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*Take a Breath*

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SUNY New Paltz

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Abstract

*Take a Breath* is a series of interactive artworks designed for the participants' slow and mindful, somatic engagement. Each sculpture is made to ground the audience in the now, to override the strain, pace, and overwhelm of 21st century life. These objects hold thoughtful consideration to the way they receive the human body, an invitation for an extended, healing embrace. Other sculptures can be carefully rolled from one point of stability to the next, every resting position activating a new sound pulled from tones and patterns of nature. These moving sonic sculptures are interlinked. When activated simultaneously each one alters a single soundscape, unifying the collective. I see these calming works as offering a space of resistance to the trauma of overstimulation and the political, environmental, and social instability of our current moment. Wood is a constant collaborator in my work, it holds the memories and teachings of its lived experience.
Introduction

In the last decade, there has been a collective shift in the human experience from the exposure of traumatic global events. These events have shaped our ability to interact with each other and impacted our mental freedom in public spaces. Our behavior has changed, ranging from judging our physical proximity to others for health concerns to profiling individuals on the off chance they possess a weapon of mass destruction. Through my experiences with general anxiety and moments of panic, I became attuned to others’ experiences through bodily and emotional cues. I have noticed, through my personal experience in the last five years and through teaching students, an increased disconnection to reality, a frequent dissociation from the body. In a world of microtension and technological triggers, I often looked inward to find answers to mend the pain I was seeing in friends, family, and strangers. My inquiry continuously leads my work towards the connection of mind and body as a tool to aid in personal strength and calm.
**Community Disturbance Project - “This is sculpture.”**

My thesis research was informed in part by a nomadic sculpture I created in Prof. Puthoff’s Sculpture Situations class. Tasked with creating a nomadic sculpture that could show up in any space at any time to build community, I chose a community that I perceived as home. I have cultivated my own daily rituals of meditation, breathwork, and movement, but the only consistent lifelong meditation I possess is the act of skateboarding. Distinct to the user it becomes an artform catered to the individual through repetitive work of specified tricks and a personal flare of style. In the broad perception of skateboarding, it is destructive, a nuisance, and a form of counter-culture. The skateboarding community is non-discriminant and redefines social interaction; the reality is that it is an action that is non-transactional and elevates public space for growth and happiness. There is no hierarchy of skill, but recognition and affirmation of personal growth from a community. A new member might not have access to the equipment, but the tool to participate is exchangeable in the sense that someone can step on my board and I can assist in their growth, creating a one-on-one bond that is locked in that moment.

The notions of community and perception were packed into the sculpture, *The Community Disturbance Project - “This is sculpture.”*, a twenty-foot skateboard ramp that folded into a white cube that could fit through any standard doorway. The enclosed ramp represents what society deems valuable seen in the museum space, on a pedestal, or in the “white cube”. The ramp rolls to a location, in this first experiment- the SUNY New Paltz farmers market, and unfolds into a three-foot tall and twenty foot long half pipe. After the skateboard session, the cube is reassembled, now bearing marks of the community interaction on the outside of the cubes: dismantling what is deemed art or valuable.

I rolled the sculpture out into the plaza where the farmers market was held, unbeknownst to anyone, and I began to unravel the ramp. At this moment skateboarders began to circle the ramp, phones to their ears. By the end of the initial set up, there were a couple dozen skateboarders activating the sculpture. In reference to Richard Serra’s *Tilted Arc*, the ramp was situated central to the path
connecting all the academic buildings, demanding attention as hoards of people circumvent the commotion to get to their destination. The object had the ability to be deconstructed and reconfigured to the community's imagination. As predicted, the police came for its removal, where I responded that this is sanctioned art, the immediate removal was requested for communal complaints and I was accused of “harassment” (which is a serious word). I then asked,

“What called the police?”

As the police officer point high up towards the building adjacent and said, “The offices above.”

