2023

# PORT FOLIO

2024

The Univerisity of Edinburgh College of Art
**STUDENT NUMBER**: S2548097

# CONTENT

# OVERALL

# INTRODUCTION

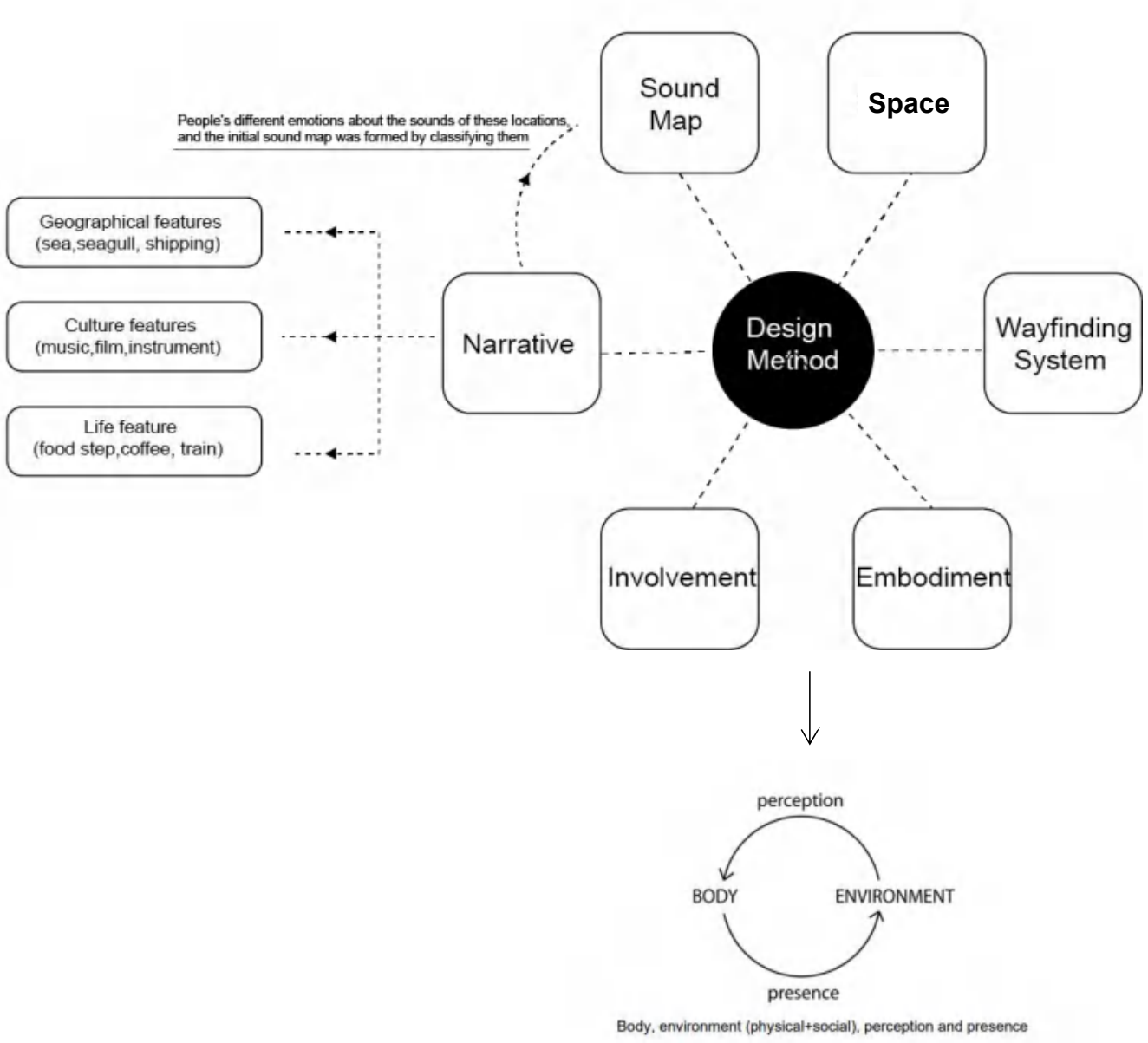
OVERALL INTRODUCTION

## Research Qusetion:

City sound environment is a complex auditory environment shaped by various factors, and sound as opposed to vision becomes the site for the critical investigation of urban life, challenging the sufficiency of visually orientated explanations of urban behaviors (Macleod,2022). But in the visually dominated city, how do we experience the sound of the city? How does our perception of sound affect our perception of space? How does our auditory experience affect our spatial experience?

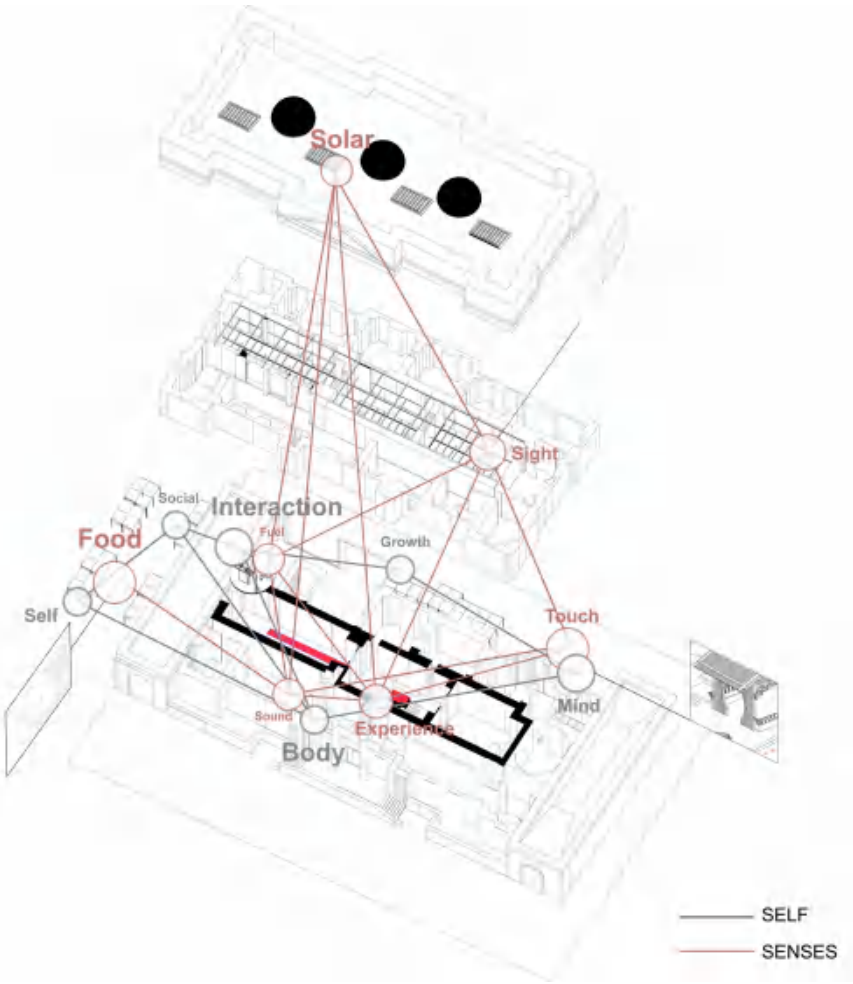
## Introduction:

Hearing is an integral aspect of spatial perception, arguably even more important thansight. Sound is immersive and perceptible to everyone. In this synthesis project, I first conduct a literature review and case study to analyze the dominance of vision and how it influences our hearing and listening, as well as the negative aspects of this phenomenon. Then, using a series of experiments, I test how people's embodied behavior with space can impact their feelings about the space and how the sound in the space can enhance and evoke impressions of the exhibition. Finally, I use my design as a tool to test the relationship between space and sound to create three sound fields, which allows people to experience the sound physically in the Custom House exhibition.



OVERALL INTRODUCTION

# Summarising my journey as a Master -- Beginning and ending




▲ The apply of various threads in the customhouse

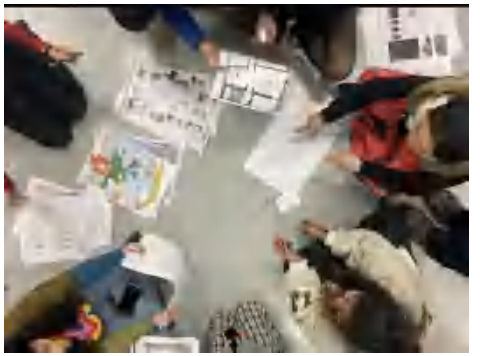
During welcome week, we answered the question about what interior design is and the meaning of "Master." We wrote that a Master involves 'acquiring in-depth knowledge and skills,' 'solving real-world problems and challenges,' and is 'a lifelong process that involves continuous growth.' As we near the end of this year's master′ s design course, we should reflect on the words that best describe our design journey over the past year. Throughout this year of continued study, I have come to deeply understand that pursuing a master′ s degree is a process of acquiring knowledge through reading, courses, and experiences. In the synthesis project, which serves as a summary of this year, everyone applied the knowledge they acquired as the culmination of this course.

Reflecting on this year's studies, our learning journey was composed of countless threads. In the first semester, the courses included "Reading Interior," "Adapting Interior," and "Multi-sensory Practice." "Reading Interior" laid the foundation for my understanding of the definition of interior design. Through extensive reading and lectures, we gained a broader understanding of interiors. In "Adapting Interior," we developed an understanding of the finer details of interior design. Additionally, the multi-sensory practice allowed me to understand interiors from various perspectives, revealing the invisible 'layers' within our interiors. Different sensory experiences extend our perception of the real world: vision shows us what the world looks like; touch allows us to feel textures, pressure, and temperatures (Paterson, 2007); and sound provides a unique form of signaling (University of Calgary, n.d.).

In the second semester, the courses covered broader design concepts. "Connecting Interior" delved into more extensive urban design theories. "Communication Design" involved concepts from communication studies to ensure that the designed products effectively reached the audience. The elective course "Business Design" encouraged us to consider practical commercial applications. These integrated courses provided a comprehensive understanding of various aspects of design.

So in the synthesis project, it was precisely the combination of these threads that came together. In the Multi-sensory Practice course, I researched how the city sound environment is a complex auditory landscape shaped by various factors, and how sound, as opposed to vision, becomes the site for the critical investigation of urban life (Macleod, 2022). I explored the experience of sound through walking. Therefore, in the synthesis project, I also studied how the unique spatial form of the custom house produces different soundscapes. Additionally, sound, as an important element of spatial ambiance, is often overlooked in our visually dominated world.

