Sound in Space

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at the

Maryland Institute College of Art

May 2020

Introduction

My artwork explores the borders and limits of communication between disabled and non-disabled people, specifically hearing and hearing-impaired people, and how natural materials such as wood and stone interact with sound technology and language in gallery spaces. I have had a cochlear implant in my right ear since December 2012. As a result, I am able to express unique relationships between sound, color and language in my art. The question is: can I overcome the limits of communication and make connections with my audience? Even though I am hearing-impaired, will I be able to create a universal music with sound?

Theoretically, *Relational Aesthetics* require the viewer to be a participant and the meaning of the work is determined by what the participants do. For example, Rikrit Tiravanija served a Thai curry to visitors and the communication that resulted was a key feature of this work. Meanwhile Tino Sehgal focused on the gestures and social subtitles of lived experience, and similarly, my practice at Maryland Institute College of Art (MICA), is about finding ways. I use sound, vibration, and words to pose three questions: how do people communicate, how do people recognize communication barriers, and how can people create an effective space and system for communication? What I learned at MICA is the value of experimental music to help people cast differences aside and reach a mutual understanding.

My hearing aids have made it possible for me to create a new expression of original sound. My linguistic system does not have the notion of general sound and sign. In this regard, John Cage's book *Silence* proved especially useful in giving me a new perspective on communicating through sound especially his talk of Zen principles and chance operations and his revolutionary ideas about sound and silence.

I hope to find ways to connect people by creating empathy musically. Using an iPhone, speaker, amplifier, recorder and a noise app, I created a composition to produce both disturbances and musical sympathy in a space. In terms of using language in my artwork, I can communicate with an audience and prompt them to think about a different perspective through hearing something they have never heard before. Moreover, when I put visual and audio limits or barriers on my artwork, the audience can also think about what constitutes borders and what constitutes walls. Finally, I will combine a new technology and develop my installations into interactive art projects that involve my audience as the future subject. After all, art is a universal language and a form of human communication. I ultimately hope to achieve my artistic goal in communicating clearly and effectively in a language that everybody can understand.

At the same time, it is important to know that I was born and raised in Japan, a culture profoundly connected to sound and space. This has had an equally profound effect on my artworks.

For example, when I clean a room, I focus not only on items, but the empty space. As a result, every time I paint, the blank space is important. In traditional Japanese culture, the notion of blank space "Yohaku, Ma, Ku", is a kind of ambiguity and "borderlessness"[1] and that influences my new art: no borders unify people. "Yohaku, Ma, Ku" means higher spirit, nothing, or nothing in constant change, a haziness, without distinction between life and death.[2] The hazy space of Japanese art, in the form of open borders, is likewise something I want to explore through sound.

I discuss the three above questions in "sound and space" in Chapter 1. In Chapter 2, I examine "the border of visuospatial and audio-spatial abilities." I explain the influence of Japanese aesthetic and space on my artworks in Chapter 3. Finally, I review and analyze my newest artworks, that is those produced at MICA in Chapter 4.

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[1] Matunaga, Seigo. *Idea of Mountain and water – imagination of "negative"*. Chikuma gakugei bunko, 2008, 220.
[2] Kanbara, Masaki. *Japanese art*. Keiso shobou, 2001, 28, 83.

Chapter 1 – Expression of Sound and Space

Sound Space and Intelligence

In the book *Keywords in Sound*, the chapters on "hearing" by Jonathan Sterne and "deafness" by Mara Mills, argue that sound is a form or intelligence and that it can offer knowledge to all people, even people who experience deafness. In *Sound,* Ralph T. Coe, a notable art collector and scholar says, "Sight makes us tend to rely on the physical world much more than does hearing…Therefore, if properly schooled, the ear could be a path into the beyond, since our eyes are restricted to the physicality of the universe"[3] Meanwhile, Sterne claims "The simple act of hearing implies a medium for sound, a body with ears to hear, a frame of mind to do the same, and a dynamic relation between hearer and heard that allows for the possibility of mutual effects."[4] What these authors are saying is that the words of the body connect to deafness through vibrations. Also, sound can be interpreted as intelligence as Sterne argues. "The legacy of hearing as the basis of intelligence, and indeed the soul, can be found in classic and contemporary writings on hearing and listening."[5] Additionally, the author adds that, "people have no direct intellectual or experiential access to the faculty of hearing in its supposed state of nature."[6] This idea asserts that people need to

[3] Kelly, Caleb. *Sound*. London: Whitechapel Gallery, 2011, 55.
[4] Novak, David, and Matt Sakakeeny. *Keywords in Sound*. Durham: Duke University Press, 2015, 65.
[5] Novak, David, and Matt Sakakeeny. *Keywords in Sound*. Durham: Duke University Press, 2015, 66.
[6] Novak, David, and Matt Sakakeeny. *Keywords in Sound*. Durham: Duke University Press, 2015, 72.

gain access to various sounds, rather than having an inherent connection. Furthermore, in "deafness" by Mara Mills, the author talks about "Deafnesses" or deafness as a spectrum, and the reason can be concluded thus: "Deafness is thus a variety of hearing; alternately, it can be conceived as a precondition of hearing or as the resistance to hearing and audism."[7] The article analyzes "deaf space" and its application to the real world, as in "architecture designed specifically for inhabitants who sign and, to a lesser extent, use personal amplification devices." In addition, the author argues about its connected mutual effects in that, "The history of deaf communication makes clear that sound is always already multimodal…Vibrations, visual recordings, and speech gestures are all possible components of an acoustic event."[8] Therefore, because of their special sense, impaired people can create a unique space. A great example of this is at Gallaudet University where they have created a Deaf Space for a diverse society.

Sound can lead to new intelligence, and I can use space and sound together. Thus, I am expressing both sound and space through my installation. Coe in *Sound* argues that "After all, sound has less definition than pigment, therefore is perhaps more magical and mysterious in its intangibility."[9] So, when I use sound in my artwork, it leads to the reinforcement of a new type of intelligence and has magical effects not found in physical mediums.

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[7] Novak, David, and Matt Sakakeeny. *Keywords in Sound*. Durham: Duke University Press, 2015, 53.
[8] Novak, David, and Matt Sakakeeny. *Keywords in Sound*. Durham: Duke University Press, 2015, 52.
[9] Kelly, Caleb. *Sound*. London: Whitechapel Gallery, 2011.

The Way of Communication through Sound Space

A question: how can people communicate with each other through sound (including vibration) and space? In his book *Silence*, John Cage argues that "method may be planned or improvised (it makes no difference: in one case, the emphasis shifts towards thinking, in the other towards feeling; a piece for radios as instruments would give up the matter of method to accident). Likewise, material may be controlled or not, as one chooses."[10] Under Cage's method, musicians, even audience members can perform without preparation. Cage continues, "normally the choice of sounds is determined by what is pleasing and attractive to the ear: delight in the giving or receiving of pain being an indication of sickness."[11] So, the musicians, audience and I can make a more disturbing sound, closer to our experience, truer to life. As Pauline Oliveros states in her book, *Sonic Mediations*, "The group may develop positive energy which can influence others who are less experienced."[12] Similarly, I have a desire to form an orchestra or a Gagaku, and as a group, make a spiritually uplifting music.

In my practice, I am influenced by Lygia Clark's interactive artwork and the way she connects the body and the senses. In *The Experimental Exercise of Freedom: Lygia Clark, Gego,*

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[10] Kelly, Caleb. *Sound*. London: Whitechapel Gallery, 2011.

[11] Cage, John. *Silence*. Marion Boyars, 1994, 62.

[12] Oliveros, Pauline. *Sonic Meditations*. Smith Publication, 1971, 2. https://monoskop.org/images/0/09/Oliveros_Pauline_Sonic_Meditations_1974.pdf

Mathias Goeritz, Helio Oiticia, and Mira Schendel by Susan Martin and Alma Ruiz, the authors state that "Clark's sensorial and relational objects require interaction, a communication between the object and the viewer achieved through the dissolution of the space that separates them."[13] For those reasons above, I have the following strategies when making my art:

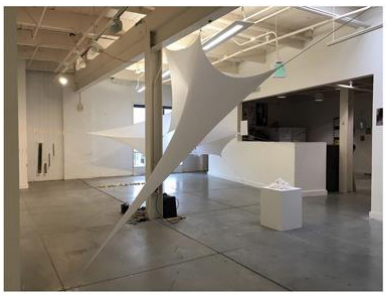
1. Making sound instruments for the audience to play. These instruments create a new sound through the player, the audience or me. That is a translation from a sound to a sculpture, and from a sculpture to a sound. Creating a list of actions, for example "sing, shout, hit…" like Richard Serra has done and encouraging the audience to interact with them, is designed to activate audiences. At the same time, I might have them write a poem on paper or on the wall. The poem gets the audience to think about how different the Japanese and English languages are. In the meantime, I will express the difference between the silent world and sound world by writing my experiences in the poem and using a blank space to represent visual language or a lack thereof. The audience can share knowledge and imagine these different worlds. *Sound Poetry, Language Poetry, Concrete Poetry* are a few of the keywords to prompt them. Thus, the audience can imagine these two different worlds.
2. Making a program as an agenda for a concert. How can people create an effective system for

[13] David, Catherine, and Rina Carvajal. *The Experimental Exercise of Freedom: Lygia Clark, Mathias Goeritz, Helio Oiticica and Mira Schendel*. Los Angeles Museum of Contemporary Art, 2000, 22.

