



Illusion Garden

Space Manipulation for Illusion
with Projection Mapping

My Reflection



Questions
&
My Answers



- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden

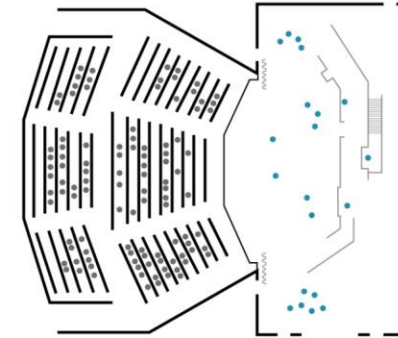
Question One [What do I design?]

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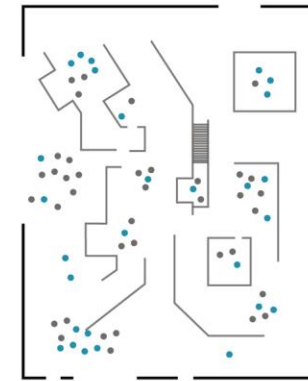


[Function] - Immersive Theater

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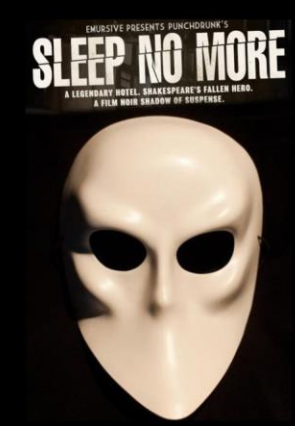


Traditional Theater

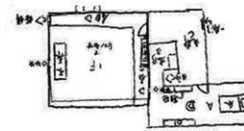
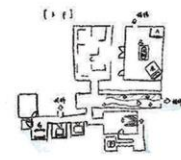
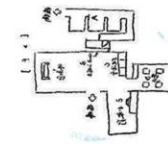
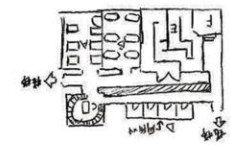


Immersive Theater

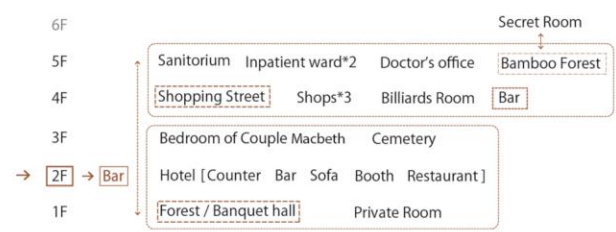
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Immersive Theater in Shanghai
- Sleep no more



McKittrick Hotel



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As we boarded the elevator, all I could think about was how those three were really not going to tell us not to touch the performers? (Later to run.) Instead, the elevator attendant gave us one final directive: "For

All three rules were frequently disregarded. Even in the presence of performers, patrons were on their phones and talking loudly. Even more troubling was how audience members treated *Sleep No More* like a competition. Those who did their research could have found *dozens of articles* about how to have the best *Sleep No More* experience, many of them including tips about how to land a one-on-one. (Basically, there are some scenes in the show only meant for one audience member to see. A performer will select someone and take them to a room that isn't accessible to anyone else.) The articles suggest that to get a one-on-one, you have to follow a performer closely, and be towards the front of the crowd where they can see you.

But *Sleep No More* performers *move through the Hotel quickly, running up and down stairs*, always with a stampede of audience members behind them. These moments made me scared for the safety of everyone involved, especially for those patrons not physically able to run up and down stairs.

3. Wear comfortable shoes.

Punchdrunk staged *Sleep No More* throughout the McKittrick Hotel. There is no stage; you don't take your seats. Every room in the multi-floor "playspace" is the "set," and decorated to create the world of *Macbeth* in the hotel. Whether exploring the space on your own, or chasing actors to witness the action, audiences *climb a lot of stairs and may even jog to follow performers.*

uncomfortable, yet intrigued.

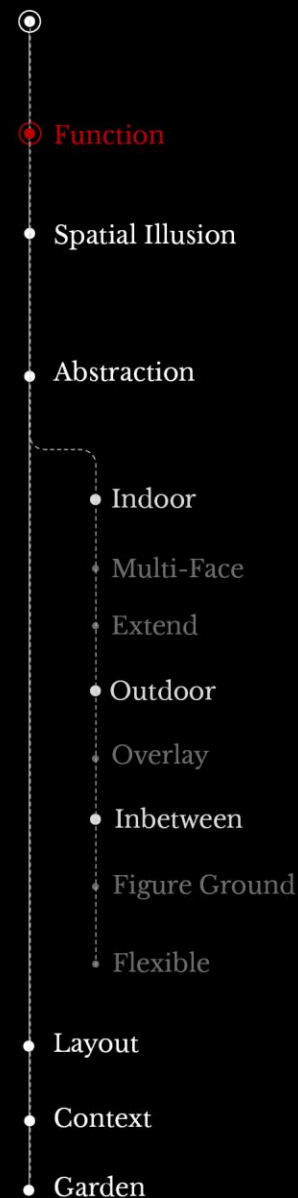
- While there is no official dress code, it is fun to get dressed up, but comfortable shoes are advised as you will be walking, sometimes running around a lot.
- All sales are final. Tickets may not be exchanged for another date or time. However, it has been reported that if you are running a bit late and they are not overbooked, they will do their best to accommodate you.

One winter four years ago, he was doing the same dream almost every day. In a very dark walkway, the lights flickered, and he felt that it was a hospital that could feel the surrounding formalin. There was only one person in the entire aisle, wearing a mask on his face and wandering in the promenade.

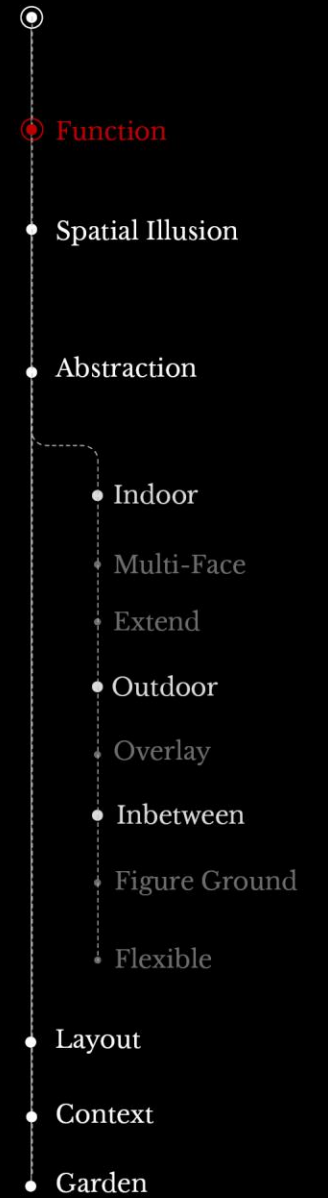
He immediately searched the Internet and found nothing in the end. A friend told him that it was a story of "Macbeth". But how does it perform in the end, as if the friends don't know, just know that *they have to run constantly, run constantly, and run constantly.* That night he saw the play.

From that day on, his dreams were closely linked to Sleepless Night. In the years that followed, like the name of the play, he spent many nights thinking about how to bring such a very special drama to China.

- The audience needs to wear a white mask all the time, can't talk, can't use any electronic products to take pictures.
- It is best to give the actor enough room for performance. Although it is a close-up view, but also respect the actors, try not to disturb their performance.
- It is best to wear comfortable clothes and shoes that are easy to run when you go to the show. Sometimes in order to catch up with the actors, you need to run, or you will lose.
- Note that the staff with the black mask is asking for help if there are any problems, but they will not give you any guidance on the watch.

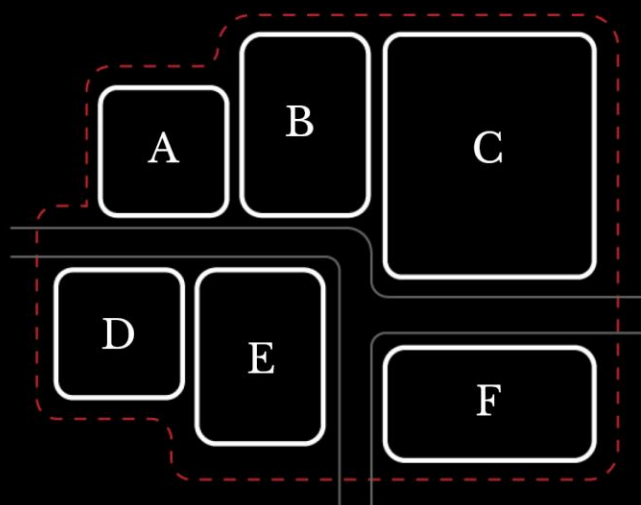


Contrast (Problem?) :
Limited Space - Larger Space Requirement

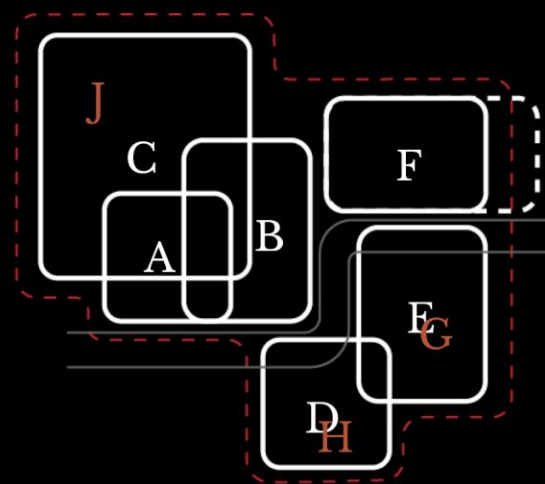


Question Two [What actually I hope to explore in my design?]

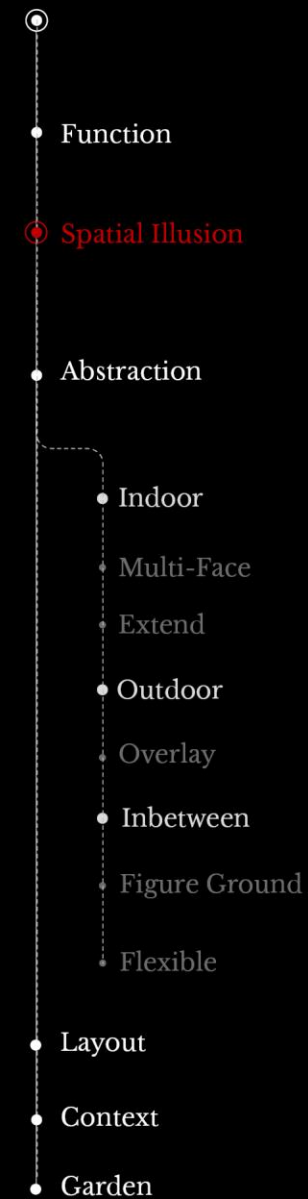
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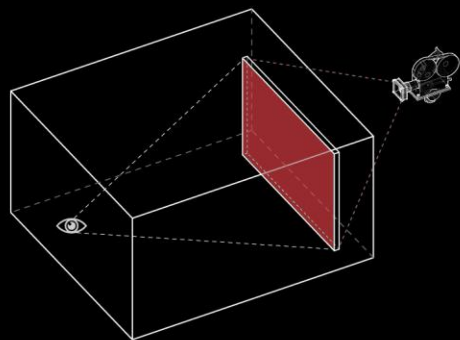


Traditional Layout

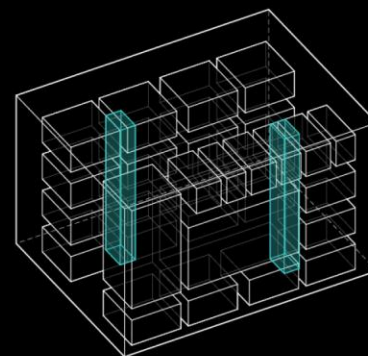


Compressed Layout
(*Compressed Space*)

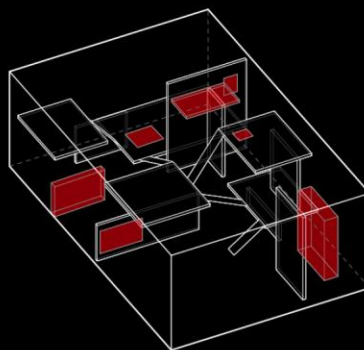




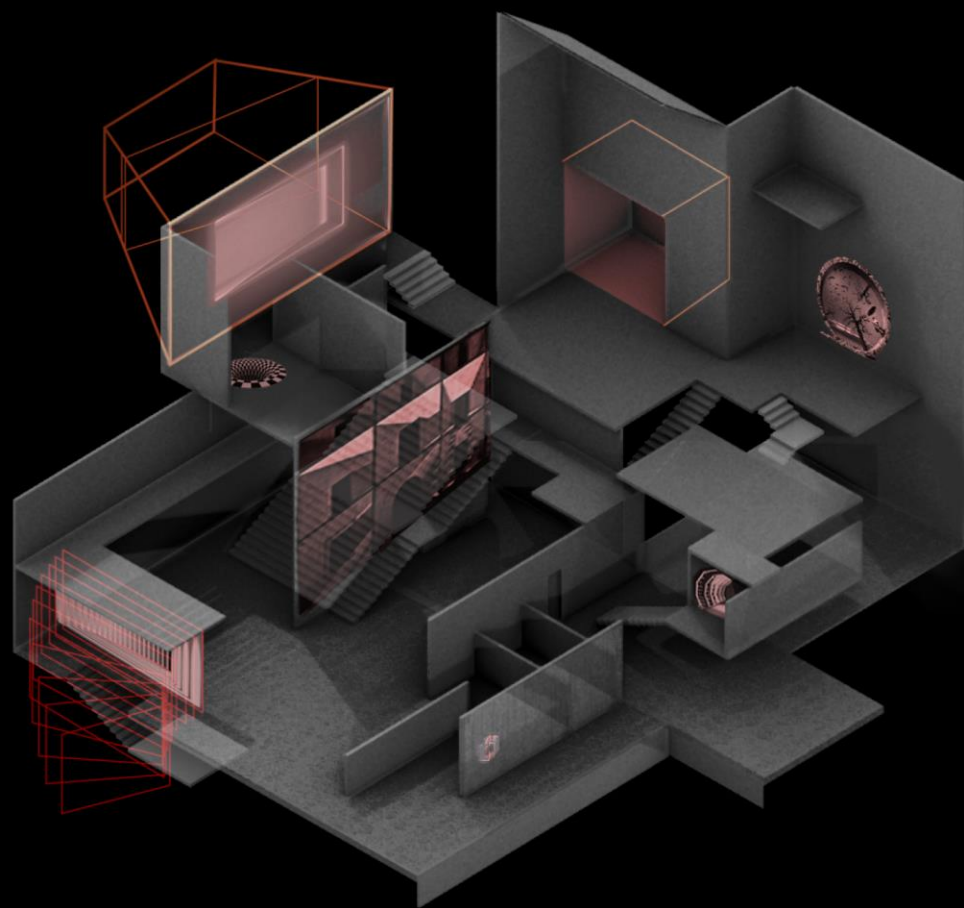
Cinema
(Infinite Screen with Virtual Video)



Normal Immersive Theater
(Real Scenes)



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Mixed Reality Experience

3D-Space composed by screens
+ changing Virtual Projection(1D-Time)

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Question Three [What's the **tool** I use to **transform/compress space?**]

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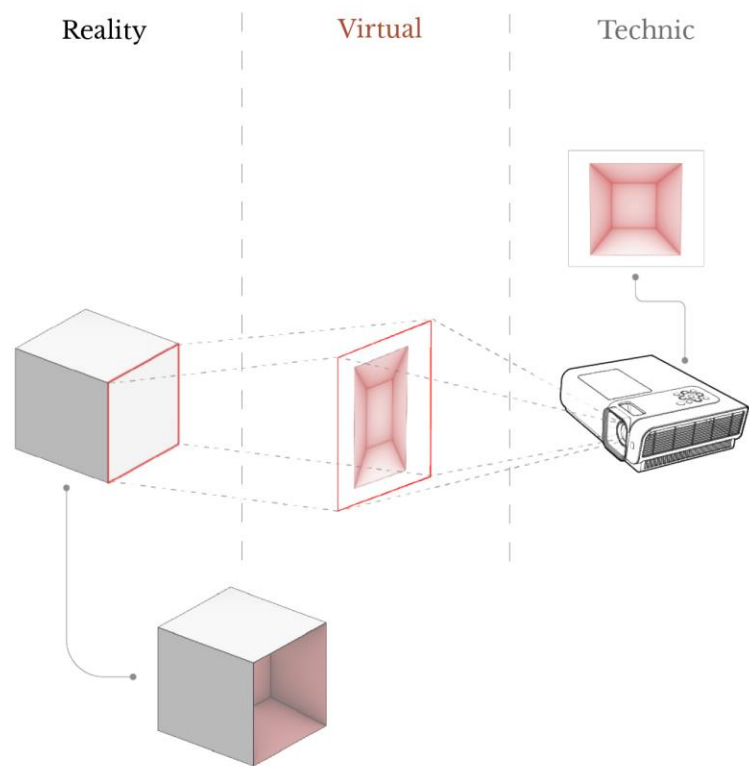
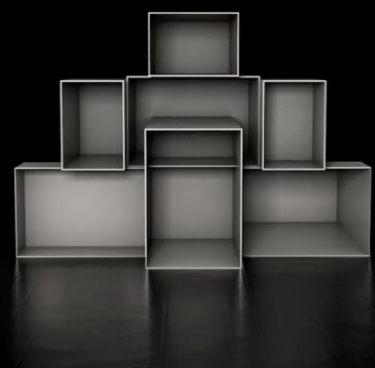
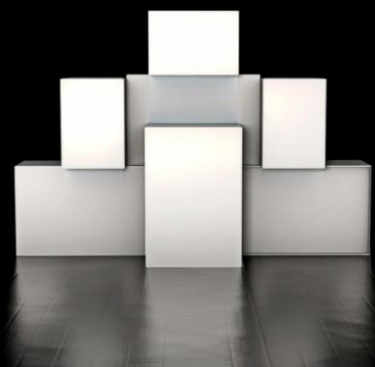


Vivid Sydney - Projection mapping on Sydney Opera House

Spatial Augmented Reality

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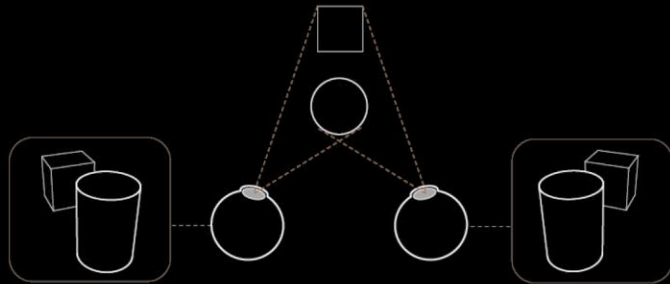




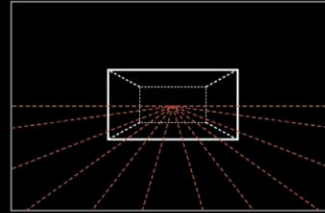
*Projection Mapping
(Spatial Augmented Reality)*

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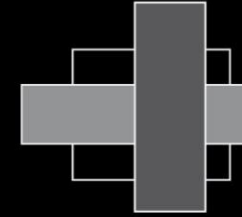
[Space Cognition]



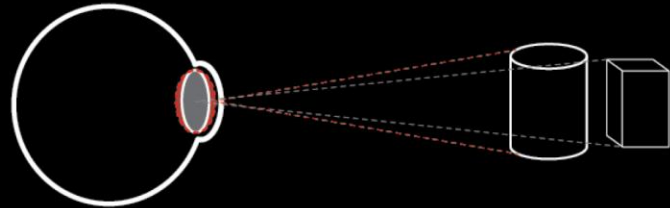
Binocular disparity



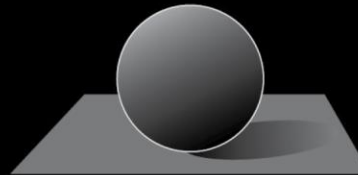
Linear Perspective



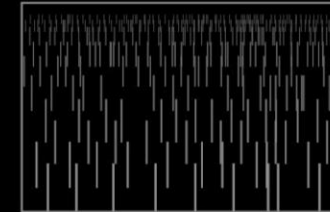
Overlapping



Change of lens thickness



Shades and Shadows



Texture Gradient

Physiological Cues

Optical science, Neurosciences, Ophthalmology
Computer graphics and geometric modeling
Automatic Location Identification and Programing

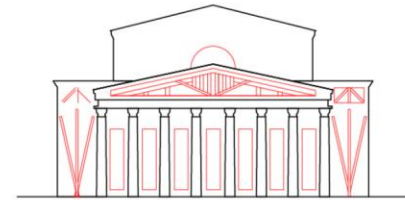
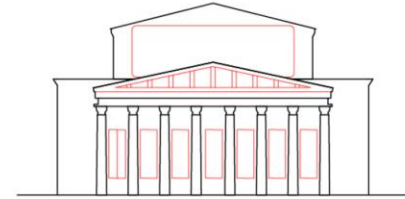
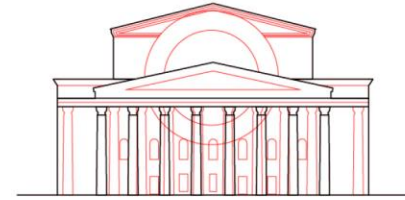
Psychological Cues

Analyze visual information based on learned experiences
Infer rough 3D information from a 2D image

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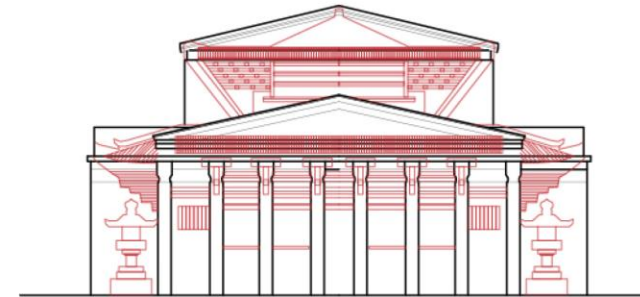
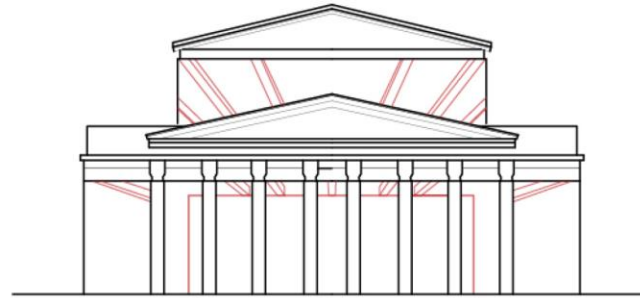
Circle of Light Moscow International Festival, Moscow
Projection Mapping by Goe Zhen



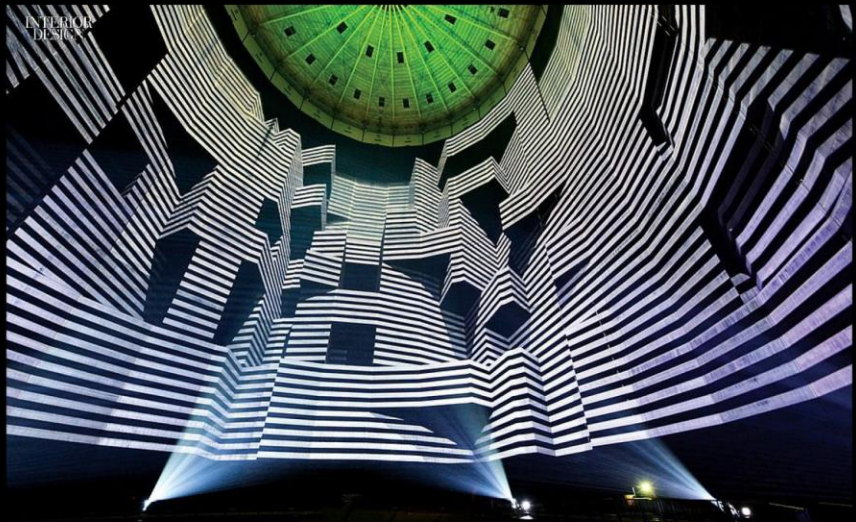
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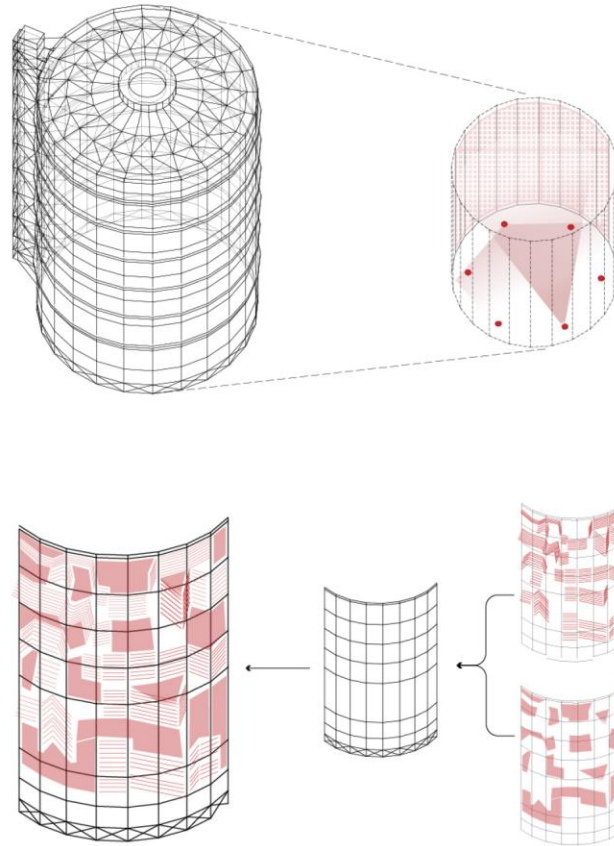
Circle of Light Moscow International Festival, Moscow
Projection Mapping by Heart-s



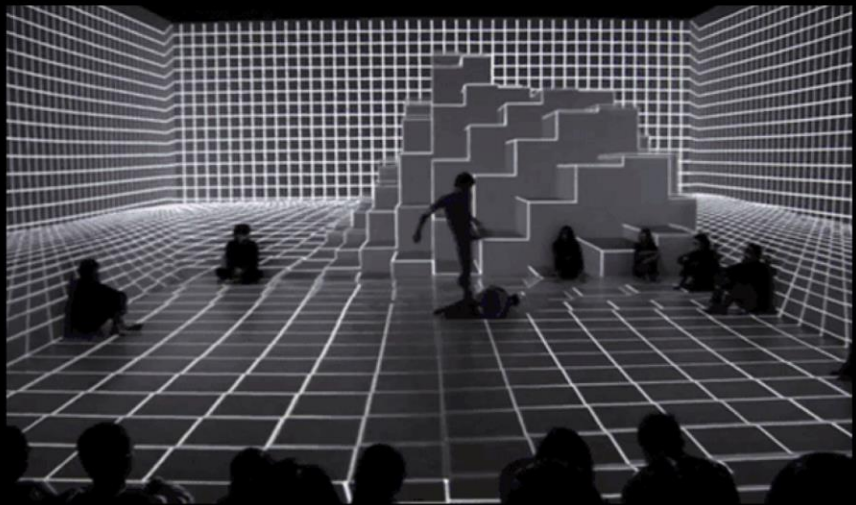
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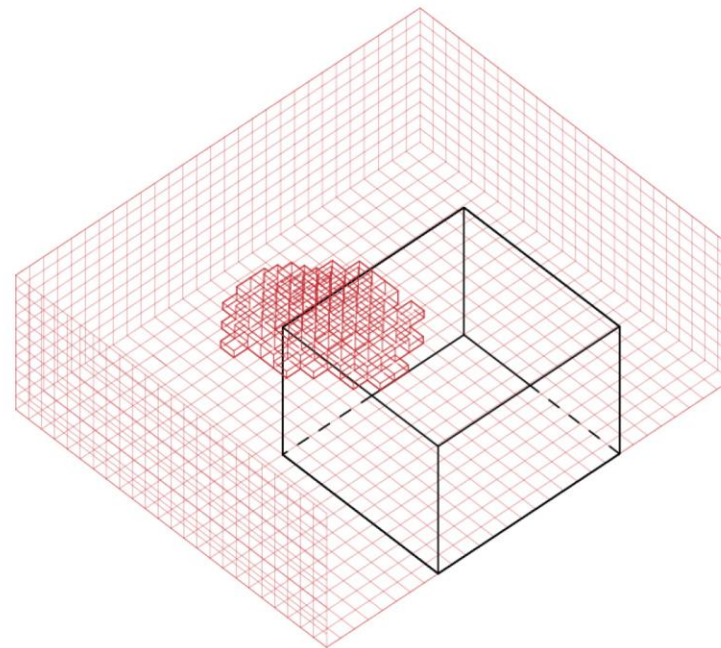
320° Licht in Gasometer Oberhausen
by Urbanscreen



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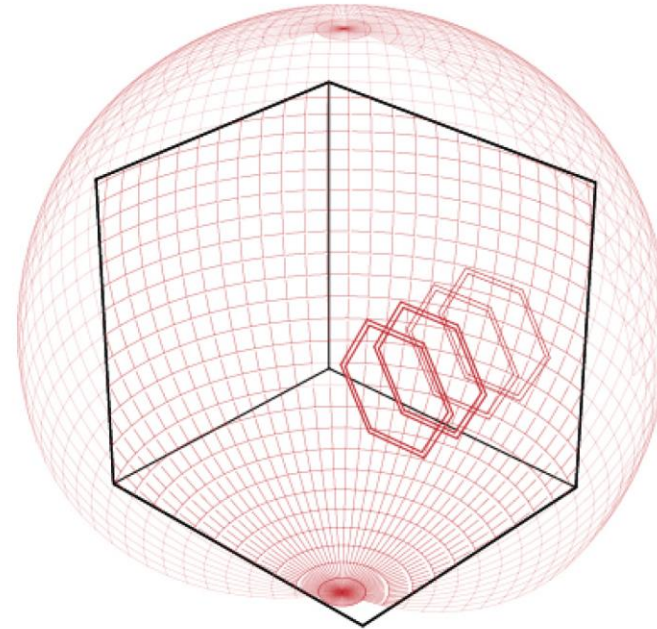
Seventh Sense (Excerpt)
Anarchy Dance Theatre + Ultracompos



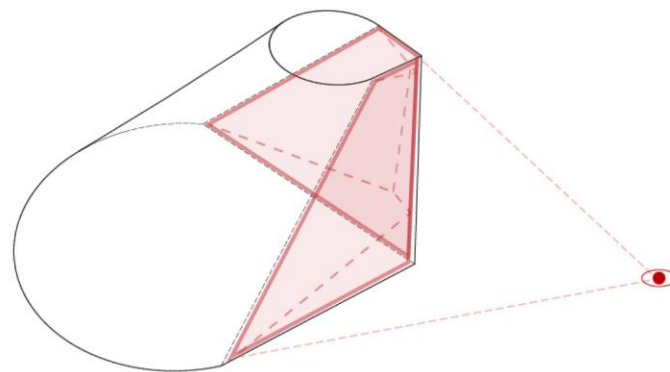
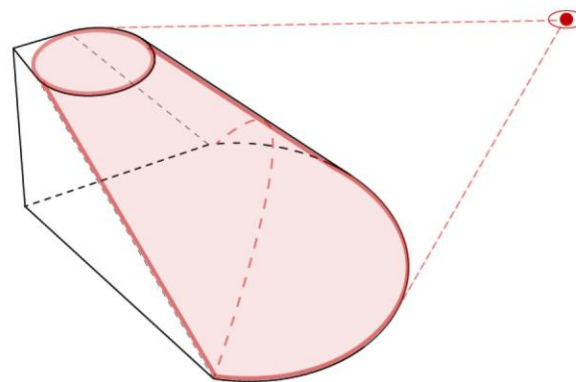
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Dirimart Gallery, Istanbul, 2011
Peter Kogler



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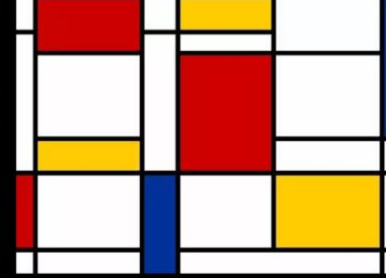


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Question Four [How to integrate it into space design ?]
-- [How to design the screens ?]