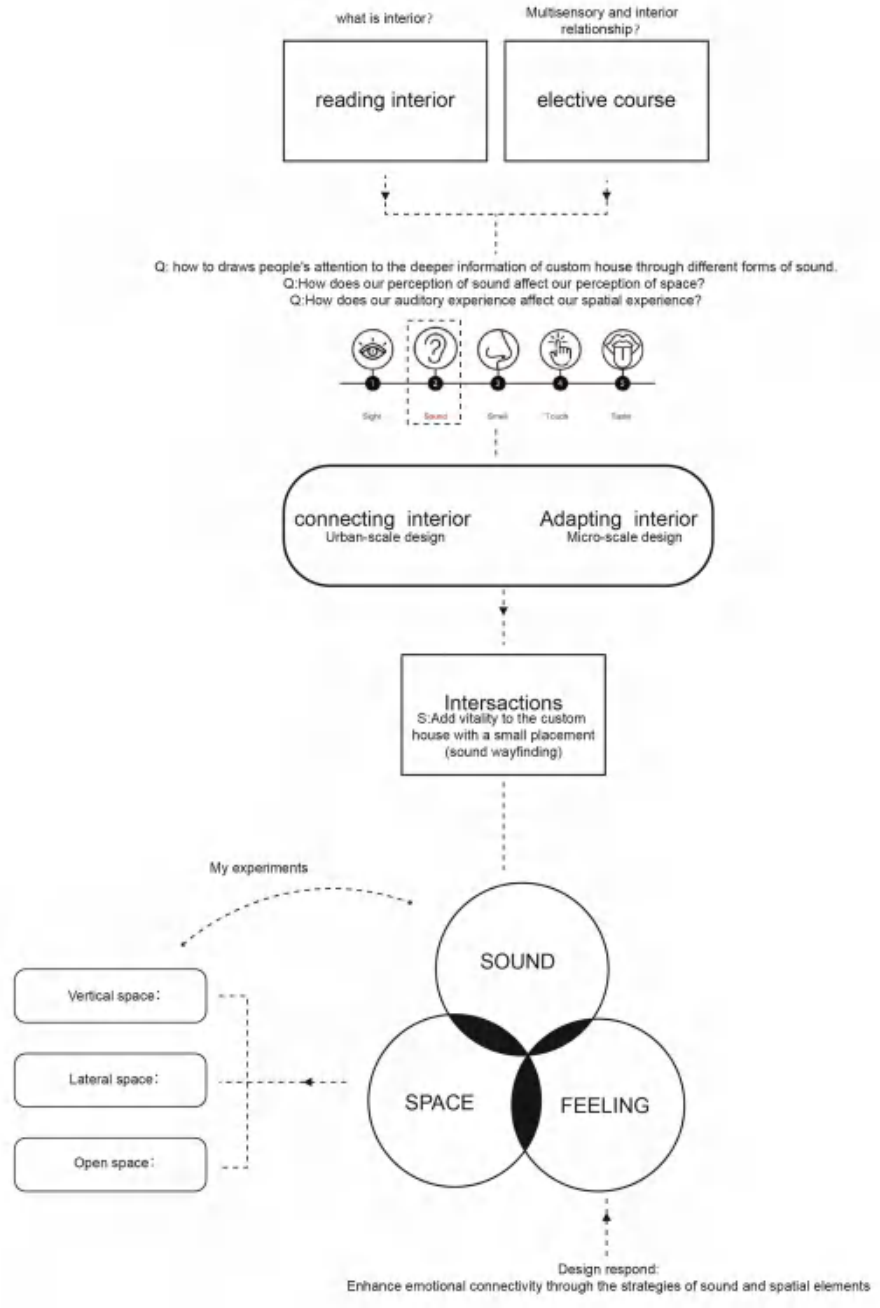
So in this portfolio, I invite each visitor to join my master′ s design journey. From different aspects of interior design, to communication within interiors, to multi-sensory interior experiences, and interactions with real users—these are the various aspects I have learned throughout the year. In the future, I will apply these theories to practical design projects.



▲ group discussion

# PART1

# FOUNDATION OF DESIGN




# PROJECT JOURNAL

Therefore, my research aims to explore the relationship between sound and architectural elements as well as our feelings, and enhance people's feelings in custom house through a series of soundscape strategies.

While many of the social functions of architecture, as opposed to its material aspects, can be achieved through sound, it serves as a valuable supplement or complement to traditional architecture. Sound holds significant untapped potential. It offers the possibility of creating an architecture that enhances and surpasses current interactions and activities in modern urban environments.

# The sound as a element in interior

# [reading interior]

Although the composition of the interior possesses different elements, the dominance of vision in the urban in the construction process of the city. Because the complex of interior and our different understandings of interiors, people use different mediums of image to express the "interior inside" like a frame is the construction of the elements in the space. The frame is what establishes territory out of the chaos that is the earth, the constitution of territory is the fabrication of the space in which sensations may emerge; the elements in the space, including sound, tone, color, texture, and weight, are extracted and are used to convey specific emotions and effect (Suzie 2005,p3) It is the richness of these layers that form our perception of the ambience of the space around us, the constant movement and change of our bodies that form the complex visual pictures. The decoration elements like floors, walls, liquid, solid, hard, soft, light and shadow all show the different personalities and moods that a person wants to create. The use of these decorations will affect the unseen parts of the space, such as sound, temperature and feeling, which together create a special space atmosphere in line with the scene.

In analyzing the atmosphere of the Custom House, I observed some unique acoustic effects. For example, standing in the center of the curved room produces noticeable echoes and reverberations, which clearly demonstrate how spatial decorative elements influence the ambiance of a space. Architecture is essentially an extension of nature into the man-made realm, providing the ground for perception and the horizon to experience and understand the world （Pallasmaa 2005,p.41） So custom house itself uses these architectural elements to create a scene for usto feel more sound, smell, and sight.

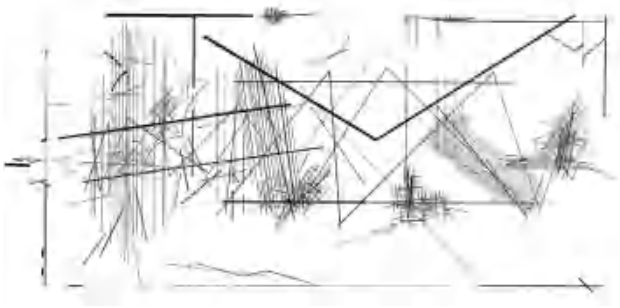
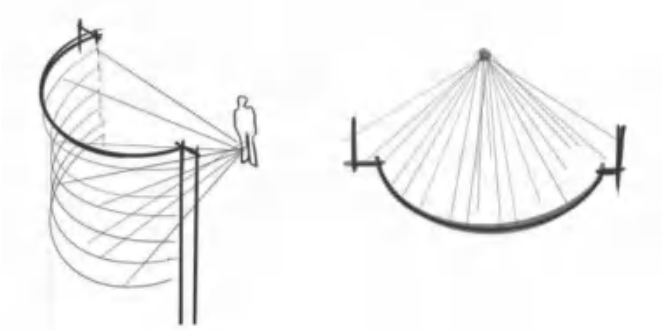


fig1：Daniel Libeskind: Chamber Works, 1983: Horizontal Plate

## referance:

Daniel defines these picture as spatial music: they are spatialized scores, musical translations.

The multi-level line and layer responds to the multi-axis sounds in the space; melody and chords.
horizontal and/or vertical structure, regulated by the common principle of liberal variation.



▲ the analysis of custom house sound

▲ the analysis of custom house sound admosphere

# The dominant of vision [Elective]

However vision not just the top of the sensory pyramid, and shows overwhelming superiority of sight over the other senses when people perception things. The creating urban space is an embodiment process of visual drawings, and it is also a process of establishing various boundaries. Due to the dominance of vision in modern architectural design, Juhani (2012, p22-25) think an excessive focus on aesthetic value and functionality has created a sense of detachment and alienation among people within these spaces. The sonic environment is the most natural interactive perceptual quality of the architecture. Despite the dominant role of visual perception,it remains a uni-directional process Light is produced from a external source, travels across an architectural form,and is consumed by the eye.This intense engagement is so often ignored in our built forms that we predominantly fail to even take notice of the relationship between sound and space within our daily movements.

In Multi-Sensory Cultures I explore the walking as a embodiment. To feel the sounds in the city, I feel the sounds in the space through different body postures such as slow walking and Scale Walks.The sound is the silent walking of people and the different kinds of sounds in the site. The sound is accompanied by all the audience in the performance relationship with the posture of the object, instead of focusing on the real relationship between hearing, listening and walking.

| *Sense* | sight | hearing | smell | touch | taste |
|---|---|---|---|---|---|
| *Percentage share* | 83% | 11% | 3.5% | 1.5% | 1% |

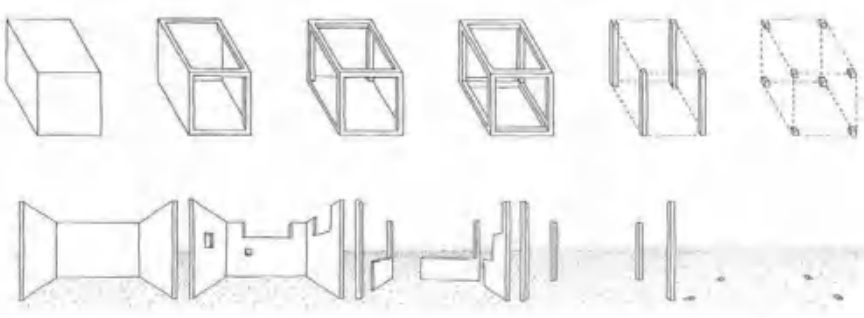
▲ fig 2：Comparison of the perception of the environment by individual human senses (Skaza,Maciej,2019,p.3)

▲ slow walks in Portobello Beach ( from Deirdre’s guest lecture)

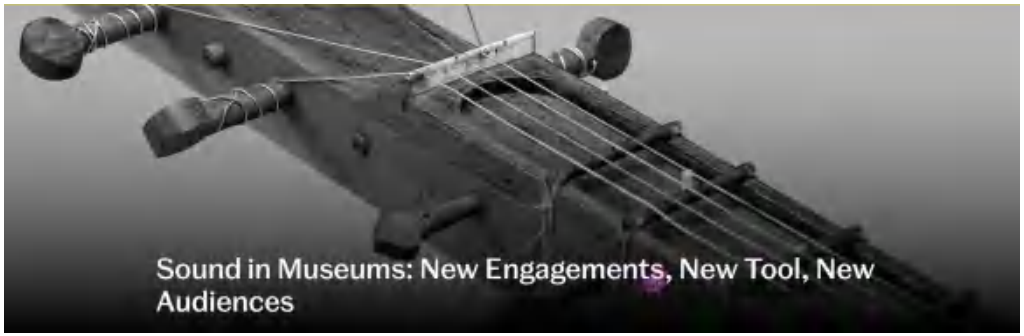
# Awareness stimulation of sound [Elective]

Although there is no definitive theory of the relationship between sound and spatial awareness, placing sound in space enables people to gain awareness this method is used in many building strategies. The awareness experience focuses on how people experience the space. In this way, it simulates the impact of awareness, thus helping people actively join the building to experience the meaning of being. Experience supports everyone's opportunity to learn, explores the world and experiences joy, miracles and social relationships (Lupton, 2019) For example, V&A museum have a mini experiment in sound and music which research in the effects of music in heritage environments, allow people to focus on the connection between the music and the exhibits and enhance people's awareness.

The dematerialization of the cube while still communicating a cube space by strategically maintaining defining cues. As perceptive beings we consciously or unconsciously register these cues based on sensory stimulation of sight, touch and sound. This allows the communication of space through implicit or explicit means. “The user establishes relationships, enabling the interpretation of an implicit limit”(Meiss，1990: 182)



▲ fig3: dematerialization of the cube (Meiss,1990:182)




Project updates

11 May 2018

**Sound in Museums Part 3: Ten Golden Rules by Prof Eric De Visscher**

As part of my tenure at VARI, two interdisciplinary workshops were held, gathering V&A staff members and practitioners from various fields. These workshops, pointing towards the concept of the multisensory museum, took place in the...

Read more...

15 November 2017

**SOUND IN MUSEUMS (2): What About Musical Instruments?**

Musical instruments are complex and often composite objects, both decorative and functional. They are the result of historically regimented assemblages, with conflicting properties between material and acoustic qualities. Foremost, they are relational objects, geared...

Read more...

4 October 2017

**SOUND IN MUSEUMS by Eric de Visscher, VARI Visiting Professor**

Hearing, together with its active component, listening, is a means by which we sense the events of life, aurally visualize spatial geometry, propagate cultural symbols, stimulate emotions, communicate aural information, experience the movement of time,...

Read more...

▲ fig4: VA museum sound experiment

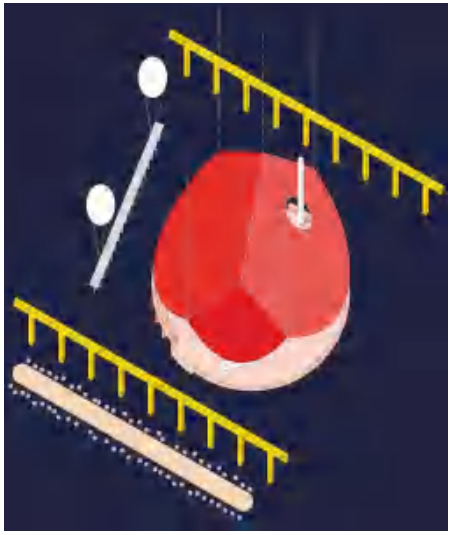
# The muti-sensory exhibition[adapting interior]

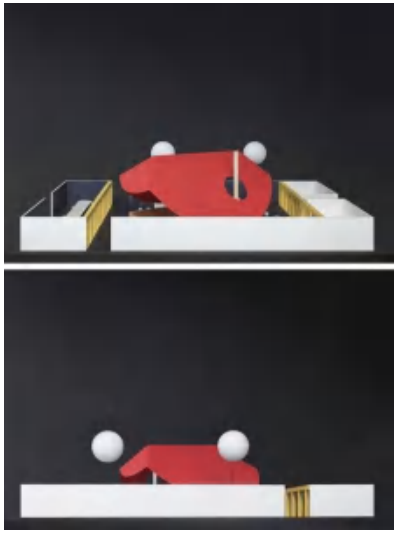
In "Adapting Design," a small-scale design course, I chose to focus on the Benline uniform. During my investigation of exhibition forms, I explored multisensory exhibition techniques to enhance people's perception of the spatial atmosphere.