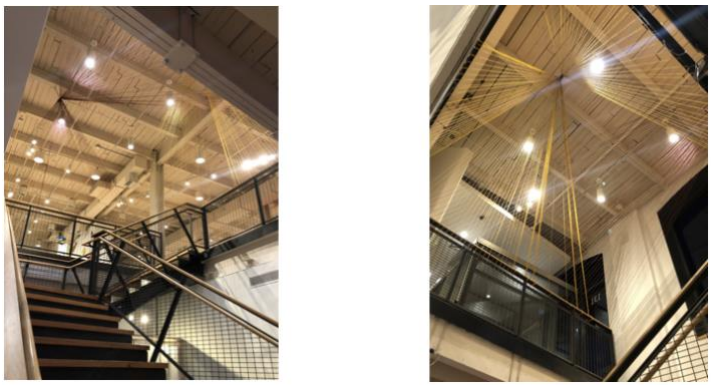
communication through sound and space? For instance, similar to a concert in Manhattan in the subway with noise using found objects, I can use various sound (noise) as well as the sound instruments in my installation space. I compose, and dancers express the sound and activate the space. The audience can play instruments tool. For the sound, I use *Zoom H4n Pro*, and then mix it with *Logic-x*. By repeating the sound or altering the Hz and volume, it will activate the space. Dancers create a kind of noise.

Possibility in the Sound scape

How do people recognize communication barriers through sound and space? I have two design strategies for this: what I have designed social function and sound expression projects. My social function project is an expression similar to Gagaku and Noh's stage. By putting a limit on their visual and auditory abilities, it gives the audiences an awareness of borders, and an architectural space can also give the feeling of empathy and interaction. I made this space during my second year.



Horizon Space: materials include white fiber, bamboo and strings, and so on, on the floor, MICA Lazarus 2019



Vertical Space: materials include strings and stones at stairs, MICA Lazarus 2019

Dark Space: materials include sound as meditation, the Large installation room 2020

(I will discuss these artworks in Chapter 4.)

My sound expression project consists of musical instruments, sculpture and changing body expression. Most of the artwork is painted with red, pink and other colors representing my synesthesia/individual experience. Materials include percussion (acoustic), bass pick up, amplification, piezo, microphone, piano wire, speaker and haptic sound.

New strategies include mixing social function and sound expression projects, and an architectural construction. The idea is to arrange some artworks from the sound expression project into the social function space. I would also like to make sound expression artworks and then build

them like Lego blocks—which would also be a new approach to constructing sound spaces. Next, I plan to create an interactive project and set a time schedule for people to participate. I will invite them through social media and ask other artists to join in the project as well.

Chapter 2 – Border between Visuospatial and Audio-spatial abilities

The Relationship between Visuospatial and Audio-spatial Abilities

In the year 2000, I lost my hearing due to a condition known as congenital sensorineural hearing loss. What this means is that I also went from being able to hear to being completely deaf. Consequently, I have had to resolve language and communication barriers. However, regaining sound changed my direction and I could connect easily with hearing people. Thus I have started to use not only sound but also vibration in my space. The sound that I have regained through a cochlear implant in my right ear gave me a new audio-spatial ability with visuospatial abilities. The experience changed my direction from the field of Japanese painting to installation artwork that is sound artwork and also *about* sound; moreover, the notion of audio-spatial ability greatly affected my artworks. Now, if I had two cochlear implants I would likely feel stronger 3D perception. Instead I experience the world as 2D film screens in a silent world, but the sound creates a sense of 3D perception. For instance, after I received the cochlear implant I felt a deeper dimension in ink painting. This is documented in medical reports too. The McGurk Effect is a famous phenomenon referring to the relationship between visuospatial and audio-spatial abilities.[14] As McGurk explains, when someone hears noise in a café, he/she sees the shape of the mouth in order to understand what

[14] McGurk Harry, MacDonald John. "Hearing lips and seeing voices," *Nature* 264, (1976): 746-748, 11.

his/her friend says. McGurk found that when people use the shape of "gaga" with the sound of "baba" in a movie, people hear "dada". It means that the visuospatial influences the audio-spatial. Ultimately, the sound helped me not only to communicate with hearing people, but also to understand the silent world because I could compare the two worlds. I had known only the silent world, but now I understood the sound world too.

Synesthesia

After I received a cochlear implant, I had a complete change in my audio, visual, and temporal perceptions due to the phenomena of synesthesia—when one sense simultaneously receives another sense–a notion that has altered my sense of time and space.[15] For example, when someone sees a sound, they experience a certain color, smell, taste and tactile sensation. The hearing-impaired may use the temporal lobe also through the ear after having a cochlear implant.[16] Also, the phenomenon of a different sense of time has been reported. The effect that this neurological function has on perception causes brain reformation.[17] Not only sound, but also color and space affect audio-spatial ability.

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[15] *Wednesday Is Indigo Blue: Discovering the Brain of Synesthesia*. Erscheinungsort nicht ermittelbar: MIT Press, 2011, 1.

[16] *Wednesday Is Indigo Blue: Discovering the Brain of Synesthesia*. Erscheinungsort nicht ermittelbar: MIT Press, 2011, 91.

[17] Doucet ME et al. "Cross-modal reorganization and speech perception in cochlear implant users," *Brain.* 129, Pt 12(2006): 3376 - 83.

Furthermore, most people hear sound with 200 million hair cells in an inner ear, but I can only hear twelve electronic sounds through my hearing aid. Actually, I may not be able to distinguish between the “language” and “sound” perfectly, but I can strongly feel “time” and “space.”

Moreover, the sound triggers the color perception because color strongly connects with other senses.[18] For example, Wassily Kandinsky and David Hockney express sound by using color in their paintings. Also, the film *Fantasia* (Walt Disney,1940) tried to express sound in a color movie.[19] I felt sound in various colors just after I received a cochlear implant; in particular, I felt pink, which came to represent my hearing because the color relates to the reds in my Japanese painting.

Flood of Sound (in New York)
Magazine, paper, drawing on wall and paper
200 x 100 x 170cm (length x width x height)
2013

Literacy

Literacy is linguistic ability, including writing *and* reading text. *Visual* language connects language to image. Visual and auditory abilities both help to develop language and thinking abilities.

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[18] *Wednesday Is Indigo Blue: Discovering the Brain of Synesthesia*. Erscheinungsort nicht ermittelbar: MIT Press, 2011, 14.

[19] *Wednesday Is Indigo Blue: Discovering the Brain of Synesthesia*. Erscheinungsort nicht ermittelbar: MIT Press, 2011, 13, 90.

Literacy also relies on abdominal or chest breathing as well as vowels sound or consonant sounds. Through my artwork, I aim to challenge this complex relationship through my poetry and language expression. Most hearing-impaired people have to train for a longer time and in a different way in order to learn how to read and write effectively because they cannot hear voices very well. Their ability will stop when they are around fifteen years old if they do not train.[20] In short, all people need not only a sense of hearing but also a sense of smell, touch, visual and taste to acquire language ability. However, language sometimes fails even when hearing people communicate with each other. From another perspective, many Japanese people struggle to learn English, because it is quite a different language. The alphabet is simple, but Japanese use the hieroglyphics, Kanji, Katakana and Hiragana. Kanji is quite similar to the Chinese language, but Hiragana and Katakana are completely original because they depend greatly on the visual language.