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The Mondrain's paintings of trees



Concrete

Abstract



- Function
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- **Reflection**



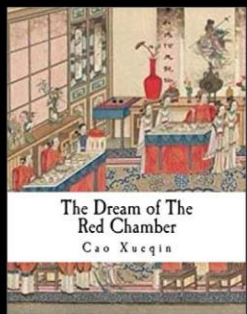
The Peony Pavilion [牡丹亭]

A romantic tragicomedy play written by dramatist Tang Xianzu in 1598



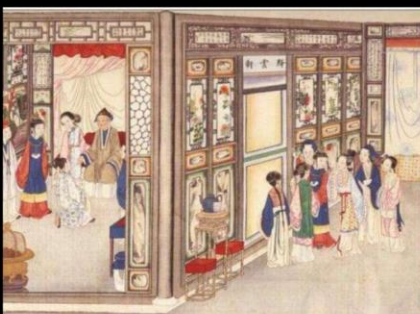
Kun Opera [昆曲]

one of the oldest extant forms of Chinese opera. It evolved from the Kunshan melody, and dominated Chinese theatre from the 16th to the 18th centuries



Dream of the Red Chamber [红楼梦]

One of Chinese Four Great Classical Novels. It was written some time in the middle of the 18th century during the Qing dynasty



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Outdoor space
(Mountains/ Forests)



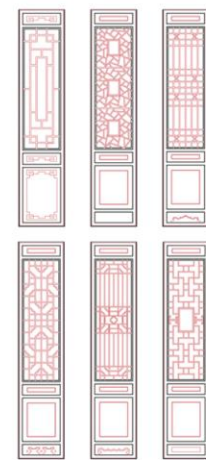
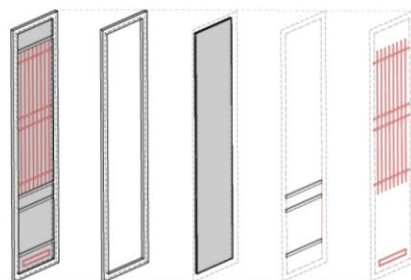
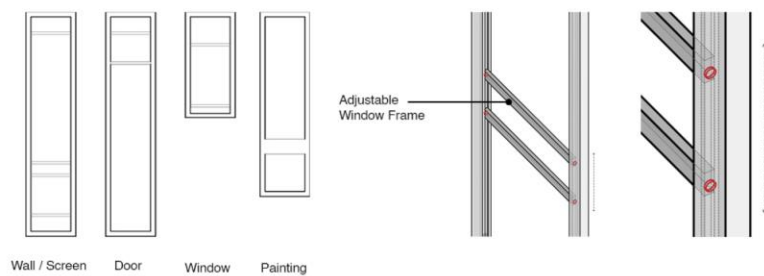
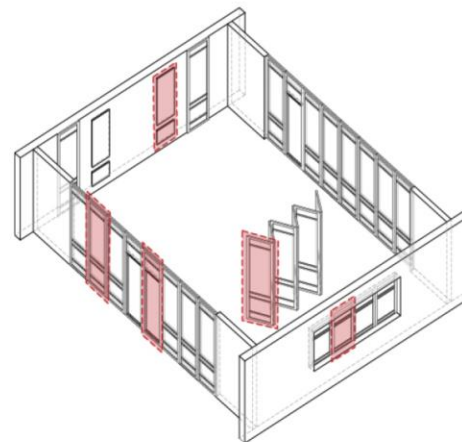
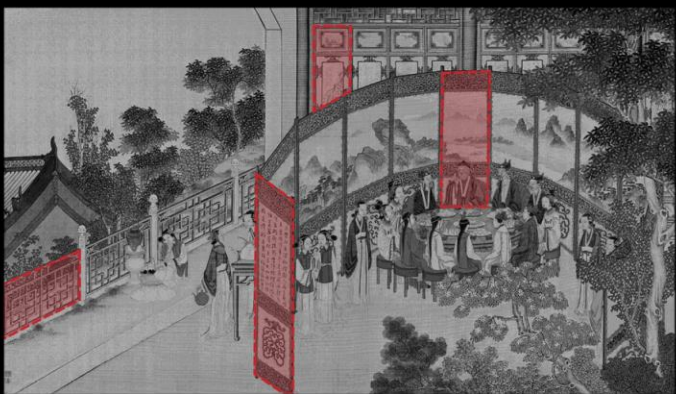
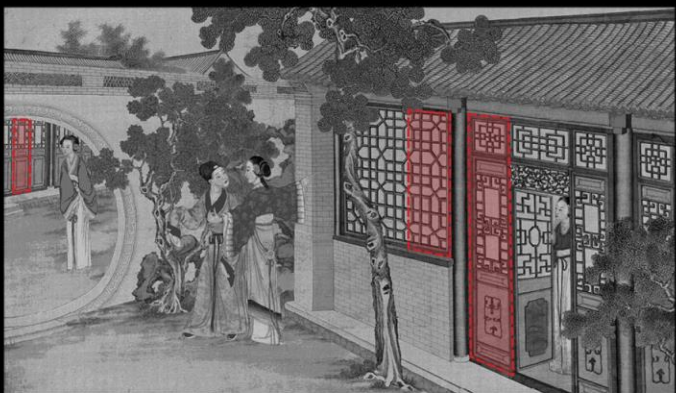
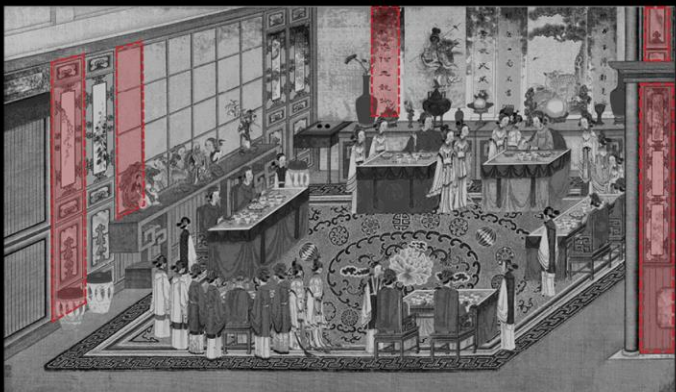
Building/Interior



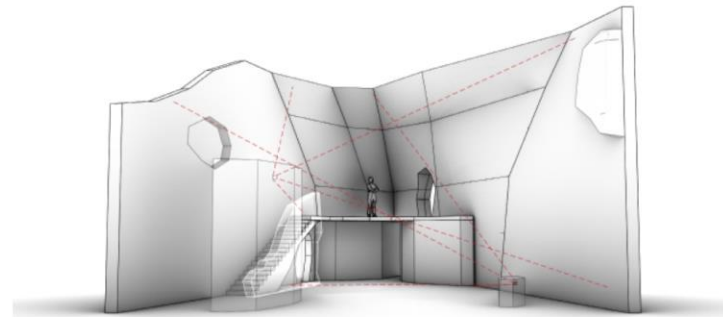
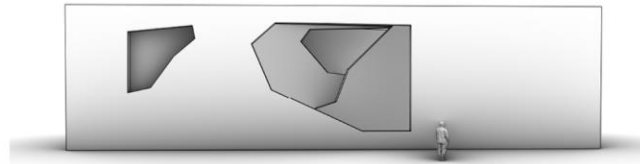
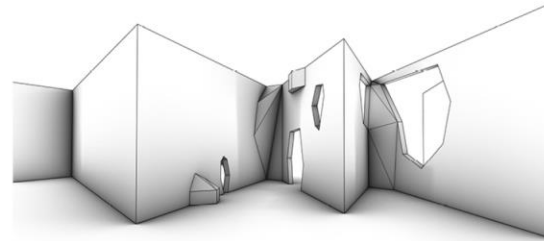
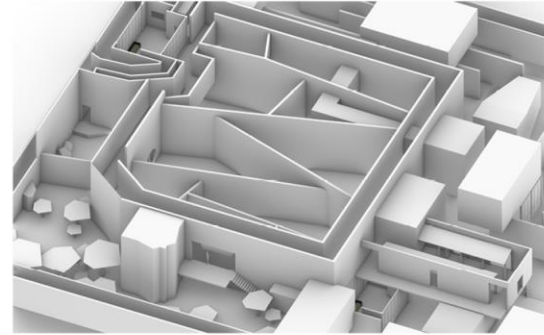
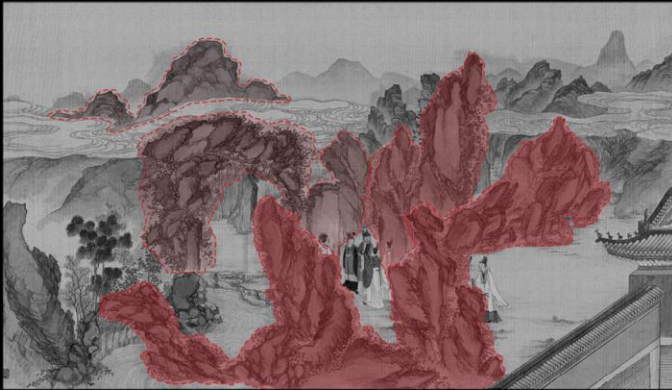
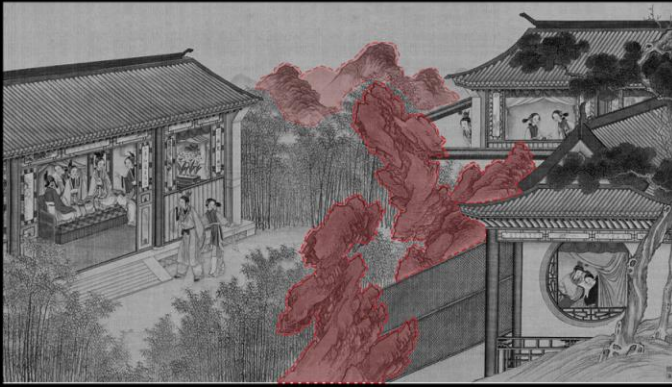
Courtyard / Corridor



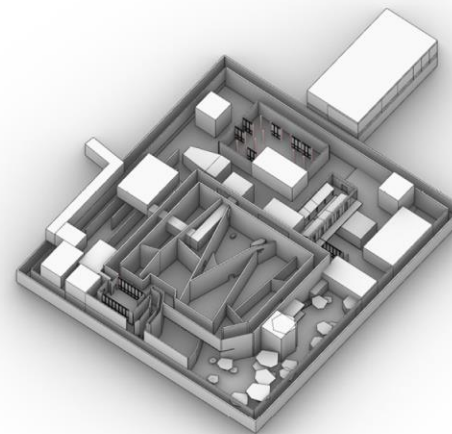
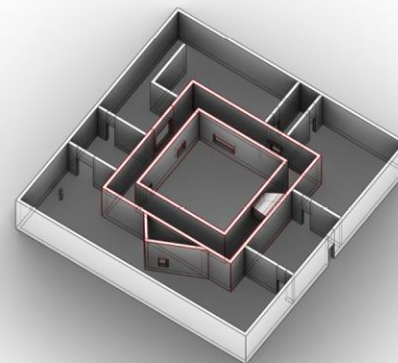
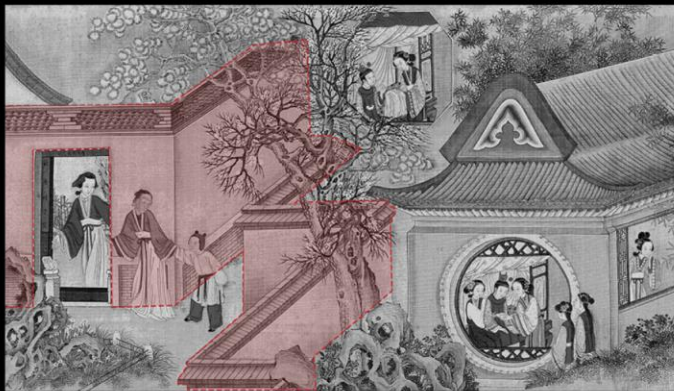
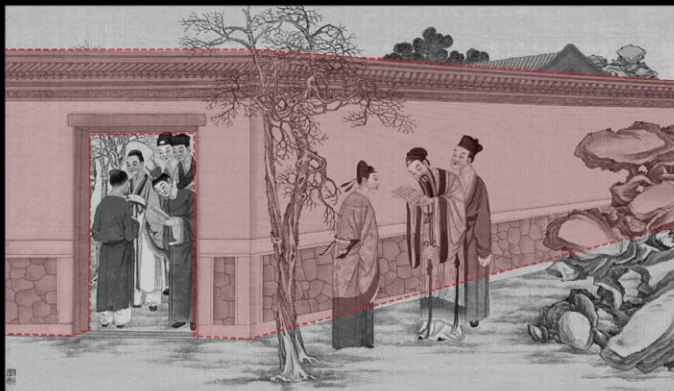
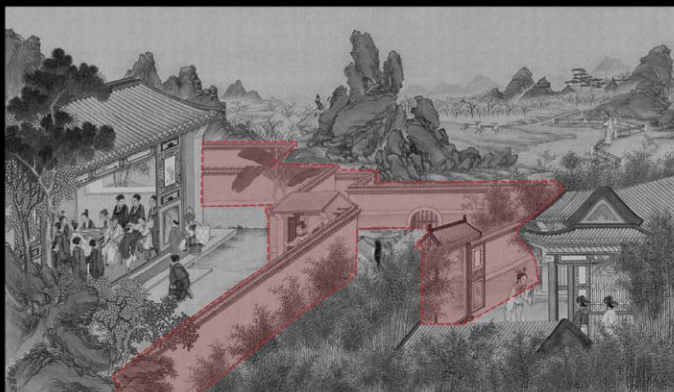
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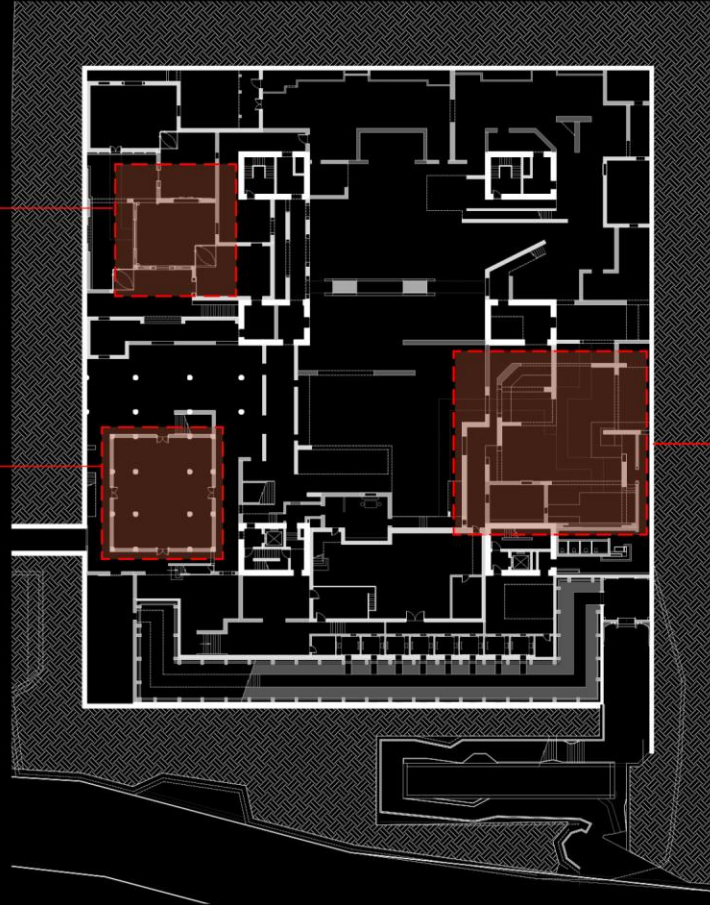
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*InBetween
(Courtyard)*

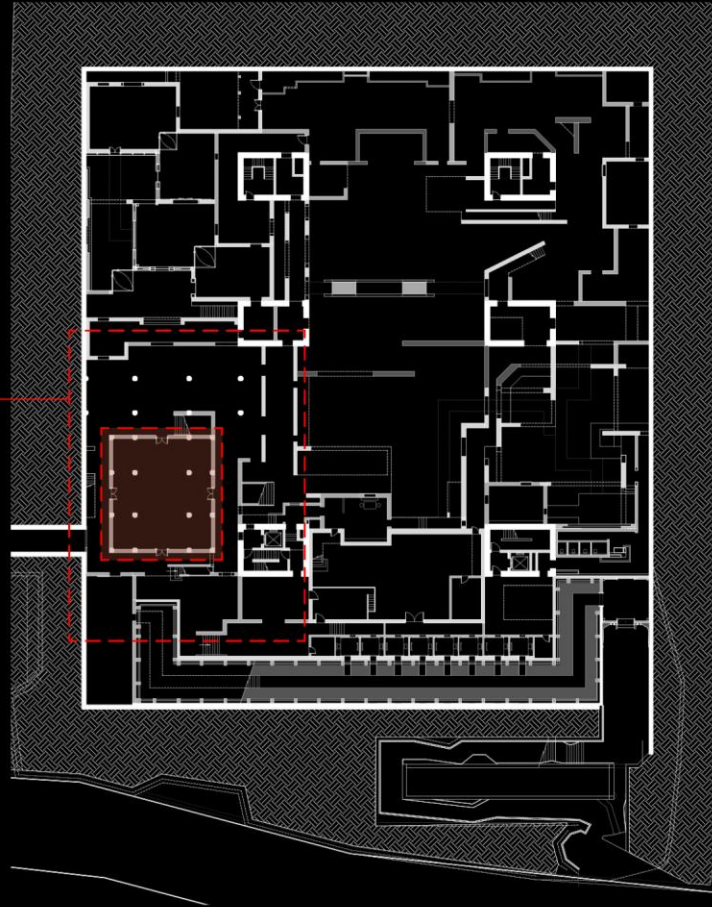
*Indoor
(Hall, Room)*



*OutDoor
(Forest, Garden, Mountain)*

- Function
- Spatial Illusion
- **Abstraction**
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden

*Zone: Palace
Academy
Library
Nether World*



[Indoor - Chaging Face / Extend Space]

- Function
- Spatial Illusion
- Abstraction
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 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



-
- Function
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- **Indoor**
 - Multi-Face
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- Layout
- Context
- Garden



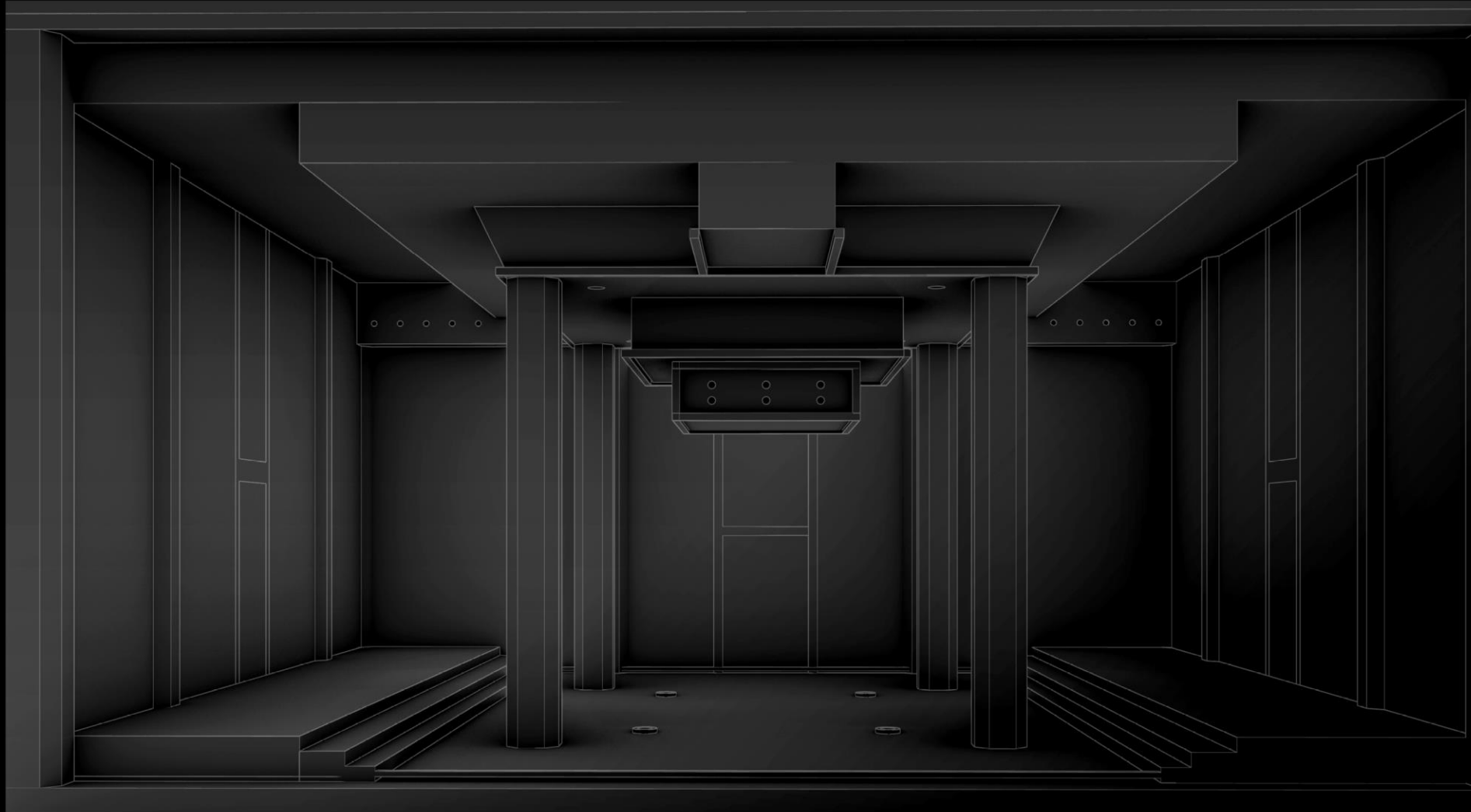
Scene: Palace / Big Hall

- Function
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- Abstraction
- Indoor
 - Multi-Face
 - Extend
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- Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



Scene: Academy / Nether World

- Function
- Spatial Illusion
- Abstraction
- Indoor
 - Multi-Face
 - Extend
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 - Overlay
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 - Figure Ground
 - Flexible
- Layout
- Context
- Garden

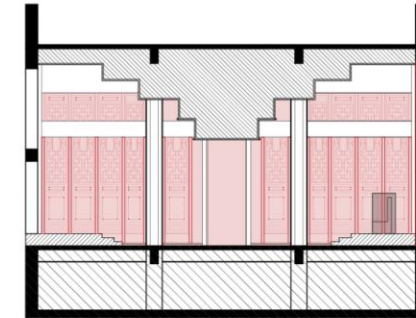
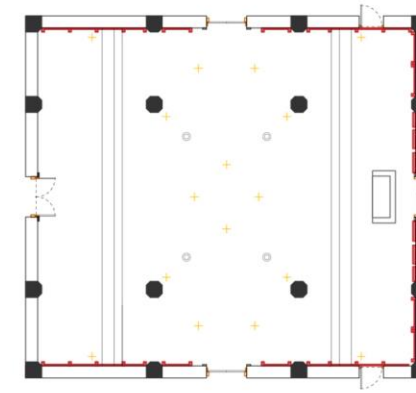


- Function
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- Abstraction
- Indoor
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 - Extend
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- Overlay
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- Flexible
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- Context
- Garden



Scene: Libary / Treasure Hall

- Function
- Spatial Illusion
- Abstraction
- Indoor
 - Multi-Face
 - Extend
- Outdoor
- Overlay
- Inbetween
- Figure Ground
- Flexible
- Layout
- Context
- Garden

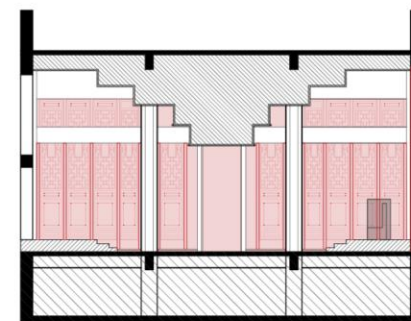
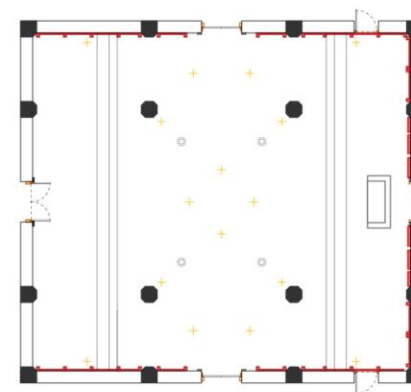
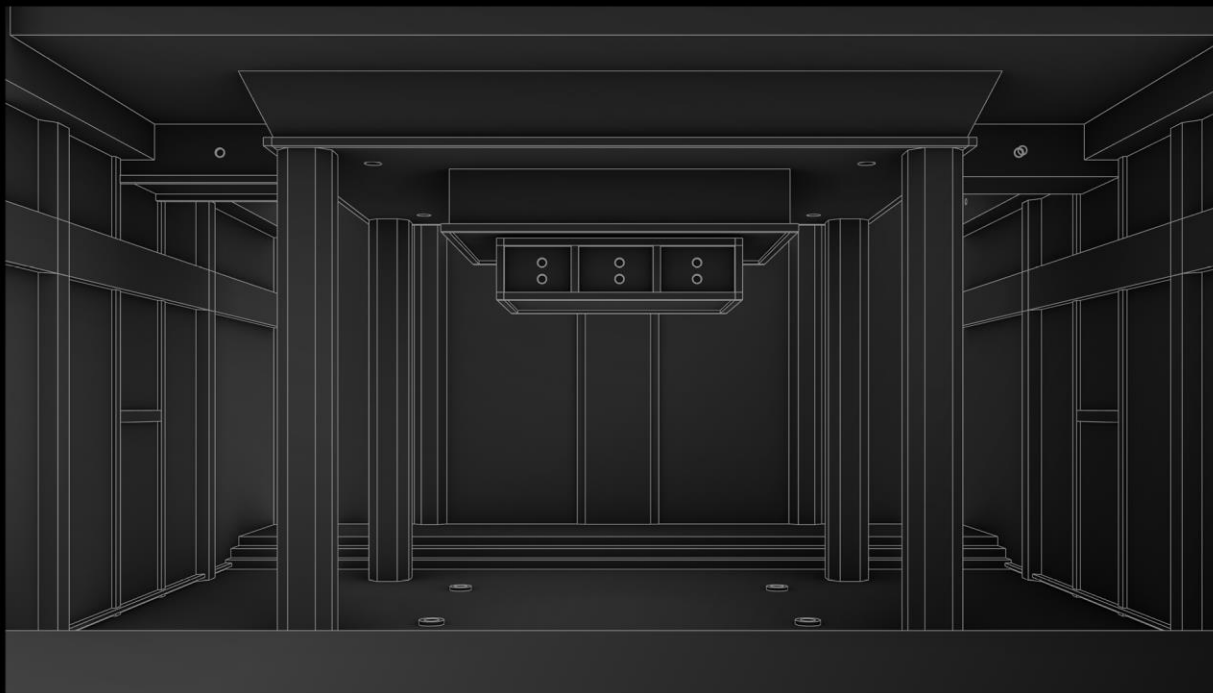


Hall - Royal Palace

Changing Face; Augmented Bas-relief

The classical interior decoration in China is mainly made of screen wall. The projection can change the room by adjusting the surface of those walls. The virtual images are better to be with a small depth. It is not appropriate to create the illusion with a large deep extension. The audience in the center will easily find out the fault.

- Function
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- Overlay
- Inbetween
- Figure Ground
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- Layout
- Context
- Garden

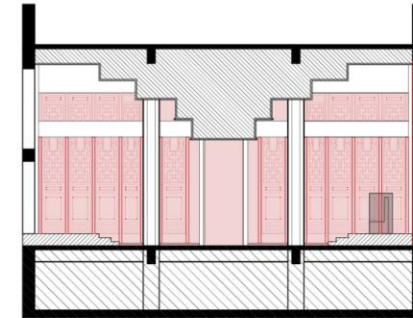
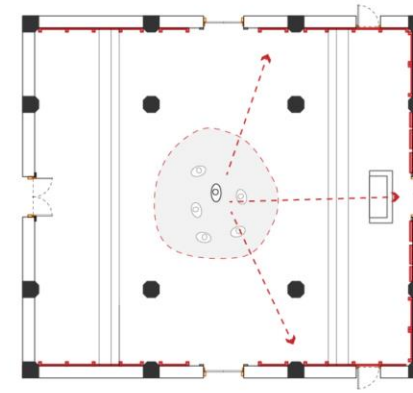


Hall - Royal Palace

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Hall - Royal Palace

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Changing Face [变脸]

The feature of masks in Chinese drama represents different character. Chaning face is a teachnic and dramatic art that actors can change their masks in a very high speed, switching from one character to another.

