



FEBRUARY 21, 2025

From **May 10 until November 23**, the Architecture Biennale will draw again thousands of enthusiastic visitors to Venice. Architecture is all around us – just think of the stunning buildings that define Venice – which makes this event fascinating for everyone, even those who are not professionally involved in the field. Personally, I enjoy it just as much as the Art Biennale.

Curator **Carlo Ratti** has titled this 19th International Architecture Exhibition '**Intelligens. Natural. Artificial. Collective.**'. For decades, architecture's response to the climate crisis has focused on mitigation, i.e. designing to reduce our impact on the climate. However, this Biennale will take it a step further by exploring the potential of adaptation: a more flexible, dynamic approach to architecture that aligns with our continuously changing world.

With **792 participants** contributing to over 50 projects in the curator's international exhibition, **66 national pavilions**, and a broad range of **collateral events** and **coinciding exhibitions**, the 2025 Architecture Biennale offers plenty for architecture lovers visiting Venice.

The main exhibition sites remain **Giardini and Arsenale**. However, with the Central Pavilion in Giardini closed for renovations this year, the city center will take on a more prominent role, showcasing installations, prototypes, and experiments. Additionally, 15 national pavilions, various collateral events, and one special project will be spread throughout **Venice's historic center and Forte Marghera**.

In this post, I'll share more details about the history of the Architecture Biennale, introduce curator Carlo Ratti, and dive into what to expect from 'Intelligens. Natural. Artificial. Collective.'. You'll also get a first glimpse of this year's national pavilions.



## The history of the Architecture Biennale

The 2025 Architecture Biennale marks the **19th edition** of the International Architecture Exhibition.

Compared to the Art Biennale, which dates back to 1895, the Architecture Biennale is relatively new. Its origins trace back to 1975, when three exhibitions were held in the Magazzini del Sale on Zattere – early precursors to today’s event. The first official International Architecture Exhibition took place in **1980**. Since the 7th edition in 2000, the Biennale has been primarily hosted at Giardini and Arsenale. In 2016, its duration was extended to match that of the Art Biennale, allowing visitors to explore it from May to November.

The previous edition of the Architecture Biennale in 2023, ‘The Laboratory of the Future’ curated by Lesley Lokko, attracted 285,000 visitors. 38% of whom were young people and students and 23% visited as part of a group. For comparison, 700,000 people visited the [2024 Art Biennale](#).



*Manameh Pavilion (© La Biennale di Venezia)*

*Denmark – Build of Site (© Hampus Berndtson)*

## Curator Carlo Ratti

Carlo Ratti (°1971, Italy) was appointed Director of the 19<sup>th</sup> International Art Exhibition in December 2023.

An architect and engineer by training, Carlo Ratti teaches at the Massachusetts Institute of Technology (MIT) and at the Politecnico di Milano. He is also the director of the Senseable City Lab, a founding partner of the architecture and innovation office CRA – Carlo Ratti Associati (Torino, New York City, and London), and Co-Chair of the World Economic Forum’s Global Future Council on Cities and Urbanization.

Carlo Ratti is one of the top ten most-cited scholars in urban planning. His curatorial experience spans projects in different countries and his work has been exhibited at venues including New York City’s MoMA The Museum of Modern Art, La Biennale di Venezia, the Design Museum in Barcelona, the Science Museum in London, and MAXXI in Rome. Three of his projects – the Digital Water Pavilion, the Copenhagen Wheel, and Scribit – have been included by TIME Magazine in the list of the ‘Best Inventions of the Year’. He has also been listed as one of the ‘Most Influential Designers in America’ (Fast Company magazine), ‘People Who Will Change the World of Design’ (Blueprint Magazine) and as ‘Sensory City Philosopher’ (Bloomberg).

*“The Biennale Architettura 2025 aims to be more than an Exhibition; it is an experiment in uniting different voices and forms of intelligence. Some will resonate louder than others; some might clash and produce jarring sounds. Nonetheless, we hope that this choral effort will offer new insights into one of the defining challenges of our time: adapting to an altered world.”*

Carlo Ratti



*Carlo Ratti (© Andrea Avezzu - La Biennale di Venezia)*

## Intelligens. Natural. Artificial. Collective.

Architecture has always been about survival – shaping our surroundings to protect us from a hostile climate. But with rising temperatures, extreme weather, and environmental shifts happening faster than predicted, the way we build can no longer focus solely on reducing impact. For decades, the approach has been mitigation – designing to minimize harm. Now, the focus must shift to adaptation: rethinking how we live in a world that is constantly changing.