Gushing fountain of words (in New York)
Acrylic, pen
200 x 100 x 5cm (length x width x depth)
2013

[20] Henry Matthew. "Toward Equality –Education of the Deaf-," 1988, 18.
Resource: Allen TE. In Schildroth AN and Karchmer MA(eds), Deaf Children in America. "Patterns of Academic Achievement Among Hearing Impaired Students 1974 and 1983." *San Diego, Calif. College Hill Press*, 164, 1986.

Chapter 3 – Japanese Aesthetic

Theme after a Doctoral Course in Japanese Painting

I attempted to produce contemporary painting after graduating from Tokyo University of the Arts. I was a high school teacher for one year in 2016 (for students with hearing, mental, and physical disabilities) and worked for a company as a designer. Although I eventually stopped painting in Japanese style, I used a red and pink color palette during this time to express a cyborg in drawings, paintings and sculptures. The reason for this is that my body and brain had totally changed: no longer felt human. With an implant, mixing the organic and non-organic, I was similar to a cyborg. The device creates an electronical signal, quite different to a natural sound. Yet his somewhat unnatural sound carried me only partially into the hearing world. But at the same time, I was inspired, I thought that a new technology and a cyborg could break borders, so I applied to the multimedia graduate program at MICA.

It was during a 2013 fellowship in New York and through the effects of the Americans with Disabilities Act of 1990 that I became familiar with the works of many hearing-impaired artists, such as, for example, Joseph Grigely. He is a conceptual artist, who became hearing impaired at the age of ten. His work in museums and writings has inspired me over the years. He proved to me that

art can be about anything including disability. There were different forms of prejudice at work in the world, in other words, artists make work about various issues relates to identity and the body.

I decided to change my field of inquiry. In 2014, I returned to Japan to complete my graduation artworks and thesis. By then, I had shifted to work in mediums that better represented my interest in visuospatial and audio-spatial abilities. In fact, I tried researching these interests with Japanese painting during my doctoral course from 2011-2015, but the thesis was impossible because of the limit of traditional materials and themes.

Japanese Painting Course

Japanese paintings (Nihon-ga) are produced using natural materials and techniques that have been used for more than a thousand years. Painting gave me the opportunity to study Japanese culture and the sense and notion of "Yohaku, Ma, Ku". In fact, the notion of space still affects my current art. For example, I continue to focuse on space when I make my installations. The traditional skills limit material and theme, but it can express the aesthetic of Japanese sense and meaning. For example, Japanese culture has created a deep and sensitive color (四十八茶百鼠 48 expresses brown thousand mouse in Kanji. It means over one thousand gray colors) The Japanese painter has to make paints on dishes, and mix the color as a layer on Japanese paper or wood (the pigments do not mix

well on the dish because of minute grains of sand pigments—rock powder—of different size and quality) Color expression also affects my current sculpture, painting and installations at MICA. In addition, Japanese painters have to learn proper behavior in their movements, and it includes repetitive motion. In 2009, I completed my undergraduate study, a time refer to as my blue period. The butterfly is sensitive and the shine from the butterfly may represent a sign of animism.[21] Animism means that all things, like human, animal and tree, stone and so on (organic and inorganic matter) have god, spirit and soul. In Japan, it is commonplace belief that gods exist *in* all things in nature and so ultimately, I guess you could say my painting reflects the spiritual climate of Japan. For example, I think the reflection of the glow of the butterfly wings also expresses sound in a space and animistic spirit. During my master's program, I changed to red because I turned my focus to emotion, pain and alienation. Red symbolizes blood in the womb representing a closed world in which I was separated from those I loved. However, another red painting in 2015 became an overall expression that anticipated my audio-spatial abilities.

[21] Terada, Trahiko, and Komiya, Toyotaka (edit). *The collected essays no.5*. Iwanami bunko, 1963, 245.

Day dream
Color on Japanese paper
181.8 x 227.3 x 2.5cm (length x width x depth)
Undergraduate work in Japanese painting at Tokyo University of the Arts
2009

They Are Raising to A High Dimension
Color on Japanese paper
227.3 x 181.8 x 2.5cm (length x width x depth)
Graduate work in Japanese painting at Tokyo University of the Arts
2011

Causalgia–Recovery as a process of alchemy
Color on Japanese paper
198.0×388.0 x 2.5cm (length x width x depth)
Doctoral work at Tokyo University of the Arts
2015

The Notion of Space

The notion of space in my artwork is original, and its expression is seen in Japanese culture and language. Japanese language does not explain its meaning, but it implies it and gives it imagination. The idea is notion of a negative and positive space inversion. Negative space is more important than positive space. So, I can imagine the space with sound in my installation. These

unclear and open-border spaces of Japanese art I explore by using sound. Also, in the silent world there is no such thing as sound, but I am hearing strange, constantly changing sounds—which is an auditory hallucination. It is similar to the emptiness in Japanese air and space. For example, the famous ancient Japanese painter Tohaku Hasegawa expresses a deep air space in his painting, *Shorin-zu byobu* (松林図屏風) He expresses pine trees with deep foggy space in the ink wash painting during the Azuchi Momoyama period (1568-1600) That painting is the most famous one in Japan and also the style well known through Japanese painting.

Moreover, I think Japan has created the value of "*ideol*" or "not real world." It's a history that does not have a clear origin, but a different notion of time and of the past. Vincent Van Gogh, Henri Matisse, and Claude Monet were influenced by Japanese culture because they too pursued *ideol* like water and air (nature) when their bodies failed and their spirits were broken. For example, as Monet's eyesight worsened, he started to focus on *ideol* (not *ideal*) and it influenced his Waterlilies series. Thus, the Japanese have constructed a notion of nothing in space and time.

I did not paint all the elements in the monochrome (blue and red) paintings in order to express an air (Ku) and foggy space (Yohaku and Ma) that means nothing. It meant everything both life and death (SeiSei ruten, Metempsychosis). Then, I experimented with a unique Japanese painting technique, like Bossen gaho with vague line drawings to express the air and the space (Moro-tai)

because the silent world is vague and has no notion of time, like an unsound world. It is similar to my perception and so it matched with the technique.

Chapter 4 – Works at MICA

The Way of My Art

I place my artwork into two categories: social function and sound expression. Social function refers to an installation where the concept of sound is a vehicle for communication. Then I developed four series during the summer of 2019 as exemplified below (1) through (4).

First, I created my interactive painting series: emotion has an effect on the sense of color, and color also influences emotion. The color sometimes creates a different meaning. For example, my pain is represented by the red color and the red color causes a certain feeling in the audience. Then, the color creates meaning, such as love or warmth. Therefore, I can select the color to cause the audience to activate emotion. Second, a language series: I urge the audience to think about the notion of semiotics and how it may be connecting with communication. We seek a perfect communication but there are many gaps and misunderstandings. However, artists can fill this gap and give ideas to help people connect more effectively. Through my work, I am suggesting a way to fill this gap in my art by using a blank space between languages and by changing the shape and color of the font. Third, a sound instrument series: various sounds affect me, and I will translate these sounds to sculptures. As a result, I can represent nontraditional sound instruments. Fourth, I have both a sound and silent world, and so I can hear two different sounds and feel the vibrations. I always

hear melody and noise in my silent world. The Japanese have imagined sound in the silent world as one similar to a Japanese rock garden. In conclusion, I make sounds and vibrations through these two aspects of sound and feeling.

My artworks

1st year at MICA

Mother and Children-Disassembled Body (2018) at Maryland Institute College of Art Wood sticks, mirror, tights, iron, painting, plastic box, paper, wax
190 x 190 x 190cm (length x width x height)

I created this image drawing on both my negative and positive experiences in Japan. This wood cube of sculpture is a mother and children's room. The idea of the room has also come from a Japanese tea box. The audiences can play percussion instruments and share the space as if in Sand Play Therapy, a type of therapeutic intervention using a sandbox.

First, the family system involved making a strong hierarchy in the family and mothers had a strong responsibility to educate children. As a result, mothers who had children with disabilities

created strong invisible borders and walls against other people.[22] My mother became a Christian because she wished to heal my ear, and so I used to read the Bible and sing a song in a quiet voice in the church of my childhood. This experience gave me the opportunity to deconstruct and combine language and words. In other words, before something was named, like the story of the Garden of Eden (where Adam named the animals), I recognized the world through a visual language and also a simple sound from my hearing aid. It allowed me to focus on a part of the world not unlike a silent world where the notion of language becomes an abstract image. I think of it in the same way a bat sees an infrared world.

