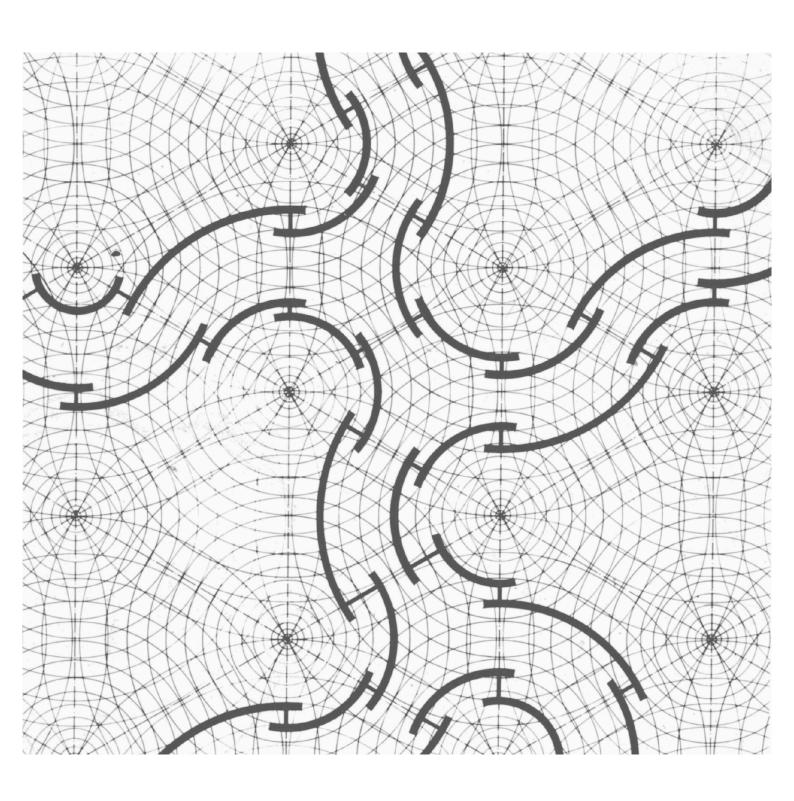
# MOVING BOUNDARIES

#### WORKSHOP ABSTRACTS



SUMMER COURSE - NORDIC X 2024

For more information visit www.movingboundaries.org

STOCKHOLM, SWEDEN August 12 - 20

HELSINKI, FINLAND August 21 - 24



## TABLE OF CONTENTS

#### WORKSHOPS

W 03	TEAM 01 Galen Cranz, Sarah Robinson, Carina Rose, Veronika Mayerboeck  Workshop: Embodied Space
	·
W 04	TEAM 02 Eve Edelstein, Kurt Hunker
	Light In Space In Nature
W 05	TEAM 03 Katharina Wulff, Ute Besenecker, Ines Bartl
	Tools Telling Time – Sundials and Hormones: Design Explorations
W 06	TEAM 04 Arne Lowden, Anya Hurlbert, Johanna Enger, Hamid Eizadi
	The Tides Of Natural Light - Exploring The Human Experience Of Light And Colour
W 07-08	TEAM 05 Mark Alan Hewitt, Jonas Kjellander
	Perceiving And Manipulating Natural Light
W 09-11	TEAM 06 Rodrigo Muro, Tonino Griffero, Clarissa Machado
	An Emotional Response To Atmospheric Lighting



Galen Cranz



Sarah Robinson



Veronika Mayerboek



Carina Rose

WORKSHOP: EMBODIED SPACE

Tuesday, August 13 | 4:00 PM Thursday, August 15 | 4:00 PM Sunday, August 18 | 4:30 PM Monday, August 19 | Presentations

The process of creating architecture is inherently distanced and representative. Unlike other artists and craftspeople whose materials and mediums directly temper and constrain the possibilities of their work, architects never actually touch their materials to feel their resistance or vulnerability in the process of making. In this way, materials can inform the work only indirectly. And when we draw, we look down at a page or stare at a screen, the visual sense dominates and the frontal view excludes immersive volumes of space and the rhythms of time. Our principal media, space, form, movement are not actual—but possibilities of our imaginations.

