# LIGHTING DESIGN - WEEKLY BLOG

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# PART 1 - THINGS ABOUT LIGHT

Create New Lighting Possibilities

Creating new lighting possibilities is vital to successful lighting design. Designers and engineers are looking to improve their techniques for ascetic satisfaction, energy use, and objective. Creating beautiful fixtures that suffice both form and function is an art discipline on its own.



One example is Nimbus's Lighting Pad Lounge. The minimalist design incorporates wood and curved edges with customisable finishes to meet the users' desires.

Moreso, it can provide a range of light temperatures for warm and cool light depending on the mood; it can also direct light up on the ceiling, down on a surface, or both. Recessed and glare-free indirect light provides a defused and even finish.





Lighting can be used as a medium for artists to create immersive exhibits. One example is Yayoi Kusama, a Japanese contemporary artist whose focus is based on both abstract expressionism and minimalism. One of her most well-known exhibitions is titled *Infinity Rooms* (on display at London's Tate this summer). She displays sculptures combined with mirrored walls and coloured lights to tell stories of her childhood, grief, her move to New York, hallucinations, mental health, and US society at the time.





Lighting technology has the potential to do tremendous good. It is estimated that 25% of the world's population does not have access to electricity; therefore, lighting is done through open flames or kerosene lamps. These pose several challenges like breathing toxic fumes, fire risk, polluting the earth, and people left in the dark if these cannot afford these means.



### **GRAVITY LIGHT**

### **NOW LIGHT**

GravityLight was designed to replace kerosene lamps and is powered by gravity. Users fill the provided bag with heavy objects like rocks, pull the cord, and power the light for 20 minutes. This technology has since evolved to NowLight, which can generate up to two hours of light by pulling a chord for 1 minute.

# PART 2 - RONCHAMP LIGHTING STUDY

Workshop Reflection and Sketches



## BACKGROUND

Le Corbusier was commissioned in 1950 to build this Catholic cathedral in the commune of Ronchamp, France to replace the previous structure that was destroyed during WWII. The church requested a space free from ornate decorations or connections to religious figures, embracing modern architecture by having the structure stand as a sculptural object. Le Corbusier aimed for the space to be meditative and reflective, and much of this was done with the lighting design and material choice.





### LIGHTING & MOOD

#### Deep

The windows display how thick the walls are. This creates a cave-like sensation, feeling almost claustrophobic.

#### Gradient

Looking first at the windows themselves, there is a strong light gradient from the surface of the glass to the edge of the eave, emphasising the depth mentioned above. There is also a gradient in the room itself, getting darker as you receded from the windows.

#### Contrast

While there is a sense of gradient and fading light, a bigger emphasis is placed on areas of brightness and areas of darkness; spotlights and shadows. This contrast draws the occupant's attention to different areas of the room based on these extremes.

#### Angles

The window openings angle the light in a way to direct its rays, cast shadows, and show spotlights. It is evident that the lighting conditions will change based on the time of day and year.

#### Definition of Space

The areas closest to the windows are the spaces people will occupy. The pillars and pew are built into the structure, so this cannot change. There is a feeling of which people are forced to huddle around and celebrate the incoming light

#### Mysterious

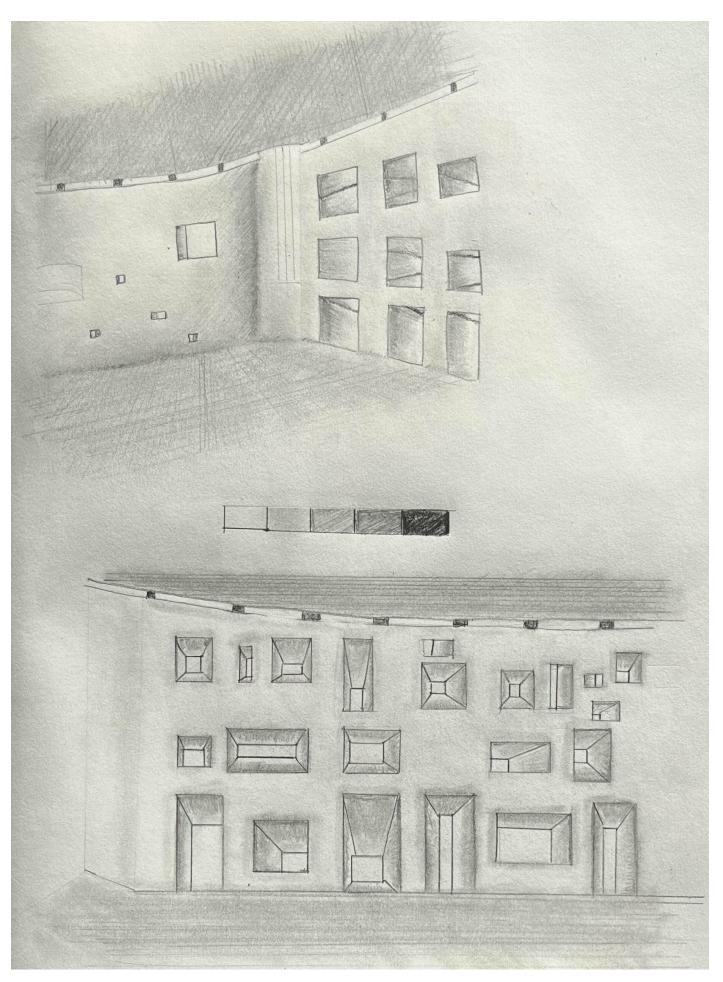
The vast amount of shadows and spotlights creates an eerie sense of chaos. The corners and boundaries of the space and programs are not clearly defined due to the gradient.

#### Solitude

The space feel pure; best explored by oneself. Le Corbusier succeeded in making the space feel holy and sacred by contrasting the sporadic placement of windows with the white walls that cause the light to be washed out.

#### Simplicity

While there seemingly is no rhythm to the window placement and size, there is a childlike simplicity. It appears as if the windows were created by puncturing a series of holes in the wall. Minimal interior and natural materials add to this effect.



Sources: https://lightingpadlounge.com/ https://www.tate.org.uk/whats-on/tate-modern/yayoi-kusama-infinity-mirror-rooms https://solar-aid.org/ https://gravitylight.org/ https://www.archdaily.com/84988/ad-classics-ronchamp-le-corbusier