## **hyperreceiver** Artist Statement

May 1 2023

hyperreceiver is a piece for cello and electronics. The piece premiered on April 22 2023 at 8:00 PM in the Chapel of the Holy Innocents at Bard College.

"Ultimately, aesthetic comportment is to be defined as the capacity to shudder, as if goose bumps were the first aesthetic image... life in the subject is nothing but what shudders, that shudder in which subjectivity stirs without yet being subjectivity is the act of being touched by the other. Aesthetic comportment assimilates itself to that other rather than subordinating it. Such a constitutive relation of the subject to objectivity in aesthetic comportment joins eros and knowledge." (Morton, Adorno 1)



#### Process1

I began this semester with caves—returning to my favorite trespass in Kingston and listening to the resonance of the nooks and crannies in the cavern. I wanted that sound, I wanted to channel the sanctity of the darkness, I wanted to feel swallowed up by a vast hole in the Earth. I researched caves as sacred places, and I even considered going caving with the local grotto (a social club for caving expeditions). I was stuck on caves and their relationship to queerness and transness. Caves and being trans both feel sacred and private, intimate and vastly unknowable. Both are dependent on reflection.

To be trans is to have reflected inward. A cave reflects inward, acoustically. (February 3 2023)

Reflection to me is to look and think internally, to introspect— something I tend to do perhaps too much from time to time. As I brainstormed and attempted to work through the question of reflection, I was thinking a lot about self-actualization. I was wondering if the self truly existed, and whether or not it was knowable at its core *essence*... if the self is able to reflect, it must exist... right? Simply, I wanted to achieve a complete knowledge of the core of my being. In *A Theory of Human Motivation*, Abraham Maslow places self-actualization at the top of his pyramid of needs as the fulfillment of all of one's potential: "This tendency might be phrased as the desire to become more and more what one is, to become everything that one is capable of becoming" (Maslow 1). I felt captivated by the perpetual mystery of "what one is." At this time in my life, identity is constantly in flux, and I feel a pressure to know who I truly "am." I sought self-knowledge, a process through which I would actualize my essence. It was a romantic, potentially self-important idea that ultimately lost its spark as I turned back to reflection.

<sup>&</sup>lt;sup>1</sup> Working notes from my journal appear throughout in italics.

As I thought about reflection more and more, it turned into *resonance*. I realized that resonance was reflection taken to the next level: resonance is productive. Rather than just a thing reflecting onto something, and potentially bouncing back outward until it disintegrates, resonance *creates*. In sound terms, when a sound resonates, it reverberates and is vibrated more, thus growing in volume rather than just dying away. Resonance works the same way in non-sound contexts— when something resonates with someone, it grows into something new and bigger inside of them. Resonance from an initial sound *is* the new thing—it is no longer the original sound, but it couldn't exist without it. When this process occurs, resonance *itself* becomes the "other" through which a person can situate themself. Veit Erlmann explains resonance's relationship to the self in the book *Keywords on Sound:* 

As such resonance is the "Other" of the self-constituting Cartesian ego as it discovers the truth (of musical harmony, for instance) and reassures itself of its own existence as a thinking entity. On the other hand resonance names the very unity of body and mind that the cogitating ego must unthink before it uncovers the truth (of resonance ...). (Erlmann 177)

Meaning and subsequently art come from resonance as the other within you. Morton says that "Aesthetic comportment assimilates itself to that other rather than subordinating it" (Morton, Adorno 1). The echo of a thing within yourself is where the aesthetic realm lives.

As I worked through the self-other relationship, I realized that resonance is the purest form of intimacy. When an external stimulus enters the self and becomes the other *within* the self, it is an act of intimacy. The other becomes a part of you and thus, as the other is strengthened in the self, you know it more deeply—intimacy within yourself.

Intimacy is knowing something deeply. The thing feeds on itself (...) A piece of art is intimate w/ you and vice versa b/c it offers itself up to you fully, but if you can do the same and access it.

