

La Biennale di Venezia
19th International Architecture Exhibition
Intelligens. Natural. Artificial. Collective.
curated by Carlo Ratti



Statement by **Carlo Ratti**
Curator of the Exhibition

Intelligens. Natural. Artificial. Collective. This is not a slogan. It is a call to action.

The Biennale Architettura 2025 unfolds at a moment of global change. The climate crisis is no longer a looming threat—it defines our present. Mitigation is no longer enough. Adaptation must take center stage. More than 350 voices—from scientists and architects to political leaders like Spanish Prime Minister Pedro Sánchez—have signed the manifesto *Intelligens: Towards a New Architecture of Adaptation*, calling on architecture to evolve in step with a rapidly changing world.

Architecture must learn. Must listen. Must adapt. To do so, it must engage all forms of intelligence—natural, artificial, and collective.

The Biennale Architettura 2025 is a chain reaction.

The chain reaction began 18 months ago with a series of Salons held around the globe: small, spontaneous gatherings sparking deeply local, urgently relevant conversations. From there came Space for Ideas—the first open call in the history of the Biennale Architettura. The response was extraordinary. Among a large number of submissions, over 750 people from around the world answered—architects, scientists, artists, farmers, engineers, designers- have become participants to the exhibition, each of team igniting a chain reaction of its own.

Now the chain reaction becomes physical—unfolding across the Arsenale, the Giardini, and the city of Venice. But it does not stop here. It accelerates. It extends to the National Participations, many of which embraced the curatorial prompt: one place, one solution. It runs through the Collateral Events. It animates *GENS*—a Public Programme at the heart of the Arsenale, hosting a spectrum of conversations.

And now, the chain reaction includes you. Like the characters in Jean-Luc Godard's *Bande à Part*, who raced through the Louvre in under ten minutes, you can experience this Biennale at many speeds—as if moving through a living super-organism:

- In 5 minutes, you'll glimpse the essentials— Natural, Artificial, Collective (and Out).
- In 50 minutes, you'll dive into major projects, guided by AI-generated summaries.
- In 5 hours, you'll experience the heart of the exhibition.
- In 5 days, you'll absorb every theme, every caption, every connection.

No matter the pace, the message remains the same: Architecture is survival.

The text continues:

- Introductory statement to the catalogue
- Manifesto *Intelligens: Towards a New Architecture of Adaptation*

Among the attachments:

- Ten thematic pathways through the Biennale Architettura 2025
- Circular Economy Manifesto
- Complete list of projects and participants

Introduction

Architecture has always been a response to a hostile climate. From the earliest “primitive hut,” human design has not only been led by the need for shelter and survival, but also driven by optimism. Our creations have always strived to bridge the gaps between a harsh environment, the safe, liveable spaces we require, and the lives we want to live.

Today, as the climate becomes less forgiving, that dynamic is being taken to a new level. Over the past two years, climate change has accelerated in ways that defy even the best scientific models. 2024 marked a grim milestone, as Earth registered its hottest temperatures on record, pushing global averages beyond the Paris Agreement’s 1.5°C target. And in the fires of Los Angeles, in the floods of Valencia and Shergarh, in the droughts of Sicily, we have witnessed the elements attacking us with unprecedented ferocity.

When the knowledge and systems that have long guided our understanding begin to fail, new forms of thinking are needed. For decades, ever since we started counting carbon, architecture’s response to the climate crisis has been centred on mitigation—on reducing our impact on the climate. That approach is no longer enough. Architecture must pivot away from mitigation, reconnect with its longer history of adaptation, and rethink how we design for an altered world.

Adaptation demands a fundamental shift in architectural practice. This year’s Exhibition, *Intelligens. Natural. Artificial. Collective.*, invites different types of intelligence to work together to rethink the built environment. The title, a neologism whose final syllable, “gens,” is Latin for “people,” is an invitation to experiment with intelligence beyond today’s limited focus on AI and digital technologies, and demonstrate how we can adapt to the world of tomorrow with confidence and optimism.

Intelligens serves as a dynamic laboratory, uniting experts across various forms of intelligence. For the first time, the Exhibition features over 300 contributions from more than 750 participants: architects and engineers, mathematicians and climate scientists, philosophers and artists, chefs and coders, writers and woodcarvers, farmers and fashion designers, and many more.

In times of adaptation, architecture is at the centre. In times of adaptation, architecture needs to draw on multiple forms of intelligence: natural, artificial, and collective. In times of adaptation, architecture needs to reach out across generations and across disciplines, from the hard sciences to the arts. In times of adaptation, architecture must rethink authorship and become more inclusive.

