Cities, Communities and Homes: Is the Urban Future Livable?

**Title:** Living in Light Putting People before Building

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**Abstract:**

There is an urgent need for a more holistic and human-oriented focus when renovating existing housing. A new focus towards a more genuine understanding of the importance of people’s health and well-being, living much of their lives indoors, inevitably involves the design and processing of the building skin. How to channel the benefits of daylight, in terms of both quality and quantity, into the lives of people is a central question. Evolutionary people belong to nature, attuned to the sun via the circadian rhythm, and we are meant to be exposed to daylight far more extensively than we are nowadays. However, since we spend most of our lives indoors, we need to find new ways to receive and harvest natural light.

Living in Light is a Nordic Built funded, four years’ innovation programme among leading actors within the field in Norway, Sweden and Denmark as well as an ongoing concrete transformation of an 1899, two staircases residential building block in Copenhagen, funded by a Danish Ministry and the City of Copenhagen. The visions and thoughts in these two programs, weaved together with discussion taken during participations in Danish THINKTANK THE CITY 2015, titled “Communities Undergoing Change” and unique images by artist/photographer Torben Eskerod, will be the take for a full paper. Daylight has a rightness and the barriers for reaching this richness are intellectual and physical. Daylight awareness is critical before acting in a larger scale, acting with human beings - in cities, communities and housing.

The following questions are posed: to what extent can a smarter use of glass create better living conditions in existing housing? Can glass become the most vital material in renovation of existing buildings, replacing traditional insulation materials and conventional praxis? Can indoors and outdoors be inseparable twins, aiming for the best liveability factors in both places?
Biography

Daniel Sang-Hoon Lee

Daniel Sang-Hoon Lee was trained and educated as a structural engineer from the University of Edinburgh, where the degree program was specifically designed to develop individuals to work in more cross-disciplinary environments. After acquiring his Ph.D. from the University of Edinburgh, he joined the Royal Danish Academy of Fine Arts, School of Architecture, Institute of Technology in 2010; where he has been teaching fundamental engineering principles to architecture design students in various academic levels in form of lectures and workshops. His research interests started from the understanding of structural and material behaviors in more conventional contexts; which later developed into investigations that seek to understand the fundamental natural phenomena and the potential design applications. He believes in the profound link of aesthetics to orders, which can be observed in natural environment; and his recent interest expanded to the theory of light, in which we see everything else. He is currently an associate professor and co-director of the High-Performance Simulation Lab at the same institute. Within the lab, his research is in the field of structures, fluids and particles simulations.

Torben Thyregod

Torben Thyregod, architect maa, has a degree from The Royal Academy of Fine Arts, School of Architecture, Copenhagen, 1996. Since 2015 Ph.D. Fellow at Center for Industrial Architecture (CINARK) at KADK, Copenhagen. The working title of the thesis is, Daylight, Health and better Well-being – Glass as a catalyst for sustainable transformation of housing. Thyregod has been a Concept Developer and spearhead for sustainable transformation in the VELUX Group. For several years, worked with radical innovation seen from a holistic approach, bringing natural elements into a cultural context. Co-inventor of concepts such as SOLTAG, Solar Solutions/Solar Prism and ‘The Penthouse Concept’ - present at COP15. Started the Nordic magazine, Daylight, in 2003 and co-founder of D/A Magazine and presently editorial & creative advisor (www.velux.com/da). Driving force behind prize-winning and thought-provoking films about people and their dependency on light. Was member of think tank, BYEN 2025 under the Danish Ministry of Housing, Urban and Rural Affairs. Started own company in 2013, focusing on the areas Awareness, Transformation and Potential. Takes part in several development projects, e.g. Living in Light, funded by Nordic Built and Living in Light/Valby Project, funded by a Danish Ministry and the City of Copenhagen and GI.