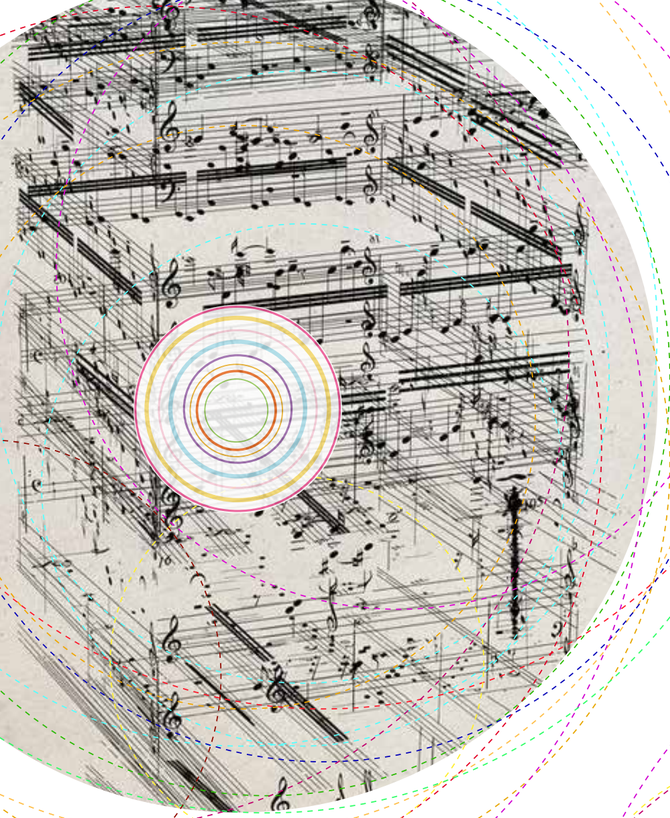
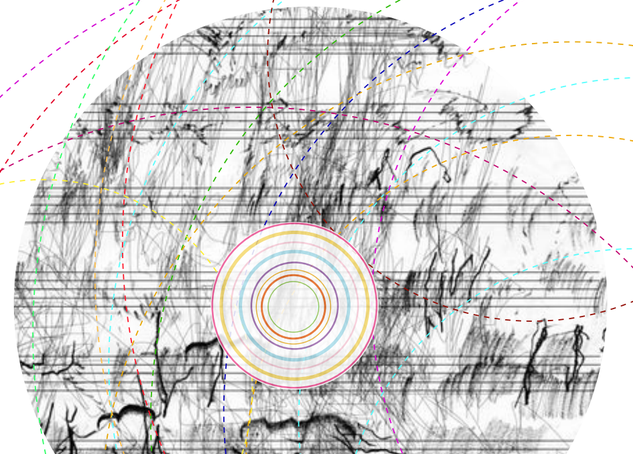
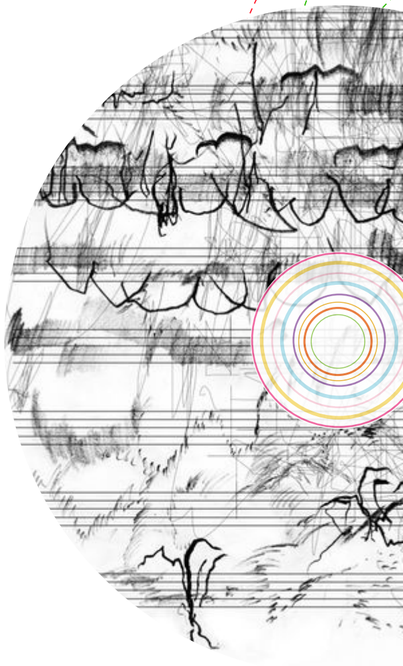


ORCHESTRATION OF EXPERIENCE

Exploring sound as an experiential, psychological, and emotional framework for understanding and navigating the physical world.





Jingyi Shen
Master in Landscape Architecture, Rhode Island School of Design, 2023

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Orchestration of Experience

Exploring sound as an experiential, psycho-logical, and emotional framework for under-standing and navigating the physical world.

Jingyi Shen
Master in Landscape Architecture, Rhode Island School of Design, 2023

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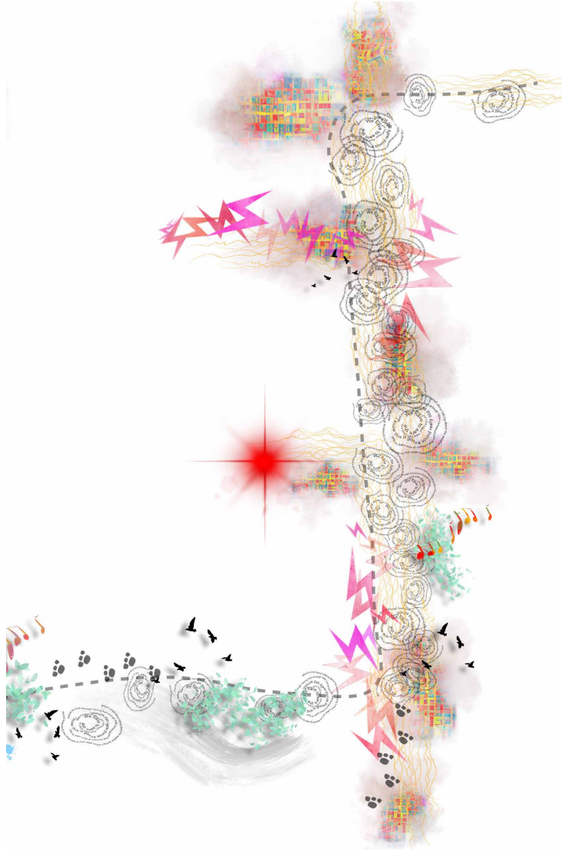
ABSTRACT

The sensory experience shaped by the landscape unconsciously influences people's emotional and mental states. Contemporary urban landscape designers prioritized the functionality of the landscape, sometimes ignoring the spiritual impact of the atmosphere created by imperceptible environmental sonic factors. Orchestration of Experience explores the connections between sound and vision in shaping people's sensory experience of the landscape. Drawing from the fields of soundscape ecology, environmental psychology, and emotional visualization, this study demonstrates how they are closely intertwined.

Motivated by the idea that white noise can unconsciously affect people's mental health by Michael Rutter, we question how physical and sound landscapes shape each other, how they can shape spatially charged environmental atmospheres, and how the universal experience-creating process can potentially create more immersive experiences for people who experience hearing or visual impairment. The ultimate goal of this work is to encourage new ways of experiencing and engaging with the environment thus enhancing people's sensory experiences in the landscape.



INTRODUCTION

In the context of industrial civilization and urban expansion, the fast-paced social environment has prompted the modern urban landscape to focus mainly on the capacity of the landscape to provide goods and services to society, while the most original sensory experience of people's physical and mental pleasure has gradually been less discussed. In addition to the obvious features of the urban landscape such as functionality, ecology, and visual effects, the inconspicuous sensory experiences such as sound and smell are also affecting people's mental health in a deep and comprehensive way.

Orchestration of Experience discusses how sensory landscapes, with sound landscapes as the main object of study, implicitly affect people's mental health. We will also examine how light, temperature, and wind are involved in sound production, and how sound guides the formation of these factors. Orchestration of Experience explores new ways of imbuing information with qualities that speak to our body's senses. We will discuss this topic from two perspectives: the body as a ruler, and the body as an instrument.

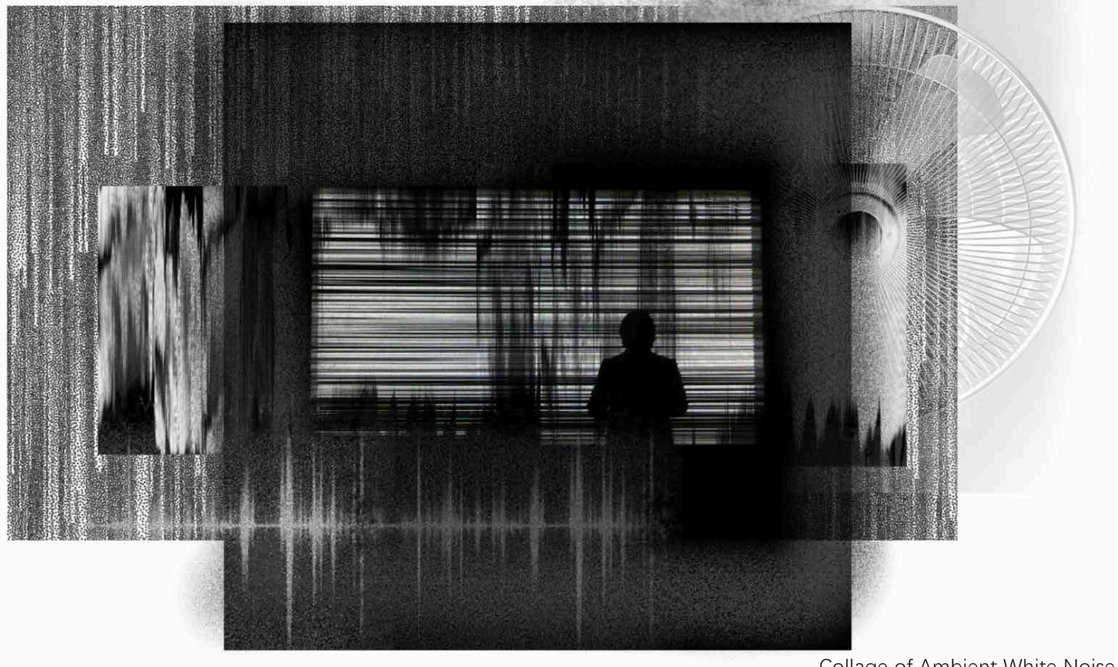
We will discuss the relationship between the three main factors of landscape orchestration: drum, instrument, and performer. I proposed a new system to identify and understand these elements. The drum represents the spatial change of a landscape and creates the landscape rhythm or beat. The instrument utilizes landscape materials to produce sound through friction or collision. The performer encompasses dynamic and unpredictable elements such as people, wind, and animals, that shape and influence the soundscape of a landscape.

The methodology of this thesis will be using social experiments, such as questionnaires, self-reported diaries, and social practices, to explore the effects of white noise in the landscape on people's emotional and cognitive states, and the link between sound and vision, in order to provide data to support the design of sensory landscapes. The study will quantify and represent sound and emotion in a visual language, as well as represent vision in a sonic language. Ultimately, I will use art installations, media projections, or 3D magazines to create a site-independent, sensory landscape artwork. This research explores the use of sound and vision to enrich people's sensory experiences.

Collage of Urban Soundscape

“Imagine the soundscape as an extensive orchestra where all the world’s activities, people and animals participate. Each city and every place have their own constantly ongoing composition. As citizens of the world, we are all taking part, as creators as well as listeners. When we are walking and when we are conversing with someone, we contribute. The city’s orchestra is a complex and dynamic organism that varies over time and space. All sounds are included, each has its specific place, function and meaning in the composition.”

—Gunnar Cerwén



Collage of Ambient White Noise

LEXICON

NOUNS

environmental psychology
white noise
mental health
sensory landscape
soundscape ecology
vision
media
hearing
frequency
vibration
spatial sense
echoes
ruler
instrument
Circulation
Elapsed time
Collapsed time
Visceralization

VERBS

body measure
resonant
rebound
engage
unfold
reveal
cover
feel
perceive

ADVERBS

globally
generally
blindly

ADJECTIVES

sensory
immersive
regenerative
progressive
healing
flexiblenon-linear
Inconspicuous
Impercepting
Spreading

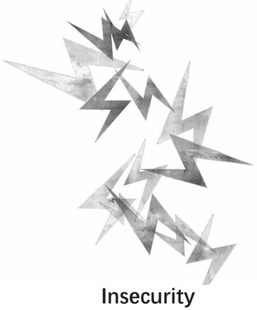
Expanding
Disorderly diffusion
of sound

Impercepting
Sounds are obscure,
hidden beneath

Circulation
The texture of echoes

Spreading
The regular propagation
of sound

Interaction
Different kinds of textures
merge into one



Insecurity
Unexpected sounds
cause insecurity

CONCEPTUAL MODELS

The sound fluctuates like the waves of the sea.

Weaving a dense web with sound.

The cave of sound rotates inside.

Particles of sound fall randomly in each region.

The irregularity in the regularity.

Distorted emotional logic network.

IDENTIFY OPPORTUNITIES

- Soundscape Ecology

The causes and consequences of biological (biophony), geophysical (geophony), and human-produced (anthrophony) sounds.

- Environmental Psychology

The influence of natural and human-built surroundings on how people feel, think, and behave.

- Emotion Visualization

An attempt to make visible a process that is in large part invisible and only partially perceived by the one experiencing it.

