

Light as Language

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Light of shades

Light of purple shadows

Light of green in early spring

Light which sings of hope -

for millions of years singing

Introduction

Our first source of light was flames from the fire. This was and still is a warm central light which invites us to sit down. The hearth remains a place to rest and feel peace. We also experience the inviting effect related to stairs where the impact of light is continuing the upward movement. And we experience the language of light announcing an entrance as indicated by this photo from the laboratory.



Fig. 1 The exhibition exercise.

A beautiful example is the entrance to Francisco Gilardi House by *Luis Barragan* where light is filtered through yellow glass. This particular entrance is vividly described in Sailo's monography about the Mexican architect [1]:

“Opening the front door and proceeding down a dark corridor deep into the house, one is suddenly showered by golden light. More than a corridor this area seems like a time tunnel that provides a baptism of light as it leads one into a different dimension.”

The architectural space of Luis Barragan is often described with the expression “emotional architecture”.

Stained glass has mostly been used in churches. Daylight became coloured in an attempt to enrich the ceremonies creating an illusion of a better world in heaven. More than any other type of room the churchroom has been worked with in order to obtain an atmosphere. In the church at *Björkhagen* outside Stockholm light is let in through relatively small square openings. Contrasting height the openings give an intimacy, and we experience the thick wall as a protection between the inner and outer world. Related to form and dimension light is clearly perceived as a means to manifest the smallness of scale in the large space. The architect, Sigurd Lewerenz wanted to limit the effect of light to a minimum which today is destroyed by the spots directed on the altar wall. Too clearly the dimension of height is defined by the high light level. It was supposed to end in darkness. Using spots in this way is a total lack of respect for the architect's intention. The greater was my joy coming to Adolf Loos' Kärntner Bar where restoration work has been done in a most respectful way. The intimate enclosure is opened by mirrors in the upper part of the walls where light is discretely suffusing the subtle play of materials. No reflections spoil the illusionistic effect of the mirrors except from the twinkling light in glasses and shelves of glass.

The language of light may be silent. It may be violent. At discotheques light is shouting at us. The coloured spots sway all over the place enhancing the level of music to help bring people into another state of consciousness. Today when the general level of light is higher than ever before it is interesting to learn the research which has been done in Boston this spring. Research results at Boston University testify that a constant high level of light causes malfunction in the gland releasing melatonin which regulates our sleep. With the constant stimulus of strong light the subtle body is not given any message to slow down. We can't expect modern man to live in the regular rhythm of going to bed when it is dark and rising with the dawn. But we may learn to regulate the light level, slowly lowering the level some time before going to sleep.



Fig. 2 Kärntner Bar (A. Loos - Vienna).

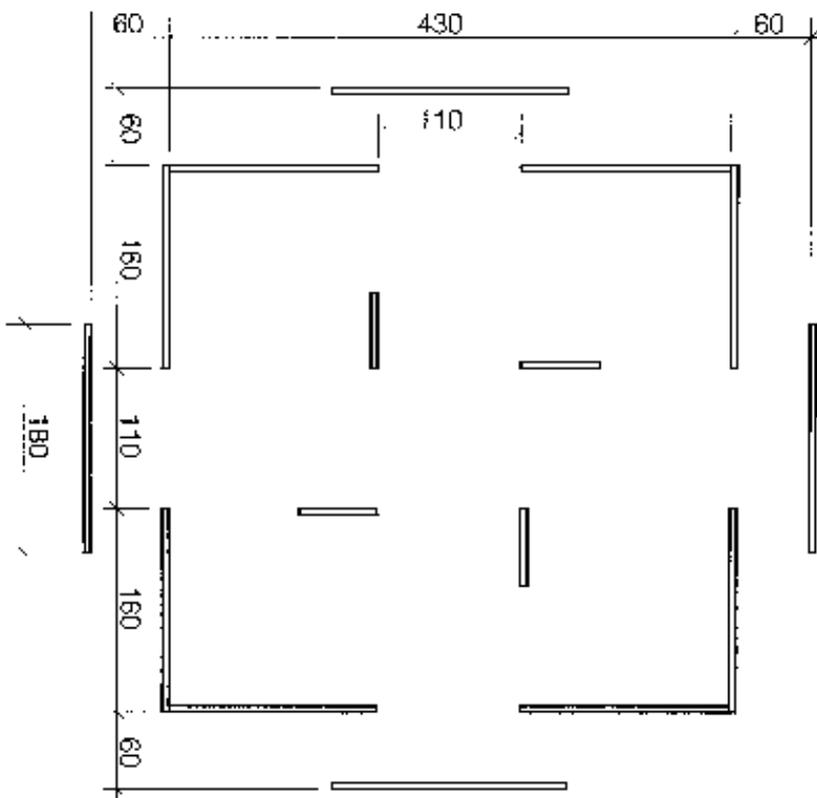


Fig. 3 Groundfloorplan of an exercise.