Projection mapping is a kind of modern performance which is similar to changing face. Cooperated with the dramatic music, the facade of buildings switch quickly among different appearance

Function

Spatial Illusion

Abstraction

Indoor

⊕ Multi-Face

Extend

Outdoor

Overlay

Inbetween

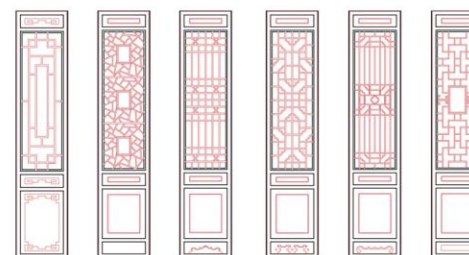
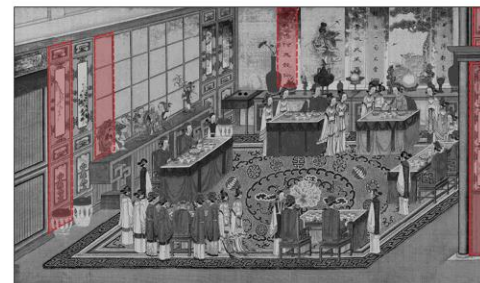
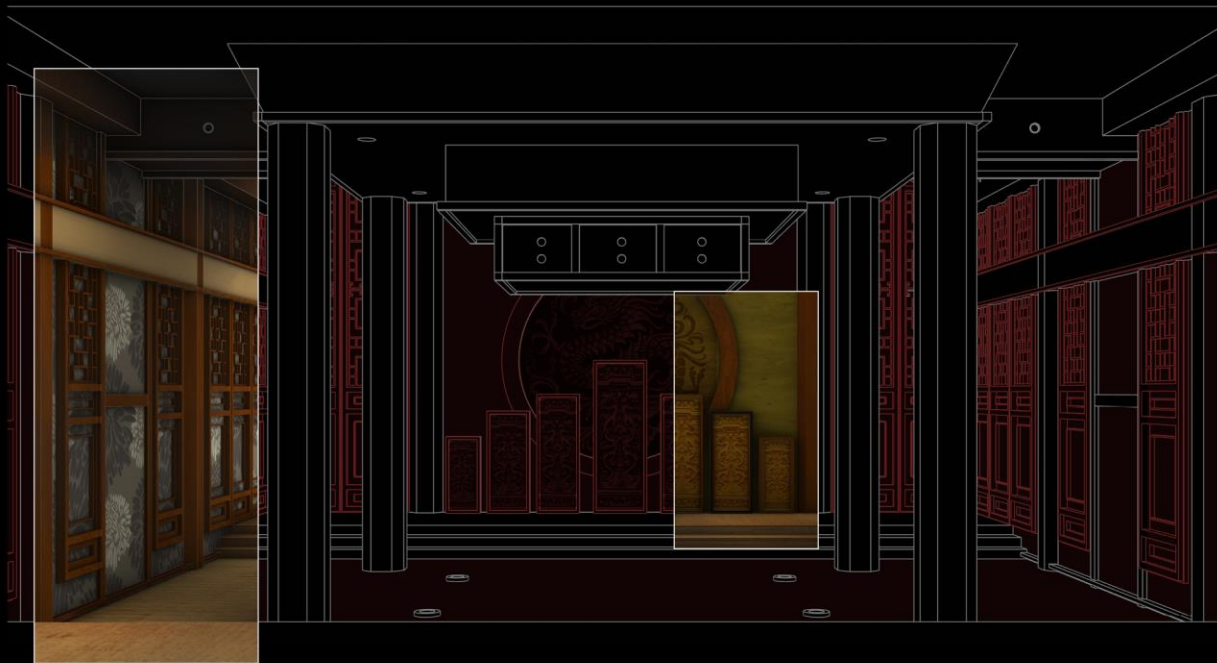
Figure Ground

Flexible

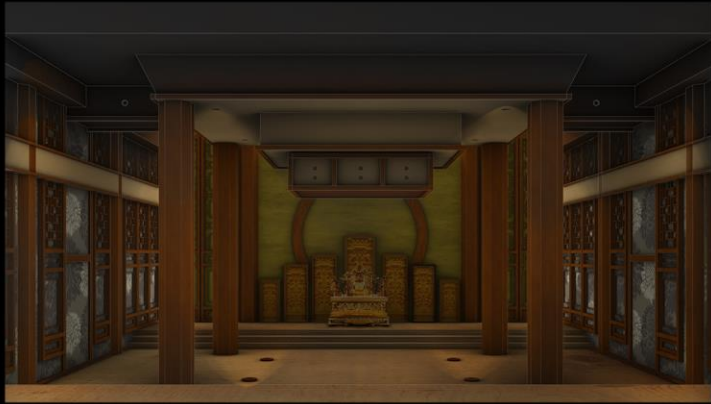
Layout

Context

Garden



- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - **Multi-Face**
 - Extend
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 - Figure Ground
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- Layout
- Context
- Garden



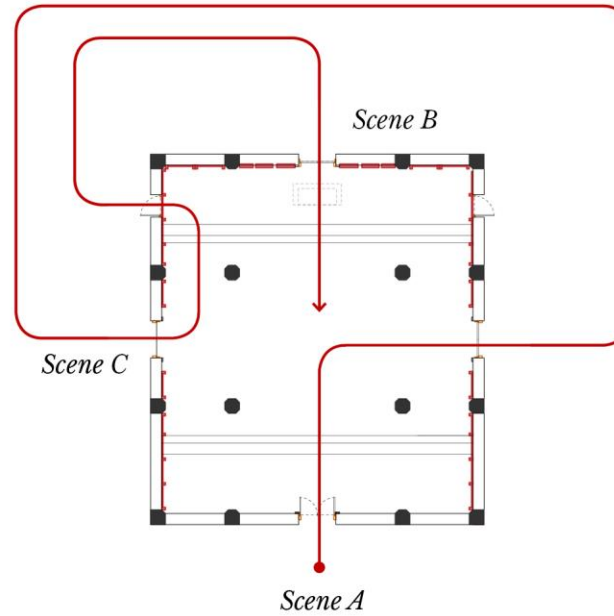
Scene A



Scene B



Scene C



- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - **Multi-Face**
 - Extend
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- Garden

Contrast (Problem?) :

Limited Space - Larger Space Requirement

(Methods) :

The simple abstract form + Multi-face Projection



(find the similarity among scenes)





[*Extension*]

It is usually known as Trompe-l'oeil or 3D mural painting.
To use realistic imagery like perspective drawing or video to
create optical illusion to extend the perception of space.

Function

Spatial Illusion

Abstraction

Indoor

Multi-Face

Extend

Outdoor

Overlay

Inbetween

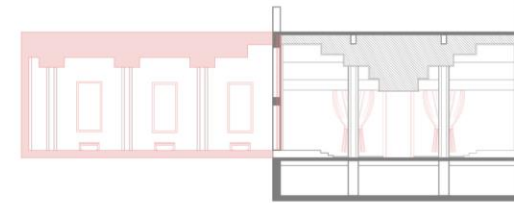
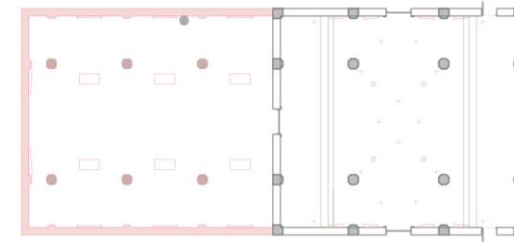
Figure Ground

Flexible

Layout

Context

Garden

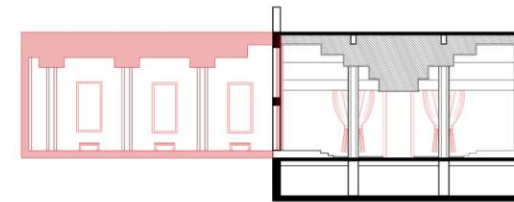
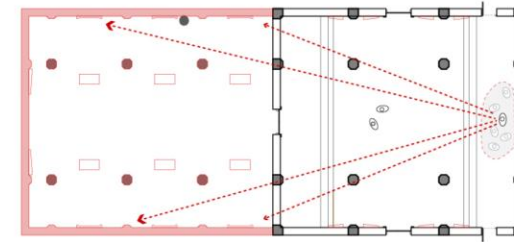
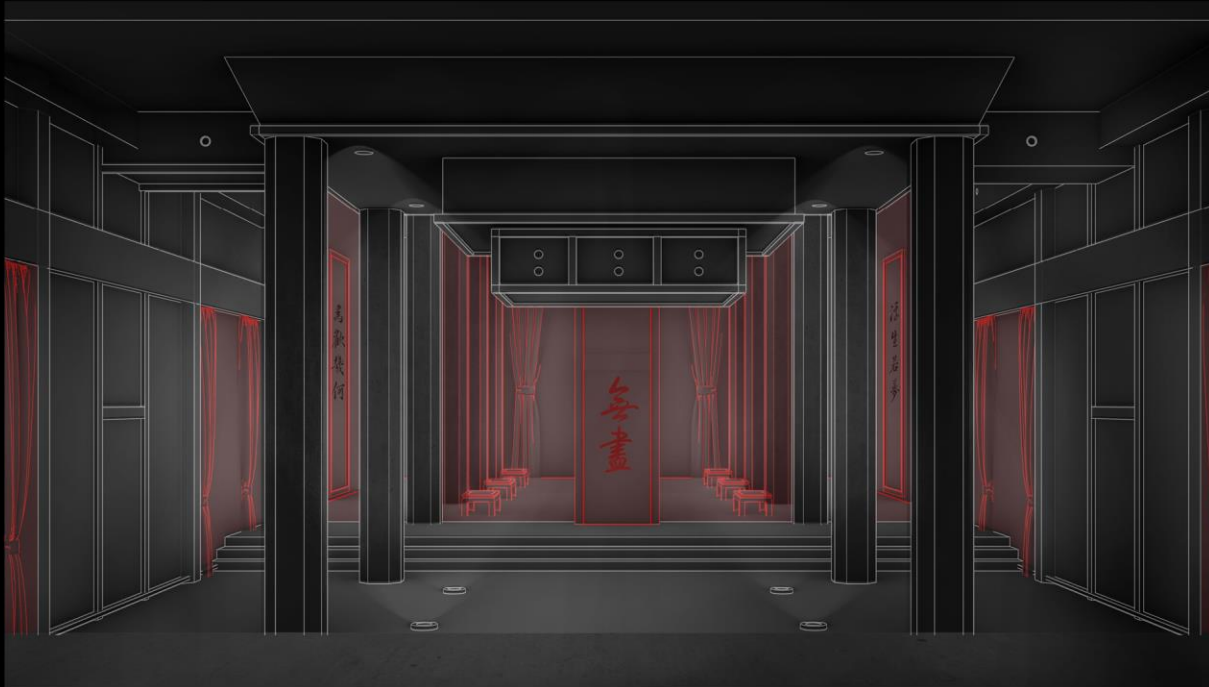


Hall - Academy

[*Extend Space, Augmented Ornament*]

It make use of the round shape of the circular columns to provide different face in the space. So the columns forest provide different screen for the projector. It might create different impression for audience along the path. It can also change the pattern projected on these columns and change the atmosphere and scene. But it also need boundary hint for audience to avoid crash intot he columns.

- Function
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Hall - Academy

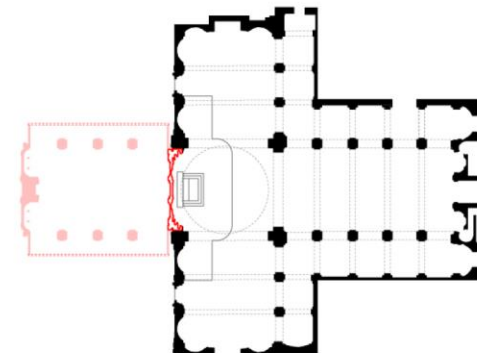
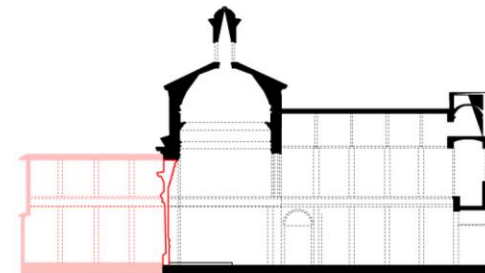
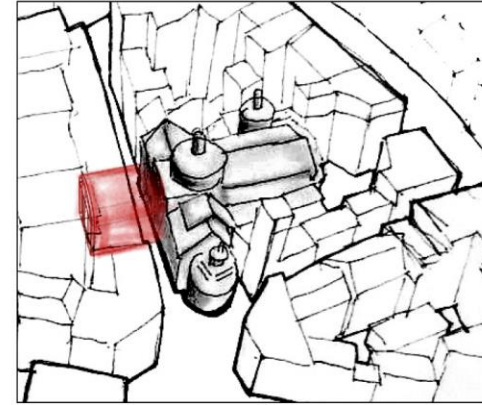
[*Extend Space, Augmented Ornament*]

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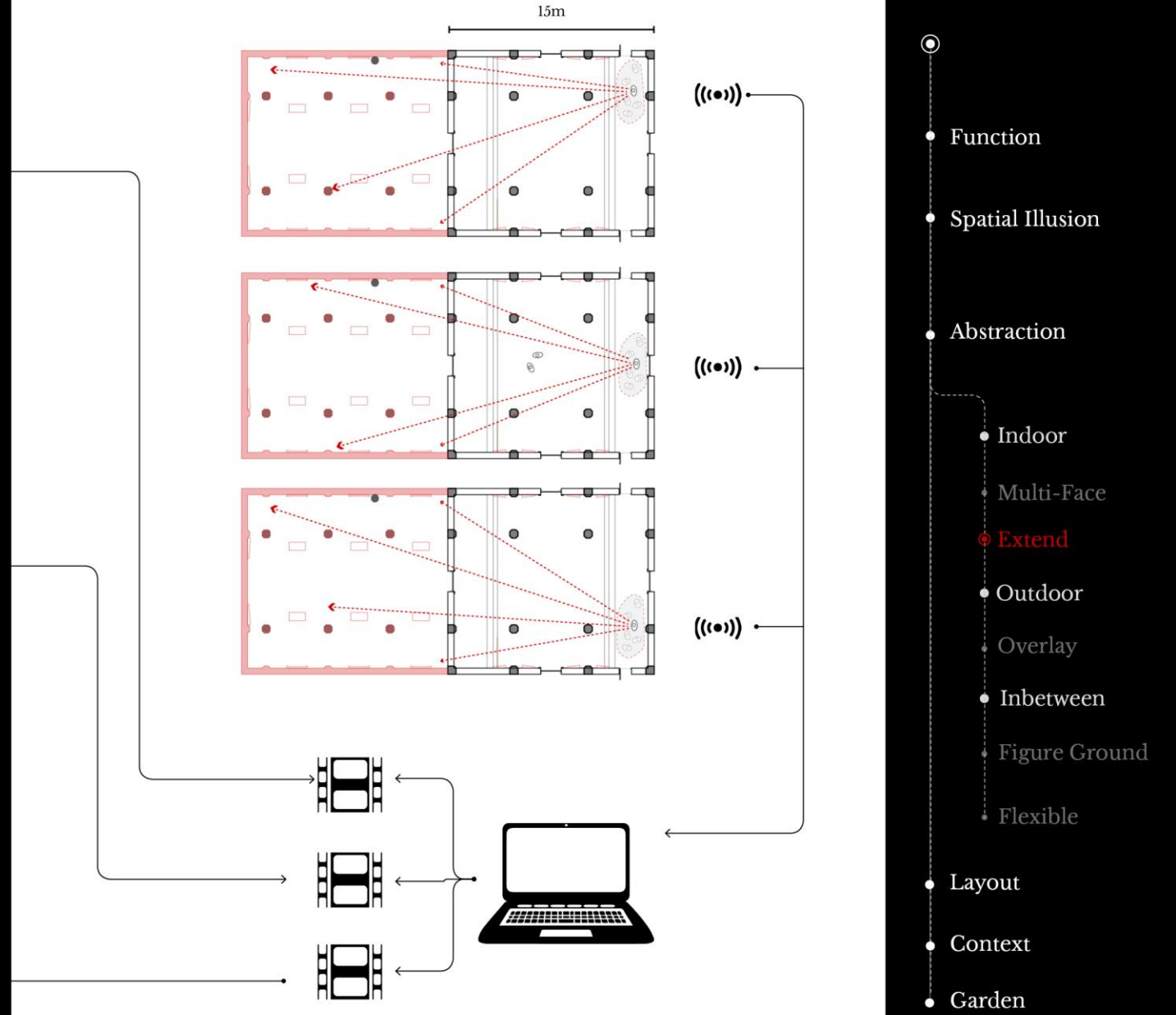
- Function
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Santa Maria presso San Satiro, Milan



- Function
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Contrast (Problem?) :

Limited Space - Larger Space Requirement

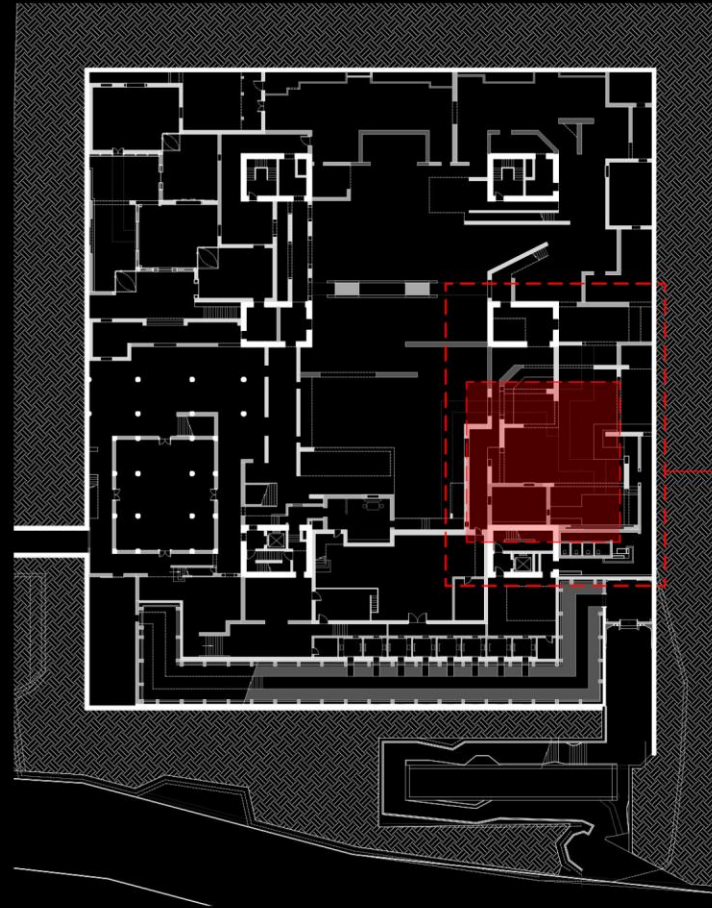
(Methods) :

Use perspective lines and shadows
to create the depth of space



(control the position of audience)

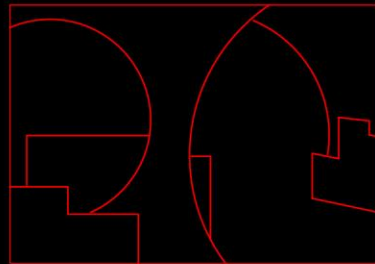
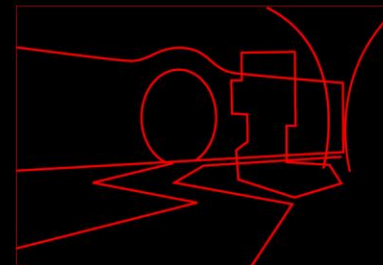
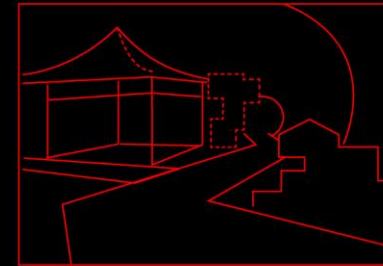
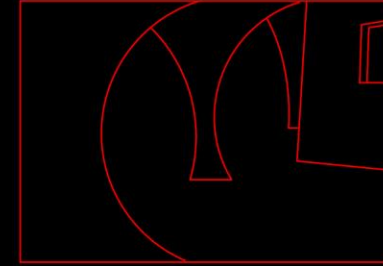
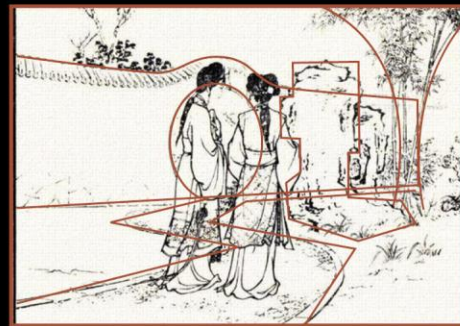




*Zone: Forest
Garden
Mountains
Heaven*

[Outdoor - **Overlap with Layers of abstract form**]

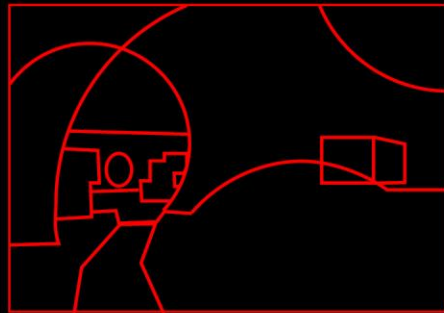
- Function
- Spatial Illusion
- Abstraction
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Analysis the form of Scene

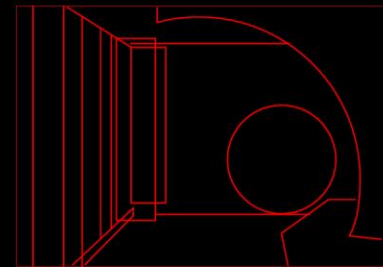
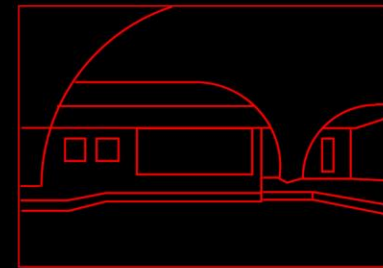
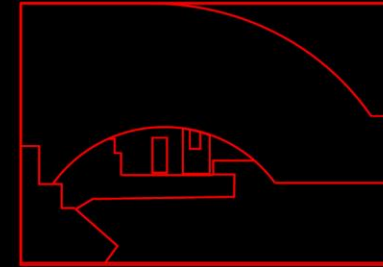
Use the abstract form to transform different views in comic drawing of scenes into the abstract shape, we can the arch shape is a good form to represent trees. And the rock can be see as steps or polygon.

- Function
- Spatial Illusion
- **Scenes**
 - Indoor
 - Multi-Face
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 - **Outdoor**
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- Garden



Analysis the form of Scene

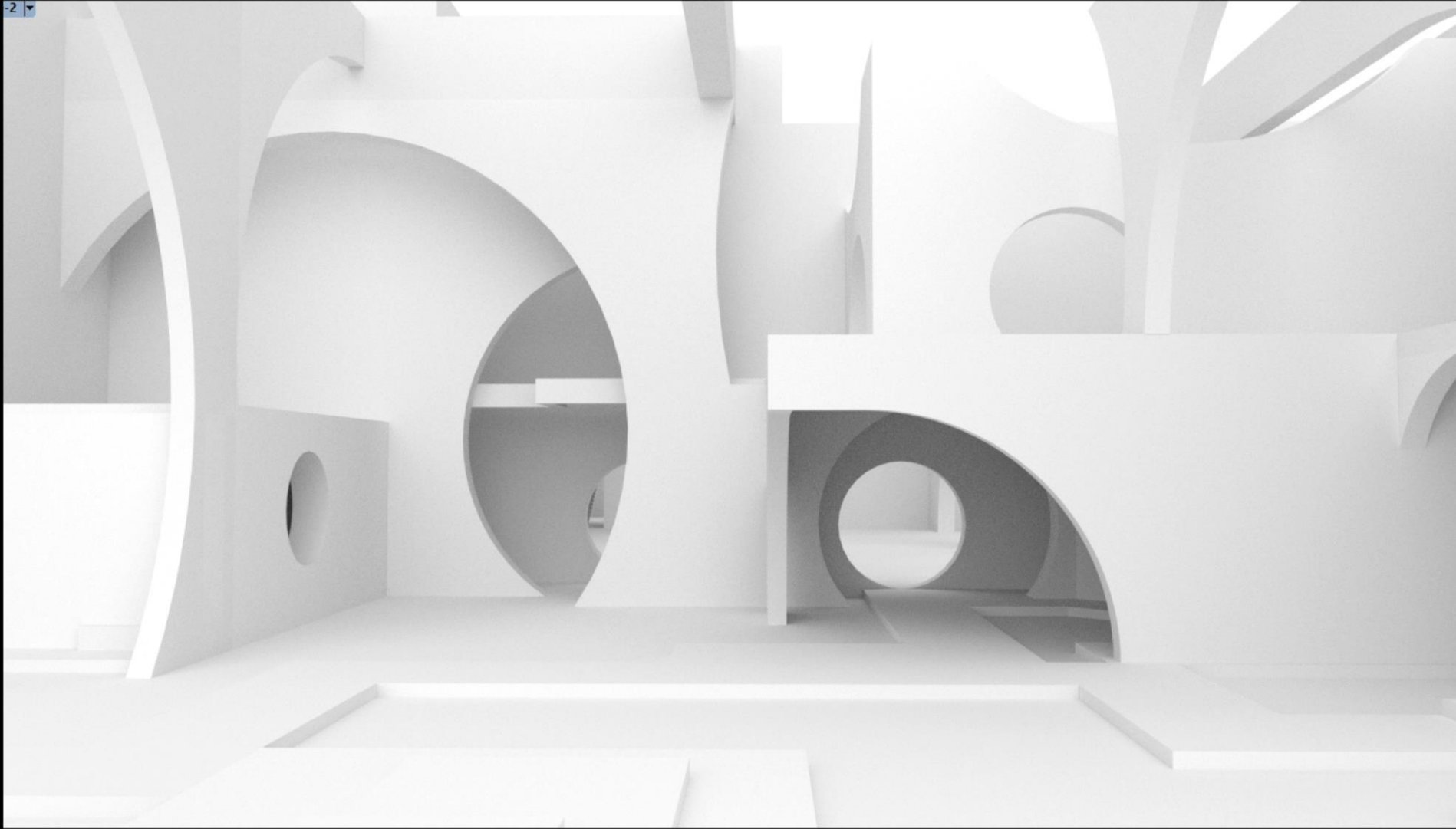
Use the similar method to transform different views in classic Chinese garden into the abstract shape, we can also see lots of overlap on the drawing. The arch shape is still a good form to represent trees. And the rock can be see as steps or polygon.



