



Spitalfields Sonic Sanctuary

SuperMatter
Interior Design
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I Project Background

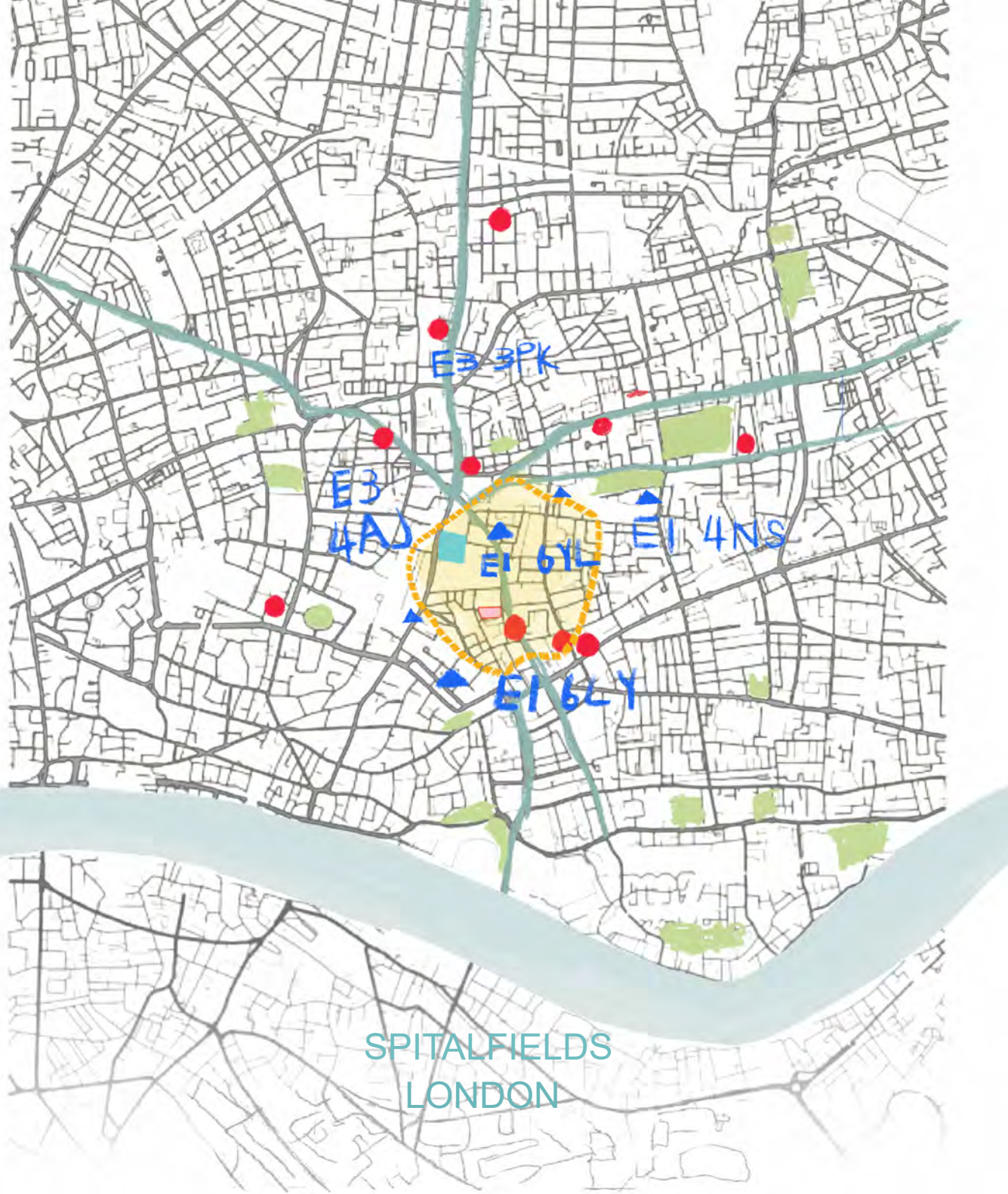
" How can we reclaim interactivity in public spaces within modern living environments, and what role does AI play in this context ? "



Site Research

- Current London Norton Folgate Street Scene





Youth music relief place:

- The dense distribution of musical instrument shops and youth activity locations provides theoretical evidence for the project.



II Core Issues

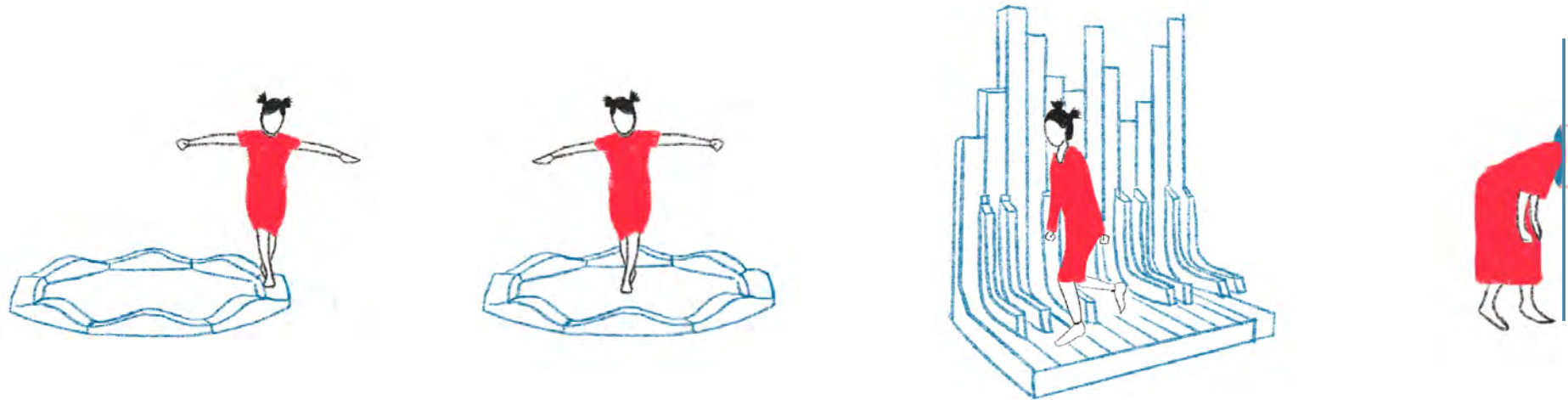
Reduced cultural diversity in spitalfields

In spitalfields, the rapid urban development and economic changes are having a significant impact on the younger generation, particularly those from immigrant backgrounds. Despite the area's cultural diversity, young people are increasingly finding themselves with limited spaces for socializing and cultural expression. This not only threatens their cultural identities but also weakens their connections within the community.

The musical landscape of spitalfields, enriched by its diverse immigrant culture, features an array of traditional bengali instruments and turkish folk songs. These various musical expressions find their stage here, providing a natural platform for cultural exchange and integration within the community. It is crucial that new developments in spitalfields include spaces that are designed to reflect and celebrate the existing cultural diversity, rather than diminishing it.

