RIT

Hear You

By

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A Thesis Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Fine Arts in Glass

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Rochester Institute of Technology
Rochester, NY
April 19, 2022
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ABSTRACT:

"Hear You" is a thesis that explores how my relationship with glass is used to discuss the connection and interaction between sound, shape, material, and surrounding things. I trace the origins of these interests related to my sensitive and introverted character since I was a child and how it has influenced my interests in communicating in unique visual and audible ways.

This thesis links personal experience to scholarly research into sensory processing, high sensitivity personality traits, the concept of quiet, and the power of sound. "Hear You" concludes with an assessment of a body of work that merges interests in glass, sound, and interactivity to explore various ways in which the intersection of seeing and hearing can be used as tools for thinking about feeling.
INTRODUCTION:

My undergraduate major was experimental design at the Central Academy of Fine Arts (CAFA), mainly researching diverse materials such as wood, metal, fiber, ceramics, bamboo, Chinese Lacquer, and glass. During my undergraduate study, I only made glass twice. The first time I learned casting-related knowledge and created a group of robot lights. The second time was the graduation creation. Each student in our studio was allowed to use the materials they were interested in to create. I decided to use glass as my primary material to create works.

At the beginning of my creation, a teacher asked me, "why did you choose glass? What's so special about it compared to other materials?" Then I began to think about it. In China at that time, only a few schools had glass art majors, and the Central Academy of Fine Arts was not one of them. I knew glass only through the Internet and books. So, I went to the school library and borrowed all the books about glass. I don't remember how many exactly, but I'm sure less than six because the number of books undergraduates can borrow at one time is 6; I only borrowed once. It shows how rare glass art is in China. So I began to learn glass art from books and understand glass's origin, composition, and main technology (cast glass, lampwork, blown glass, etc.). By browsing the works of artists made by different processes, I found that blown glass works are more attractive because they look more light, changeable, rhythmic, and breathing, just like music. Then I suddenly realized glass, especially blown glass, is more pliable than some other materials, such as wood or metal, and can easily be formed into many shapes, isn't the shape of the glass that carries
the body of sound? Therefore, in the following time my research interests began to build in areas regarding how to make sound by different means, what it might mean to visualize sound, and how to deconstruct and reconstruct sound with shape.

So how did these themes come into being? During a critique, Professor Michael Rogers and David Schnuckel guided me to think deeply about sound art, including what is sound art, the types of sound art, and the ways of expression of it. Because at that time, I felt a little unable to go further into the theme of "Sound and Shape." So what is sound art? Alain Licht, an American guitarist, composer, journalist and writer, talked about his views in a book entitled *Sound Art: Beyond Art, Between Music*, published in 2007. He believed that sound art is an art that includes but is not limited to music or even beyond music and is between various art types. From ordinary everyday noise, such as the buzzing traffic sound, to the sound made by musical instruments or human voices (whispering, talking, singing, even just leaves and making other meaningless noises), various kinds of noise are applied to sound art. Sound art can sometimes be experienced through live performance, or can be listened to as a recording through speakers or headphones, and can be placed anywhere and listened to. I learned a lot about sound art from his books and got a lot of inspiration. First of all, my direction is not music-related because I don't have any music background. I don't know how to start. So I focused on making sounds. I tried to make sounds with various materials and methods and later attempted to visualize the sound. So why did I choose to visualize sound? Vision and hearing are the two key channels for people to sense the external

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1 Alain Licht, “Sound Art: Beyond Art, Between Music”
world. They are the two most initial and common behaviors of human beings, which all actions in individual human cognition cannot replace. The most intuitive and natural way to understand the external world through various visual and auditory senses is "view" and "listen." Eyes and ears are like lenses and radio, respectively, so what people touch is the selected option with the help of audio-visual media, which is a simulated world with unique dimensions of appreciation and listening. The creation of works such as sound visualization is by no means a simple creation of computer 3D animation but the construction of an immersive virtual environment. Immersion can make the viewer indulge in the scene and participate in it. Sound visualization can integrate images, sounds, and images and provide viewers with a surrounding visual and auditory experience. As a person without any background in music and sound theory, visualizing sound can help me understand sound from a graphic point of view. In addition, as a sound creator without any background in music and sound theory, visualizing sound can help me understand sound from the perspective of graphics. For example, the frequency testing software can visually show what kind of sound I make through feeling and imagination. Then I can think back about the sound I created through visual images.