- Sonic Landscape and Physical Landscapes

Study how physical surroundings influence the soundscape and vice versa. Investigate how landform shapes sound propagation and perception.

- Cross-modal Representation of Atmosphere

Explore representing visual atmospheres through sound and vice versa.Examine how sound interacts with light, temperature, and wind.

- Inclusive Installation for Deaf and Blind

Develop installations for immersive landscape experiences for sensory-impaired individuals.

- Participatory Soundscapes

Engage people in creating their own soundscapes and experiences.

LITERATURE REVIEW

How the Environment Affects Mental Health
Michael Rutter

This article discusses the influence of the environment on the mental health of adolescents. The authors focus on the effects of social environment, family environment, and personal experiences on people's mental status.

Arousing the Sound: A Field Study on the Emotional Impact on Children of Arousing Sound Design and 3D Audio Spatialization in an Audio Story
Francisco Cuadrado, Isabel Lopez-Cobo, Tania Mateos-Blanco and Ana Tajadura-Jiménez.

Sound from media increases the immersion of the audience in the story, adding credibility to the narration but also generating emotions in the spectator. A study on children aged 9–13 years, using an audio story, investigated the emotional impact of arousal vs. neutral treatment of sound and 3D vs. stereo mix spatialization. The emotional impact was measured combining three different measures: physiological (Electrodermal activity), self-report (pre-post exposition), and richness of mental images elicited by the story. Results showed higher emotional impact of the arousal and 3D audio conditions with different patterns according to the age of the participants and distinctive types of interaction when both variables were combined.

Soundscape Ecology: The Science of Sound in the Landscape
Bryan C. Pijanowski, Luis J. Villanueva-Rivera, Sarah L. Dumyahn, Almo Farina

The conceptual framework of soundscape ecology is based on the causes and conse-quences of biological (biophony), geophysical (geophony), and human-produced (anthrophony) sounds. This article propose a research agenda for soundscape ecology that includes six areas: (1) measurement and analytical challenges, (2) spatial-temporal dynamics, (3) soundscape linkage to environmental covariates, (4) human impacts on the soundscape, (5) soundscape impacts on humans, and (6) soundscape impacts on ecosystems. We present case studies that illustrate different approaches to understanding soundscape dynamics.

Sensory Geographies
Paul Rodaway

Paul Rodaway's book "Sensory Geographies" is an insightful and interdisciplinary exploration of the ways in which sensory experiences shape our perceptions of place and space. In this work, Rodaway draws upon a range of theories and methodologies from geography, anthropology, and philosophy to examine the complex relationship between the senses and the environment. He argues that the senses play a crucial role in our engagement with the world and that they are shaped by a range of factors including culture, history, and power dynamics. Rodaway also provides comthat they are shaped by a range of factors including culture, history, and power dynamics. Rodaway also provides compelling case studies that illustrate how sensory experiences vary across different contexts, from urban environments to natural landscapes. Ultimately, "Sensory Geographies" offers a compelling and thought-provoking analysis of the significance of the senses in shaping our understanding of the world, and it has significant implications for fields such as urban planning, environmental management, and design.

Sonic Wonderland: A Scientific Odyssey of Sound
Trevor Cox

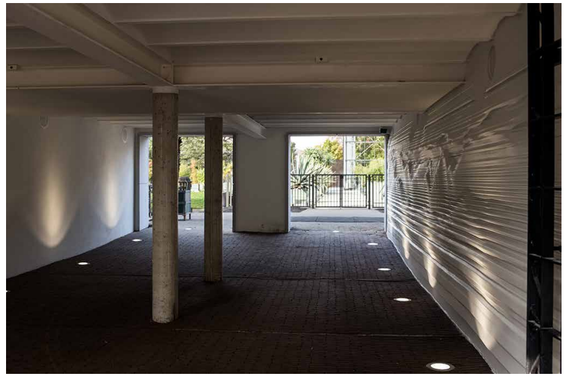
The book takes readers on an engaging journey into the captivating world of sound. Through scientific exploration, the book delves into the role of sound in shaping our perception of landscapes and environments, offering fascinating insights into the power and influence of sound in our daily lives.

CASE STUDIES

• Fluisterende Wind

The artwork consists of a wall relief of 12.5 by 2.5 meters and an 8-channel generative sound composition. The composition creates a continuum between noise and human voice which results in moments when wind seems to be whispering.

The wall relief has been generated using a spectral analysis (sonogram) of a voice changing from vowel to vowel over time while maintaining a constant pitch. The vowel transitions are composed in such a way as to result in an aesthetical and contrasting visual composition.



The sound of the installation is generated and spatialized in real-time. The work uses a library of recorded spoken words that are being analyzed in order to extract the spectral envelop that describes the timbral resonances of the throat, mouth and nose over time and used to filter white noise in such a way that it starts to whisper. The detail of the filtering and the played speed are parameters used in the generative process and result in a true continuum between pure noise and voiced (but unpitched) sound while the speed can vary from very slowly, nearly frozen, changing resonances to almost perceivable words.

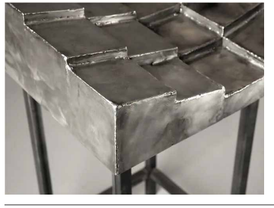
1. Koetsier, Carola. "*Fluisterende wind.*" Available at: https://www.evdh.net/fluisterende_wind/.

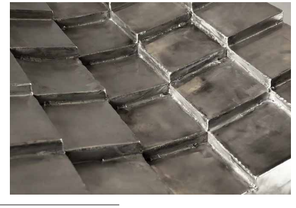
• Rainwaves by Studiovallbo

Rainwaves is a sound sculpture in stainless steel that gives shelter but foremost enhances and plays with the sound of rain. When rain hits against the 25 rain drums, different tones are played.

Rainwaves are a modular system, several modules can be mounted together to create a big variety of forms depending on where it will be placed. Several assembled modules can become a roof, a rain pavilion or a sound sculpture. The pictures shows one module of 25 rain drums in size 625x625mm, It is the thickness of the steel that creates the different tones.

Rainwaves is designed to gather and give the rainwater direction, the rain is collected in the middle and flows down until it becomes a little waterfall.

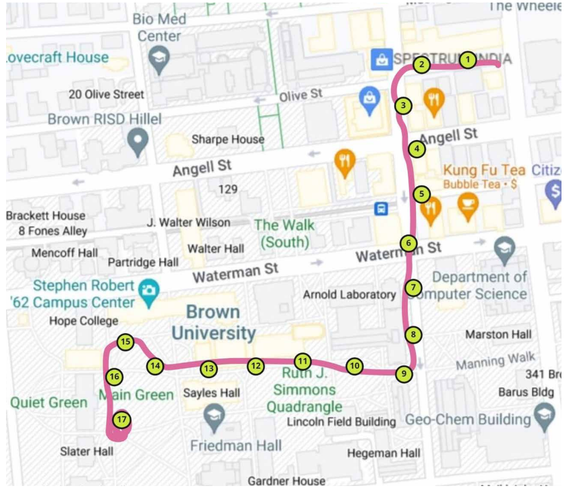




1. Vallbo, Erik. "*Rainwaves.*" Accessed 2020. Available at: https://www.studiovallbo.com/gamlarainwaves.

SOUND EXTRACTION

From collecting the sound data, analyzing my personal emotional responses, and visualizing the soundscape, I developed my understanding of the objective conditions of soundscape, which including the classification, quantification, and data visualization. My goal is to create a system to measure and visualize the texture of sound and how people feel, thus giving more data theoretical support to soundscape design.

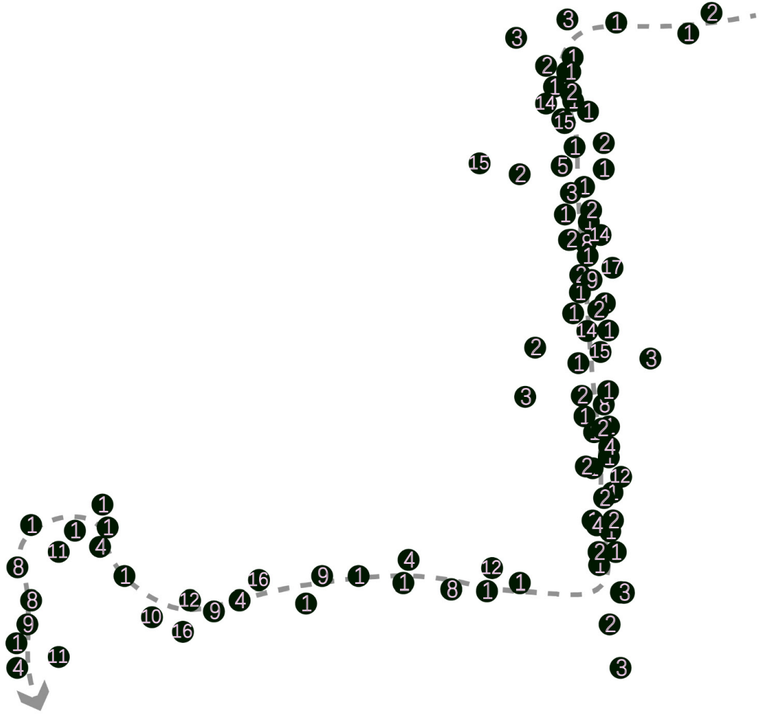


1 I had just come out of my house, the noise in the street was getting louder and louder, and I felt the air was fresh and wanted to take a big breath.	2 Walking down Thayer Street, I heard the sound of cars moving and people playing loud music, which made me feel annoyed.	3 Passers-by were talking loudly to each other. As a foreigner, if I didn't pay attention, I couldn't understand what they were saying, and these conversations sounded like the white noise of the world, which made me feel comfortable.	4 A homeless man suddenly called out to me as a man flew by on a motorcycle, and I subconsciously felt I was in danger.	5 Brown's school bus was parked on the side of the road and the sound of the engine made me feel a little noisy.	6 There was a puppy passing by and it walked with such a cute sound. I saw a man with a cup of milk tea, I'll have a cup of milk tea later too.
7 The street became quiet and I heard the hurried footsteps of some students rushing to class.	8 There is the sound of birds flying over.	9 I felt energized by the presence of two students taking pictures. The grass smells good.	10 The sound of so many little flying insects flapping their wings in my ears was annoying.	11 I heard the chirping of bugs, the sound of birds stirring their wings, the sound of students talking, and smelled the scent of grass. Suddenly I felt like my whole body was wrapped in a warm sense of security.	12 I sat in a chair under a tree, listening to the footsteps of pedestrians passing by and the white noise of the constant chatter, and I suddenly felt at one with my environment.
13 A rabbit scurries past my feet and it burrows into the bushes, rustling the leaves.	14 A group of students were playing ball on the lawn, and they shouted loudly. I was a little worried that I would get hit by a ball.	15 I heard someone singing loudly in the building, and I stood quietly for a while listening.	16 I put on the headphones, adjusted to a relatively low volume, and started playing random songs. I began to not notice the sounds around me, and the sounds of the songs and the ambient white noise seemed to blend together. I felt as if my mind had gone to another universe and some random thoughts began to appear in my head.	17	

2D MAPPING

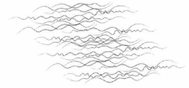
Select the sound into different catagories

1. People talking
2. The sound of car tires starting
3. In-Car Player
4. Bird wings fluttering
5. Fire alarm
6. My own footsteps(constantly)
7. Music from my earphone
8. Rustling of leaves
9. Animal footsteps
10. Water spray
11. Hitting the ball
12. Wind
13. Rain drop
14. Homeless talking
15. Motorcycle
16. People singing
17. India music from the store
18.