- Function
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- Garden



Function

Spatial Illusion

Abstraction

Indoor

Multi-Face

Extend

Outdoor

Overlay

Inbetween

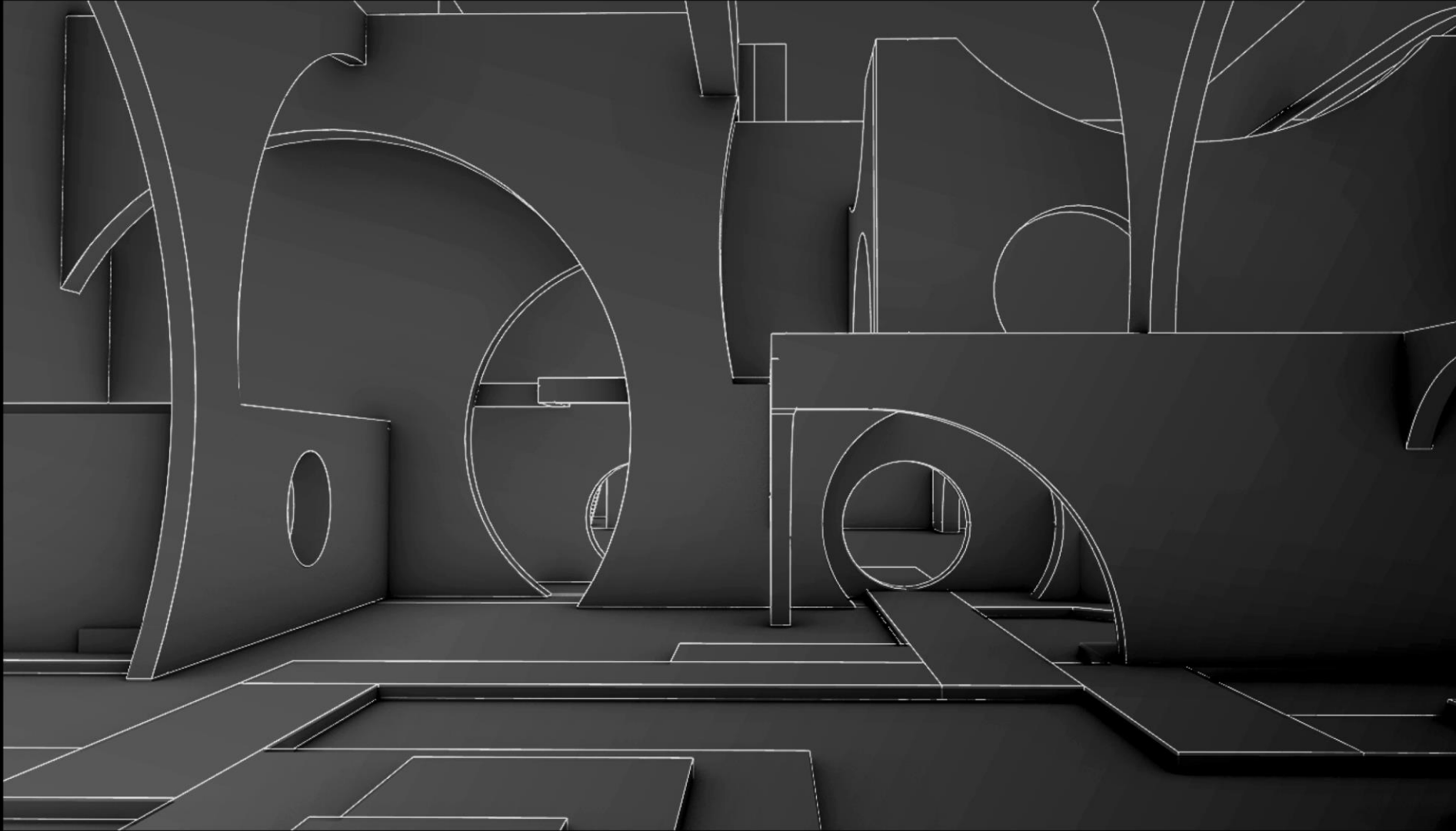
Figure Ground

Flexible

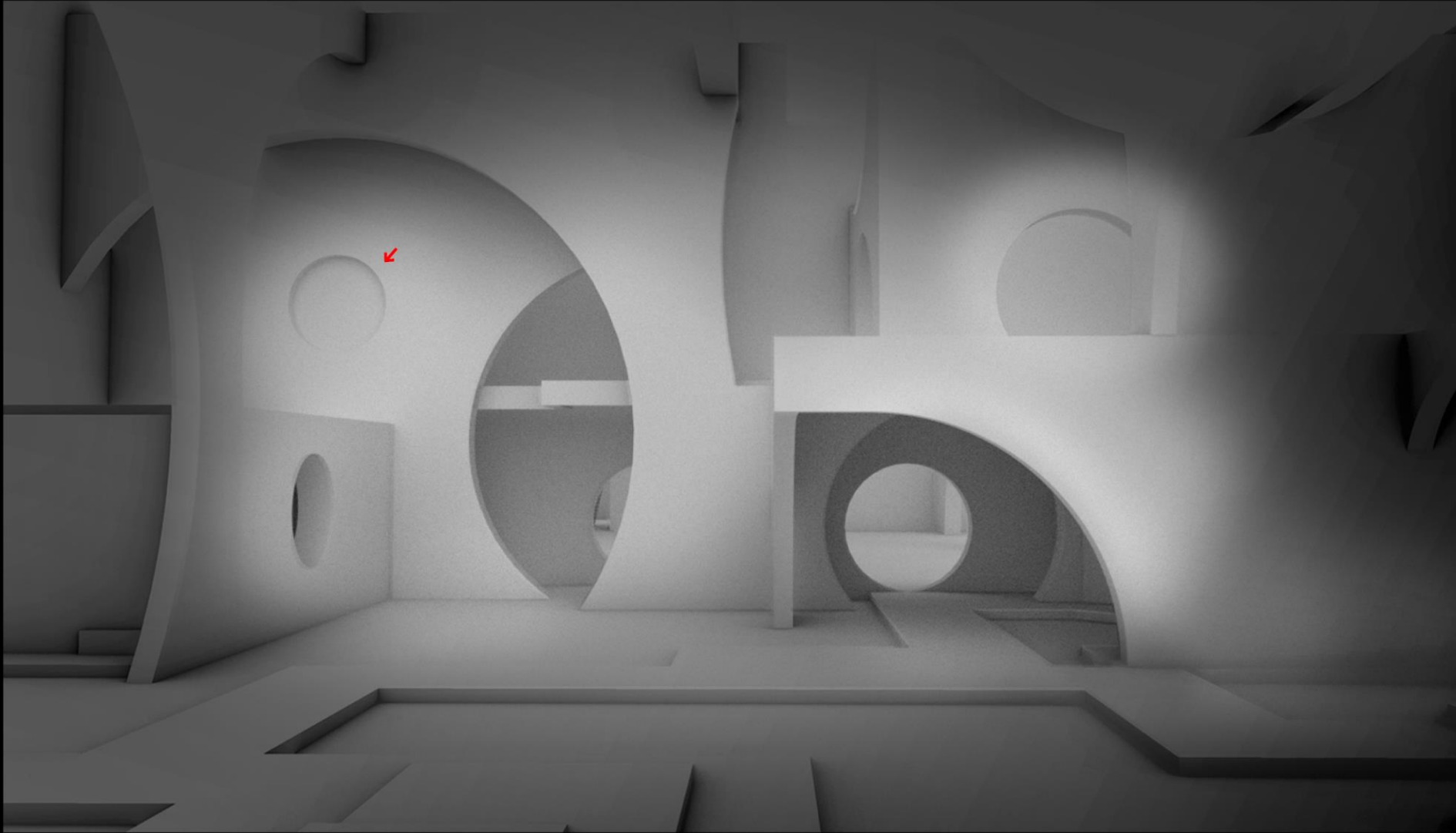
Layout

Context

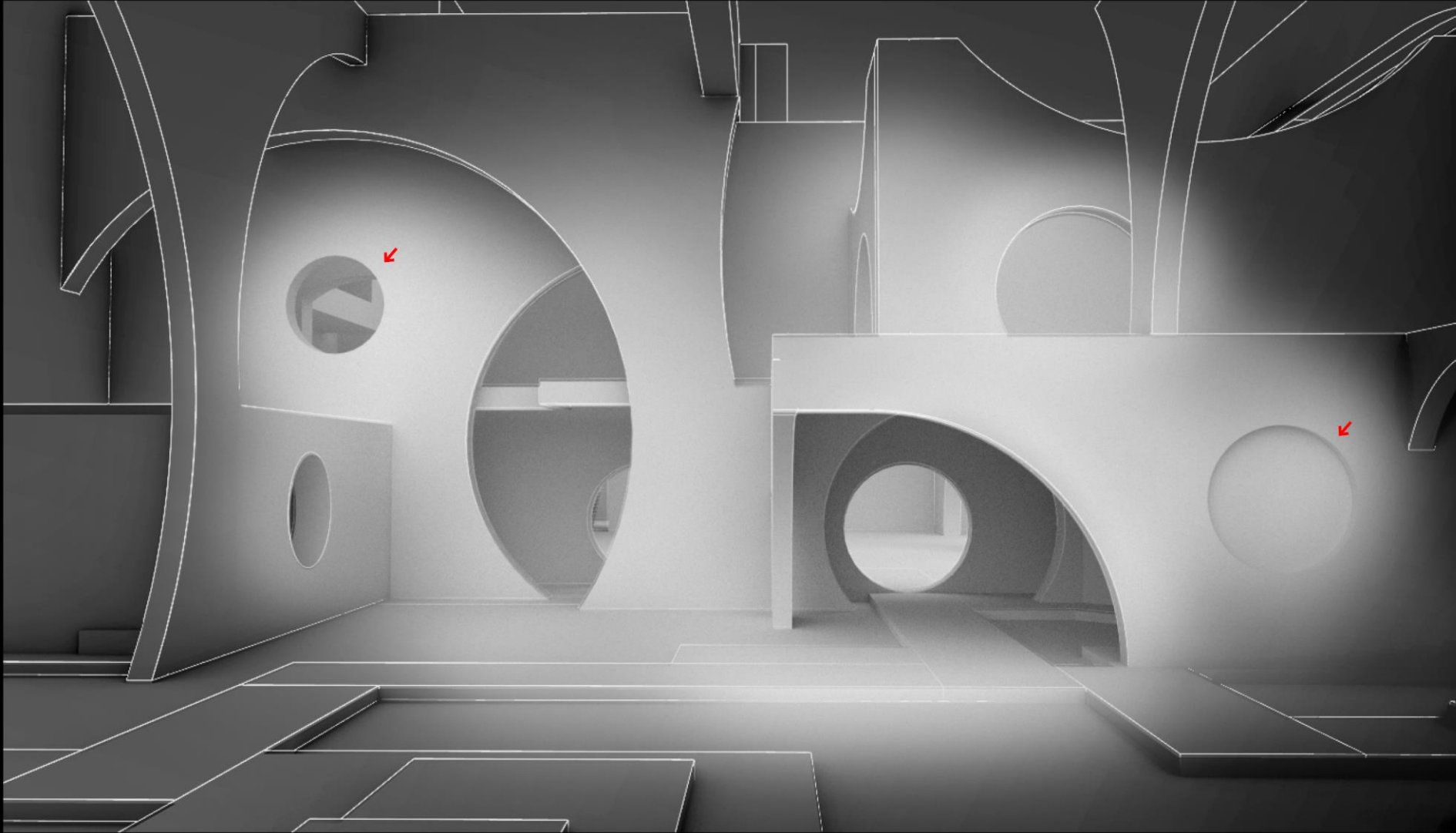
Garden



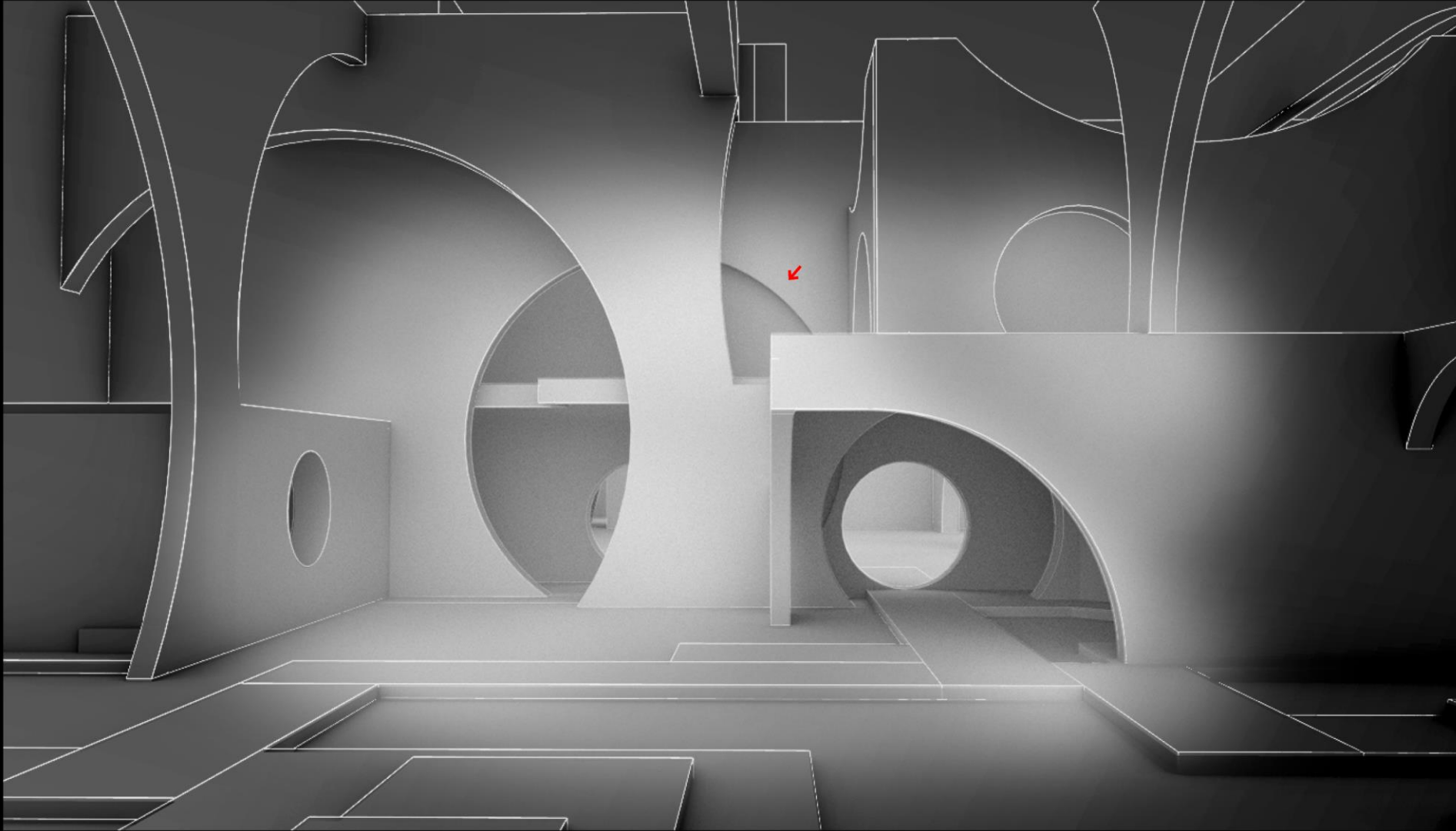
-
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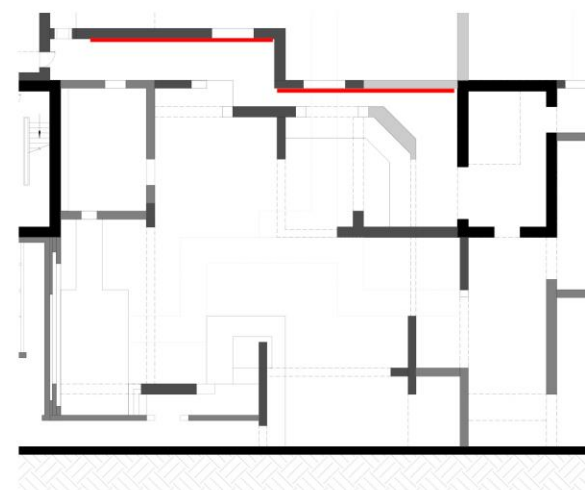
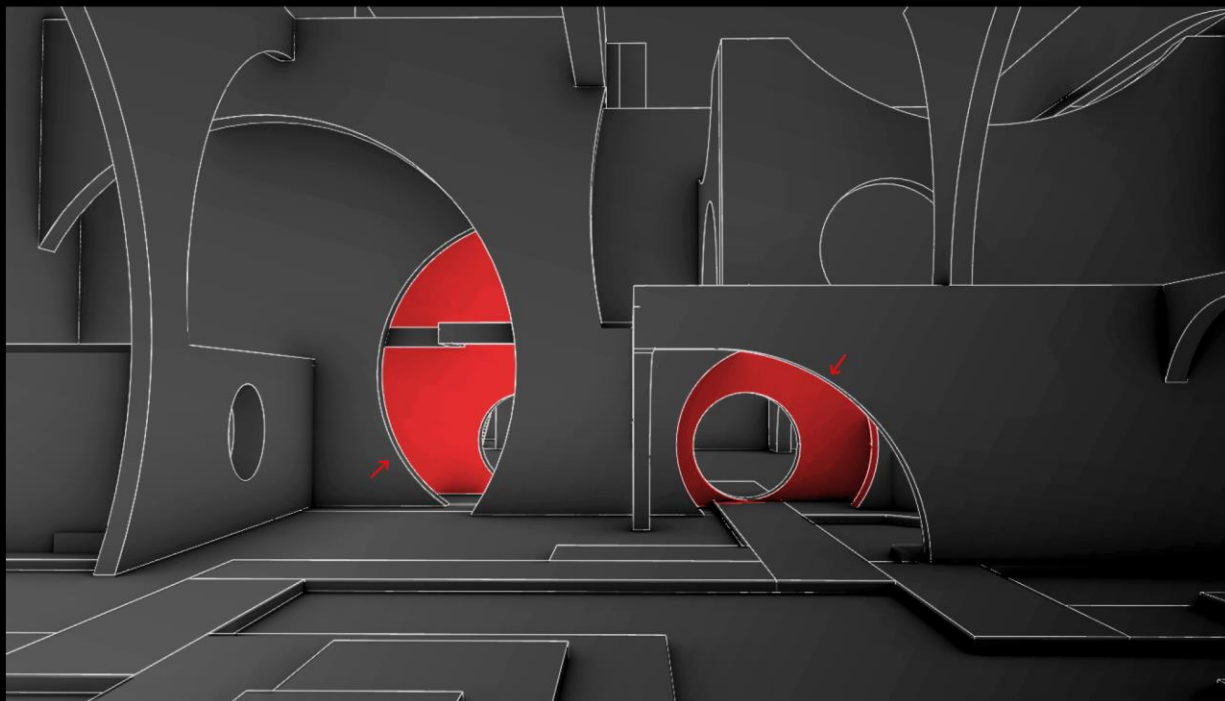
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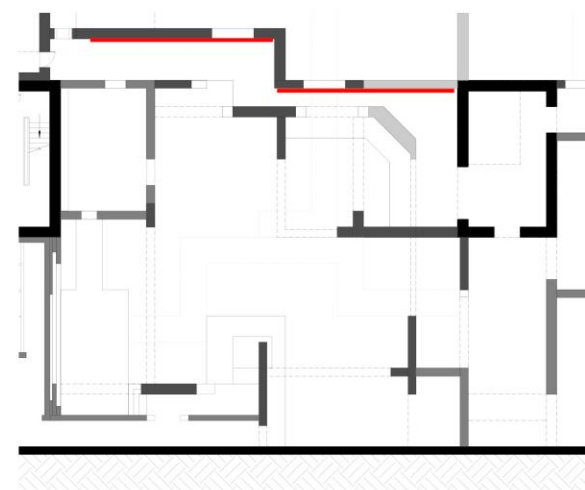
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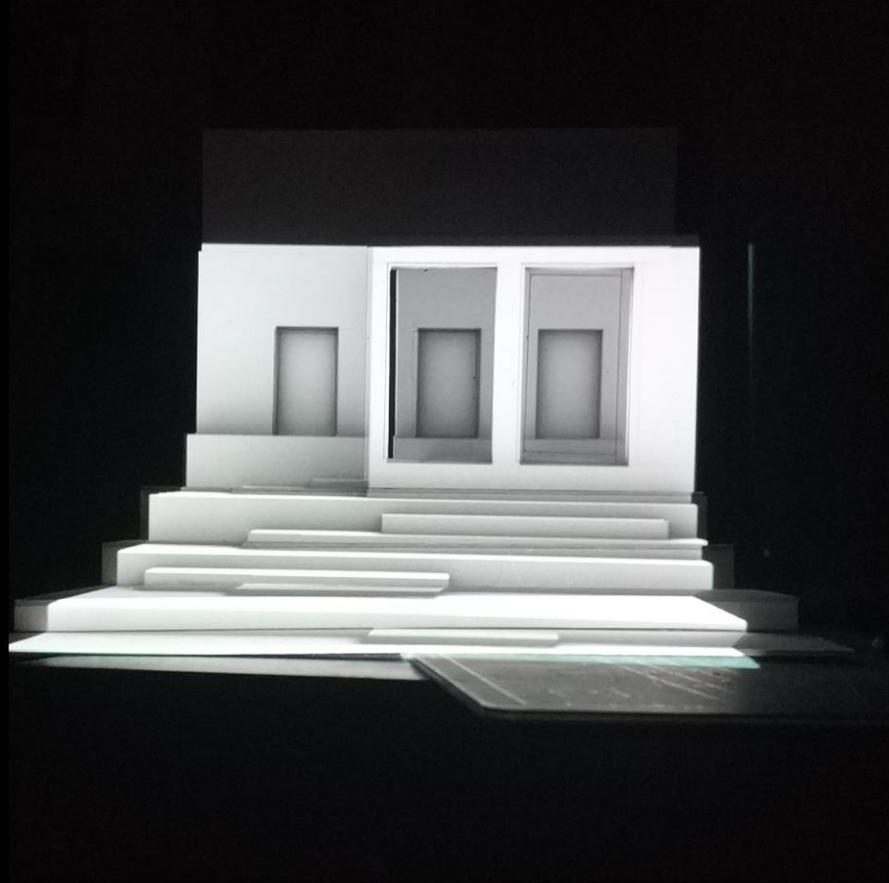
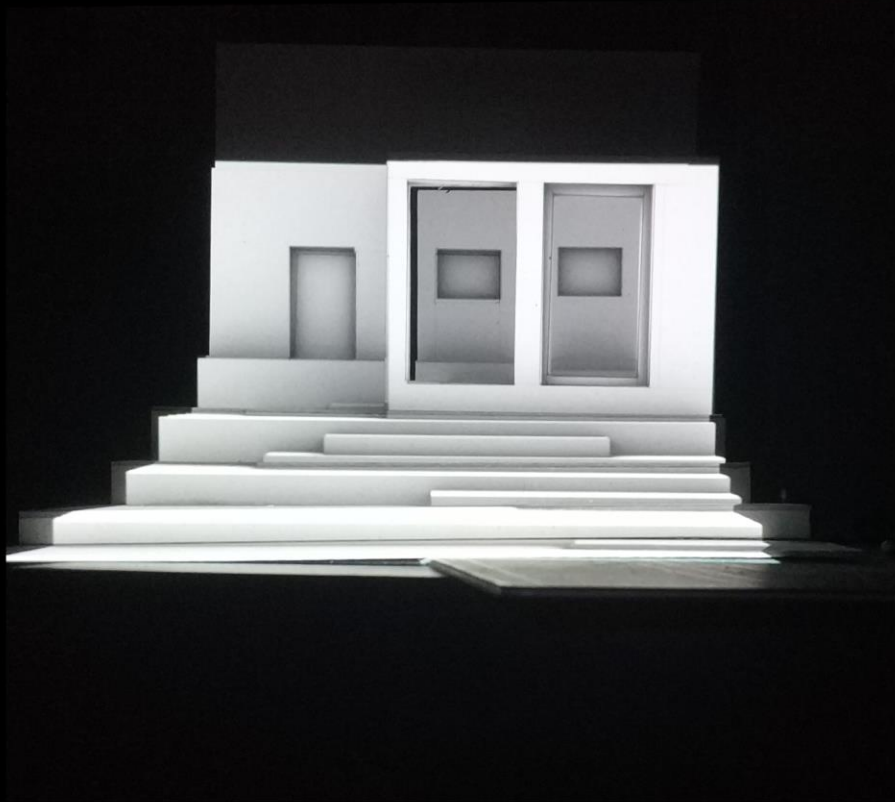
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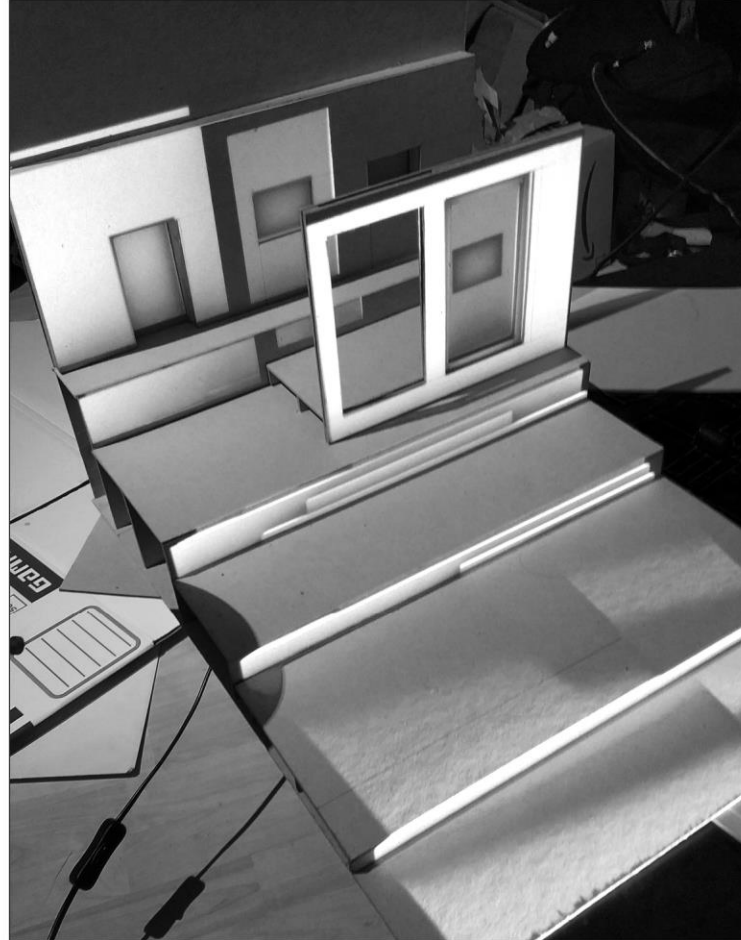
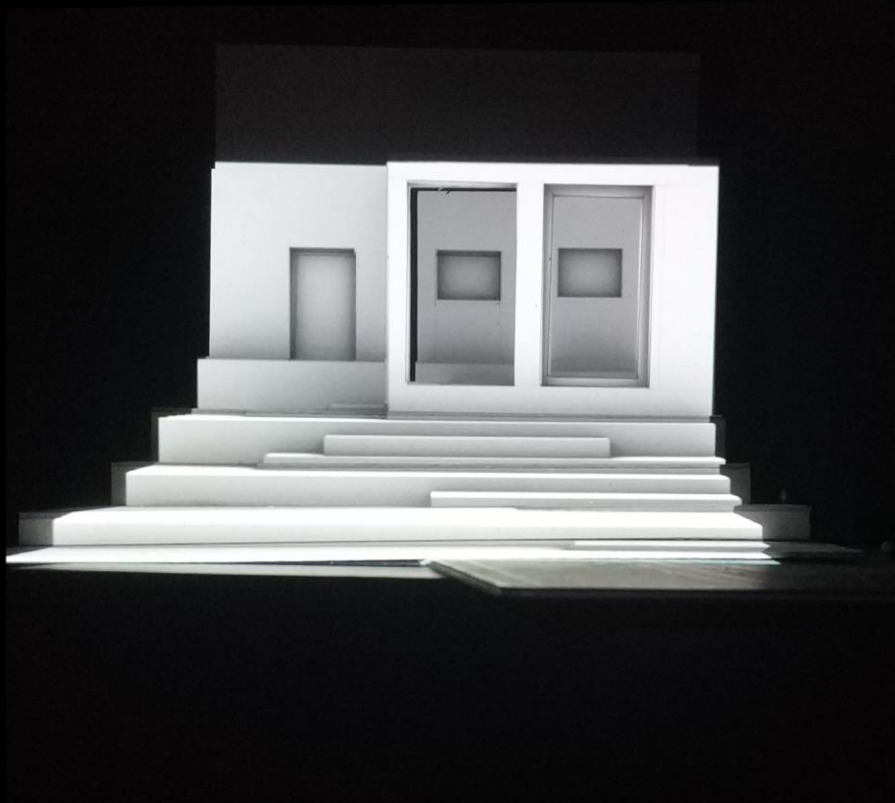
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Screens with Holes and Depth

- Function
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- Abstraction
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 - Outdoor
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- Garden

Contrast (Problem?) :

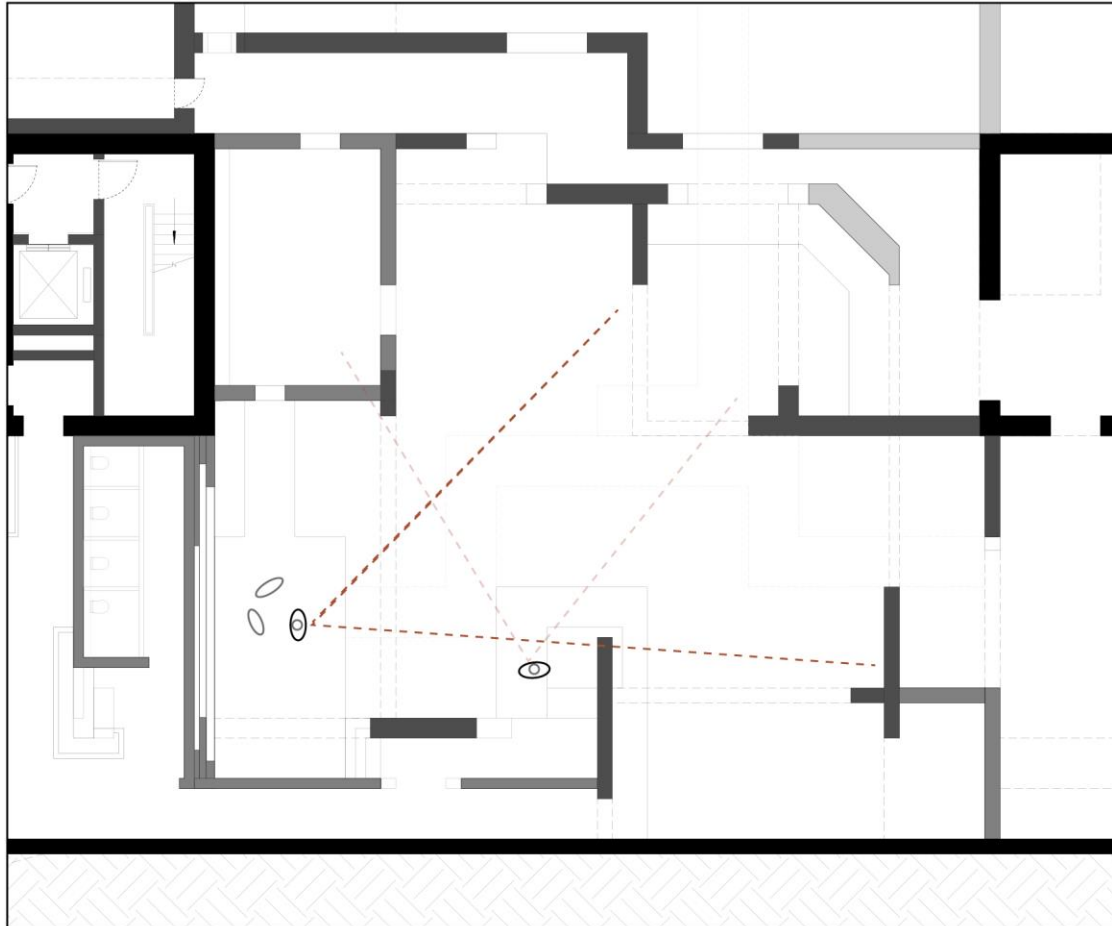
Limited Space - Larger Space Requirement

(Tools) :

