

Suzhou, China

Suzhou is located in the lower reach of the Yangtze River.

It belongs to the monsoon ocean climate zone.

There are four distinctive seasons and abundant rainfall.

The coldest month is January.

The average yearly precipitation is about 43 inches, and the "plum rain season" is from June-July, characterized by gloomy and rainy weather.

It rarely snows during the winter.

Spring and Autumn are the best times to travel to Suzhou.

Spring: warm and pleasant

Summer: hot and humid

Autumn: sunny, cool, and dry

Winter: cold and humid



Meagan Mo

The Astor Court Garden
and Ming Room



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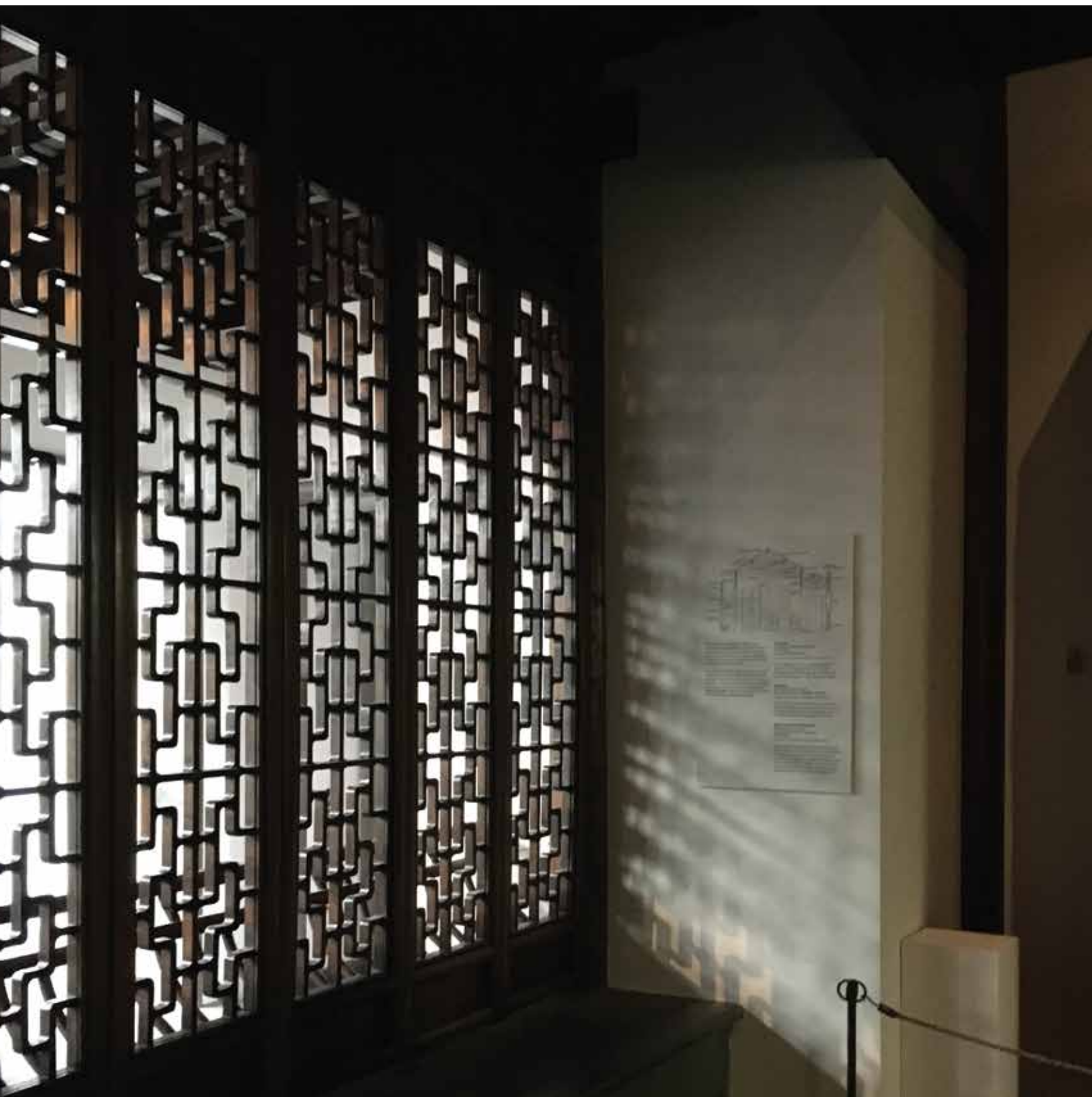
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The Astor Court Garden
and Ming Room



The roof, supported by columns, add a sense of shelter from the rain that is common in the area. The openness of the path allows wind flow so that the narrow aisle wouldn't be too hot.

The pillars are made of nan wood, a rare species of broadleaf evergreen. It is impervious to insects and is prized for its durability.