Vision works in conjunction with other senses rather than in isolation. Our vision and other senses have networked connections through synesthesia and intersectionality . For example, some people with synesthesia might perceive colors when they hear music or associate specific tastes with particular words. This allows us to experience specific objects in conjunction with other sensory organs and emotions.

In the case of VERBENA, the designer uses bright colors and meal scenes to suggest a celebratory atmosphere, which may further stimulate the audience's imagination of celebration music and traditional joyous scenes (Figures 5& 6). The use of elements such as color, light, and temperature can create different atmospheres and feelings, promoting relaxation and sensory engagement.

▼ fig5 fig6: VERBENA exhibition





In the process of adapting design, I have focused on details such as materials, textures, lighting, and other elements that create the atmosphere of a space. I have integrated the concept of multi-sensory design into my work.

# Losing and Finding Yourself in the Modern City

# [connecting interior]

Walking, as a discontinuous, procedural, coherent, and autonomous mode of urban transportation, differs significantly from private cars and public transport. It is both a physical movement and an embodiment process. Walking also serves as a means of listening to and producing rhythmic urban sounds, making it a unique method for observing urban environments. In my elective course, I explored the relationship between urban sounds and walking. Matthew Beaumont (2020), in "On Losing and Finding Yourself in the Modern City," examines the pedestrian experience through the rhythm of footsteps on the pavement. Different modes of walking and body movements are viewed as forms of escape, self-discovery, disappearance, and revolution.

Therefore, as part of our exhibition design at the Custom House, I conducted an experiment involving walking and experiencing sounds. This approach allowed us to explore and understand the auditory dimensions of space through movement.

▼ on losing and finding yourself in the modem city custom house model

In the process of connecting interior design, we have identified the true stakeholders within the Custom House. Although these different communities focus on different aspects, they share some common visions. For instance, the Custom Line's new cafe and exhibition space for the Custom House provides residents with more social opportunities, aligning with the Scotch Whisky Society's goal to promote communication and interaction between people through whisky.

However, there are potential conflicts. For example, the development of tourism might impact the opportunities for the Scottish Environmental Protection Agency. To address communication challenges between these diverse communities, boundary objects are needed to establish common ground and shared understanding in the context of complex design tasks (Fischer & Jonathan, 2005).

# Case study 1
# Sound Tube 1

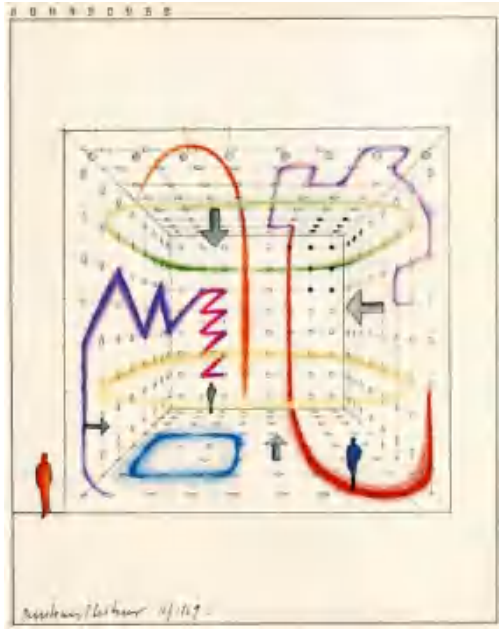
Time：1971
Type：installation
Designer：Bernhard Leitner

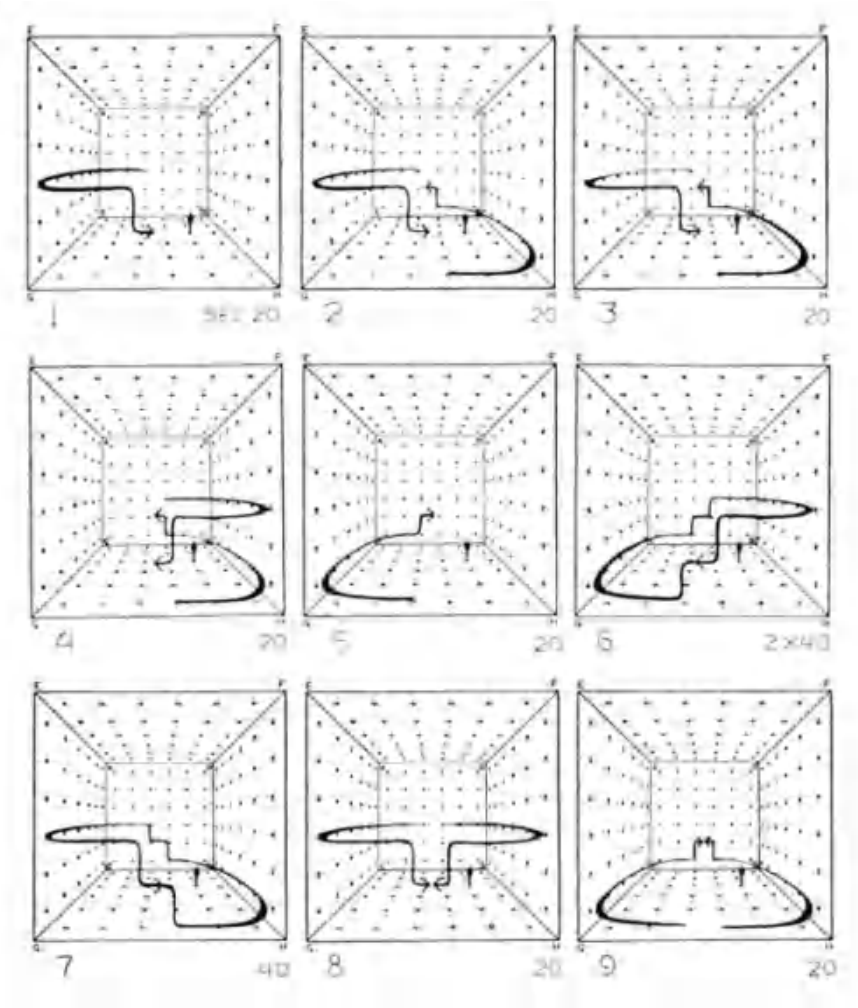
He created an invisible boundary with sound. In his early period experiences all based his assumption that sound can create an interior space that can be acoustically experienced by both the ears and the whole body. According to Lopez's work on this, the visitor inevitably becomes aware of his own body as part of the combined area of sound installation.

#First, a specific spatial position or even pose is determined for his body.

#Secondly, the visitor in the sound installation is given the feeling that the tone that fills the installation area flows from his own body. The boundaries of his own body are ultimately questioned and become relative and begin to perceive themselves as part of the installation site as a whole.

I think his analysis of sound is very interesting. Different scenes are simulated through sound, and sound is set to spread from one speaker to another to achieve different characteristics of spatial sound.

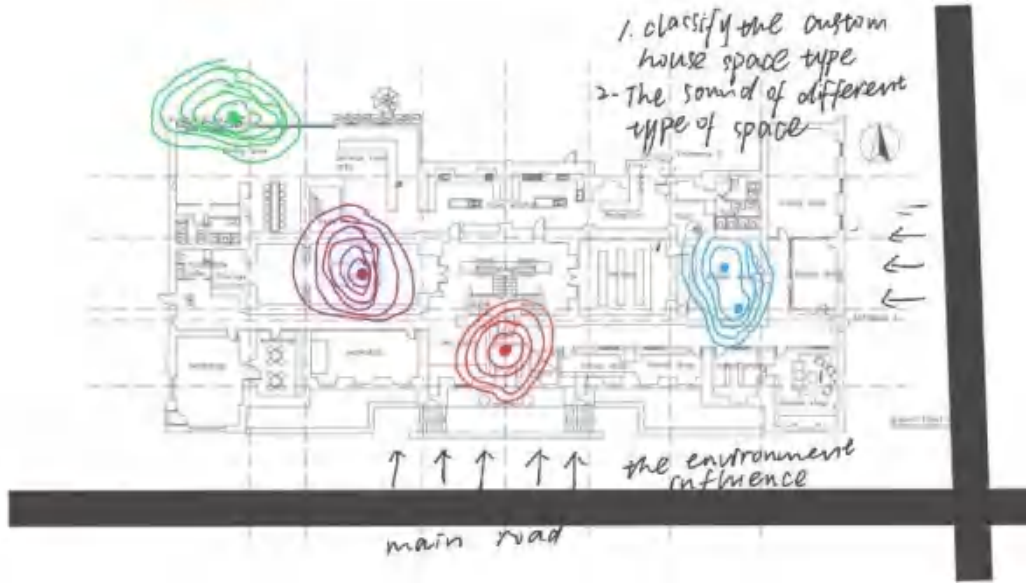





## Inspire by this case

- Allowing people to feel the sound through their whole body, as well as using the physical properties of the space to amplify the auditory sensations and create the ambience of the space.

-Analyze the bounce, advance, and propagation of unseen sounds through space in a quantitative way




## Case study 2 -- smell map

-Summer Streets Smell mapping Astor Place, NYC

Time：August 2017

Location：New York

Artist：NYC DOT Art team

This map was produced by questionnaires on the initial description of the site, which is the initial impression of local residents on the smell of the city. The original map is gleaned from the noses of Summer Streets employees and Village Alliance during April, May and June 2017,but in In August 2017 installation visitors undertook smell walks and were asked to superimpose their “smell ervations” on top of the printed map in the form of graffiti.


### Inspire by this case

- The shape of the map is not permanent but increases and changes according to the participation of visitors
- I think it's interesting how they describe smells, using nouns and words that aren't used to describe smells
- How to set up the questionnaire

reference：https://sensorymaps.com/?projects=summer-streets-smellmapping-astor-place-nyc

# PART2

# RESEARCH PROCESS & OUTCOME

# Site analyisis

**1810-12**

Robert Reid build the house,based on the design of, Register House(1774-76)by Robert Adam.

**1825**

William Burn do Additions and alterations.Symmetrical, neo-classical,two storey, 11-bay building,with attic storey to advanced centrepiece and end bays; single storey stable range to rear.

**1909**

The Excise Department moved from InlandRevenue to be combined withcustoms in the new Board ofCustoms and Excise.

**1973**

UK joins the EEC dramatically reducing the number of import/export taxesneeding to be paid and soeffectively negated the need for Custom House.

**1980**

Custom House is acquired by the National Museulof Scotland and is usedalmost exclusively for storage.

**2015**

NMS move to purpose-built storage facility. CECacquire building and SHBTawarded short term lease formean time" use.

**2019**

**2023**

**NOW** Serving the growing community of Leith, strengthening the civic pride that already exists in the area.

an iconic Georgian building

south elevation

North elevation

Part as a rental room

Provide wedding space

Saturday market

# Site analysis

Customs House is located at the port of Lieth in Edinburgh, a landmark building of Lieth Port, a classic Georgian building that has grown alongside the century old port, and is a witness to the great changes that have taken place in Leith. Time has taken away the once bustling interior of the building, yet it has fully preserved the body that carries the bustling spirit.