I began to keep asking myself a question, why am I so interested in sound? I don't have any background in music and don't play any instruments. This kind of creation for "no reason" brought me strong self-denial after meeting a comment which is meaningful to me and influenced me a lot, "I can't see your soul in your work, where is your soul?" As Hugh Marlais Davies, museum director, and curator, said in his book *Echo: The Images of Sound*, "...the works are above all
expressive of a personal solidarity with nature and the world whereby all things and all life are
destined to possess an individual identity. This is what the artist is trying to grasp and understand.”

It made me realize that I never tried to express my personality through work. All my previous
explorations were based on my understanding and interest in glass materials. There is a lack of a
link, a clue and a context between me and my works. Why do I do such work? Can such works
represent me? With these questions, I began to find some sources from the stories and characters
I had experienced.

I've been an ineloquent person since I was little. It seems like I've been communicating with
people within this world in different ways ever since. I communicated through making, not
talking. And making something was the primary activity for me every day in my childhood. I
drew my colorful idyllic life, sketched the Chinese opera figures on the TV show that my
grandparents love, cut the flowers and animals with paper, designed the cards for my parents for
every holiday and their birthdays, and wrote down, "I love you," which I never say in words.

These small things show I began to express myself by doing things when I was very young. Why
can't I insist on this as an artist now? Why, when I become more mature, but I dare not "say"
more and more?

**CONTEXT**

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2 Hugh Marlais Davies, “Echo: The Images of Sound”, p. 11.
I was labeled introverted since I was a child. The teacher wrote in comments, "Chenyang is a very earnest and friendly child, but she is a little introverted." A relative once said, "Why are you so sensitive." There are many comments like this, but they undoubtedly gave me a signal that my introversion and sensitivity are wrong. I wanted to work in the so-called right direction. I tried to become talkative and reverse the initial impression that I was introverted and sensitive. Over time, I habitually played a rational person and hid my introverted character, including avoiding expressing myself at works. I was immersed in the "soulless mood" of the work and had doubts about my character and my work.

I found myself self-negating which brought on additional confusion. I became more reticent. One day, I was so depressed and couldn't find an exit, and I felt that I needed an answer to explain all these emotions. I googled "the people who don't like to talk to people," one word came into my view, Highly Sensitive Person (HSP). "In a nutshell, being highly sensitive means your brain and nervous system are wired somewhat differently than others. You have a higher sensitivity to stimuli, like the smell, sound, lights, and activity, and you feel things deeply. As a result, you have a lower threshold before reaching critical mass. This explains why highly sensitive people (HSPs) can become easily stressed out and quickly overwhelmed in situations that might not bother others. "3 Then it suddenly dawned on me why I'm so interested in sound, why I always say "it's the smell of winter" when the weather changes, why I'm very easily attracted to light and shadow, and why I care about others' thoughts. All these little emotions and

3 https://highlysensitiverefuge.com/highly-sensitive-people-synesthesia/
concerns indicated that I might be a highly sensitive person. Then I forgave myself and tried to accept my introverted and susceptible nature.

After that, I asked myself a question, what is the purpose of speaking? It expresses inner feelings and thoughts, is a tool to complete inner-thinking and consciousness, and is also an approach to achieve interpersonal communication. Do we have other "more effective and appropriate ways of expression" for individuals rather than for most people apart from expressing the feelings, opinions, and even thoughts in words? When a person does not like to speak or is not good at speaking, is it impossible for them to accomplish the individual task of expressing their inner feelings, opinions, and even thoughts that others can only achieve by "speaking"? Maybe they don't think it would be good for them to express these things by speaking at all, that is, not to speak, which is precisely the best choice for them.