At the same time, decades of work in the cognitive sciences tell us that all of thought, feeling, and imagination are situated and embodied. And our experiences of architecture and the built world take place on a largely non-conscious level. So, paradoxically, the process of creating architecture increasingly distances us from our bodies, but our bodies are the very source of wisdom and knowledge that we need to draw upon and cultivate. This workshop intends to ground us in our bodies as source and wellspring of knowledge, imagination and spatial expertise. Through experiments in somatic practice, improvisation, dance, and autobiographical research, we hope to explore deeper layers of embodied knowing that can directly inform our creative practices.

<u>SESSION 1:</u> replicates a study of how different states of consciousness (cortical and subcortical) produce different types of drawings. You will experience being taken to your frontal lobes, before making two drawings and then taken to your sub-cortex (your kidneys), after which you will make two more drawings. As a group we will describe and analyze the two sets of drawings and discuss the meaning of what you have experienced. Which mental state is most useful for what kinds of tasks?

<u>SESSION 2</u>: aims to guide participants towards the deep inner sensation of the body along tissues, nerves, organs, and bones to slowly expand our attunement from the horizontal to the vertical inner body—encounters between the somatic and the architectural serve to gently deconstruct the layers of our spatial autobiographies.

In <u>SESSION 3</u>, having unfolded an inner world of impressions, you will explore

reflective practices such as drawing, taxonomies, and verbal reflection help to translate, mediate, and express insights throughout various media. Journaling, drawing and conversation will accompany movement as we experiment with expressing the insights and perceptual shifts arising from our body's intelligence. We will seek deeper narratives that come from openness and listening rather than a trained mind and habitual body and release you into impulses and choices that facilitate spatial imagination and creative skill. Finally, we invite you to organically implement the gained embodied insights into open design tasks.

No prior movement training is required, all mobility levels are welcome. We suggest clothing that is comfortable to move in and we will invite you to be barefoot.



Kurt Hunker



Eve Edelstein

#### WORKSHOP: LIGHT IN SPACE IN NATURE

Tuesday, August 13 | 4:00 PM Thursday, August 15 | 4:00 PM Sunday, August 18 | 4:30 PM Monday, August 19 | Presentations

This workshop will give participants an opportunity to explore ideas about light in space in the context of the architectural design process. Your instructors, Eve Edelstein, PhD and Kurt Hunker, FAIA, are members of ANFA, the Academy of Neuroscience for Architecture. As such, they will bring both architectural and scientific thinking to the task. Eve is a neuroscientist with a strong orientation to architecture and design and degrees in both. Conversely, Kurt is a practicing architect with an appreciation for the potential for scientific research to positively impact the design process. They share a particular interest in the "translational" aspects of Neuroscience for Architecture (NfA): how do we designers make use of brain research in a careful, responsible way?

This workshop will involve a modest design project with a simple program. Parameters will include the requirement that the space(s) must be daylit, it will be in use year-round, and the structure must be situated in a "natural" environment. We will build upon the lectures, discussions and field trips scheduled for Nordic X as the workshop progresses over the two-week time frame.

<u>SESSION 1</u> serendipitously follows your team leaders' lectures on Tuesday, August 13. As a group, we will discuss participants' backgrounds, design methodologies, and goals and "debrief" the talks from earlier in the day. The project program and parameters will be discussed as well, and the group will form itself into teams of 2-4 participants each. Additionally, we will consider things within the context of the Woodland Cemetery tour the following day, in which we will experience sublime examples of light in space in nature.

<u>SESSION 2</u> occurs the day after, on Thursday, August 15th. The emphasis will be on brain science and how translational considerations may impact the development of design projects; Eve will lead the discussion. We will look at various techniques for expressing design work, particularly in terms of representing changeable aspects of daylight. There will be ample time for teams to work together. Two intervening days separate this workshop from #3, which gives participants expanded opportunities to explore natural environments in and around Stockholm and experience the effects of daylight at this northern latitude. The field trip to the Stockholm Archipelago will be discussed for its potential to inform the work.

