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New York Office

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1. Rambla Climate-House

Molina de Segura, Murcia

2018-2021

Andrés Jaque / Office for Political Innovation + Miguel Mesa del Castillo

Team

Roberto González García, Nieves Calvo López, Joan Fernández Linares, Ana Fernández Martínez, Marina Fernández Ramos, David Gil Delgado, Marta Jarabo Devesa, Jesús Meseguer Cortés, Laura Mora Vitoria, Paola Pabón, Belverence Tameau

Quantity Survey: Francisco de Asís Pérez Martínez Estructural Engineering: Qube Ingeniería (Iago González Quelle) Edaphology Consultant: María Martínez Mena Ecology Consultant: Paz Parrondo Celdrán Planting Consultancy: Viveros Muzalé (Rubén Vives) Topographical Survey: Fulgencio

M^a Coll Coll **Geotechnical Report:** Forte Ingeniería **Quality Survey:** Ingeolab **Photography:** José Hevia **Drones Operator:** Juan José Rojo

Albadalejo

MATCOAM Sustainability Award 2022

Living Places – Simon Architecture Price 2022

Since the 1980s, vast stretches of land in the formerly-rural county of Molina de Segura (Murcia) have been exploited to create suburbs. The result of this exploitation is a flattening of the land's topographies and the destruction of its territorial system of ravines (ramblas). Ramblas constitute a fabric of veins carved by seasonal rainfall in the dry steppe landscape. In them, humidity accumulates and biodiversity flourishes. They constitute corridors of freshness, carbon fixation, and ecological entanglement that play a crucial role in the climatic and earthy stability of Molina de Segura's ecosystems.

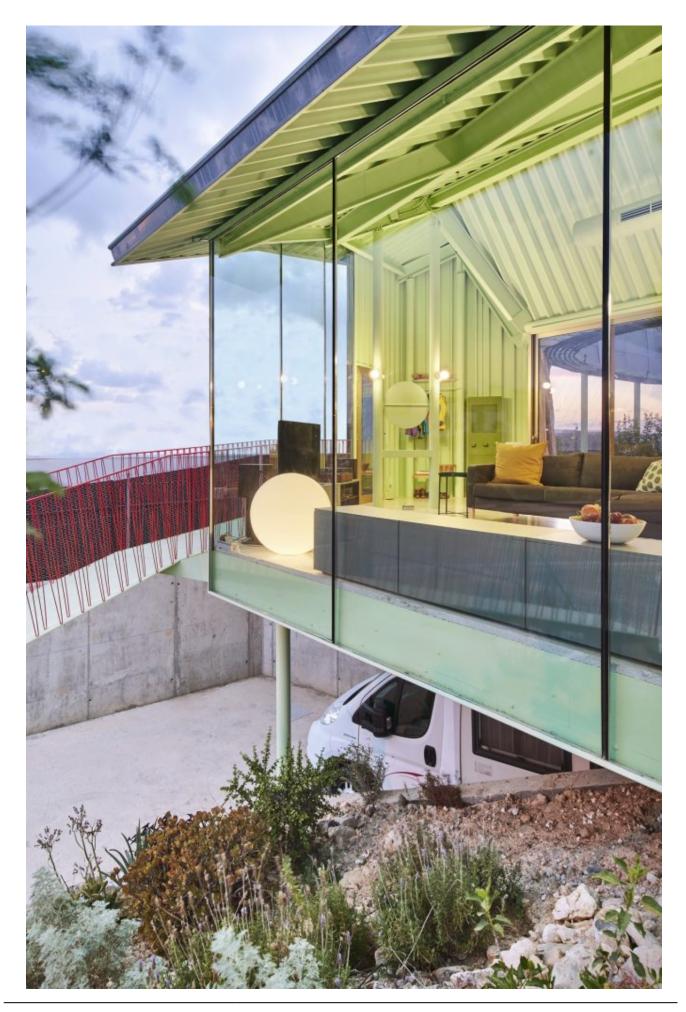
The Rambla Climate-House works as a climatic and ecological device. It is part of a series of associative initiatives, developed at the scale of independent citizens, to contribute to reparations for the environmental and climate damage caused by overurbanization in Molina de Segura. The Rambla Climate-House collects pooled rainfall from its roofs and grey water from its showers and sinks to spray onto the rambla's remains and regenerate their former ecologic and climatic constitution. Humidity and conductivity Netro-sensors activate an automatized meteorology that escapes the control of humans to reach the requirements of the reparation process. The house is organized around this elliptical section of rambla, as an observatory in alliance to this reconstructed

landscape and as a sequence of interconnected spaces of different widths.

Following the reparation of the hydrothermal conditions of the *rambla*, glimpses of its former more-thanhuman life have rapidly re-emerged after a one year period. Now, brachypodiums, myrtles, mastic trees, fan palms, oleanders, and fire trees grow in the elliptical section. Insects, birds, and lagomorphs find shelter in it.

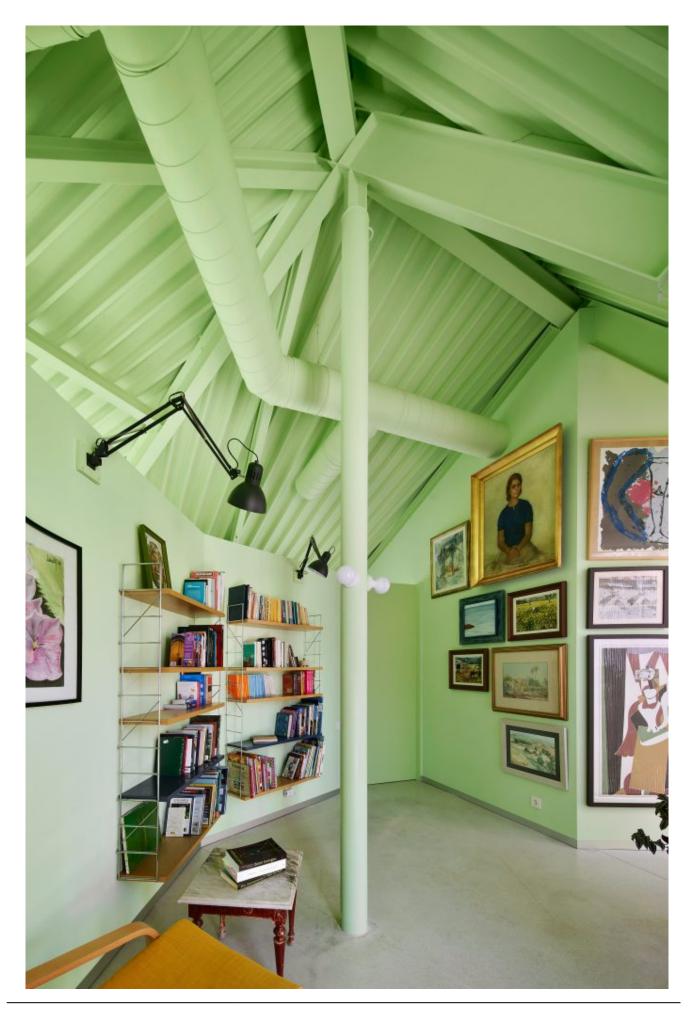
Thermally, the construction of the house tests unorthodox ways to maximize energy efficiency. A marble bench around the elliptical section allows residents to cool off by allowing direct contact to the house's thermal inertia. A coil exposed to the sun, crowning the elliptic section, provides passive hot water during the entire year.

The Rambla Climate-House is the result of a collaboration between architects Andrés Jaque/Office for Political Innovation and Miguel Mesa del Castillo; the edaphologist María Martínez Mena; and the ecologists Paz Parrondo Celdrán and Rubén Vives. All are committed to contributing to the growing grassroots movement claiming climate reparation in Murcia. Since its completion, the house has became a demonstrative device. Gatherings with neighbors and members of the extended Molina de Segura community are organized to share insights and experiences on a collective effort to reground Molina de Segura's urbanisms.



