

Light Atmosphere

Design parameters for evaluating lighting in hospital wards

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Background

Textile design_ Kolding School of design 06

Teacher, Silkeborg 99

Lostdesign 06

Interest: Light atmosphere

What is interesting light, and when is it interesting

Understanding Atmosphere?

Design Parameters for pleasurable light atmosphere in hospital wards

To approve the sensory qualities of light and.

Study the effect of light by having a holistic approach to research in light and lighting.

Light in a hospital setting.

Guidelines Hospital design

Ulrich, R. & Zimring, C. 2004,
"The Role of the Physical Environ-
ment in the Hospital of the 21st
Century: A Once-in-a-Lifetime Op-
portunity"

Dalke, H., Littlefair P.J. & Loe
2006.
"Lighting and colour for hospital
design"

McClughan, C.L.B., Aspinall, P.A.
& Webb, R.S. 1999, "*The impact of
lighting on mood*"



Herlev Hospital

Atmosphere.

Albertsen, N. 1999, "Urban Atmosphere",
*Atmospheres can not be seen - It must be
experienced through other senses and an
atmosphere occurs rarely through one sense
alone, but in an interaction between several
senses. Atmosphere affects people emo-
tionally.*



Afternoon in DK

Atmosphere

It is not a stamp of approval for "good taste". It is everywhere at any time, it is always present.



View from my studio in Aarhus

Atmosphere

It is not a stamp of approval for "good taste". It is everywhere at any time, it is always present.



Cafe i Lagos, Nigeria

Atmosphere

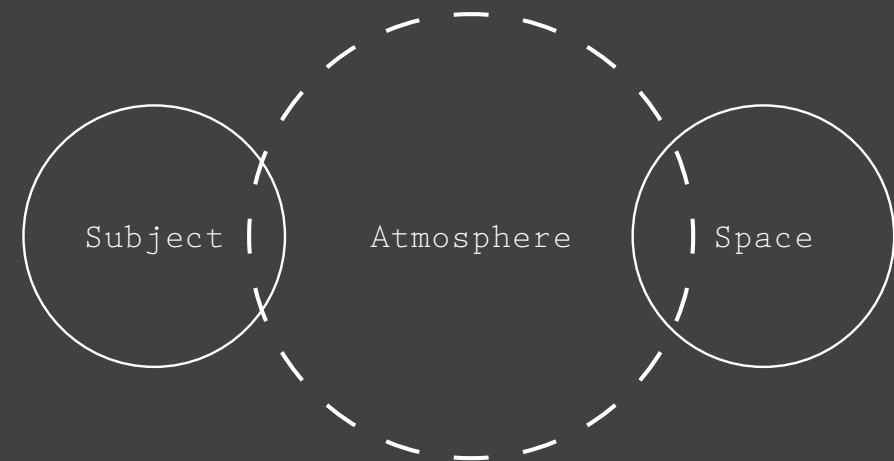
Therme Vals. Peter Zumthor, 2006,
*Atmospheres - Architectural Environ-
ments - Surrounding objects*



Peter Zumthor: The Therme Vals

Atmosphere

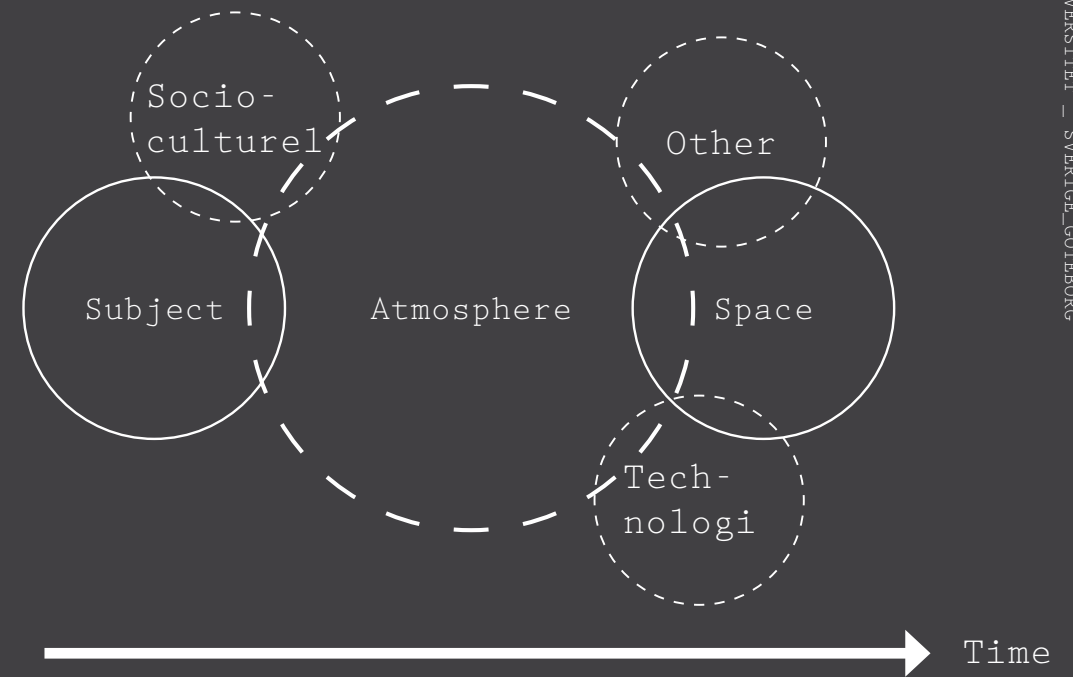
Philosopher Gernot Böhme: *The concept of Atmosphere*. 1993, "Atmosphere as the fundamental concept of a new aesthetics1" in *Thesis Eleven*.