Next, in order to break the borders and walls, I invite audiences into this cube space much like a Japanese tea room to make their own dialogues with playful sounds. The idea behind this is of the tea room established during the Edo period (from the 17th to 19th century). The Japanese society created a hierarchical system but the king and the common people could be equal in this room. And thus, we can see ourselves objectively, stand opposite to each other, and sympathize with other people. Actually, it strongly impacts the mothers who struggle with borders and walls, and they need this type of communication to see themselves objectively.

[22] Hiroe, Yoda. *Sociology in Ableism*. Iwanami Shoten, 1999, 1-228.

The Cyborg Creature-Hybridity (2019) at Fox building (3/29 – 4/12)
Many colorful tights, clothes, thread, wires, aluminum, iron sticks, bicycle materials, LED lights, gear machine, percussion tools, metal, oil painting, pot, water in pot, pink water, music wires (harp and guitar)
Around 240 x 340 x 270cm, space size: around 1200 x 1200 x 2000cm (length x width x height)
"Bodily Constructs, Pilot Primer Demo, 2019"
The Exhibition organized by MICA Curatorial Practice MFA 2019
Curatorial Team: Hannah Davis, Ashley He, Tracey Jen, Eva Sailly, Minwen Wang

Although these artworks are sculptural, I displayed them in an installation format because of the huge space. The construction is based on an inorganic cochlear implant; the exhibition itself may cause an uncomfortable sensation. The tights express my tension and conversational limitations, and they connect to my tension in conversation. Also, I wanted to incorporate sound and kinetic expression as in Jean Tinguely's artworks *Le Transport* (early 1960s), in order to express a monster. To recreate my life experience, I mixed colorful tights, pink water, clothes, and LED lights. The

lights and colors show life and the sound. The movement from a kinetic machine made of aluminum, iron sticks, bicycle materials, a gear machine and wires creates sound that expresses the machine of my cochlear implant. I noticed that using sound, light and movement is important for me to express life in this exhibition.

In addition, the shape takes the form of a monster from Greek mythology, a precursor to the cyborg. I mixed electronic tools because I wanted to represent being imperfectly mixed—like Therianthro and a Cyborg. This implies simultaneous life and non-life and the possibility that Therianthro and a Cyborg break the symbolization in our society and create an unclear border. I got the idea to express a mix between cyborg and the human body from Donna Haraway's book, *A Cyborg Manifesto* (1984). The blood red color expresses my body and pain, but the creature is living strong. The shape of the cyborg explores how vivid sound and color relates to our inability to communicate a beautiful, but also possibly an uncomfortable, conversation piece. I would like to prompt audiences to think about the idea of conversation through this sculpture. Why do we fail at communication even when we speak the same language?

For the installation of sculpture of this artwork, it should be exhibited in the center of room. Also, other hard materials can be used of fiber and mono colors in order for the audience to focus on the sound.

Pinocchio's Transformation (2019) at Maryland Institute College of Art
Chair, strings, acrylic, amplifier, speaker, guitar tuner, screw
36.5 x 38 x 90cm (length x width x height)

Instructions for both the audience and myself in this performance include:

1) Shaking the strings

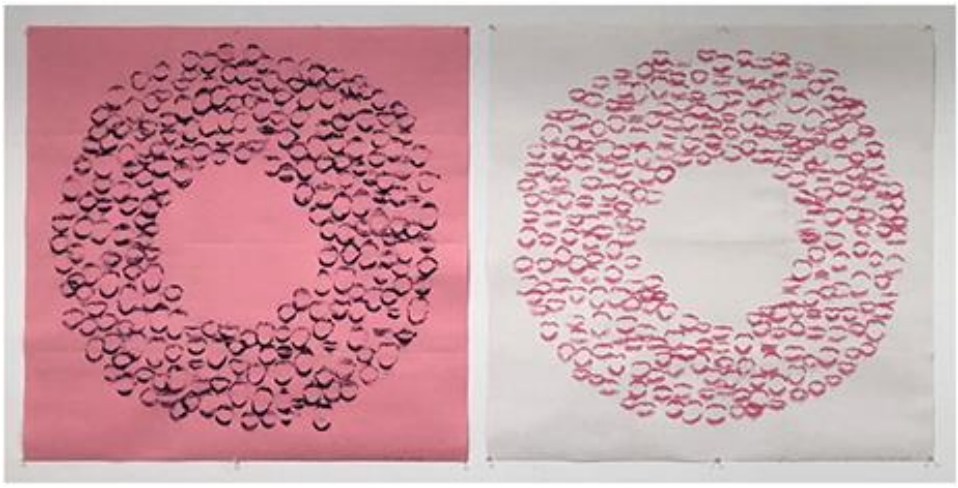
2) Flipping the strings

3) Scrubbing the strings

This piece is a sound sculpture created out of everyday objects as an experience artwork. I was influenced by Tony Conrad's sound instruments seen at ICA Philadelphia in 2018. I translate sound to a sound instrument which I then translate to another new sound. The amplifier with

microphones and a speaker near the chair which amplifies the sound of the three guitar strings attached.

After I received a cochlear implant, I went from a silent world to a world which included sound. The sound world strongly influenced my perception. When many objects moved I heard sound and I felt that it had life. In addition, the phenomena of synesthesia temporarily created sound colors. Following that phenomena, I asked myself the question: Am I the same human between my current and former self? My brain has been sonically reorganized through my cochlear implant. I think the reorganized brain affects my sense of space. In fact, my family and doctor pointed out to me that I could walk straight after my surgery because sound gave me a new audio-spatial ability. So, like the story of Pinocchio's transformation from wood to human, my body and brain were reproduced yet they are unified by my memory. This experience of translation gives an audience different ideas through constructing a new world.



The Sound Painting-Sound and Silence World (2019) at Maryland Institute College of Art
(Sound power/ pressure level dB [Lin], the LW is expressed pink, on the contrary LP at 4km is a blue line)
Paper (pink and white), lipstick (blue and pink)
90 x 184cm (length x width), each size 90 x 90cm

In this painting, I put my mouth on pink and white paper while making vowel sounds. In the mouth color expression, the color connects sound with the sound-pressure level (Lp). On the other hand, LP is related to sound power level (Lw).[23] It is a modelled effect of distance on pink noise. Then I wrote a small Japanese story under the kiss mark to complement the shape. I frequently used a motif of my mouth to express my identity and it connects with Samuel Beckett's "*Not I: Lisa Dwan mouths off- video*".[24] He wrote that "*En attendant Godot*" expressed a separated system of

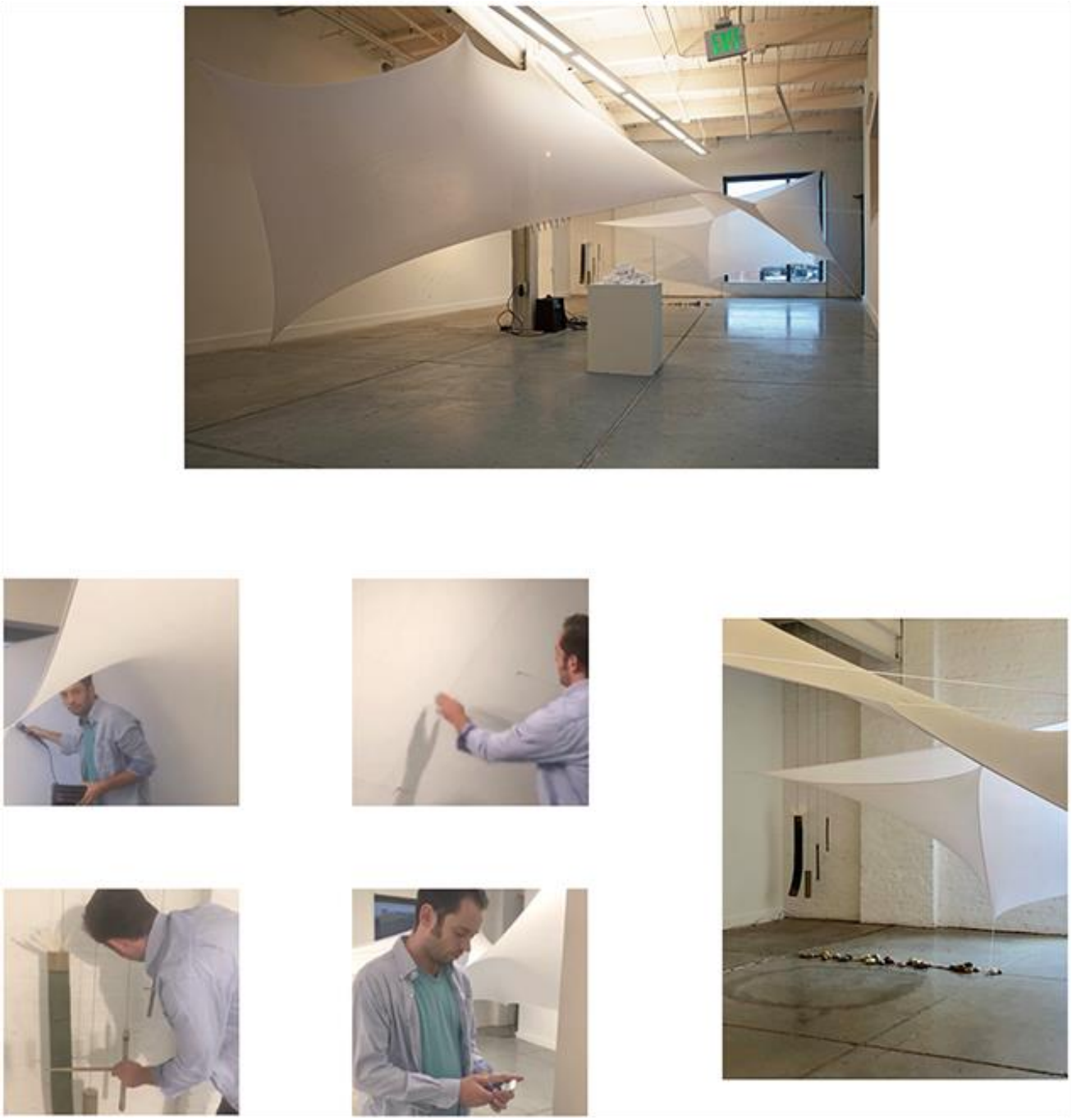
[23] Collman, Richard. *Sound Power and Sound Pressure Levels*, Decibels & Acoustic Principles, 2015. https://www.acoustical.co.uk/decibels-acoustic-principles/sound-power-and-sound-pressure-levels/

