The Hylomorphic Project Technological R&D - Structural shape annealing protocols

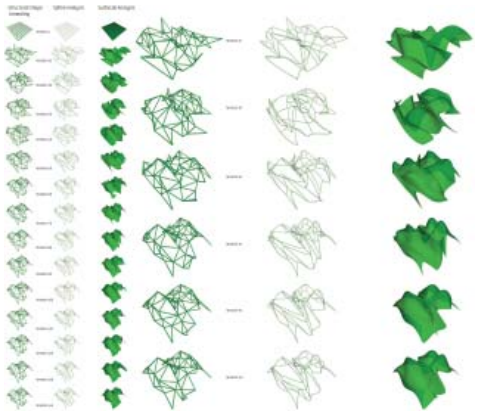
This experimental structure is generated by a pioneering customized technological engine that aims at defining design solutions in response to a wide range of structural and environmental parameters. Based on a research that offers the possibility to integrate the expertise of designers and engineers on a unique computational platform, The Hylomorphic Project envisions the possibility to fully automate design solutions, structural optimization, material performance and fabrication methods. Its customized structural algorithm integrates an evolutionary component that acts as a searching device while reacting to multiple constraints such as geometrical constraints and material properties. This pioneering prototype has been tested for the first time at Rudolph Schindler's seminal King Road House in West Hollywood.

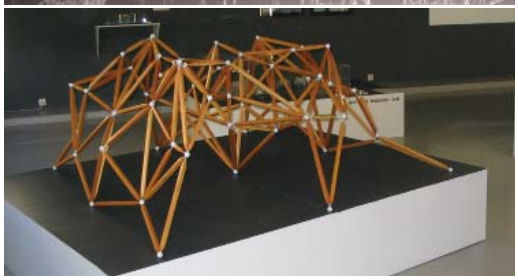
Fact Sheet

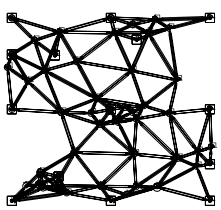
Client MAK Center for Art and Architecture
Location Schindler House, West Hollywood, CA

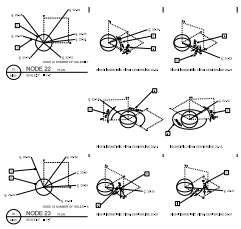
Phase 1 (2004-2005) Preliminary design and computational algorithm
Phase 2 (2006) Structural and environmental algorithmic components I Fabrication and Prototyping

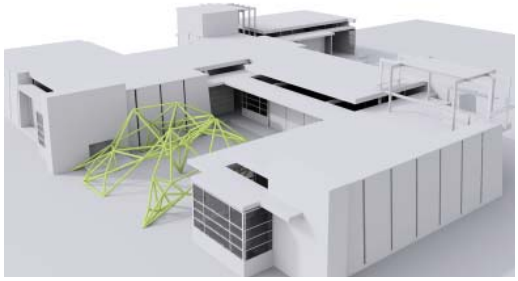
Design Open Source Architecture
Computation Kristina Shea and Martina Gourtovaia, Cambridge University
Structural Engineering Judith Leuppi, ARUP Los Angeles and London
Structural Testing UCLA Structural Testing Lab
Construction Open Source Architecture and the Federal Group, Shanghai
Budget $30,000
Size 400 sqf
Materials CNC milled aluminium, wood

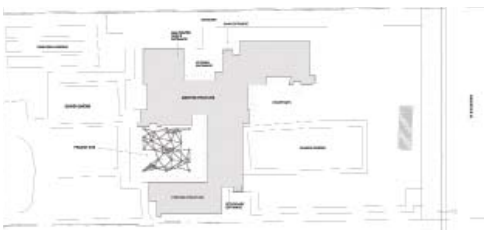












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