Atmosphere

Time

Socio Cultural.



Design Parameters

Light Source

Characteristica, effect, information

Space

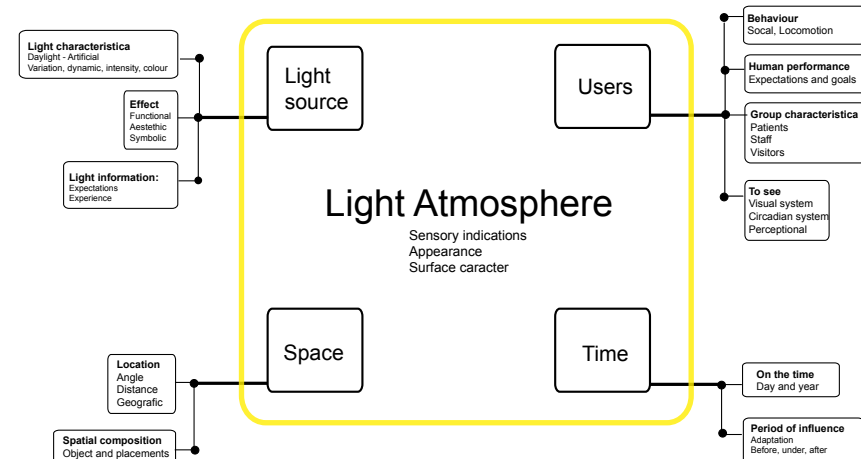
Geografical orientation, spatial composition, surfaces, objects, materials, colour

Time

Time of the year, daytime, time of influence

User

Behaviour, performance, user group, visual system, expectations, kultural background



DESIGN PROCESS - Ongoing

Design approach for case study

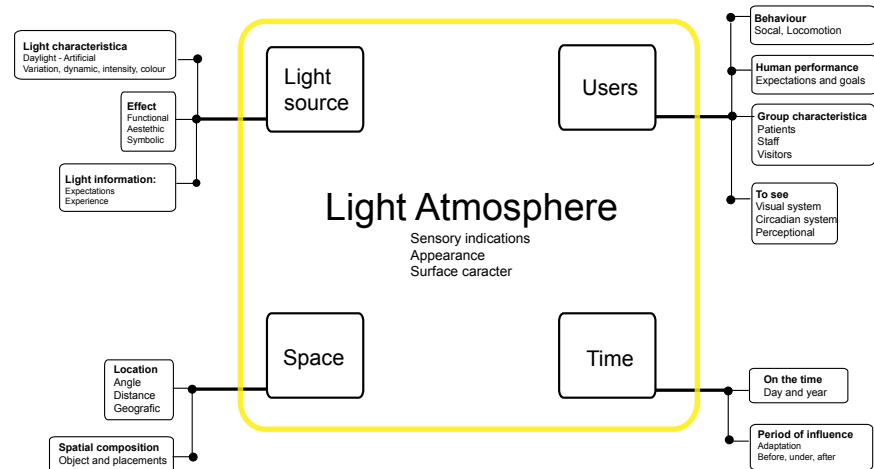
Defining SPACE atmosphere

Describing the TIME

Defining LIGHT situation.

Finding USERS preferences

Defining the goals for light atmosphere



Space

Location: Ward 10-11, Department of orthopaedic surgery, Odense University Hospital, Denmark.

Geographic orientation is towards the south.