III
Thesis ambition
and Sound Research

An Architectural Installation That Fosters Dynamic Interaction Between The Human Body And Spatial Environments





Motion Capture



blowing



scuff



press



strum



strum



squeezes



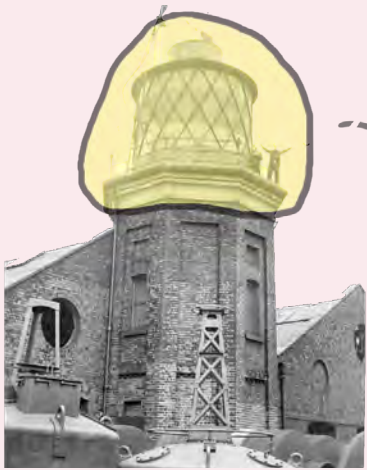
drumming



recite

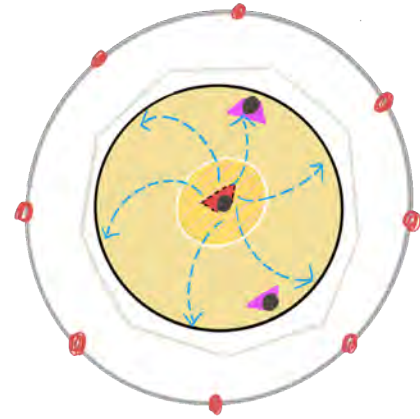


strike

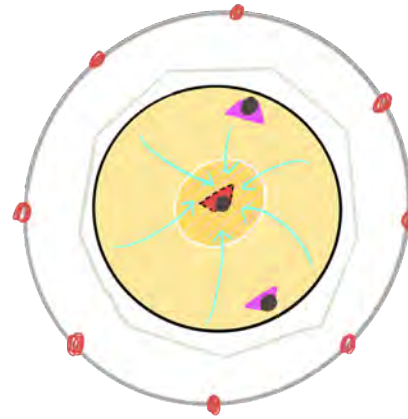


Trinity buoy wharf
Experimental lighthouse

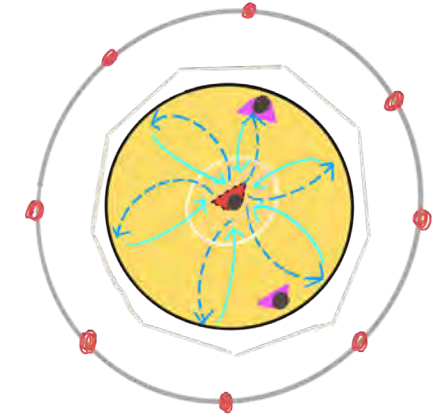
Sound research - shape 1: Domes



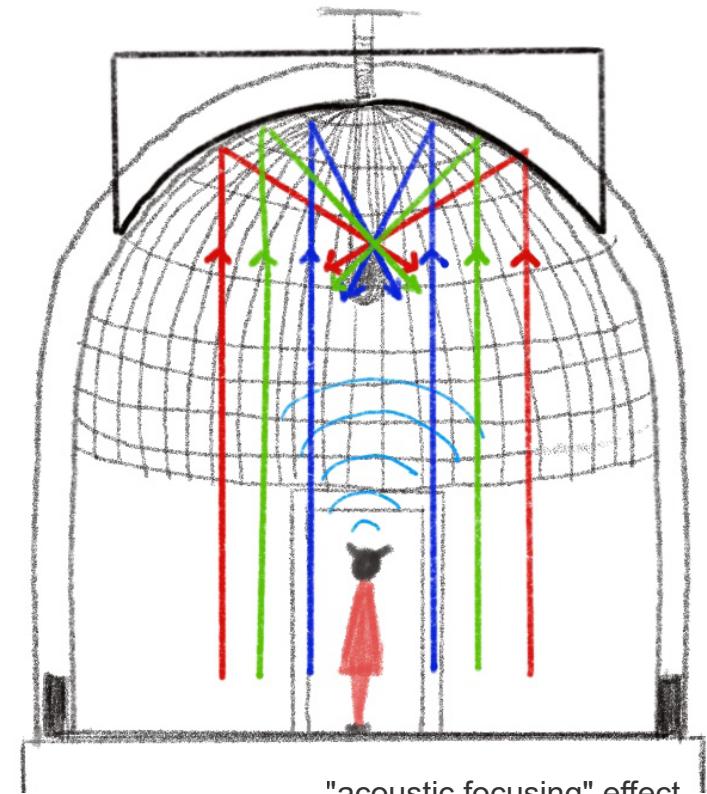
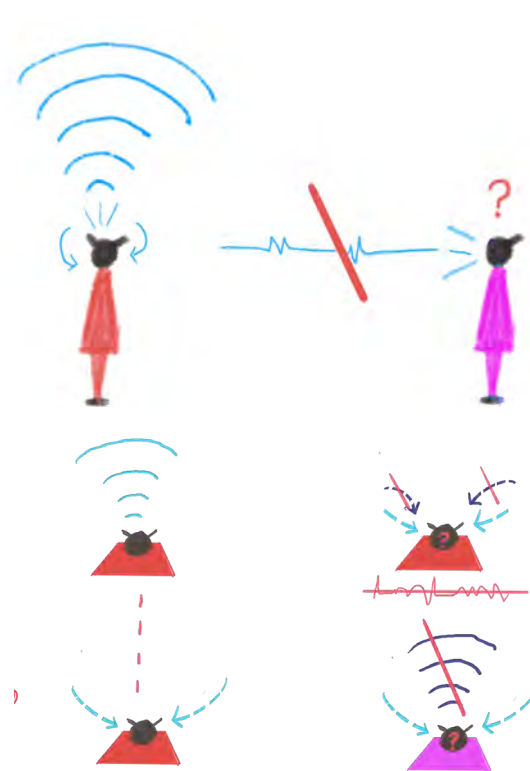
1. Speaking in the middle



2. Speaking by the wall



3. Sound converges in the middle

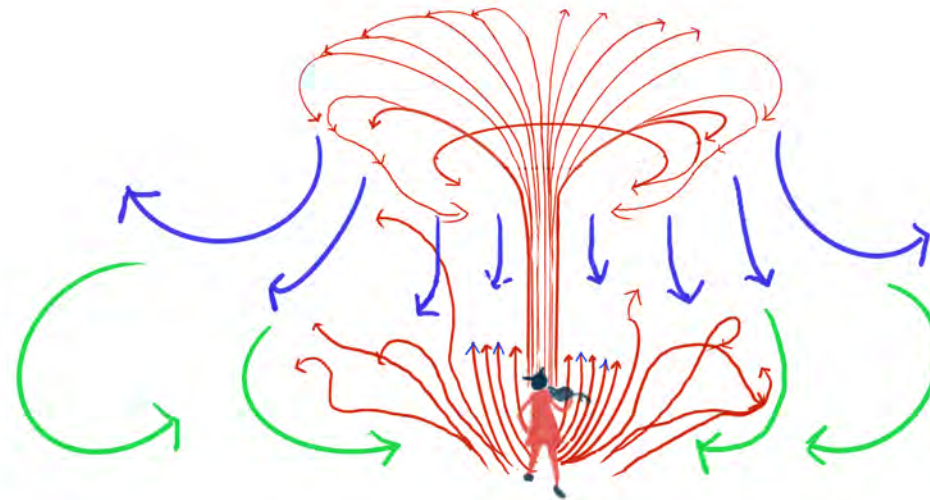
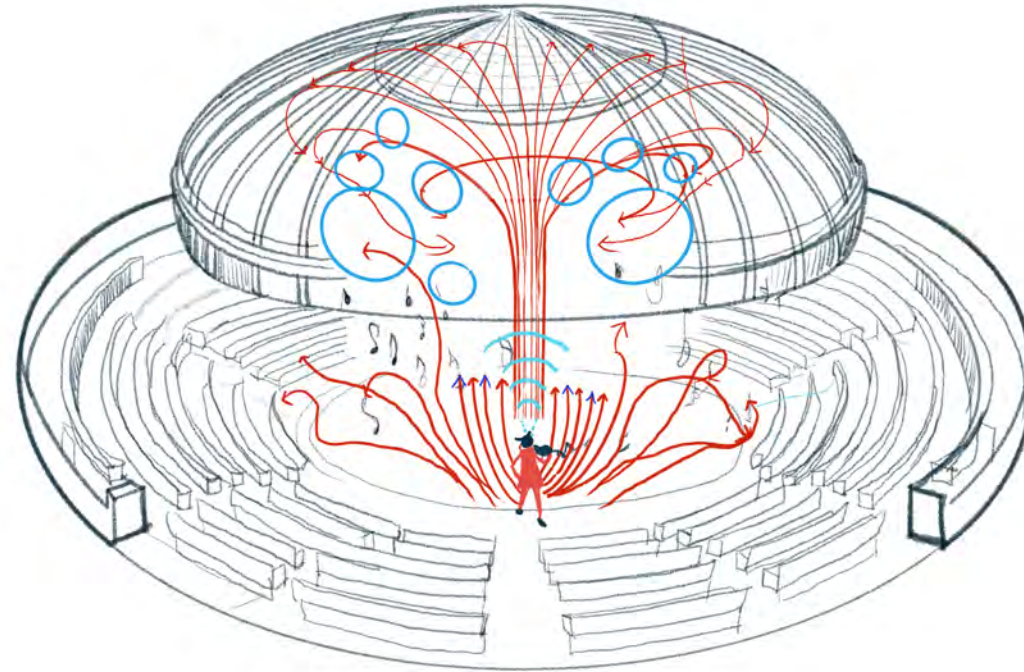


"acoustic focusing" effect.