[24] Beckett, Samuel. *Not I: Lisa Dwan mouths off- video*, The guardian, 2014. https://www.theguardian.com/stage/video/2014/feb/03/samuel-beckett-not-i-lisa-dwan

language. For me, it is important to emphasize my body because I use body language and focus on the mouth when I communicate with people. In other words, I wanted to prompt the audience to use various ways of communication.

A professor suggested do a performance to express the relationship between language and sound, not only exhibiting painting. During this performance, I use not only the mouth but also tongue and vibration of the throat expressed through a video recorder. In addition, I make random kiss marks on paper to represent language.

2nd year at MICA



Mother Earth (installation) (2019) at Maryland Institute College of Art
Fiber, piano line, bamboo, stones, clip, amplifier, salt, thread, noise, speaker
Around 700 x 700 x 350cm (length x width x height)

This installation creates loud sounds in the exhibition space.

Instructions for both the audience and myself in this performance include:

1) Scrubbing fabric near a microphone

2) Plucking piano wires on the wall near an amplifier

3) Hitting bamboo poles together

4) Hitting stones on the floor near an amplifier

5) Creating various noises displayed by colored sound waves (i.e., white, pink, blue, brown waves) with small speakers on the ceiling

6) Hitting pillars by hand near an amplifier

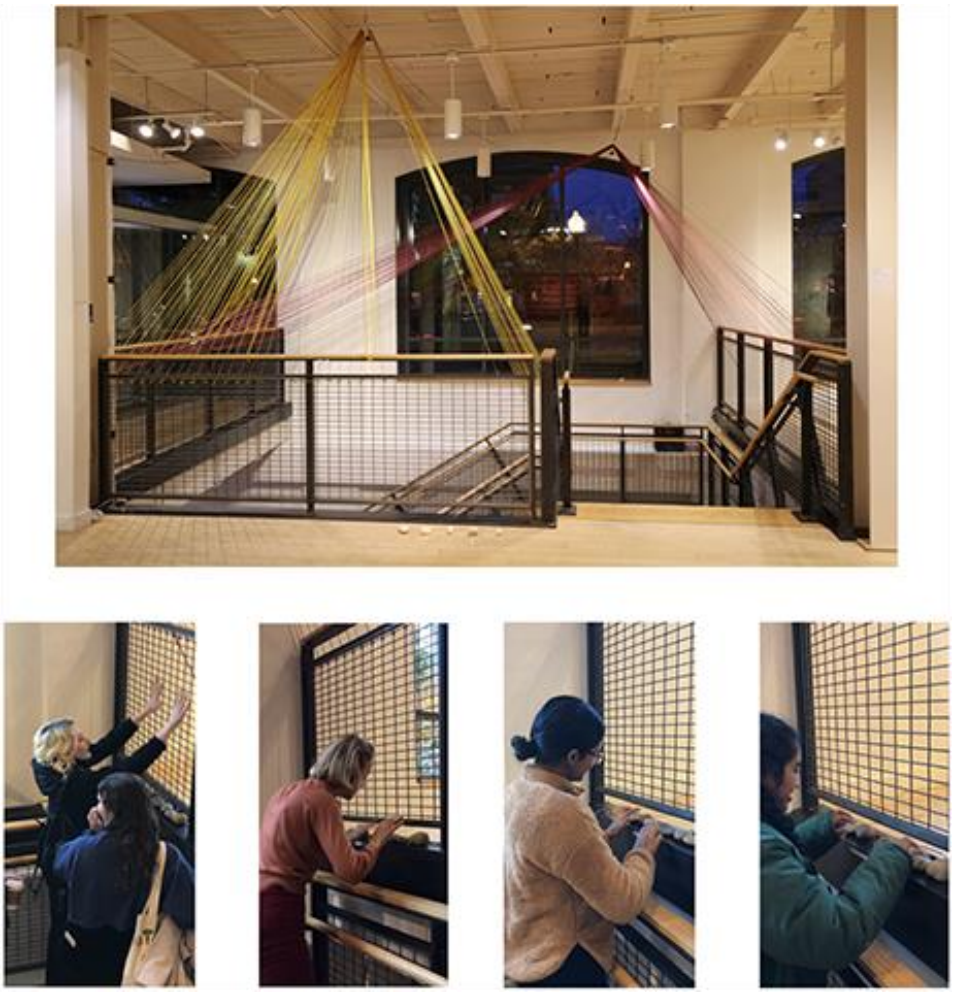
This installation is a magical place to express a space for communication. The white fiber creates a visual and physical limitation in order to express visuospatial ability. Furthermore, the fiber emphasizes the sky, sea and sound waves is based on my experiences. When I first heard the sea seven years ago, the sound was like an orchestra. Also, I felt the voice of the earth walking along the sea. By placing salt piles on a gallery box, I expressed an entrance to a sanctuary and represented a boundary against evil (Japan is a country surrounded by the sea).

The acoustic interaction is my new direction in creating sound instruments. In the air around us people experience the same vibrations. These vibrations connect people in the same space.

The wood pins will also express vibrations and sound. In addition, the audience can hit bamboo. Moreover, various sounds are amplified and digitized in my brain, but only when I hear sound do I feel one with nature. Is my brain searching for the meaning of sound in our world? I used noise from my iPhone and speakers because I hear sound in my Silence and I wanted to share my experience. Sound from the amplifier expresses my hearing aid.

I always define the world as being constructed through the sense of vision and hearing and through my art I am exploring the relationship between object and subject. My hope is that the audience will communicate in this space through emotion and other sensations. They can explore human nature. In our world, something of value often shines like a star. By observing the star in the world, humans can navigate their own position like guiding a ship in the sea. Time is also fluid, flowing to the future like a ship passing through a sea of silence to a sea of hearing now.

In this installation, a viewer asked to consider the relationship between sound and white color on fiber. In addition, another viewer asked what purpose the sound had in this installation. For example, what do you wish the audience to gain from this experience? Or what kind of experience do you want to give to the audience?



Cradle (installation) (2019) at Maryland Institute College of Art
Hemp strings, stones, amplifier, speakers
522 x 510 x 771cm (length x width x height)

This installation creates a range of noise in this exhibition space. Instructions for both the audience and myself in this performance include:

1) Scrubbing fabric near a microphone

2) Hitting stones on the landing of the staircase near the amplifier

3) Creating white noise sounds (the audience can change the volume and the Hertz)

with small speakers on the ceiling

4) Hitting stones, boards and the fence near the amplifier

My second installation took place in MICA's the Lazarus center at the staircase. The staircase to the basement, replicating humans going into a cave like Lascaux, which alludes to the cycle of life and death. Moreover, the staircase environment imitates a womb with the passageway to a lower level, much like birth canal. I used hemp and attached a fence as well as bi-color strings, which represented arterial and venous blood pathways. I dyed the strings red and yellow with water extracted from plants and insects. The overall shape of the sound wave expressed the filtering phenomenon of sounds bouncing. With respect to Japanese Mono-ha artists and Lee Ufan's artwork *Open Dimension* in an installation at the Hirshhorn Museum, it also expressed the string and stones.