The texture of environment sounds

People talking to each other



Car driving by

In-car player

Rustling of leaves

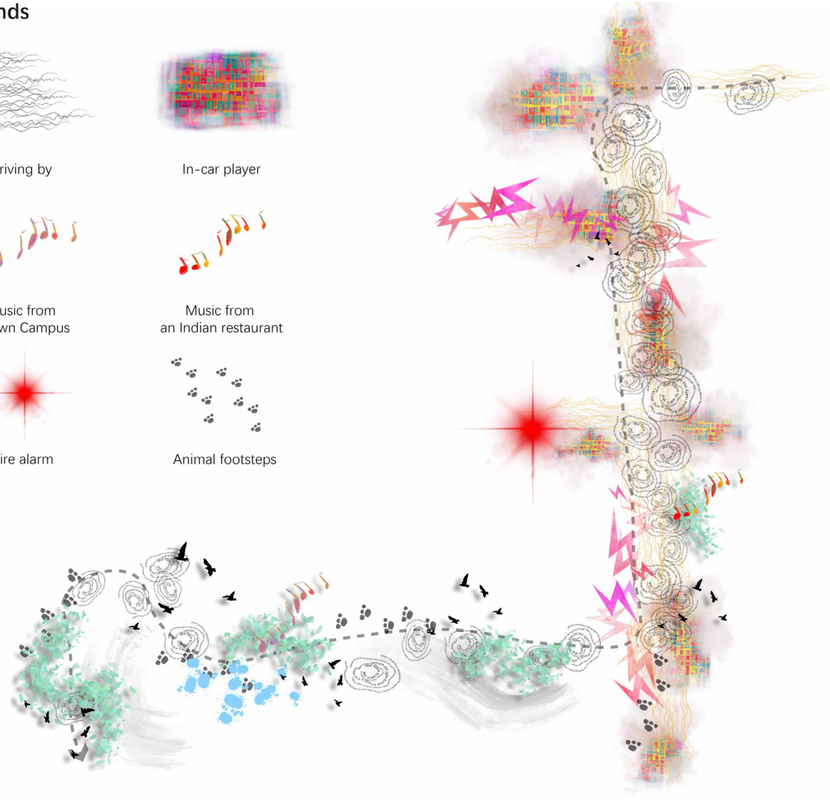
Music from
Brown Campus

Music from
an Indian restaurant

Wind blowing through the ears

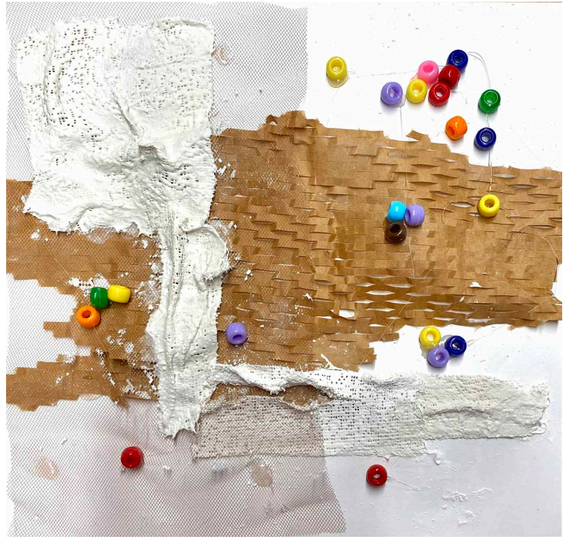
Fire alarm

Animal footsteps



3D MAPPING – CONCEPTUAL MODELS

Macro Model :
The macro model shows the tope/color/texture of ambient sounds (to imply the social/cultural atmosphere of the site).



Meso Model :
The meso model shows the overlap of different sounds occurring at the same location and same time (to study their relationships).

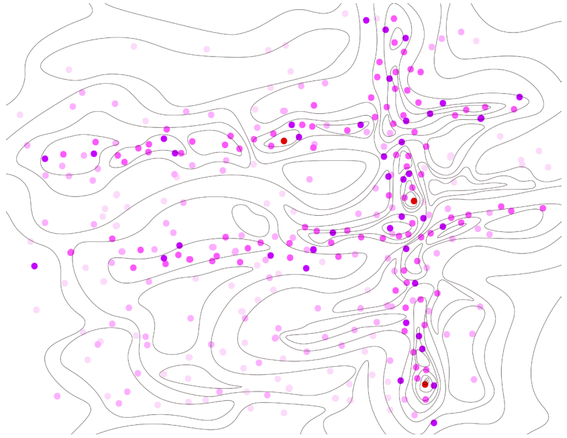
Micro Model :
This model shows two different sounds occurring simultaneously in the same space, with an interactive reaction between the two. They have different qualities and textures and blend with each other to form a third sound. (to investigate the reation of different sounds)

RESEARCH SUMMARY

From collecting the sound data, analyzing my personal emotional responses, and visualizing the soundscape, I developed my understanding of the objective conditions of soundscape, which including the classification, quantification, and data visualization.

The methodology that I used throughout the semester was to use note taking, recording audio, measuring volume to collect the data of sound. And use techniques such as Rhino, grasshopper, touch designer for data visualization.

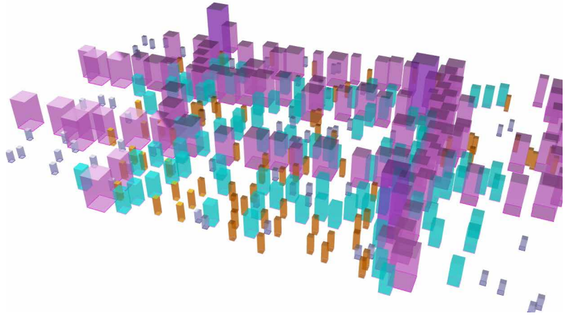
The study of environmental sounds has been divided into three steps:
Step 1 Study the relationship between my personal emotion and enviromental sound.
Step 2 Develop a system to record and visualize sound.
Step 3 Use sound texture to describe the time and space

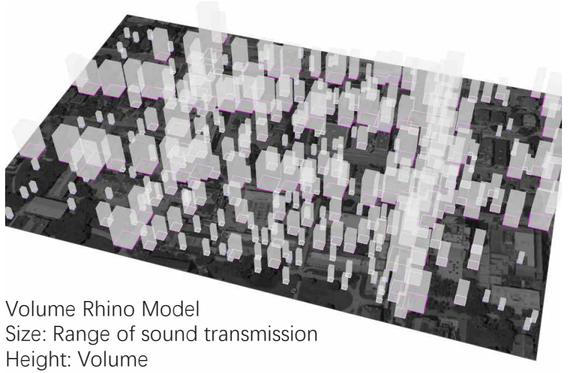


STEP ONE

The relationship between my personal emotion and enviromental sound

1. Volume
Record the sound, measure the volume, and take notes.
Transfer the notes to drawings.



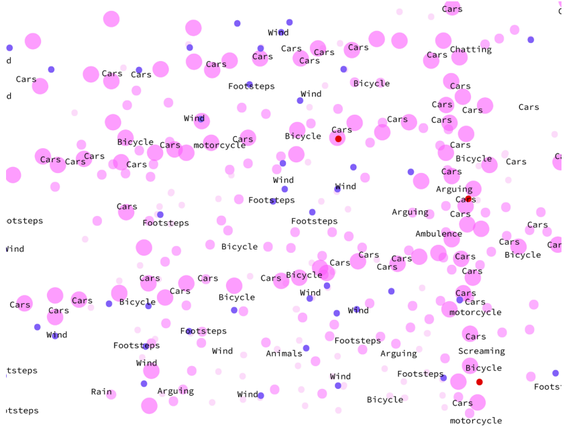


Volume Rhino Model
Size: Range of sound transmission
Height: Volume

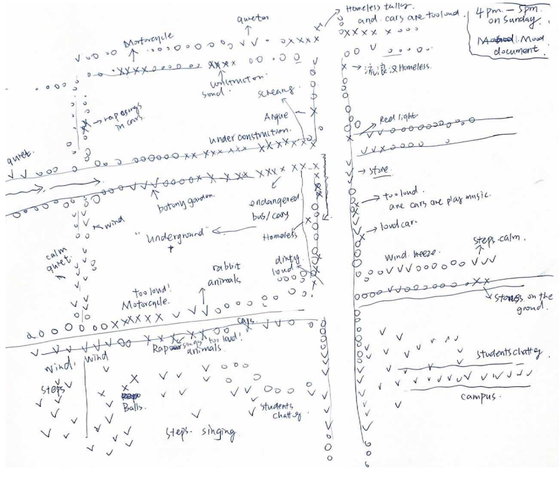
2. **Source**
Record the source of sound, and compare with the volume maps.

- Data collection

- Overlay of source and volume maps

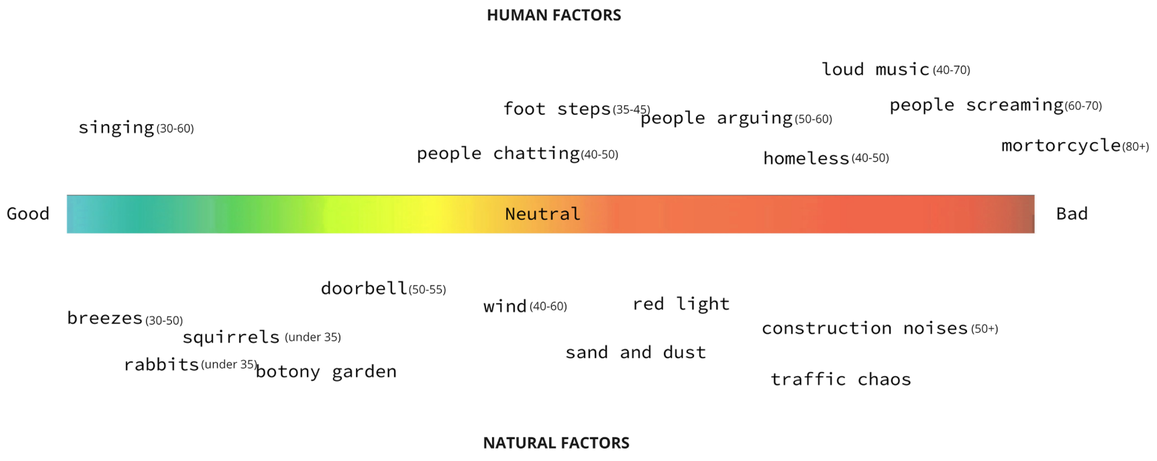


3. Emotion
Write down my personal feelings while walking on the site, and transfer it to drawings.



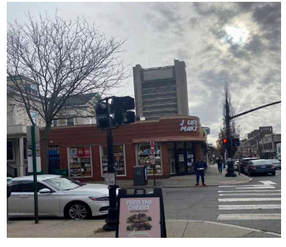
4. Spectrum of emotion and sound types

Based on previous research, I have sorted out the effects of different types of environments on my personal emotions.



Before proceeding to the next step, I zoomed in on 2 representative sites for the study.

Site 1 Thayer St.



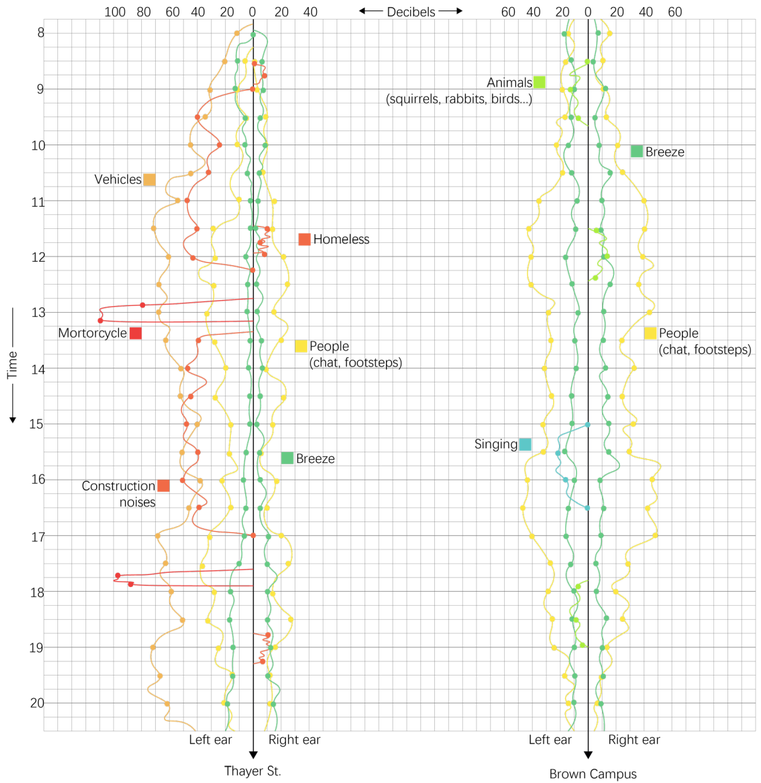
Site 2 Brown Campus

STEP TWO

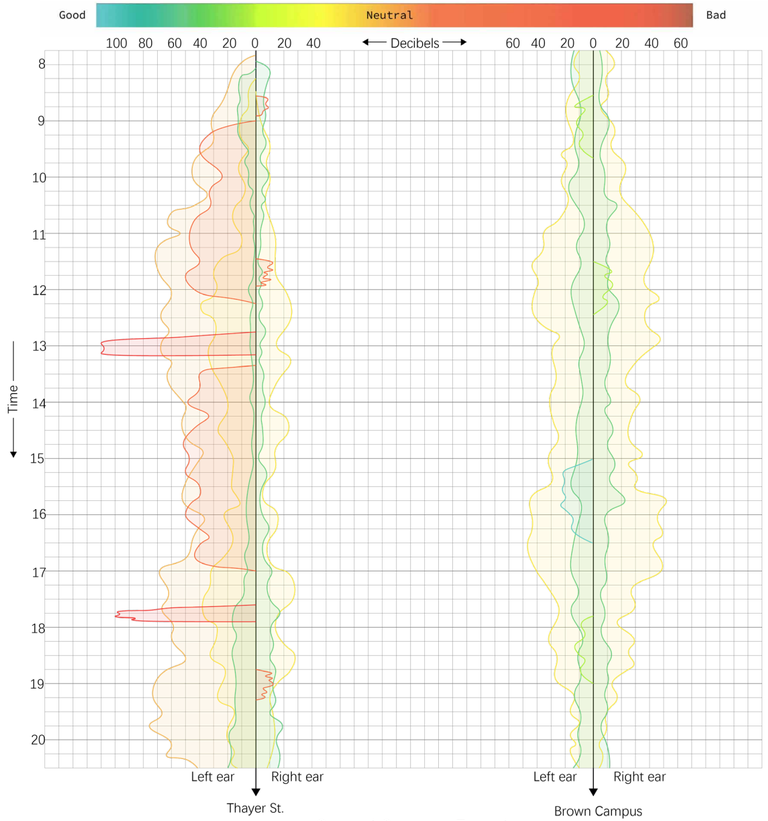
Develop a system to record & visualize sound