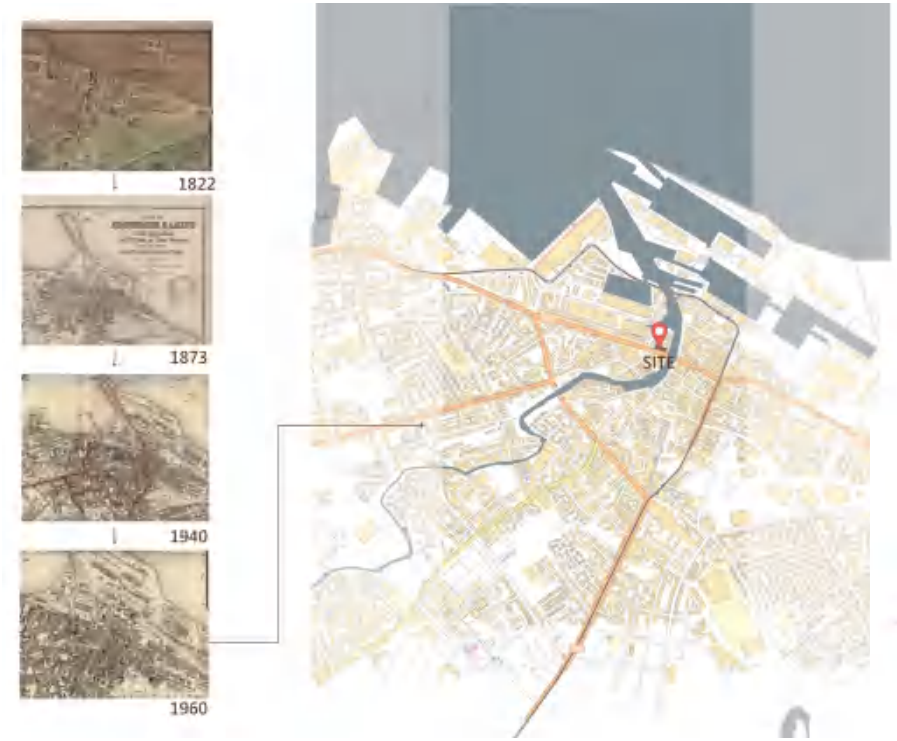
For over 200 years, it has still stood at the visual center of the community. The solemn and majestic architectural features of the Customs House inspire people's memories and remind them of its power and prestige in fulfilling government functions.What kind of display method can enhance the characteristics of the building is worth considering. A sustainable future plan will now be developed based on the history of the Leith Customs House.

# Site problem

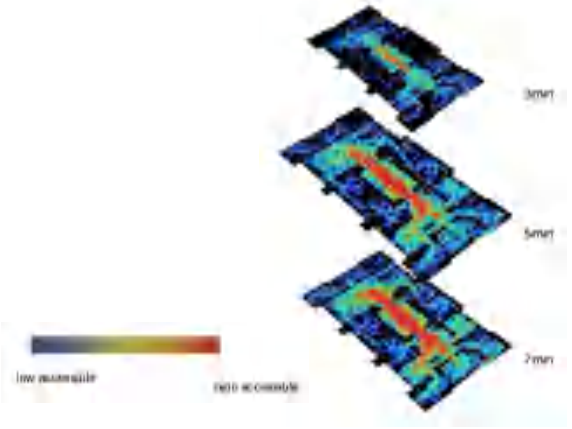
Based on our previous course analysis of the Custom House site, several deficiencies have been identified:

1.Accessibility Issues: Some rooms within the Custom House have weak accessibility. The complex routes can affect people's experience as they navigate the space.

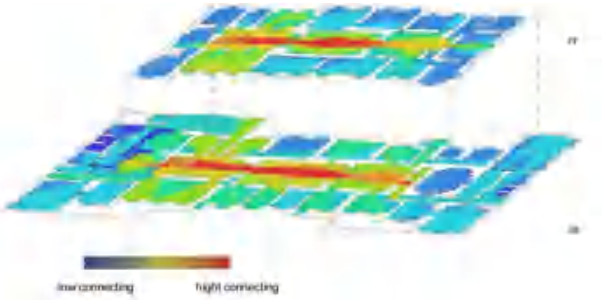
2.Insufficient Lighting: Some areas within the site suffer from inadequate lighting. Rooms lacking natural light may feel oppressive and dim.




▼ Connecting analysis



▼ Accessible analysis



# Experimrnt 1

- COLLECT PEOPLE'S FEELINGS ABOUT SOUND

According to the exhibition and building tour for custom house exhibition, 9 places with different space atmosphere are selected.

**THE CHOOSE 9 SPACE :**

1The MAIN entrance of the exhibition, you can get the corresponding exhibition map, and the corresponding explanation

2 is the introduction of the exhibition background of custom house, SHBT and MA interior architectural and spatial design

3 Time corridor, which is also the beginning of the story of MA students and custom house

4 Time line corridor, Introduce the history of Leith and the history of the custom house

5 Mainly introduces the local culture and scenery of leith

6 the heartbeat of leith community, introduced the main service objects of the course

7 Aesthetic and design strategies for custom house

8. Evolving definition of the concept of interior

9. adapting interior courses to display objects of different scales and backgrounds in custom house

building tour exhibition order

INFORMATION

CUSTOM HOUSE ATRIUM
The iconic Custom House staircase marks the start of our exhibition.

INTRODUCTION
Background of SHBT and Custom House history. Introduction to MA Interior, Architectural, and Spatial Design Class of 2023.

MEDIA ROOM
You will see digital imagination of Custom House, as we explore multi-media representation of interiors.

STRATEGIES AND AESTHETICS
"Designing Leith: Strategies and Aesthetic Value"

TIMELINE WALL

PEOPLE AND EXPERIENCE
"Living Leith: The Heartbeat of the Community"

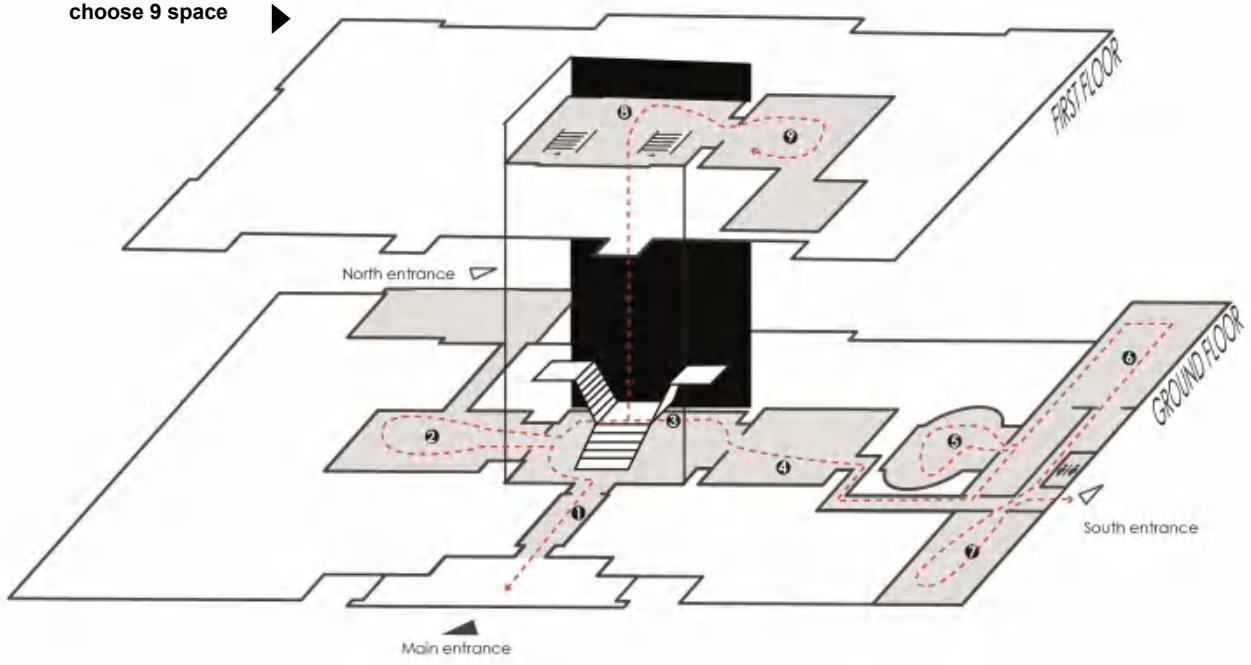
SYNTHESIS & QUESTION WALL

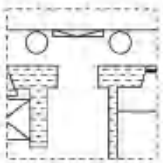
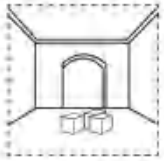
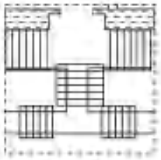
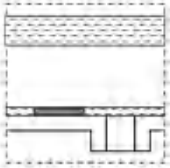
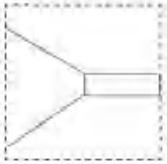
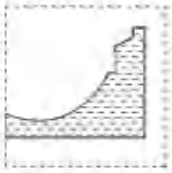
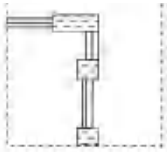
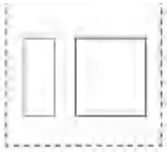
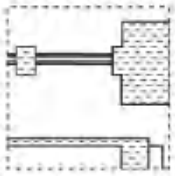
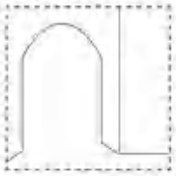
WORKSHOP
"Leith and Community Bond"

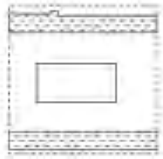
READING INTERIORS
You will see how we have studied Custom House using different theories and interior design concepts.

ADAPTING INTERIORS
This exhibition shows how interiors adapt to historical objects from Leith culture.

**choose 9 space**



| | plan | sense | activities | atmosphere |
|---|---|---|---|---|
| ❶ |  |  |  | Bright lighting, clear signage, and an organized layout to ensure visitors can easily access maps and explanations. |
| ❷ |  |  |  | Soft lighting with focused spotlights on key displays.. |
| ❸ |  |  |  | Historical and narrative-driven. |
| ❹ |  |  |  | Use warm tones to create a cozy, reflective ambiance. |
| ❺ |  |  |  | Slightly dim light and quiet atmosphere. |
| ❻ |  |  |  | Bright, natural lighting with large images or murals of Leith's scenery. |
| ❼ |  |  |  | Reflective and forward-thinking. |

| | plan | sense | activities | atmosphere |
|---|---|---|---|---|
| ❽ |  |  |  | Minimalist design with focused lighting on models and design sketches. Use a neutral color palette to emphasize the designs. |
| ❾ |  |  |  | Bright, adjustable lighting to highlight different exhibits. |

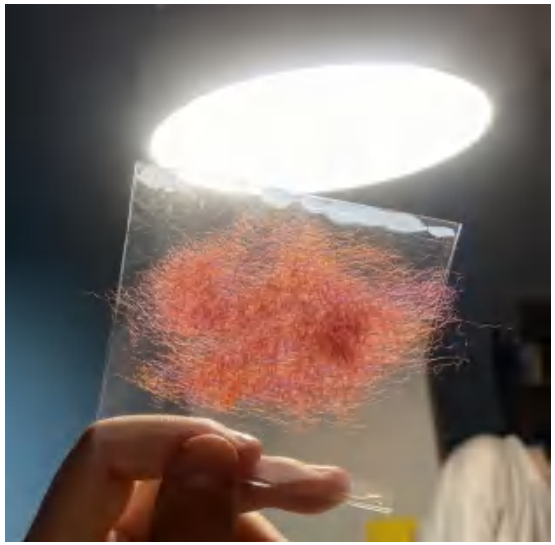
Summary of the Characteristics and Activities of the Nine Locations, and the Desired Atmosphere for sound Selection.

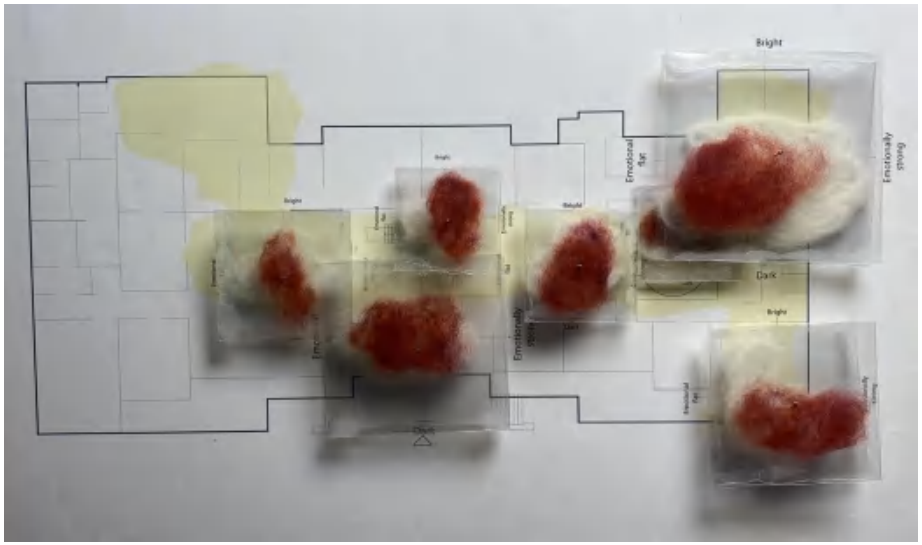
-The link of these 9 sound:https://youtu.be/ncZXTQLqgmE

After selecting these venues, the emotion and atmosphere of the venues are defined, and different sounds with some common characteristics are synthesized. The nine sounds are:

1. The exchange of indoor and outdoor sounds includes frame extraction in the background sound, creating a distinctly different auditory experience.
2. The sound is relatively spacious, with the addition of guitar music, leaning towards a joyful atmosphere.
3. The corridor space has a strong spatial sense, incorporating the sounds of visitors' footsteps and the prolonged echoes of an organ.
4. Some repetitive music segments.
5. Echoes caused by the spatial structure, emphasizing the sounds of people's activities.
6. Incorporates ambient sounds such as seagulls, the sea, and people talking.
7. Incorporates ambient sounds such as seagulls, the sea, and people talking.
8. The vertical space has sound echoes combined with a strong musical presence.
9. Some repetitive music segments, reducing the intensity towards the end of the exhibition.