This opens a longer dialogue of who these authorities are serving and what is prioritized, but that is separate from the path of my thesis trajectory. The reality of the situation was that I filled a gap in the needs of a particular group that found solace in this activity. A field of smiles and affirmations surrounded the experience with highly-skilled individuals pushing their own limits and newcomers receiving a helping hand with their first go at the activity. As the Community Disturbance Project - “This is sculpture.” was packed up and pushed out and it received ample amounts of clapping and cheers from the participants, but also all the farmers market stands. The whole experience is documented at michaelfortenberry.com if this project is of further interest. The importance of this experience was that it opened a whole new set of questions around accessibility and its limits of a broader interest in the activity. The intent of my work shifted to what interactive and sensory work could cultivate - a state of calm, separating the viewer from personal mental distraction and creating an experience that bonds people together.

*Take a Breath* is a body of work that offers a collective experience to pause the active mind, engage the body, and assist in the interaction with people we are not familiar with. My work creates a space to maintain a personal and cooperative momentary state of calm. I have transitioned my work from humans' connection to the natural world to humans' relationship with other humans and the self. The work creates a soothing interaction pulling from sensory-somatic research and international scientific research on the healing properties of nature with the hope
of assisting in participants’ current emotional and bodily states for lasting states of tranquility. My sculptural forms deploy somatic movements, encouraging postures and gestures that open the body to counteract one’s response to external and internal stresses. The guiding research question of my work is as follows, with the constant rise in collective anxiety and mental health complications, what experiential objects can ease stress and release the present mental overload?

Other questions arose as I created this body of work:
What materials induce a state of calm?
What organic shapes, textures, constriction, and undulations work best?
How can these objects be mass produced and disseminated?
Should they be?
Why is everyone anxious and what flags need to be raised?

**Background: Engaging the Sensory Somatic System**

The arch of my research to understand grounding and meditative practices for myself, others, and the art experience became bound to the use of sensory-somatic tools and known effects of exposure to nature in all sensory capacities.
Before we proceed, I offer a disclaimer: the use of somatic therapy and psychology in this project only scratches the surface of the full span of somatic therapy that is based in trauma held in particular parts of the body in connection to the guidance of a therapist. The use of somatics in my work is based on the understanding of anxious and panic tendencies within myself, coping tools I have learned through professional guidance, and somatic workbooks that assist the understanding of the body and how bodily gestures and movement can assist in the healing of trauma and moment-to-moment mechanisms to isolate the mind and body to cope with sensational response and mental lag.

In a brief overview, sensory-somatic research is concerned with the connection between the mind and body, focusing on an individual's sensory experience and physical response linked to mental health. Somatics refers to the study and
practice of exploring and understanding the fabric of your soma through your internal awareness. Somatic practices develop your embodiment and awareness - your proprioception - how your body moves in space, and your interception - the experience of your body's internal sensations and movements (Shapiro, 18). The use of sensory-somatic research pulls from fields such as psychology, neuroscience, physiology, and somatic therapy/psychology. These practices can be seen applied to embodied practices in therapy, supportive educational programs, performance in sports, and other areas that regulate emotion and physical response. Livia Shapiro, an active voice in the somatic psychology and yogic field, explains that “engaging in somatic work is about becoming an integrated human organism: an organism that is inclusive to all parts of self; an organism with healthy and coherent boundaries; an organism that has the ability to reorient time and time again toward health and ease; an organism that recovers from overload and trauma - not just one who copes, holds on, and maintains hyperalertness for safety and survival” (Shapiro, 9). The integration of mind and body practice is often seen in mindful practices such as yoga, mindfulness, and body work that is intended to help in overall well-being. My research in various sensory activities all led back to the reduction of cortisol. When cortisol levels are elevated, there are negative effects to the body such as chronic disease, high blood pressure, heart disease, weight gain, lack of energy, concentration problems, immune disorders, and more.¹

**Artist Pursuit: Nature is Human Centric**

Florence Williams, a contributor to *Outside Magazine*, the *New York Times*, and *National Geographic*, went on a two year global journey following the leading countries' research on why nature makes us happy and healthy. In Williams' book, *the Nature Fix; Why Nature Makes Us Happier, Healthier, and More Creative*, she highlights the way we evolved in nature and the specifics of how our brains adapted to our environment for survival, and how we depend on it for our general well being (Williams).

