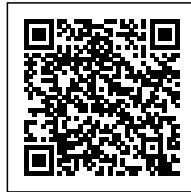


## TRANS-STRUCTURES: FLUID ARCHITECTURE AND LIQUID ENGINEERING

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**Categories:** [home](#), [Matyas Gutai](#), [Trans Structures](#)

Trans Structures introduces water as a building material to build unique, responsive-able structures and define a new paradigm for architecture and sustainable design.



Architecture is based upon the misconception that strong is stable, both in sense of energy and structure, as an unchanged state of microclimate would require more material or insulation. Trans-structures are the opposite: building elements with the response-ability to change according to external conditions in order to maintain stability in terms of structure and/or energy. In this type of building, any effect (structural or thermal load) would generate an immediate affect (a response of the structure). Energy and weight would be counteracted and on a total scale, change would not occur. Such buildings are always in transition from one state to another, unlike conventional structures. The book is comprised of three main parts. The first part explains the theoretical framework of trans-structures and is also accompanied by photos and diagrams of the laboratory tests. The second part shows realized related projects accompanied by interviews with key designers of the buildings. The final part introduces a built Trans-structure: Water House experimental pavilion, which utilizes water as building material. Water gives unique aesthetics and structural characteristics to the building with real response ability based on the properties of water, thus allowing liquid engineering to provide a new solution for contemporary sustainable design.