The cut-outs in the window allow light to enter the interior, as well as providing airflow. It also adds a decorative element to the space.



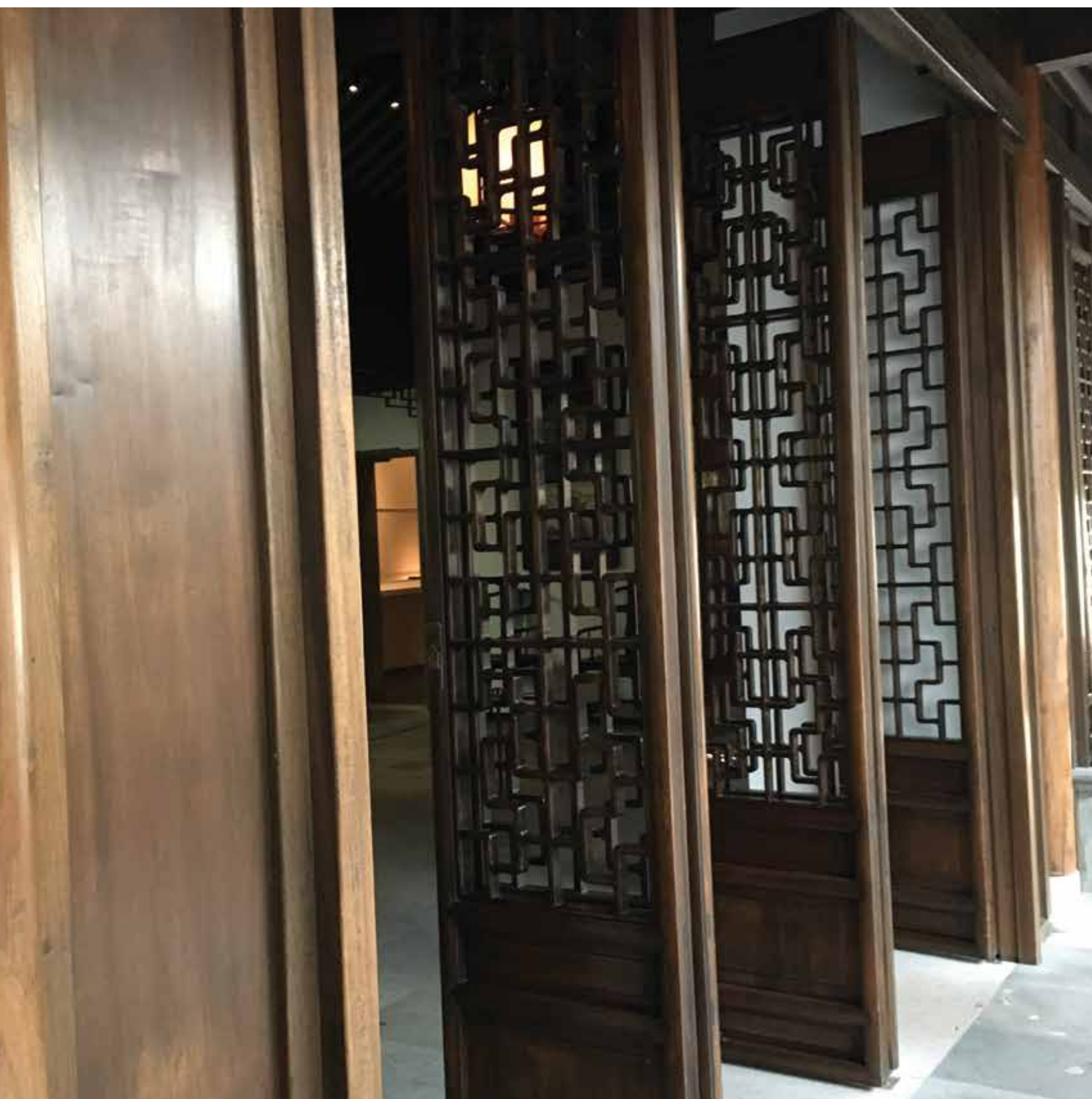
The windows with cut-outs provide air-flow from the garden and allow for viewing the Astor Court from other parts of house.



The window located in the interior of the Ming Room allows light to enter the space, in addition to the light entering the room from the opposite side, through the doors.



In gardens, the rocks represent the
rugged grandeur of China's great moun-
tains.



These folding doors can be manipulated to allow more light/air into the space as well as block out any weather conditions that may occur.



The lanterns are used as a light source in addition to the influx of natural light entering the space through the windows and doors. These provide light during times of day when the sun isn't present.



The pond, located on the left of the picture under the window, is a reminder of the restorative qualities of water, how it is always present. It is surrounded by rocks, representing the complementary polarities of yin-dark, void, soft, wet, and cool, and yang-bright, solid, hard, dry, and hot.