This year's Architecture Biennale 'Intelligens. Natural. Artificial. Collective.' explores how architecture can embrace this shift by drawing on different forms of intelligence. Natural intelligence – the way ecosystems have adapted for millennia – can teach us resilience. Artificial intelligence and technology offer new tools to design and build in smarter, more responsive ways. Collective intelligence, rooted in human collaboration, brings together diverse perspectives, disciplines, and generations to find innovative solutions.

The Latin root of intelligens includes gens (“people”), emphasizing that adaptation is a shared effort. Beyond AI and digital advancements, this Biennale looks at architecture's role in responding to our changing world through flexibility and inclusivity.

Curator Carlo Ratti challenges architects to rethink traditional authorship, drawing inspiration from science, the arts, and cross-disciplinary knowledge. This year's Architecture Biennale is a bold call to action – an invitation to explore, experiment, and rethink how we build for an unpredictable future.

**“Architecture must become as flexible and dynamic as the world we are now designing for.”**

**Carlo Ratti**



Gateway to Venice's Waterways (©  
Norman Foster Foundation)

SpaceSuits.US – Study of mylar and  
beta cloth space suit, 2024 (© La  
Biennale di Venezia)

### 'Intelligens. Natural. Artificial. Collective.' exhibition

The exhibition 'Intelligens. Natural. Artificial. Collective.' is a combination of a central exhibition along the Corderie in Arsenale and several events in the city center of Venice. It serves as a dynamic laboratory and brings together more than 750 experts across various forms of intelligence such as architects and engineers, mathematicians and climate scientists, philosophers and artists, chefs and coders, writers and woodcarvers, farmers and fashion designers, and many more. As architecture shifts from mitigation to adaptation, inclusivity and collaboration are required.

"When it's two degrees [warmer] in the long term, there's three metres more of water, and Venice doesn't exist anymore. So what [the festival] will do is actually look at, in a scientific way, what the climate of Venice will be in 100 years."

### Carlo Ratti

The **Corderie** is set-up along three thematic worlds: Natural Intelligence, Artificial Intelligence and Collective Intelligence. The exhibition culminates in Out, and asks: can we look to space as a solution to the crises we face on Earth?

The 2025 Architecture Biennale challenges us to rethink how we build and live in a rapidly changing world. What will tomorrow's climate look like? How will shifting populations reshape our cities? The exhibition explores how different forms of intelligence can help us adapt.

In *Natural Intelligence*, we look at how nature itself can guide the future of construction. One project revives ancient Japanese joinery techniques, using AI to transform irregular timber into strong structural material. Another showcases innovative materials like bioconcrete, banana fiber, and graphene, pushing the boundaries of sustainable building.

The *Artificial Intelligence* section expands beyond digital tools to explore robotics, engineering, and data science. Humanoid robots demonstrate next-generation construction techniques, raising questions about the future of human labor in architecture.

Moving into *Collective Intelligence*, the exhibition shifts focus to the wisdom of communities. From Rio's favelas to refugee camps in Bangladesh, and from small Chinese

towns to bustling Lagos markets, these urban ecosystems reveal how material economies and social networks shape resilient architecture.



The journey ends with *Out*, where architecture looks beyond Earth. A 360-degree sonic installation invites visitors to rethink their relationship with space and sound, while another project, inspired by astronaut suits, explores how space-age insulation techniques could improve buildings here on Earth. In collaboration with the European Space Agency (ESA) and NASA, the exhibition examines how space technology can help us adapt to climate challenges rather than escape them.

Venice's **city center** will serve as the backdrop for a new kind of exhibition, where installations, prototypes, and experiments are scattered across different neighborhoods. One project will for instance redesign Venice's relationship with its canals, exploring sustainable aquatic mobility as a blueprint for the future. A second project will purify water from the canals to create the best espresso in Italy, proving that environmental challenges can be woven into daily life. In another project, Diane von Fürstenberg will explore how Venice can turn its femininity into resilience.

*Elephant Chapel – Boonserm Premthada (© La Biennale di Venezia)*

*Circularity on the edge – 3D visualization (© La Biennale di Venezia)*

### Special projects

At the Polveriera austriaca building in Forte Marghera, you can visit the '**Margherissima**' project, designed by Nigel Coates, Michael Kevern, Guan Lee, John Maybury and Jan Bunge. Check out my post '[Unwind at Forte Marghera: a tranquil green oasis only 10 minutes from Venice](#)' to make the most out of your trip to Mestre.

La Biennale di Venezia and the Victoria and Albert Museum, London present for the ninth consecutive year an Applied Arts Pavilion Special Project. '**On Storage**', curated by Brendan Cormier, explores the global architecture of storage in service of the circulation of things. It features a newly commissioned six-channel film directed by DS+R.