Author Susan Cain of *Quiet: The Power of Introverts in A World That Can't Stop Talking* wrote, "The secret to life is to put yourself in the right lighting. For Some, it's a Broadway spotlight; for others, a lamplit desk. Use your natural powers—of persistence, concentration, and insight—to do work you love and work that matters. Solve problems, make art, think deeply."4 These words pointed the way forward in my future creations. I don't have to hide my introverted and sensitive emotions and pretend to be a sociable person. I just need to be where I fit and like, bravely, dare to face my problems, improve myself and learn from my strengths to make up for my weaknesses to meet the real and better myself.

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Susan Mary Philipsz is a Scottish artist, the winner of the 2010 Turner Award. Susan usually uses the recording of her own singing to make her artworks and plays it by public address system of galleries or other places. In the "Lowands" Susan combined her voice with the music material from Irish folk music to David Bowie. She is very interested in the psychological effects of sound. The work is located on the George Bridge in Glasgow. The ballad Lowlands tells a somewhat sad story. A sailor who unfortunately drowned, and his soul goes through all kinds of hardships to return to his hometown because he wants to say goodbye to one of his relatives. Susan deliberately subsumed her breath and blemishes into a natural and honest voice to create a sense of intimacy for the audience. The city is rainy all year round, and the George Bridge is a place where people often jump into the river to commit suicide. She wanted to use her voice and what it said in the song to tell a story about love with people. That might be able to redeem them. This work made me realize the importance of language; it has a robust power to move people. It reminds me of what my friends often say to me, "you are already good enough." The touching song sung by the author in the lowlands can play a gentle force to encourage people, and "you are already good enough" is also a powerful sentence that can move me and heal me.

5 https://www.youtube.com/watch?v=UWeKzTDi-OA&t=257s
"Action" comes from a Chinese Artist Tianmiao Lin. It is an interactive device; the audience can get into the eggshell-shaped space and start using the sensor with a pulse. The "blood" formed by the blue fluorescent liquid drops along with the pulse of the interactions. And the ground vibrates with your heartbeats. This work "refracts" the internal body system into an external object that can be viewed and perceived. We can return to the concept of "body" in this work by sensing the changes around us through our bodies. This change of feeling things around me through my body inspired me and drove me to start from the body feeling itself and use the medical observation and feeling methods to feel my inner emotions. Then I extracted the keywords——medicine, body observation methods, feelings, emotions, heart. A tool came into my mind, a stethoscope. Stethoscopes in the hands of doctors can be used to judge the working condition of organs close to our bodies. Can the stethoscope become a new form of feeling and interaction in the hands of artists?

In addition, interactivity is also a very important part of my thesis practice. Because the essence of social fear will make me feel uncomfortable when communicating with others, so my works can interact and communicate with the audience instead of me. The exploration of interactive methods also ranges from the initial audience can only listen, feel and explore the sound made by the work with their ears to the need for the audience to play and make the sound
personally to the need for the audience to trigger the sound "switch" through the movement of their body, and then to the real-time sound of the audience as a part of the work, and so on. All these attempts are based on exploring glass and sound art and expressing art in my own comfortable and interested way.

BODY OF WORK

My research interests in glass, sound, introversion, and interactivity have come together in a body of art work that is used to explore various ways in which seeing and hearing can be used as tools for thinking. The following subsections categorize and assess various ways in which I have explored how these key components of my conceptual interests have crossed over: the deconstruction and reconstruction of sound through shape, methods of visualizing sound, the participatory instrument, and sculptural integrations of voice.

Deconstruction and Reconstruction of Sound Through Shape

EVOKE is my first work during graduate school. Sounds evoke shapes which in turn change the sounds. This work integrates sound, shape, and material. Five speakers on top of a wooden trunk transport the sound into the copper pipe and simple glass pieces. Each part of the sound is uniquely changed; we can even hear new sounds in the new shapes. It's effortless to produce surprises and feelings. That's a way to
deconstruct and reconstruct sound through the object's structure. Sound can not only be changed by shape but also be "premeditated" created and controlled.

