dining area close to the compost toilets and used my audio recorder to capture my moment in that spot.

Sound Frequency Analysis Visualization



I want to experiment to see if by translating sound frequencies into visual data and observing distinct elements, that as a whole audible sound are not always distinguishable, can new insights on the Wa Samaki site be gained.

A project I've wanted to program is a tool that analyzes a sound file's full frequency spectrum and outputs that data as a visualization by drawing a shape based on coded parameters assigned to each pixel to represent variations.

Many sound visualizers only measure one value, volume. FFT (Fast Fourier Transform) is a function available in p5.js (a free and open-source JavaScript library for browser based creative coding) to do frequency analysis on sound files to extract and display the amplitude at multiple frequency levels (i.e. low & high frequencies) not just volume.

Sound Recording Technique

Going forward some new habits will be to use a wind sock and move less. A lot of unintentional noise is captured, like the sound of movement and rustling, the wind, etc. Considering this I will be more aware of the volume levels on the recorder itself (my levels were too high), and to keep the recorder stationary unless I intend to capture movement sound, or adjust recording frequency settings to balance for this factor.

Through doing this reflection, I have a new understanding about sound frequency spectrum. LIstening so closely to my recordings and observing how the sound I recorded is visualized gives me some ideas how I will adjust my sound recording technique.