¹ [https://www.healthline.com/nutrition/ways-to-lower-cortisol#TOC_TITLE_HDR_2](https://www.healthline.com/nutrition/ways-to-lower-cortisol#TOC_TITLE_HDR_2)
We all need nearby nature: we benefit cognitively and psychologically from having trees, bodies of water, and green spaces just to look at; we should be smarter about landscaping our schools, hospitals, workplaces and neighborhoods so everyone gains. Everyone needs access to clean, quiet and safe natural refuges in a city. Short exposures to nature can make us less aggressive, more creative, more civic minded and healthier overall. For warding off depression, let's go with the Finnish recommendation of five hours a month in nature, minimum. But as the poets, neuroscientists and river runners have shown us, we also at times need longer, deeper immersions into wild spaces to recover from severe distress, to imagine our futures and to be our best civilized selves (Williams 242)

The sculptural forms that I create emulate forms and patterns of nature to invoke a sense of internal balance. I utilize thematic symbols like mushrooms, which signify natural processes integral to the growth of an ecosystem. The Matsutake mushroom and its growth patterns of fruiting in areas that humans have already disturbed inspire my work. Fungal bodies step into zones of mass destruction to neutralize toxins in the soil and return balance to the broader ecosystem. The aftermath of Hiroshima is one example where mushrooms sprouted to assist in the return to a balanced state. Within this understanding, mushrooms became an emblem for encouraging coexistence for a healthy future of human and natural longevity and fertility in my work. Mushrooms also stand as a symbol for what we (humans) can not cultivate or control, slowly encroaching our built environments with the knowledge of ecological harmony.

Once these forms left my hands I would have to fully surrender my intentions, the experience became that of the viewer. Each person has an action in their lives that builds this blank mental state through active meditation. A frame of mind where there is no thought, just action from momentary response. This activation could come from working out, journaling, skateboarding, road rage, etc. that is specific to the individual. What experience could assist a large group of people to this desired state of mind? Leading my focus to create objects that lent itself to community engagement and object activation that could take on multiple forms. This became my methodology for creation in this past year, deploying experiences
through sculptural form for various groups and communities to take on a lock in a calm state of mind separate from their daily tedium and the occupied mind.

The question of what combination of sensory elements induce a state of calm guided my research towards nature's relationship with cognition and what happens to our mental and physiological states when we are exposed to “nature”. What natural agents assist in bodily change? I began to accumulate various tips and tricks that engaged humans instinctive survival techniques, in the modern way, how our mechanisms of survival are the root of crippling anxiety and panic disorder. For example, a panic attack is a response to an external trigger that engages our fight or flight response activating various chemicals in the body like adrenaline to circumvent or confront danger and increasing cortisol, which is hormone released when an individual feels stress. In present-day events, it could be as minimal as social interaction in large groups, public speaking, or whether the individual is amounting to enough compared to their peers. This body of work became an opportunity to hone in on what sensory aspects the sculpture can offer to generate a state of calm or momentary awareness separate from self.