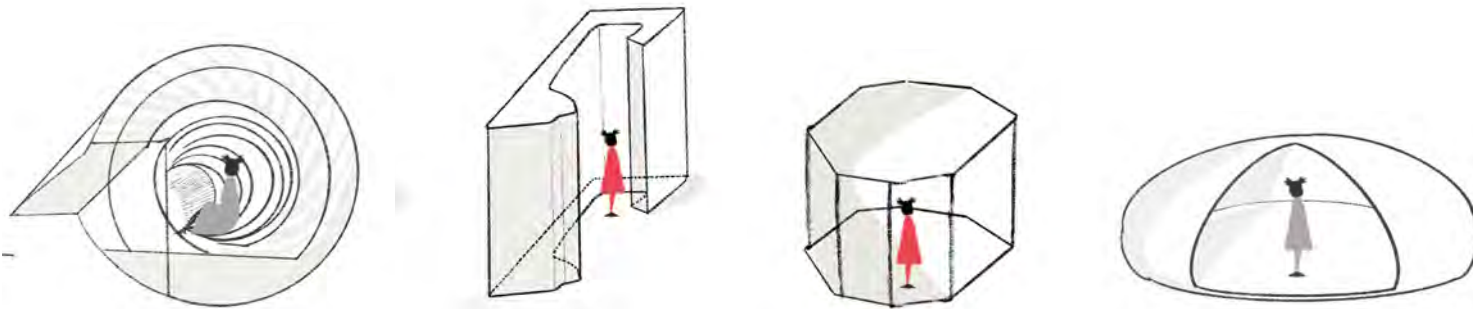
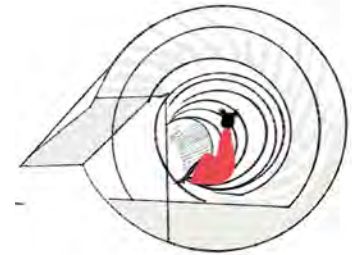
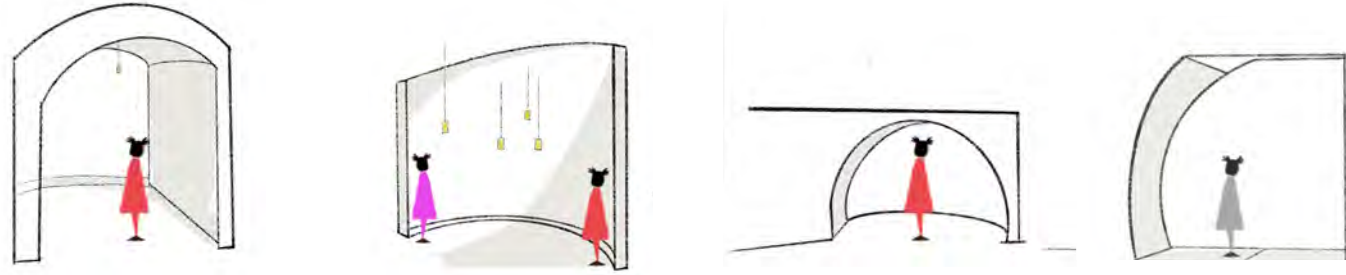
Sound research - shape 2



The Royal Albert Hall
Mushroom-shaped speaker



Sound research - shapes



AI spatial vision using drawing and word prompts
//how shape effects sound



Prompts
//an acoustic dome,
surfaces reflect
enhanced sounds



Prompts
//curved in soft,
acoustic properties



Prompts
//Spiral Space,
Multi-Level,
Sonic Surrounds



Prompts
//giant drum,
hitting the walls
tightly stretched,
synthetic



IV Materials Palette exploring building waste

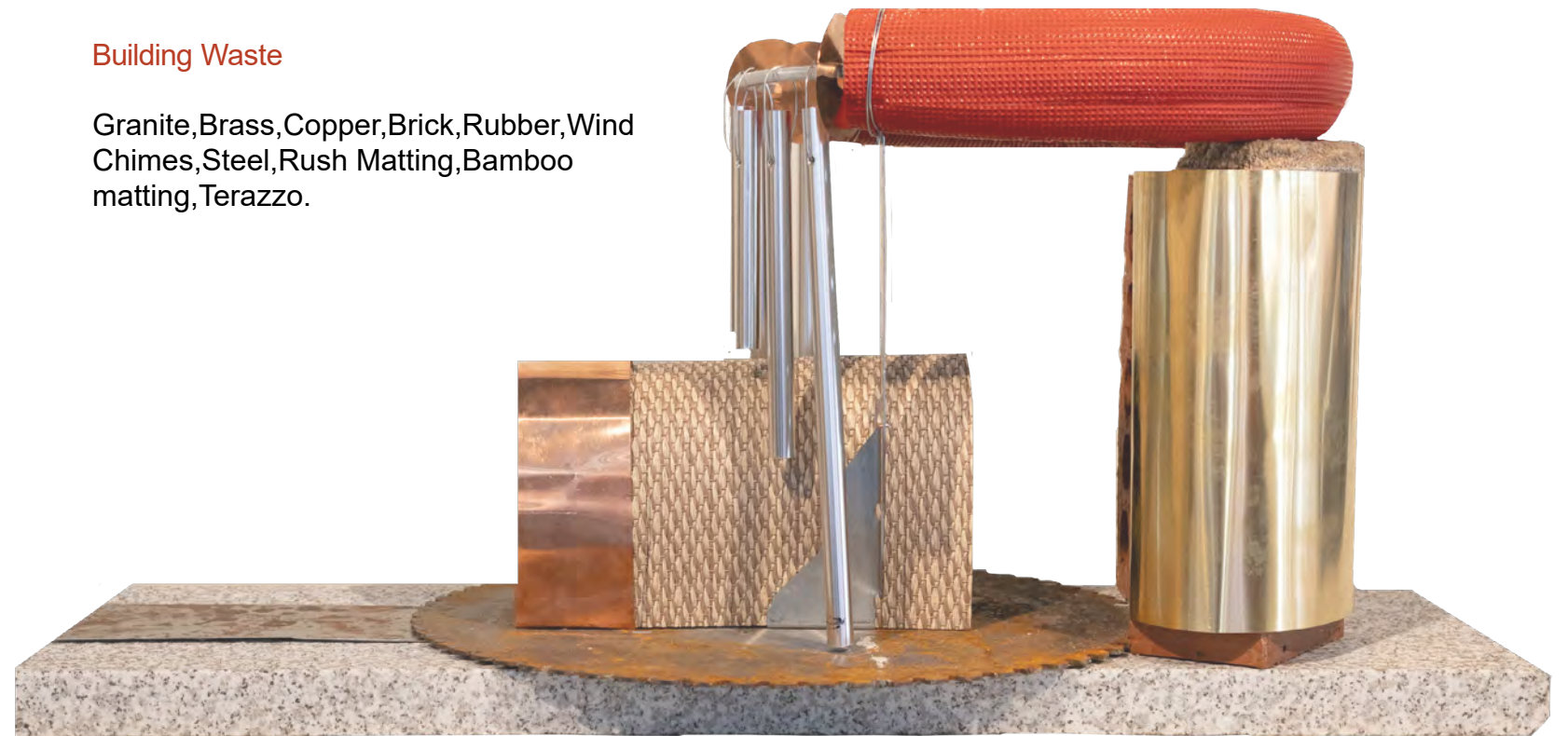


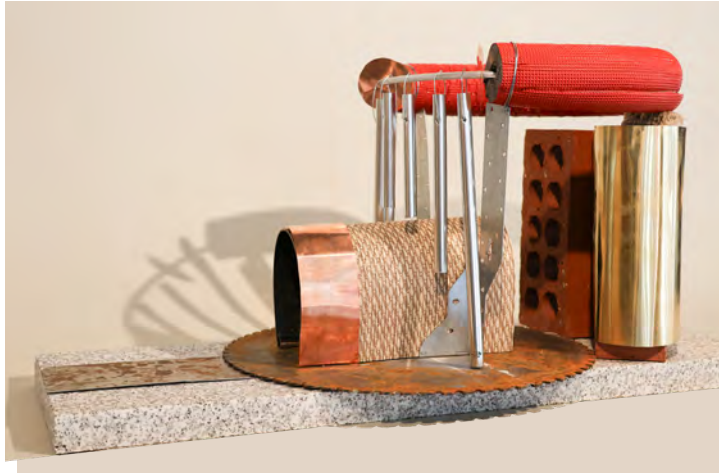


Material Palette

Building Waste

Granite, Brass, Copper, Brick, Rubber, Wind Chimes, Steel, Rush Matting, Bamboo matting, Terrazzo.





