

SONIC BLOOM

Mileece's experiments in plant sounds reveal a new kind of harmony.

Text by Lisa Rovner

Photography by Logan White

Mileece was born in London in 1978. Her parents ran a pioneering recording studio called Freerange and a music video company called RockFlicks, exposing her at a very early age to artists and audiovisual production. She comes from a family of innovators—her grandfather programmed the very first computer-generated song, “Daisy, Daisy,” which appears in Stanley Kubrick’s film “2001: A Space Odyssey”—and grew up surrounded by experimental people, including Timothy Leary and Charles Lucy, the inventor of the Lucy tone microtonal scale. But really it was the work of Cleve Backster that had the biggest impact. Backster was a lie-detection specialist who attached plants to a polygraph machine to document their electrical emissions. Initially he was testing basic plant physiology, but soon concluded that plants were sentient—in other words, able to feel—and that they exhibit a “psychic” connection to the world around them. Mileece is a sonic artist whose music and installations highlight plant intelligence and our own interconnectedness.

Mileece, you have made it possible for us to hear plants talk. You record the electromagnetic emissions of plants by attaching them to electrodes, and then through a computer program you transform those inaudible frequencies into audible frequencies, thus creating musical portraits of plants. How incredible. What inspired you to make music with plants, or *plusic*? By the way, is that a term that you coined?

Yes, I made it up. The music that plants write is very particular, so I called it *plusic*. What inspired me? A few things ... I grew up in the countryside and in the city, so I was very aware of the impact of technology on people, while also very aware of ecology. From a young age I wanted to protect [the natural environment] but I was also fascinated by technology. When I was 17 I saw Mobius8 perform in Los Angeles. He was using security system sensors from Israel and had made this MIDI-based instrument. This was before sensors became common in interactive music. I was very inspired and had this weird image of holographic plants that you could touch and play. Two years later, when I was 19, I saw this documentary called “The Secret Life of Plants,” and realized I could do it with real plants. I completely lost my shit, like, “This is amazing!”

I love that film! So, how did you begin?

In “The Secret Life of Plants” there is this guy, John Lifton, who was making plant music in the 1970s. He had these huge modular synthesizers that made kind of boring sounds—I mean, for the time it was great, but with new, more powerful computers I thought we could do something much more lucid. So, I got involved in SuperCollider and started to code. I went to school for sound engineering because I wanted to record endangered species and sonic environments before they went extinct. Just as species are disappearing, soundscapes are disappearing too. I wanted to help archive the sonic biosphere. Then I went into a sonic arts program where I learned programming. At the time I didn’t know I could record plants, but I was already interested in their natural processes.

Pictured pomegranate (*Punica granatum*)





A photo from one of Mileece's performances.

You design installations that enable human interaction with plants, underscoring the idea that all cellular life is in constant communication. You create environments where people can spend time with plants—brushing up against them, touching their leaves and hearing the effects. Does your work aim to bridge the gap between humans and plants?

The idea [behind past installations] was to take what I'd learned in "The Secret Life of Plants" and use modern technology to evolve what John Lifton and people like him had started—to create a voice and a way for people to interact with plants. The first thing I put together was for the Innovation Centre at the London School of Economics. I designed something that wouldn't play unless it was touched. The interaction was very basic. When [the Macintosh computer operating system] OSX came out, everything changed; the depth that could be achieved with program language was much greater; what you could generate was more diverse. The machine could do more.

Do you see music as a vehicle or medium through which one can more easily explicate ecological concepts, such as plant intelligence or human impact on plant life?

Sound is the bridge that makes it possible for us to understand that plants are sentient, just as we are. It's difficult for us to understand [just how sentient they are] because plants don't move around. Well, of course they do, but very slowly. Imagine if a plant could move towards your face, if when you said hello, the plant turned toward you. We look at them as if they were inanimate objects, but they're not! I use sound to demonstrate the quality of our interaction and technology to promote ecology.

Do you play music to your plants to help them flourish, as Dorothy Retallack suggests in her book "The Sound of Music and Plants"?

When I do interactive installations, there is continuous sound being generated by the plants and they grow enormous amounts—so yes, plants are sensitive to music. I think it would be a good thing to do on an agricultural level. I'm working on building a mass-produced machine in which plants generate their own music.

Let's talk about Cleve Backster; I know he was a big influence on you. Backster's studies are riveting. The story goes that he was going to burn a leaf to see what reaction he could get from the plant's polygraph reading. He didn't have any matches, so he left the room to find some. When he came back, he noticed the plant's readings jumping all over. Just the thought of burning the leaf was enough to throw the plant into a state of fear. Do you believe, as Backster's studies show, that plants have a sixth sense?

Because we can't harness the data, we tend to call it "psychic" abilities. I am not so esoteric. I prefer to remain observational and literal. We know that plants are able to detect and relay information quickly through large amounts of space and in a very dynamic way. They have certain sentient abilities that allow them to make decisions about their organism that we don't have. Plants are able to self-induce a state of shock and turn off all their functions.

Yes, plants can be frightened into non-activity.

In reaction to the cutting down of the rainforest, plants have been shown to shut themselves down and become comatose, no longer taking in carbon dioxide and producing oxygen, in a kind of "protest."

Ninety-nine percent of the economy doesn't want you to know that the earth is a living organism. The more inanimate and exploitable, the better. Most people believe that exploitative greed is perfectly valid. It's not. That's why I'm doing what I do. I'm not a scientist, I'm just creating a platform for people to experience this awesome—and I say that in the truest sense of the word—interconnectedness.

Reference:

MIDI (Musical Instrument Digital Interface)

A standard protocol for the interchange of musical information between musical instruments, synthesizers and computers. Introduced in 1983.

SuperCollider

An environment and programming language for real-time audio synthesis and algorithmic composition. Introduced in 1996.



Pictured: fig (Ficus carica), palmetto (Palmetto)