This interest evolved into creating sculptures that induced a meditative state or momentary separation from the fragmented mind. Everyone experiences anxiety at some level, and my focus became assisting in individuals that become overcome by sensory overload. Through research and personal experience a majority of tools for anxiety and panic relate to the body and disentangling or separation of mind from bodily sensation. Often, when a person goes into a state of anxiety or panic their body becomes heightened by our fight or flight response, but given the external situation like a business meeting or in the midst of the night your body has nowhere to go to release these emotions through movement, a sense of entrapment. One begins to curl up or cross their arms and legs. The next body of work I wanted to meet these moments head on with objects that soothe and assist in the elimination of anxiety and panic. With the relation to the body I began to research somatics and our sensory system to create grounding objects that would bring anyone into the present moment and alleviate the frantic mind.
The integration of sensory tactics into my sculptural forms became a focus of my work when I became curious about how to induce a state of calm or “flow-state” where someone is completely present and aware of their surroundings. The notion of calm doesn't come from a simple visual experience, rather an all-encompassing event that engages at least a few senses. For example, you look at the horizon at a colorful sunset and you happen to catch the exact moment the light switches from a dull pink to a fiery vibrance. One might think that it involves just visual cues, but your body is responding to your surroundings. Are you sitting on a couch looking out your window or in a car driving on the interstate? What releases that split second switch in consciousness where you are separate from self or at least your busy mind.

The use of sculptural form allowed me to explore how to bring my own intentions to the public. In order to mend humans' relationship with the natural world, we must first mend our relationship to ourselves and others. The exploration began from my discovery and interest in sculpture, with the main pursuit of manipulation of raw materials, allowing for its affordances, potentials, and limits to guide the finished forms. I was captivated by creating objects that appeared to be in constant movement through rigid and organic form. The process of pushing a material to its breaking point and allowing it to guide me to its resting point created a deep meditative state where my internal thoughts subsided. Repetitive actions of wood wrapping allowed for a prolonged mental state of calm. This pushed me to practice to figure out how I can create an object or experience that assists in another person to reach this state of mind. What emerged from a meditation for myself became from a complex understanding of wood forming and resulted in a form that provokes a calming response, a contemplative experience of emotion.

*Take a Breath*

My thesis exhibition, *Take a Breath*, is a testament to the resilience needed to overcome the mounting stress and trauma of the 21st century. The intention of the work is to pull the viewer out of their busy mind, create a bond with strangers, and provoke a sense of personal calm and presence as they leave the show. The
exhibit features four sculptural forms that are meant to be handled and embraced as a mirror of forms of nature and the human body. *Take a Breath* is an interactive body of work exhibited at the Samuel Dorsky Museum of Art consisting of a hand-held wood sculpture titled *Nuzzle*, and three ribcaged sound sculptures titled *Between Breaths*. Spanning the museum center, two sculptures are suspended from the ceiling to be maneuvered and swung, one central on the floor to be tilted and rolled, and then a hand-held piece carved to fit various parts of the body which can be flipped and turned to embrace parts of the body. They have been described as large ribcage forms resembling the remnants of vegetables, aquatic sealife, and structurally human in reference to our skeletal make up. Open for interpretation, they physically are made up of twelve bent-wood curves connecting two focal points, bound together by two central steel forms that come to a point. These steel connectors begin as a cone and branch out to grab the wooden ribs by wrapping the tips to hold the forms together. They hold an abundance of visual tension as they appear to be able to unravel at any moment. This energetic interaction between the wood and steel is intended to provoke play and need to touch the work.

*Between Breaths* (detail) 2023 - wood, steel, sound
A desire to help people arrive home in their bodies as their inherent birthright and intended landing pad for life's experience.
- Livia Shapiro

The sculptures alone reference nature, but have no basis in a particular recognizable form. They are derived from natural forms of growth and decay, indicating a sense of transition. For the viewer it might signify growth of self or the shifting of a mental state. The ribcage forms are large and reference the body for opening postures while interacting, whereas the hand held smaller form is meant to handled and squeezed, with tactile cues that alter the way its supported in one's arms.
When participants walked into the central space of the museum, they encountered three large sculptures titled *Between Breaths*, made of steam-bent hickory and steel. Participants were non-verbally invited to place headphones on their head where they were introduced into the soundscape. The viewers were invited through visual cues to push the sculptures around the space to engage the various sound components. There were no posted instructions on how to join the experience to encourage interactions with strangers, in some form a puzzle. Momentarily people were removed from their reality to join an individual experience that functioned as a collective. The viewer could recognize their movements changing the sound, but also observe other influences. This created a non-verbal collaboration between the participants in whether to push, swing, teeter, stop, etc. A total of ten headphones were in circulation and often the headset didn't make it back to their rack, rather passed around the museum from one person to the next.