Elements included in the system

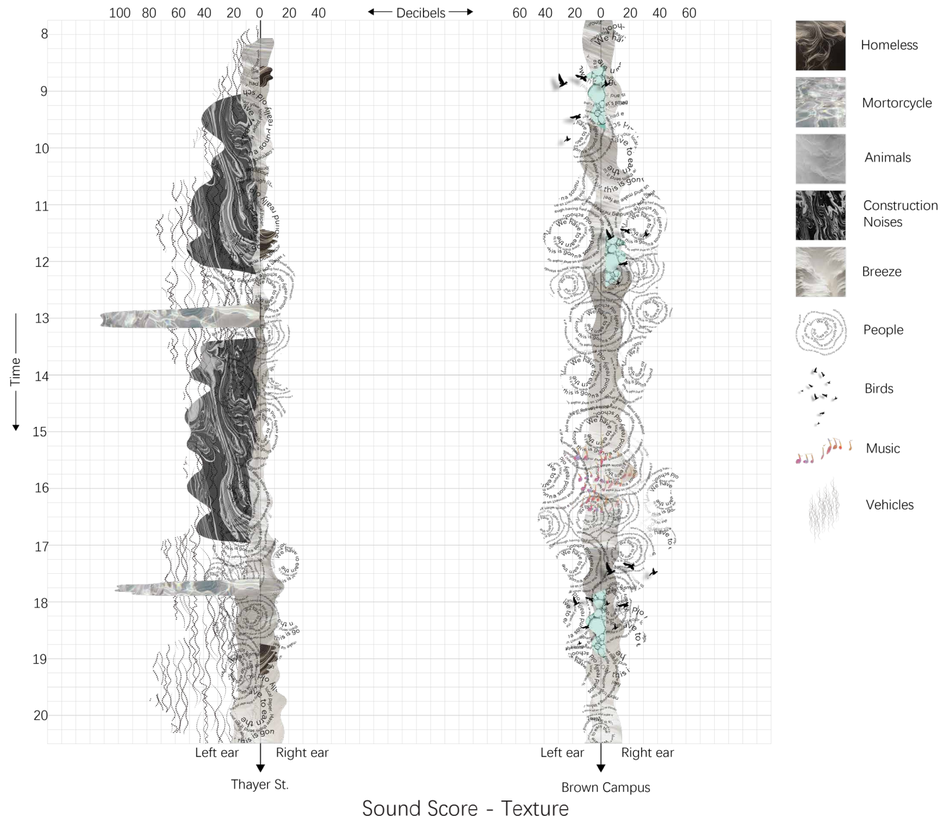
1. Direction (left and right channel)
2. Volume (X-Axis)
3. Time (Y-Axis)
4. Source and emotional atmosphere (based on the “spectrum” from step 1)



Sound Score - Data collect



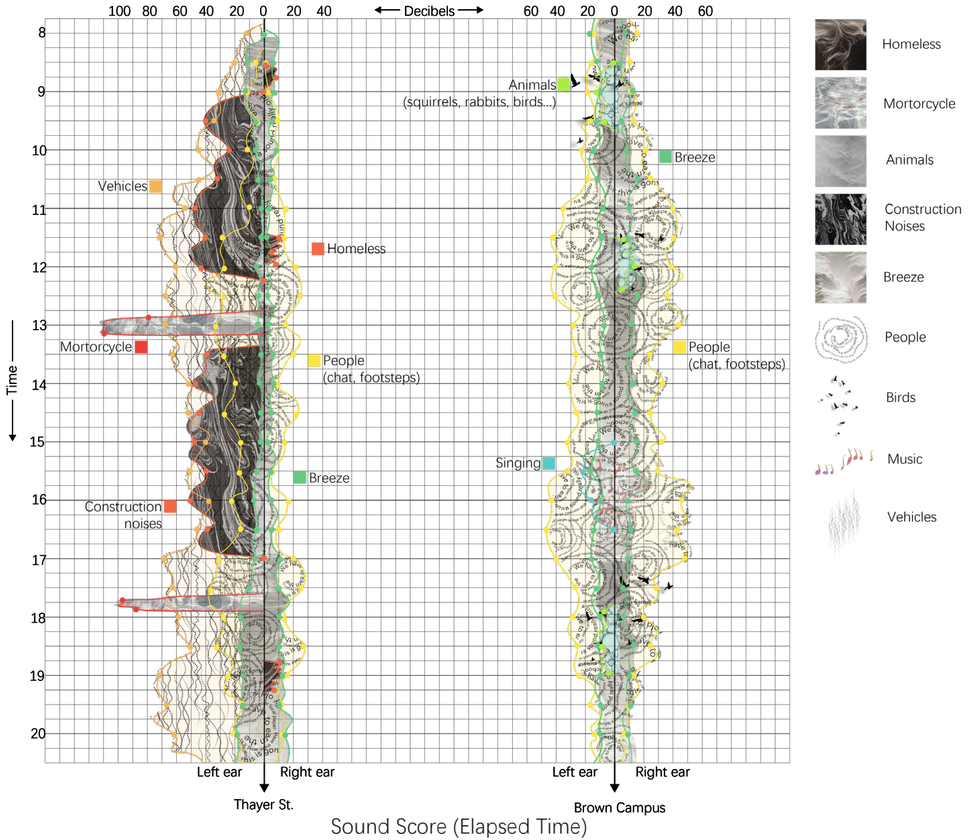
Sound Score - Emotion



Sound Score - Texture

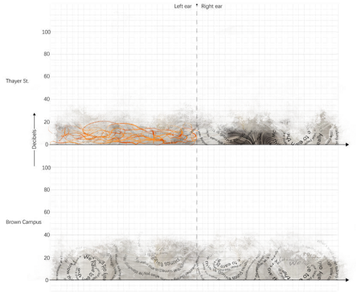
STEP THREE

Use sound texture to describe the time and space

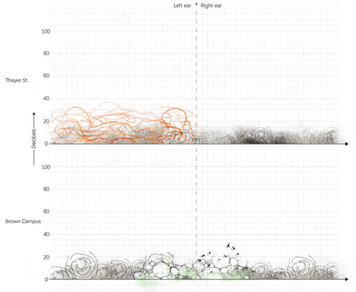


Sound Score (Elapsed Time)

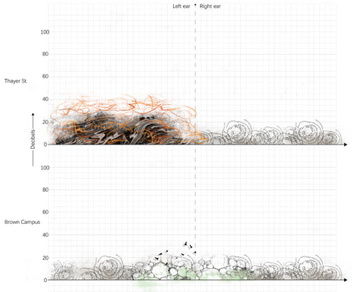
Soundscape from 8 am to 8 pm



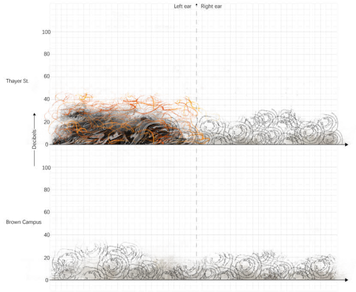
8:00



9:00



10:00



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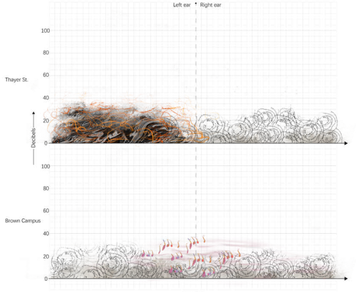
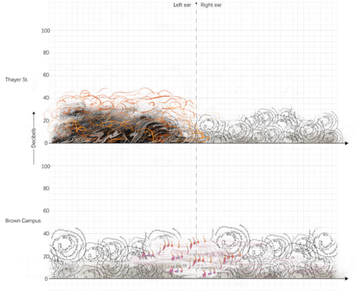


15:00



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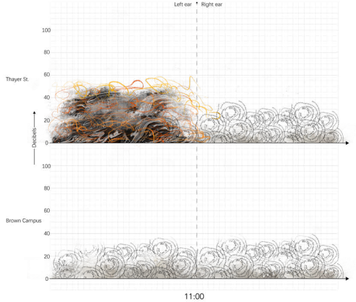

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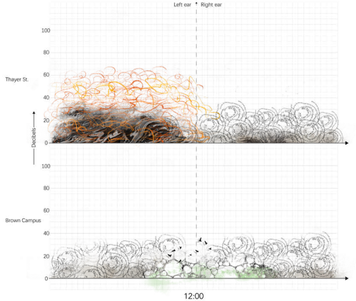

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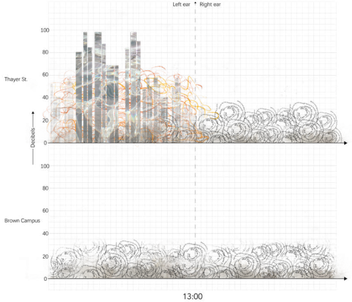

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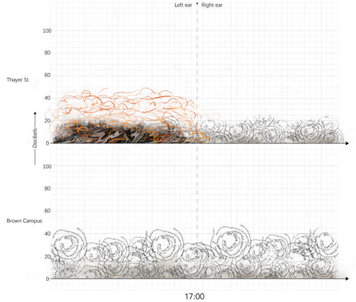

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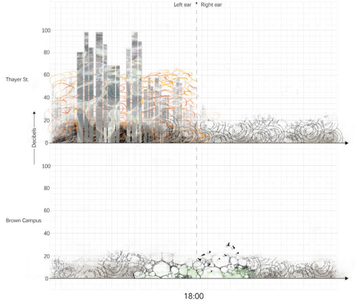

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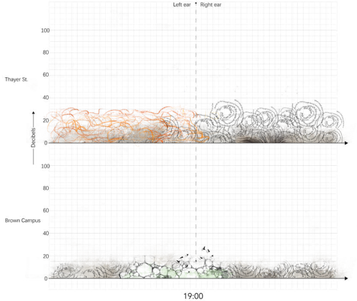


19:00

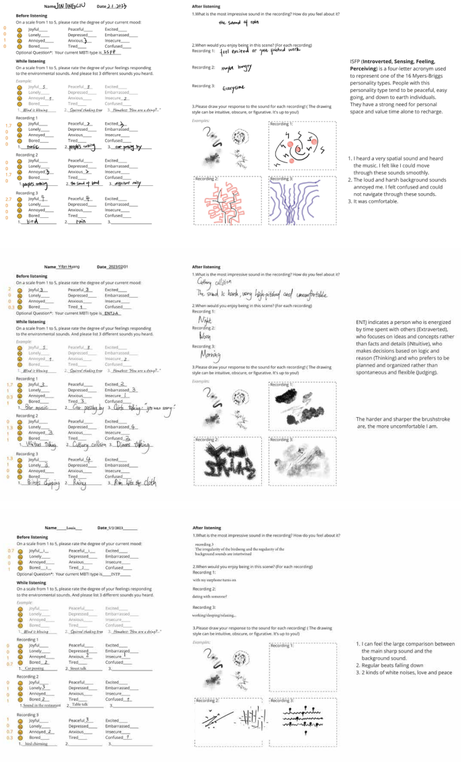
EMOTION EXTRACTION

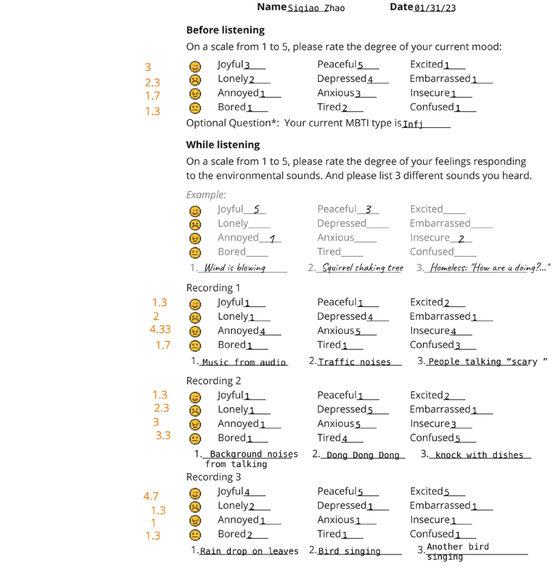
There are many imperceptible factors in the environment that have a great impact on people's mental health, such as light, wind, temperature, smell, and sound. This project aims to study the people's emotional response to these imperceptible factors, and what role does soundscape play during the process.