The installation includes instructions for the audience to activate their own emotions. Luigi Russolo creates a noise machine (not music) in a room but I express it in a different way.

The audience produces white noise near the two speakers hanging from the ceiling. Furthermore, the audience can play sounds using river stones and the wire fence by hand where it is then amplified. Ancestors from the Stone Age also made music by hitting stones. The musical installation is intended to evoke a primitive emotion stemming from memories deep within the subconscious. It is well known that babies hear white noise while inside the womb.

Poem on Wall (2020) at Maryland Institute College of Art
Acrylic, oil sticks
200 x 120 x 300cm (length x width x height)

This expression of poetry and onomatopoeia on the wall was made using red oil sticks and pink acrylic. I wrote a poem and left a blank to express a silent world. The experiment represents a system of broken language underscoring my challenges in the world of communication. This is my attempt to release myself from this burden.

The artworks of Yoko Ono's book *Grapefruit* (1964), and Mira Schendel's artwork Untitled from *Graphic Objects* at MoMA, gave me this idea. I usually would use paper, but I wanted to incorporate it into a public space. The wall connects to another wall, ceiling and floor and so the space is not limited. The painting became a part of the installation. Sound creates various colors in

my brain as a phenomenon of synesthesia. Pink represents sound in my current work and so I use it in this artwork. The pink is a pure sound expression while the presence of red refers to my body and the problem of sound as a result of my pain. I translated the red and pink color into the text and wanted to communicate this experience with the audience.

Originally, all language was based on sound. In prehistoric times, we used oral communication but developed written communication for records as time went on (hypothesis). Thus, strictly speaking, a textual language does not exist if someone does not have experience with sound. In other words, text exists as long as it connects with sound or imagined sound.

In terms of this wall painting, viewers suggested I fuel the audience's imagination by expanding the possibilities of the space with my words. I could use poetry to replicate the experience of a silent world. Then I could flood a staircase or kitchen space with many words. The audience will find them. Moreover, they said you could express more flexible language shapes. Make language echo, jump, copy, many complex things. Then, I could consider the size of language and space between words and other words.

Universe with Sound (installation) (2020) at Maryland Institute College of Art
Salt, stainless wires, bucket, big and small stones, amplifier, speakers
502 x 475.5 x 431cm (length x width x height)

In this closed space, a harp's stainless-steel wire creates sound and a hanging bucket, stones and salt add to the acoustic availabilities. Many sounds may be bound together. Through my artwork, a small performance group can create sound and also silence. Then the audience also can hit stones and can communicate in order to form the pure circle shape. In fact, I studied Japanese culture

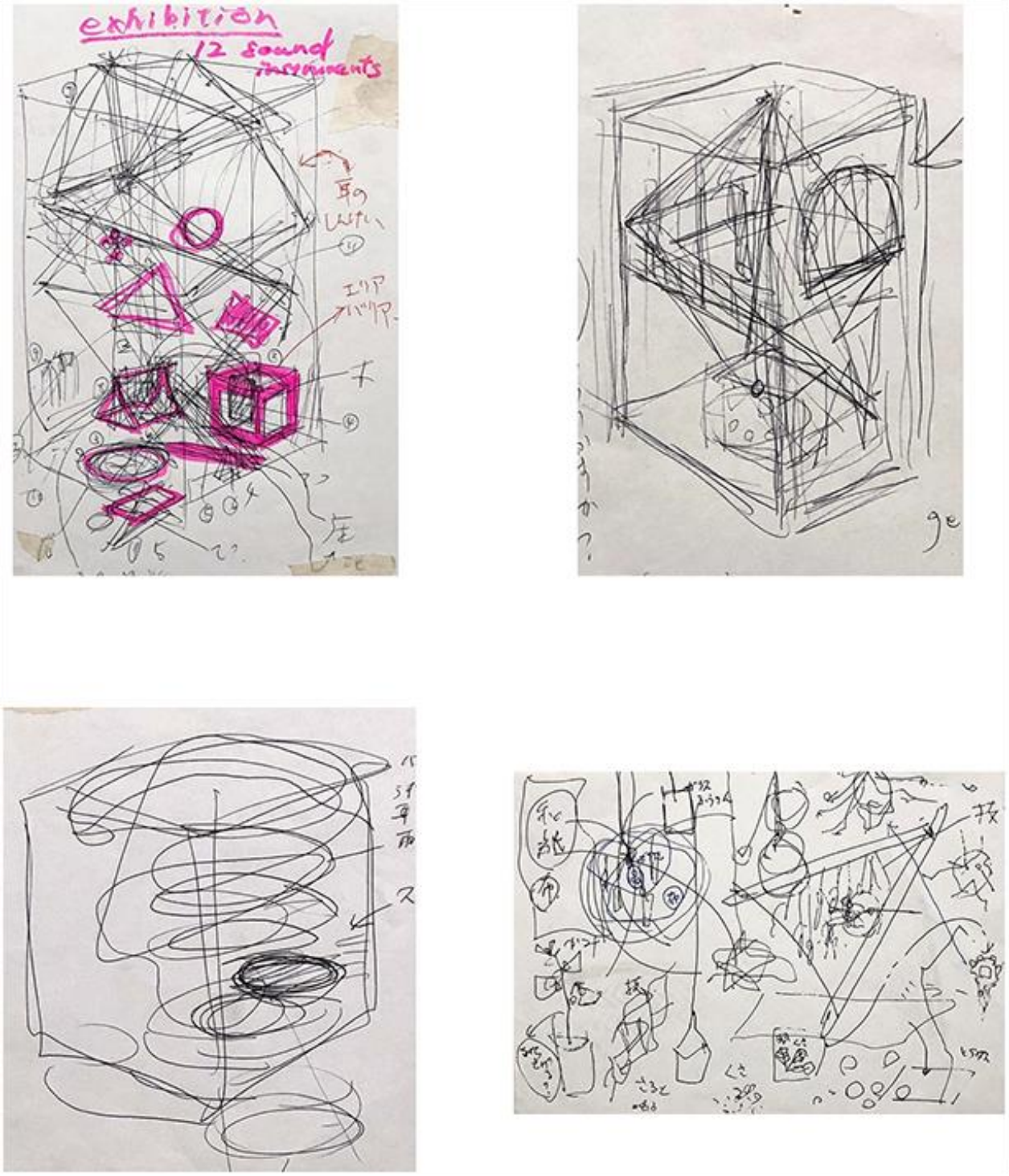
through Japanese painting and it connects with the notion of a universe. The space in the garden creates an expanse to imagine sound. I used raw materials to emphasize and create the notion of a universe and zen. Then sound goes around the notion of nothing space.