Embedded in the sculptures were gyroscopic sensors that sent the movements of the sculptures to a MAX/MSP computer program written by Michael Simonelli. As the participants moved the sculptures, they created an ever changing real-time soundscape, which they experienced through the blue-tooth sound canceling headphones. The sound scape, composed in real-time by the movement of the sculptures, could be traced on a screen display in the pedestal. On the screen, viewers could see the movement of each sculpture as a dot passing through chromatic circles of sound. As each dot moved through the circles, the sounds mixed. The audio component was composed of thirty sounds from synths to sounds of birds chirping. The audio was based on researched natural melodic sounds and vibrational pitches said to calm the body and cultivate focus. With the headphones on, participants were completely enveloped in the experience, invited to step out of their own body and collaborate with strangers.
Arduino Io3 Nano: Sensor that tracks the sculptures movements by sending the computer the changing x,y,z axis values.

Max/MSP digital display: four digital squares that contain the sound triggers to each sculpture. As the sculpture moves the sensor moves a cursor within its corresponding box through fields of sound, fading one sound to the next.
I created the *Between Breath* sculptures out of hickory, a wood that holds a density and weight which guides the movements with force and consistency. Myself and Prof. Asbill sourced the hickory wood locally and milled it on the side of the road. I then bent the wood through a steam process I engineered where each rib was meticulously heated, steamed, and quickly (but slowly) wrapped around a form. Once those shapes were assembled, aesthetic and functional choices were integrated to guide the rolling motion and grip.
Milling wood: A Hickory tree pulled out of the forest, loaded up in a wood milling machine. The machine does horizontal passes of the length of the tree making rough cut planks of wood.

Steam bending: the wood is cut into 1in x 1.5in x 10ft pieces that are placed in a steam chamber at 212 degree. This makes the wood momentarily flexible until it cools down. This is the bending table where the wood strips are bent around and held for 24 hours.

Removing: After 24hr the wood strips are take from the form and have frozen in the steam bend shape.
Sixty steam bend wood curves chosen for the sculptural forms.
Each bend could have been identical, creating round volumetric shapes with rigid steel or wood connectors. I made the conscious decision to create awkward curves with pieces jutting out, forcing the participant to be fully engaged. If a sculpture was spun or maneuvered, the next hand position was higher or lower, inward or protruding. This assisted in opening the body and collaborating with others. The role of the steel that bound the steam wood curves, other than stability, was to create a point of tension and energy. They suggested that the form had the potential to explode at any moment.
This process was thoroughly researched, constrained by my own material limitations and knowledge many elements had to be learned. To pull together this project I built and taught myself how to steam bend locally sourced wood, and created a base of electronic and kinetic language to create sculptural sound controllers. I reached out to the sound engineer, Michael Simonelli, and he created a composition of sounds that would overlay in any combination and spearhead the technological hurdles to create these wireless forms. The sculptures had to be tuned in the museum, so no prior testing could be conducted. This put me on the edge of my seat hoping the experience and intentions I placed on the installation would come through.

Research suggests that sound in particular has a large impact on our physiology and mental needs. Aspects of nature such as birdsongs, running water, and other sonic elements of nature vastly impact our brain’s rest and tuning ability, while noise pollution from the industrial world creates negative health implications including cardiovascular problems, poor continuous sleep, and cognitive impairments. Williams explains that our connection to sounds in nature can have a calming effect, our brainwaves calm down and our levels of the cortisol, a stress hormone, decrease. This physiological response is accompanied by an increase in feelings of relaxation and a sense of well-being. The science of sound also tells us that exposure to natural soundscapes enhances cognitive function, allowing us to think more clearly and creatively (Williams). This raises the question: What happens to us with prolonged exposure to noise pollution or from aimless walking with headphones, scrolling on smartphone? Infusing the natural world through sound in my sculptural forms and installations is a key focal point of how to induce a state of momentary serenity. Each sculpture poses seven distinct sounds that oppose each other or flow together activated by movement in space.