Spatial Relation: 2 beds ward.
Size: 4 x 6 meters, ceiling heights 4 meters

Two wards for a comparative study.
One 1:1 light design mock-up and one control room.



Time

One week hospitalization

January - march 2011



Light

Documenting the existing LIGHT situation at the ward.

Looking at best practise

Combining the knowledge practical experiments of light effect.



1. User preferences

Patients preferences and expectations for light using qualitative anthropologically methods.

Photographi of everyday use of light in private settings.

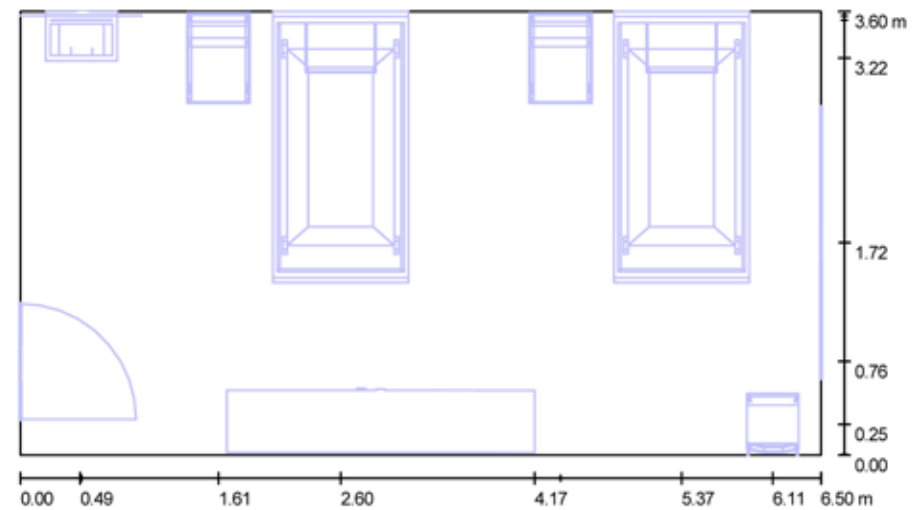
Innovation and inspiration



2. User zones

To optimise light setting and support the staffs working condition and thereby patients experience of ward atmosphere,

Documentation of everyday use of the ward by Mapping the movement of the staff.
Use for: who should be in control of the light and when.



3. User preferences

Scenario design for a comparative quantitative study of user preferences.

3D visualisation/1:1 mock-up

Scenario A-B-C-D in hierarchical order



Everyday use of the ward light

“Patients private space” (reading, dining, sleeping, and watching television, visits of relatives),

“Patients active space” (training area, physiotherapy, walking area),

“Patients public space” (doctors and physiotherapists examinations).



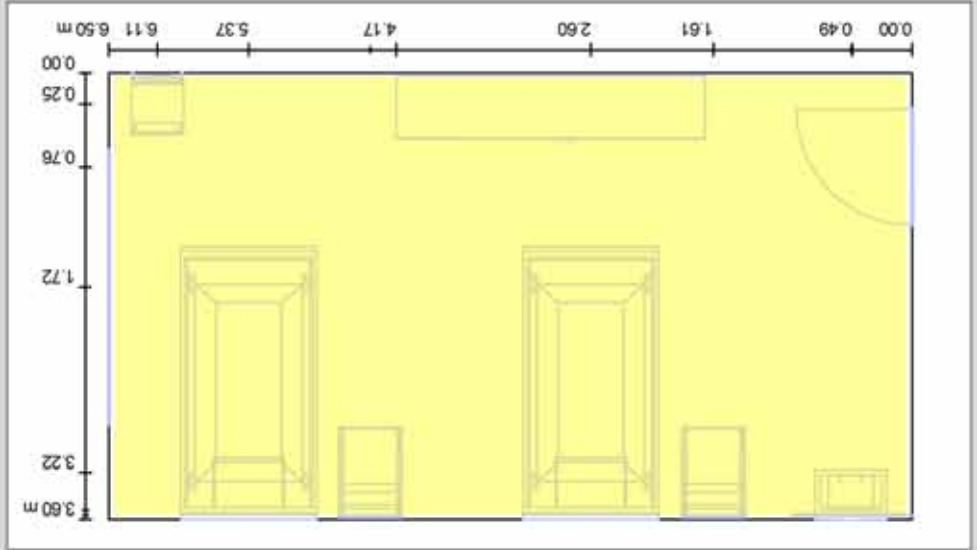
HIGH LIGHT SCENARIO

“Patients active space” (training area, physiotherapy, walking area),

“Patients public space” (doctors and physiotherapists examinations).