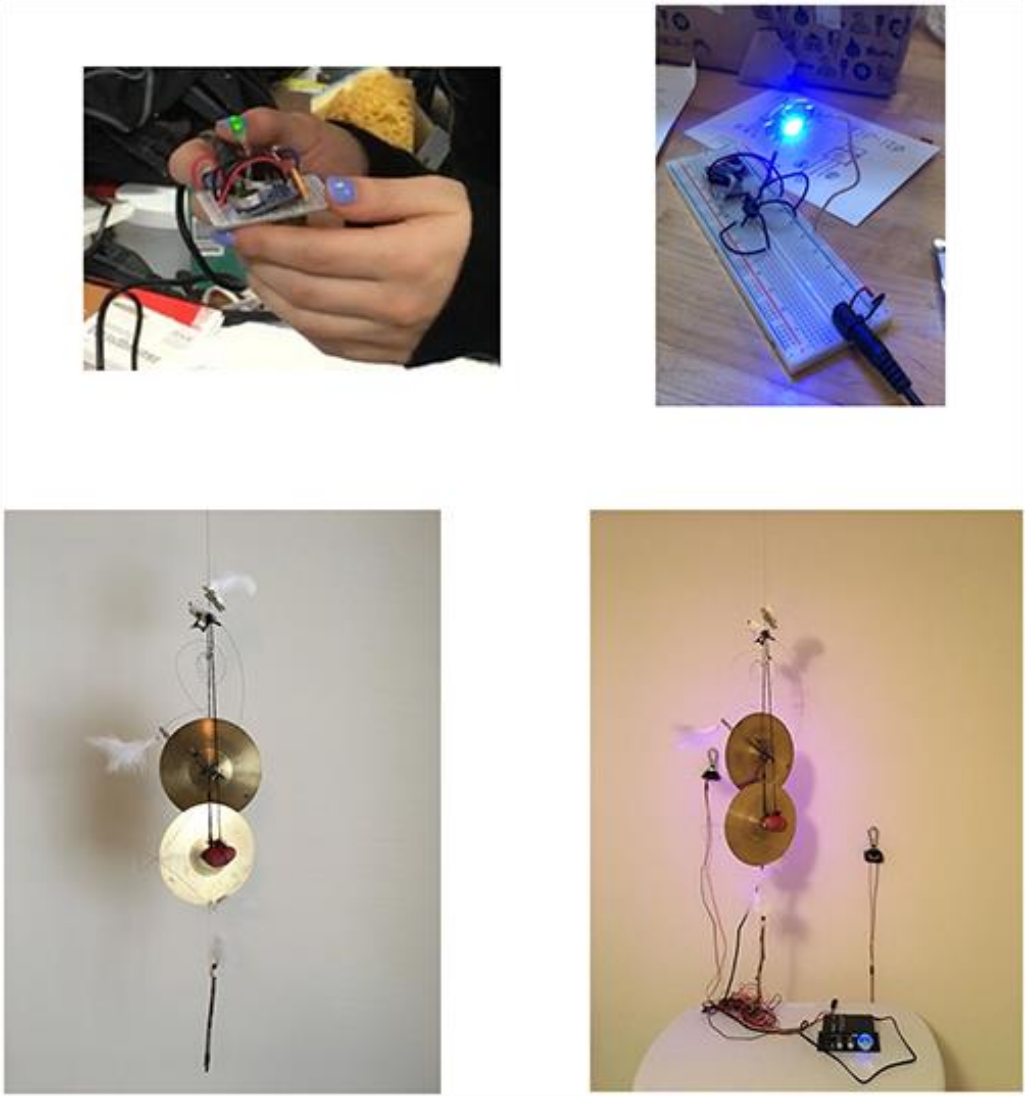
In this dark room, the audience can manipulate light through the vibration of an electromagnetic wave, bouncing a sound and creating a recognition of space in three dimensions thus combining auditory and visuospatial sensations. This means that even though we share the same space we have different perceptions of the visual and the auditory and can communicate with each other using sound rather than only visual perception.[25]

About this installation, a professor asked me to consider a dome shaped space to emphasize sound echo. And then, an unexpected sound could create an uncomfortable or deep low sound to match the space. In addition, I could consider a score with a dancer to activate the space. Another professor said to think about proper materials like stones and salt, but that my art is expressing a bridge between nature and artificial technology. (Analog and digital communication)

[25] Nakamura, Keiko (edit). *Relationship – Bio history research Book no. 49 - 52*. Bio history research Hall, 2007, 13 – 14.

End of Thesis Grad Show at Maryland Institute College of Art





Those are drawings and samples for the 12 sound instruments.

No title (2020) at Leidy Gallery at Fred Lazarus IV Center

Grad Show 3 has been canceled, and so instead I will show this work in public at a later date.

This is also based on my experience of hearing only twelve sounds. I set up 12 sound instruments and made 12 frequencies. And then I arrange eight speakers around the gallery space to

connect with the 12 instruments. Actually, when I am creating 12 different sounds (frequencies) with a speech therapist for my cochlear implant so I could create my 12 sound instruments. Echoing my past experience, the audience will be confused in this space by the direction of sound. In other words, they can share in and empathize sonically with my experience. This idea came from David Tudor (Rainforest V) MoMA “David Tudor and Composers Inside Electronics Inc.,” and “Sound Series: A Night of Deep Listening, Featuring Joe McPhee, Claire Chase, and Peter Evans at Carnegie Institution for Science.”

Twelve sound instruments, a recommendation: Creating for frequency 20Hz~5kHz

1) 4~20k（Cymbal）
2) 15Hz~9k (Organ)
3) 30Hz~5.5k (Piano)
4) 450Hz~4k (Piccolo)
5) 220Hz~2.2k (Flute)
6) 200Hz-1k (Trumpet)
7) 300Hz~1.2k (Soprano voice-sound)
8) 200Hz~3K (Violin)
9) 150~420Hz (Tenor voice-sound)

10) 200~800Hz (Alto voice-sound)

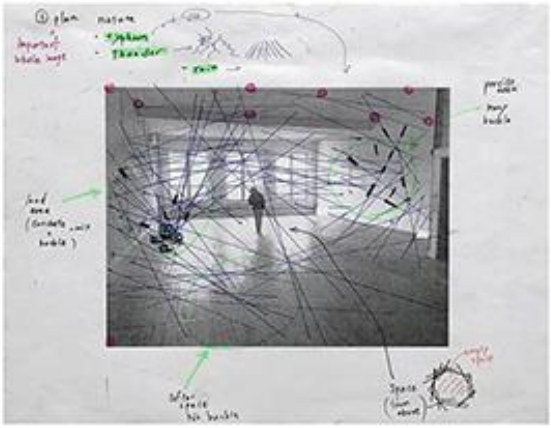
11) 80Hz~600Hz (Guitar)

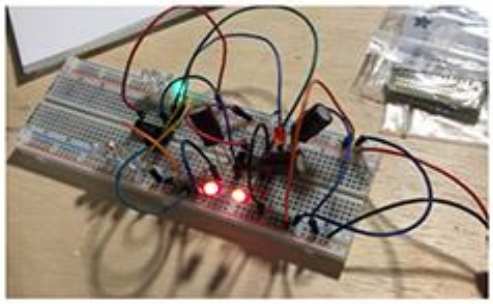
12) 30~80Hz (Bass Drum)

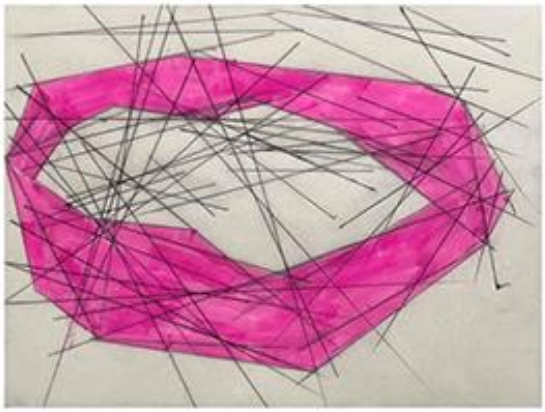
Idea for sound sculpture: Drum in box, salt stone circle (pink and black salt), iron pipe, marble stones circle, stainless-steel wire strings (shape of cochlear), copper, guitar and piano strings, hostile sound, flute, fiber, paper and mirror sheet sound, performance sound (tree, bamboo and natural materials), digital sound, water sound

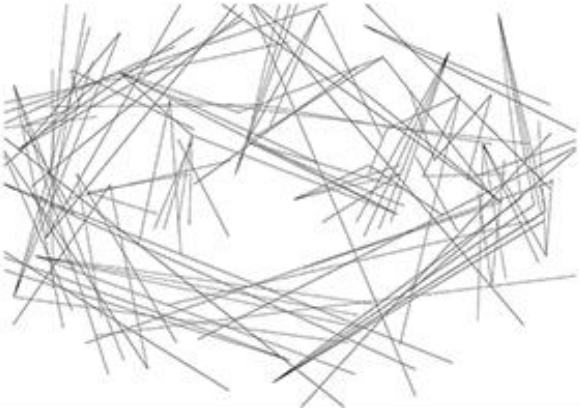
Idea 1: I will record music and then replay it in the same space. Idea 2: I will collaborate with dancers to recreate the sound and scores.