∨ AI Generation

spatial exploration

Prompts
//Music Centre,
children's playground
Futuristic design.
interior space
Tadao Ando
McGregor
various shaped slides
Reflective, hard metal



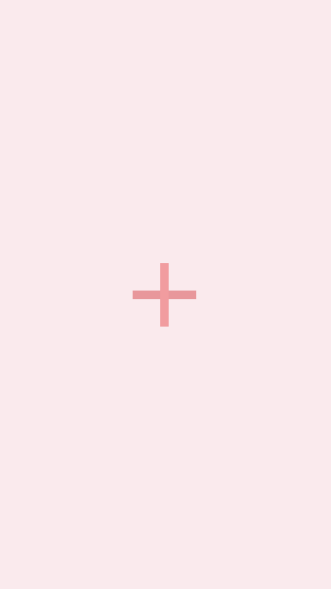
spatial exploration

AI Generation



Prompts

//Inflatable feel,Drum-shaped windows and ceilings,Open space,Wooden,Elastic leather,Dynamic,Curved.



Prompts

//Zaha Hadid,Children's Playground,Instrumental Form,Metal Spiral,Sound Dynamic,Brass,Slide Futurism

Prompts

//Drum Space,Organic Curves,Amplified Drum Sound Interaction,Surreal



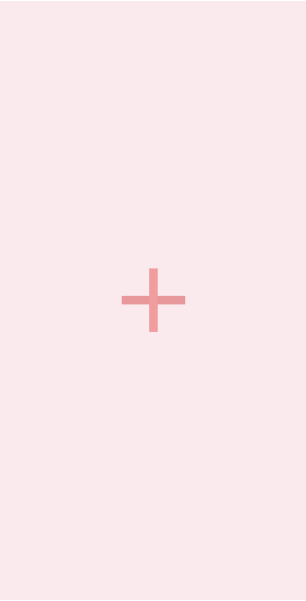
spatial exploration

AI Generation



Prompts

//Inside Wooden Structure,Tunnel,Layers
Inside a Piano Case,Wavy Form,Sound
Diffusion.

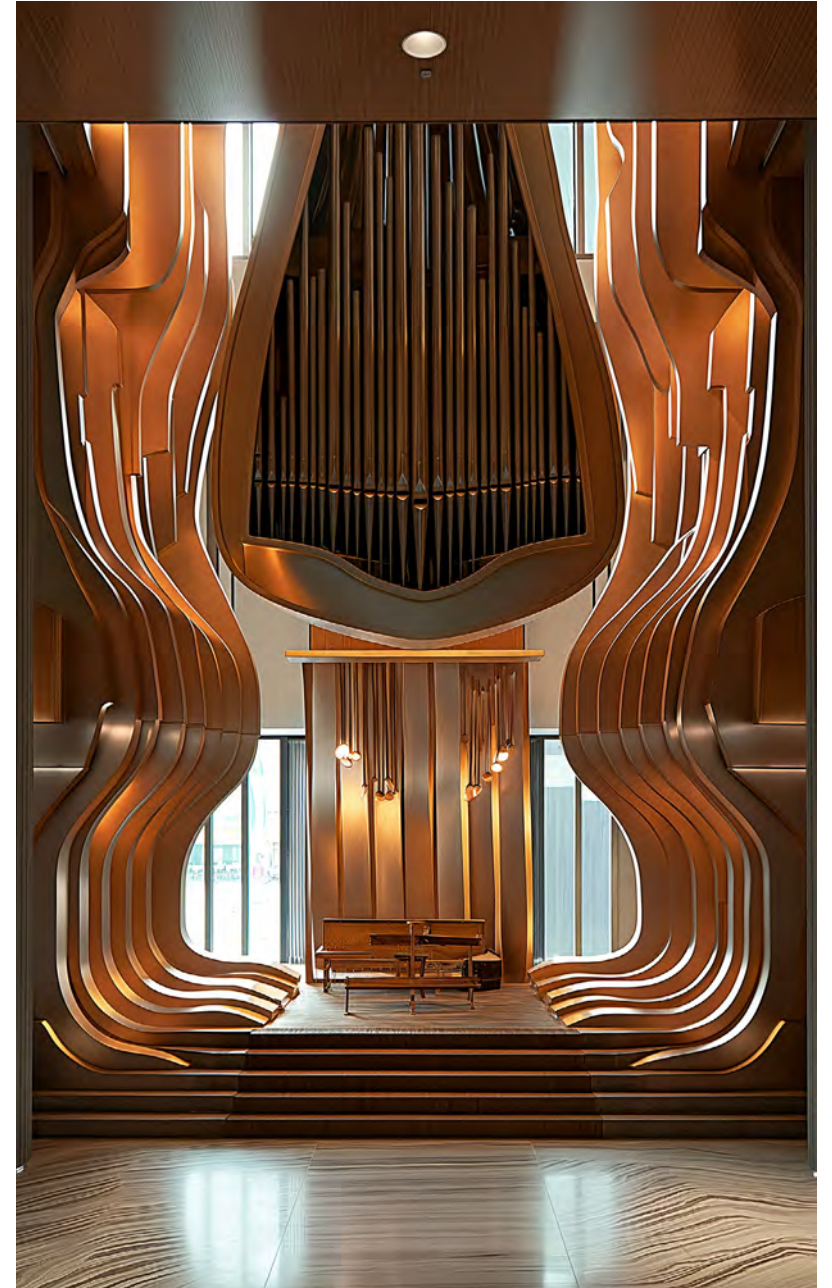


Prompts

//Zaha Hadid,Children's
Playground,Instrumental
Form,Metal Spiral,Sound
Dynamic,Brass,Slide
Futurism

Prompts

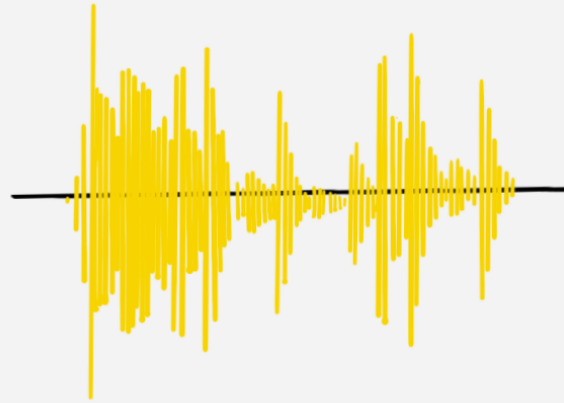
//Pipe Organ,Wood and Metal,Sound
Conduction,Organic Shapes and Curves
Symmetrical Balance.



Furnishings and Finishes Palette



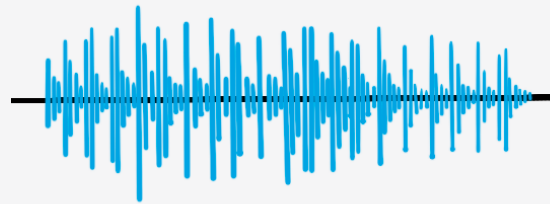
Experiment in sounds
—Simple Tests



TREBLE

Stainless Steel: Sharp and loud treble, high density and depth, long lasting sound.