HIGH LIGHT SCENARIO



HIGH LIGHT SCENARIO

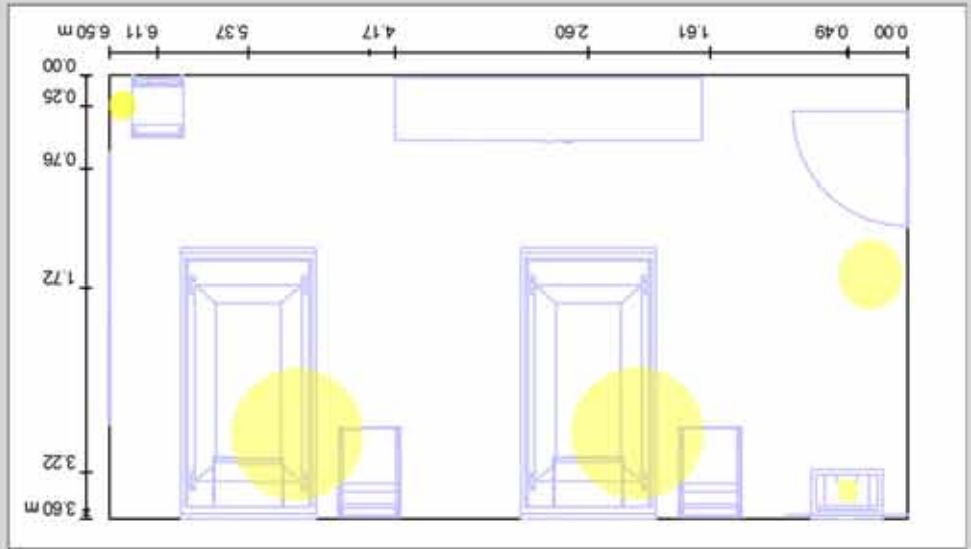
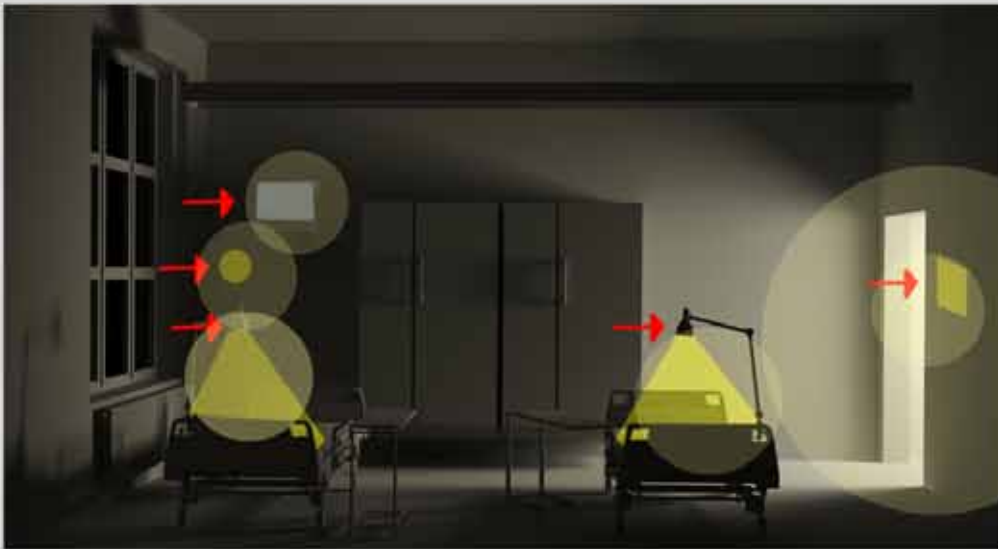
CENTER LIGHT SCENARIO

“Patients private space” (reading, dining, sleeping, and watching television, visits of relatives),

“Patients public space” (doctors and physiotherapists examinations).



