PATTERN DENSITY BASED ON STRUCTURAL ANALYSIS
Nodal Displacement under Dead Load, calculated with KARAMBA.
Experimental Setup: Soap bath and site model with important nodes (MRT, Bus Stop, etc.) When the model is dipped into the soap bath, a network of connections emerges between the nodes. By adding additional, flexible nodes, and by repeated dipping, variations of path networks can be generated.

PATTERN DENSITY BASED ON PROGRAMMATIC REQUIREMENTS

PATTERN DENSITY BASED ON SOLAR ANALYSIS

NON-STRUCTURAL PATTERN ELEMENTS
BASE WITH PLANTERS
As Furnishing (Bleachers, Reading Table, Panel Holders) and Foundation.

STRUCTURAL PATTERN ELEMENTS

FINAL PATTERN DENSITY
Based on Average of Sunlight Intensity and Programmatic Requirements, with Nodal Displaced by Structural Requirements.

INTERIOR LIGHTING DISTRIBUTION
(Daylight Factor calculated in DIVA.)
The patterned skin controls the amount of daylight received by each program.

Library: Darkest, even distribution.
Expo: Brighter, even distribution. Brighter along edges due to views.
Forum: Brightest, varied distribution due to views and dark stage background.

dhoby B.A.S.E.
Branching
Adaptive
Solar
Envelope

1. BASIC NETWORKS
Open Form with Flows
Evaluated according to utility and complexity.

2. PATH NETWORK VARIANTS
With fixed nodes only. Evaluated according to utility and complexity.

3. MASSING VARIANTS
With fixed nodes and paths. Evaluated according to site integration.

4. DESIGN VARIANTS
With Library, Expo, and Forum as nodes in the path network. Evaluated according to design and programmatic requirements.

INTERIOR LIGHTING DISTRIBUTION
(Daylight Factor calculated in DIVA.)