Steel, Aluminum: Sharp, and loud treble with great echo.



MIDRANGE

Copper: Warm and mellow medium pitch, softness, good resonance sustain.

Zinc: Relatively soft midrange medium-low pitch.



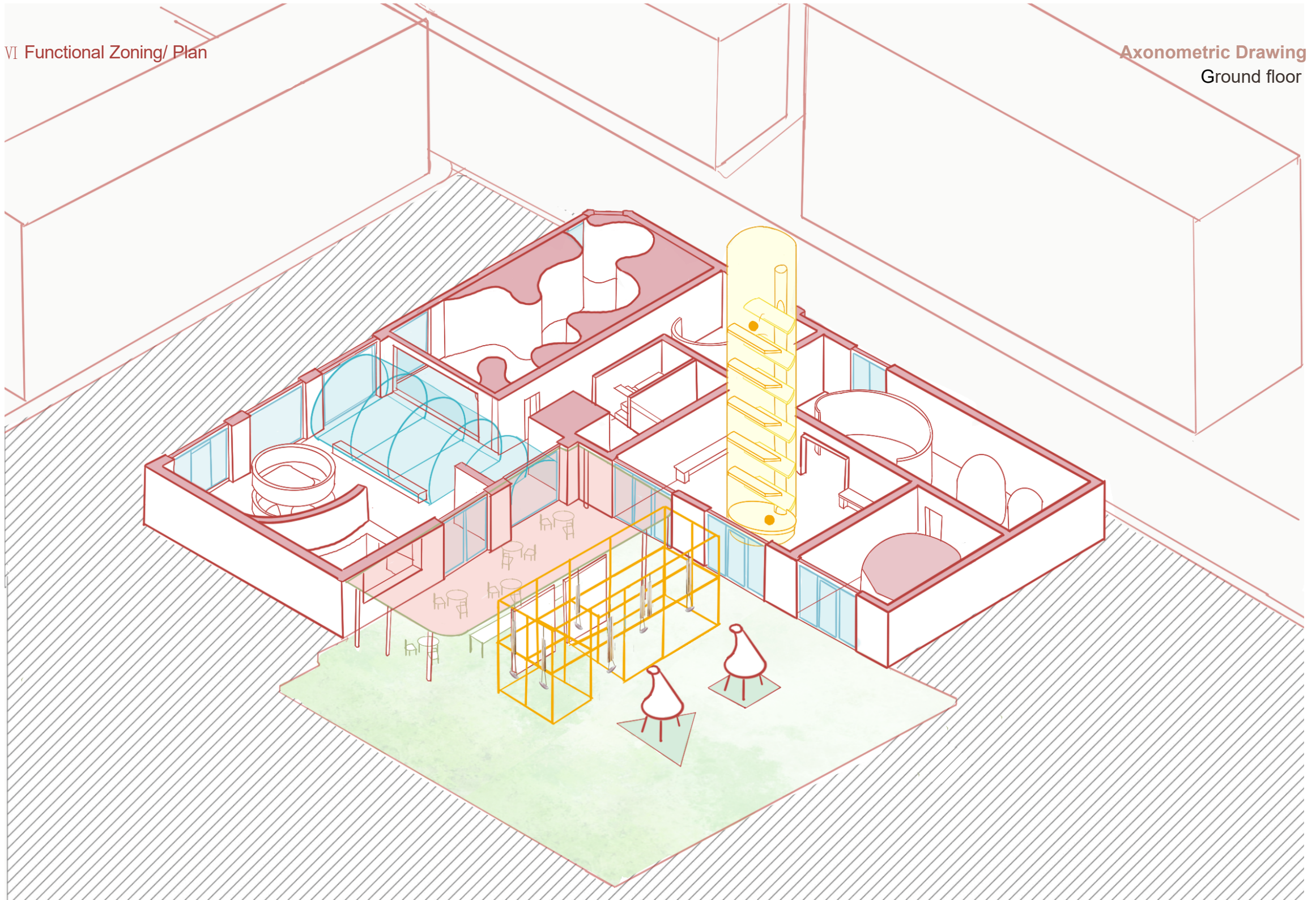
BASS

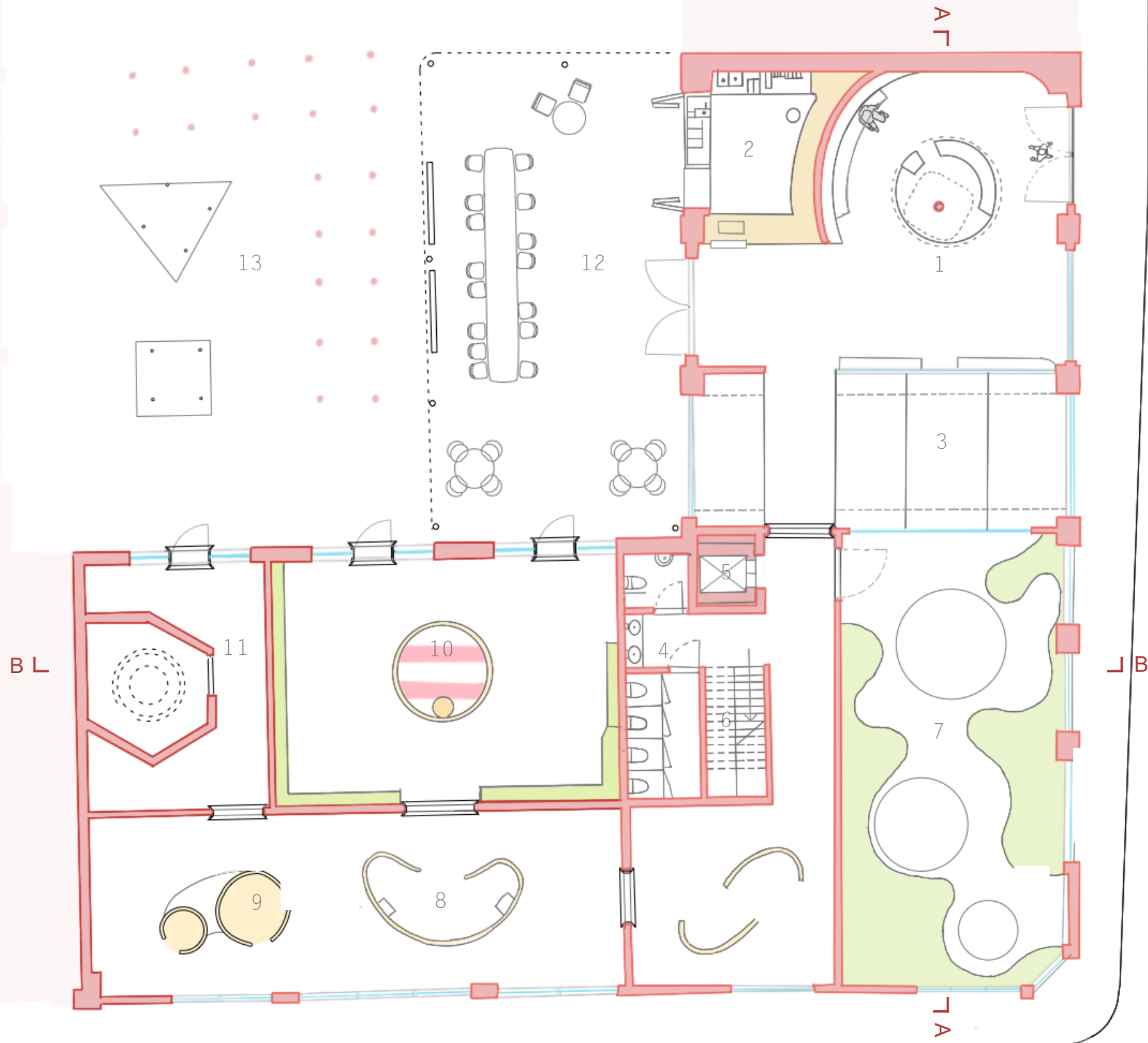
Tin: Considered a lower soprano or high midrange. Lower density.