Often, we tend to think that some environmental background sounds/ light/ atmosphere cannot affect us, but the truth is that we just get used to them and ignore their existence. Some sounds can promote people's sleep, some sounds can help people focus more, and some sounds can help release people's stress. So how can we as landscape architects participate in the creation of ambient sounds, and can we guide the creation of some sounds, or artificially attenuate some ambient sounds.

People's emotions are very personal and difficult to describe. This project will find ways to quantify emotions and try to simplify the complexity of human emotions. Starting from private emotions, to regional, and then extracting objective reality.

DATA COLLECTION





Name Siqiao Zhao **Date** 01/31/23

Before listening

On a scale from 1 to 5, please rate the degree of your current mood:

3	Joyful 3	Peaceful 5	Excited 1
2.3	Lonely 2	Depressed 4	Embarrassed 1
1.7	Annoyed 1	Anxious 3	Insecure 1
1.3	Bored 1	Tired 2	Confused 1

Optional Question*: Your current MBTI type is Infj

While listening

On a scale from 1 to 5, please rate the degree of your feelings responding to the environmental sounds. And please list 3 different sounds you heard.

Example:

	Joyful 5	Peaceful 3	Excited
	Lonely	Depressed	Embarrassed
	Annoyed 1	Anxious	Insecure 2
	Bored	Tired	Confused

1. Wind is blowing 2. Squirrel shaking tree 3. Homeless: "How are u doing?.."

Recording 1

1.3	Joyful 1	Peaceful 1	Excited 2
2	Lonely 1	Depressed 4	Embarrassed 1
4.33	Annoyed 4	Anxious 5	Insecure 4
1.7	Bored 1	Tired 1	Confused 3

1. Music from audio 2. Traffic noises 3. People talking "scary"

Recording 2

1.3	Joyful 1	Peaceful 1	Excited 2
2.3	Lonely 1	Depressed 5	Embarrassed 1
3	Annoyed 1	Anxious 5	Insecure 3
3.3	Bored 1	Tired 4	Confused 5

1. Background noises from talking 2. Dong Dong Dong 3. knock with dishes

Recording 3

4.7	Joyful 4	Peaceful 5	Excited 5
1.3	Lonely 2	Depressed 1	Embarrassed 1
1	Annoyed 1	Anxious 1	Insecure 1
1.3	Bored 2	Tired 1	Confused 1

1. Rain drop on leaves 2. Bird singing 3. Another bird singing

After listening

1.What is the most impressive sound in the recording? How do you feel about it?
The last one. The first two seems come from daily life in the city. and the last one make me feel peace. I like listen to rains. it also represent "nature", which means I need some effort to go to hear the moment.

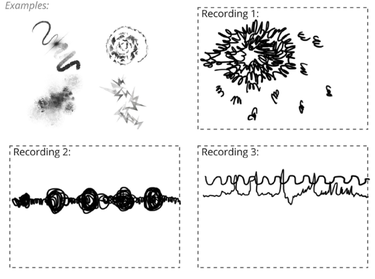
2.When would you enjoy being in this scene? (For each recording)
Recording 1: After a late night party. being high.

Recording 2: Hungry

Recording 3: Always. (in a secure shelter. warm and dry).

3.Please draw your response to the sound for each recording! (The drawing style can be intuitive, obscure, or figurative. It's up to you!)

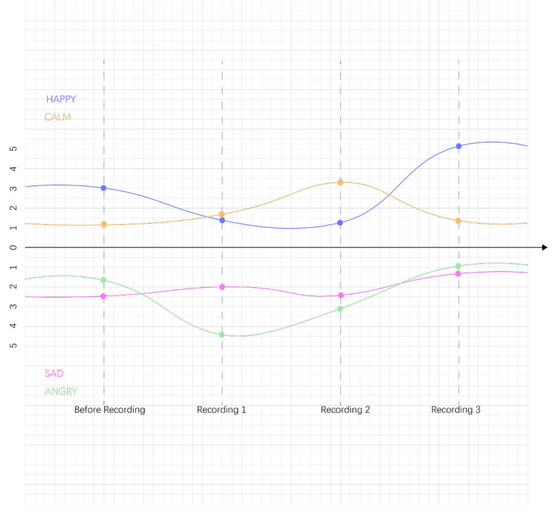
Examples:



An Advocate (INFJ) is someone with the **Introverted, Intuitive, Feeling, and Judging** personality traits. They tend to approach life with deep thoughtfulness and imagination. Their inner vision, personal values, and a quiet, principled version of humanism guide them in all things.

1. There is one main source of sound that is very continuous and lively, in addition to some punctuated intermittent sounds.
2. The thumping in the background annoyed me, so I drew some sustained wave frequencies with those black dots.
3. There is an interplay of two lines, one is a wavy line of rain and the other is a bird call. The two create echoes from time to time.

DATA VISUALIZATION



positive	Happy	Joyful____	Peaceful____	Excited____
negative	Sad	Lonely____	Depressed____	Embarrassed____
	Angry	Annoyed____	Anxious____	Insecure____
neutral	Calm	Bored____	Tired____	Confused____

Name Sigiao Zhao **Date** 01/31/23

Before listening

On a scale from 1 to 5, please rate the degree of your current mood:

3	Joyful 3	Peaceful 5	Excited 1
2.3	Lonely 2	Depressed 4	Embarrassed 1
1.7	Annoyed 1	Anxious 3	Insecure 1
1.3	Bored 1	Tired 2	Confused 1

Optional Question*: Your current MBTI type is Infj

While listening

On a scale from 1 to 5, please rate the degree of your feelings responding to the environmental sounds. And please list 3 different sounds you heard.

Example:

Joyful 5	Peaceful 3	Excited____
Lonely____	Depressed____	Embarrassed____
Annoyed 1	Anxious____	Insecure 2
Bored____	Tired____	Confused____

1. Wind is blowing 2. Squirrel shaking tree 3. Homeless: "How are u doing?..."

Recording 1

1.3	Joyful 1	Peaceful 1	Excited 2
2	Lonely 1	Depressed 4	Embarrassed 1
4.33	Annoyed 4	Anxious 5	Insecure 4
1.7	Bored 1	Tired 1	Confused 3

1. Music from audio 2. Traffic noises 3. People talking "scary"

Recording 2

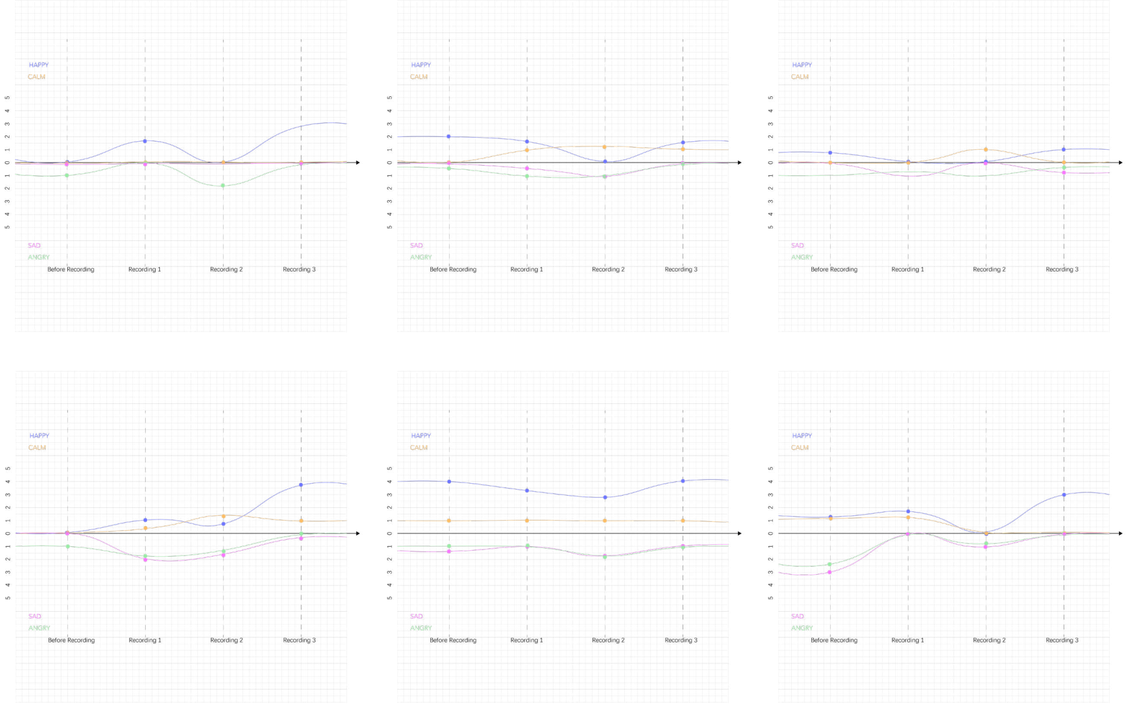
1.3	Joyful 1	Peaceful 1	Excited 2
2.3	Lonely 1	Depressed 5	Embarrassed 1
3	Annoyed 1	Anxious 5	Insecure 3
3.3	Bored 1	Tired 4	Confused 5

1. Background noises from talking 2. Dong Dong Dong 3. knock with dishes

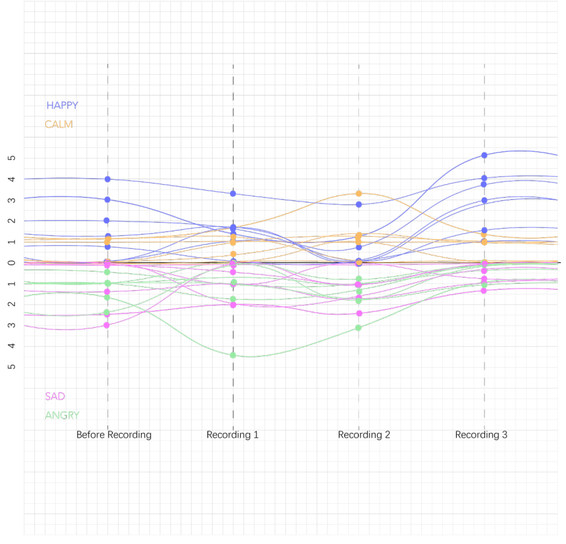
Recording 3

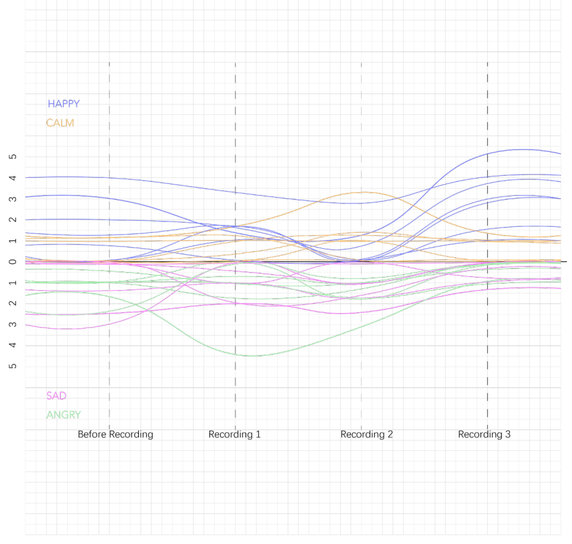
4.7	Joyful 4	Peaceful 5	Excited 5
1.3	Lonely 2	Depressed 1	Embarrassed 1
1	Annoyed 1	Anxious 1	Insecure 1
1.3	Bored 2	Tired 1	Confused 1