Sunday, August 18th's <u>SESSION 3</u> is the last before projects are presented. Here, Kurt will lead the workshop and ideas culled from a week's worth of lectures, panels, and tours will be reviewed for their potential in the design process. We will discuss the idea of "atmosphere" as it may relate to the work. As before, there will be plenty of time for teams to collaborate on their individual designs. Lastly, the group will consider how to present its findings in the presentations planned for the next day.

Participants should bring cameras (cellphone versions should be fine) and sketching/note-taking materials, including sketchbooks. Your team leaders will not dictate the media; bring tools that work for you.



Katharina Wulff



**Ute Besenecker** 



Ines Bartl

### WORKSHOP: TOOLS TELLING TIME – SUNDIALS AND HORMONES: DESIGN EXPLORATIONS

Tuesday, August 13 | 4:00 PM Thursday, August 15 | 4:00 PM Sunday, August 18 | 4:30 PM Monday, August 19 | Presentations

This workshop will immerse participants into the natural light environment at higher latitudes. Light as a temporal source determines the rhythms of life on our planet in plants and animals on a daily, seasonal and annual basis. Providing biologically functional light is, therefore, a crucial need for building enclosures, and the choices of openings, transitions, and materials (including vegetation) at the threshold of inside and outside influence it's supply. The workshop aims to offer a convincing rationale for utilising neurophysiological knowledge in various ways at an early planning stage in the architectural lighting design process. Participants will have the opportunity to experience light exposure to experiment with tools to anticipate light availability and to discuss and explore questions of embracing site-specific features and how to cater to individual needs of different types of sensitivity for different occupancy.

The instructors form an interdisciplinary team of three: Katharina Wulff, PhD, a neuroscientist with a focus on biological timing, Ute Besenecker, PhD, architectural and urban lighting design researcher, and lighting designer lnes Bartl. The team shares an interest in how basic biological needs translate into practice, and they will help discuss and test various strategies for applying recent research findings to the architectural design process.

The Workshop will start with experiential exercises related to the shades and levels of light and dark, morphing into a small group project designing a sleep-in shelter in a Nordic context to be used year-round. In addition to exploring Nordic light-dark conditions and discussing their impacts on design, the participants will also reflect on transferring their designs into their geographic home contexts.

<u>SESSION 1</u>: all participants will introduce themselves by pinning everybody's residential geographic locations on a map, with respective annual and daily light-dark experiences. This will be followed by immersive exercises related to the shades of light and dark, and an introductory demonstration of some tools available to evaluate light for visual and physiological impact. The session will end with the forming of working groups and the introduction of the design task to be followed up two days later in the second workshop session.

Between sessions 1 and 2, Katharina and Ute will give lectures that provide additional content relevant to the workshop. The site visits are opportunities for the workshop participants to observe and document the light conditions, their transitions in nature and man-made openings from indoors to outdoors.

<u>SESSION 2</u>: it will provide an opportunity to discuss the content of the lectures from the prior day in relation to the temporal snapshots from the site visit. The main activity will be to test and explore ideas of integrating light-related physiological and behavioural health aspects into choosing an imaginary site and designing a shelter to live-in all-year round under the physical forces of Nordic environments. Materials and equipment to invent small models and to produce sketches will be provided.

<u>SESSION 3</u>: This is the last session before the projects are presented. The first part of the session is dedicated to discussing 'cyclic motion' and exploring within the group how the models would (need to) change when transported to the locations of the participants' home areas. The second half of the workshop will be dedicated for the groups to present to each other and to curate and turn the connections learned during the workshop into a final deliverable for the overall presentation of the workshop's findings the next day.

While not necessary, participants should feel free to bring their own favorite working tools.