Low Carbon Steel: shorter duration of sound, quick dissipation of echo.

VI Functional Zoning/ Plan

Axonometric Drawing
Ground floor



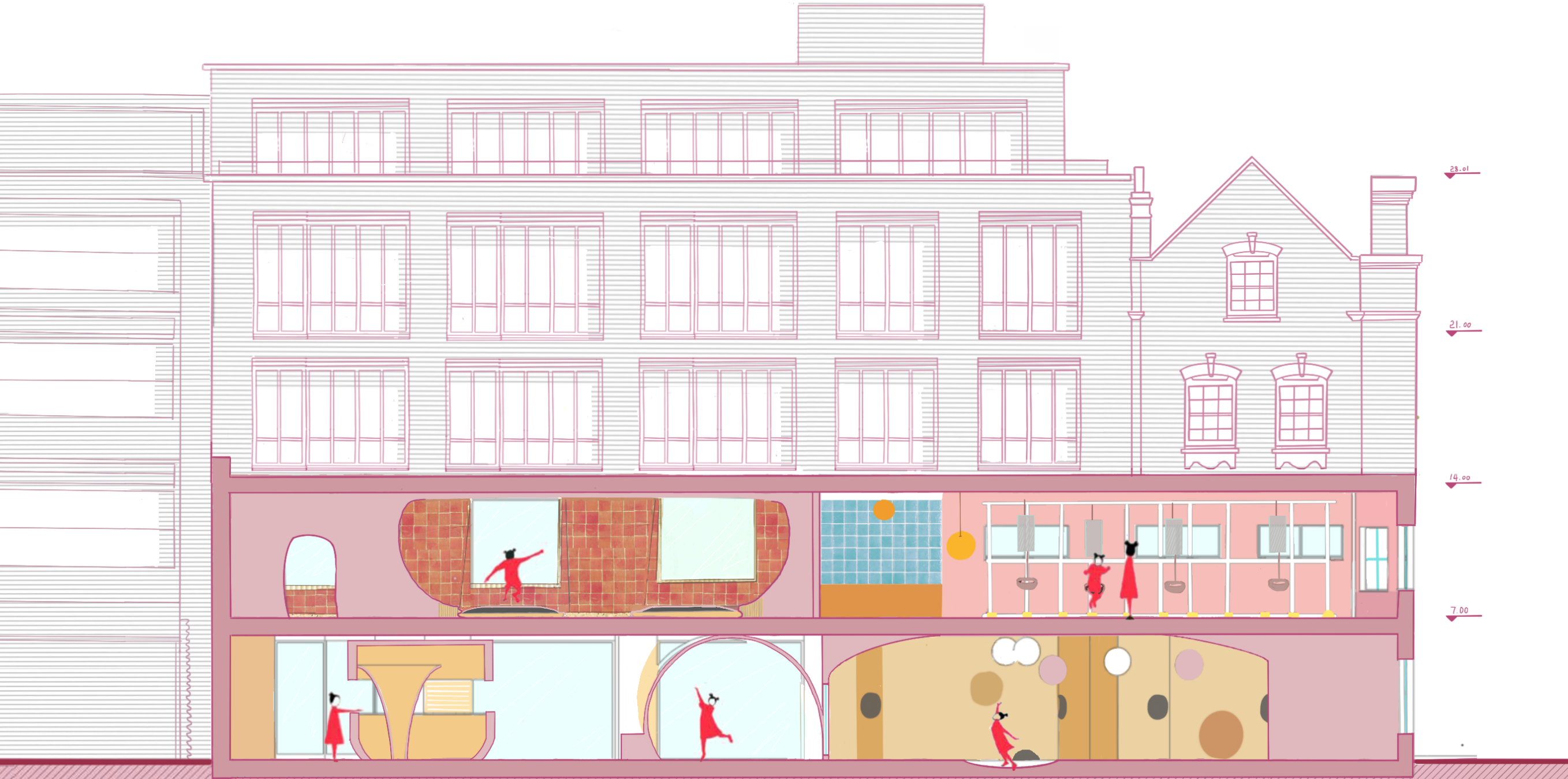


plan 1
ground floor

- 1 reception
- 2 coffee bar
- 3 tunnel stop
- 4 unisex toilet
- 5 lift
- 6 staircase
- 7 scream room
- 8 whispering wall
- 9 domes stop
- 10 music Tower
- 11 drum wall room
- 12 coffee garden
- 13 outdoor facilities