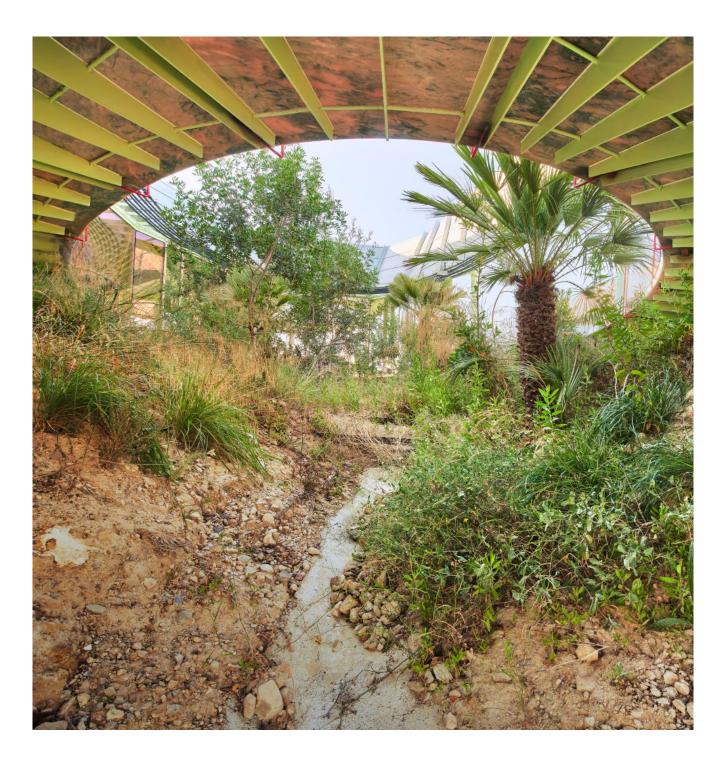


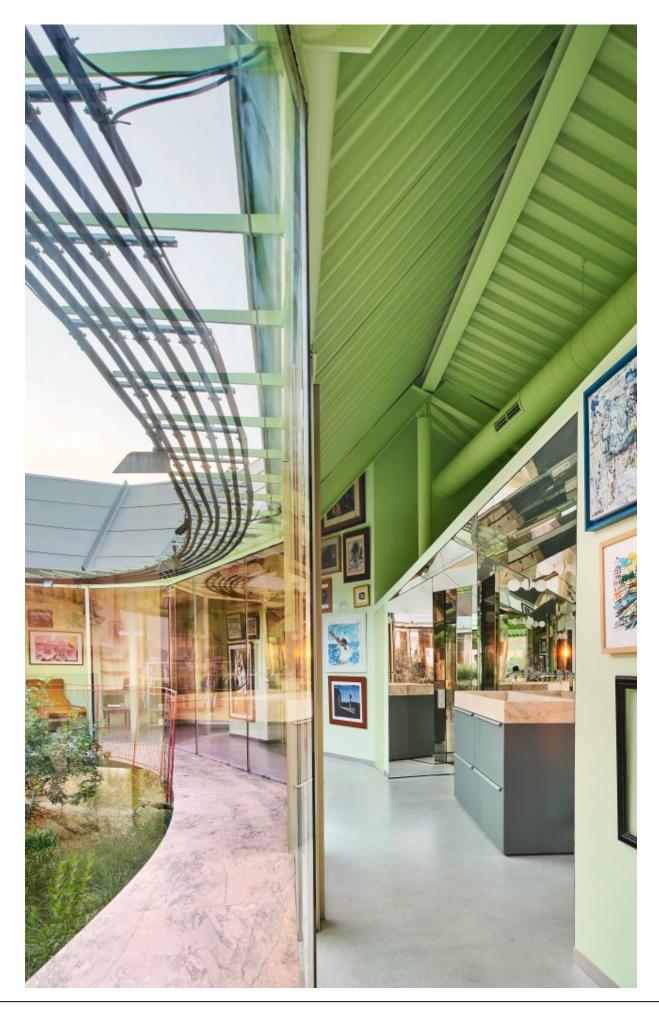




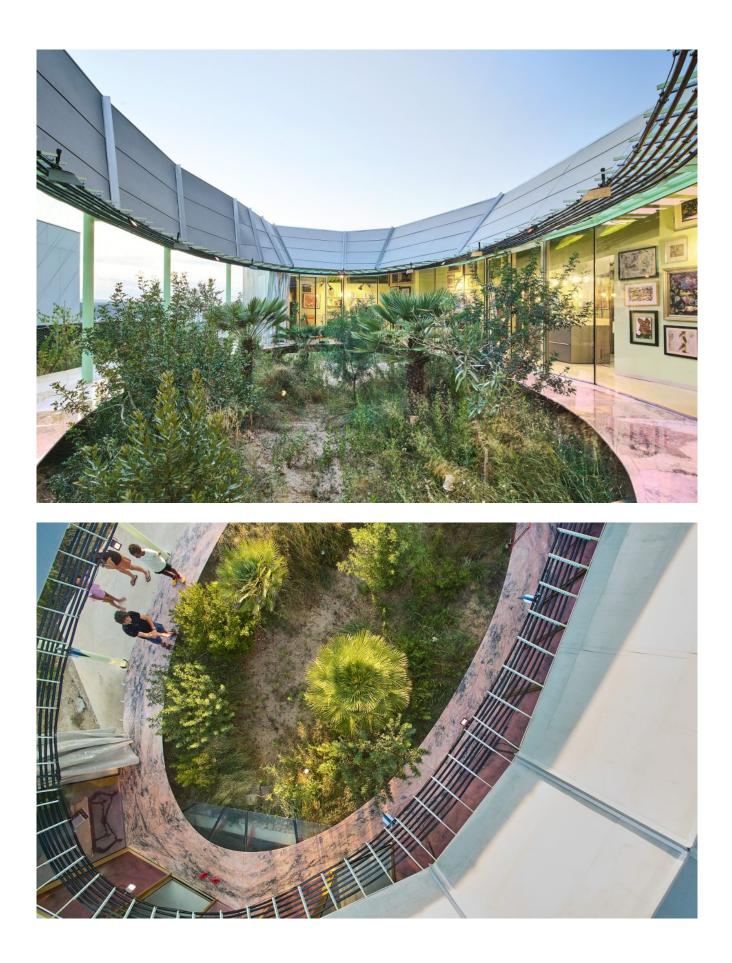




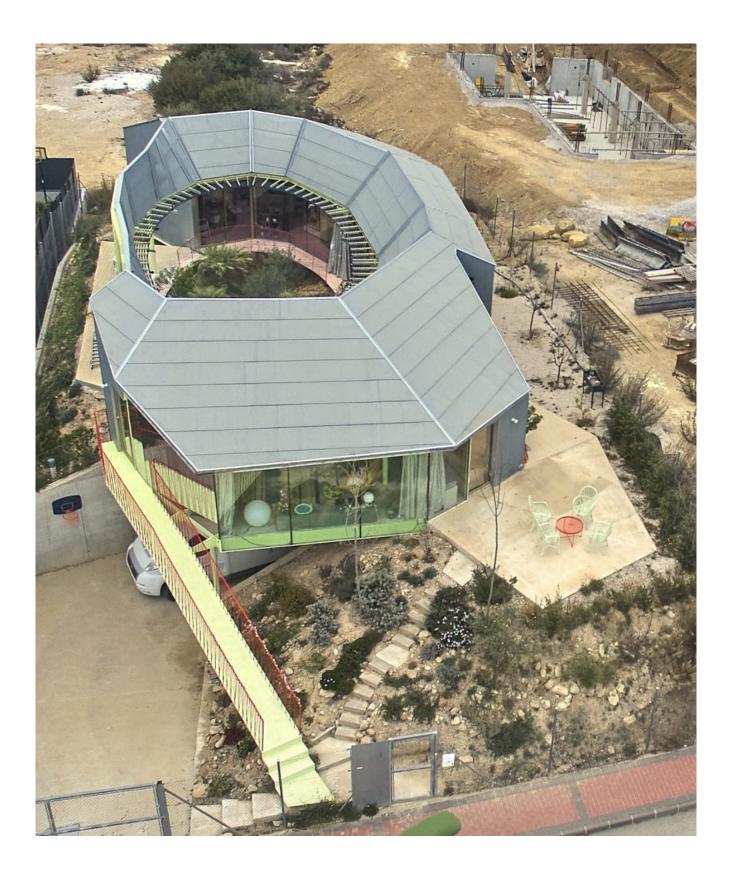


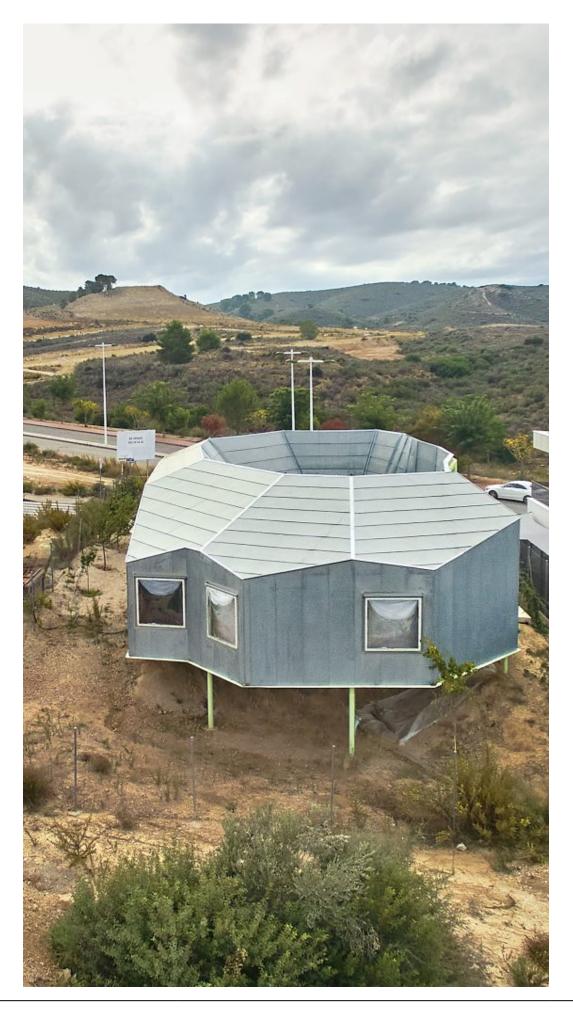




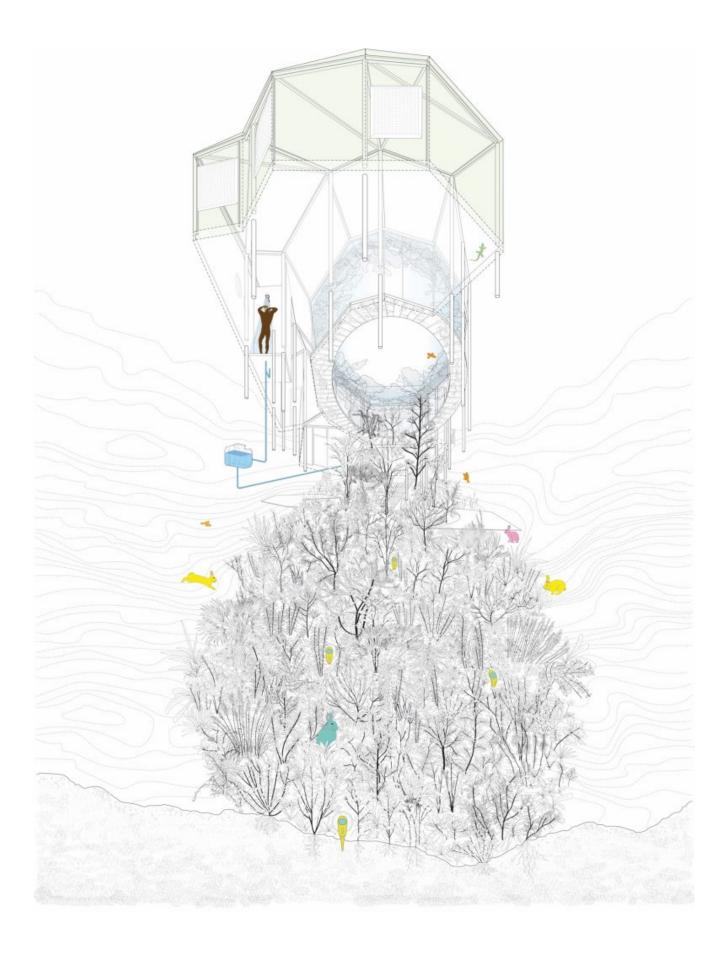


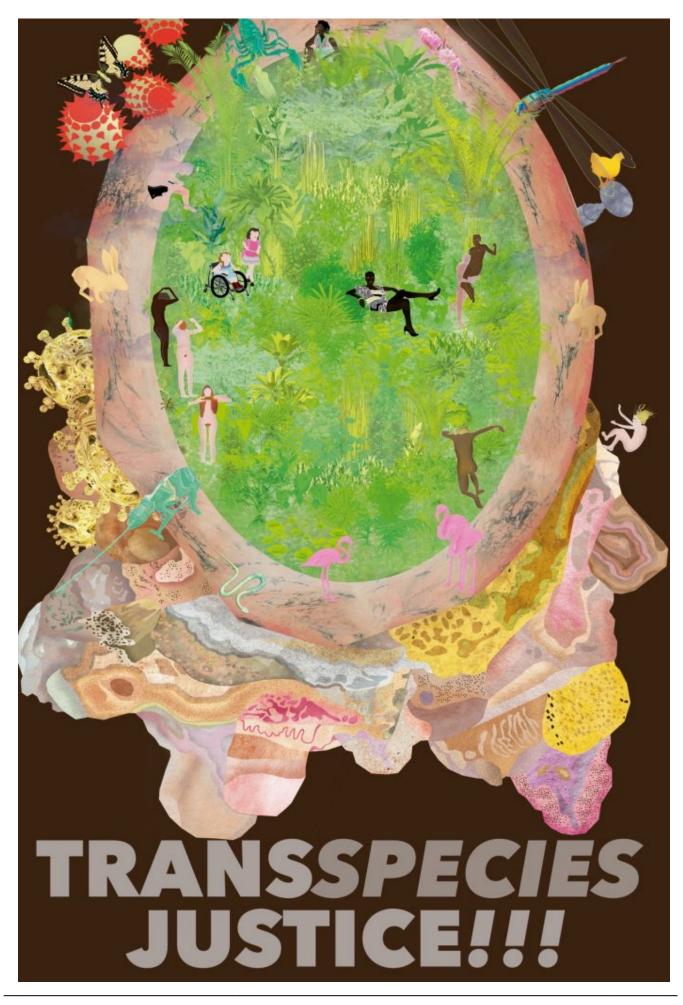


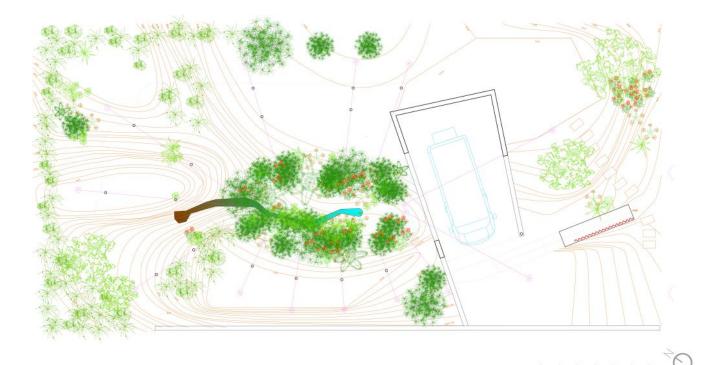


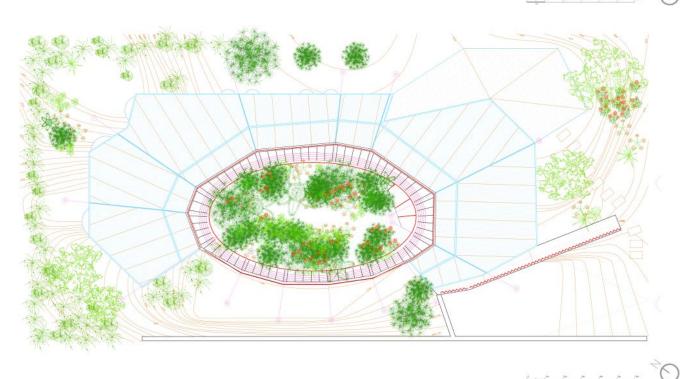


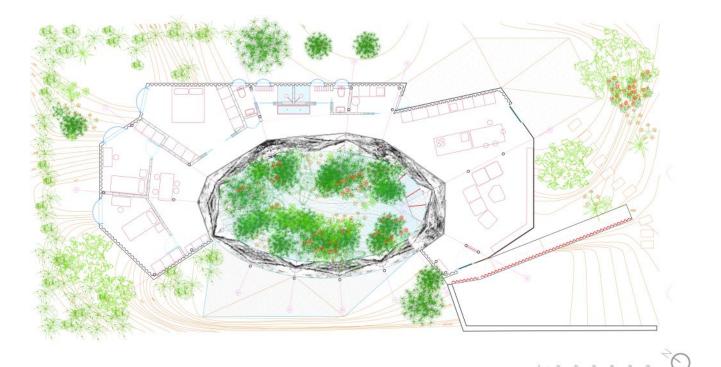


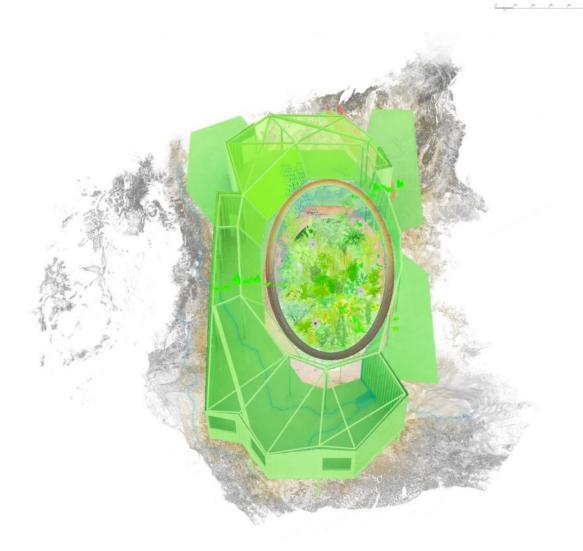


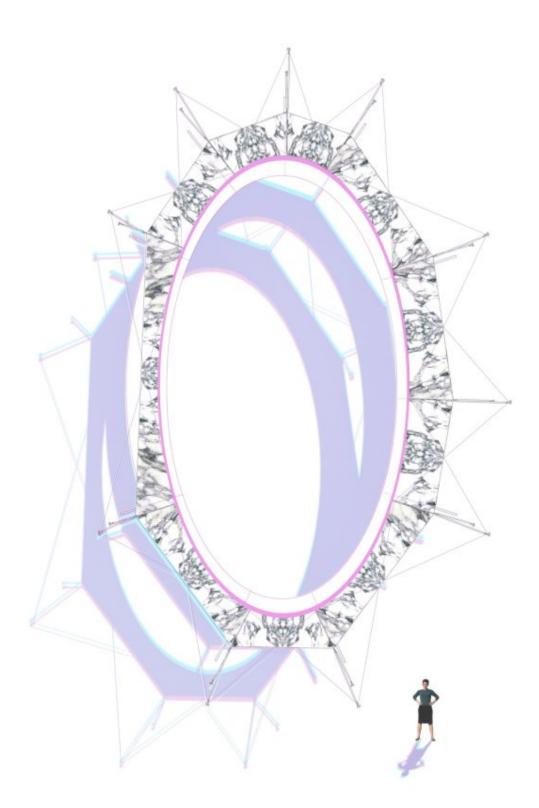












2. Reggio School

El Encinar de los Reyes, Madrid

Completed

Andrés Jaque / Office for Political Innovation

Team

Roberto González García, Luis González Cabrera, Alberto Heras, Ismael Medina Manzano, Jesús Meseguer Cortés, Paola Pardo-Castillo, Rajvi Anandpara, Juan David Barreto, Inês Barros, Ludovica Battista, Shubhankar Bhajekar, Elise Durand, Drishti Gandhi, Maria Karagianni, Bansi Mehta, Alessandro Peja, Meeerati Rana, Mishti Shah, Saumil Shanghavi

Structural Engineering

lago González Quelle, Víctor García Rabadán (Qube Ingeniería de Estructuras)

Services Engineering

Juan Antonio Posadas (JG Ingenieros)

Quantity Surveyor (Project)

Javier González Nieto, Javier Mach Cestero (Dirtec Arquitectos Técnicos)

Construction Management

Ángel David Moreno Casero, Carlos Peñalver Álvarez, Almudena Antón Vélez

Ecology and Edaphology

Jorge Basarrate, Álvaro Mingo (Mingobasarrate) **Photo**

José Hevia

Project of The Year Award 2022, Architects Newspaper Best Façade Award 2022, Architects Newspaper Bienal de Española de Arquitectura y Urbanismo XVI BEAU Award FAD Architecture Award 2023 IV Premio Mini de Diseño 2024 VI Premios Ciudad OPEN HOUSE 2024