Arne Lowden



Anya Hurlbert



Johanna Enger



Hamid Eizadi

### WORKSHOP: THE TIDES OF NATURAL LIGHT - EXPLORING THE HUMAN EXPERIENCE OF LIGHT AND COLOUR

Tuesday, August 13 | 4:00 PM Thursday, August 15 | 4:00 PM Sunday, August 18 | 4:30 PM Monday, August 19 | Presentations

Understanding the natural shifts of light and colour is essential for scientific and medical fields, as well as for improving quality of life by integrating light qualities into everyday design. By exploring these dynamics, we gain deeper insights into their profound impact on our biological and emotional states.

Throughout the workshop, participants will blend scientific methods and measurements with practical lighting design explorations of natural light, and how to mimic it with electric light. Through reflection, discussions, and hands-on practice, they will learn to bridge and implement various perspectives, from analytical to experiential and creative.

Arriving in Stockholm in August, participants will encounter unique daylight conditions, including long-lasting sunsets and early sunrises typical of the Scandinavian summer. To monitor the effects of these conditions, participants will fill out daily self-evaluation forms tracking their sleep patterns and mood. On the first day, each participant will receive a wearable light meter (a watch) to record their light exposure throughout the week. The data collected will be analyzed and discussed with workshop leaders during the third session (Sunday).

In parallel with scientific investigations, participants, divided into 5-6 groups, will work on creating light installations that mimic daylight. Each group will select a specific geographic location and a day of the year, then use various lighting fixtures to recreate three light scenarios: two times of the day, plus either an overcast or nighttime scenario.

In this task, the experience of light and colour is central. The spatial structure and architectural elements will remain abstract, focusing on angles, distributions, shadows, and spectral colours that closely resemble real daylight. Since most light is perceived through reflection, the experience will be integrated with the properties of reflective surfaces, such as colour and texture. Additionally, scenarios will be explored and evaluated with different colour settings, using coloured papers, for instance.

All scenarios will be evaluated using different methods. Advanced light meters will measure light levels and spectra, while the perceived light quality will be assessed using forms that address light levels, contrast, colour, mood, and atmosphere.

As the final part of the creative task, each group will choose one scenario and, based on data from measurements and evaluations, decide on a suitable activity or function for that scenario. This bottom-up design process aims to challenge conventions, standards, and assumptions about lighting, promoting a human-centered and holistic approach.

The workshop will conclude with a discussion integrating the scientific track with practical and creative work, exploring how to create light environments that meet both biological and emotional needs.

For the presentations, groups of participants will be responsible for presenting different aspects of the workshop outcomes.



Mark Alan Hewitt



Jonas Kjellander

#### WORKSHOP: PERCEIVING AND MANIPULATING NATURAL LIGHT

Tuesday, August 13 | 4:00 PM Thursday, August 15 | 4:00 PM Sunday, August 18 | 4:30 PM Monday, August 19 | Presentations

This workshop will focus on human understanding of natural light and the potentialities of architects' manipulation of it. It will also deal with how artificial light mixes with light from the environment.

The first session will be devoted to drawing light on surfaces and understanding how it affects our emotions. We will do a short creativity exercise to build team cohesiveness. Hewitt will present a short lecture on drawing and visual perception. We will then discuss how the visual system processes light and how drawing can help us comprehend its effects.

The second session will feature short lectures on how light is perceived and manipulated as it reflects off surfaces or travels through substances. Students will then begin to draw and model those effects in the studio. Kjellander will show a project designed with input from Konstfack faculty that used lightbox models, explaining the limitations of using conventional word indexes to describe emotional reactions to light.

The final session will be devoted to creating lightbox models and testing both its effectiveness as a light reflector and its effects on our emotions. The group will prepare a video documenting the three sessions and discussing the process of designing, perceiving and feeling light as a medium.

Though some materials may be provided each student should come with sketchbooks and drawing media so that we may begin our investigations with hand drawing. Faculty will provide guidance on how to best represent light in the initial drawings and how the visual system receives signals from photons in the environment. By better understanding the limitations of the haptic and visual systems, we can become more effective designers.

