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Tools Telling Time – Lecture 2: Sundials And Hormones: A Designer's Perspective

Concepts: time, dark/light shades, seasons, adaptiveness

In this talk, we build on concepts from lecture 1 - Sundials and Hormones: A Biologist's Perspective - that introduced our planetary dark-light rhythms and their relationship to our body-internal, hormone-triggered timing system with specific consideration of the Nordic region and its large seasonal variation in illumination by daylight, moonlight and/or twilight.

Sundials are fascinating instruments that visualize solar changes over time; they require a local-specific design, placement, and alignment to work and to be experienced. Enabled by man-made lighting technologies, today, built structures tend to follow concepts more independent of the geographical location and the associated local-specific light/dark cycles.

What light/dark adjustments are we striving for to align our internal time and physiology to the daily and seasonal demands arising from local habitats? How can emerging knowledge from biology be utilized in various forms and ways to enrich the design process from an early planning stage aimed at supporting the various inhabitants of the specific built environment?

We support our daily visual needs using light/dark scenarios. Now, the first toolboxes have been developed to provide researchers and designers with techniques for comparing and evaluating an environment's potential to trigger a light-related physiological response.

This lecture will explore and discuss selected interpretations and examples of spatial design concepts, considering visual and biological aspects, particularly, the use of varying shades of light and dark emitted from the sun and electric sources.