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

An open curatorial framework

We set out with a mission: to open up the curatorial process. Wherever travel took us, we invited the local community to join us—friends, colleagues, and a vast network spanning architecture and beyond— to gather around the table. From the early hours of a breakfast in Zurich to a lively aperitivo in Mexico City, from a late-night barbecue in Dubai to an afternoon tea in Queenstown, these encounters sparked deep conversations and meaningful collaborations. The dialogues nurtured in these Salons became the foundation of our creative journey, with many of the insights shared directly shaping the curatorial vision of *Intelligens*.

The central curatorial exercise for the Biennale Architettura 2025 was the *Space for Ideas*, an open call for proposals from people all around the world that evolved into the platform for feedback and iteration between the Curator and participants in the Exhibition. The massive response to this open forum presented a challenge in terms of sheer information processing. It also exposed a set of thinkers, practitioners, and new proposals that may have been impossible to unearth otherwise. This curatorial process has produced an Exhibition that is greater than the sum of its parts, and greater than it could have been through individual outreach alone.

The *Space for Ideas* was an experiment, and an effort towards replicating the spontaneity that might be considered one of the signatures of intelligence across its many forms. The resulting participant pool spans generations—from seasoned professionals still innovating at ninety to recent graduates just beginning their careers. Pritzker Prize winners, former La Biennale di Venezia Curators, Nobel laureates, and Royal Professors appear alongside emerging architects and researchers.

This richness of contributions calls for a new approach to authorship. *Intelligens* challenges the tradition of the architect as the sole creator, with other professionals relegated to supporting roles. The Exhibition demonstrates a more inclusive authorship model that is inspired by academic research. There, authorship is attributed to those who contribute significantly to the design, execution, and analysis of a project, regardless of their primary role. This collaborative approach ensures that every contributor's intellectual input is acknowledged. Similarly, in times of adaptation, all voices driving design must be recognised. It is also not enough to talk the talk: we must walk the walk. The Biennale Architettura's Circular Economy Manifesto, developed together with Arup and the Ellen MacArthur Foundation, sets bold goals for reducing waste and promoting material reuse. And most of the Exhibition itself is designed using recycled wood panels, which will be shredded at the end of the Exhibition and turned into new materials. The Exhibition begins in the Corderie with a stark confrontation: global temperatures rise while global populations fall. This is the reality architects must face in times of adaptation. From here, visitors traverse through three thematic worlds, which each in their own way put forward experiments in adaptation: Natural Intelligence, Artificial Intelligence, and Collective Intelligence. The Exhibition culminates in the Artiglierie with Out, which looks to space not as an escape, but as a way to help address the crises we face on Earth. Each section is conceived as a modular, fractal space: an organism that links large and small-scale projects, creating a web of dialogue and allowing visitors to find their own way through the Exhibition.

With the venue of the Central Pavilion under renovation in 2025, Venice will not just host the Biennale Architettura—it will become a Living Lab. The city itself—one of the most imperiled on Earth in the face of a changing climate—will serve as the backdrop for a new kind of Exhibition, where installations, prototypes, and experiments are scattered across the Giardini, the Arsenale, and other neighborhoods. These Special Projects involve multidisciplinary teams comprising architects, scientists, and supporting companies, and offer innovative solutions and insights to pressing local and global issues.

While it is essential to create new solutions that speak to the challenges of the present, it is also important to recognise meaningful precedents that demonstrate the convergence of intelligences. Running throughout the Exhibition are projects that form a Canon, which might hold valuable lessons for architects seeking to comprehensively address the theme of the Biennale Architettura today. Similarly, this catalogue includes a series of Impossible Conversations, which stage dialogues via artificial intelligence between pioneering historical and contemporary figures on pressing planetary challenges.

In times of adaptation, institutions such as La Biennale di Venezia are in a unique position to create collaborations with other leading institutions and bring its message to as wide of an audience as possible. *Intelligens* has forged connections with other global Institutions, the UN's COP30 in Belem, C40, the Davos Baukultur Alliance, the Soft Power Club, and many others. Its public programme, GENS, will host a multitude of conferences, workshops, and other activations that engage audiences both large and small, local and remote.

Inspired by Rem Koolhaas's approach at the Biennale Architettura 2014, we sought to create thematic coherence among the National Participations under the framework "One Place, One Solution." We invited each nation to explore architectural strategies grounded in their local context, yet ones that are relevant to global challenges. Instead of imposing a top-down vision, we facilitated bottom-up exchanges. Collective inspiration through numerous virtual gatherings did the rest. We eagerly await how contributions will intertwine—a unifying thread through this Biennale Architettura's National Participations.

Ultimately, the Biennale Architettura 2025 is more than an Exhibition; it's a chain reaction, it is an experiment in uniting different voices and forms of intelligence. Some will resonate louder than others. 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.