When studying the inherent potentials as well as the limitations of the visual, auditory, and haptic systems, we can become more effective designers by understanding proprioception and the influence of the physical environment on achievement, learning, memory, mood, emotions and behavior.

#### SESSION 1

Location: Starting in room A1, then spreading around on the premises or interior public spaces in the vicinity. Reassembling in room A1.

Material: Students are encouraged to bring their own sketchbooks and drawing tools, such as soft-lead pencils or charcoal. Konstfack may also supply drawing tools, pads, and paper.

Activities: While this session involves drawing, no previous drawing skills are required. In fact, being a trained artist could prove to be an obstacle rather than an asset.

The first exercise will be a short, fun drawing-relay to loosen up and get acquainted. Subsequently, Mark Hewitt will present a short lecture on "Drawing to See."

#### WORKSHOP: PERCEIVING AND MANIPULATING NATURAL LIGHT

Mark Alan Hewitt & Jonas Kjellander

In the second exercise, students will draw "light on interior surfaces." These may be an entire room, a section of a space, or a detail. The focus will be on shades and cast shadows rather than outlines. Attention will be paid to light rather than function or representation.

Drawings may be from anywhere on the premises or nearby interior spaces such as a café, a metro station, or a hairdresser. Drawings should preferably be produced on-site, while camera snapshots may also be used as a basis or for later completion. Camera images may be in black & white to single out the light experience, but students are encouraged to pay attention also to color rendering and light temperature.

Finally, students should submit digital photos of the drawings and the actual settings by email or USB drive to Mark or Jonas

#### **SESSION 2**

Location: Room A1

Material: Projector and screen. Bring notebooks and pencils or laptops.

Activities: This session will be devoted to analyses and discussions on the light experiences from the drawings and the corresponding physical settings. It will also feature one or two short intermediate lectures by Jonas Kjellander.

Discussions will emancipate from the submitted photos with the objective of analyzing and verbalizing the light experience in terms of mood and emotions while disregarding the specific function or activity of the space or the detail. We will attempt to point out the specific light characteristics in the different settings and describe their impact. A list of keywords will be linked to the respective light scene.

#### **SESSION 3**

Location: A1 and outside (if weather permits)

Material: Foamboard, utility knives, glue, sticky tape, fiber optic lights, mini LED lamps (all supplied).

Activities: This last session will be devoted to creating 2-3 lightbox models based on selected examples from session 2. We will enhance and develop hands-on some of the lighting characteristics identified in session 2 using both natural light (cutouts) and artificial miniature lighting sources.

Finally, we will analyze the disembodied lighting scenes moving back to concrete situations and functions. Will a specific light scene excite and promote a specific function or activity? In the light box, we can illustrate this with symbolic furnishings or artefacts. The measurements of the light boxes will be that of approximately a large size room (6x10x3 meters) in scale 1:12

The scenes will be photographed (with only the artificial miniature lighting, only natural light, and both in combination) for the final presentation.



Rodrigo Muro



Tonino Griffero



Clarissa Machado

Participants are expected to react to the atmospheres provided by the lighting conditions by painting over the available surfaces at space (walls & floor\*). It is not a painting in the artistic sense or depict anything in particular, but a kinetic reaction to space and atmospheres.

#### WORKSHOP: AN EMOTIONAL RESPONSE TO ATMOSPHERIC LIGHTING

Tuesday, August 13 | 4:00 PM Thursday, August 15 | 4:00 PM Sunday, August 18 | 4:30 PM Monday, August 19 | Presentations

The immersive hands-on workshop is a practical way to explore the realm of atmospheres and affordances in lighting design. Designed for lighting designers, architects, researchers, environmental psyclogists and enthusiasts alike participating in Moving Bourdaries Nordic X. This workshop offers a unique opportunity to delve deep into theoretical concepts and translate them into an architectural and lighting experience.