1. Rain drop on leaves 2. Bird singing 3. Another bird singing

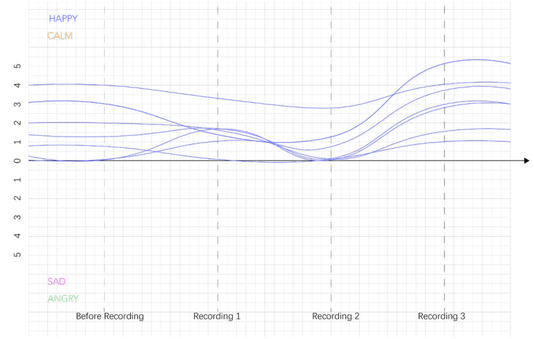


Overlap the data

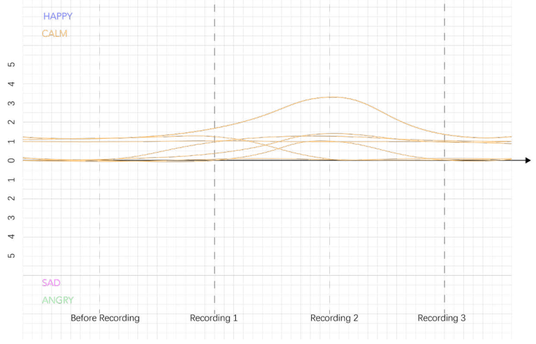




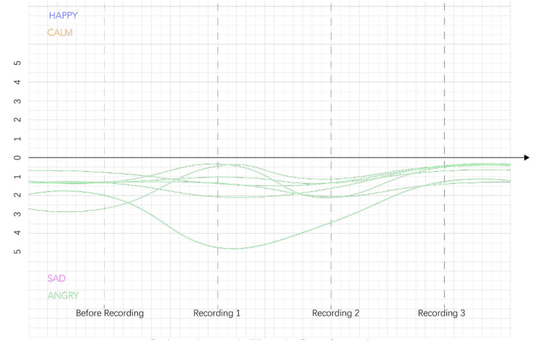
positive	Happy	Joyful____	Peaceful____	Excited____
negative	Sad	Lonely____	Depressed____	Embarrassed____
	Angry	Annoyed____	Anxious____	Insecure____
neutral	Calm	Bored____	Tired____	Confused____



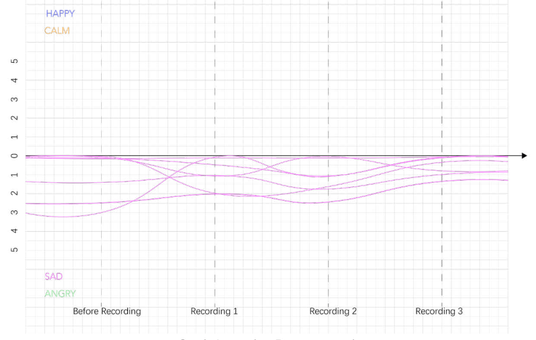
Happy: Joyful, Peaceful, Excited



Angry: Annoyed, Anxious, Insecure



Calm: Bored, Tired, Confused



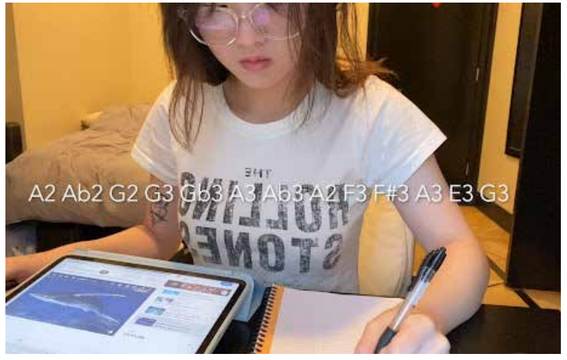
Sad: Lonely, Depressed,

BODY AS RULER

Develop a methodology to use my own body as a ruler to perceive and transfer the environmental sound

METHODOLOGY

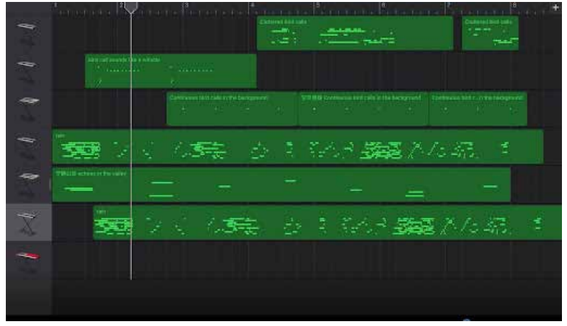
Exploring the Creative Potential of Music Skills in Sonic Landscape Extraction

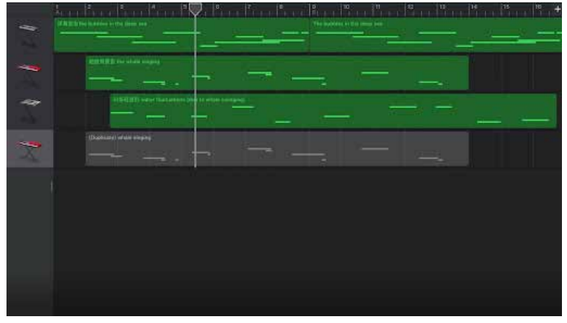


Phase one of Orchestration of Experience investigates the potential of using music skills in sound editing. Specifically, we explored the use of perfect pitch and Garage Band as tools for extracting and editing different parts of an environmental sound recording.

The exploration began with a recording of a whale singing, from which I used perfect pitch to write down the musical notation of the song. However, I found that when I played the notes on the piano, the texture was different from the original recording. Through a series of experiments, I was able to achieve the desired sound by adding background sounds of vibrations between the singing and water waves.

I then turned my attention to the sound of a forest, which presented a more challenging task. In particular, I struggled to capture the relevant texture of the birds chirping. After multiple attempts, I decided to use a whistle as a sampling material, and then added random raindrops, faint echoes in the valley, and the continuous birds calling in the background to create a soundscape that captured the essence of a forest.



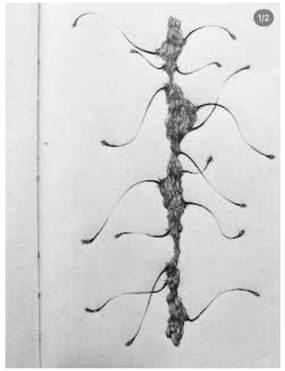


Scan to know more about the process of transcribing.

Using the ability to duplicate score layers and attach different textures to the sound, Orchestration of Experience demonstrated the potential for creative exploration in capturing environmental sound, offering new ways to experience and appreciate the sounds around us. Phase one of Orchestration of Experience contributes to the growing body of research on the methodology of capturing the vibration and texture of environmental sound.

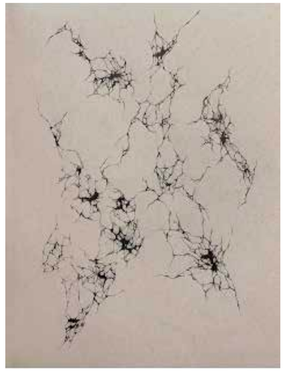
VISION – HEARING – MEDIA

Case Study: Sensory Drawings by a Chinses artist Yu Lu

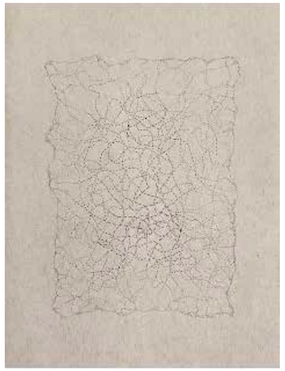


Nose test for Covid-19

The smell of burning plastic

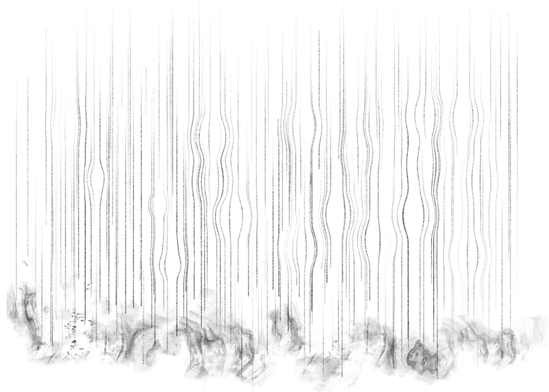


The current sound of video calls when the network signal is weak.

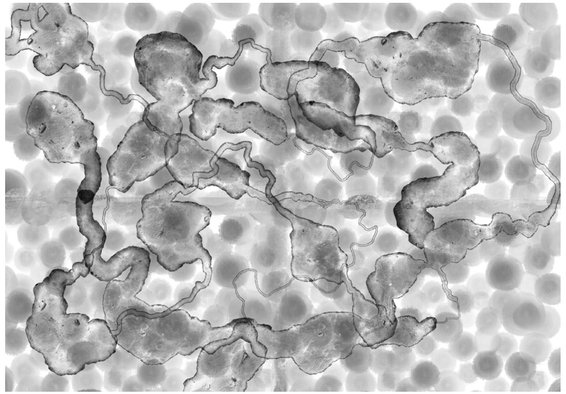


The sound of cling bags being gently rubbed

Sensory Drawings of Vision Extraction



Forest:
The raindrops fell rhythmically like threads, and birds twittered irregularly out of the rain.



Whales:
The sound of bubbles in this scene creates a spatial sense, and the whale's call is like a soft, blunt cloud that weaves in and out of the sound of bubbles.

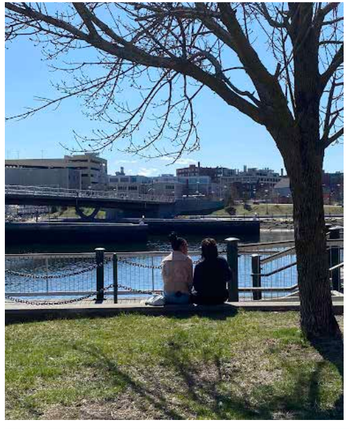
BODY AS INSTRUMENT AND PERFORMER

Participate In On-site Sonic Landscape

Introduction

Through on-site research, understand the relationship between environmental drums, instruments and performers, and establish the system of landscape orchestration.

In Phase two, I applied this methodology by doing on-site research near the river. I walked along the same route on the site at different times of the day. I took videos and notes to record the sounds that I heard along the way.



- **Elapsed Elements**:

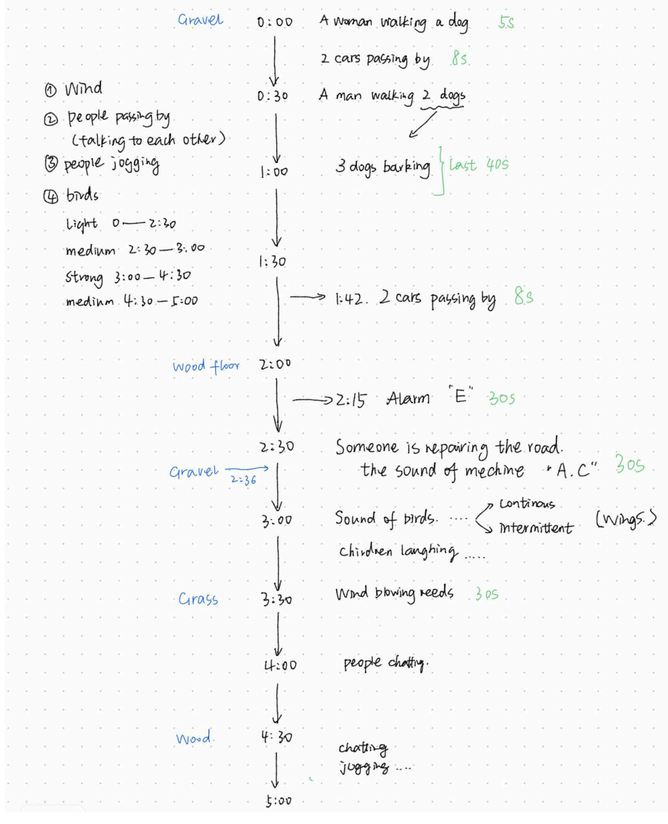
an incremental presentation of change as a chronology over a fixed period, placed in motion at some consistent rate.

- **Collapsed Elements:**

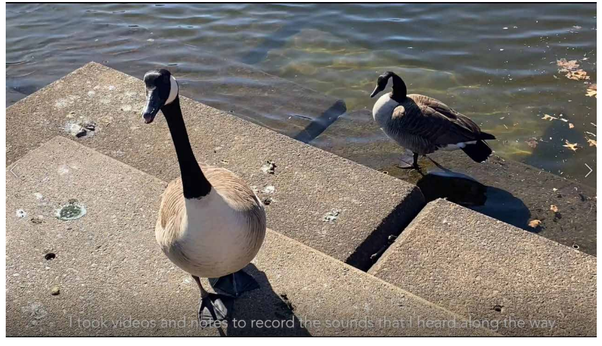
an simulataneous presentation of multiple moments in time at once, for some summary visualization of an action, a motion, an effect, or a result.