Included in the list of the most impressive buildings to be finished in 2022 by *El País ICON Design*.

The design of Reggio School is based on the idea that architectural environments can arouse in children a desire for exploration and inquiry. In this way the building is thought of as a complex ecosystem that makes it possible for students to direct their own education through a process of self-driven collective experimentation-following pedagogical ideas that Loris Malaguzzi and parents in the Italian city of Reggio nell'Emilia developed to empower children's capacity to deal with unpredictable challenges and potentials.

The design, construction and use of this building is intended to exceed the paradigm of sustainability to engage with ecology as an approach where environmental impact, more-thanhuman alliances, material mobilization, collective governance and pedagogies intersect through architecture.

The stacking of diversity as an environment for self-education

Avoiding homogenization and unified standards, the architecture of the

school aims to become a multiverse where the layered complexity of the environment becomes readable and experiential. It operates as an assemblage of different climates, ecosystems, architectural traditions, and regulations. Its vertical progression begins with a ground floor engaged with the terrain, where classrooms for younger students are placed. Stacked on top of this, the higher levels are where students in intermediate classes coexist with reclaimed water and soil tanks that nourish an indoor garden reaching the uppermost levels under a greenhouse structure. Classrooms for older students are organized around this inner garden, as in a small village. This distribution of uses implies an ongoing maturity process that is translated into the growing capacity of students to explore the school ecosystem on their own and with their peers.

A more-than-human assembly as the school's heart

The second floor, formalized as a large void opened through landscape-scale arches to the surrounding ecosystems, is conceived as the school's main social plaza. Here the architecture encourages teachers and students to participate in school government and to interact with the surrounding landscapes and territories. This 5,000 square-feet central area is over 26-feet high and conceived of as a cosmopolitical agora; a semienclosed space crisscrossed by the air tempered by the holm oak trees from the neighboring countryside. A network of ecologists and

edaphologists designed small gardens specifically made to host and nurture communities of insects, butterflies, birds and bats. Here, mundane activities like exercising coexist with discussions about how the school is run as a community and what is the way to relate to the neighboring streams and fields. Ultimately, this floor operates as a more-than-human summiting chamber where students and teachers can sense and attune to the ecosystems they are part of. Visibility of mechanical systems as a pedagogical opportunity As an alternative to architecture's common efforts to hide mechanical systems, here all services are kept visible, so that the flows that keep the building active become an opportunity for students to interrogate how their bodies and social interactions depend on water, energy, and air exchanges and circulations. The building unapologetically allows pipes, conduits, wires and grilles to become part of its visual and material ecosystem.