***Intelligens*: Towards a New Architecture of Adaptation**

MANIFESTO

Madrid, Spain, 24 April 2025

Valencia, Spain, stands as a recent example of the impacts of climate change. Unprecedented rainfall overwhelmed the city's defenses, flooding roads, trapping vehicles, submerging buildings, displacing communities, and resulting in the loss of over two hundred lives. This event is not an isolated case; Valencia joins a growing list of places grappling with the reality of climate disruption – it reminds us that no community is immune. Our built environment must evolve in response, as argued in this manifesto, developed within the framework of the Biennale Architettura 2025 titled "Intelligens. Natural, Artificial, Collective". Architecture must lead our response to an altered planet.

Carlo Ratti, Curator, Biennale Architettura 2025

Architecture has always been a response to climate. From the earliest "primitive hut," human design has been led by the need for shelter and survival, driven by optimism: our creations have always strived to bridge the gap between the environment and the safe, livable spaces we require.

Today, that dynamic approach is being taken to a new level - as climate becomes less forgiving. Human actions have triggered an unprecedented climate shift. In 2024, Earth registered its hottest temperatures on record, pushing global averages beyond the Paris Agreement's 1.5°C target—a threshold science identifies as the critical limit to avoid the most severe impacts of climate change.

Climate change is no longer a distant threat—it is here, and it is accelerating. Spain, like many nations, has felt its force: floods in Valencia, droughts in the countryside, heatwaves hitting hard cities in the center and south of the country. The same pattern is unfolding worldwide—from Brazil to Bangladesh, from Azerbaijan to Australia. Our built environment must respond.

For decades, architecture has focused on mitigation—designing to reduce our environmental impact. Adaptation was seen as resignation or, worse, abdication. But that approach is no longer enough. Mitigation and adaptation must go hand in hand, each reinforcing the other. The time has come for architecture to embrace adaptation: rethinking how we design for an altered world.

Adaptation means learning from the changes already underway—climatic, technological, social—and responding dynamically, along with the fight against climate change to limit its effects. It is about designing cities, infrastructure and buildings that evolve over time, shaped by feedback and able to thrive in uncertainty. In many ways, architecture has long done this.

The igloos of the Inuit, the wind towers of Iran, the canal systems of Mesopotamia, the ancient artificial lakes of Sri Lanka—these are all examples of adaptation. We've long drawn on local materials, forms, and knowledge to adapt. Today's challenge is to do the same—only faster, and at a scale never before attempted. Mitigation slows the crisis; adaptation ensures we can withstand it. Both are essential, and neither can wait.

In the time of adaptation, architecture is at the center and must lead with optimism. In the time of adaptation, architecture needs to draw on all forms of intelligence – natural, artificial, collective. In the time of adaptation, architecture needs to reach out across generations and across disciplines - from the hard sciences to the arts.

In the time of adaptation, it is time for architecture to develop all its creative capacity, innovate and use new technologies to create spaces that respond to the social challenges of availability and affordability of housing in these transforming climate environments.

In the time of adaptation, architecture must rise to confront its new challenges—with intelligence, empathy, and the courage to transform.

Acknowledgements

Our curatorial approach for the Biennale Architettura 2025 is rooted in openness and collaboration, and as such, we find ourselves indebted to a far broader network of individuals than traditionally expected for such an endeavour.

First, we recognise the extraordinary team at La Biennale di Venezia.

My appointment is a direct result of the trust placed in me by its past and current Presidents, Roberto Cicutto and Pietrangelo Buttafuoco. Though their approaches differ significantly, both have profoundly enriched the Biennale Architettura 2025 with their perspectives.

But La Biennale di Venezia is more than just its leadership—it is also the beating heart of its operations. To the whole Biennale team, we owe profound gratitude. Their dedication is the foundation upon which the Biennale stands today—and which underpins a bright future.

Furthermore, we would like to acknowledge:

The exceptional team of the Curator, whose tireless dedication has consistently supported and expanded the Exhibition's vision.

The attendees of the numerous Salons held around the world, whose active participation has contributed to an evolving dialogue.

The participants of the Exhibition, whose extended feedback has helped refine and deepen its scope.

The participants in the *GENS Public Programme*, whose contributions animate and enrich the Exhibition during its six months of opening.

The visionary supporters of Special Projects, whose generous contributions have made possible an Exhibition with new layers of experimentation.

The curators of the National Participations, who have shared perspectives within the framework "One Place, One Solution."

The Donors and Sponsors of the Biennale Architettura, whose support has provided the necessary foundation for its success.

While each of the individuals and organizations in the above categories is listed elsewhere in this Catalogue, we would like to highlight a select few whose contributions span multiple areas. Their generosity and intellectual support have woven a complex network of collaboration.

In alphabetical order, we would like to single out: Amara Antilla, Carlo Antonelli, Aaron Betsky, Gillian Crampton Smith, Diane von Fürstenberg, Maja Hoffmann, Jean-Louis Missika, Hans Ulrich Obrist, Deyan Sudjic, Philip Tabor, and Marco Zatterin.

Finally, to all those who read these words, we close with a call to action: *per aspera ad astra* "through hardships to the stars"—and then back to Earth.