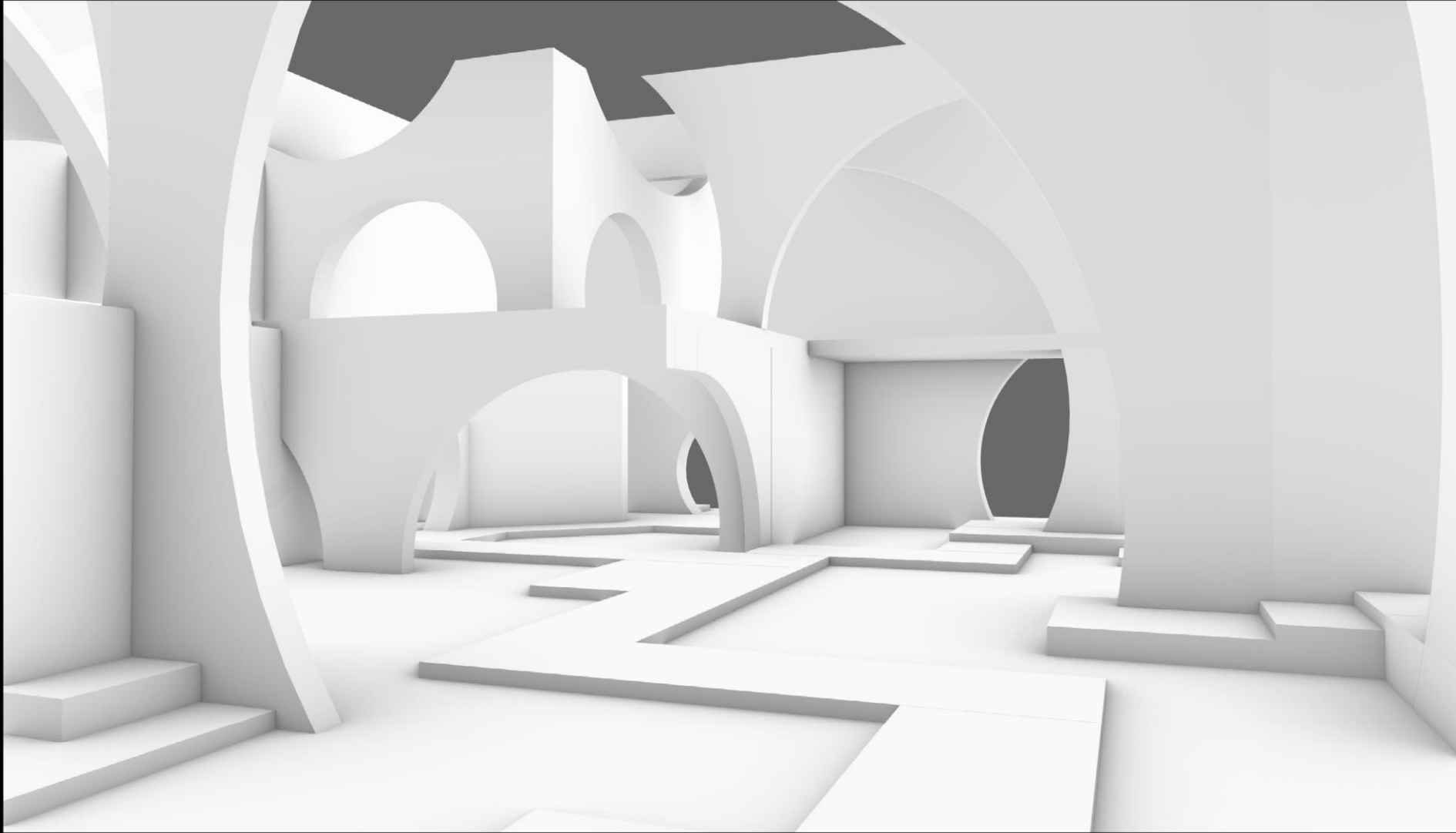
Overlayer-Screen Wall

provides possibilities to influence the illusion

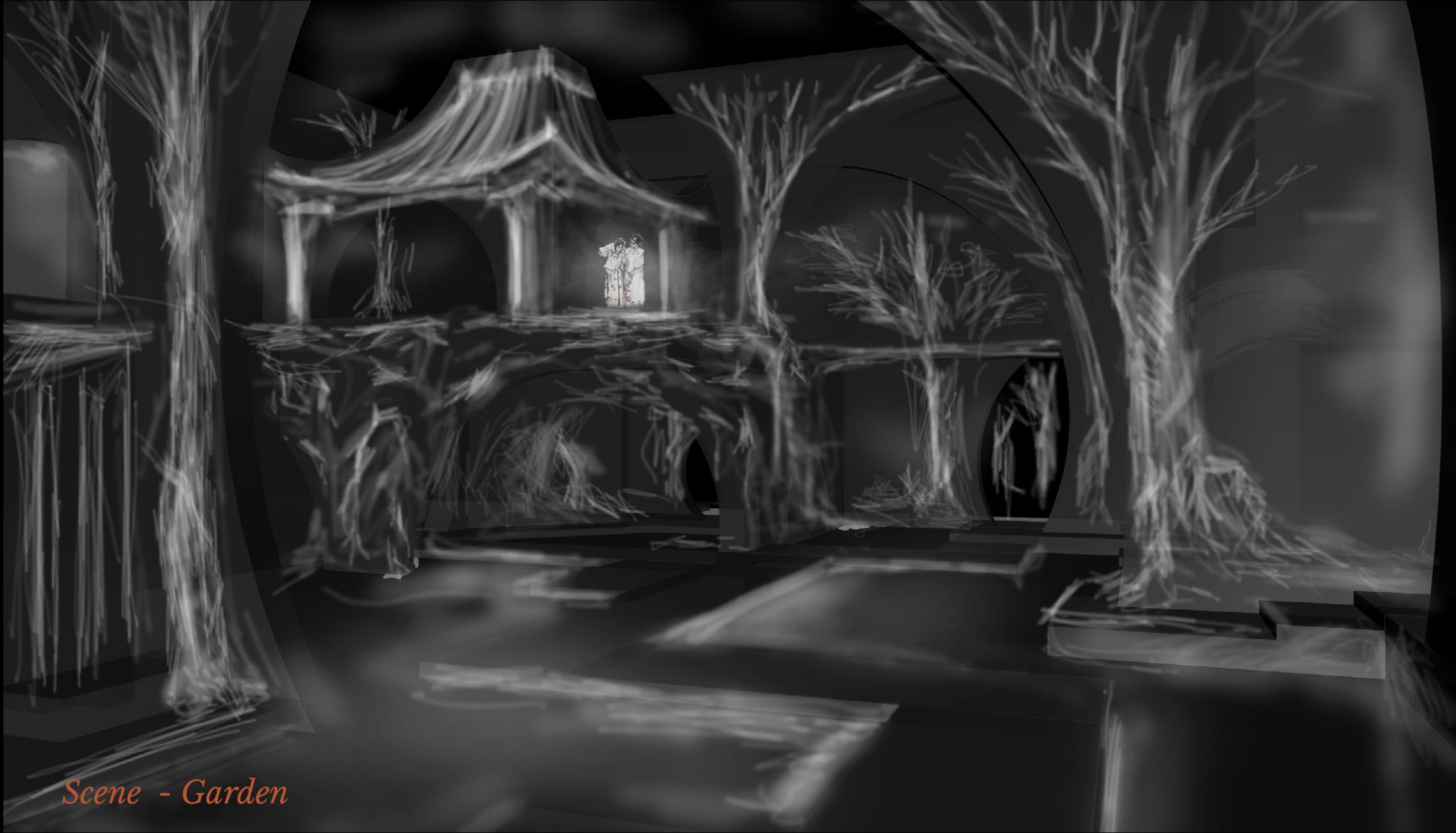




- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Outdoor
 - Outdoor
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 - Inbetween
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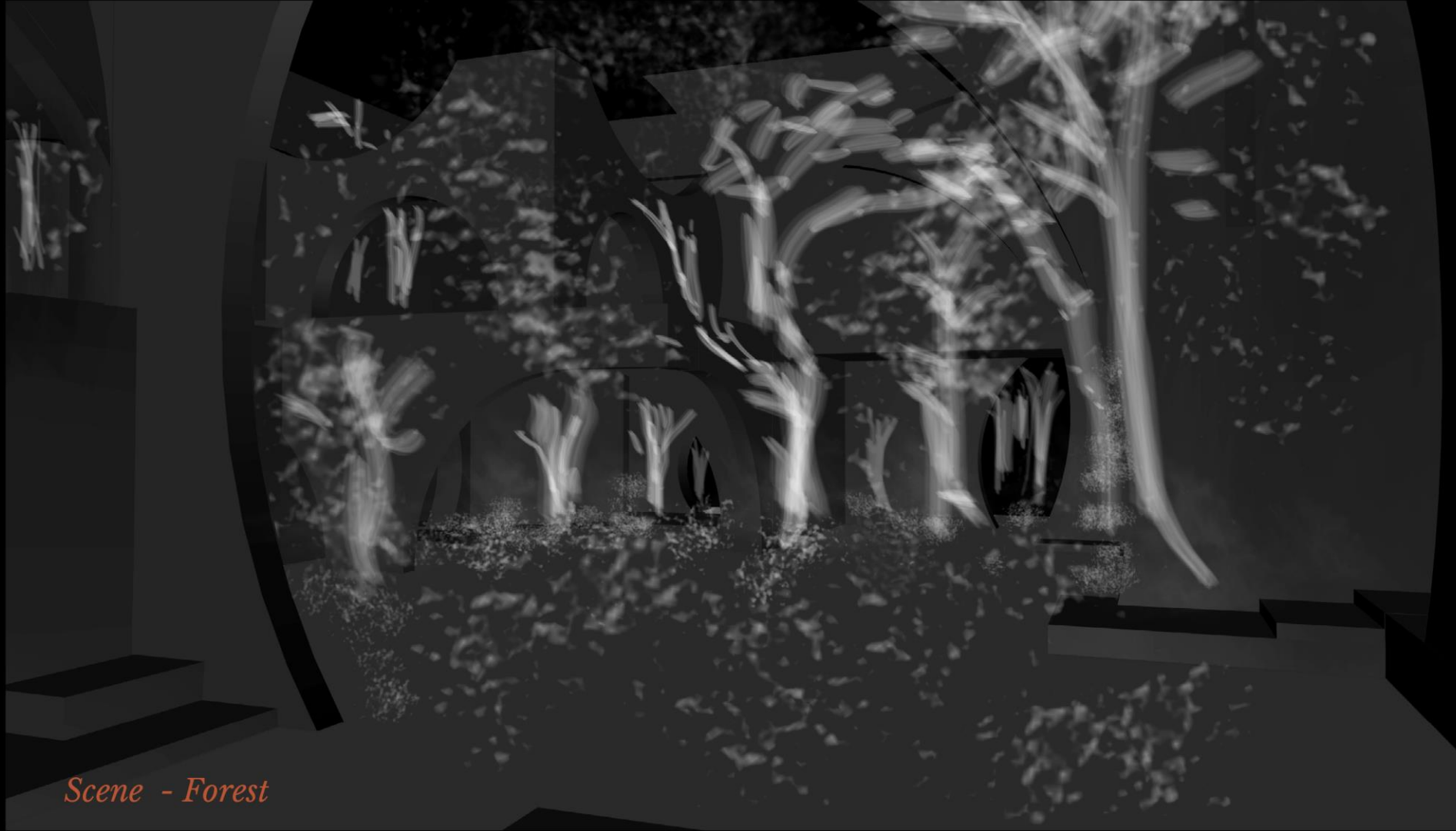


-
- Function
- Spatial Illusion
- Abstraction
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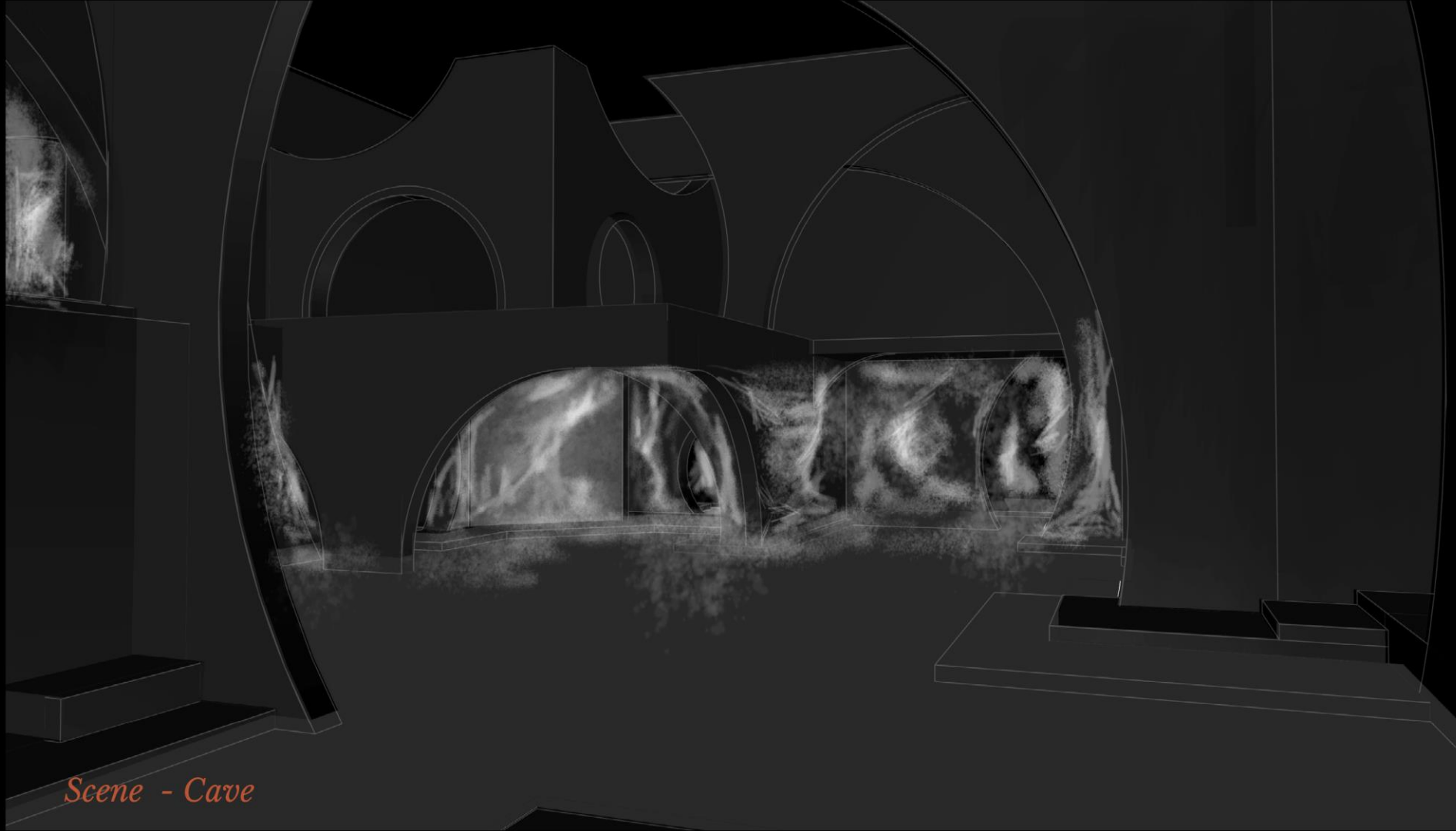
Scene - Garden

- Function
- Spatial Illusion
- **Abstraction**
 - Indoor
 - Multi-Face
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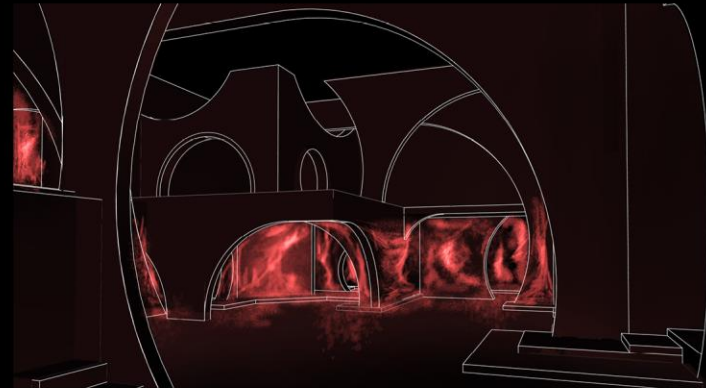
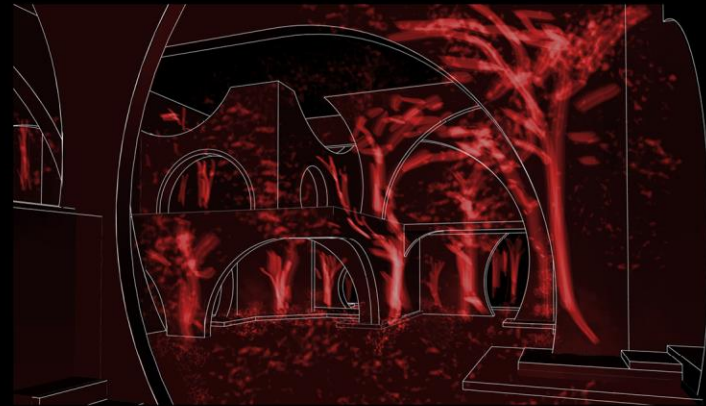
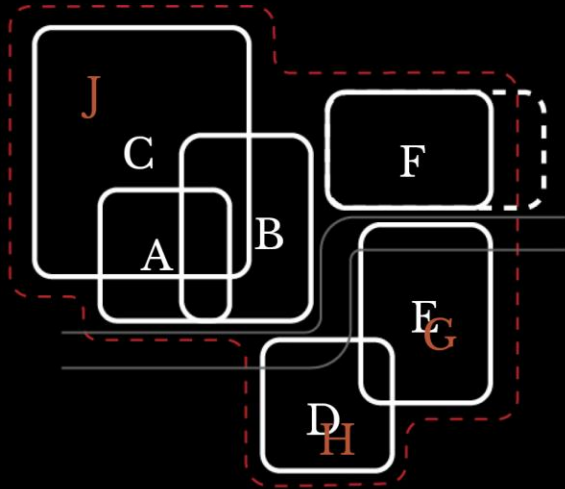
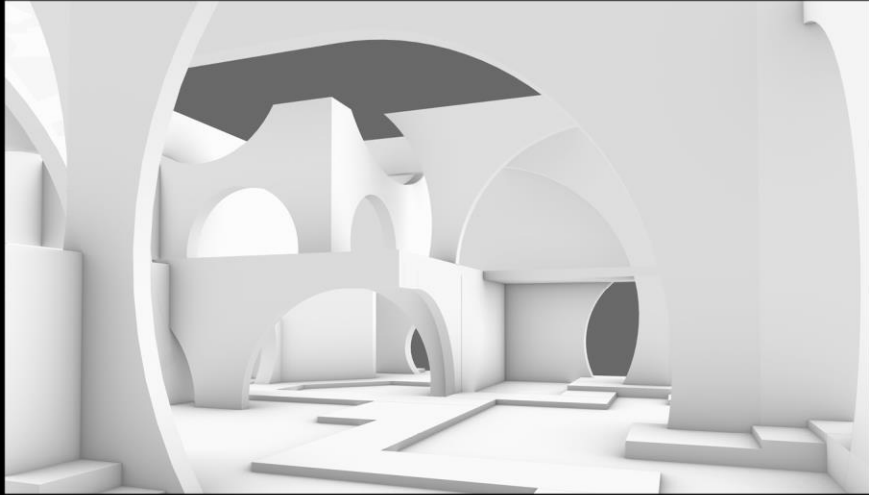
Scene - Forest

- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
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Scene - Cave

- Function
- Spatial Illusion
- Abstraction
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- Function
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Contrast (Problem?) :

Limited Space - Larger Space Requirement

(Methods) :

Overlayer-Screen Space

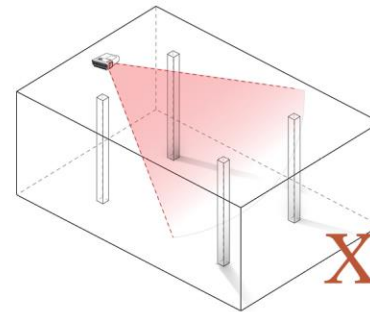
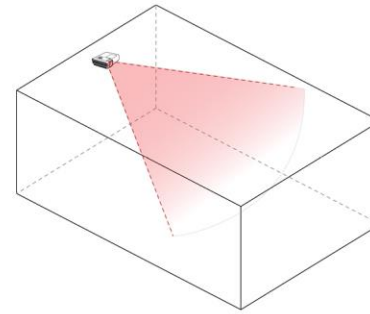
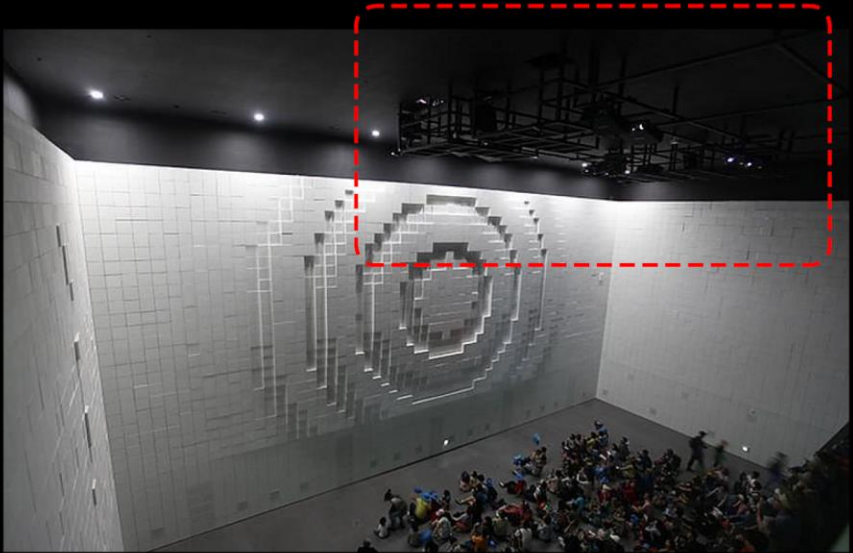


use different part of space
to represent different scenes



Question Five [What is the disadvantage of overlayer-space ?]

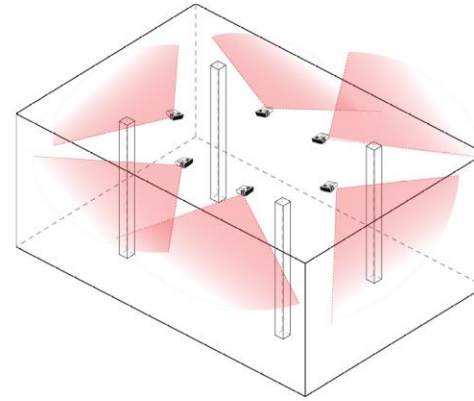
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - **Overlay**
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



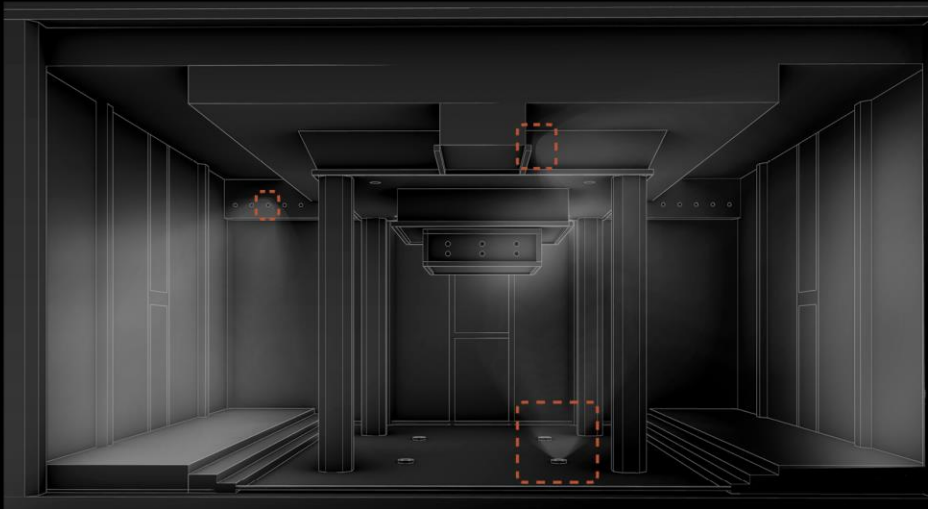
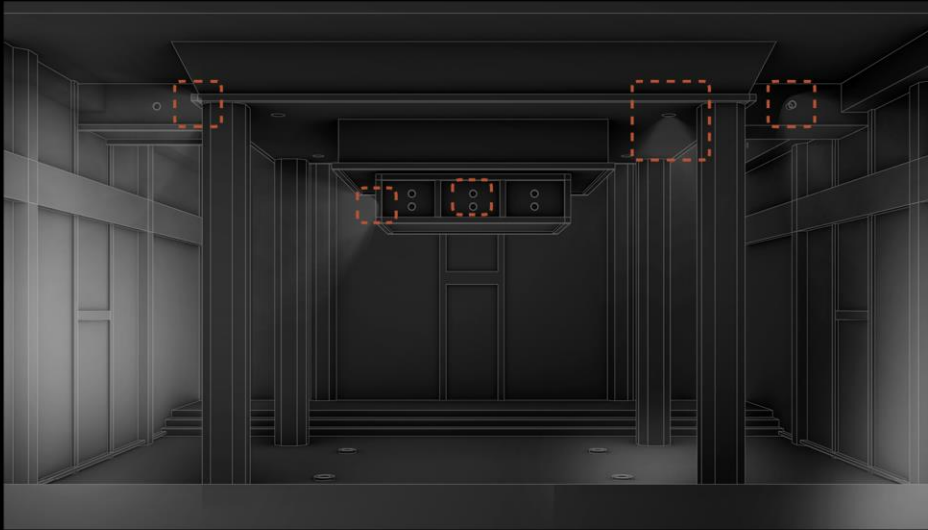
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - **Overlay**
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



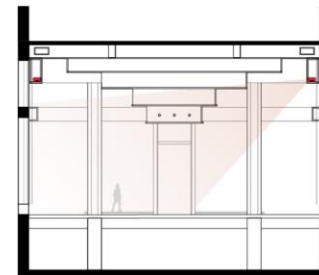
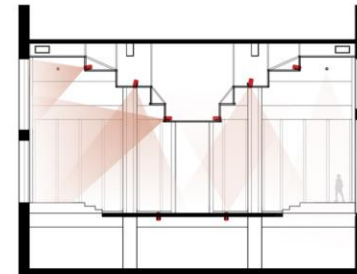
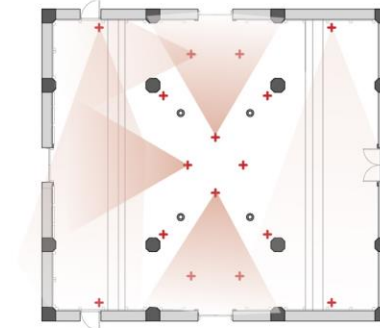
Projection Mapping in Atelier des Lumières, Paris



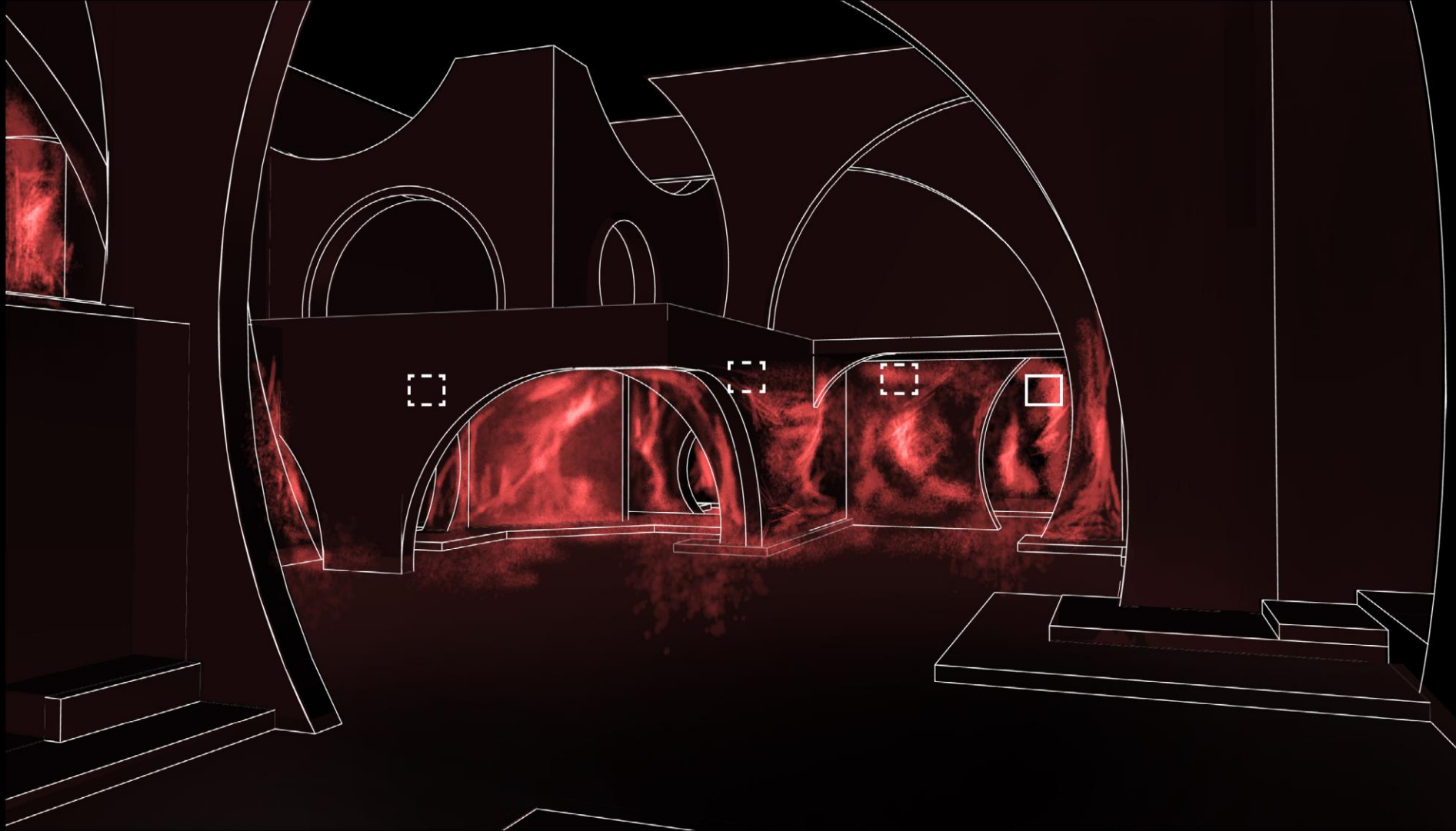
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - **Overlay**
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



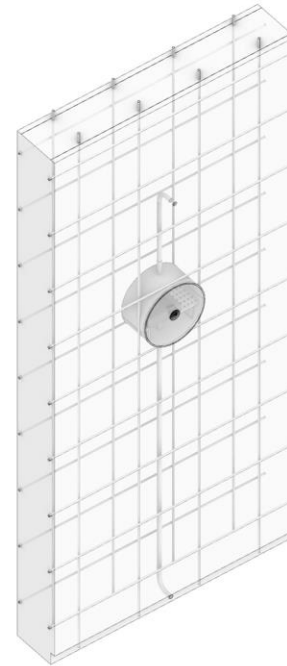
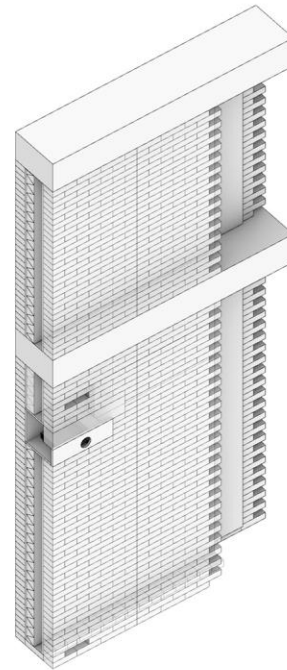
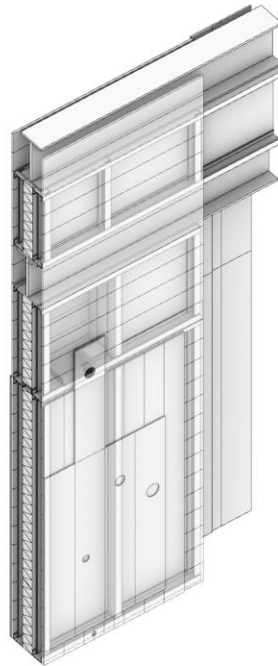
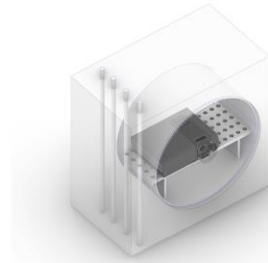
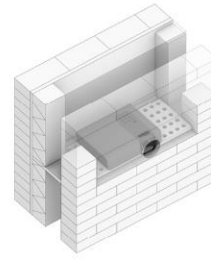
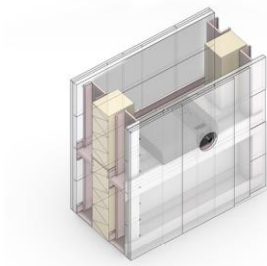
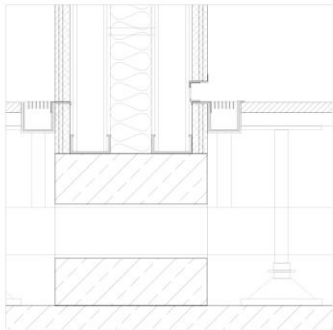
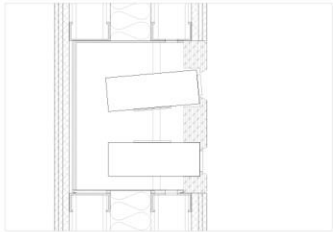
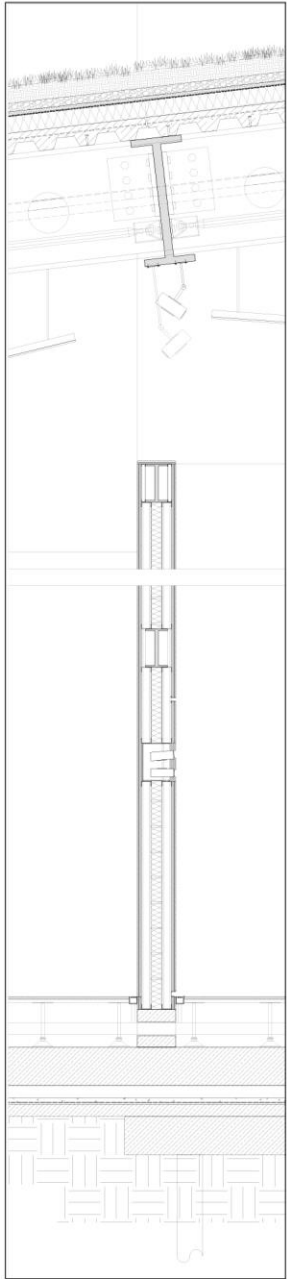
Zone - Palace / Hall / Academy



- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - **Overlay**
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - **Overlay**
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



Gypsum board Partition Wall

Brick Wall

Concrete Wall

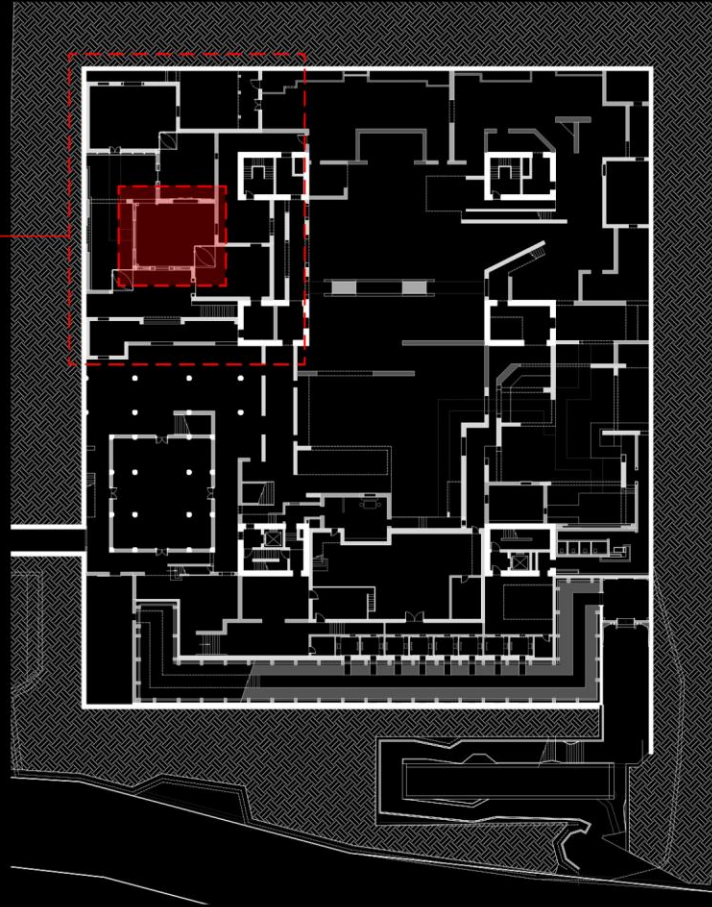
*Projector-Embedded Wall
(450mm-600mm thick)*

- Function
- Spatial Illusion
- Abstraction
- Indoor
- Multi-Face
- Extend
- Outdoor
- **Overlay**
- Inbetween
- Figure Ground
- Flexible
- Layout
- Context
- Garden

Question Six [Is it possible compress indoor and outdoor space ?]