The curved roofing shoots snow and rain water off the eaves and away from the edge of the structure's foundation.

Energy & Ecology

Thermal Comfort and Light
Studies of the Astor Court
Garden and Ming Room at the
Metropolitan Museum of Art

Meagan Mo



Meagan Mo
The Astor Court Garden and Ming Room

The light striking through the windows onto the floor's surface goes through two processes since the material is opaque: absorption and reflection. Since the windows don't have glass panels within them, they are transparent, made through cutouts in the wood.



Meagan Mo
The Astor Court Garden and Ming Room

The light coming from this window goes through absorption and reflection. The floor's surface is the same as the first picture, the material is opaque. However, the material on the window is different. This window is translucent and therefore creates a diffused transmittance.



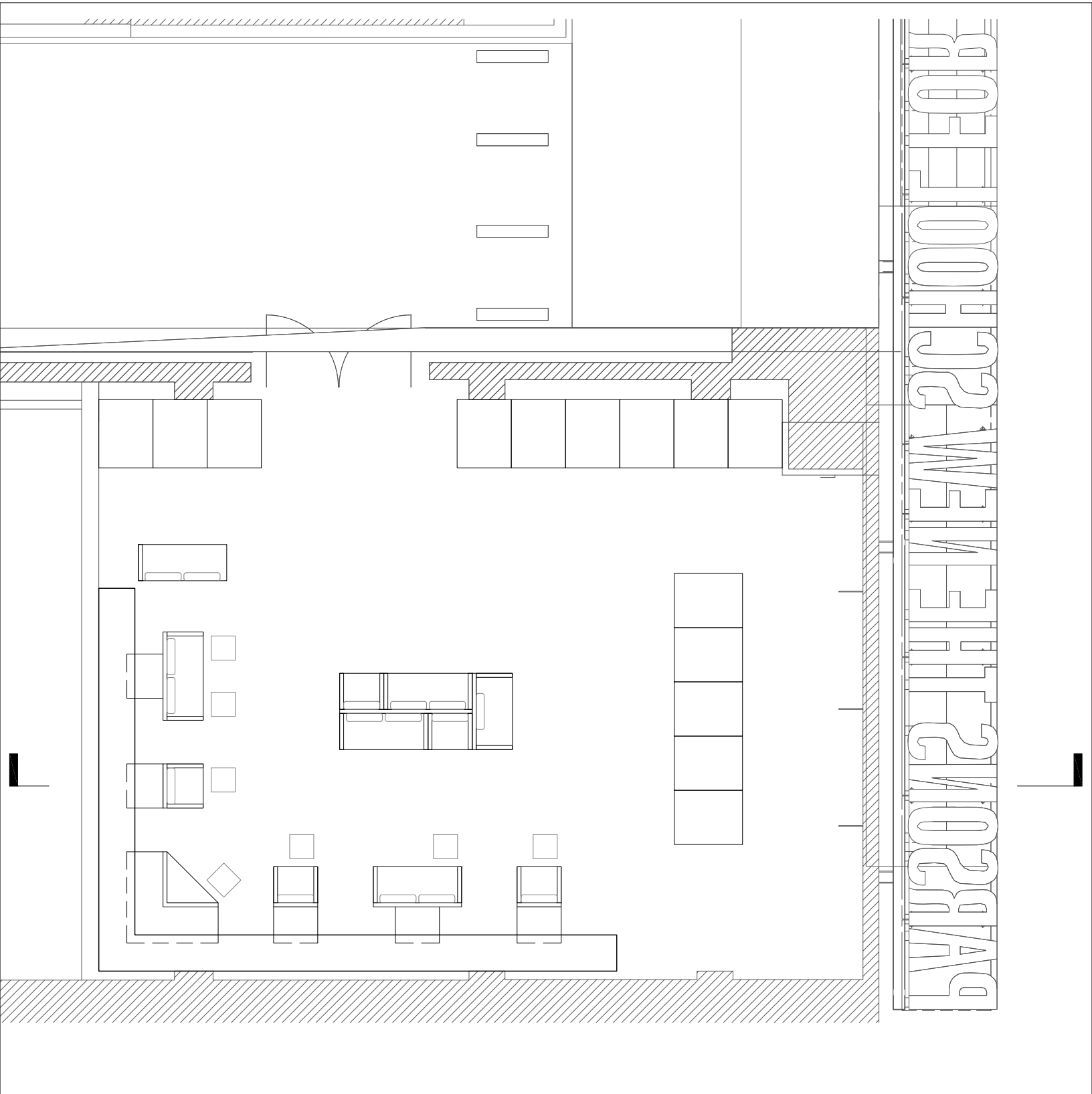
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The Astor Court Garden and Ming Room

Unlike the light sources in the other pictures, this lantern is an artificial light source. The windows allowed for influx of natural light. This lantern has a frame/shade surrounding it. The shade is a matte translucent material, which creates a diffused transmittance onto the reflected ceiling surface. Since the ceiling is made of wood panels, it is opaque and therefore goes through absorption and reflection.