Using the two indicators, sound emotion and sound trend, I quantitatively measure people's perceptions of these sounds. Based on my own perceptions, I create an initial sound map. Additionally, I prepare feedback forms, encouraging visitors to express their feelings after hearing the sounds. This participation will help form a dynamic sound map.

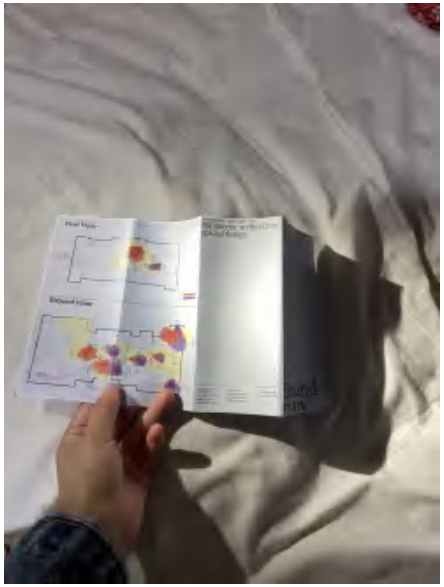



## Sound map Model:

In this model, the focus is on emphasizing that everyone has their own unique perceptions and interpretations of sound. The red cotton represents sound emotion, while the white cotton represents sound trend. People can express their sound emotions by rotating around the central axis and altering the shape of the cotton.

## Sound map brochure:

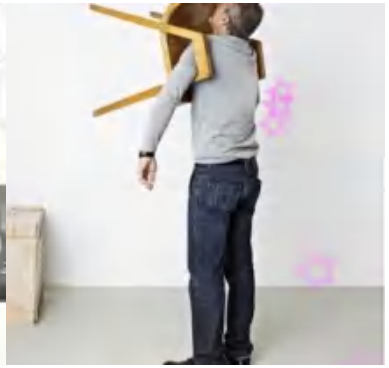
To facilitate the collection of visitors' perceptions of the sounds in Custom House and to create a final dynamic sound map, I designed a brochure that allows them to describe the sounds themselves.




# Experimrnt 2

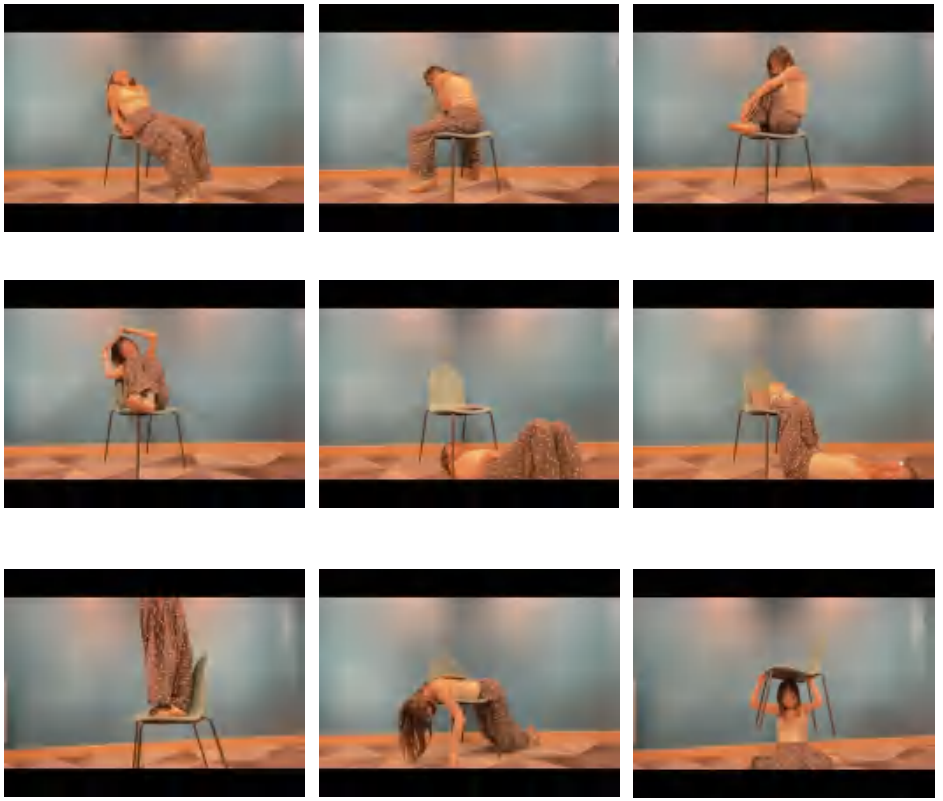
- HOW EMBODIMENT AFFECTS OUR PERCEPTION OF SOUND

Firstly, I hope the final output will enable participants to experience sound in a relaxed and varied manner, using different body postures. Our bodies use multiple senses to receive different information all the time. Bodies can be stratified, organized, categorized, even restrained, but they cannot be stopped (Manning, 2007).Bernhard Leitner (1998, p280)also said'"I can hear with my knee better than with my calves.' Therefore, I designed this experiment to allow individuals in the space to experience sound through different body postures.



reference:
https://www.domusweb.it/en/from-the-archive/2012/03/31/searching-for-comfort-in-an-uncomfortable-chair.html

https://publicdelivery.org/erwin-wurm-one-minute-sculptures/



In the experiment, I made various connections with a chair in the space, and felt the sound device in my stomach, head, chest and other places. There was a very subtle feeling that different organs of the body could feel the sound waves. I hope that people who participate in the custom house can listen to these sounds with a comfortable posture, so that they can feel the emotions contained in the sounds to the maximum

Using body as a way to feeling the sound, beside the space allow visiters to manipulate their bodies to the maximum extent possible and feel the sound with different body parts.

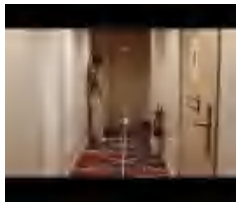
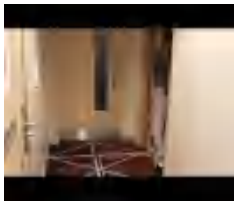
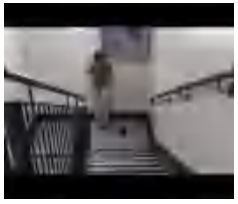
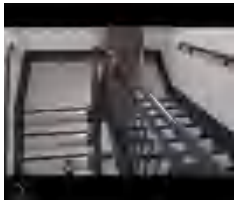
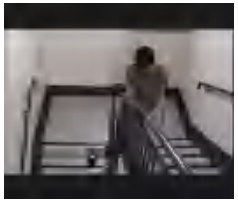
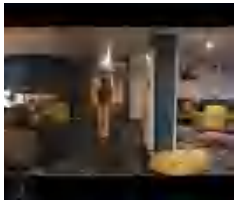
# Experimrnt 3

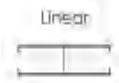
-HOW ARCHITECTURE ELEMENT RESPOND TO SOUND

According to the type of space, the selected nine Spaces are divided into three different types of Spaces: vertical space, Lateral space and open space, and the architectural elements in these three Spaces will produce different responses to sound.

**-EXPERIMENT VIDEO PROCESS**

**-EXPERIMRNT VIDEO LINK: HTTPS://YOUTU.BE/BCFBDPFAXXA**






**- MEASURE SOUND**

In this experiment I use three angles to measure sound including：duration, spreading range, and spatialization.

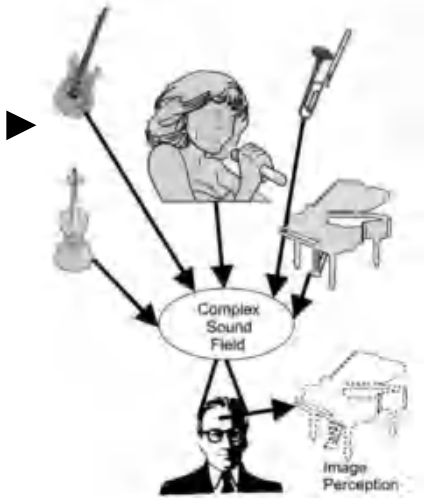
Duration: The duration of a sound affects how it is perceived. Short sounds can be perceived as sharp or abrupt, while longer sounds can create a sense of continuity or sustain.

Spreading range: Spreading range refers to how far and wide sound waves travel from the source.Due to the physical elements of the space, it will affect the spreading range of sound.

Spaticlization:Spatialization refers to the perception of sound in a three-dimensional space, including direction and distance from the listener.

Then, We receive one sound input that is made up of a sum ofthe sounds from all of the sources in our environment（William A.）So these sound elements and space together make up the sound field and affect how we feel about the sound of space.

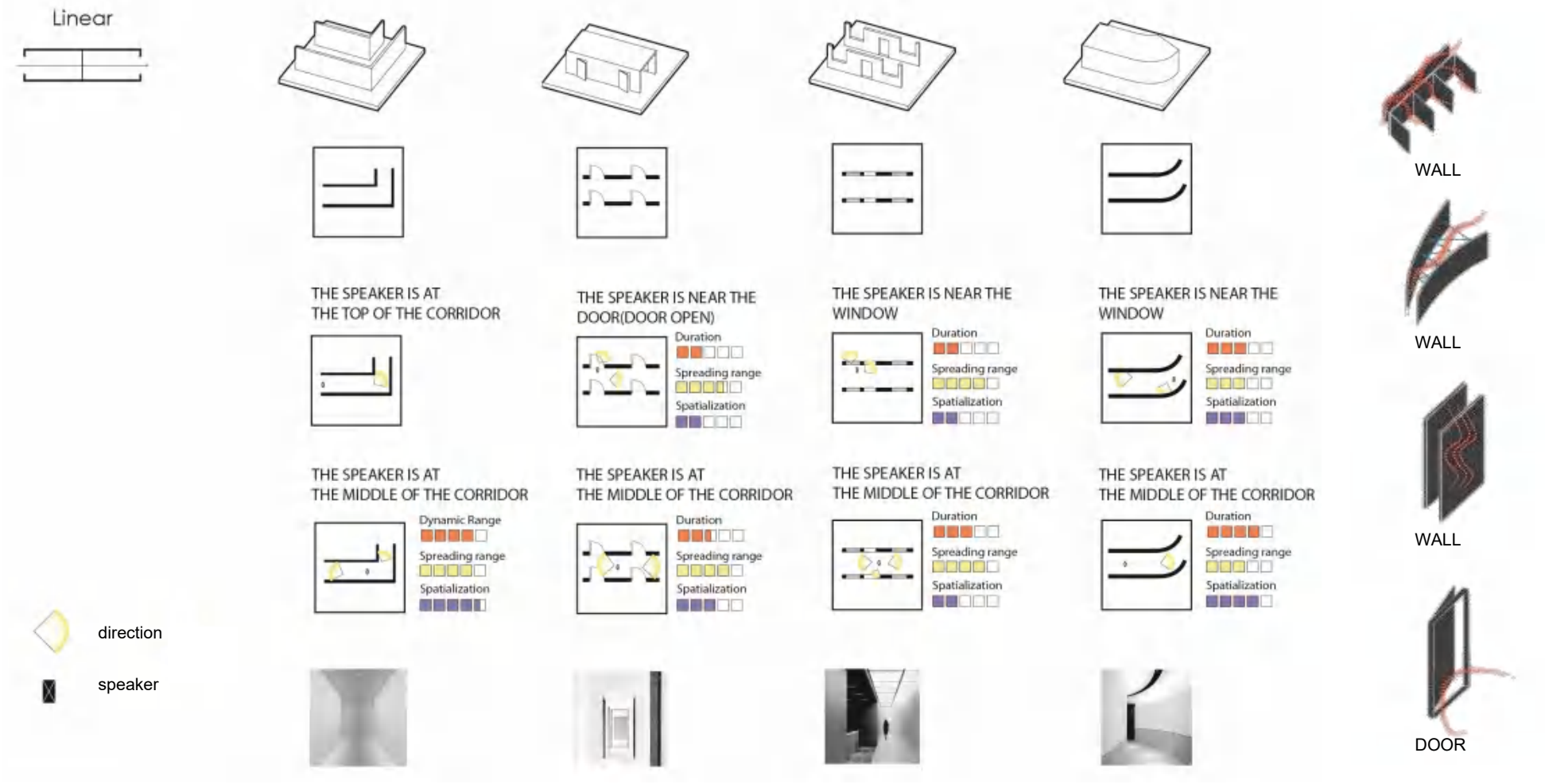
fig2 the complex sound field when we linsten concert



## The character of linear space sound:

Pronounced Spatial Character: The corridor's design enhances its linear nature, drawing visitors through a sequential narrative journey. This spatial character is emphasized by the structured layout, which guides movement and creates a sense of progression.

