

Student Lighting Type Exercise: FILTER

filter |'fɪltər|noun

1. *a porous device for removing impurities or solid particles from a liquid or gas passed through it : an oil filter.*
2. *a screen, plate, or layer of a substance that absorbs light or other radiation or selectively absorbs some of its components : filters can be used in photography to reduce haze.*

MATERIALS

[a single light source]

[18"x18"x18" cube] Create an 18"x18"x18" cube. The BASE of the cube should have a single light source [battery operated may be best]. One exterior wall of the cube should have a "viewing port", or hole for you to look into your spatial environment and photograph with your camera. All interior walls of the cube must be white. It is recommended that the you construct the cube so that filters can be easily changed and placed over the light source.

[camera]

[filters: see below]

Assignment: Create a multitude of filters to create various CONDITIONS through the filtering of light in a controlled environment. Please document and articulate the CHARACTER of the filter and the ATMOSPHERE it creates. Describe its personality...how it makes a "space or person in the space feel." Where and when would this light environment be appropriate?

LIGHT ENVIRONMENTS

1. indirect luminous [ambient]
2. direct luminous [ambient but see the source]
3. indirect brilliant
4. direct brilliant
5. direct light [one focal point]
6. direct light [3 focal points in space]

Phase 1: find examples of existing light conditions that match your understanding of the desired LIGHT environments above. [Cite your sources]

Phase 2: using your precedent research as a guide, design and construct your own "filters" and apply them into your 18x18x18 white cube. Document how the spatial condition changes through photography. Do not use a flash.

[same project can be done in computer with renderings]

_Filter Project

Student: Brandea Stickler



Chapel of Notre Dame du Haut:
Le Corbusier

_Focused/Direct

From the opening above, light is allowed to stream into one location, casting shadows on the adjacent curved wall.



_Direct Light FILTER

fo-cus [foh-kuhs]

_noun

1. a central point, as of attraction, attention, or activity: The need to prevent a nuclear war became the focus of all diplomatic efforts.

Student: Brandea Stickler



Park Hyatt. Tony Chi

_Direct Brilliant

Light is spilling in directly from the exterior windows allowing for shadows to be cast on the reflective pool. There is no barrier the light has to go through in order to light the space.



Student: Brandea Stickler

_Direct Brilliant

By utilizing focused lighting, you can create a space that has a brilliant feel. Projecting shapes, shadows, and light onto a wall can make for a unique design that makes use of all surfaces of the interior. It can easily turn a dark space into one that explodes with light. The contrast between light and shadow is high, creating a volume of projected light.



Sinju Restaurant: Skylab Architecture

_Indirect Luminous

Light is luminous throughout the space without having the source of the light being seen. The color and materiality of the surface creates visually rich highlight and lowlight patterns.



Los Feliz Residence: Techentin Buckingham Architects

_Indirect Luminous

Light is ambient yet no shadows are created.

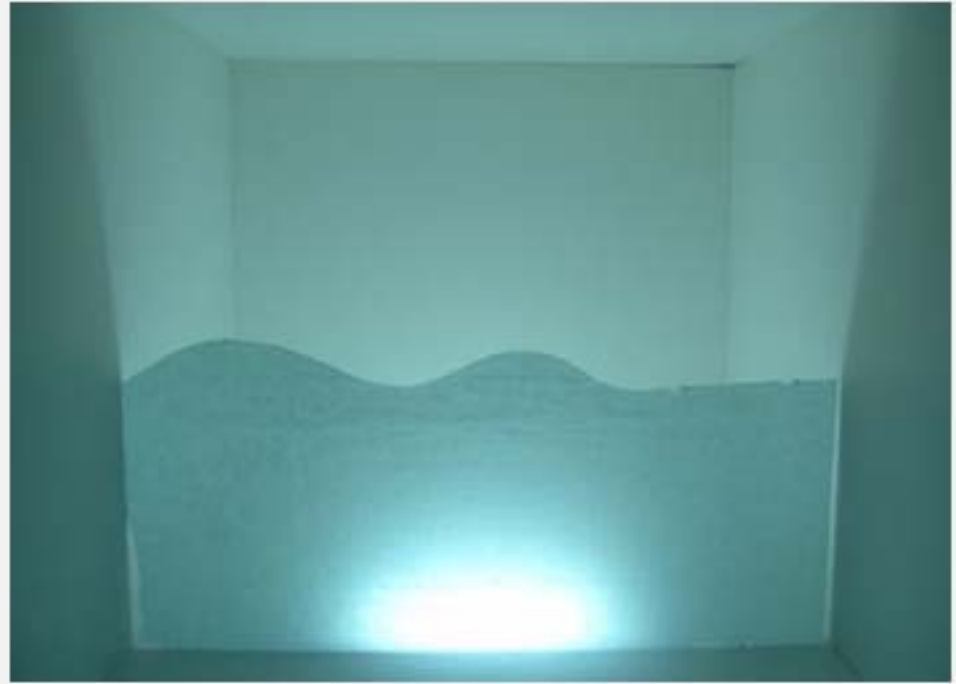
Light source coming from exterior is visible. The interior space is glowing.

_Luminous

Student: Brandea Stickler



Indirect-light source is not directly visible, covered by materiality. No shadows exist.



Direct-light envelopes the space with a visible and direct luminous glow. The filter not only reveals the light, but distributes color throughout the volume

lu-mi-nous [loo-muh-nuhs] **–adjective** 1. radiating or reflecting light; shining; bright. 2. lighted up or illuminated; well-lighted: the luminous ballroom. 3. brilliant intellectually; enlightened or enlightening, as a writer or a writer's works: a luminous concept; luminous prose. 4. clear; readily intelligible: a concise, luminous report.



_Positioned Focused

conclusion

By experimenting with focused light, one can create a multitude of spaces. Focused/Direct light is greatest known for the intense shadows and focal points that it creates. Positioning the light source in different locations can make the focal points change dramatically. Looking at the image to the left, you can see that I positioned the FILTER closer to the light source, which created larger focal points on the left wall. On the contrary, in the image on the right, I positioned the FILTER farther from the source, making the focal points on the left wall smaller, but showing higher contrast.