Thinning, skinning and make fluffy as an affordable environmental strategy In the context of Southern Europe, where high-tech sustainable solutions are only available to highbudgeted, corporate or statepromoted buildings, this building develops a low budget strategy to reduce its environmental footprint based on the following design principles:

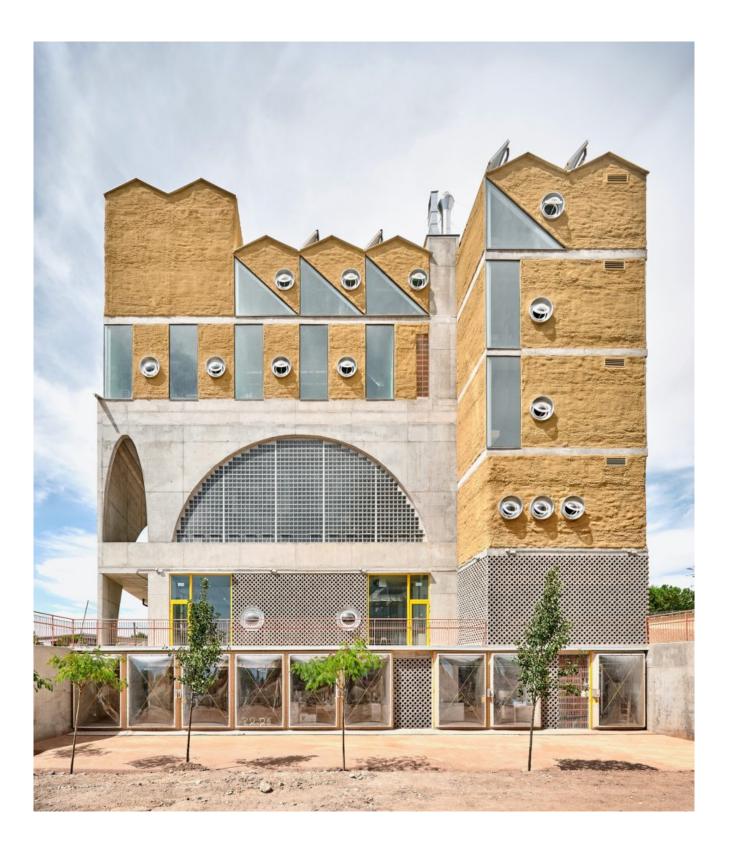
- 1. Verticality to reduce land occupation. Instead of opting for a horizontally-expanding land-occupation – as is the case for 90% of school designs – Reggio School is a compact vertical building. This design decision minimizes the building's footprint, optimizes the overall need for foundations, and radically reduces its façade rate.
- 2. Radical reduction of the construction. No claddings,

no drop ceilings, no raised technical floors, no wall lining, no ventilated façades are used in this building. The overall amount of material used in the facades, roofs and interior partitions of the building has been reduced by 48% just by replacing a big part of the construction by simple strategies or thermal insulation and mechanical systems distribution. The result presents a naked building where the non-edited visibility of its operating components defines its aesthetics.

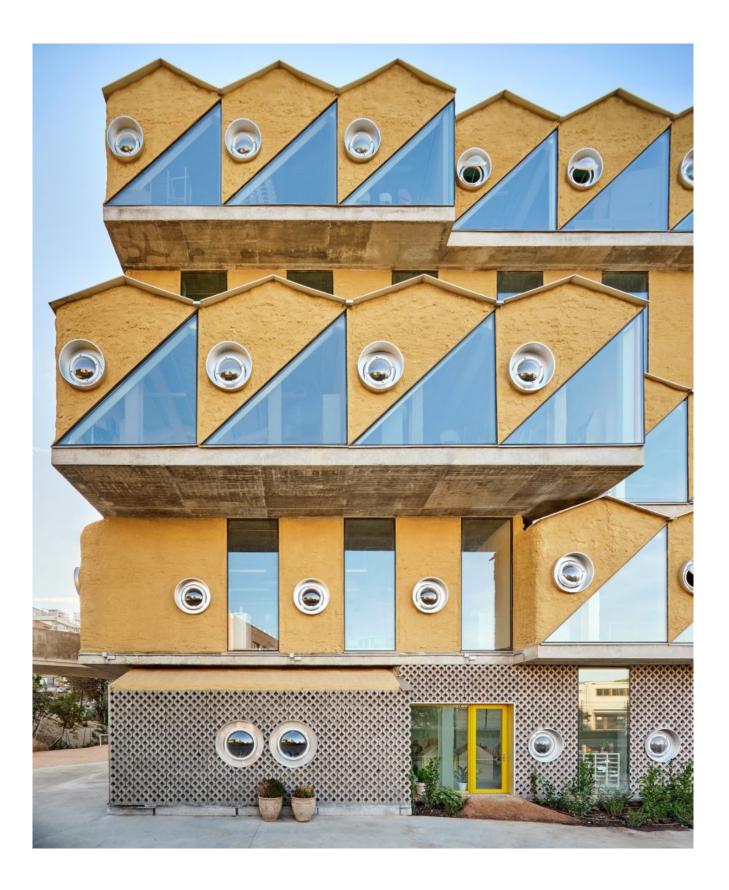
- 3. A thick wrapping of living isolation. Cork wrapping as both thermal isolation and support to more-than-human life. 80% of the envelope of the building is externally covered by a 14.2 cm of projected 9,700 Kg/m3 dense cork. This natural solution, specifically developed by the Office for Political Innovation for this project, is used both in vertical and pitch parts of the building's external volume to provide a thermal isolation of R-23.52, double that what Madrid's regulations require. This adds to the passive 50% reduction of consumed energy when heating of the school's interiors. Beyond this, the irregular surface of the cork projection is designed to allow organic material to accumulate, so that the envelope of the building will eventually become the habitat of numerous forms of microbiological fungi, vegetal and animal life.
- 4. **More thinking, less material.** Led by researcher and structural engineer lago González Quelle, the team has shaped, analyzed and dimensioned the building's structure so that the thickness of loading walls can be

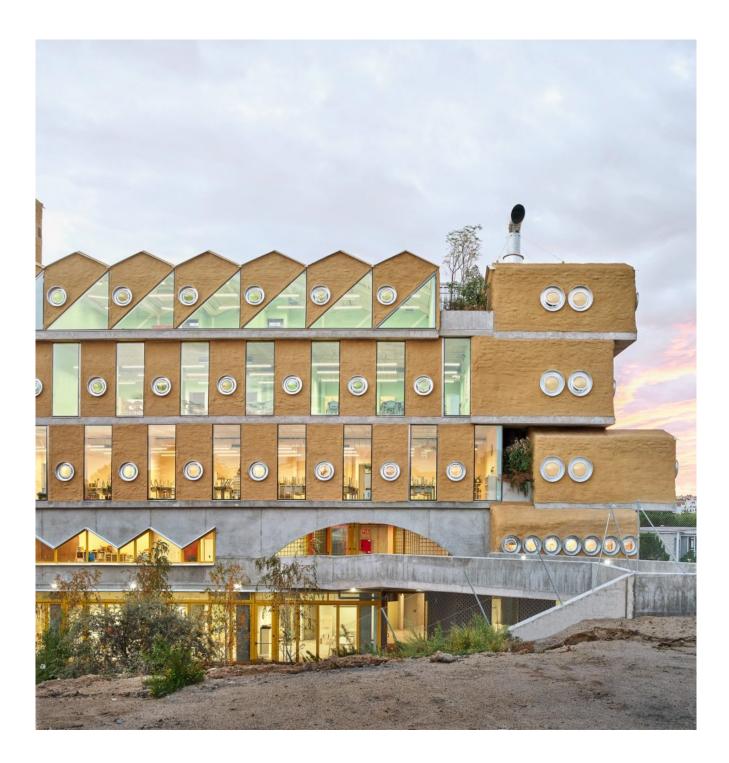
reduced an average of more than 150 mm compared to conventional reinforced concrete structures. Overall, this implied a 33% reduction in the embedded energy of the building's structure.