-
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden

*Zone: Courtyard
Rooms*

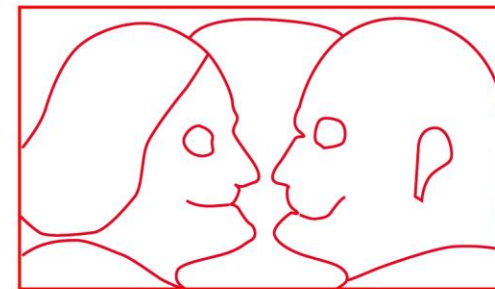


[Inbetween - *Between Indoor and Outdoor*]

-
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - **Inbetween**
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



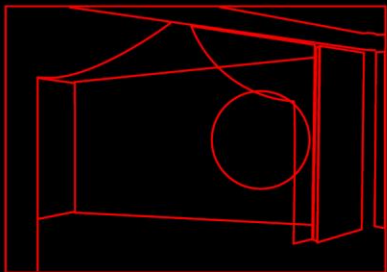
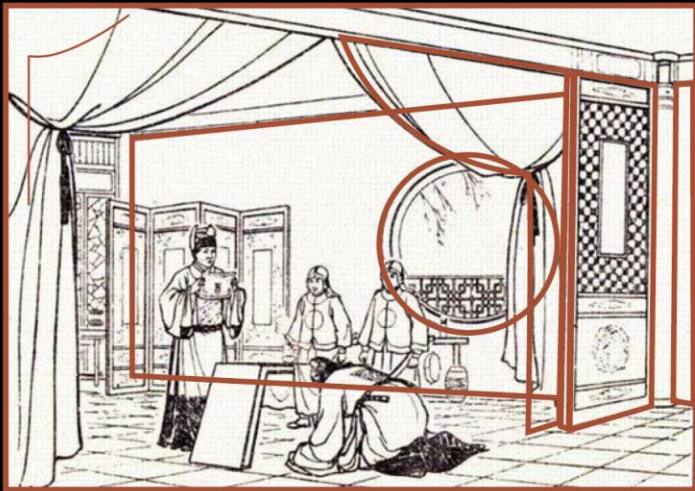
Rubin's Vase



Gestalt Principle - Figure Ground

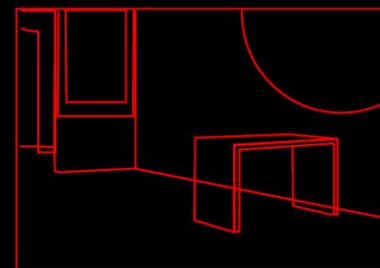
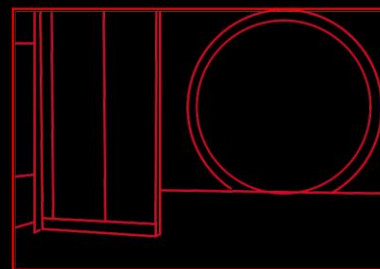
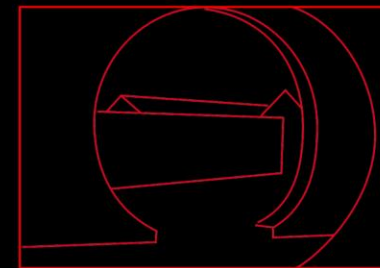
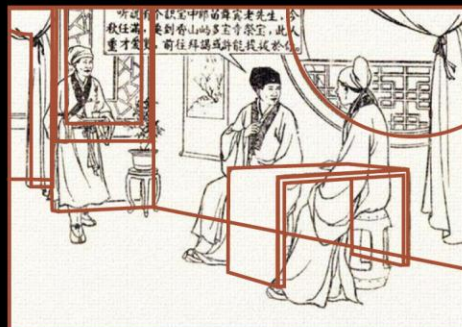
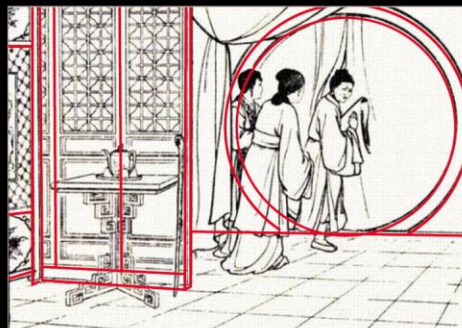
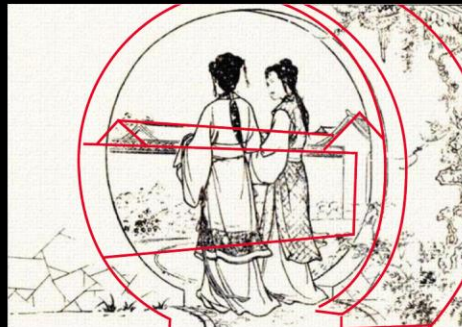
If we focus on the different part of the drawing. It is the figure ground effect. So when we draw these painting, we should first figure out the main outline of the drawing and fill in the other part into the outline.

- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - **Flexible**
- Layout
- Context
- Garden

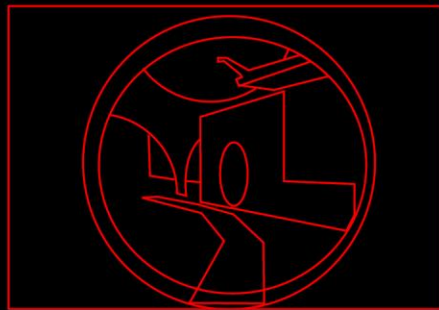


Analysis the form of Scene

If we use abstract geometric shape to represent the scene in comic drawing. We can easy to see the main elements in interior and exterior is the screen walls, curtain and the circular windows or doors.

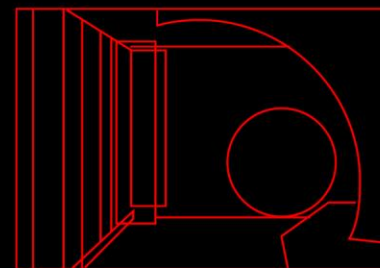
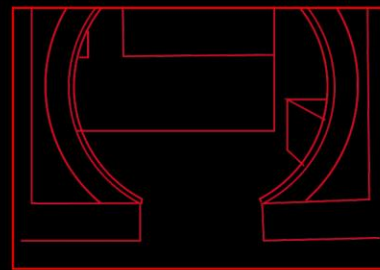
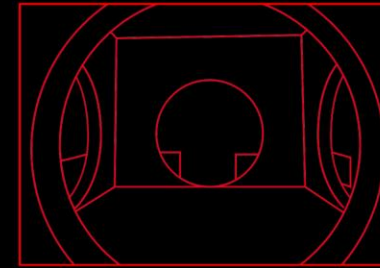


- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - **Inbetween**
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden

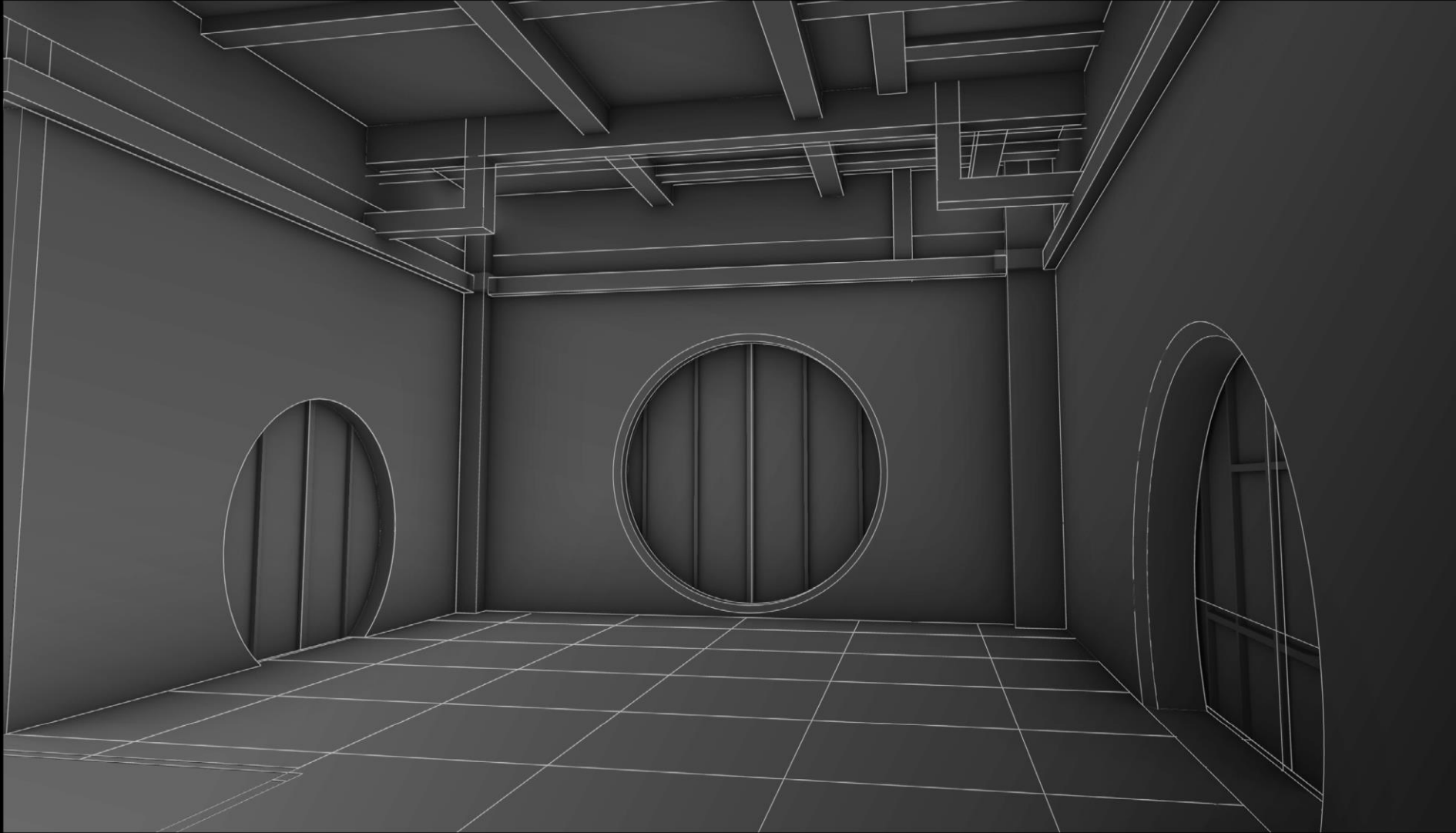


Analysis the form of Scene

Similar situation happens in the real scene in Chinese Garden. The circular door and windows is one of the most important element inbetween indoor space and outdoor space.



- Function
- Spatial Illusion
- Abstraction
- Indoor
- Multi-Face
- Extend
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- Overlay
- **Inbetween**
- Figure Ground
- Flexible
- Layout
- Context
- Garden



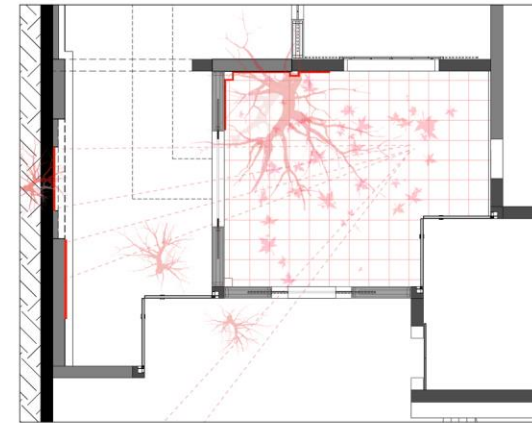
-
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - **Inbetween**
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- Function
- Spatial Illusion
- Abstraction
 - Indoor
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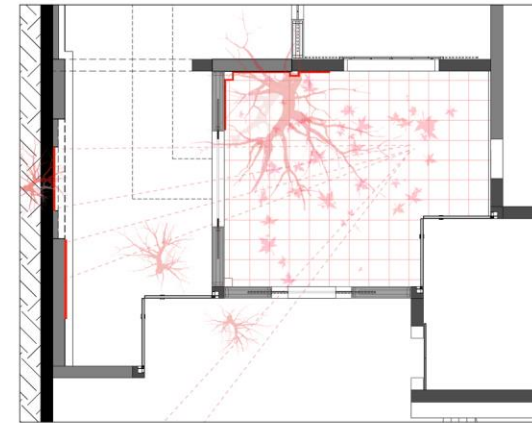
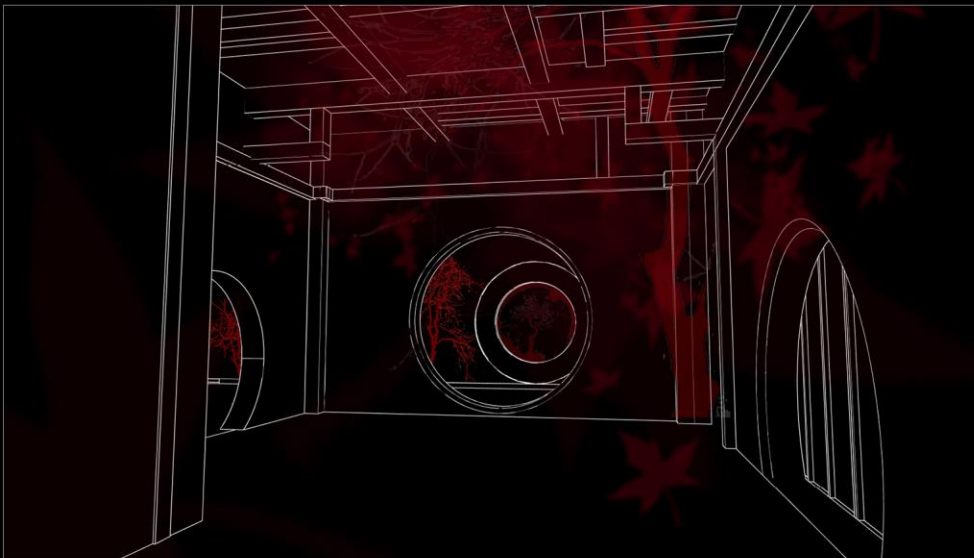
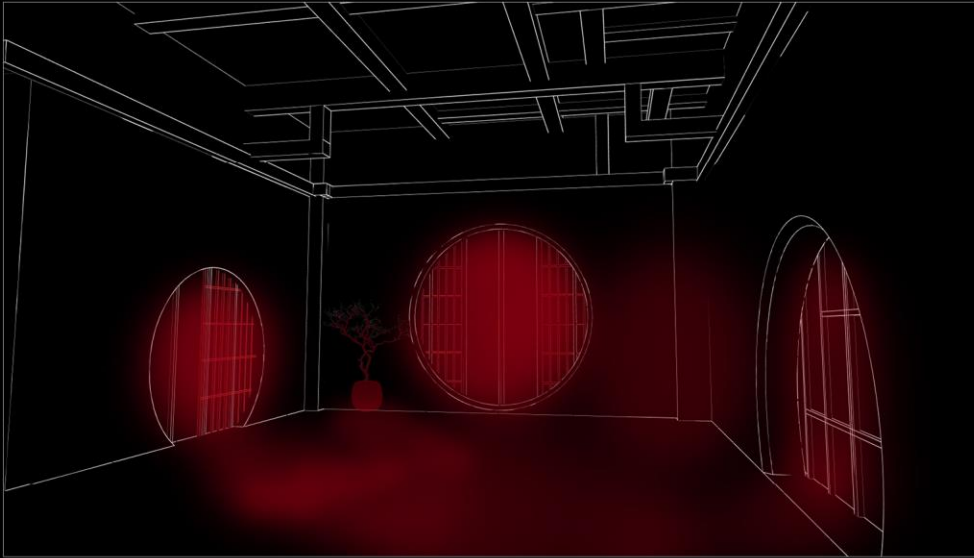
-
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - **Inbetween**
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



Circular Door - Interface between Indoor and outdoor

The circular door and windows are used as the main frame of the scene. Because it can help audience to focus on the center of door. It is always used in Chinese garden. And it belongs to both indoor and outdoor.

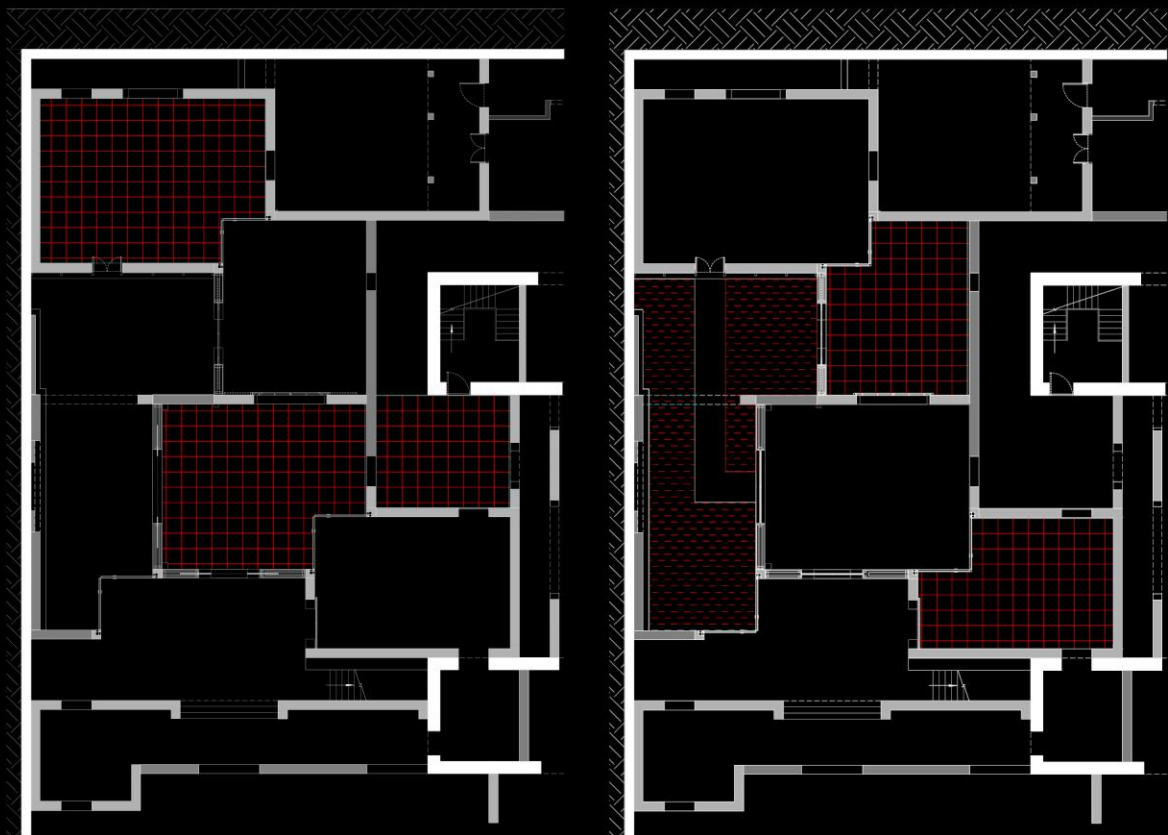
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
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 - Overlay
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- Garden



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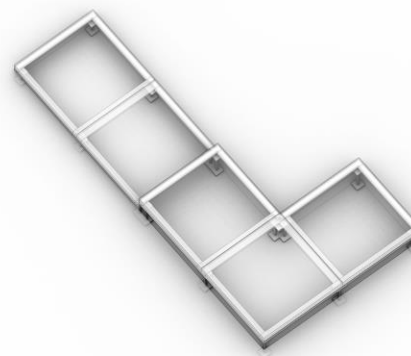
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden



Virtual "Outdoor" Floor pattern



Embedded Slide Door



Adjustable Steps

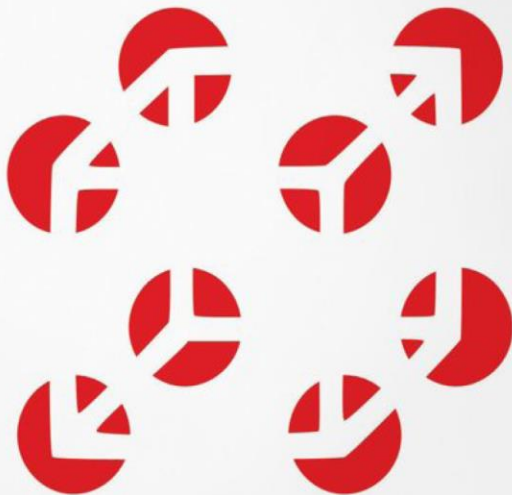
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - **Inbetween**
 - Figure Ground
 - **Flexible**
- Layout
- Context
- Garden



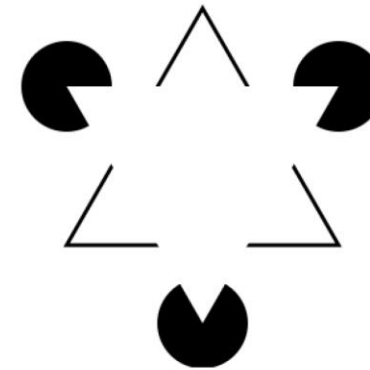
-
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - **Inbetween**
 - Figure Ground
 - Flexible
- Layout
- Context
- Garden

DIE GESTALTTHEORIE

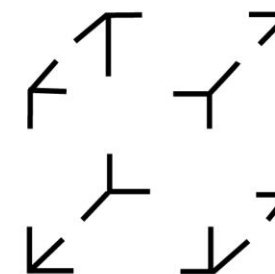
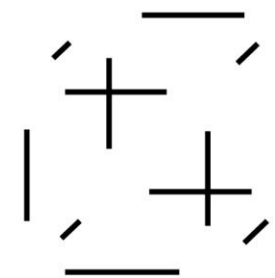
Psychologie der menschlichen
Wahrnehmung



Business 50MINUTEN.de



Gestalt Principle - Closure



Function

Spatial Illusion

Abstraction

Indoor

Multi-Face

Extend

Outdoor

Overlay

Inbetween

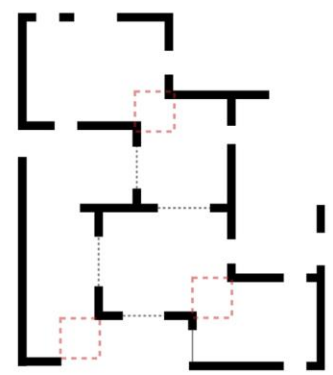
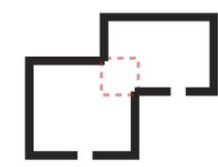
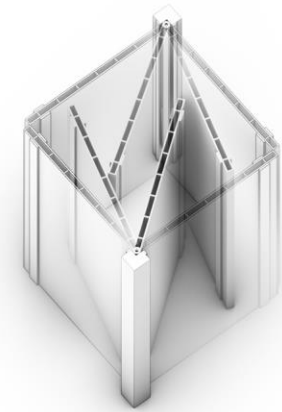
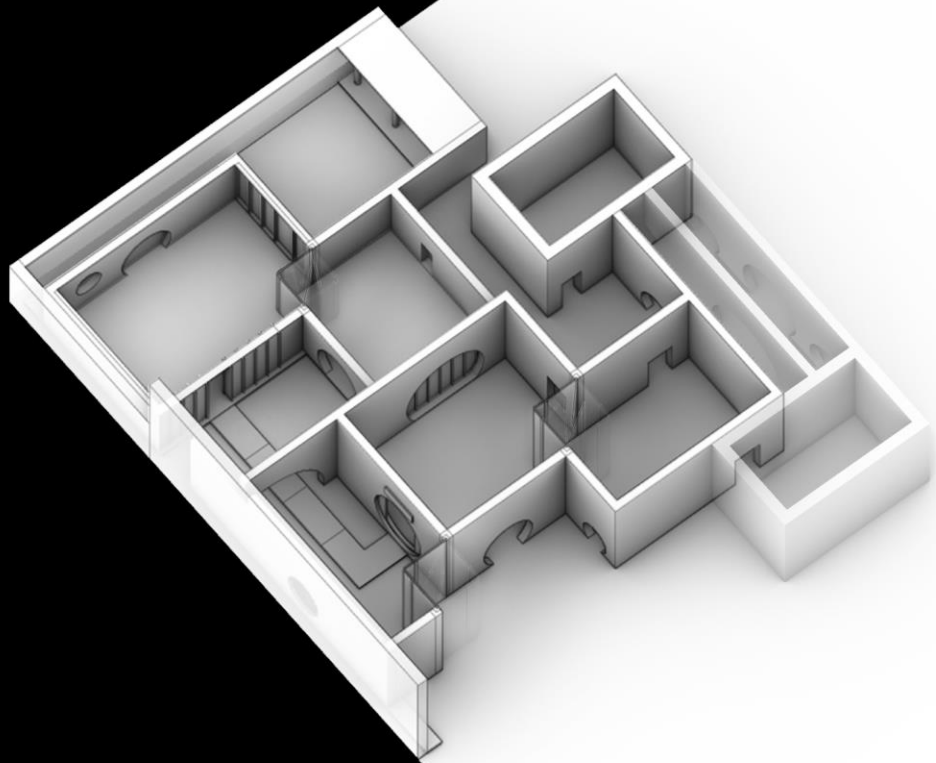
Figure Ground