How to make art resonate with an audience? Getting it down to the simplest it can be. (February 21 2023)

I knew I needed to get the piece to be as simple as possible. Just as with self-actualization, it needed to become more and more what it is. I had to start thinking about the actual music, the components of the performance. I knew I was going to use electronics, so as the sound bounced around the space, it would turn into feedback. A cave is a chamber of feedback and echoes from the rock surfaces— so I sought to capture the feeling of being inside a cave through using controlled feedback as a potential improvisational partner.

At what point does a response become an object (like the stimuli), dehumanized? Feedback. (April 11 2023)

When something exists, you respond to it. The response comes from the subject in relation to an object. Thus the response is part of the human subject, but at some point it leaves the human experience and becomes a new stimulus in the form of an object— a snake eating its own tail. Feedback is the sonic expression of this process. A microphone causes loud noise simply because of its proximity to an amplifier. Feedback takes the inward and brings it back outward and then inward, and then outward, so on and so forth. It takes what it already is and, depending on the space and the proximity of other objects, amplifies and distorts it.

Amplification and distortion would end up being the backbone of the music.

As I kept gathering my seeds of inspiration and ideas, some of them fell away and some called out to me more than others. I had been trying to figure out whether to involve other people

or do it solo, and the only thing that felt certain was that I wanted to be playing cello in it. And that became the format—solo cello and electronics. Playing solo just felt like what the piece wanted me to do. It very much so seemed like it was going to be a self-portrait in some way, at least to me. As I fought against the part of my brain that told me doing an hour-long piece all about myself was narcissistic, I realized there is a "human rights" component to the piece beyond all of the philosophical musing: the human right to self-knowledge. We have a right to examine ourselves deeply. It is not just a privilege reserved for those who can afford therapy—it is a genuine *right*, because no one can ever know the self as much as the self can. I examined and inserted myself more, and the idea became less about intimacy and resonance and more about sensitivity and reception. Because even the slightest stimulus can resonate, if the receiver is sensitive enough.

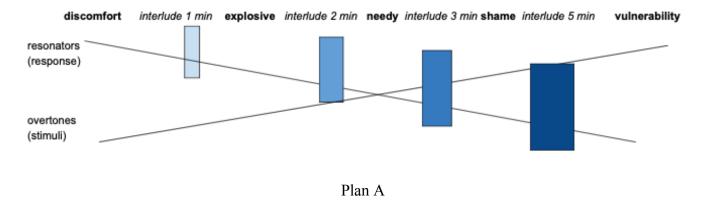
I've always been very sensitive. And during the couple months leading up to April 22, the day of the concert, I was in a fairly negative mindset. Small things would deeply upset me as they did when I was a child, when I was deemed "highly sensitive." I was inspired by this extreme vulnerability to the external, and the resulting internal distress and obsession, to write a piece all about being highly sensitive. Looking back on my preliminary ideas for the piece, I found a note relating sensitivity to caves:

When a grotto is flooded frequently it eats away and erodes the limestone, a smoothing process similar to the process of stabilization of sensitivity, a dulling down of extremity and sharpness. (March 3 2023)

At that time, I thought the piece would be a process of desensitization, a form of dulling down, but that plan eventually changed.

### The Music

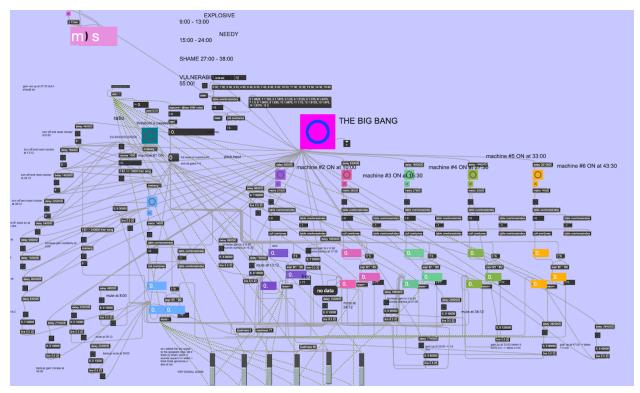
I started writing the plan of the piece by identifying qualities or states of being that are central to sensitivity. The piece is in five movements, originally all supposed to be eleven minutes each so that it would be 5 chunks of 11 (my birthday is 05/11, teehee). I wanted repeated numbers and everything to be even, but eventually they had to be adjusted to the duration they felt they needed to be (or however long I could physically play them for)— I was not going to be so strict with my numbers that I would lose musicality. It solidified into five sections of playing cello, totaling 44 minutes. As mentioned above, the original plan was to communicate, abstractly, a process of destabilization by using an inverse and disproportionate relationship of "stimuli" and "response." As stimuli increased, response diminished— demonstrating desensitization. Below is my initial visual representation of this process.



