Lighting Qualities in Wards

Design Parameters for a Pleasurable Light Atmosphere

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Lighting qualities in wards - Design parameters for a pleasurable light atmosphere

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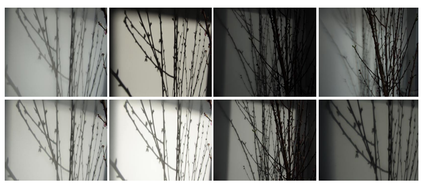
User

The users of the ward are the center for designing lighting of wards. There are 3 user groups: The patients, the staff, and the visitors.
The patients have different needs and expectations and the stay should facilitate the patients feeling of anti stress, be comfortable and safe. The surroundings physical effect is important for the their recovery process.
For the staff, the environment must supports a professional examination, dialogue, and communication with the patients. Their needs are easy workflow and space to do their jobs.
It is important that visitors have a good feeling about being with the patient in the wards. Different cultures use the wards in different ways. Some have many visitors at the same time, some few.The ward atmosphere can be changed in relation to users perception and thus provide the user with opportunity to control the surroundings and be "masters in their own house ". The social constallation, and the locomotion affect the experience of a pleasurable light atmosphere.

Time



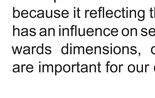
The time has an influence on the acces of daylight in the ward. The time of the day, the time of year has an impact on the needs for lighting, and for the way daylight influence the experience of the ward. The period of influense of light, the adaptation is important parameteres for experience atmosphere
In scandinavien we have an experience of daylight as varieted in fx. intensity. This collections of photos shows 3 minuts of lightvariation at the same spot 3 minuts 18.th of marts 2008 in Copenhagen. It indicates a variated daylight in our surroundings. This light variation over time could affect our experience of the atmosphere and the wardssensory qualities. It could be an inspiration for the choice of artificial dynamic lighting design, and achieving wellbeing and consistency between daylight and artificial light, It could give the user a familiar understanding of light and our culture of using the light. A consistency between our light expectations and our light experience.

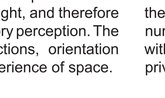
Light

The artificial light is the substitute for daylight, but there is often a huge gab between the experience of a daylit room and the same Illuminated room. The effect of light can be divided in different categories: The functional, aesthetic, and symbolic effect.

There is a tradition in using ceilingmounted downlight fixture or wallmounted up lights, but it might be benificial to rethink the placements of the fixture so the ward can be experiences less uniform, and regards to the different users and the useres cultural understanding of light.
The daylight and artificial light should support each other in the lighting design, and the different needs, expectations of moods should be taken into consideration..