Exercise: Interplay of Light and Form

The purpose of the exercise is to demonstrate how light can alter the apparent form of a room. The wall elements are placed in an open order allowing to emphasize different spacial configurations by the light setting:

- A. The square form
- B. The cross form
- C. The rectangular form
- D. Total disorder

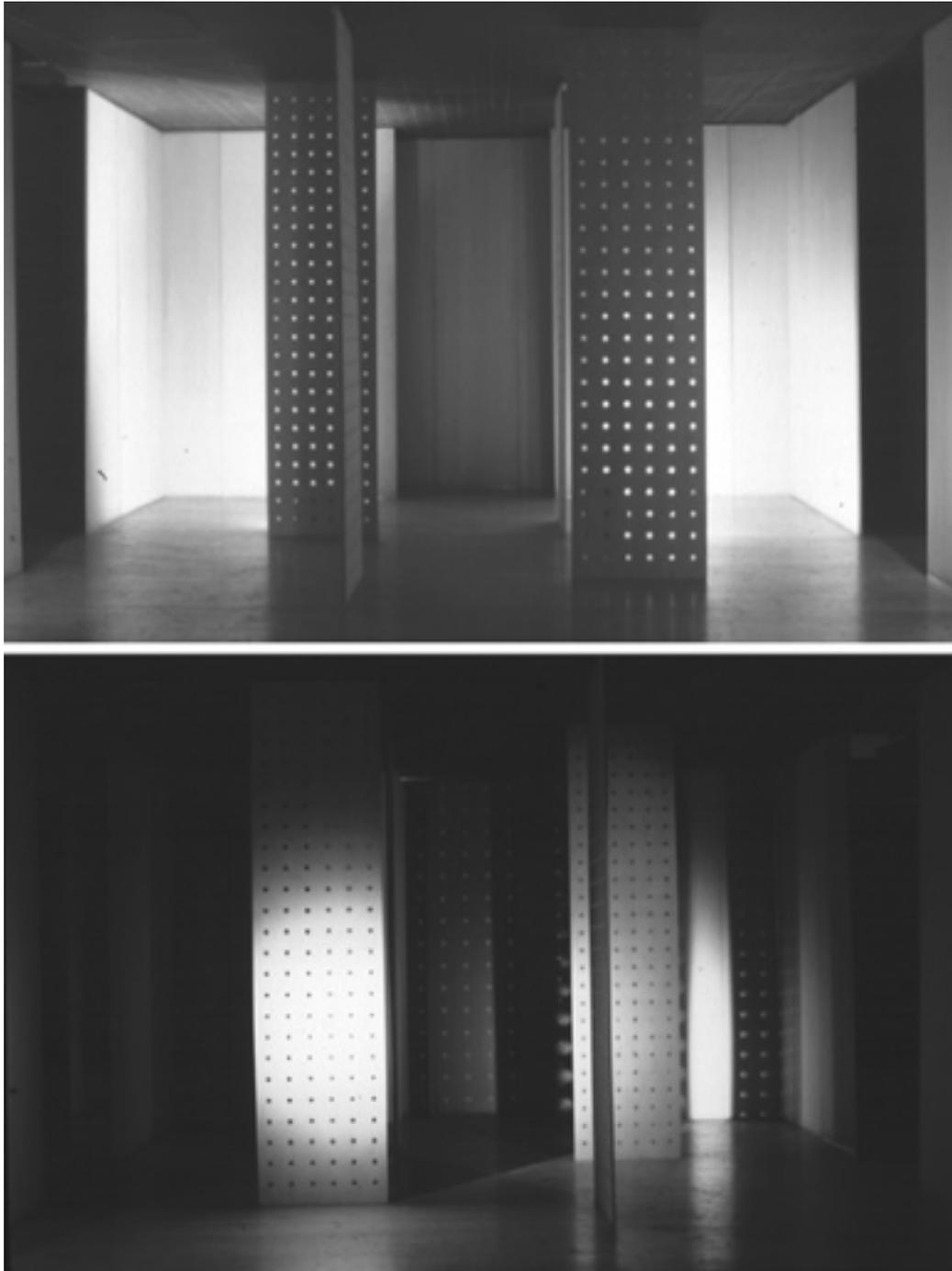


Fig. 4a-b (square form resp. total disorder).

Case Study: A Doctor's Waitingroom

Spaces without access to daylight have been of special interest in our experimental work [2]. Let us start by asking: What do we have in common when we are waiting to come in to a doctor? We are nervous and we sometimes feel miserable. Analyzing the situation we understand the need for an interior that takes our state of mind or may I say, our soul into consideration. The level of light is important in this situation. Light has to speak softly. Instead of the ordinary strong light in the middle of the ceiling, several spots are selected to light the small tables separating the seats. The separation is supposed to give a feeling of privacy. By the low row of reflected planes we experience an intimate and warming atmosphere in the room. A special place for children contributes to the total impression of calm. As the space is considered to be without daylight a recess is built in the wall (depth 50 cm from the outer wall). Light from spots behind the wall elements on each side passes through the steel construction creating a play of shadows on the walls. We perceive an openness which is “breathing” in the space, most favourable when all seats are occupied.



Fig. 5 A steel construction may be used to enlarge an existing window.

Conclusions

The language of light is visual defining form-space relationships, and it is an emotional language moving our inner selves. Both factors are essential to bear in mind lighting architectural spaces. With regard to a definition of form we experience the damage of spots daily. Constructive elements like columns and beams are visually dissolved or cut into pieces. The spotlight is a strong means which must be used carefully without distorting the perceptual clarity. Light is a dominant quality in creating character and mood of a room. Shadow is another quality enhancing the impression of light. Light and dark, we need the darkness of shadow making effects of contrasts and variations, and also of direction. The effect of directed light is impressive. We obtain a range of lighted spaces in space which may suit a neutral impact of indirect light. A light setting of indirect light alone is not advisable. Being in a forest we experience the principles of articulation. Nature is our best teacher.

References

- [1] Sailo, Yudaka. *Luis Barragan*. Tokyo, 1992.
- [2] An article about corridors was published in *International Lighting Review* (1989) vol. 2 [see also <http://WWW.mogul.no/comein>]. This summer another neglected area has been in focus: A doctor's waiting-room.