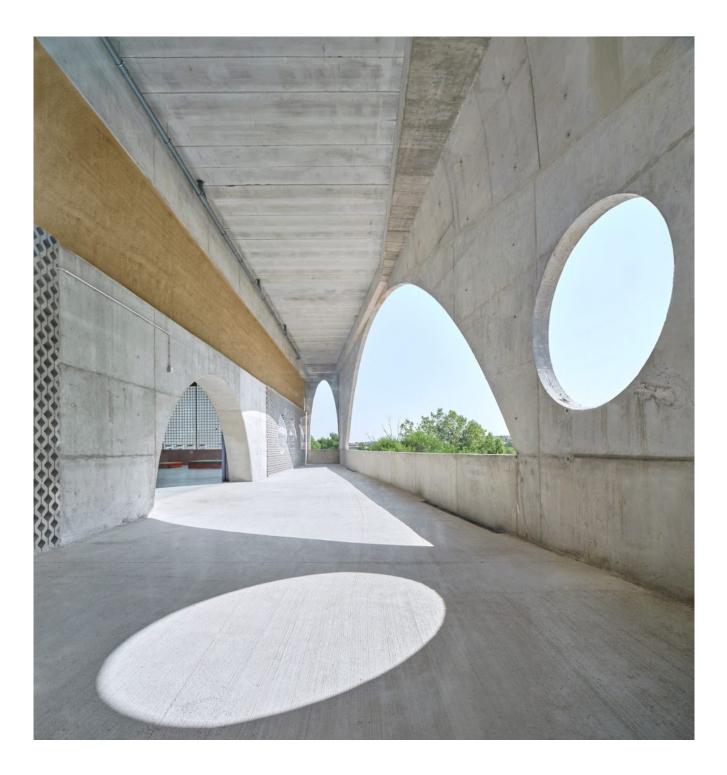


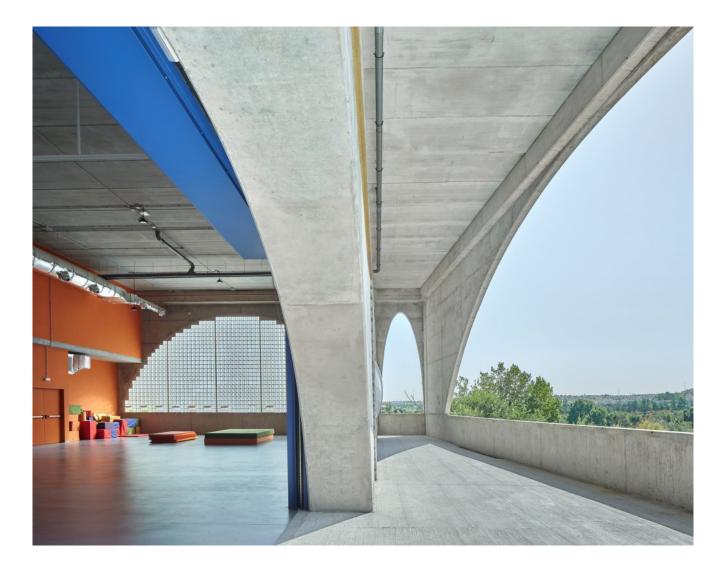


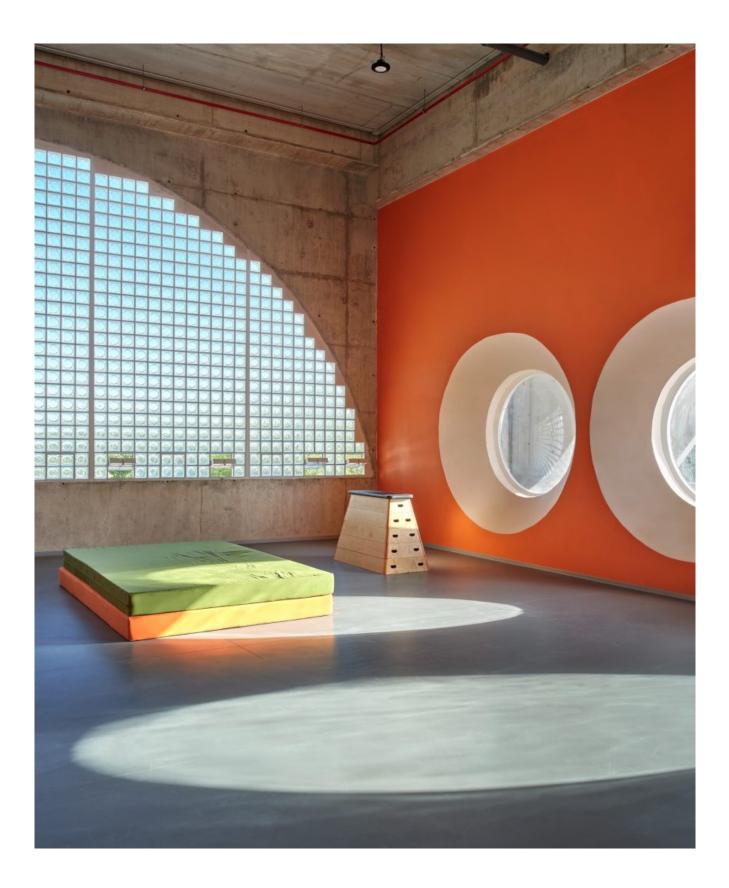


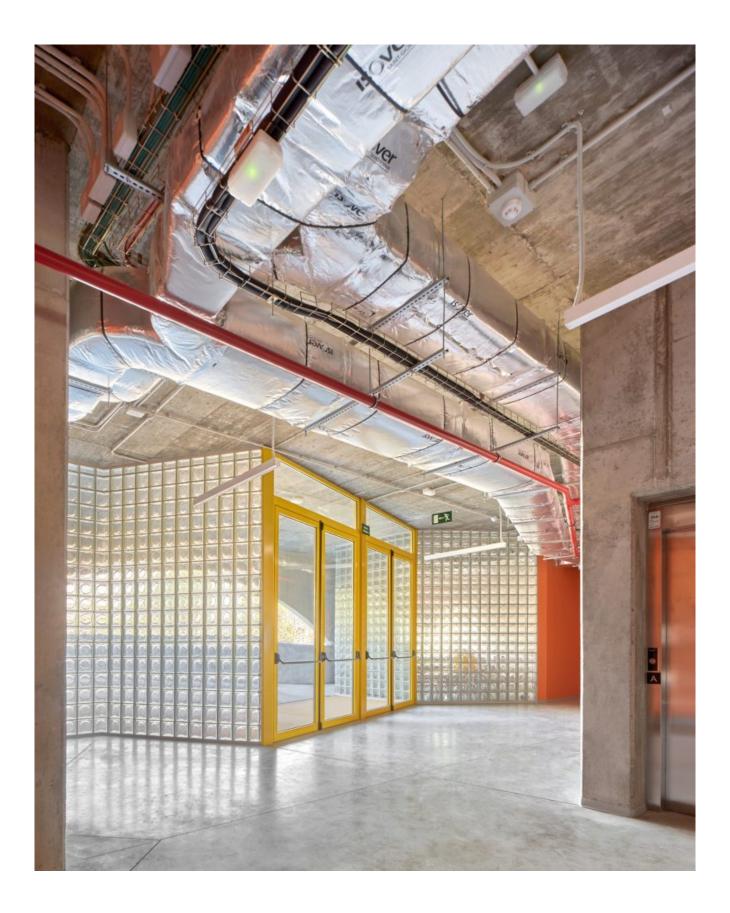


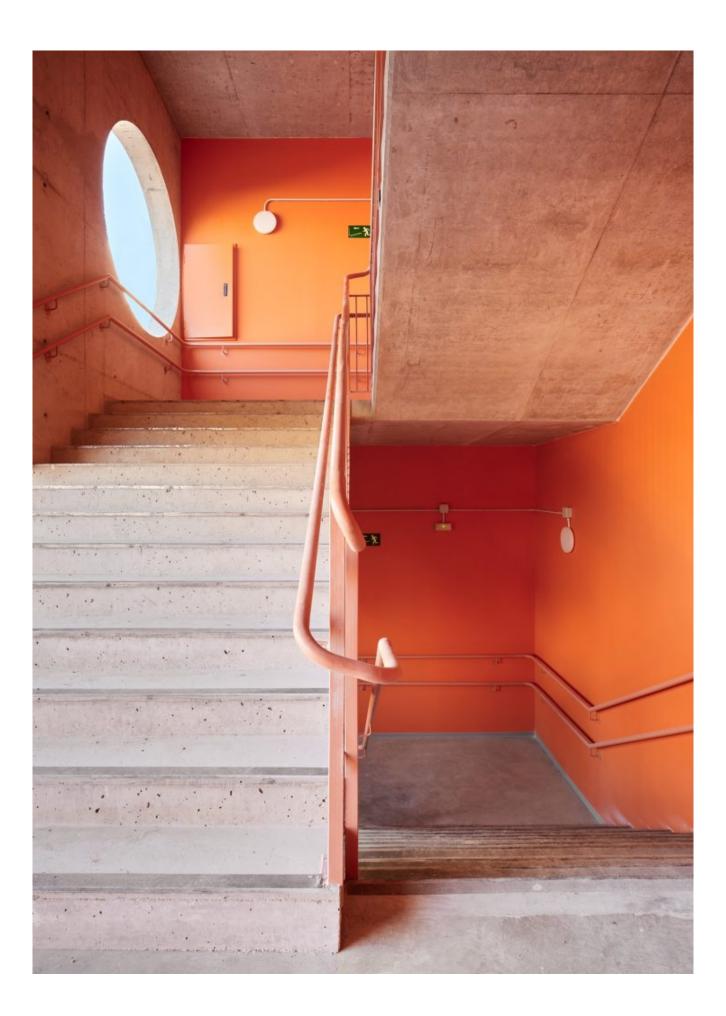


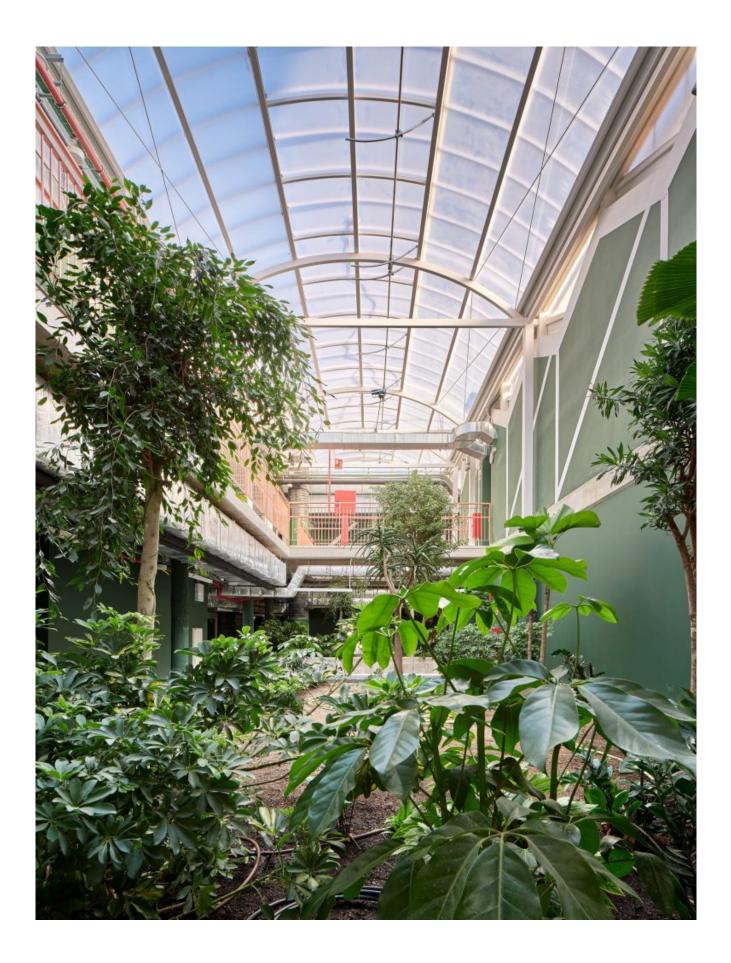


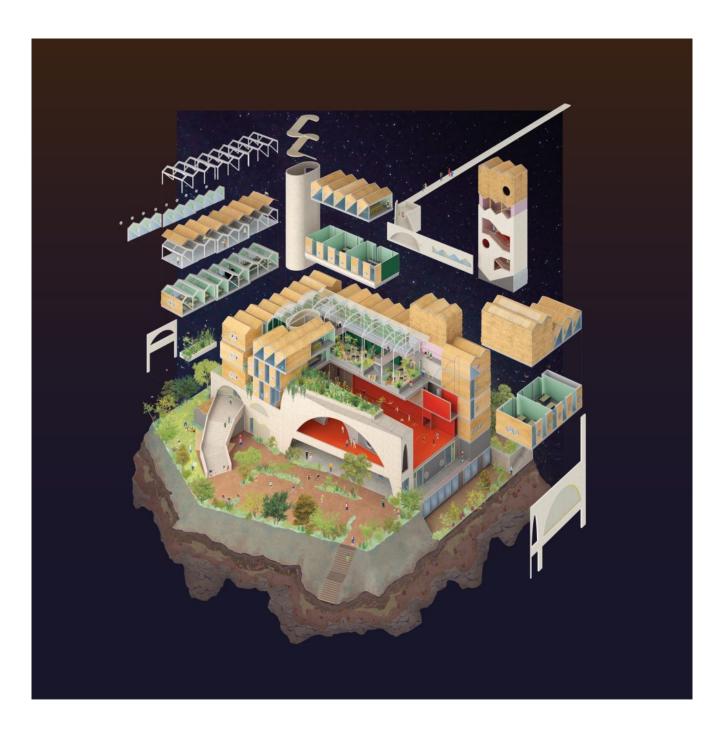


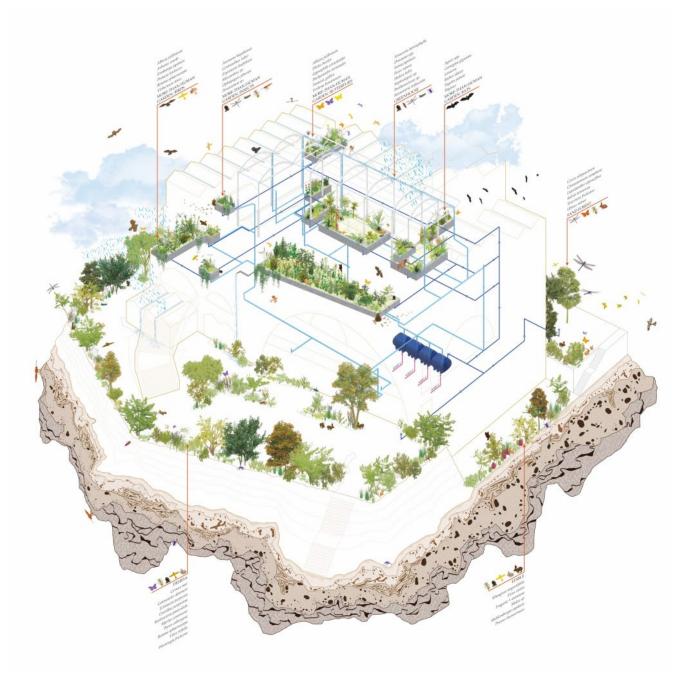


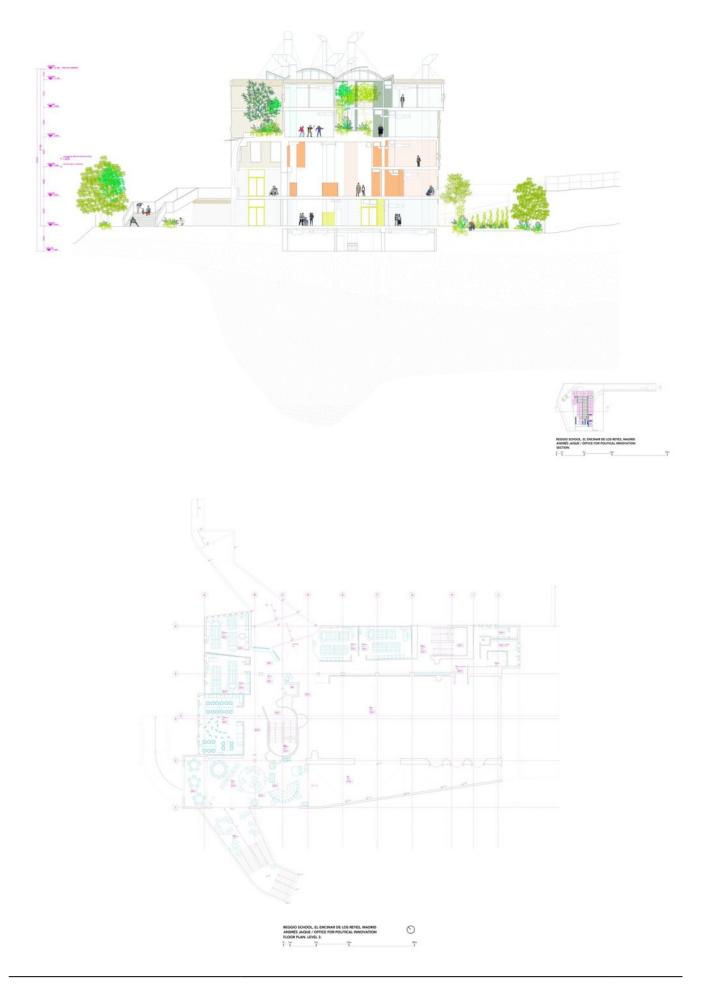




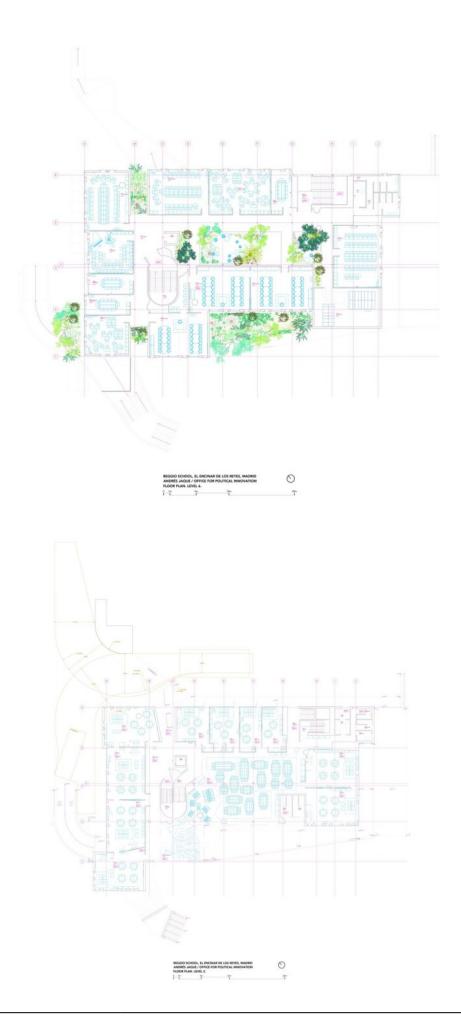


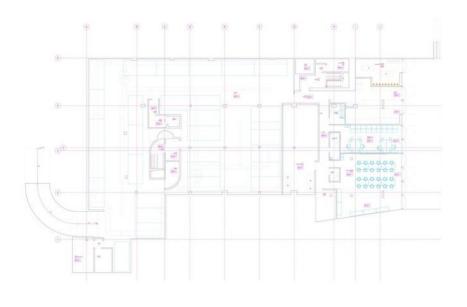














About us

Andrés Jaque / Office for Political Innovation (OFFPOLINN) is an

international architectural practice, based in New York and Madrid, working at the intersection of design, research, and critical bodyenvironmental practices. They have been awarded with the Frederick Kiesler Prize for the Architecture and the Arts, the SILVER LION for Best Research Project at the 14th Venice Biennale, and the Dionisio Hernández Gil Award. OFFPOLINN's work is part of the collections of MoMA and the Art Institute of Chicago, among many others.

The office has a broad portfolio of **awarded projects**, that includes the Babyn Yar Museum of Memory and

Oblivion in Kiev, the Thyssen-Bornemisza Ocean Space in Venice, Reggio School in El Encinar de los Reyes, the Clergy House at the historic center of Plasencia, COSMO MoMA PS1 in New York, Escaravox at Matadero Madrid, Transvector at Lafayette Anticipations in Paris, Rambla Climate-House in