Before I wrote the actual music, I coded machines in the software Max/MSP to process my cello live. "Response" and "stimuli" manifested through these machines. It was originally going to start with heavy usage of a Max patch I made which I refer to as the "resonators" patch. This patch was a collection of 8 machines amplifying various frequencies randomly, eventually choosing fewer and fewer of them so that by halfway through the piece, it was resonating only one or two. I chose the frequencies I wanted it to have as options, and the idea was that I would

play mostly these frequencies at the start of the piece, so then the audience could really hear the random amplification of specific notes when I played them, if Max chose to amplify them at that moment. This patch to me was the "response" because the patch only amplified what I was already playing; it came from myself, yet became estranged once it was pushed beyond my input.

The patch kept glitching though, and when I tested it with my cello, it didn't even sound that good anyway, so I decided to scrap it. I was left with only my other patch, the "overtones" patch, which to me was "stimuli." It's a group of machines which amplify specific partials of the harmonic series as I play, triggered to turn on if my cello volume surpassed a certain threshold. It read my pitch and multiplied it by specific numbers to amplify the harmonics. I made a probability table for these multipliers, starting with the octave and the fifth as having the highest probability to be selected. Over time, it would reduce the probability of these two partials, and start including more of the other partials, such as the fourth, the sixth, third, second, and seventh. Thus the pitches became closer together and less consonant throughout the 55 minutes. This patch represented "stimuli" because the pitches it generated were not the exact pitch I was playing—they did not belong to me. However, overtones do come from a specific pitch—they innately exist as a part of a fundamental. Especially in a cello, which is very resonant with harmonics, the partials existed in whatever I was playing already. So in this sense the overtones are stimuli already formatted through the subject, but for the purpose of giving me some sort of concept to compose from, they represented an outside force.



"overtones" Max patch

The other aspect of the electronics part was the "surround sound" type of system I had made. There were six speakers and a subwoofer positioned round the room. I had created another machine in Max that would analyze all the frequencies of whatever I was playing, and would separate them into six different bins of frequencies by range. I then multiplied the volume of the higher bins by 10 or 5 or so to make them louder than the other bins because they were weaker. I created a system to randomly, every 66 seconds, switch which speaker received each bin. This system resulted in the effect of ranges of frequencies traveling around the room— sometimes you would hear the low range better, sometimes a really high range. It was fun!

I also included 11 minutes of manipulated field recordings as interludes. I had been behind Blum one day and the nearby waste treatment facility was being worked on with a big truck — I guessed they were emptying the tank. I stood there in awe of the sound for a while, and collected one short recording that day and a much longer one the next time it happened. It

sounded like a cello, but also sort of like a cave, with harmonious overtones and a sense of looming depth. At first, I had no idea how to include the recording. As the piece became more about cycles of emotional exhaustion, the recording revealed to be the perfect sound to represent necessary sanctuary and rest which followed the exhaustion. They're an escape to the cave, sensory deprivation allowing the mind and body to, for a brief moment, have some sort of respite from hyper-sensitivity and reception of outside stimuli.

I will now go through the whole structure of the piece, named after the five qualities of sensitivity I chose. The piece begins with *discomfort*, which I define as something barely perceptible being wrong. It is the first stage in the piece, but if I truly think about it, it is the second stage of the mental cycle of sensitivity. Discomfort begins after an external stimulus is uneasily recognized as not quite right. On the cello, I play with just my left hand at first, because it creates a quiet pitched creaking sound, something so small but unsettling. It grows greatly over the course of 8 minutes to be a loud trilling, switching between two or three chords. It escalates and stops abruptly. Then, there is a one minute interlude of rest.