Flexible

Layout

Context

Garden

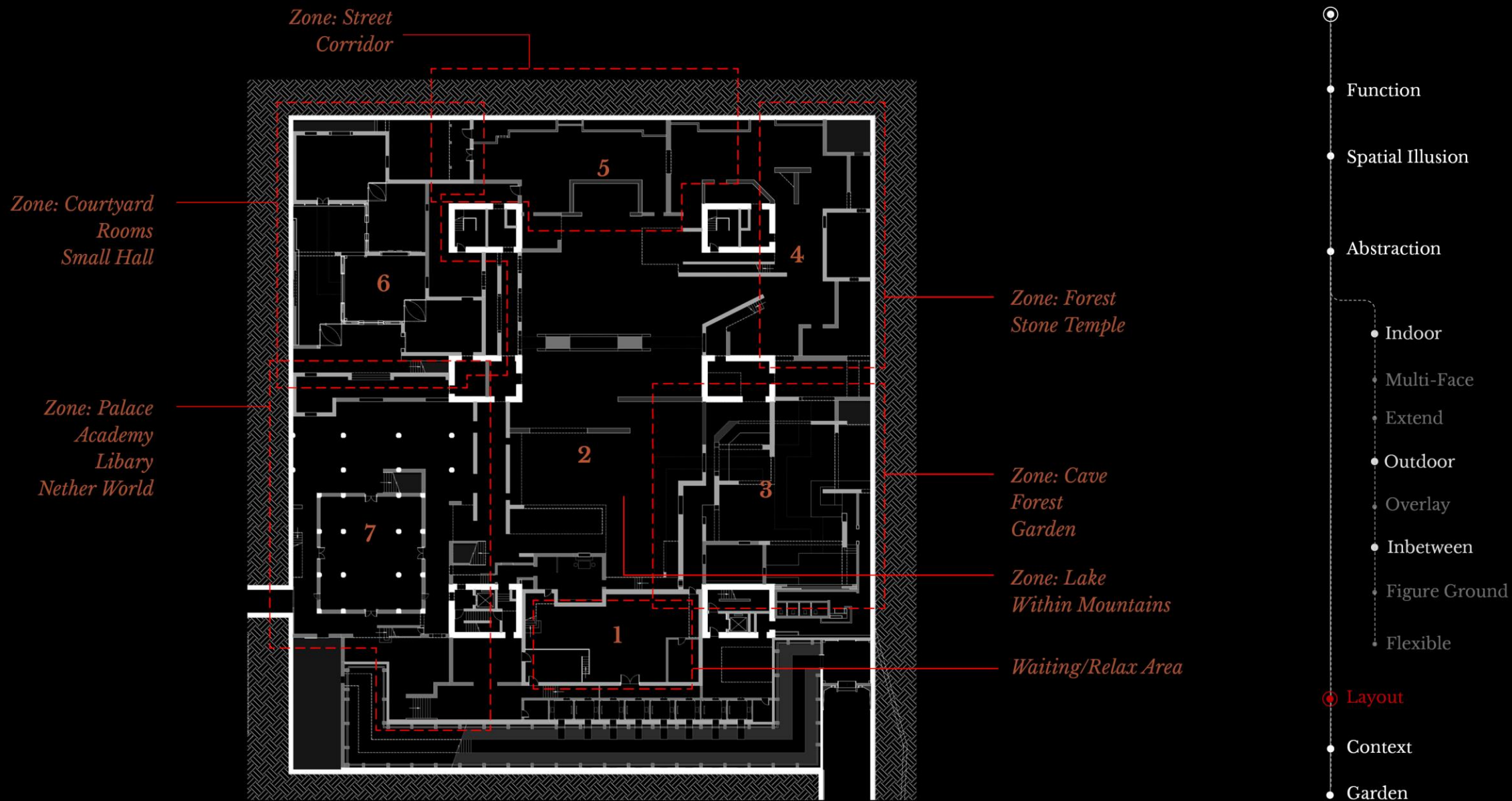


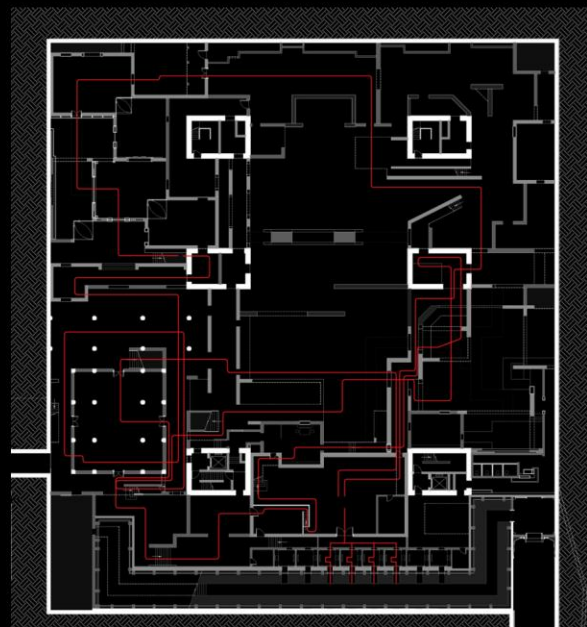
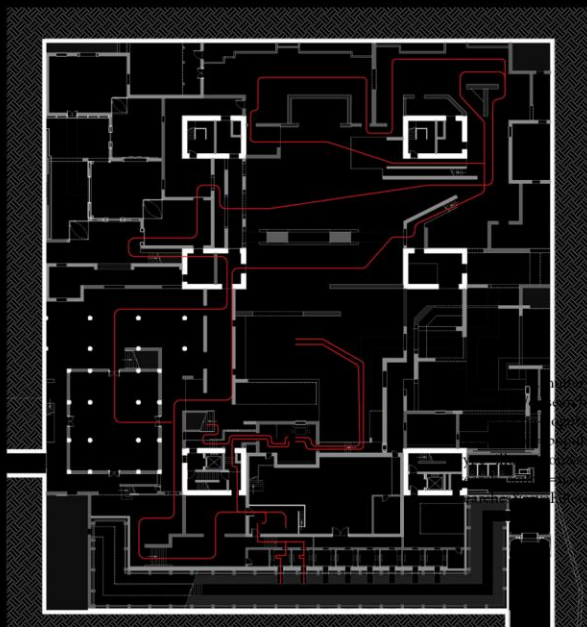
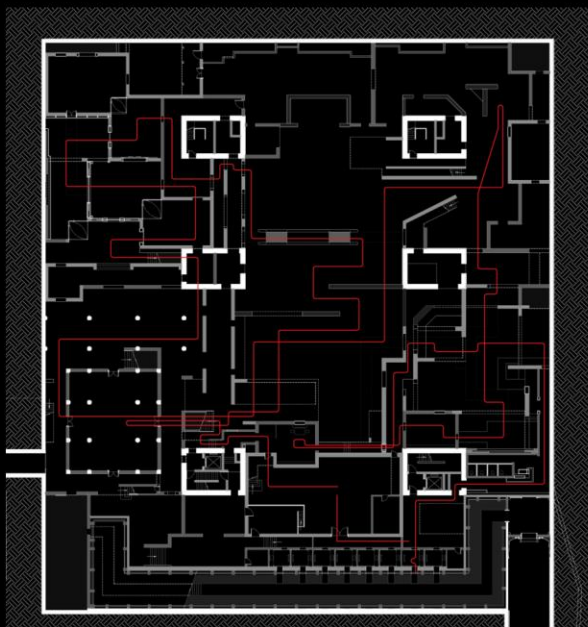
*change Perspective remindner
+different focus
+timeline (consequence)*

- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - **Flexible**
- Layout
- Context
- Garden

Part Seven [Can the **Layout of space** be designed to reinforce teh illusion]

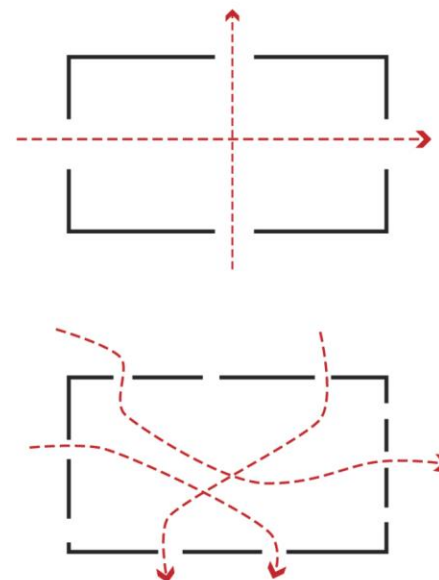
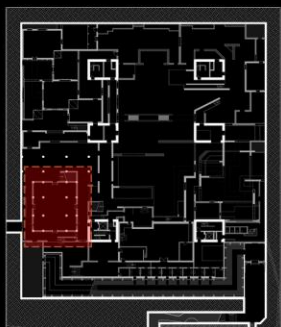
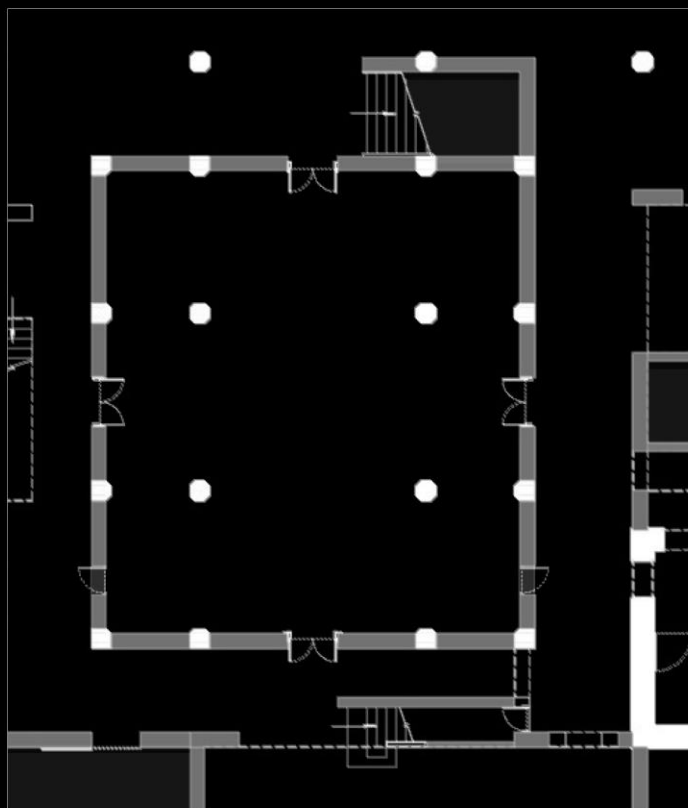
-
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- **Layout**
- Context
- Garden





Different storylines on Space → *the Multiplicity of Space*

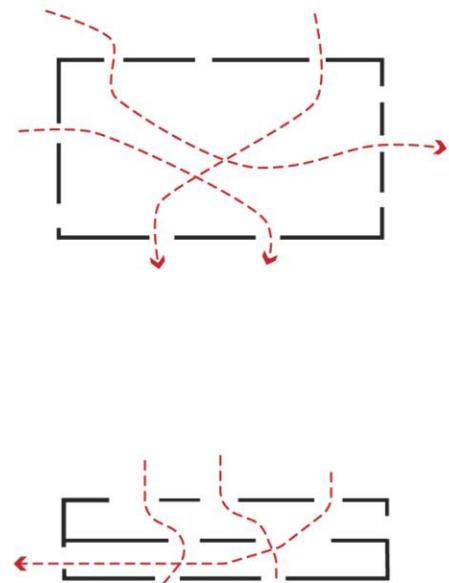
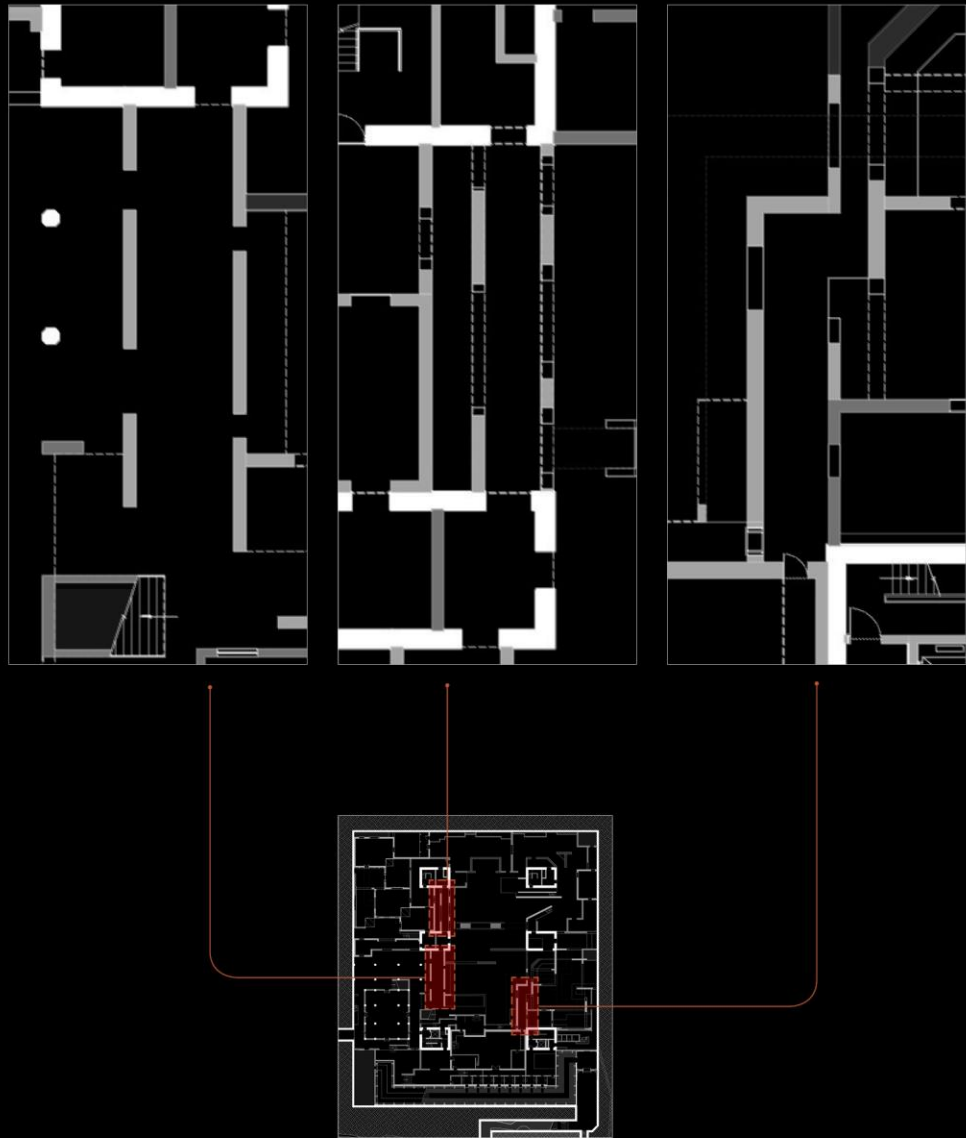
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- **Layout**
- Context
- Garden



Rooms with many doors

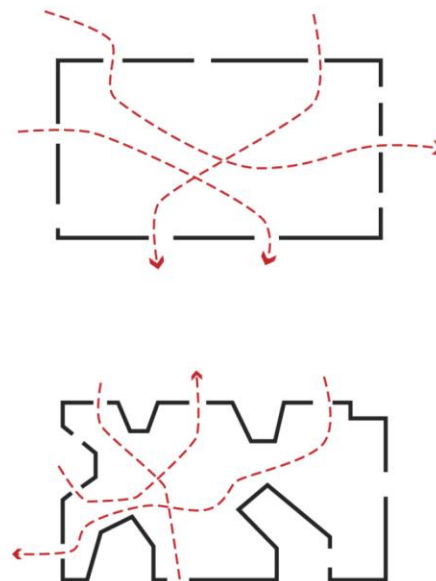
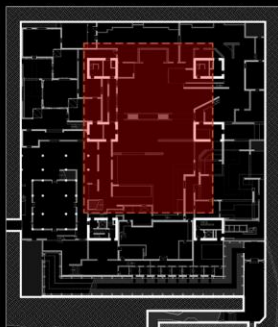
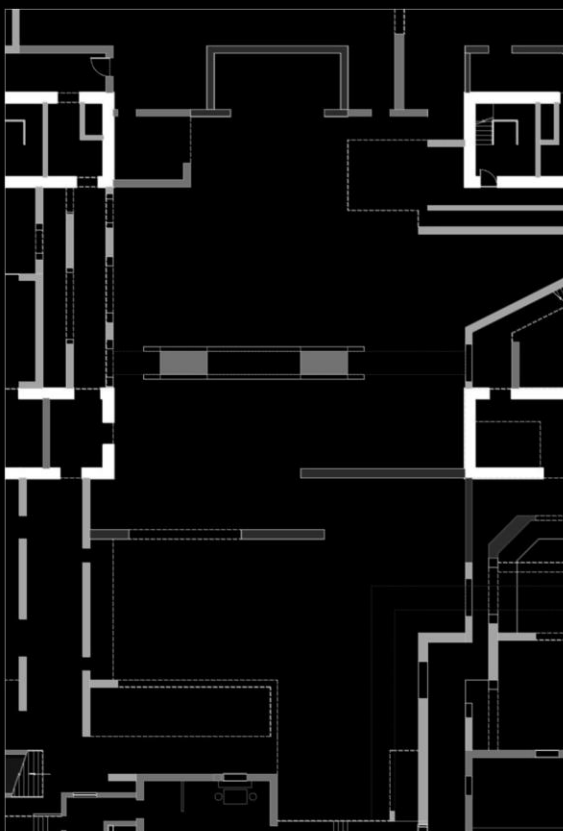
Different angle and view to go in and out

- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- **Layout**
- Context
- Garden



Boundary with many layers
Different Choice of Path

- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- **Layout**
- Context
- Garden



*Large space with organic shape
experience different part of big space*

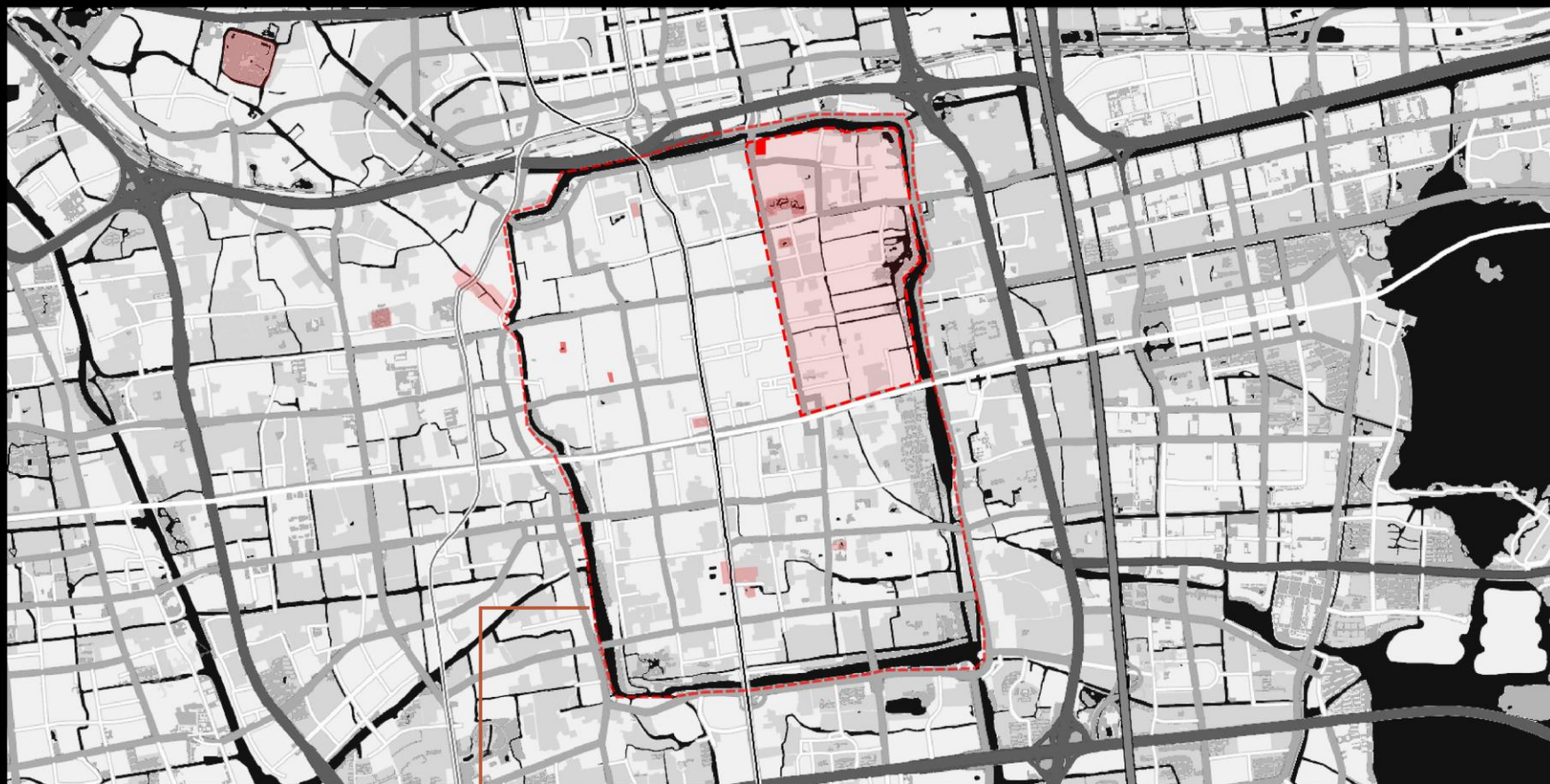
- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
 - Flexible
- **Layout**
- Context
- Garden

Question Eight [What is the context]

- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
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- Layout
- Context
- Garden



- Function
- Spatial Illusion
- Abstraction
- Indoor
- Multi-Face
- Extend
- Outdoor
- Overlay
- Inbetween
- Figure Ground
- Flexible
- Layout
- **Context**
- Garden



Old town of Suzhou

- Site
- Famous Garden
- Tourist area

- Function
- Spatial Illusion
- Abstraction
- Indoor
- Multi-Face
- Extend
- Outdoor
- Overlay
- Inbetween
- Figure Ground
- Flexible
- Layout
- **Context**
- Garden



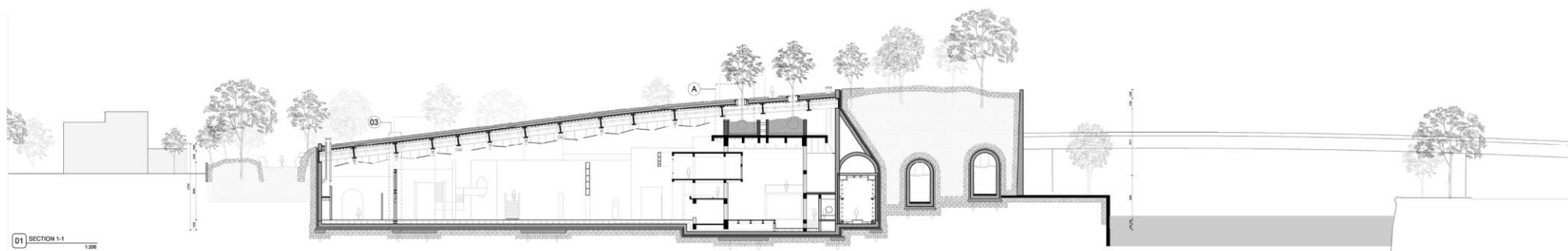
- Function
- Spatial Illusion
- Abstraction
 - Indoor
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 - Inbetween
 - Figure Ground
 - Flexible
- Layout
- **Context**
- Garden



- Function
- Spatial Illusion
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- **Context**
- Garden



- Function
- Spatial Illusion
- Abstraction
- Indoor
- Multi-Face
- Extend
- Outdoor
- Overlay
- Inbetween
- Figure Ground
- Flexible
- Layout
- **Context**
- Garden

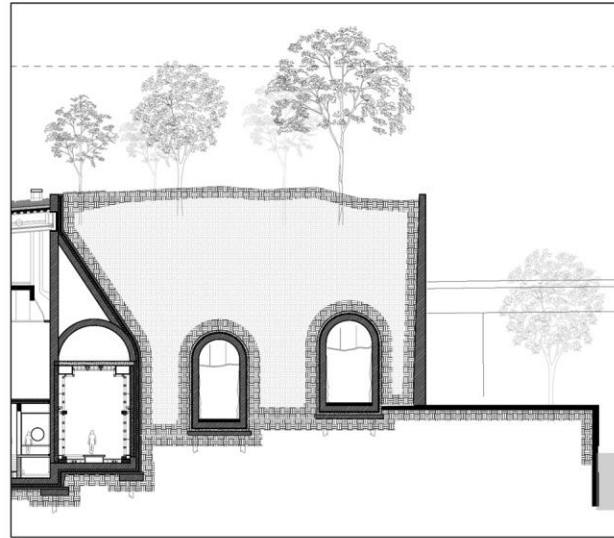


Reason One: No need for nature light

Reason Two: Maintain the function as a public park for nearby residents

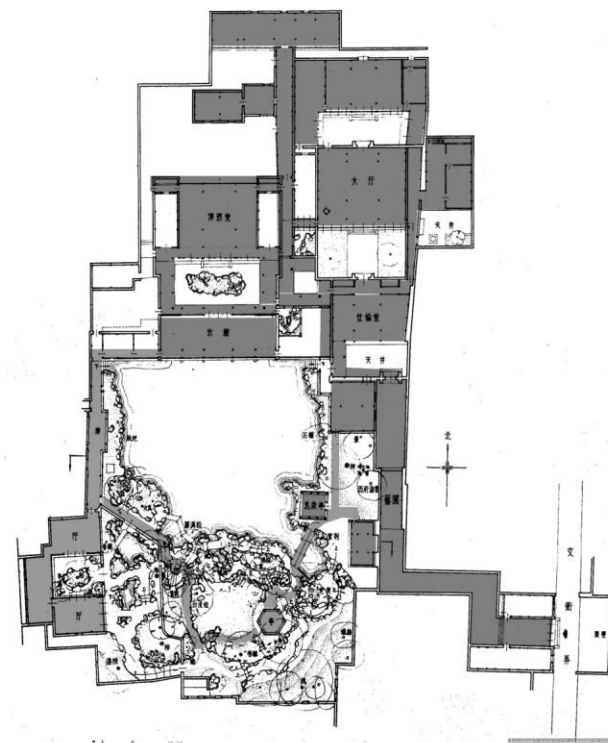
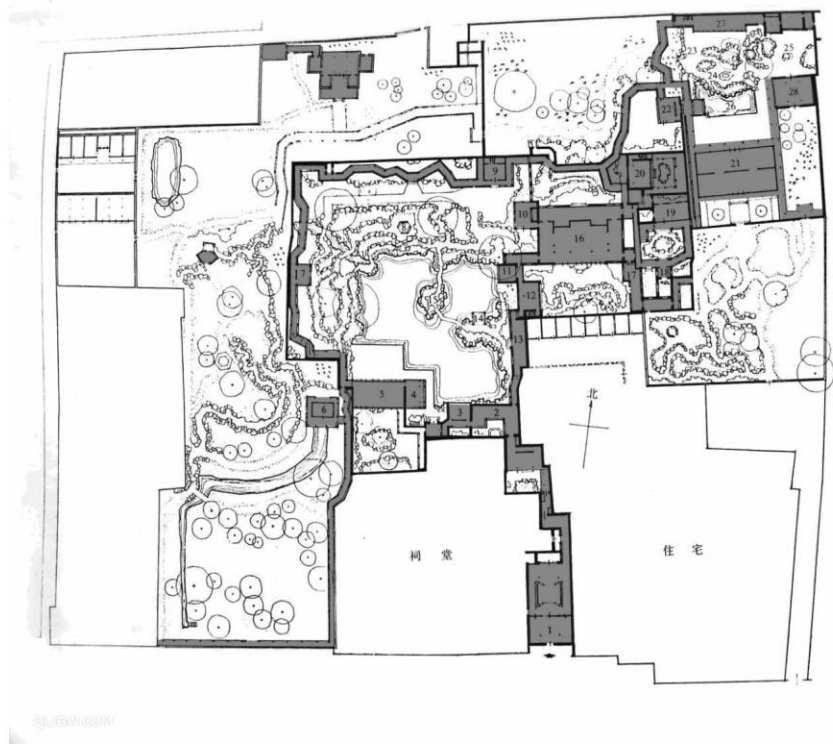
Reason Three: Create a contrast to reinforce the illusion

- Function
- Spatial Illusion
- Abstraction
 - Indoor
 - Multi-Face
 - Extend
 - Outdoor
 - Overlay
 - Inbetween
 - Figure Ground
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- Context
- Garden



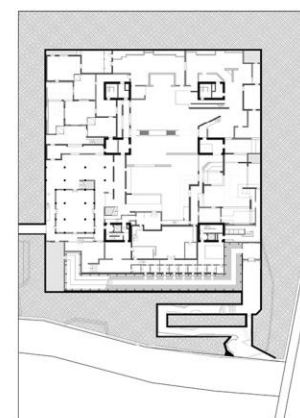
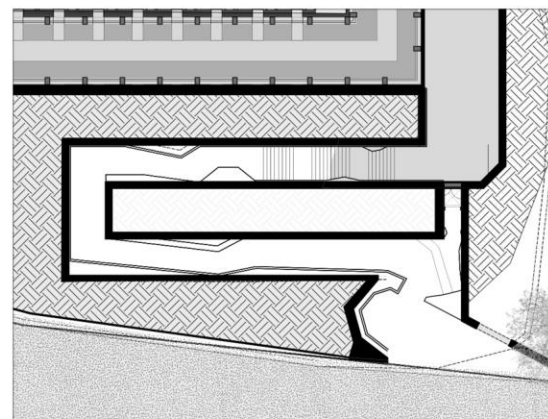
Hamble Entrance and Narror and dark Corridor

- Function
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- Inbetween
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- Garden

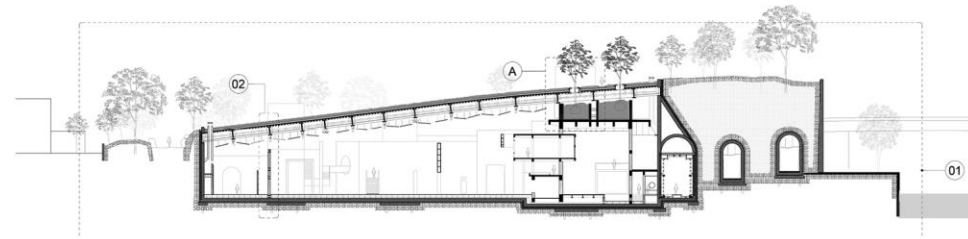
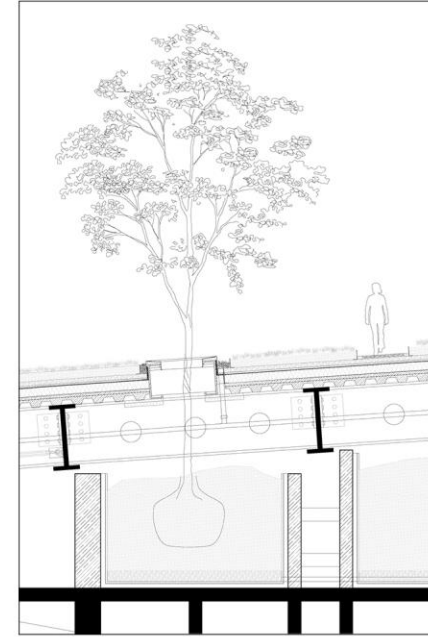


Garden hidden in the city

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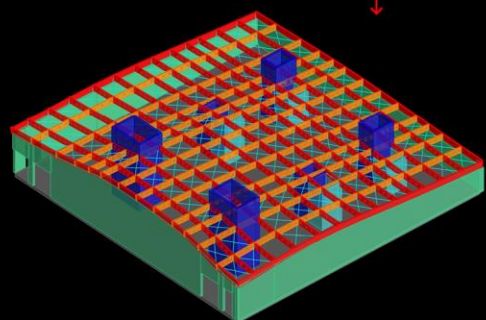
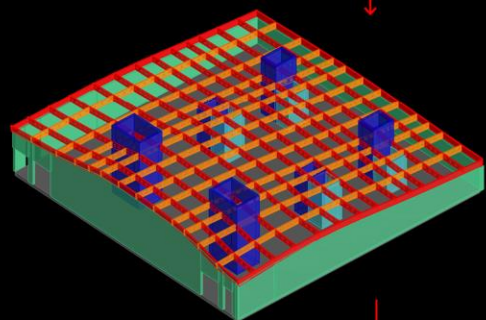
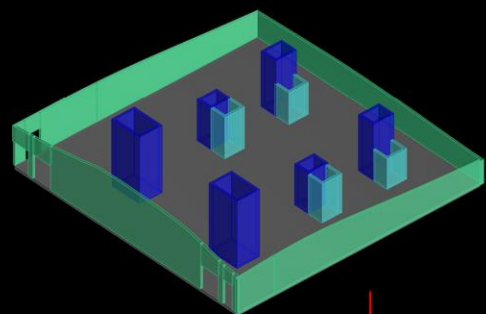


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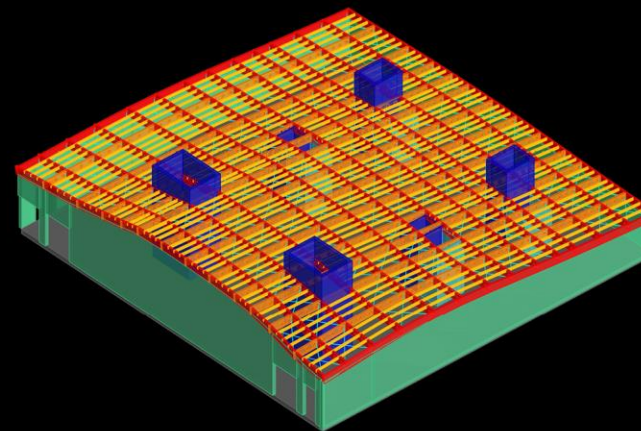