Molina de Segura, House in Never Never Land in Ibiza, Ròmola in Madrid, Hybrid Infrastucture: RUN RUN RUN, **TUPPER HOMES. Rolling House for** the Rolling Society, among others. All these projects are part of a critical practice that the office has developed as well through the revision of architectural formats in performance projects that include:

Being Silica (Performa NY, 2021), IKEA Disobedients (MoMA, 2012), Superpowers of Ten (Lisbon Architecture Triennial 2013; Chicago Architecture Biennial 2015; Jumex Museum, Ciudad de México, 2016; ZKM Karlsruhe, 2016), 12 Actions to Make Peter Eisenman Transparent (Cidade da Cultura, Santiago de Compostela, 2004), 1L Oil Banquet (Madrid, 2007); and research-based installation projects including: Spirits Roaming the Earth (Whitechapel Gallery, London, 2018), Pornified Homes (Oslo Architecture Triennial, 2016), Intimate Strangers (London Design Museum, 2016), Sales Oddity. Milano 2 and the Politics of Direct-To-Home TV

Urbanism (14 Venice Biennale, 2014), PHANTOM. Mies as Rendered Society (Arts Institute of Chicago, 2012), Fray Foam Home. When Decoration Becomes Political (12 Venice Biennale, 2010), among others.

OFFPOLINN's work has been the object of solo exhibitions at MoMA, MoMA PS1, MAK Vienna, Princeton University, RED CAT Cal Arts Contemporary Art Center in Los Angeles, the Cité de l'Architecture et du Patrimoine de Paris. and Tabacalera in Madrid; and