CENTER LIGHT SCENARIO



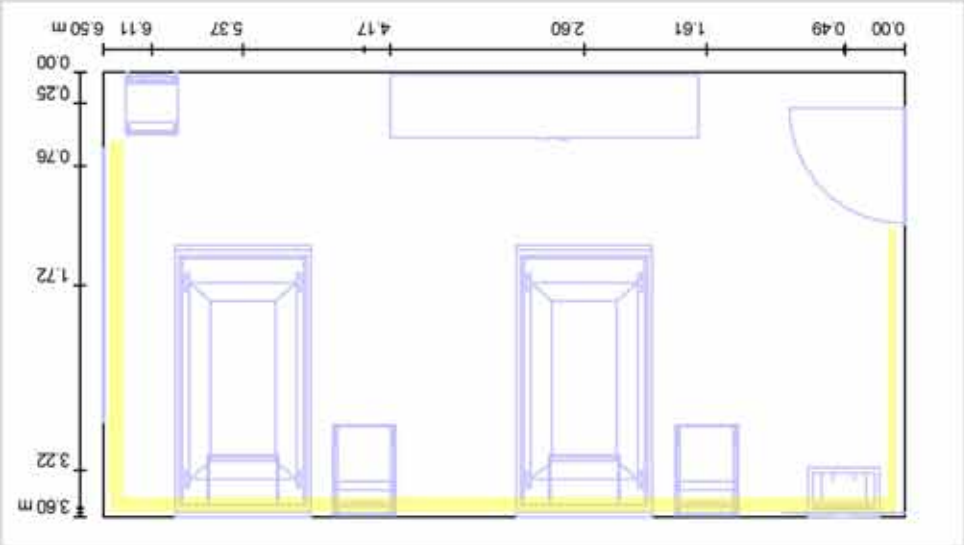
CENTER LIGHT SCENARIO

LOW LIGHT SCENARIO

“Patients private space” (reading, dining, sleeping, and watching television, visits of relatives),



LOW LIGHT SCENARIO



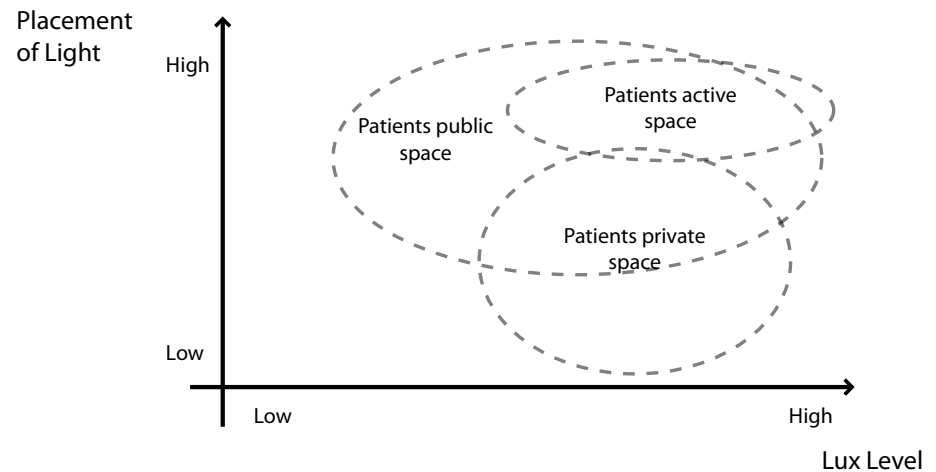
LOW LIGHT SCENARIO

EVERYDAY USE OF LIGHT AT THE WARD

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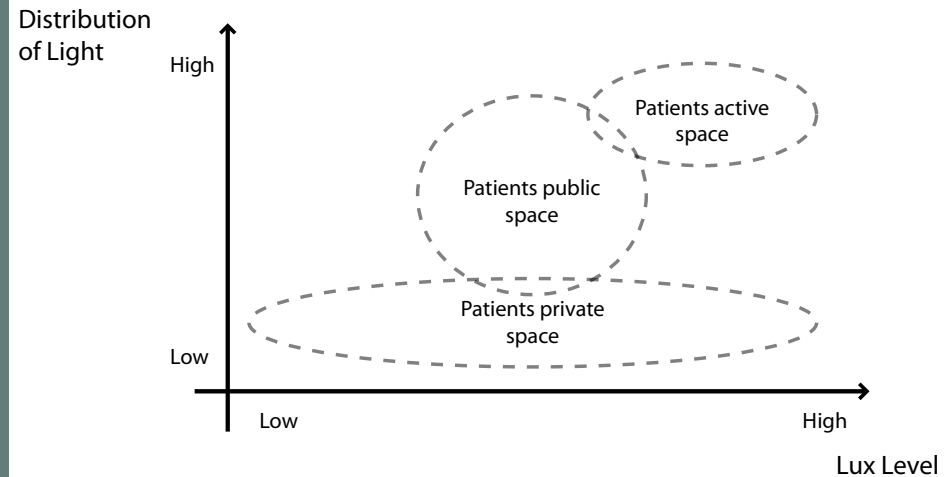


EVERYDAY USE OF LIGHT AT THE WARD

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Thank You