The Hylomorphic Project

Open Source Architecture
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The Hylomorphic Project is a complex canopy structure, genetically evolved as a vital entity that reacts to changing data streams while configuring the architectural form. For the Hylomorphic Project, Open Source Architecture (OSA) together with structural engineer Prof. Kristina Shea and Marina Gourtovaia of Cambridge University (UK) developed genetic algorithms. Performs in eifForm software, an experimental computer-aided design system for structural synthesis, the algorithm is based in computational environments as a methodology for form finding and material expression that goes beyond the formal articulation of the computational procedure. This procedure simulates a topological condition of natural form evolution that can be consolidated according to innumerable trajectories.

Seeking dynamic, flexible and continuous evolution procedures, the software provides the required conditions for this type of the design as it consists of a computational core, which is written in C, a fast low-level compiled language. The modules providing interactive access to the core and the graphical user interface (GUI), a high-level scripting language written in Python, allow for easy customization of the software according to a design task in hand.