Tree and Grass Separation Diagram

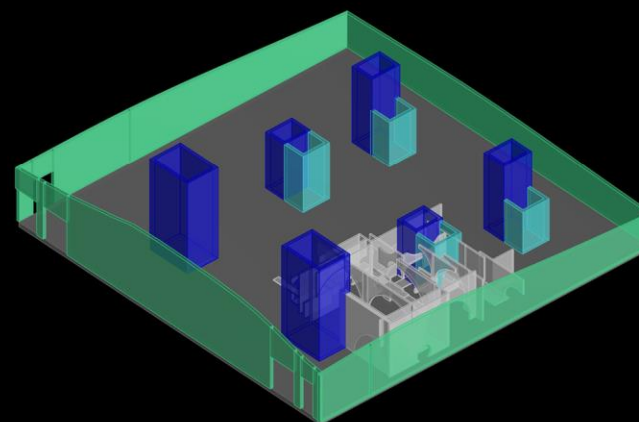
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Main Structure System

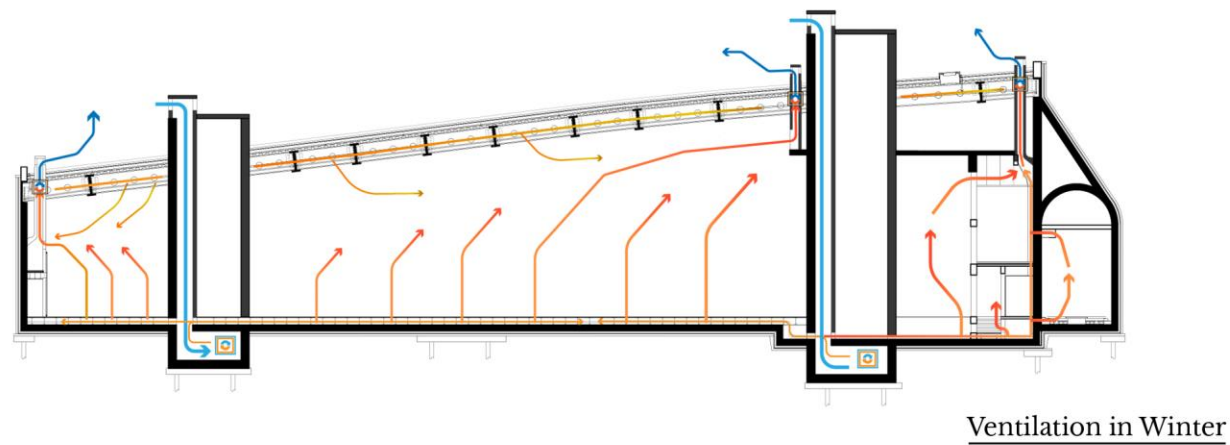
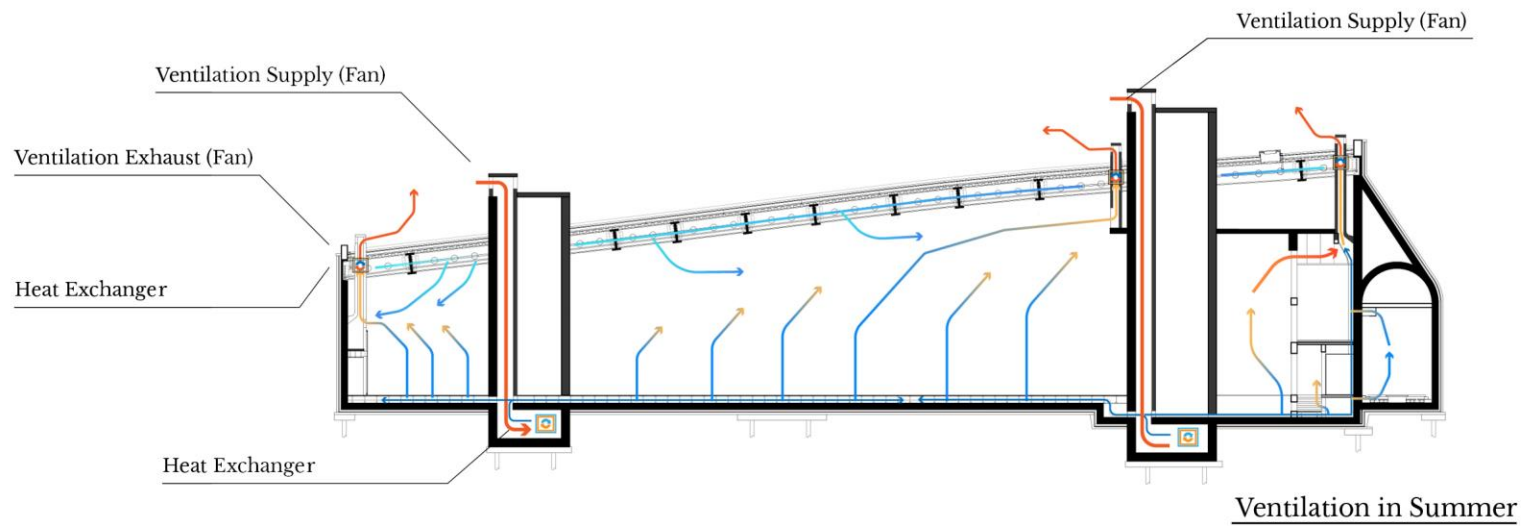


Green Roof Structure:
Six frame-core wall structure works as six big columns to support the roof and the grass on the top.



Flexible Wall Structure:
The walls which construct the space are more flexible and demountable according the need of the changing scenes. And part of the walls support the tree on the top, for the roof park.

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Mechanical Ventilation

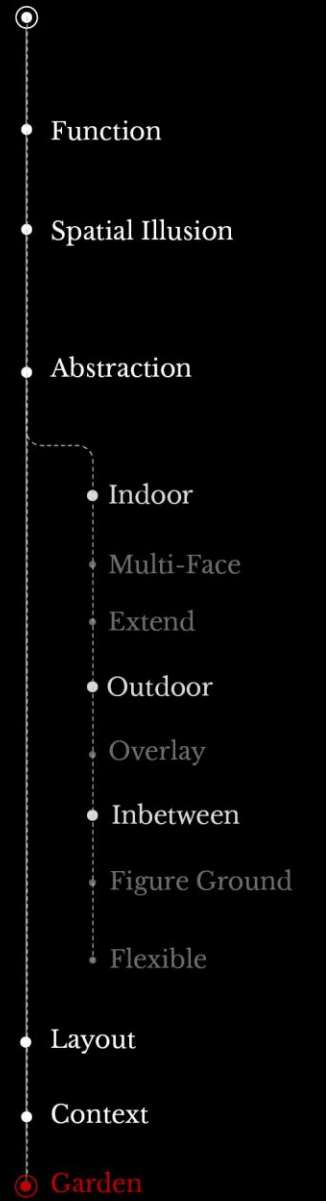
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Question Nine [Why I call it a garden ?]

-
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Chinese Painting





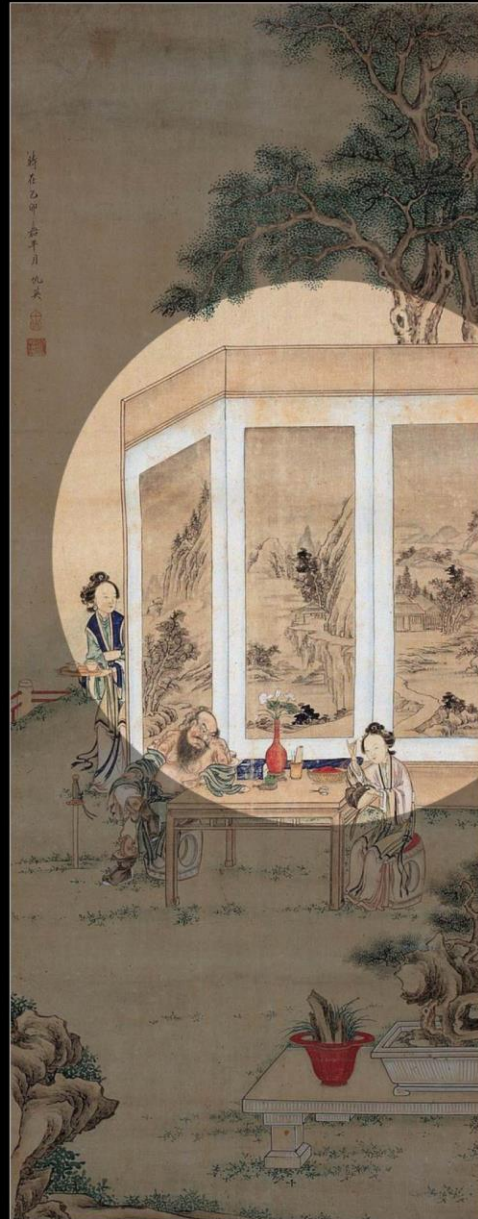
Old Chinese Painting of Suzhou

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Contrast (Problem?) :

Limited Space - Larger Space Requirement





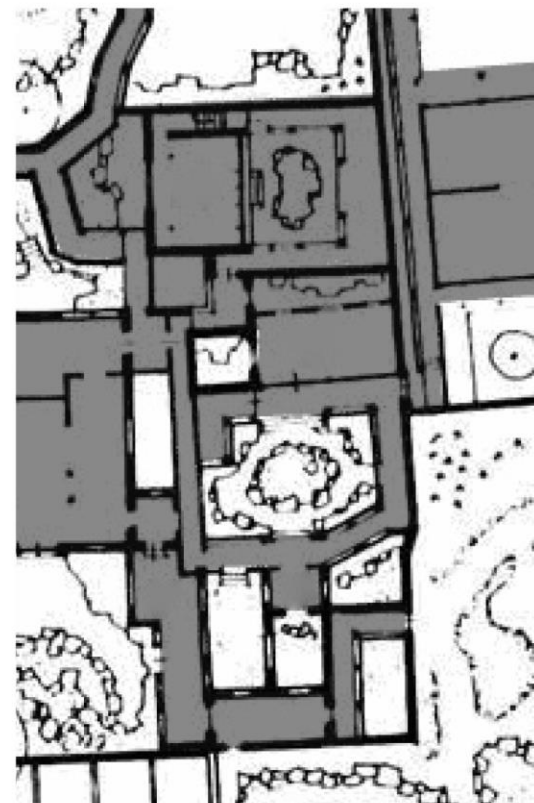
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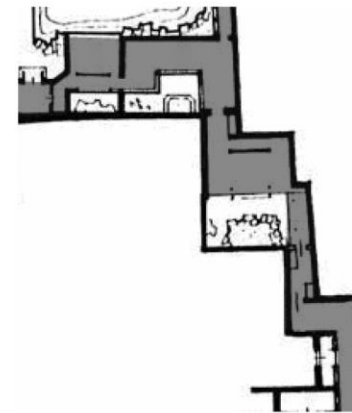
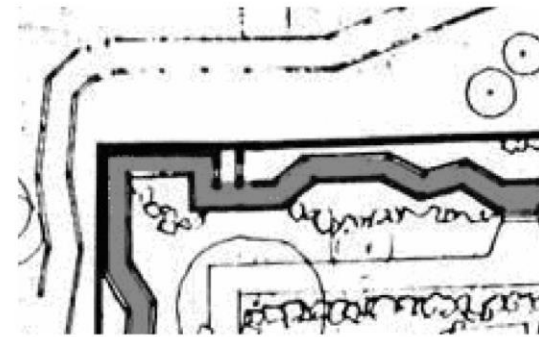
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Contrast (Problem?) :

Limited Space - Larger Space Requirement

Technic in Chinese Garden (Solution) :
Control what you see and control the path
to create an Experiential Illusion

“ The space seems bigger ”





Spatial Augmented Reality in Ancient China

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- **Reflection**



Spatial Augmented Reality in Future China

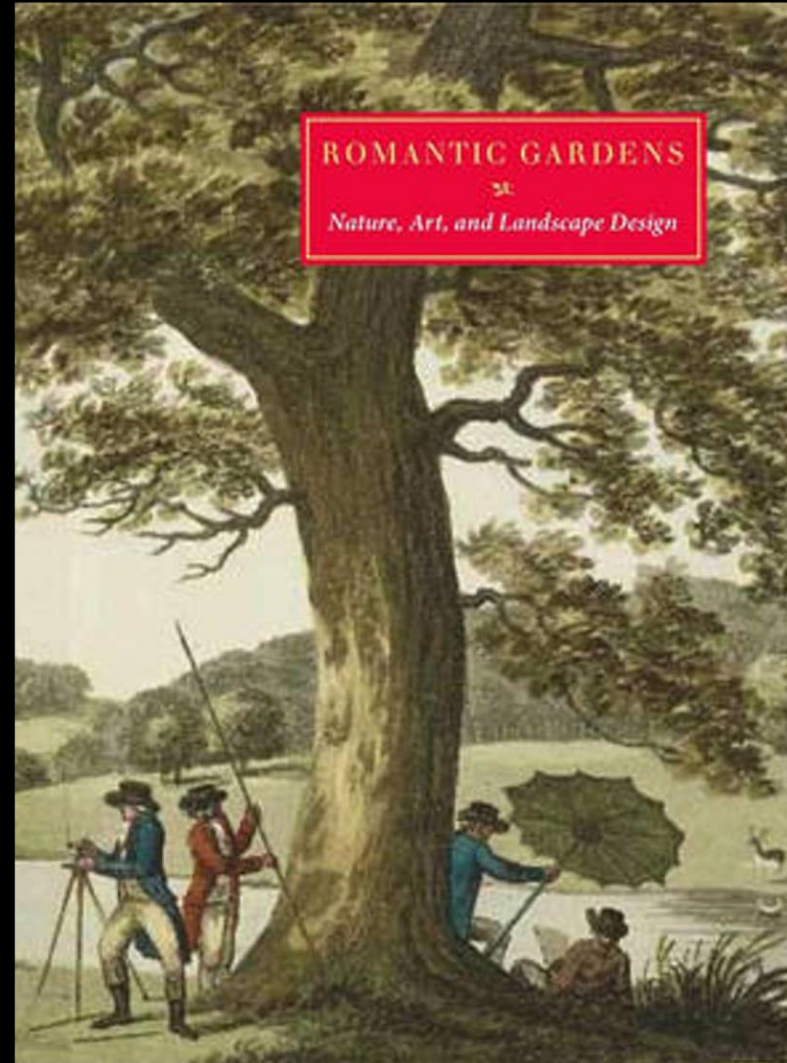
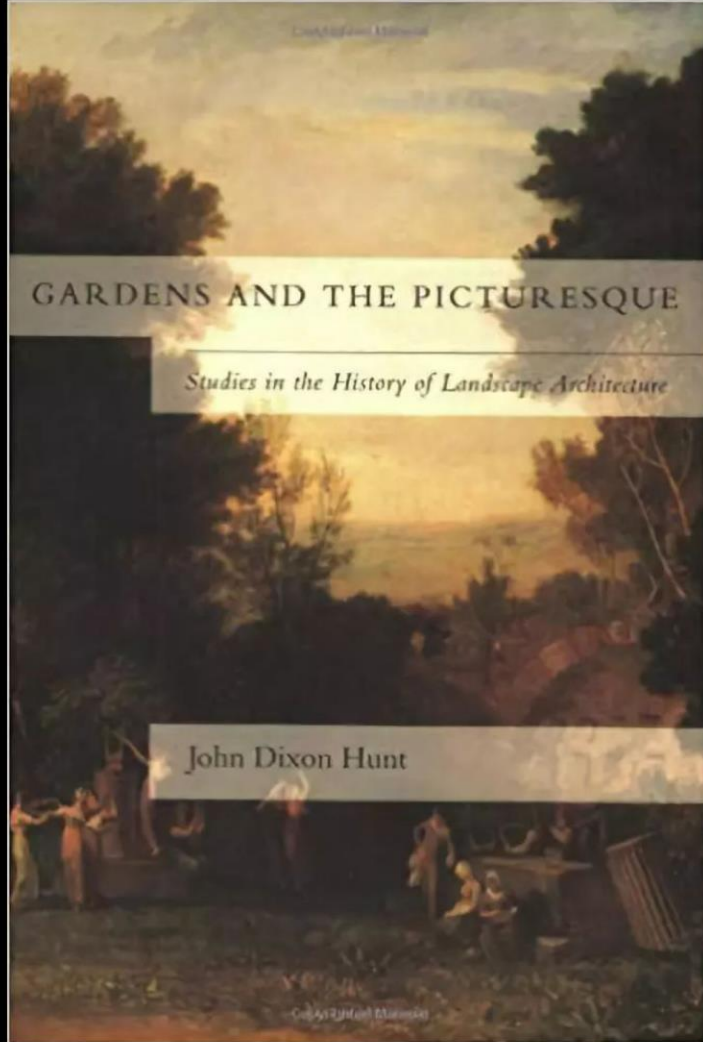
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City Green Belt

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*The influence of Picturesque in Garden Design
England (Europe) , 18th century*



Function

Spatial Illusion

Abstraction

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Multi-Face

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Figure Ground

Flexible

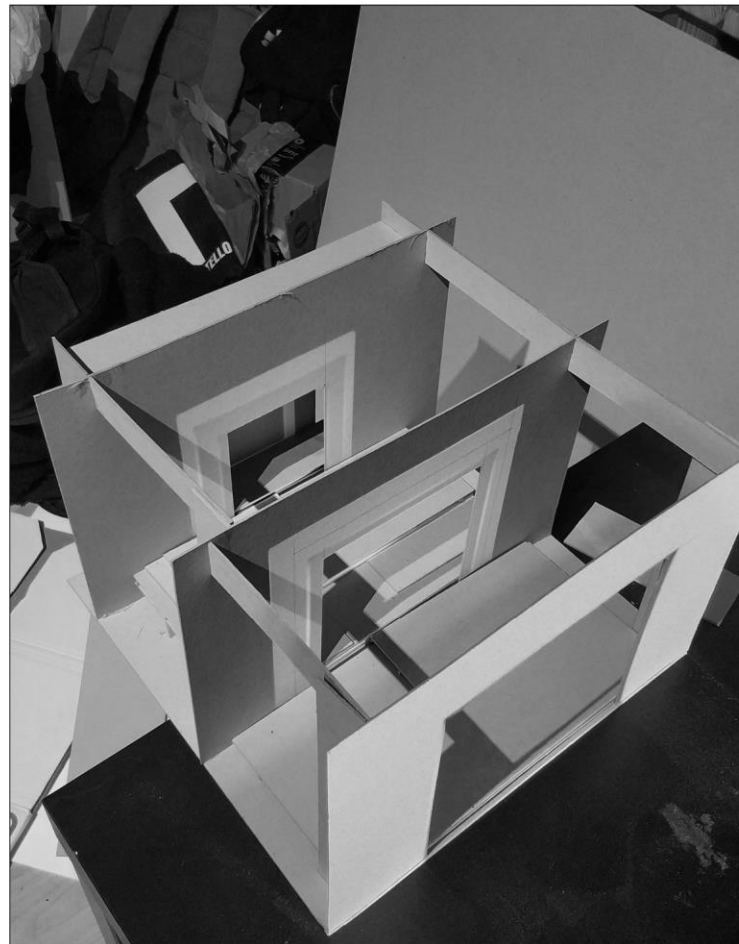
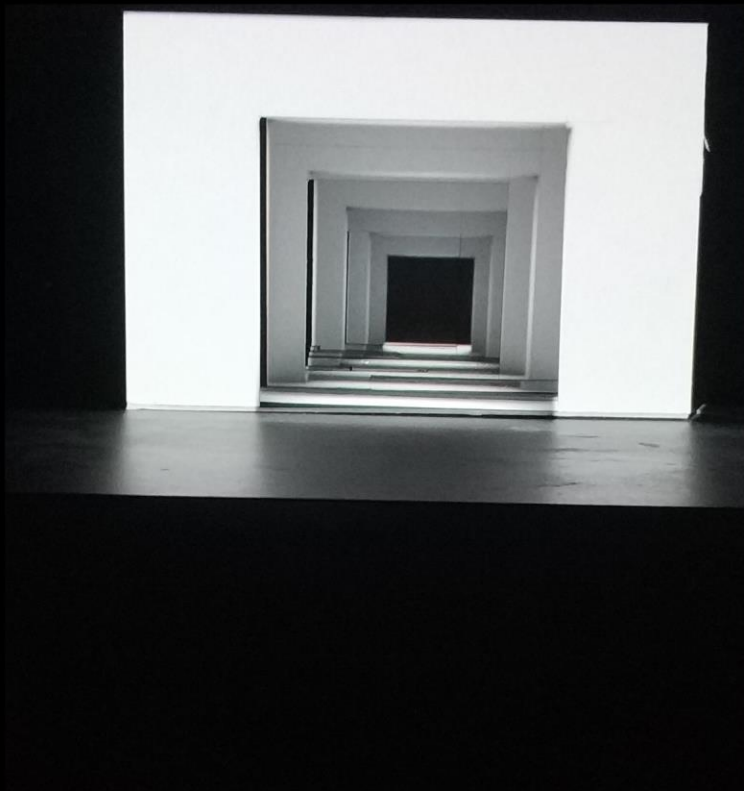
Layout

Context

Garden

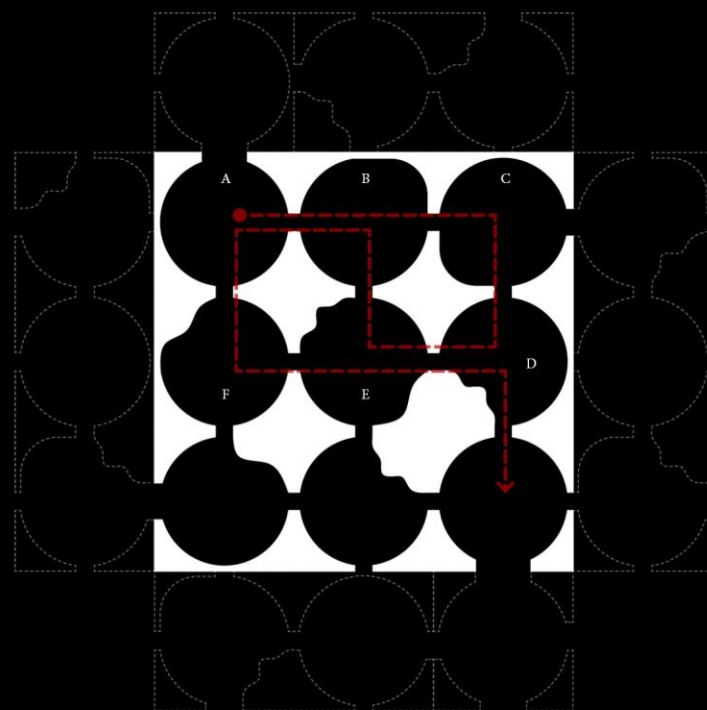


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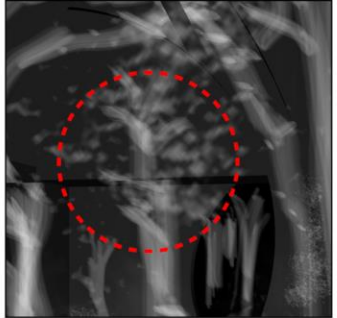
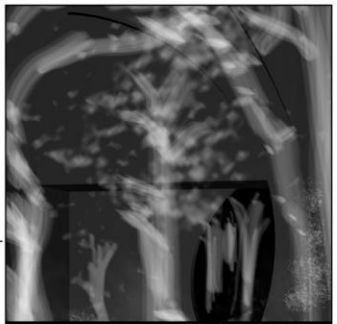
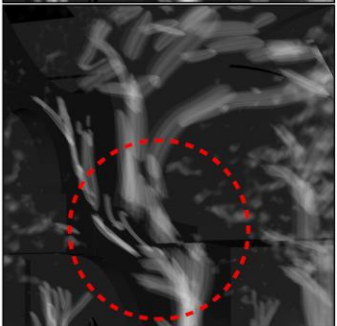
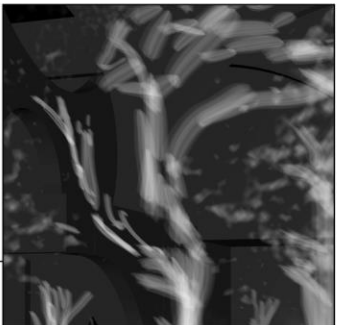
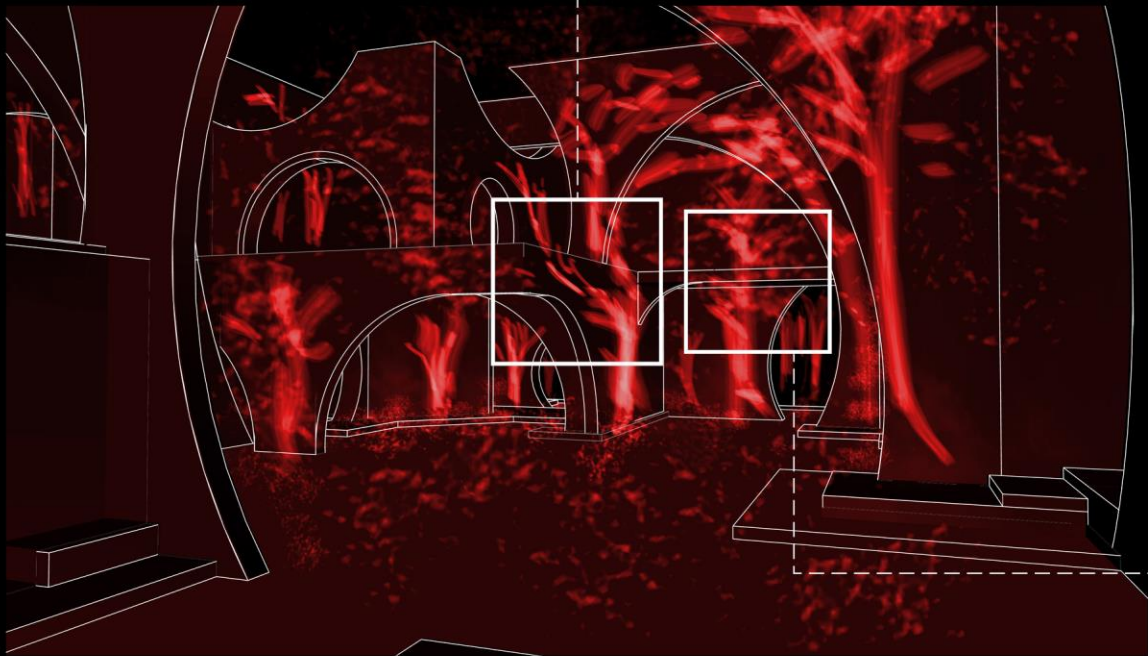
Screens can be go through

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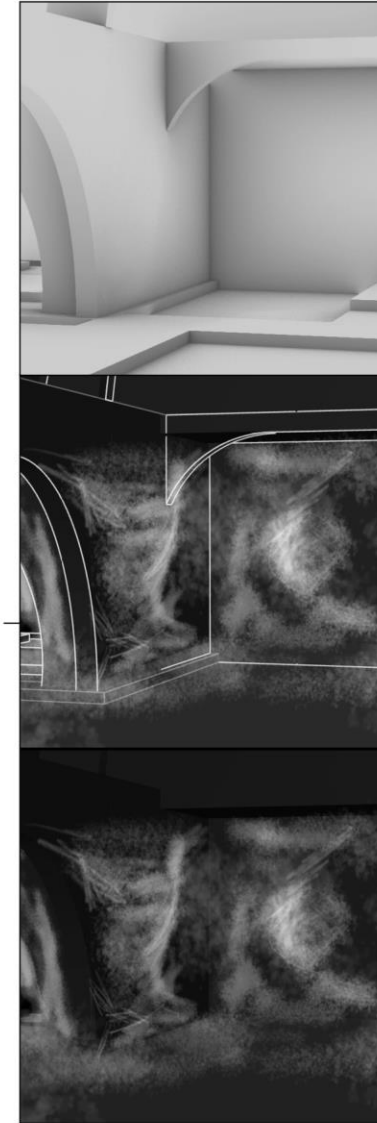
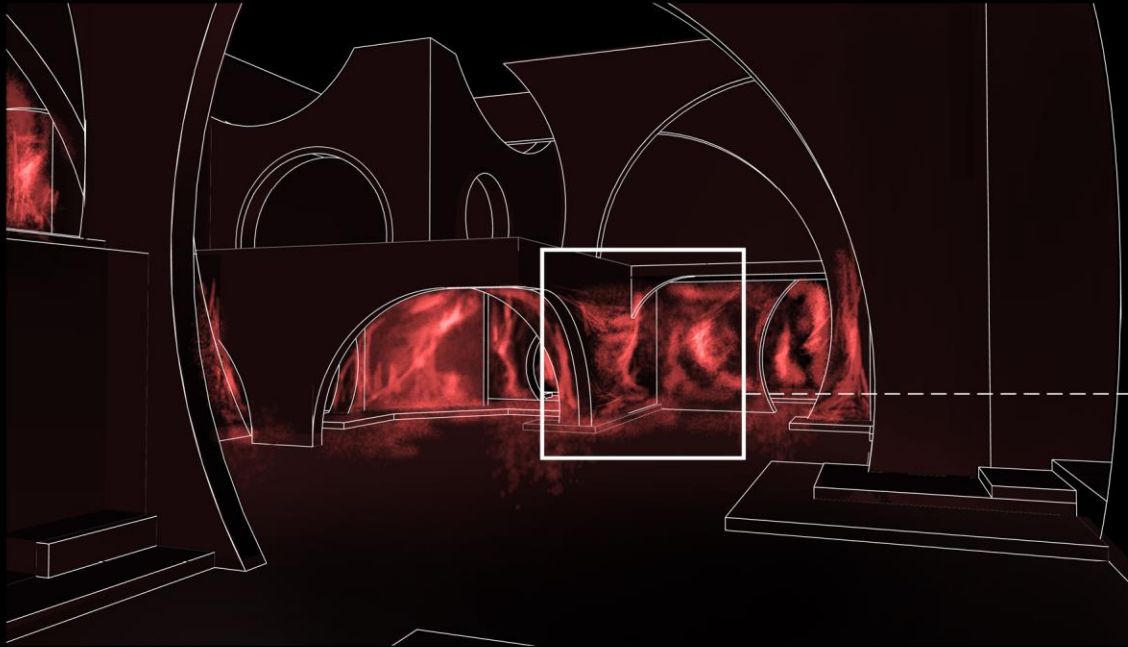


Multi-Scenes for Limited Physical Space

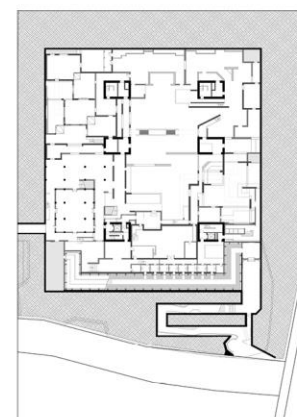
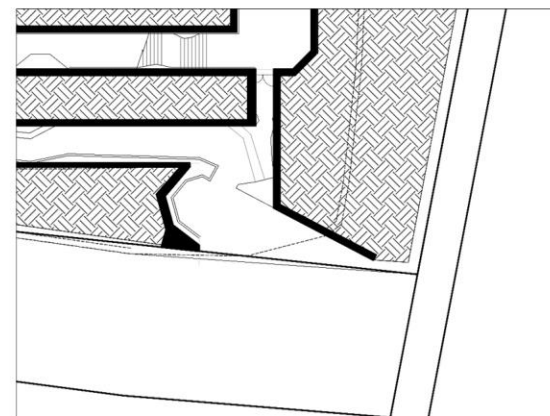
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