### Educational initiatives

The broad educational programme addresses individuals as well as groups of students, children, adults, families, professionals, companies, and universities. They aim to actively involve participants with **guided itineraries, workshop activities and interactive initiatives**, i.e. tours that combine a workshop part with the visit. There will also be activities available in Italian Sign Language (LIS) and for visitors who are blind. More information can be found on the website of the Biennale and in my post '[How to prepare your visit to the Architecture Biennale 2025](#)'.

## National participations and collateral events

This year, **66 countries** will present their view on the current challenges in architecture in their national pavilion. Four countries will be participating for the first time to the Architecture Biennale: **Republic of Azerbaijan, Sultanate of Oman, Qatar, and Togo**. Israel and Russia will not participate this year. Besides the national pavilions, there will also be collateral events which are admitted by the curator and worth a visit, but that list hasn't been revealed yet. As soon as it's available, I will update this post so make sure to bookmark it.

From what I have read so far, we can expect a fascinating mix of bold statements, experimental ideas, and fresh perspectives on the future of architecture. The exhibitions promise to be both thought-provoking and visually striking. Here are some that I'm particularly looking forward to.

The **Dutch** pavilion transforms the iconic Rietveld Pavilion into a sports bar, using sport as a lens to question societal norms. Through a queer perspective, Amanda Pinatih and Gabriel Fontana challenge in [SIDELINED](#) how architecture regulates bodies, spaces, and behaviors, asking how we can design environments that foster inclusivity and new forms of togetherness. By rethinking how spaces influence identity and interaction, it offers a refreshing take on architecture as a social force.

The **Belgian** pavilion explores plant intelligence as a driving force in architecture. Led by landscape architect Bas Smets and biologist Stefano Mancuso, '[Building Biospheres](#)' reimagines buildings as artificial microclimates, where plants purify air, cool spaces, and enhance sustainability. The pavilion acts as a laboratory, demonstrating how nature can be integrated into urban environments to combat climate change. With cutting-edge research into plant intelligence, the exhibition envisions a future where nature and architecture are not separate, but deeply intertwined.

The **Danish** pavilion takes a hands-on approach to resource reuse. '[Build of Site](#)' turns the pavilion itself into an evolving construction site, showcasing real-time maintenance and repurposing of materials. Architect Søren Pihlmann, along with Danish and international experts, highlights hyper-local building techniques and bio-based materials, proving that sustainability starts with what already exists. By challenging traditional perceptions of material value, the exhibition presents resource reuse not just as a necessity, but as a creative and aesthetic opportunity.

The **Hungarian** pavilion critiques architecture's growing commercialization in '[There Is Nothing to See Here](#)'. Set in an abandoned architecture studio, the exhibition explores how architects are applying their skills beyond their profession, using their expertise in other industries. Through bold visuals and interactive storytelling, it reflects on the shifting role of architects in a world where market forces often dictate the built environment. The exhibition raises an intriguing question: if architecture is more than just construction, what else can it be?

The **Holy See** returns with '[Opera Aperta](#)', curated by Marina Otero Verzier and Giovanna Zabotti. Hosted in the Complesso di Santa Maria Ausiliatrice, the exhibition reflects on

openness, inviting dialogue between architecture, culture, and spirituality in a space of contemplation. Not much information is available yet, but given how much I loved their chapels on San Giorgio Maggiore at the 2018 Architecture Biennale and their installation in the women's prison at last year's Art Biennale, I can't wait to see what they will bring this time. If past editions are anything to go by, it's bound to be a highlight.

Finally, [Time Space Existence](#), one of the coinciding exhibitions, invites Chilean architect **Alejandro Aravena** to present a prototype for carbon-neutral housing, developed in collaboration with Holcim. Using low-carbon concrete, the project explores scalable, affordable solutions to the global housing and climate crises. As the curator of the 2016 Architecture Biennale, Alejandro Aravena delivered the most compelling edition I've ever visited, so I'm particularly excited to see what he brings this year. His work has always been rooted in social impact, and this project promises to push the conversation on sustainable housing even further.

*Alejandro Aravena (© Holcim)*

*Belgium – Building Biospheres (@VAI)*

In line with previous Art and Architecture Biennale editions, I will publish **reviews** of several national pavilions after my visit, helping you decide which ones are worth exploring. For easy reference, I suggest bookmarking [my Biennale page](#) where you can always find the latest articles.

Once again, I will publish a book with tips, must-sees, and background information on the Architecture Biennale 2025. **'The insider guide to the Venice Architecture Biennale 2025'** will be available around May 25, after I visited the different pavilions. Subscribe to my [newsletter](#) to be notified when it's released.

For **practical tips** to plan your visit, check out my post '[How to prepare your visit to the Architecture Biennale 2025](#)'. You can also find more information on the Biennale, including an full list of all the participants and national pavilions, on the official [website of La Biennale](#).

*Enjoy the Biennale!*



