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Design’s Boundary Conditions in Relation to Environmental Interactions GIGA-map

Systemic Approach to Architectural Performance and Wood as a Primary Medium to Architectural Performance project Marie Davidová

This GIGA-map developed as a ZIP-analysis of GIGA-mapping Workshop lead by Birger Sevaldson that was mapping pavilions from the project Wood as a Primary Medium to Architectural Performance. It is mapping a problem of different types of environmental, biological as well as physical, interactions through a range of boundary conditions of different designs. The case designs were either authored or co-authored by the GIAGA-map’s author and were selected due to their suitability to the not fully strict ‘gradient’.

The map lays out a matrix of parameters and relating their interactions that often generate more or less complex feedback loops, some of them cycling even in hierarchical constellations. The stroke thickness doesn’t fully reflect the hierarchy in the system but the importance of related interactions. The gradient of the splines represents the boundary crossings, while the colour gradient of lines and texts for each project represent a range from design’s openness to closeness of the boundary.



environment - design responsive

environment - material responsive

physical environmental conditions

relative humidity responsive

temperature responsive

air flow responsive

light responsive

sound responsive

radio waves responsive

biological environment conditions

symbiotic with flora

platform for fauna - means non-anthropocentric context

human - design responsive

design - environment responsive

material - environment responsive

physical environmental conditions

relative humidity effect

temperature effect

air flow effect

light effect

sound effect

radio waves effect

biological environment conditions

social interaction

individualistic interaction

meditation

leisure

sleeping

work

meeting point

communication

material loading

material storing

social boundary conditions

public

public-private

private

opportunistic use

installation

furniture

shelter

screen

parasite

movable