Visualizing sound

What We Can See is a group of works composed of a single channel power amplifier board, seven identical speakers and six glass cavities of different shapes. I connected seven speakers in series to ensure the sound was the same, then put several glass cavities of different shapes and sizes on the speaker to let the sound pass through—the same speaker, different shapes of glass cavity, to get a different sound. Afterward, I tested the frequency curve of each "horn." In this way, the sound is visualized to prove the difference between each sound. Then the shape with obvious sound characteristics can be found through the analysis of the frequency curve. I Strengthen that shape so that the sound of that shape can be strengthened.
The Participatory Instrument

Hearing is not only the individual response to the physical characteristics of sound but also the main channel for people to receive external information. Human ears also have different feelings for different frequencies and types of sound. It depends on the nature of the sound and the subjective attitude of the listener. Different musical instruments will bring us different feelings. For example, percussion instruments like cymbals, bells, and triangular iron can give people the sense that golden light radiates everywhere. They can strongly show their fierce personality. However, suppose their frequency components are too intense. In that case, they will become sharp and harsh timbre, which will bring irritability to people. While the sound of the cello is like a calm and experienced older man. This is because different vocal bodies have different materials and structures, which can reflect the quality and characteristics of the sound.

*Beating* explores the influence of different materials on sound and the different feelings it brings. I experimented with rubber, leather, paper, metal, thin glass filament, and glass tubes of different lengths by rubbing, striking, vibrating, etc. Meanwhile, I amplified and tested the sound with pickups and a loudspeaker box. The audience can touch, scratch, tap the surface of different materials and feel how they produce the various sound effects and feelings.
When you rub your fingers on a veneer, the sound is distant and long. Especially when you prolong the sound with a sound effect, it will deepen its sense of spaciousness. The sound made by knocking on the leather is a low-frequency dull sound. The sound of pulling the rubber will produce a theatrical rebound sound. At the same time, I cut off the glass rods of different thicknesses and lengths and play them with another glass rod; there will be a fixed pitch. The sound sent out through the amplifier has a crisp and beautiful metal texture. I also try to pull the glass rods into regular filaments and pluck them, just like a spring, which can perfectly reflect the toughness of the glass. The above is my feeling and imagination of some experimental materials. I believe everyone will have different senses. I like the uniqueness and uncertainty of "feeling." I like the audience to inject their understanding and thinking through touch and interaction with the works.

*Mingle* is another artwork that lives as an interactive device allowing people to alter the sound by blowing the reeds like a melodica. At the beginning of the creation, I was going to make a device to make sounds by pulling its telescopic structures like an accordion. Due to an accordion being a type of organ, I studied the vocalism principles of the organ.

When a finger presses a key, the pipe plug of the sound pipe corresponding to the key is opened, the air will come through and blow the sound pipe to produce a tone. That’s basically an
organ works. This kind of organ, like a piano, is rare. Nowadays, the most common organ in our daily life is the accordion and harmonica. Their vocalism principle is the same, and only the air is supplied by pulling the bellows with both hands or bowed through a blowpipe.

At this point, I suddenly realized that the process of blowing glass is similar. It is as if an organ needs to be blown to get all sorts of tones. It also requires a pipe to blow to create all kinds of shapes. I think it’s a very romantic parallel. And then I started thinking about how to blow air to make sounds through the reeds in the glass spaces. I tried several tools and methods, including using the rubber dust blower, ball pump, and foot pump to deliver gas and drive the reed to vibrate to make the sound. But in the end, I still chose to let someone blow the hose to drive the reed to make sounds even though the influenza was severe. Because I think the human body is the best musical instrument in the world, it can be more flexible. We can control the air's length, strength, and rhythm, which can't be achieved with any tools. So finally, I made a lot of glass mouthpieces for this work. During the interaction, the audience can take one and insert it into the black hose for "playing," which can achieve the purpose of good interaction and avoid the spread of influenza. When I was doing this work, I was so worried because, at that time, I didn't think deeply about doing this work but felt funny. But after finishing it, I unexpectedly gained the love of many people. Visiting artist Jack Wax\(^6\) said, I don't think it's funny, it's interesting. That's different. Later, I checked the difference between the two words. Compared with "funny,"

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\(^6\) Jack Wax is an artist and educator.
"interesting" focuses on someone or something that can stimulate people's interest. Thank you for his affirmation of my work and for making me realize the difference between the two words.