Our sensory and motor systems influence our emotions, behavior, and perception; this guided the sculptures form, scale in comparison to body, weight, textures, and fidgetability. The thread of my work returning to forms of nature required this object to be created from organic material, ensuring that these be

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2 Fidgetability, the need to fidget. It is a common conversation among this era of the roll of fidgeting, resulting in fidget toys and actions globally.
made from wood. Wood holds memory of a living body, once interacted with the viewer might pull from this once living being, a teacher. The use of wood is a constant collaborator in my work as its tension and personal life stresses dictate my organic direction.

These guiding factors culminated into Nuzzle, a sensory-somatic object that mirrors the body's curves in various forms to create a grounding experience. The hand held piece is an object of comfort and ease, situated on a meditation mat and pillow. People sat with their headphones on and held the carved piece for ten minutes at a time and then would pass it on to the next. Visually it looks like a volumetric bicycle seat with two tapering holes and a smooth finish. The object connects to the user through its aromatic finish, smooth and undulating texture, and its response to the body when held. Its counterpart Soma-Breadth, which reacts to the body's need to curl, tighten, cross, and hide in the presence of fear, responding to the modern setting of anxiety and panic. This sculpture's main
use is to ground the legs in a seated position from crossing, straighten the spine, and allow for the arms and hands to roam with sensory holds and textures. Every orientation fits the body with a different soothing tactic that allows the individual to fidget till calm. At this juncture, I had seen the benefits in a group setting through skateboarding and hand-held objects for a sole participant, the next step was to combine these elements to create an installation that brings a group of strangers together into a transitory blissful state. Congruently, the research phase focused on remedies of nature and agents of bodily change that everyone has access to. The result of sensory understanding and material exploration culminated into a kinetic, sonic, interactive installation that addresses states of individual and collective anxiety.

*Soma-Breath 2023 - wood*
As the exhibition opened, my brain was situated in anxiety for the work's success, I created a meditative experience, yet didn't use it. I was in full observation mode. What role did I take in the museum? Do I watch the sculptures not be interacted with and tweak or do I help guide the viewers? Within the first ten minutes of the show opening, headphones were being passed through the masses and a woman grabbed Nuzzle and a pair of headphones and sat with the sculpture for ten to fifteen minutes. My body was at ease. The emotional response of awe, confusion, and harmony filled the faces of many. This work feels like a stepping stone in the creation of some important work for myself and assisting in helping others through immersive experience.

*Take a Breath* continued on to the Kaatsbaan Cultural Park for their outdoor sculpture summer series where the work was situated in the opening of a two story barn overlooking the Hudson River. The soundscape was reworked for the space and stands as the second iteration of the work. The first was intended to assist the audience in a couple hundred person opening post-pandemic, an object of resistance to the usual experience of a museum. The next showing honors the knowledge learned from the forest and natural environments. Participants engaged in the work and then walked the grounds tuned to sounds of nature, fixated on what they take for granted.

**Conclusion:**

This body of work is an evolution of past work that creates a space for humans to recognize their separation from the “natural world” and to experience the reality that we are embedded in the sum of all beings. We are modernized, safe from the elements, yet there is an intrinsic need for natural form to feel balanced in our day to day lives. The work challenges the notion that humans are in some way superior to other beings or entitled to exploit the natural world for their own agenda. Creating a space for reflection, this work invited people to reconsider their relationship with the natural world and to recognize the importance of preserving and protecting it. It is also important to note that in areas that have
already been affected by human intervention, we can collaborate with non-human life to rebuild and heal scars of the earth.

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