ARCHITECTURAL STRATEGIES TO INTEGRATE WELLBEING AND HEALTH EFFECTS OF DAYLIGHT INTO THE DESIGN OF PRIMARY SCHOOLS: a comparative analysis of exemplary case studies

Jean-Denis Thiry, MArch.
PhD advisors: Prof. Marilyne Andersen and Prof. Bruno Marchand

PRELIMINARY PHASE 1: THE BEGINNING OF A RELATIONSHIP BETWEEN ARCHITECTURE AND DAYLIGHT IN THE DESIGN OF SCHOOLS

The first plans in «central hall» in the UK
The «Ben Jonson Schools» in Germany
The pavilions schools
The open-air schools
The modernist movement

PHASES OF THE RESEARCH PLAN

Fig. 1

HISTORICAL AND THEORETICAL ANALYSIS
from the perspective of daylight & health (from the 60s)

Fig. 2

SIMULATION-BASED ANALYSIS

THE OCTAGRAM METHOD
Assumptions based on the type of space:
Definition of 8 view directions at eye-level
Weighting of the different directions chosen

REFERENCES

Jean-Denis Thiry

Jean-Denis joined LIPID lab. late 2014 as a PhD candidate in the Doctoral Program in Architecture and Sciences of the City (EDAR). He holds a B.Sc. Arch and a M.Arch from the Université catholique de Louvain in Belgium (2013). During his studies, he was a visiting student at the Tampere University of Technology in Finland and at the Istituto Universitario di Venezia in Italy. His master’s thesis “The lighting mechanisms in the architecture of Alvar Aalto’s libraries” was awarded the BE-BVH prize for the best Belgian-master’s theses in the field of lighting. Upon graduating, Jean-Denis received a teaching assistantship position in the undergraduate design studio and architectural theory course at the UCL where he taught for two years. His activity includes several years of professional experience too, as a registered architect in Belgium and the north of France. His research in architecture, daylight, well-being and health is supported by SFEP and the Stasi NSF, a Walloon-Bruxelles International Excellence Fellowship (WBI), and a Christian Léaleu research fellowship from UCL.