**Sculptural Integrations of Voice**

I had an experience when I was little, and I believe many people have experienced it. Parents always teach you to be polite to say hello when you meet someone, especially elders, whether you know them or not. I understand why my parents did this, and I agree with the way they raised me. But it was a very stressful thing for me, who was highly introverted at that time, and even now. I feel like a robot implanted with a program to say hello automatically. So, I planned to make a piece of work that could say “hi” automatically when someone comes near.

In addition, I chose mirror glass as another way to communicate with "others" in addition to saying hi; it's similar to eye contact. But what kind of state the mirror glass should be in really made me think for some time. I thought about using flat mirror glass with many sensors to produce one after another "hello" sound effects. I also tried to make a mirror-like water ripple to simulate sound waves. But none of them seemed to be the effect I wanted. Until one day, when I was blowing a big glass sphere in the hot shop, the top of the glass sphere was sunken due to overheating and thin, just like the distorting mirror in kindergarten in my childhood. I knew what I wanted in an instant.
The speaker was hidden in the distorted glass sphere. “Hi” played through the deformed glass and electronic transmission, but also a kind of mechanical deformation of the feeling. At the same time, you can see the distortion and the unnatural reflection of yourself through the glass.

Each person has a different way of expressing what they feel comfortable with. Some people like to talk. However, some people are better at listening. So, *Encounter* is composed of two parts and two spaces, listening and speaking. The speaking part is a microphone; the audience can go to the microphone and say whatever they want. In this process, you don’t know who is listening to you at the other end. The listening section consists of a dozen transparent glass bubbles suspended from various shapes and sizes from the ceiling. There is a speaker at the top of each bubble. At the same time, the microphone collects the sound and plays it through the speakers in the glass.

Because the glass is extremely thin, its sound can produce a rich resonance effect to get a unique sound field inside a bubble. People can even feel your conversations with strangers through the form of touch. In the end, the conversations in each bubble are combined into a new and unique space.
As for why I made them into bubbles one by one, the reason is that when I blew them, it was like taking a deep breath, a way to relax under external pressure. During the exhibition, an audience told me that these glass spaces are like message bubbles, carrying my or your secrets and communications with others. That is another explanation I like very much.

Another thing that happened at the exhibition site touched me very much. There was a piano in the "speaking" space. When I was "listening" in the basement, the gallery owner, Professor Luvon Sheppard of RIT, played a piano song. When the moving melody was conveyed through glass bubbles, my eyes immediately moistened. I can't tell the specific reason. It may be because of the atmosphere that everyone listens to carefully. It may be because beautiful music and thin glass convey a sense of fragility that is not so perfect, or it may be all of this. Later, before I was ready to leave the United States, I found Mr Luvon and asked him to teach me that piece of music. His first reaction was surprising. He didn't remember which one was because everyone had a good time that night and played many pieces of music. I showed him the video I had recorded at that time. He said I improvised this song. It was my emotion at that time. So I realized why I was so moved. It should be a feeling of being understood.

At the same time, my two friends, Madeline Rile Smith and Ethan Townsend and I performed this work at the exhibition. The three of us stood in front of the microphone and sang

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7 https://vimeo.com/648018974?embedded=true&source=vimeo_logo&owner=90613022
8 https://vimeo.com/manage/videos/700474336
the melody freely. We captured each other's songs during this period and cooperated at will, like looking for each other. That's corresponding to the theme of this work, "encounter".