BLOSSOM STREET

Section A-A



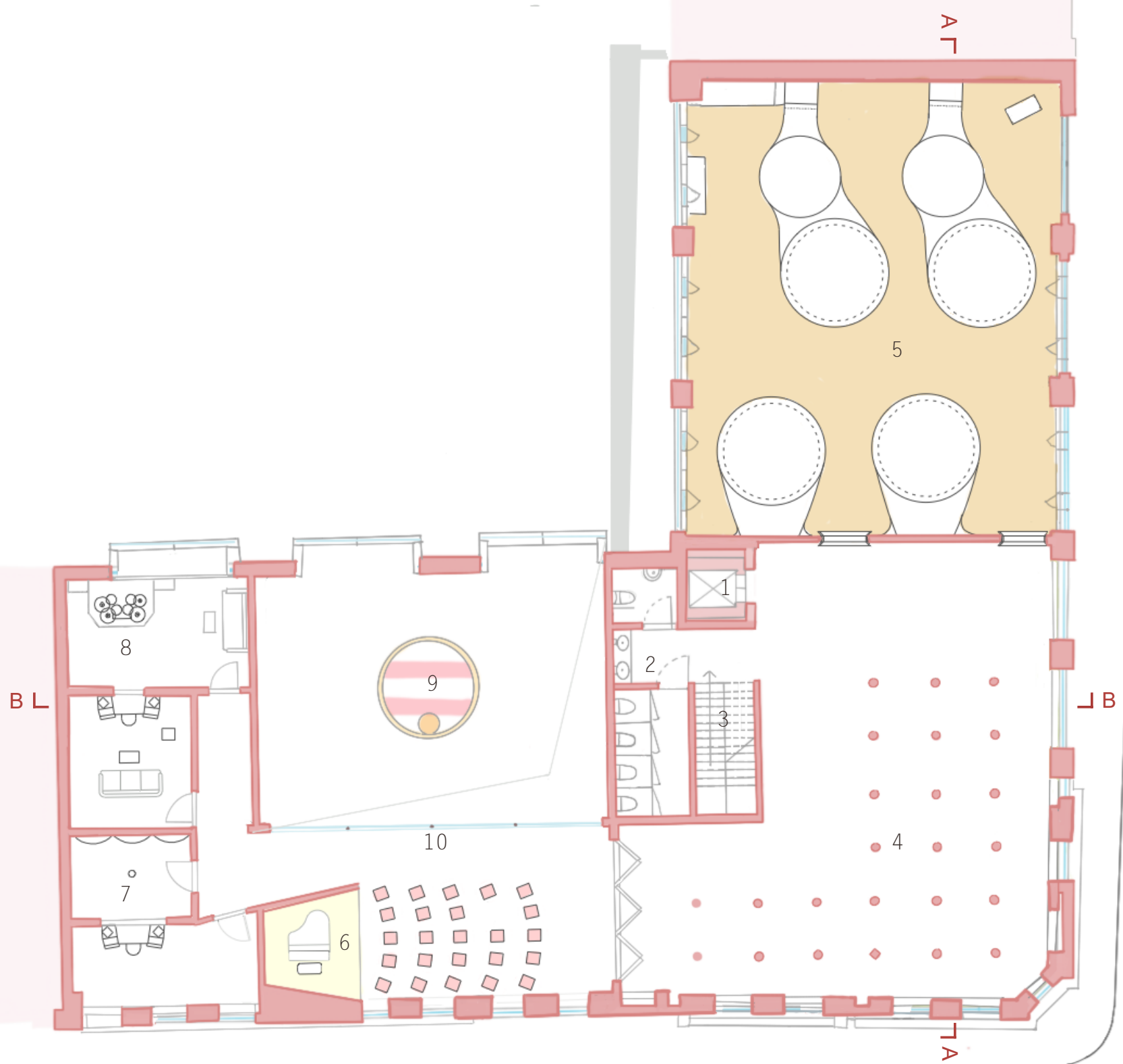




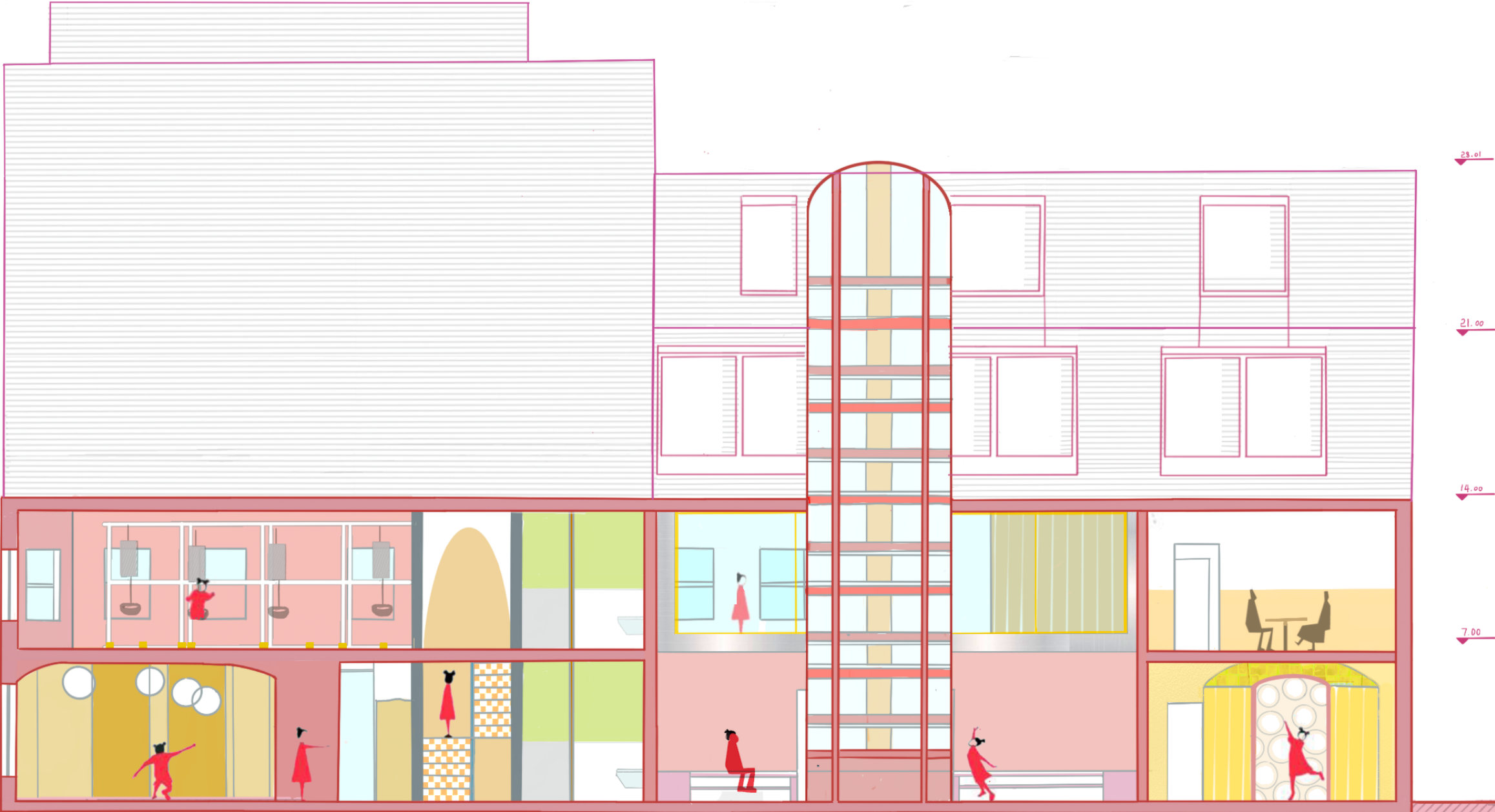


plan 2
first floor

- 1 lift
- 2 unisex toilet
- 3 staircase
- 4 wind chime swings
- 5 drum trampoline
- 6 lecture space
- 7 recording room1
- 8 recording room2
- 9 music tower
- 10 tower viewing area