it also been exhibited at the Art Institute of Chicago, Zentrum für Kunst und Medien ZKM (Karlsruhe), London Design Museum, Whitechapel Gallery (London), Z33 (Hasselt), the Schweizerisches Architektur Museum (Basel), Lisbon and Oslo architecture triennales, and the Venice, Chicago, Gwanju, São Paulo, Santiago de Chile, and Seoul architecture biennales. The books of the office include: Superpowers of Scale (Columbia Press, 2020), More-Than-Human (with Marina Otero and Lucia Piestroiusti; Idea Books, 2020), Mies y la gata Niebla. Ensayos sobre arquitectura y cosmopolítica (Puente Editores, 2019), Transmaterial Politics (MCD, 2017), Transmaterial / Calculable (ARQ, 2017), PHANTOM. Mies as Rendered Society (ACTAR, 2013) and Different Kinds of Water Pouring into a Swimming Pool (CalArts, 2013).

OFFPOLINN was founded and is lead by Andrés Jaque. Andrés Jaque is an architect, writer and curator. He is the Dean and Professor of Architecture at Columbia University Graduate School of Architecture, Planning and Preservation. He has also been Visiting Professor at Princeton University and The Cooper Union. He has been an Alfred Toepfer Stiftung's Tessenow Stipendiat and Graham Foundation grantee. In 2018 he co-curated Manifesta 12 in Palermo, The Planetary Garden. Cultivating Co-Existence, and he is the Chief Curator of the 13th Shanghai

Biennale, Bodies of Water.





Andrés Jaque / Office for Political Innovation