This work is called “HEAR YOU”, also the theme of my thesis exhibition. Inside the misty glass sphere, a speaker plays a single sentence in a loop. You can only hear it clearly if you stick your stethoscope on the glass ball; it’s “You are already good enough”.

I am an extremely introverted person at heart and accompanied by un-self-confident. I feel like I can’t do anything well, doubt my ability, and get really depressed. But at that time, my friends can always feel the change of
my mood and give me all kinds of encouragement, including that sentence, “You are already good enough”. This is like a prescription for me. Combined with the idea of stethoscope before, what I want to express is about listening, diagnosis, friendship, about healing; I got a basic portrait of this work in my mind. I can record "you are already good enough" and play it on the speaker, then make a glass shape to cover the speaker to block the sound as much as possible. The shape of the glass is a regular semi-sphere because I want to weaken its body as much as possible and make it look purer. The outside of the glass ball is kept smooth, and the inner wall is sandblasted to form a foggy and invisible hazy effect, just like my heart. Subsequently, stick the stethoscope on the glass cover; you can hear the sound that you can’t hear under normal conditions because the sound can be transmitted through vibration, then you can hear it more clearly. It is what I want to express! As a diagnostic tool, a stethoscope can hear the sound of our internal organs to judge whether we are sick. Similarly, if the stethoscope is used as a symbolic tool so that it can listen to my inner anxiety and the words that heal me, how ingenious and touching it is!

And then, every time I get lost, I will try to calm down and say, “You are already good enough” to cure myself. At the same time, I hope that this work can help everyone hear your inner voice and give you encouragement. I also made some treatment sheets for this piece and kept a detailed record of when I was down, and which of my friends was the doctor and encouraged me. The name of the "hospital" is "Friendship Hospital."
CONCLUSION

‘Music in A Stone’ (1984), photo: Julius

I do not care for ideas

for they are so vain

should they become reality

a stone

a stone

but it can

hear you

(Julius)\(^9\)

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\(^9\) Rolf Julius is a German artist, mainly engaged in the creation of sound installations.
When I saw the picture and this poem, I understood that the concept is a very empty and unreal word. We should pay attention to the real things and feelings. Just like a stone, it can also listen to you. Things, phenomena, and their characteristics in the world are complex and infinitely diverse, and the relationship between things is also intricate and varied. Different things and their features link to each other because of different types of relationships, such as the relationship between space and time, the relationship between whole and part, cause and result, content and form, etc.

Among all kinds of relations, social relations have their special nature. In social practice, people establish a connection with objective things. The relationship between people, the relationship between people and objective things, themselves and others, has the characteristics of self-consciousness and social historicity. Then think back to the picture of the speaker on the stone. The stone is listening to the speaker, and the speaker feels the stone. This is not only physical contact but also reflects our role and position in social relations. Then, it becomes essential to listen to yourself and clarify your position. So I set the theme of my paper as "Hear You". I will continue to find, feel, and express bravely in my future creation.
LIST OF ILLUSTRATIONS/WORK IMAGES

Hi

Glass, Sensor, Speaker, Sound/Voice Board
Recording Module
12” × 24” × 8”
2019
Encounter
Glass, Wood, Speakers, Electronic Components, Blown Glass
Size Variable
2019

View video [here](#).
Hear You
Glass, Wood,
Stethoscope, Electronic
Components
Blown Glass
19" × 12" × 10"
2019
Beating
Glass, Wood, Leather, Rubber, Pickups, Amp
65" × 59" × 8"
2019
Mingle
Glass, Copper, Acrylic, Reed, Rubber Hose
Blown Glass
78" × 59" × 9"
2018
View video here.
Evoke
Glass, Copper Pipe, Iron Pipe, Acrylic, Loudspeaker, Amplifier
Blown Glass
51” × 32” × 112”
2016
What We Can See
Glass, Steel, Wood, Loudspeaker, Amplifier
Blown Glass
71” × 12” × 20”
2017

View video here.
Sketches in the Exhibition Hear You
Bibliography


Nai’an, Shi. *Outlaws of the Marsh*. 1367