The next stage in the cycle is *explosive*. This stage is fairly self explanatory. Disregarding the interludes, it is the shortest stage by far in the piece— an explosion happens quickly. I start it with really high long notes, which to me sound like ringing ears following an explosion. At the beginning of this stage I wanted to create the feeling of being on the edge of total chaos— high pitched shakiness to me communicated that something huge was looming and would imminently arrive. It develops into chaos, extremity, and an outpouring of emotion. I channeled the semi-consistent rhythm of hyperventilation for this stage. Following is a two minute long interlude of rest.

*Needy* is next. I was inspired by the need for reassurance that can come following an obsessive thought pattern. It's an insistent begging. During this stage, I play a pattern in 4/4, which shifts to 3/4 as I shift one of the pitches a quarter tone lower. This pattern repeats for the other chords and I start adding in more rhythms and more microtonal intervals, while keeping the same very constant tempo. As I played, I felt the insisting, the reoccuring need for some kind of outside force to intervene. Following is a three minute long interlude. These interludes have their own arc— each time they occur, it is lower in pitch, more layered, with more of the high range of frequencies excluded, so each time it feels darker.

The next stage in the cycle is *shame*. It follows the *needy* section because it is the feeling that follows needing a lot of outside reassurance. Shame is the darkest stage; it is the most internal and sorrowful. I begin with tapping on the body of my cello right next to the pickup to make all the strings vibrate, resulting in the Max patch to trigger harmonics, and creating feedback. Shame is self-perpetuating. Though it may come from a worry of the opinions of others, true shame is self-made and heavily internal. Feedback is as well. It takes what it already is and amplifies and distorts it. So I knew I wanted the shame section to be full of feedback. I didn't entirely know it would happen though; I changed the setup of the speakers on the day-of. I had been practicing with my amp at my feet so that if I moved my cello close enough, the amp would resonate the cello strings itself. Once in the chapel though, I moved that speaker to the wall so there would be an even distribution of sound. I accepted that I wouldn't be able to get that much feedback. But then during soundcheck, I noticed that my G string resonated the space so aggressively— so much so that I initially wanted to quiet it down. But I realized it was exactly what I was missing, and I could control it by moving my cello towards / away from the microphone. Timothy Morton writes about LaMonte Young's Dream House: "We are hearing the

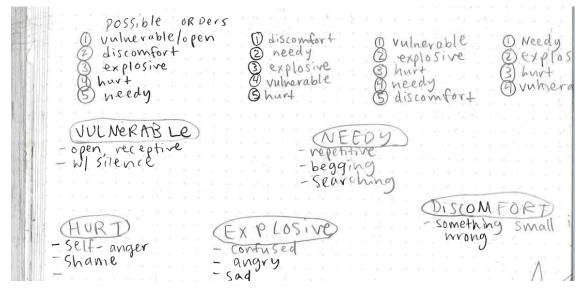
equipment itself, we are hearing "music" that is a tuning to the equipment, and not the other way around. Rather than the equipment delivering the music, the music delivers the equipment."

(Morton, Age of Asymmetry 167). I adapted my music to the equipment because I heard that the speakers in that specific space had a resonant frequency. In that section, my music delivered the equipment and the space. As I had first theorized the piece with feedback at its core, it all came full circle in that moment.

For *shame* I wanted as little interference from me onto my cello as possible. The tapping felt like the best method. I started adding in some fiddling around with the bridge, creating sounds of brushing, knocking, rustling from the thin wood of the bridge. The tapping and the bridge sounds crescendo for several minutes until I pick up my bow and start playing low double stops. In this part I just improvised, more than the other parts: I played sadness, I played inward reflection, I played the feeling of being ashamed. After this section, which doesn't end in a huge crescendo and sudden stop as the other stages do but rather a soft kind of unfinished ending, is a five minute long interlude. Five minutes feels long, or at least it did to me as I sat there, unsure of what to do. But as the stages of the piece gain minutes, so must the interludes. You need more rest as outside stimuli multiply, as my Max patch did to my overtones.