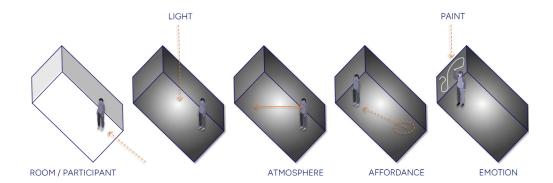
Led by architect and lighting design expert Rodrigo Muro, phenomenological researcher and leading expert in the topic of Atmosphere, Tonino Griffero, and architect Clarissa Machado, this workshop will explore the intricate interplay between lighting, atmospheres, and affordances. Participants will gain a comprehensive understanding of how lighting can shape spatial perceptions, evoke emotions, and influence human behaviour within architectural environments.

Through a responsive interactive exercise, attendees will have the chance to experiment with different lighting scenes and atmospheres in space. The given immersive atmospheres seek the engagement of the senses and elicit a kinetic response. Different lighting schemes provide different atmospheres in a specific architectural context allowing to explore effects of light. Participants will learn how to harness the power of lighting to create meaningful and impactful spaces.

Key topics covered in the workshop include:

- Understanding the concept of atmospheres and affordances in lighting design
- Exploring the emotional and behavioural affect of light on human through visual perception
- Active perception/reaction for the creation of emotional large scale wall painting\*.
- Hands-on exercises and discussion

By the end of the workshop, participants will emerge with a deeper understanding of the theoretical underpinnings of atmospheres and affordances in lighting design, as well as practical skills and techniques that they can apply to their own projects and design practices. Join us for an illuminating journey into the art and science of lighting design, and discover how light can transform the way we experience the built environment.



## WORKSHOP: AN EMOTIONAL RESPONSE TO ATMOSPHERIC LIGHTING Rodrigo Muro, Tonino Griffero, Clarissa Machado

SESSION 1 - Theory and Ideation

Introduction to the workshop

Topic & Concepts

Material, tools and equipment

Definition of atmospheres and lighting scenes (in groups) – (Work over paper)

SESSION 2-Practice and Realisation

Creation of atmospheres and lighting scenes (in groups) – (Hands on working with lighting fixtures in space)

SESSION 3-Experiencing and Creation

Presentation by Tonino

Painting (in groups) – (Hands on painting with brushes over surfaces)

Discussion and conclusion (ALL)

Documentation (ALL) - (photographs & transcript)

<u>PRESENTATION OF RESULTS</u>-Documented material photographs, transcript/summary of discussion

Discussion and conclusion (ALL)

ROOM S1

For the hands on activities will be divided in 4 groups:

» 2 groups working in parallel for the hands-on lighting and for the handson painting.

» 2 groups are documenting atmospheres around the building.



Daylight + blackouts

Tracks for lights

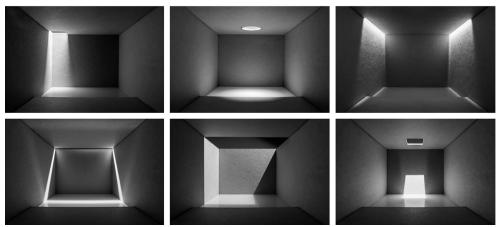
Wood panels + paper

Division wall / wood panels

NOTES: Material for painting provided by the workshop. Students should bring notebook/ sketchbook, pencils for the "ideation" Day1 stage. Be willing to work in teams and be physically active. No homework is given.

## WORKSHOP: AN EMOTIONAL RESPONSE TO ATMOSPHERIC LIGHTING Rodrigo Muro, Tonino Griffero, Clarissa Machado

#### DIFFERENT LIGHTING SCENES / DIFFERENT ATMOSPHERES



Images used only as reference for protraying different lighting conditons. © IUA Ignacio Urquiza Arquitectos + Max von Werz Arquitectos

#### SPATIAL PAINTING / AFFORDANCE / EMOTIONAL







Images used only as reference for protraying painting is space activity. 1. Gemma Schiebe fine art 2.Live Painting Hommageto a Great Woman | Franck Bouroullec, 3.Black on White by Anastasia Faiella

#### AFFORDANCE / EMOTIONAL RESPONSE



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