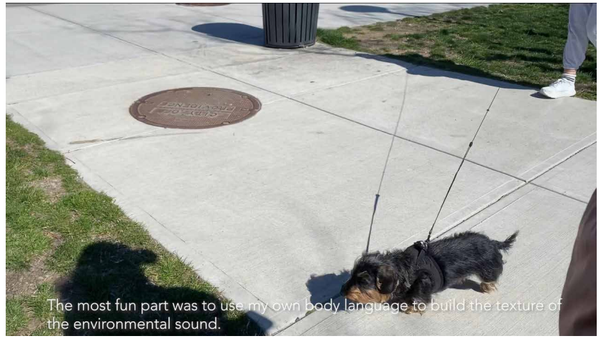
- **Visceralization:**

imbuing information with qualities that speak to our bodies senses.



SITE EXPERIMENT



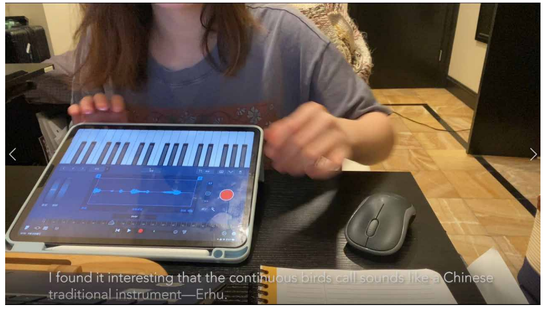


I transferred the sound to the score in Garage Band using the method that was developed in the first phase.

During this process, I used my own body language to build the texture of the environmental sound.

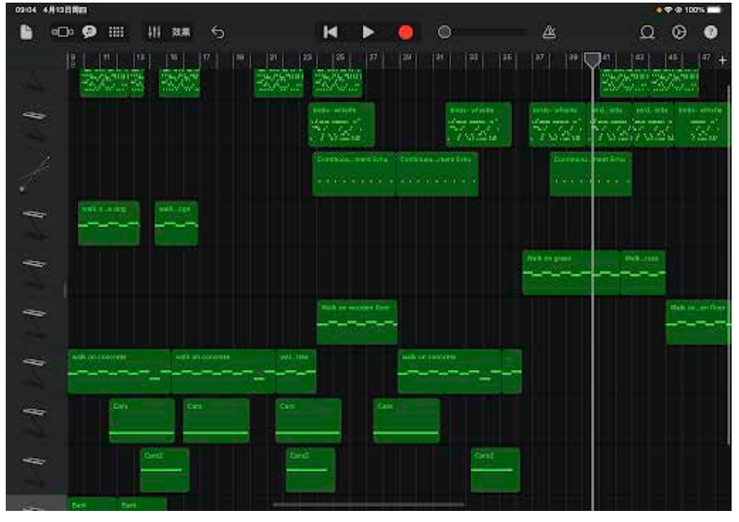
I rubbed and squeezed my palms to imitate the sound of a puppy's footsteps walking on concrete
And I recorded my whistle to mimic the birds chirping.

The continuous birds call was made by the Chinese traditional instrument—Erhu.
I smacked my lips to imitate the sound of rowing.



Scan to know more about the process of transcribing.

An Easter Egg:)



TEXTURES OF SOUND


Walk On Wood Floor


Tires of Cars


Rowing (Smack Lips)


Walk On Grass


Dogs Walking On Concrete
(Squeeze and Rub Palms)


Bird Chirping (Whistle)


Walk On Concrete

ORCHESTRATION OF LANDSCAPE

Drum & Instrument & Performer

Drum

The spacial change of a landscape creates the landscape rhythm (beat).

Instrument

Landscape materials provide the opportunity to produce sound by friction or collision.

Performer

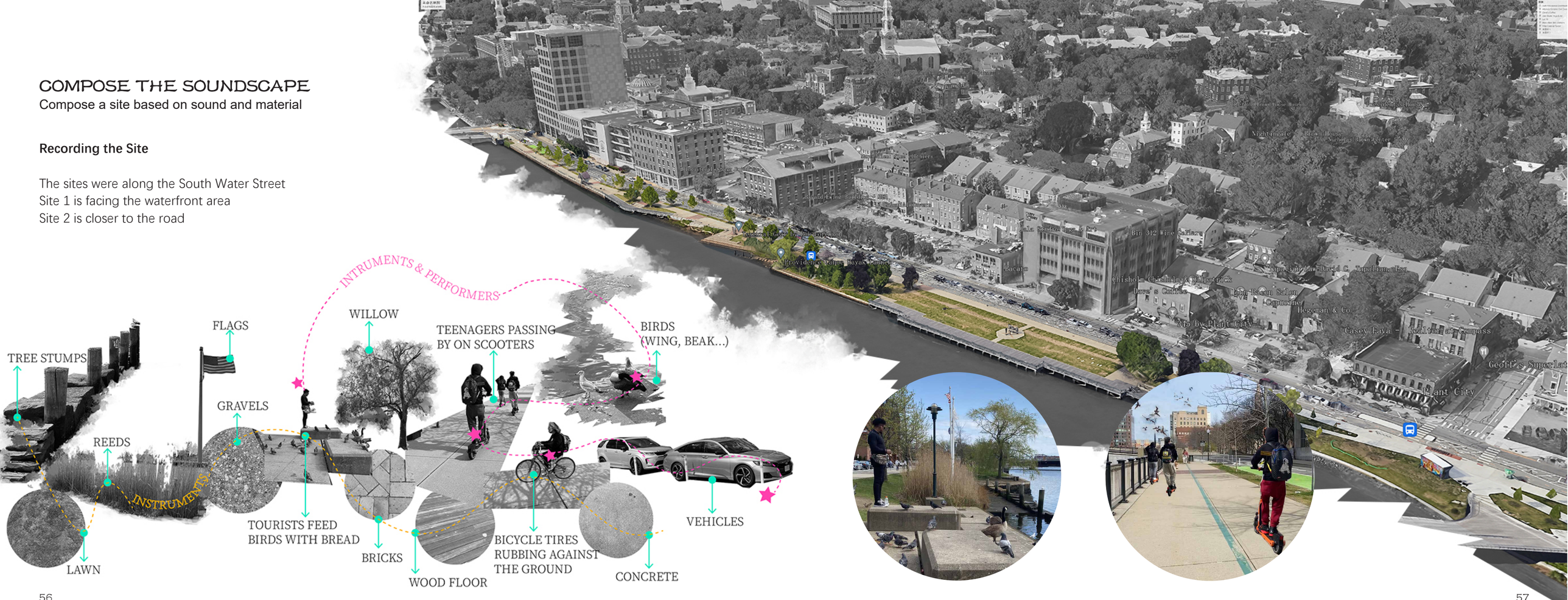
Dynamic unpredictable things are the performers of landscape, such as people, wind, animals···

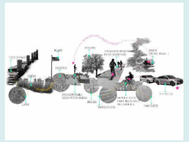
COMPOSE THE SOUNDSCAPE

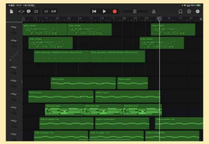
Compose a site based on sound and material

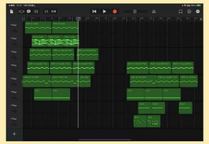
Recording the Site

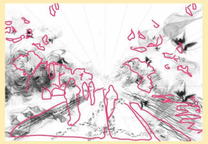
The sites were along the South Water Street
Site 1 is facing the waterfront area
Site 2 is closer to the road

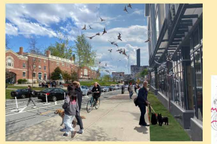












Record the Site

Transcribe the Site

Collage the Score

Collage a New Score

Create Song

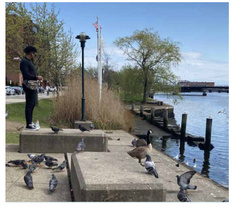
Represent the New Site

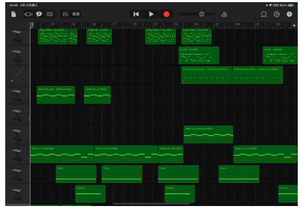
FROM SITE TO SCORE

—Transcribing the Score

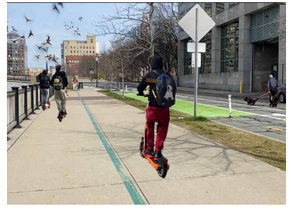
I used the same methodology that has been developed on Phase 2-transcribing the sound in Garage Band.

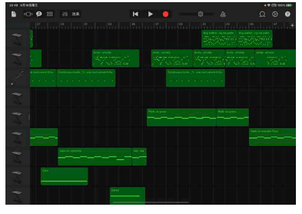
Site 1





Site 2

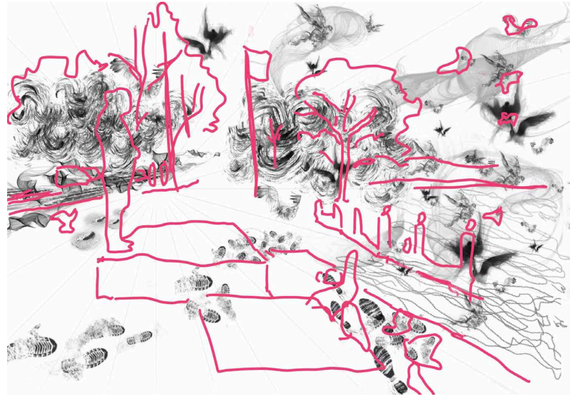




COLLAGING THE SCORE

I used sensory drawings to show the spatial sense and material of the site. For example, the clump texture on the top of site 1 represent the sound of leaves rustling in wind. And the two entwined vortexes in the middle of site 2 represent two dogs barking at each other.