Depth and Continuity of Sound: The sound within the corridor is carefully curated to enhance the spatial experience. The integration of ambient noises, such as visitors' footsteps and the prolonged echoes of an organ, adds layers of depth and continuity. These auditory elements reinforce the linear nature of the space, creating a cohesive auditory landscape that complements the visual journey.

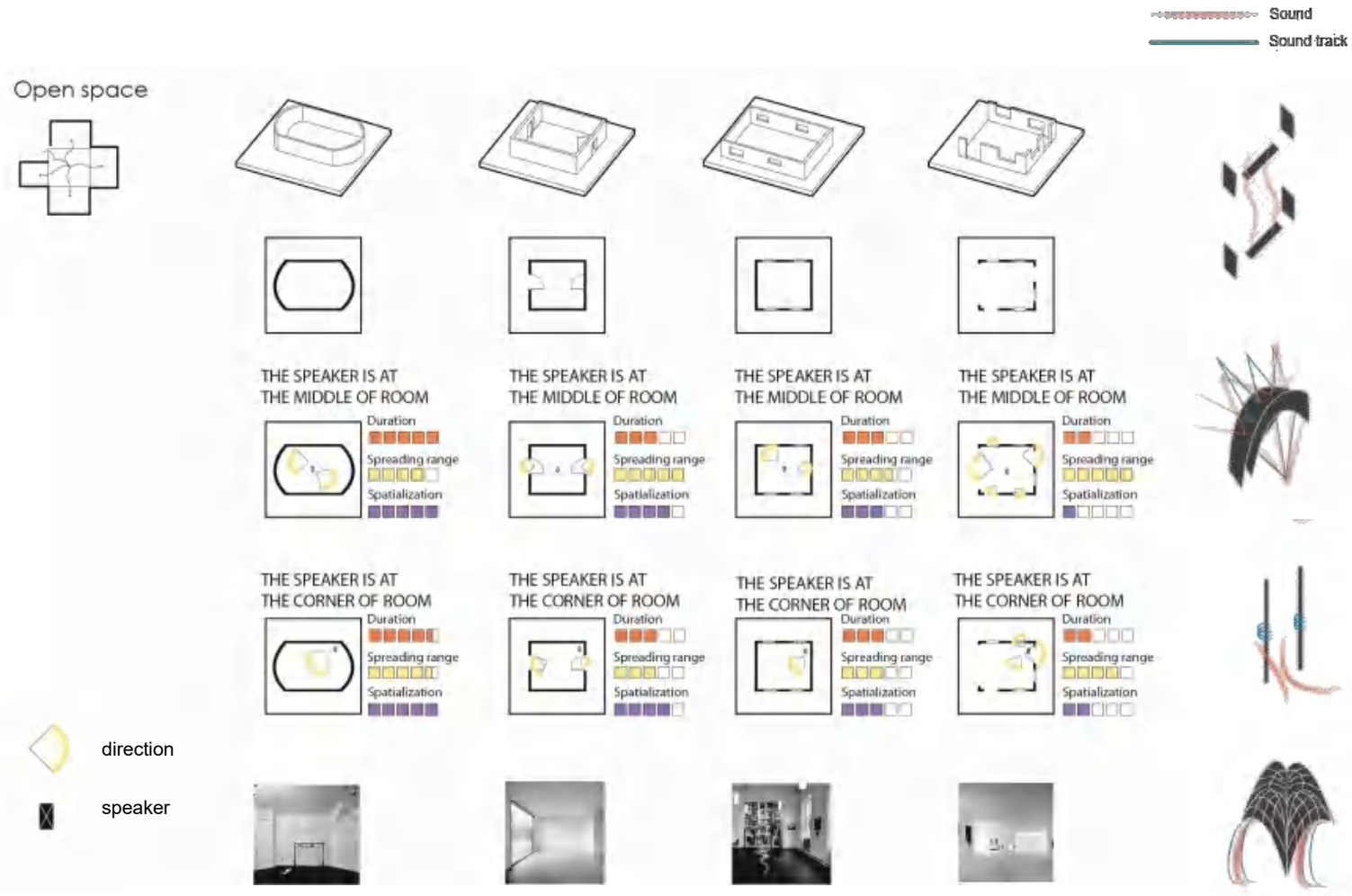


## The character of open space sound:

Weaker Spatial Definition: Unlike linear spaces, room spaces often have a less pronounced spatial character. The enclosed nature of a room means that sounds do not follow a clear directional path, leading to a more diffuse and evenly distributed auditory environment.

Wider Propagation Range: In room spaces, sound can propagate more broadly throughout the area without being confined to a linear path. This means that sounds can fill the entire space more uniformly, creating a more immersive and encompassing auditory experience.

Lack of Strong Spatial Cues: Because room spaces lack the directional cues that linear spaces provide, the spatial definition is weaker. Sounds can originate from multiple sources and directions, making it harder to pinpoint the exact location of a

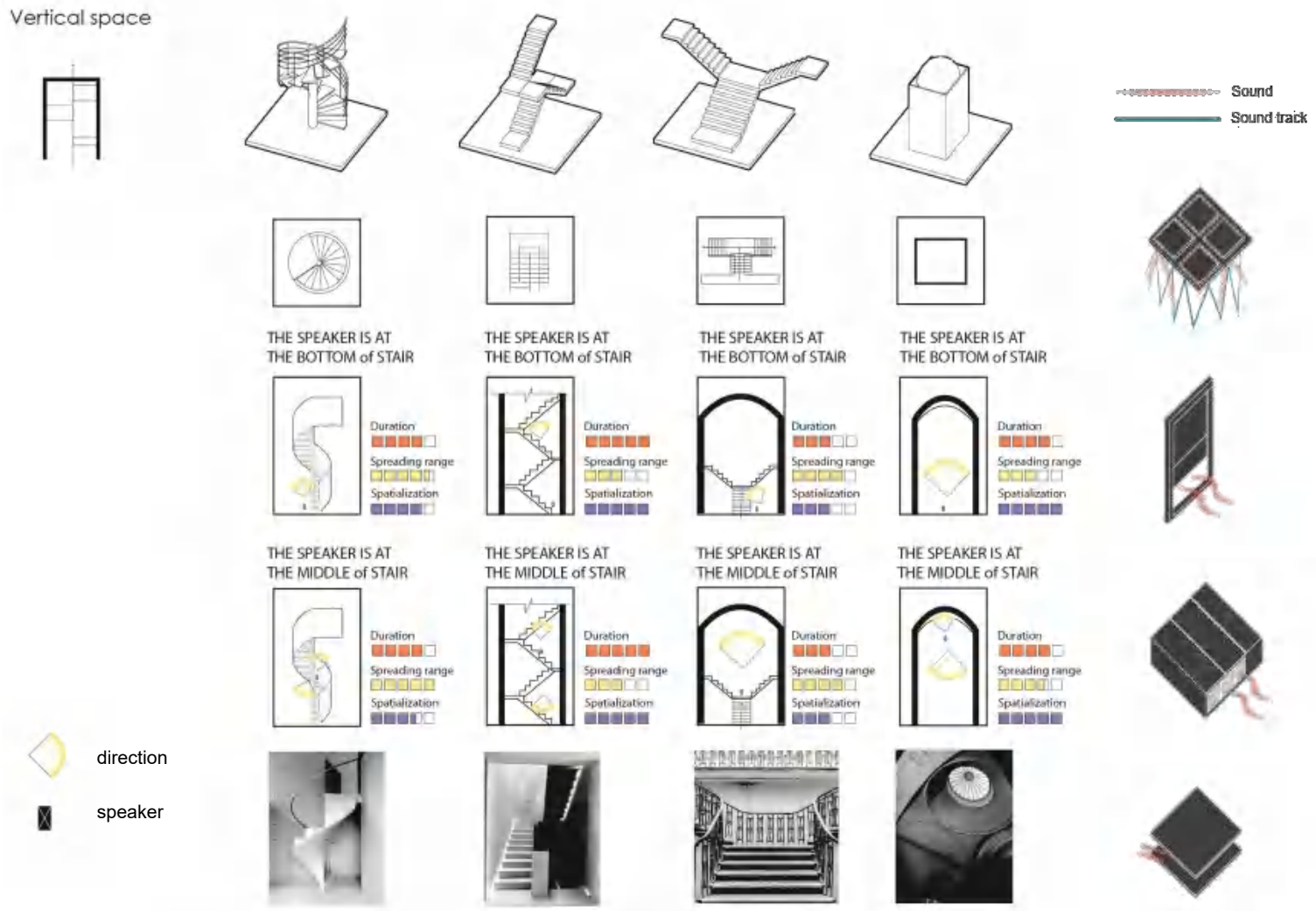


## The character of vertical space sound:

Strong Spatial Presence: In vertical spaces, such as atriums or stairwells, sound has a pronounced spatial character. The height and verticality of the space contribute to a unique auditory experience, as sounds can travel upwards and downwards, creating a sense of elevation and depth.

Echo and Reverberation: Vertical spaces often amplify echoes and reverberation. Sounds bounce off the high ceilings and vertical surfaces, producing a lingering effect that enhances the spatial awareness of the listener. This echoing quality can make the space feel more expansive and dynamic.

Vertical Sound Propagation: Sound in vertical spaces can propagate both vertically and horizontally, allowing it to fill the entire area. This multidirectional propagation enhances the sense of immersion and makes the vertical dimension of the space more perceptible to the listener.




