

**La Biennale di Venezia**

Biennale Architettura 2021 — Padiglione Italia

Curatore: Alessandro Melis

Sezione: Giardino delle Vergini

Un'esplorazione della Resilienza dello Spazio Pubblico

Curatore della sezione: Dario Pedrabissi

**Description**

The premise is simple. Given the impact of climate change on weather patterns, rainfall and other forms of precipitation might it be both necessary and desirable that building types are developed that can harvest and store as much water as possible, providing enough capacity that the increasingly erratic time divisions between the 'rains' can be ameliorated. Could this provide an incentive for the widespread provision of locally based, dispersed and decentralised infrastructures for water supply? And, finally could this model, which demands a level of community based stewardship that piped, linear, centralised systems do not require, provide the circumstances for invention in relation to the political processes that govern water-use generally, and, ultimately . . . survival?

Our installation in the Giardino delle Vergini is a provocation — providing a quiet place to sit in the shade, in a corner of the garden. Located between the trees, a collection of translucent leaves form a canopy, connected to pillows filled with water. This assemblage of rainwater catchment surfaces and water storage vessels is an artificial watershed. In Venice, the leaves are clouds. Consistent with themes explored in the Pavilion, the design of the installation is a 'spandrel', invoking the careful use of an architectural term by the evolutionary biologists, Stephen Jay Gould and Richard Lewontin in their controversial paper on 'The Spandrels of San Marco and the Panglossian Paradigm' (1979). It is 'a fruitful use of available parts', responding to architectural constraints that in this context are understood as ecological and economic. The pillows are conceived as the locus of dreams, and debate. After the Biennale the installation will travel, provoking conversations about water security and public health, in Istanbul, Florence and Belfast. It will then be separated into four independent pieces, and shipped to Ghana, Botswana and Malawi, where questions raised in Venice will be addressed in rural communities where rainwater harvesting initiatives are being developed. In this way, the installation becomes an actor in networks that extend beyond the walls of the garden . . . into the future.

**Table of credits:**

**Team:** David Turnbull  
with  
Fred Avitaia  
Lorenzo Bertolotto  
Marc DiDomenico  
Saul Golden

**Sponsors:** University of Ulster, Belfast School of Architecture and the Built Environment, BSABE  
Florence Institute of Design International, FIDI

**Biographies:**

**David Turnbull** is a Professor of Architecture, critic, writer and consultant working on ecosystem restoration projects internationally. He is currently a Senior Research Fellow at the University of Portsmouth, UK, a Visiting Expert at ARUP, worldwide, and a member of the Scientific and Cultural advisory group for the 'Padiglione Italia - Biennale Di Venezia 2021'.

**Fred Avitaia** is a co-founder of Studio Tricot in Florence. He is currently teaching advanced computer rendering, prototyping and concept design at Florence Institute of Design International, FIDI, in Italy

**Lorenzo Bertolotto** is a landscape designer and herdsman. He is currently working on climate adaptation and resiliency at De Urbanisten, and head shepherd for the Dakpark, in Rotterdam, NL.

**Marc DiDomenico** is the director, and founder of the Florence Institute of Design International, FIDI, in Italy.

**Saul Golden** is the director of the Urban Research Lab at the Belfast School of Architecture and the Built Environment, Ulster University, in Northern Ireland, applying trans-disciplinary and performative tactics to co-construct meaning in shared urban spaces.

**Images:**

1. Concept model in paper.
2. Site planning diagram — leaves & pillows
3. 3-d model