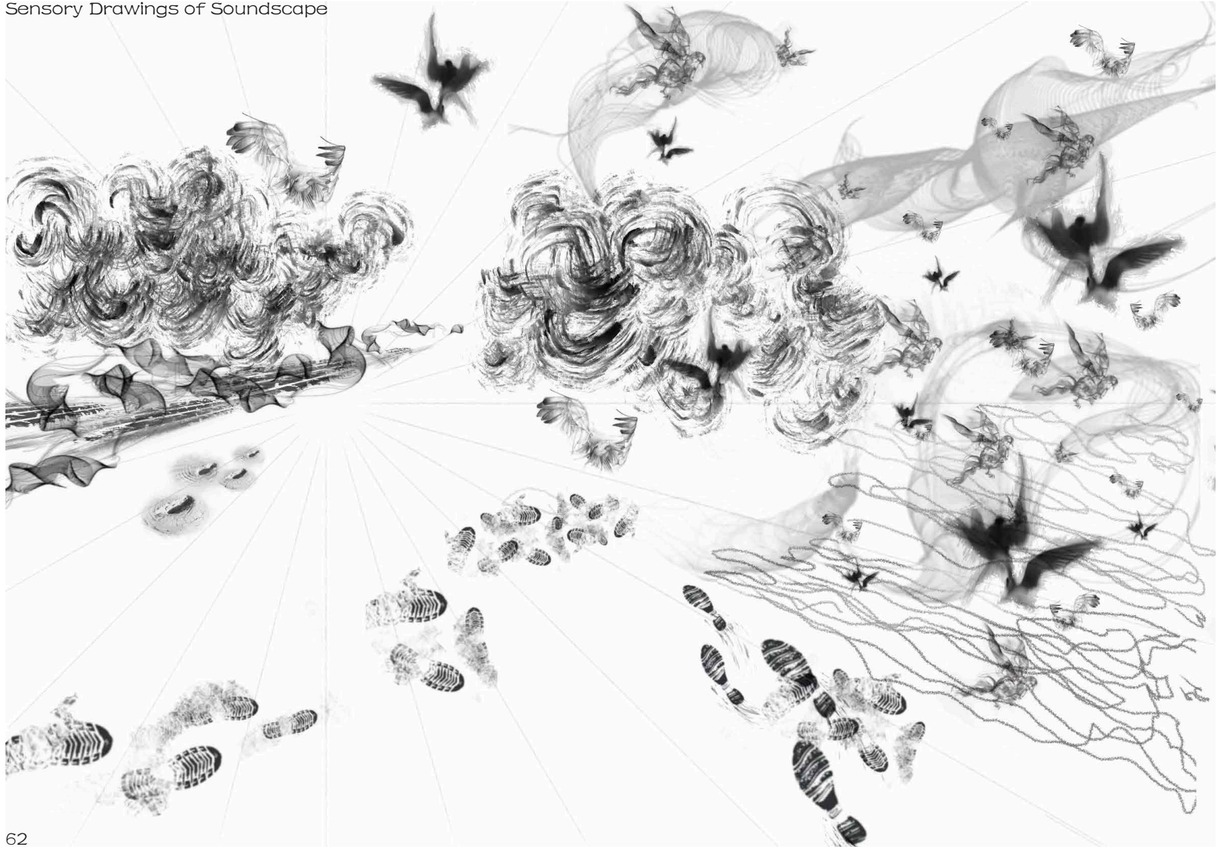
Site 1



Site 2

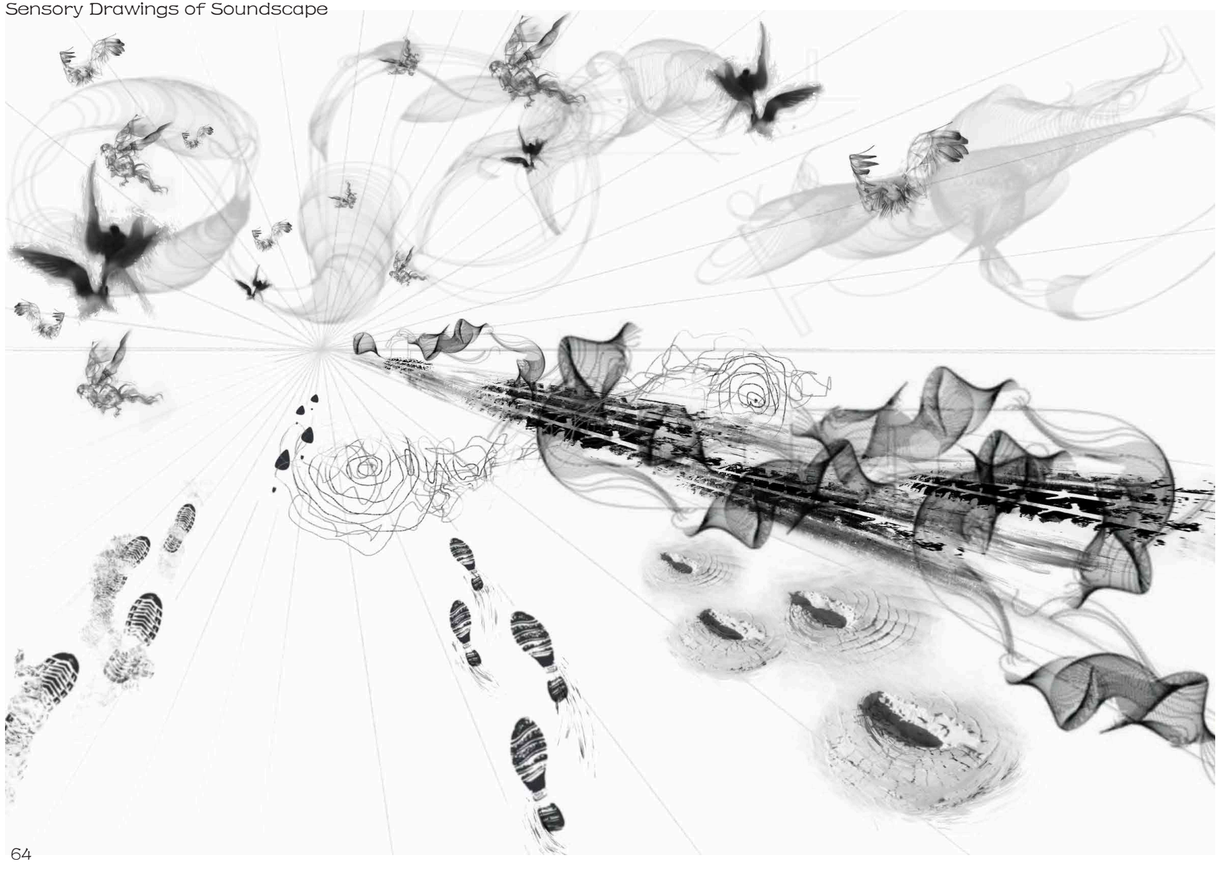
SITE ONE

Sensory Drawings of Soundscape



SITE TWO

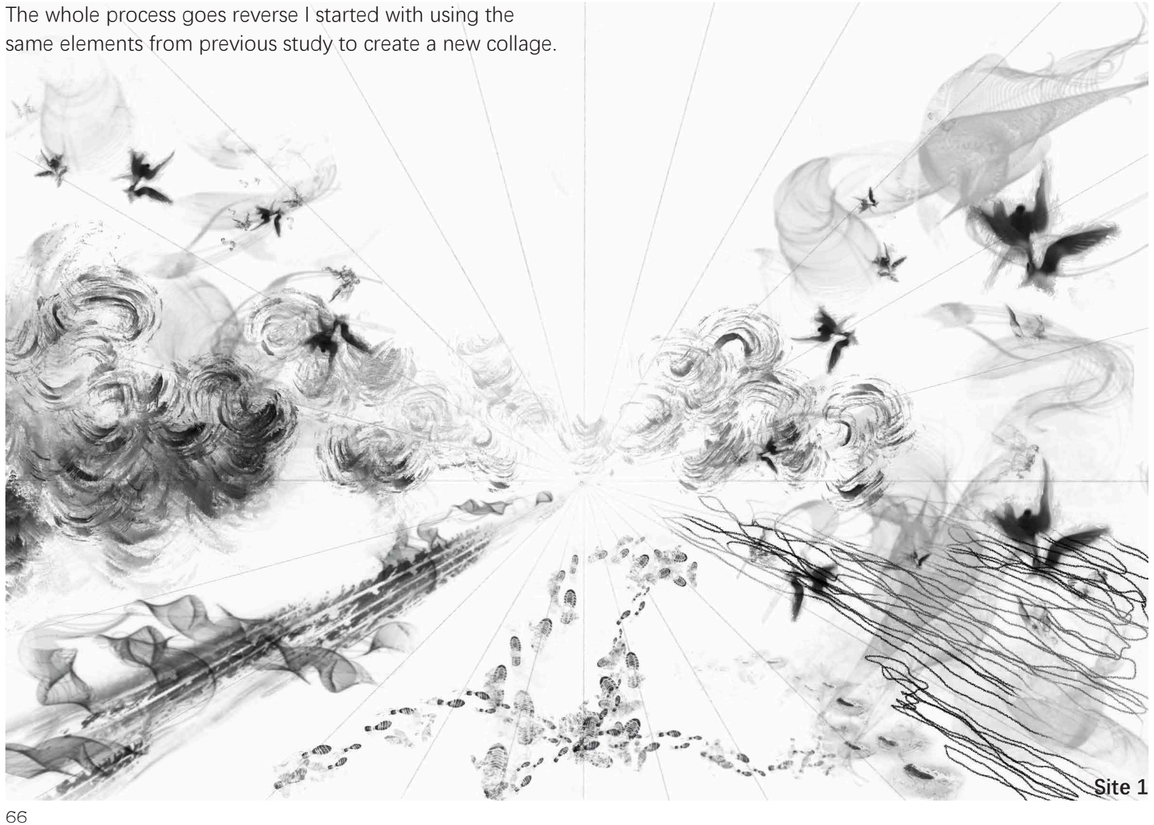
Sensory Drawings of Soundscape



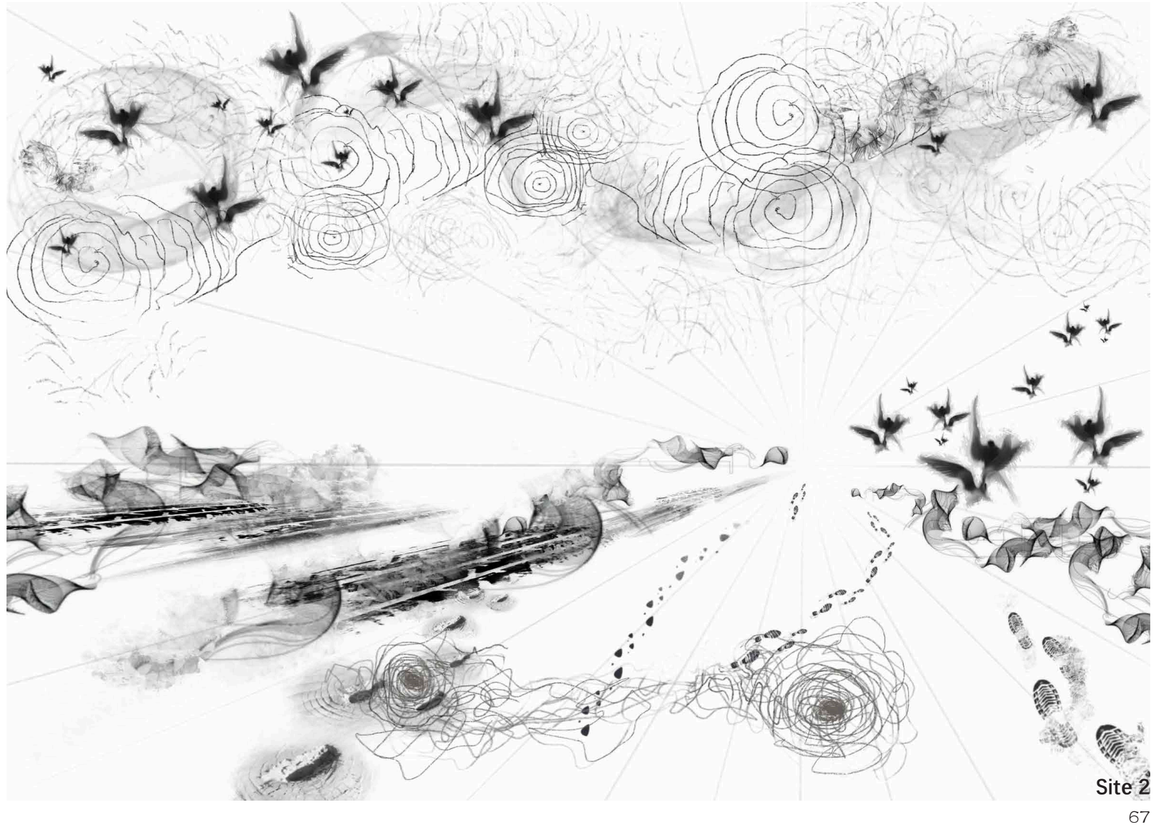
FROM SCORE TO SITE

COLLAGE A NEW SCORE

The whole process goes reverse I started with using the same elements from previous study to create a new collage.

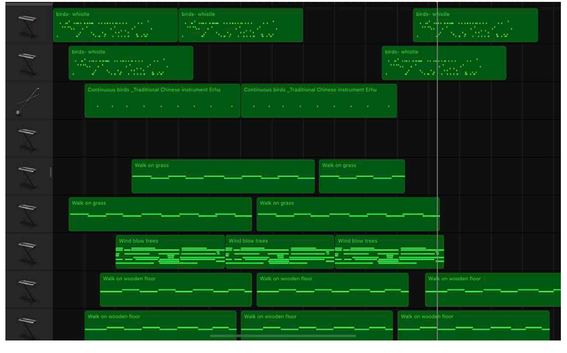


Site 1



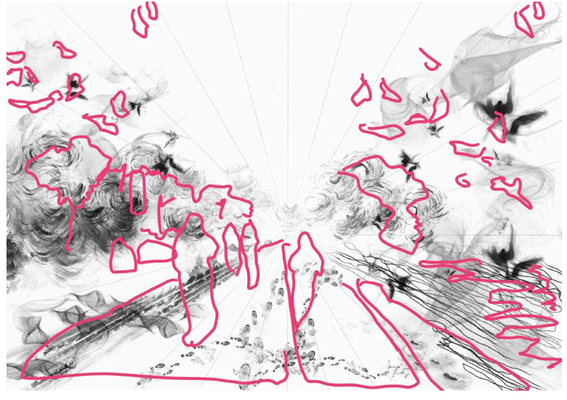
Site 2

CREATE A NEW SONG



Scan to listen to the newly composed soundscape

REPRESENT THE NEW SITE



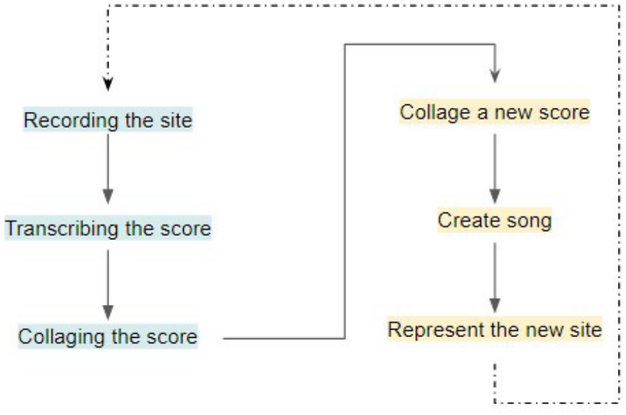
Recomposed Site 1

Recomposed Site 2

RECOMPOSED SITE ONE

RECOMPOSED SITE TWO

THESIS REFLECTIONS



Opportunities:

-Different places may share the same kind of soundscape.

-Providing the possibility for using sound as a tool to compare visually different spaces.

-A new way for understanding how the human body as a physical landscape is affected by soundscapes.

Limits:

-Lack of representing the texture and dimensions of the space.

-Lack of introducing new soundscapes and removing old ones.

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