## REFLECT OF THESE EXPERIMENT

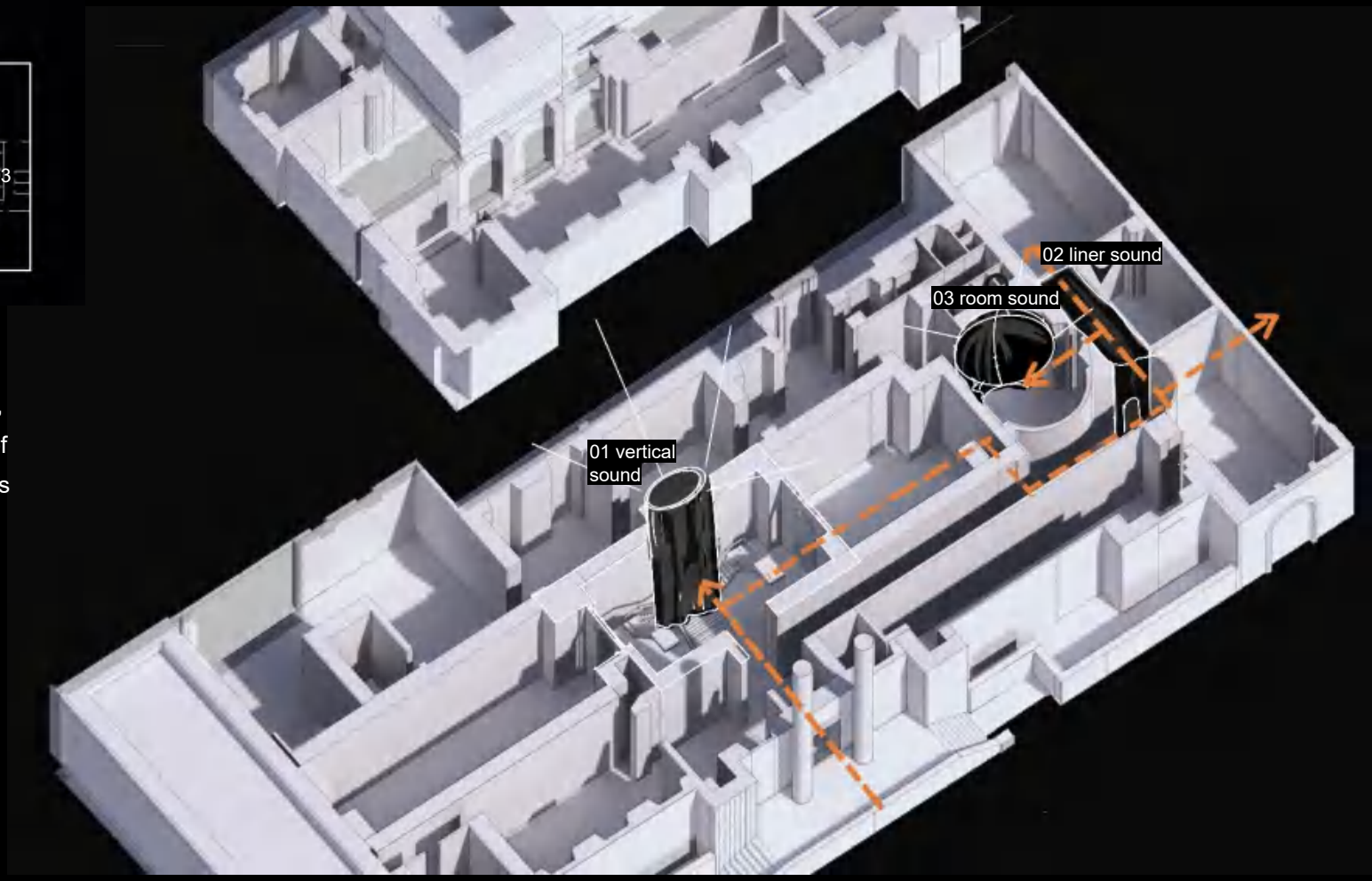
### EXPECTED OUTCOME:

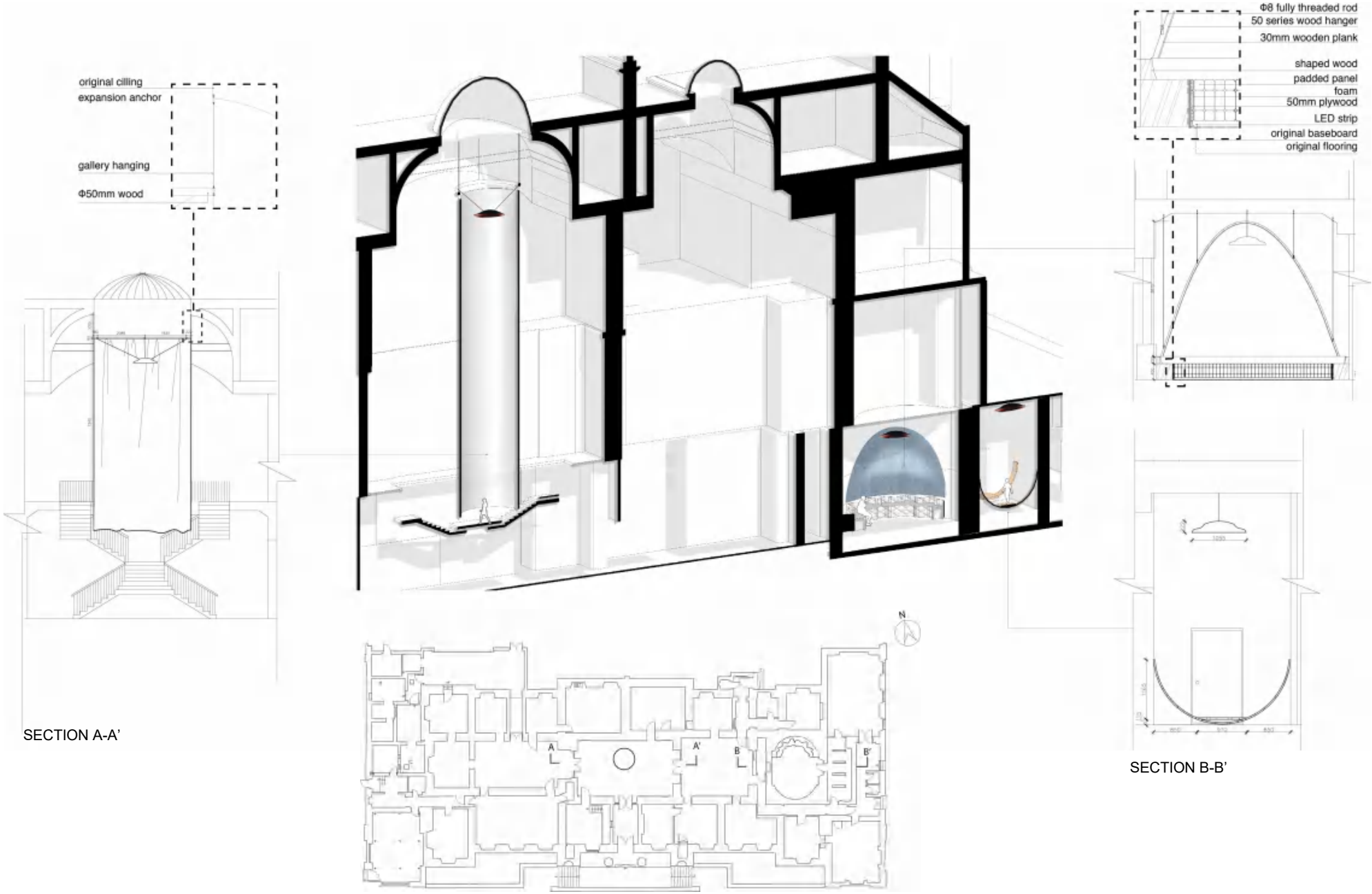
Throughout my research on the subject of sound within spaces, I have come to realize the vast scope of this topic. Therefore, Three sound installations were designed based on the distinct characteristics of the sound fields in the three types of spaces, aiming to enhance people's experience of the Custom House exhibition.

### REFLECTION:

Throughout this project, my understanding of the intricate relationship between sound and space has deepened significantly. Initially, I set out to explore how auditory elements influence our perception of environments, but the journey revealed the vast and complex nature of this subject. The creation of the sound map and the short experimental video became more than just a method to gather and present data; they evolved into tools for raising awareness about the omnipresent yet often overlooked role of sound in shaping our spatial experiences.


Based on experiments and the routes taken by visitors in the Custom House, I have identified three different types of spaces and set up three different forms of sound installations to enhance the exhibition's engagement. Spaces 01 and 03 are transit areas where I hope the sound will enrich people's experience of the space and their perception of the exhibition.



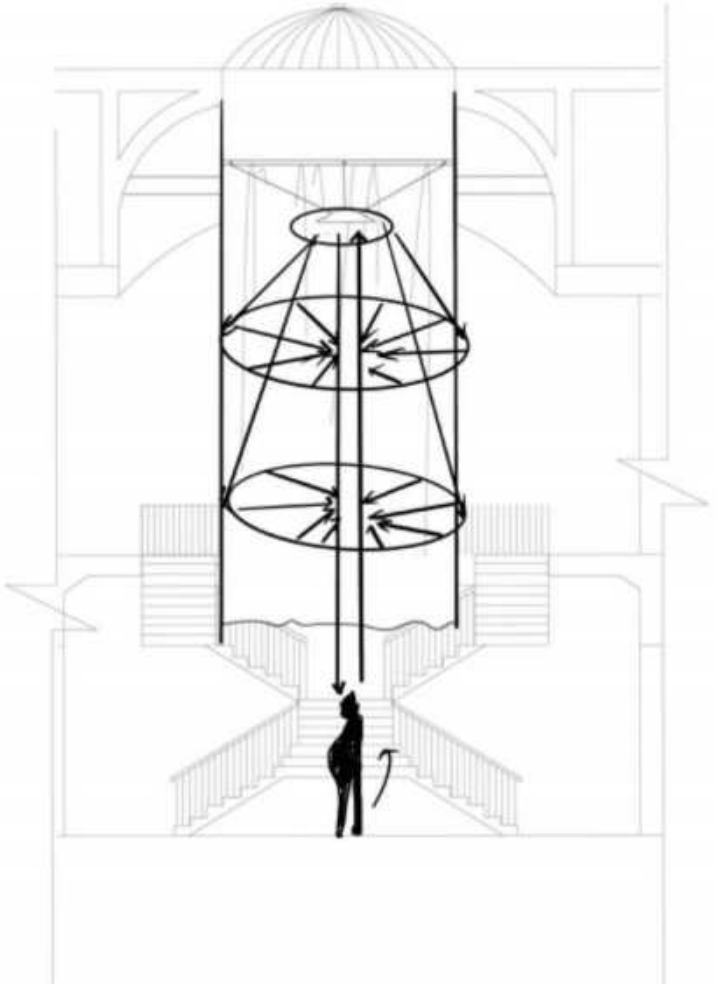



SECTION A-A'

SECTION B-B'

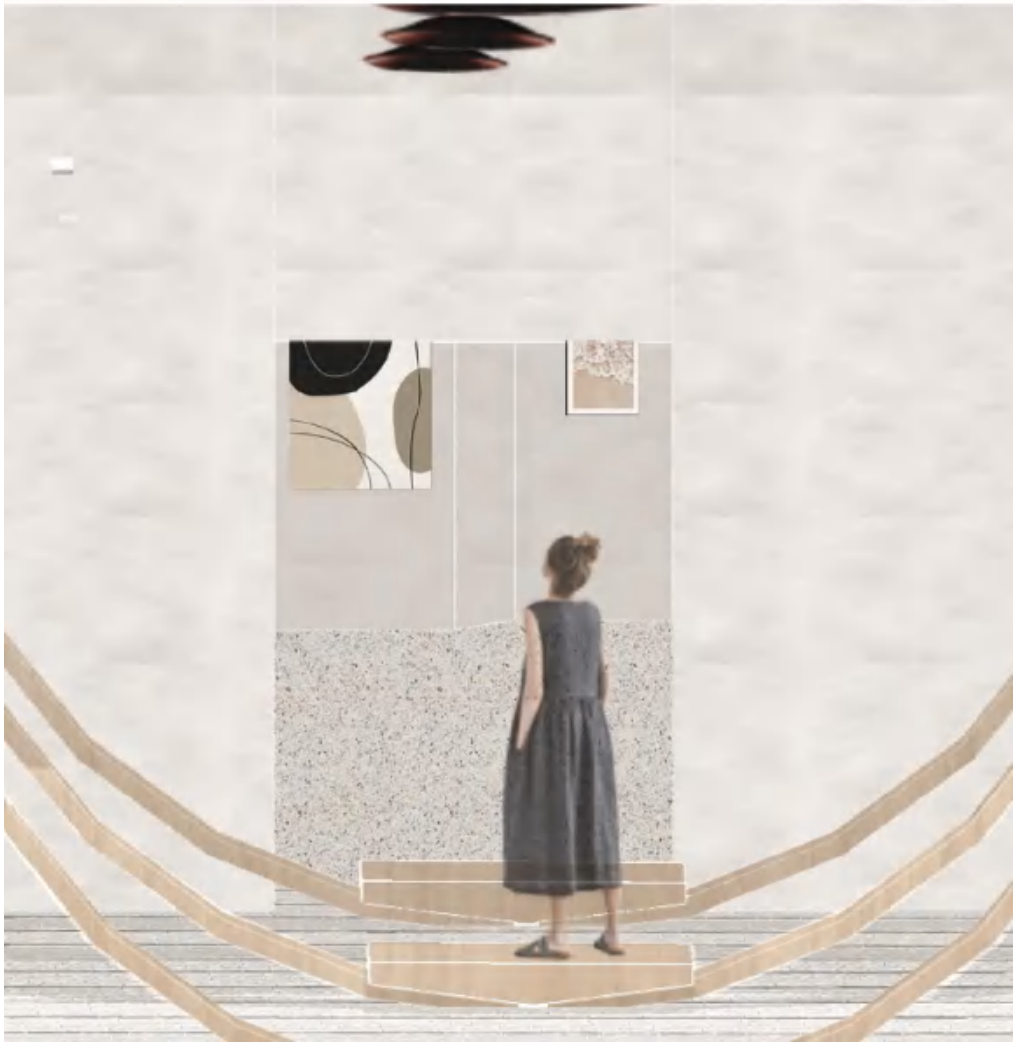
## SOUND ANALYSIS

The enhancement effect of sound in cylindrical spaces was analyzed. A speaker placed at a high position and the movement of people in the vertical direction help individuals better perceive the sound in the vertical space.