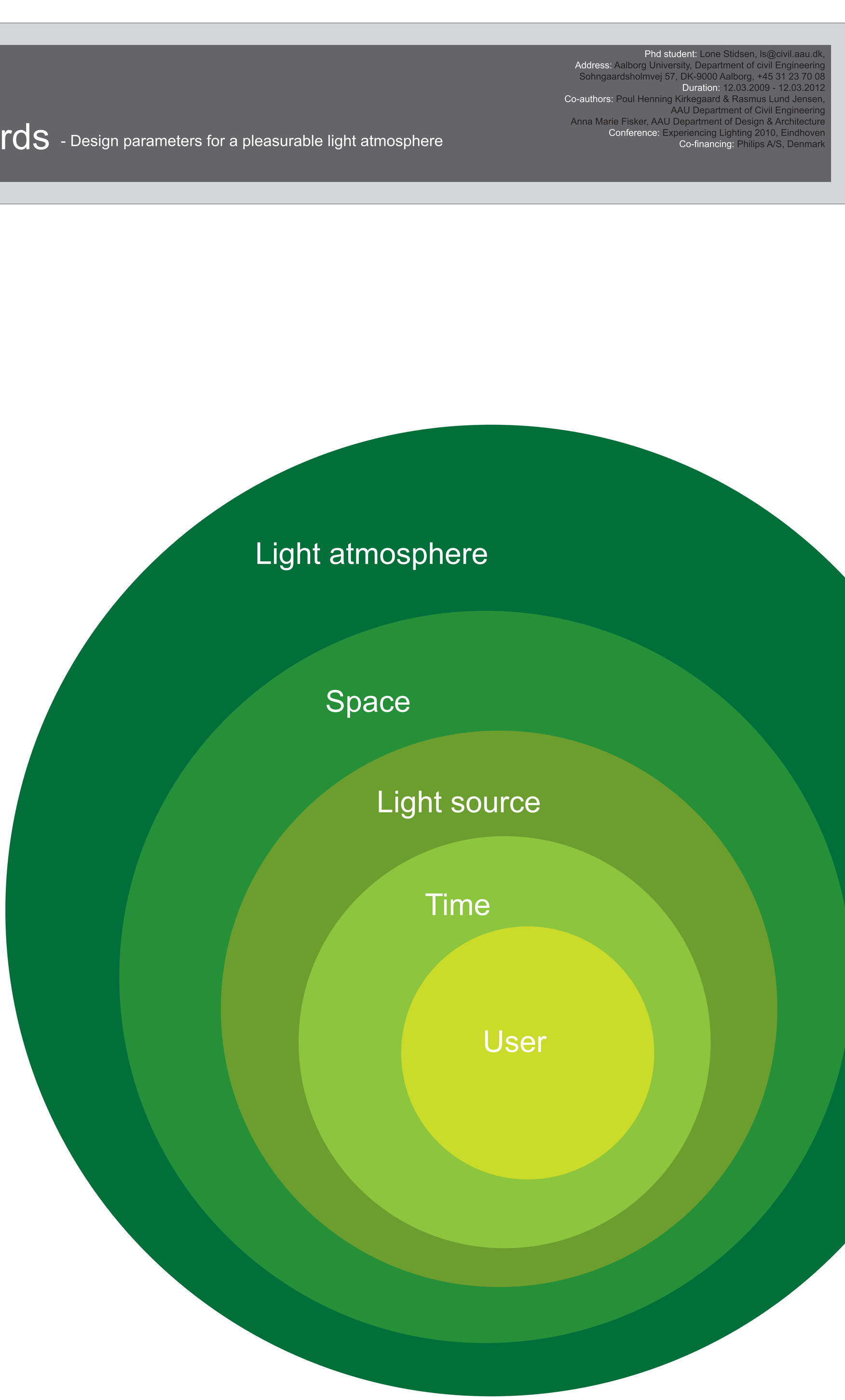
Space





The wards spatial composition, and the connections between the materials, acoustics, the thermal environment and indoor air quality is important for the perception and the experience of atmosphere. Material is an important factor because it reflecting the light, and therefore has an influence on sensory perception. The wards dimensions, directions, orientation are important for our experience of space.

Because of the wards complexity, it is an interesting architectural space to design. It has a range of functions to facilitate. The users have different needs of the space. The ward is the patients home, the place they have dinner, they sleep. The relatives visit the patients, and at last it is the doctors and nurses workingspace. It's a public domain with a lot of references to the design for the private sphere as a home.



Light atmosphere

ABSTRACT
When constructing and designing hospitals of the future, the patients, staff, and guests are in focus. Designing a healing hospital environment is a very important factor when planning new hospitals. But how can aspects as design, architecture, arts, lights, sounds and materials support and improve the patients recovery and the satisfaction of staff and guests? The physical settings, the furnishing, the acoustics, the light – daylight and artificial is essential when we evaluate the environmental quality. The light is crucial for the experience of safety, mystery and wellbeing in a physical and psychological way.
Today most of the lighting design is planned by engineers and electricians. They fullfill and follow the requirements from Danish Standards directions for hospital lighting. Bringing the designers knowledge into play, lighting designs has the posibility of enhence space value, at the user has the oppertunity to experience a pleasurable atmosphere in there hospitalising.
We use all our senses when we experience and enter a space. We are using all our senses at the same time, and trying to connect the information's from the senses. We try to create a line of sensory information. The body doesn't only rely on the senses, but attempts to form links between the senses - a sensory integration.

THE APPROACH
The objectives of the poster presentation are:
- to identify the important factors for when the lighting is planned for wards.
- to display the important parameters for experiencing our physical surroundings in order to achieve consistency between expectations and actual experience of space
- to gain knowledge about design parameters for achieving an pleasurable light atmosphere in wards and make the parameters for qualifying lighting visible.