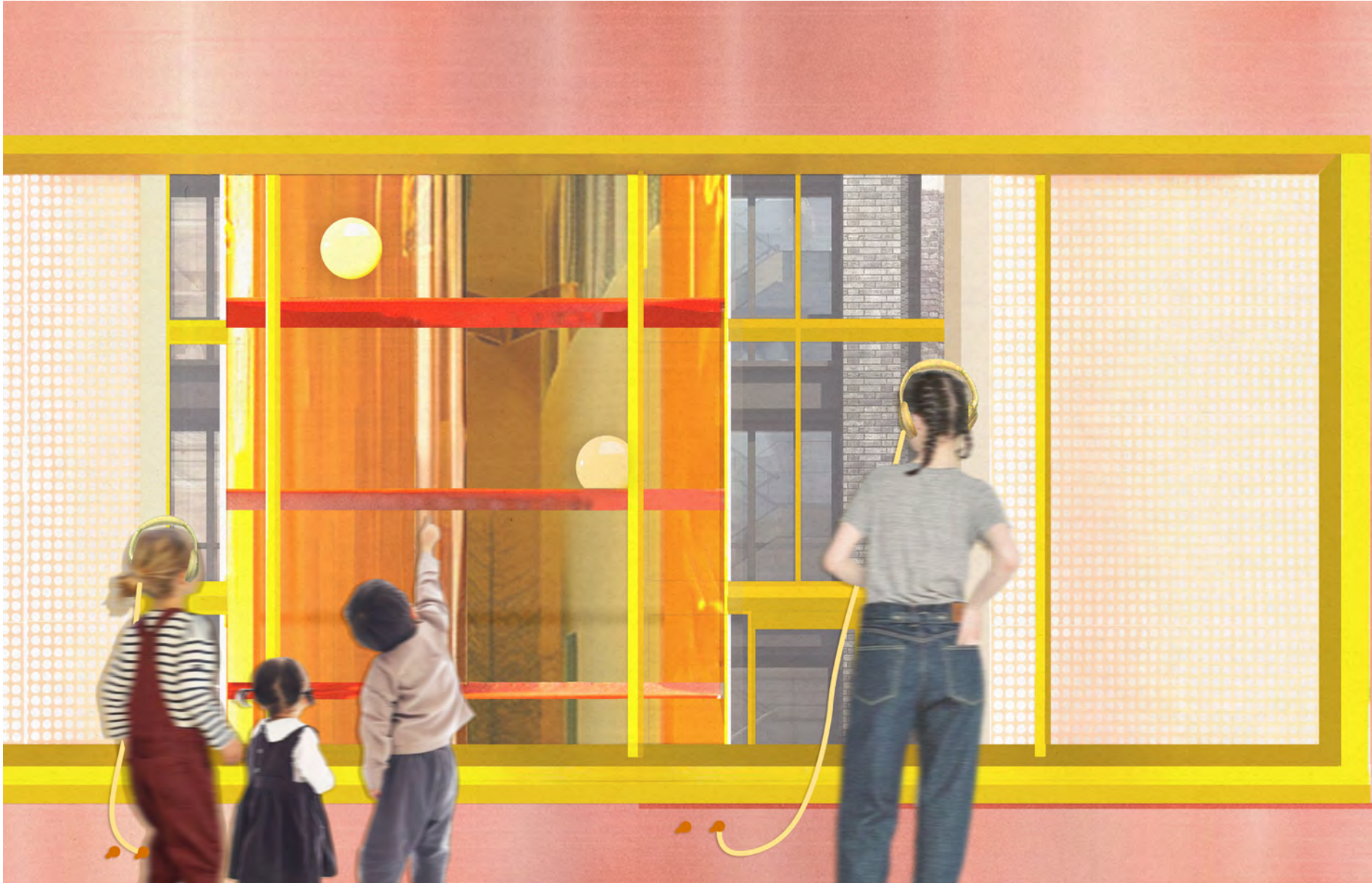
Section B-B





5 whispering wall
ground floor

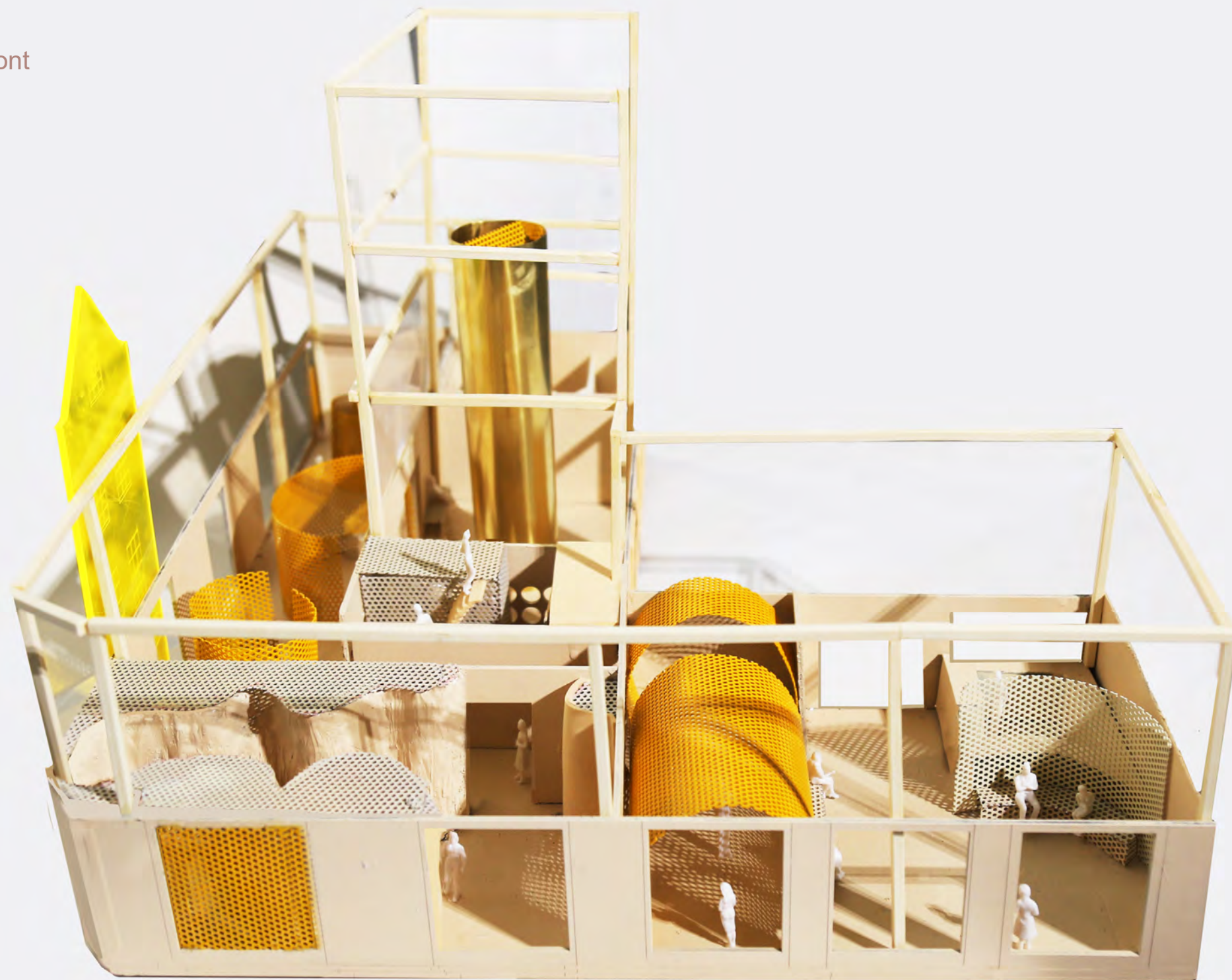








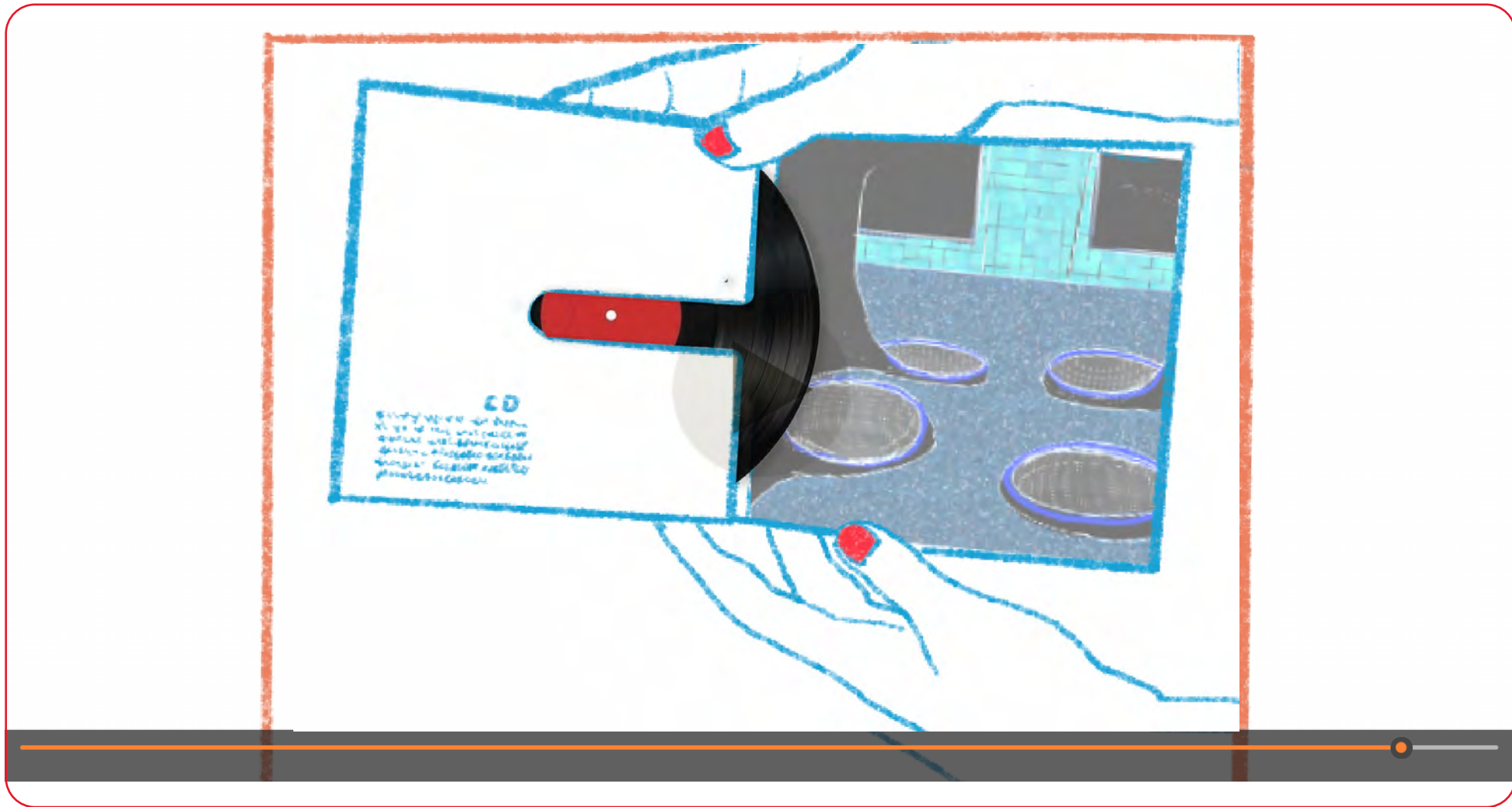
Experiment in shape
1:50 Scale Model Front



Experiment in shape
1:50 Scale Model Back



VIII videos



video link: https://youtu.be/oAmQ_A_bnvQ