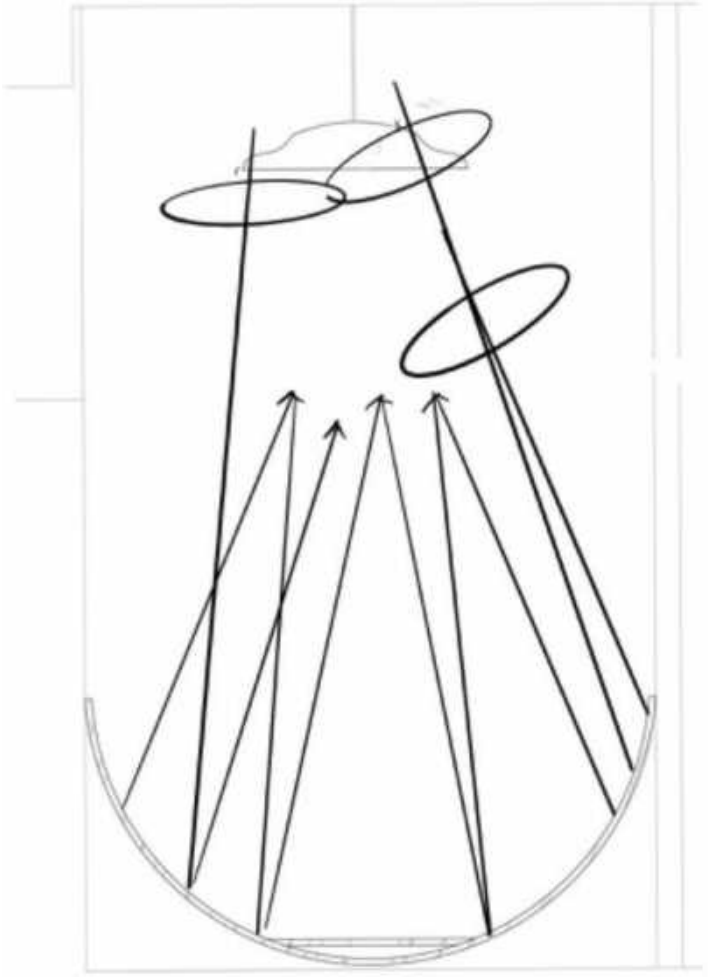
## VERTICAL SPACE MODEL

## MOOD BROAD

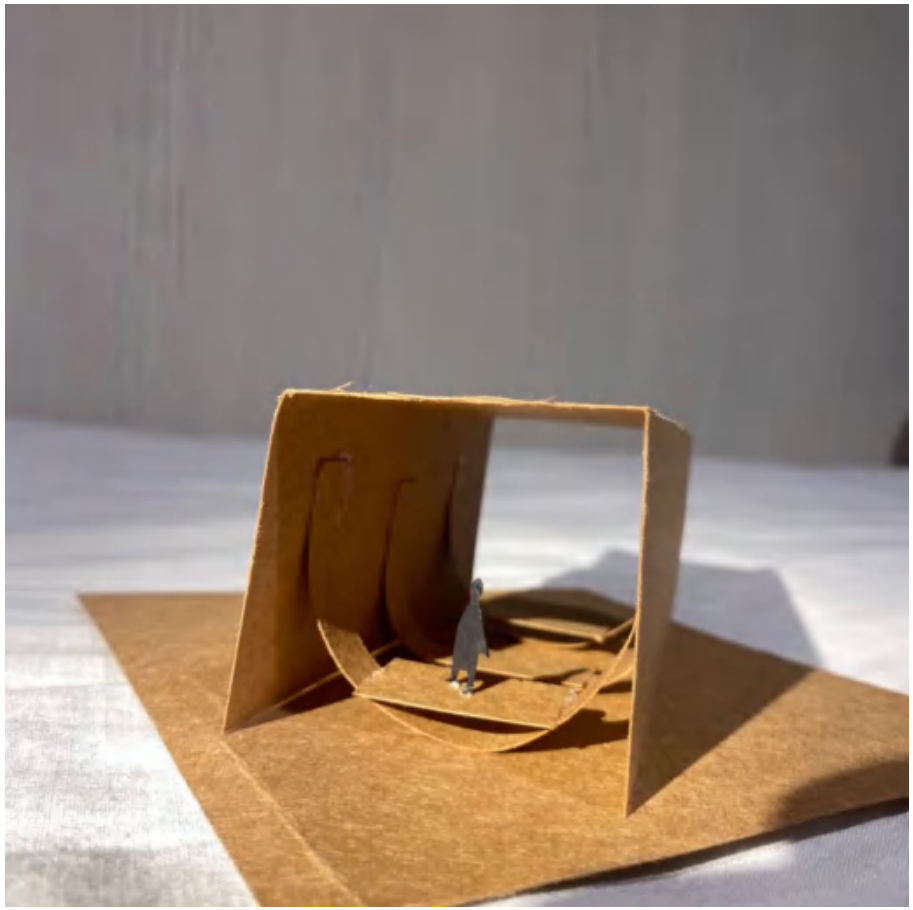


## SOUND ANALYSIS

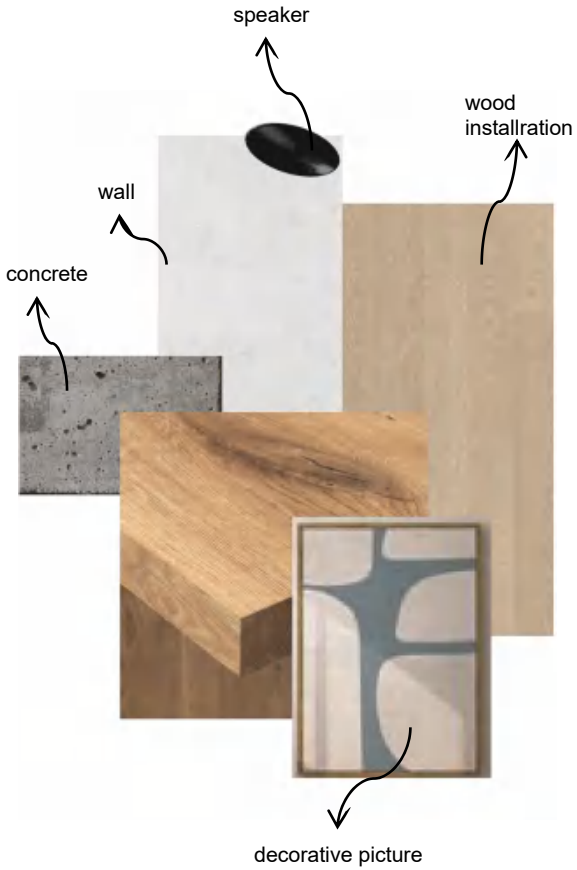
The sound effects in linear spaces were analyzed. Speakers arranged in a straight line create a sense of depth in the sound, while the curved installations amplify the sound, allowing people to experience it as they move forward.



## LINER SPACE MODEL

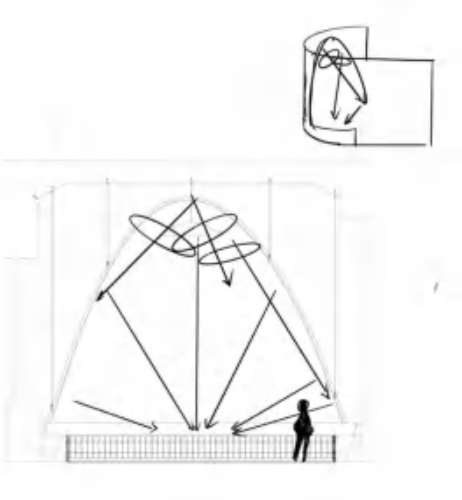


## MOOD BROAD

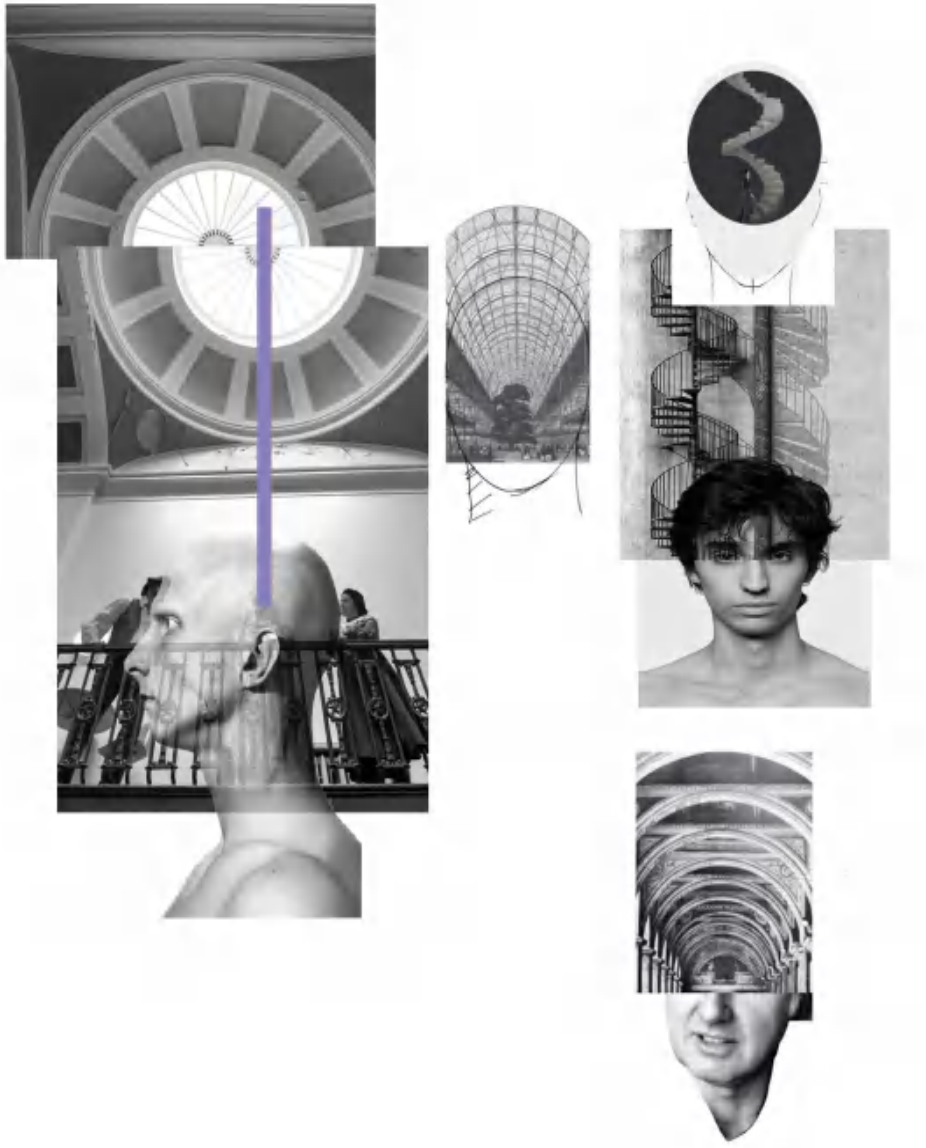


## SOUND ANALYSIS

An arched dome element was utilized to converge sound within the space. Additionally, irregularly shaped seating was designed to allow people to listen to the sound from various bodily positions.



## MOOD BROAD



# Beyond vision— Custom house sound field design

**MANIFESTO & POSTER**

As a creative practitioner, my identity is deeply rooted in the intersection of sound, space, and sensory experience. I approach design with a keen awareness of how auditory elements can shape and transform our perception of environments. My work is characterized by a blend of analytical research and intuitive experimentation, aiming to create immersive experiences that engage multiple senses. I believe that sound is a powerful medium that transcends the visual and can evoke profound emotional responses and connections to space.

My Synthesis project,  reflects this belief by exploring how sound can be used as a tool for exhibition and storytelling within urban settings. Through the creation of sound maps and interactive installations, I aim to highlight the unique auditory landscapes of different spaces and invite participants to engage with their surroundings in new ways. This project is a direct response to my identity as a designer who values the sensory richness of environments and seeks to expand the role of sound in spatial design.