

EMERGENT BEHAVIORS:  
Music and Human Rights Senior Project  
By Annie Dodson  
Artist's Statement  
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*EMERGENT BEHAVIORS is a piece for violin, viola, cello, 3 floor toms, electronics, field recordings, and natural objects. The piece will premiere Saturday, December 10 2022 at 8:00 PM in Bard Hall, at Bard College.*

“Humankind is a thing, and so it withholds its graspability, it is open. Humankind is humankind, not some abstract being but a very specific one. Yet this doesn’t mean we can point to it directly. Humankind is *specific* and *spectral*. The quality of humankindness floats spectrally like a halo around humans, precisely because of the specificity.”

*(Humankind by Timothy Morton, 99)*

“The x-frog floats uneasily around the frog, and it *is* the frog — and it *isn't*, at the same time. (...) Ecological awareness is saturated with *nothingness*, a shimmering or flickering, a shadow play of presence and absence intertwined” (78).

Acknowledging the spectrality of all things is necessary for accomplishing any sort of solidarity; realizing that it is what makes everything the same and different at once. We must also reckon with the fact that solidarity is *already* happening constantly around us everywhere:

“Solidarity is the noise the symbiotic real makes in its floating, spectral nowness, conditioned by the past (otherwise known as trauma), yet open to the future” (79).

I did not anticipate my senior project to be what it is. But when I read “Solidarity is the noise the symbiotic real makes,” I felt a jolt through my body, goosebumps crawling down my back. That’s it. The world around us is humming with solidarity, emitting a frequency humans cannot hear. We can tune into this frequency and accept the transmissions, but it is hard. This concept, the buzzing solidarity of the spectral around us, was the backbone to composing *EMERGENT BEHAVIORS*.

The piece follows a narrative, the one I interpolated from Morton’s ontology, as well as Stephen Buhner’s experience of communicating with plants. I interspersed the loops and routines from their work into crafting a story for the piece. It begins in a swamp, bubbling, dark and eerie. Out from the swamp emerges the spectral, shimmering above us, captured in a 5 harmonic row repeated by the strings at their own pace. Slowly, as the harmonics are reduced to their fundamental pitches (a fundamental pitch is the lowest reduction of a harmonic, which is just one of the many overtones produced by this fundamental — or, to put it in Morton’s terms, they are the same thing, yet not the same thing), the spectral becomes form. Form: appearance, what a thing looks like and how it exists in the purely physical plane. I represent form in the piece fairly literally, through the sounds of the natural world— digging in the dirt, playing with mud, branches breaking, leaves rustling, skin scratching. The physical aspect of things, relatable, accessible, because we know we can make that sound ourselves by going outside and walking

through the woods. Yet we can still hear traces of the spectral shimmer through occasionally—but never the full series because now, in the world of form, we cannot fully access the spectral. This harmonic shimmer is a reminder of a conflict, and foreshadows the conflict coming.

From form, we move into entraining. This section was inspired by Stephen Buhner's work with plant attunement, which requires the hopeful communicator to slow their heartbeat, focus, and tune into the frequency of the plant in order to listen to it and feel its emotions as your own. I wanted to capture the sound of many heartbeats beating at different rates. The string players switch to playing the floor toms in semi-steady beats, but not in time with each other. Partway into this section we hear the real (but manipulated) sound of blood pulsing in a human vein. The electronics play a big role in this section, and continue to do so for the rest of the piece. Here, in order to create the sensation of pulses and beating in and out of time, and pulses entering and exiting the ear seemingly sporadically, I created a sine wave generator machine in Max/MSP to constantly and randomly be playing sine waves at extremely similar frequencies. But because they are a couple Hertz off from each other, the waveforms don't sync up fully, and this creates a beating sound. To generate the frequencies, I used the average heart rates of humans, raccoons, and cats, just for fun. The role of the electronics versus the role of the strings is undefined. I had gone into the piece with an initial plan for their strict roles and tasks, but as I had more and more ideas for the piece, I needed to branch out and become flexible. I decided to keep the strings acoustic, to represent the natural world, and in this section and the one that follows, the electronics sort of represent humanity, if I had to label it, adding to the conflict, with many out of sync heart beats.

We now enter the next section, trauma. Trauma is the conflict between the human and nonhuman, and form and essence. I was inspired by Timothy Morton's severing—the severing

between human and nonhuman which has left us traumatized, and re-traumatizes us everyday as we continue to perpetuate it. The electronics are doing a very similar function, using another sine wave generator machine I made, but this time much lower in frequency, and more distorted. The strings detune for this part to find that close-sine-wave microtonality easier. They add the harmonics from the beginning occasionally throughout this section as well, but in a new timbre: harsh, fast, loud. This truly is a conflict between the pulsing heart, the form, and the spectral. It all comes together here. It is repeated, slowed down, dimmed. Is it resolved?

The last section, in an attempt to resolve the conflict, is called medicine. This name also comes from Buhner, a phrase used for those who have communicated with plants and gained a feeling which has cured them of an ailment. It starts with wind. I was trying to find the most neutral sound possible, and to me, wind is incredibly neutral. However, I tuned the wind to specific frequencies — the harmonic overtone series, so the wind would harmonize with the strings in a conversation, or duet. The wind randomly changes pitch in the series, but gradually moves from lower frequencies to higher frequencies. The strings play a repeated phrase, reharmonized every couple times through it, playing very ponticello. Ponticello is an articulation where the player has their bow extremely close to the bridge, creating a very harsh and almost painful sound by drawing out the upper overtones / harmonics of the pitch. Using this technique while playing generally “pretty” sort of notes, I wanted to create a feeling of peace and achievement, while also not forgetting the trauma they have endured, and not resolving it too strongly— like it could continue for a long time. I was mostly thinking about the ending of that quote from Morton: “conditioned by the past (otherwise known as trauma), yet open to the future.”