Studio 3 Project

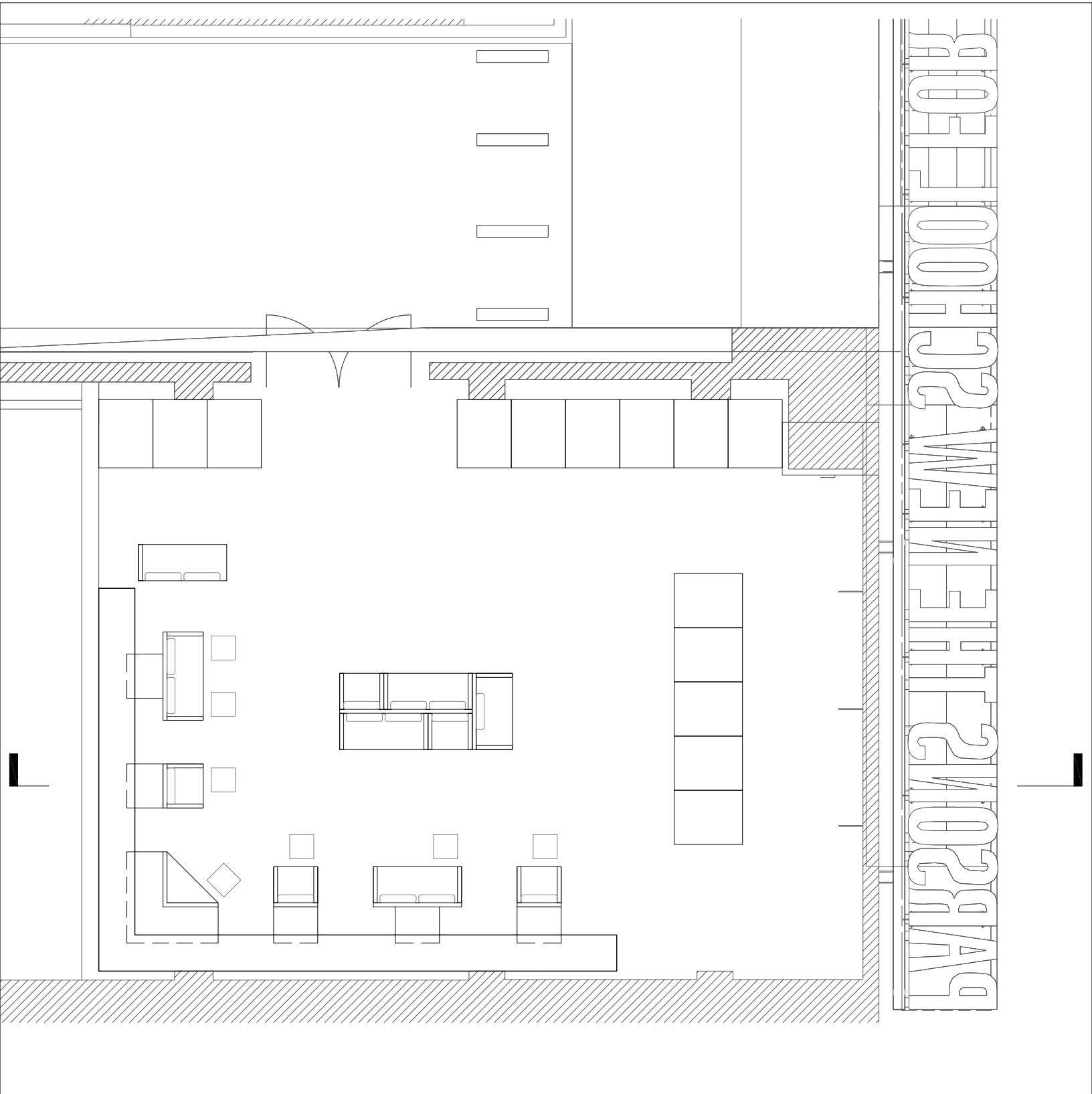
Thermal Comfort and Light Studies of the Laundromat Cafe

Meagan Mo



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Studio 3 Project: Laundromat Cafe

There is a large glass window on the right side of the space that allows for daylight/natural sunlight to enter the laundromat cafe. Since the window is large and covers the entirety of the facade, it lights up the whole space and also provides thermal comfort when the sun shines in.



Meagan Mo
Studio 3 Project: Laundromat Cafe

The mass influx of sunlight coming from this window goes through absorption and reflection since the material of the floor's surface is opaque. The glass on the window is transparent, it creates a specular transmittance.