The last stage is *vulnerability*. This stage is actually the first stage of the mental cycle of sensitivity. It is the constant state of being sensitive, being open and extremely receptive to stimuli. Being open, to me, sounds like harmonics. Harmonics are spectral and feel like something floating around in the air, which was the perfect way to communicate reception. In order to find harmonics, I played exclusively under the bridge, where overtones are plentiful. I wanted that open sound, but with a harsh timbre, to suggest that maybe this vulnerability is not just purely positive. There is an underlying unsettling distortion— something small will be

wrong again soon. I increase my bow speed and play around with the placement to find different overtones, and I use breath as the guide for my rhythm. I frame silence with long bow strokes, taking this section as a time to listen and breathe, as vulnerability and reception is all about listening. I increase tempo and start adding in the G string as well to have a more wide variety of harmonics and timbre. It gets whinier, harsher, and faster. Eventually, I soften, and end the piece.



choosing the order

# The Night Of

The Chapel was dark, save for soft pink and yellow lamps on me, casting a shadow from my right arm which danced across my face as I played. I arranged the chairs in a semicircle, with ample space at the front for beanbags and cushions for the floor-inclined. The light shone in such a way that I could not make out anyones' faces, which I was grateful for as I gave my opening remarks. When I played, my eyes drifted closed anyway.

I began the piece so quietly I was afraid that people would not be able to tell it had even started. I wanted to start each section, and especially the beginning, so quietly that whatever it grew into would *require* a large amount of time. The builds would be as gradual as possible, because I love when I'm listening to music and there's a huge build but you never notice it—

until the loudness stops and it's all quiet and you are reminded of where you began. I do wish I had embraced the silence and the quiet a little bit more, because in the moment, I rushed a little. Leaving so much room for silence also just opens up the possibility of someone making a noise in the silence, and I really wanted to avoid that. I strove to not take anyone out of the performance, to keep the audience *in it* as much as possible. Cage says there is no such thing as a bad sound, but for the purpose of immersion, and for the sake of a ideally pristine recording, I was nervous about interruption. The toilet in the basement whined, but I hoped it was not too noticeable or distracting.

People came up to look at my laptop afterwards, which was rewarding. I was surprised and honored to hear from someone that the performance had been good music to pray to. Others told me that they had been transported. To where is a whole other question.

## Reflection

hyperreceiver and my previous project, EMERGENT BEHAVIORS, exist in similar sound-worlds but took fundamentally different approaches to their construction. EMERGENT BEHAVIORS had a specific goal— I wanted to capture the sound of solidarity. The piece had a desired outcome for the audience, while hyperreceiver was more abstract. I left it very open to interpretation. EMERGENT BEHAVIORS was more meticulously planned because I was playing with 3 other musicians. I needed things to be set in stone, and I wanted each moment to be crafted perfectly. I had a lot more flexibility in hyperreceiver, because I was the only one performing. But I was still determined to get it perfect. At a time when I felt really unsure and pessimistic about the piece, other folks told me things along the lines of "but it's just a solo noise

set — it doesn't matter!" While reassuring, it also felt insulting. I cared *so* much about the final result, for my own standards if not those of others.

Throughout the year and the process of writing two large pieces of music, I learned a lot about my voice as an artist, and how to have a sustainable artistic practice. I know what goes into writing an hour of music! I now know my routine—I start by gathering seeds, then sorting and planting the seeds, and then the seeds grow into a harvest. I need to start with concepts and abstract ideas, before I can begin to compose or even theorize the music. Then I think for a long time, and then eventually, the music comes out. It was cool to see my voice develop; as hyperreceiver started containing sounds that were similar to EMERGENT BEHAVIORS I noticed my personal sound-world being formed. I feel as if I am leaving Bard with a distinct, yet very new and ever-changing perspective to making music. I began college with no idea of what music I wanted to make—I even began junior year with no idea! I am still so young and at the beginning of my art, and I am excited to see how it will continue to change throughout the years.