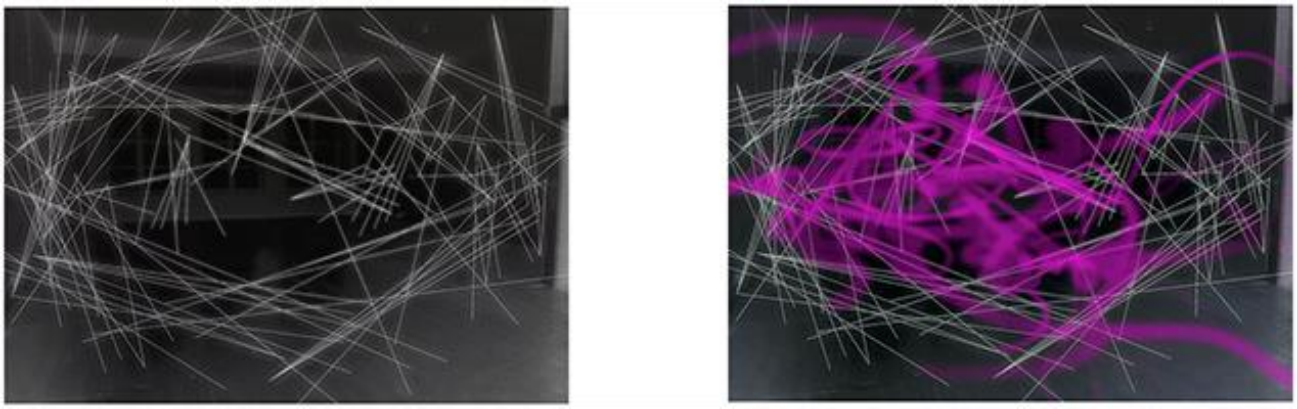
Full list of all my art at Maryland Institute College of Art











No title (2020) at The Coward Shoe (322 N. Howard Street) and online exhibition
"A roving presence"
Residency program organized by MICA Curatorial Practice MFA 2021
Curatorial Team: Dulcina Abreu, Zion Douglass, Deyane Moses, Ryan Patrick, Babette Pendleton, Sicong Sui

The three resident artists—Lynn Hunter, Amy Reid, and myself were in residency to express site-specific exploration, installation—driven creation, ephemeral activations, and organic collaboration with support from the MICA Curatorial Practice MFA 2021 curators. Due to Covid-19, the Show was canceled, but the curators are planning to show it online.

The theme is spiritual transmission, migration and movement, and nomadic existence. This sensory exploration and project centers on Baltimore and its historical evolution (the changing buildings, communities, and economies) as critical questions.

I make musical scores in a small space and collaborate with a sound artist and performer using stainless wires strings in a larger space. To make a random sound, I use three small devices.

When the stainless wires are hit the machine creates a random sound. The sound comes from eight speakers around a room. This is based on my personal experience of not understanding where a sound is coming from.

I had planned to collaborate with a performance and sound artist in a large space and express my music scores in a small space at The Coward Shoe, but that too was canceled due to Covid-19.

Idea: I collaborate with dancers in this space with my choreography and their bodies can respond to my idea of sound. The movements of the bodies in the space create another way of visualizing it.

Pinocchio -Reproduction- (one chair and three strings)
Chair, strings, acrylic, amplifier, speaker, guitar tuner, screw
36.5 x 38 x 90cm (length x width x height)
2019

Fountain Inside Retina
Mirror, stones, mixed media ball, amplifier
69 x 63 x 10cm (length x width x height)
2019

Cybernetic Siren
Wood, amplifier, string, electronic tool, stick, pink water, glass, guitar and harp strings, guitar tuner, feather
82 x 14 x 20.5cm – one harp string (length x width x height)
one string
121 x 10 x 3.5cm – one harp string (length x width x height)
three strings
2019

Tactile Organ
Copper, wood, color
81 x 75 x 87cm (length x width x height)
2019

Ink, picture, pencil, spray, mirror sheet, paper book
120.65 x 90.8cm (length x width)
2020

Ink, picture, pencil, spray, mirror sheet, paper book
121.92 x 95.9cm (length x width)
2020

Ink, acrylic paint, picture, pencil, spray, Japanese traditional paper
84.5 x 115.6cm (length x width)
2020

Ink, picture, pencil, spray
197.2 x 47.6cm (length x width)
2020

Ink, acrylic paint, picture, pencil, spray, hemp string, feather
124.5 x 142.2cm (length x width)
2020

木 timberland 木, the sound project at Valley Park in Cincinnati (Summer 2020)

This project is being organized with two local art institutions, the Contemporary Art Center and Wave Pool Gallery. Also, this would include a concert in Valley Park where four musicians play in front of five large trees by using four of my sound instruments and five scores.

Five music scores:

I got ideas from the ink wash painting, “black has five colors” which includes all colors. So it stimulates the imagination of various sounds and colors.

Performance (2020) at Maryland Institute College of Art

Tree, aluminum foil, string

Wall Painting 475.5 x 300cm (length x width)

The number music composition (2020) at Maryland Institute College of Art
Motor, rope, rocks, salt, splay color
120 x 300 x 100cm (length x width x Depth)

Musical Composition-By Deconstruction of Wavelength of Voice (2019) at Maryland Institute College of Art
Paper, ink, white pigment
76.5 x 50cm (length x width)

Vibration Bell (2019) at Maryland Institute College of Art
Tights, nail, traditional bell, lipstick (pink)
60 x 60 x 20cm (length x width x depth)

Sound cyborg (2018) at Maryland Institute College of Art *Sound cyborg*
Tights, wheel, iron stick, wax, expanding form, mixing sound (iPhone and headphone)
140 x 100 x 200cm (length x width x height)

Future Work

First, as part of exploring the borders of communication, I hope to expand the limits of the imagination like the aforementioned Lascaux cave. My strategies for my next exhibition involve social function and sound expression. One, I will make an architectural construction of the social function and then arrange some artworks of the sound expression as discussed in Chapter 1. Or two, I will make some artworks (sound expression) and build around them. Also, I will try mixing social function and sound expression. In addition, I will further develop these sounds to illuminate the fact that the Hearing and Deaf can offer one new perspective and new experiences through sound.

Second, our space and the borders of communication totally have changed by COVID – 19, and we have to think about the pandemic. So, I will pursue my theme by using photographs and videos, and some form of sound or vibration via the media folder parallel to the physical way. For instance, I can broadcast my own projects using a livestream or live performance or making a recording of my sound pieces.

Conclusion

People hear sound through their physical ears, but my sound is a digital signal through my cochlear implant. By using new materials and media, a new genre of representation can be created in order to listen to an original sound through my hearing aids. The sound is quite simple, but I think that other senses (tactile, eye and taste) may be productively translated into sound to create transformative experiences. Furthermore, the sound I hear creates a different sense of space. In other words, I am able to create a new definition when I use sound, vibration and words: a new media in a space.

I have studied to find new ways for people to connect with others—people that they may perceive to be different—by creating mutual interactions *through my artwork*. In my work at MICA, I found a new way of expressing sound, vibration, and language *as* a new media. And through my research here, I learned that people do not need standard music to cast their differences aside in order to find and produce a mutual exchange.

Developing a new sound technology and making a composition that would create a universal sympathy in my installation has been my goal. I still struggle to communicate and tend to avoid it because I become nervous when I talk to people; moreover, I believe that this feeling can be expressed, indeed translated, through certain materials like strings and fiber in sound instruments. On

the other hand, creating limitations in my artwork can help people think about what constitutes a border or what constitutes a wall, especially those perhaps otherwise imperceptible to them. Also, as mentioned earlier in this paper, notions of Japanese traditional culture equipped me with a new perspective toward focusing on space and colors rather than materials only. Not having the notion of general sound and sign gives me the unique opportunity to prompt people to think about perception. In other words, it is a chance to extend our society. In fact, there are many others in our world and we have to hear their opinions and ideas.

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Acknowledgements

I am grateful to Maryland Institute College of Art (MICA) and all the Mount Royal School of Art (MTR) professors Claude Wampler, Jennie Hirsh, Luca Buvoli, Siobhan Liddle, Stephanie Barber, especially their many critiques over the last two years and the feedback of Babette Pendleton, professor Mark Harris and my MTR classmates. Thanks also to MTR tutor Casey Bieda, librarian Christian Drolsum, writing studio tutor Shane Moritz and Professor Sukyun Weaver. I have had support from LRC and note-takers, especially Claire Baldi, who typed my notes over these two years. In addition, I got technical advice and electronic help from professor Ann Walsh , Jenny Graf, Neil Feather, Paul Mirrel, Sarah Dittrich and Will Schorre. Special thanks to my family, to professor Norihiko Saito at Tokyo University of the Art, to Chairman of Ashinaga Foundation Yoshiomi Tamai, his late wife Yumi Tamai, her best friends at Tokyo Metropolitan Hibiya High School and Agency for Cultural Affairs. I appreciate the feedback on my artworks from Ayumu Kubo, Kazushige Kryu, Lucas Yasunaga, Shintaro Nagayama , Soh Ideuchi and Sorahisa Koda.