TIME

European Cultural Centre

Venice 2023
Architecture
Biennial

SPACE

EXISTENCE

TIME

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SPACE

Palazzo Mora
Palazzo Bembo
Marinaressa Gardens

Venice 2023
Architecture
Biennial

European Cultural Centre

18. Mostra Internazionale di Architettura
La Biennale di Venezia
Eventi Collaterali

20.5–
26.11.2023

Exhibition organised by ECC Italy in
collaboration with Open Space Venice

Hosting the Collateral Event
EUmies Awards. Young Talent 2023

Foreword

European Cultural
Centre Team

When we started this project, our goal was to establish in Venice a place for reflection, dialogue and research, to enhance cultural and intellectual exchange and mutual understanding.

With an extraordinary presence of organisations dedicated to art and culture, and a rich history as a crossroad of cultures and ideas, Venice was the ideal place for the realisation of the objectives of the European Cultural Centre (ECC). In addition, the city with its lagoon is an emblematic place where to experience and become aware of global issues related to climate change and mass tourism.

Every two years, we invite an international group of architects, artists, academic institutions, and creative professionals working across disciplines to investigate the fundamental topics of Time, Space and Existence. These are the principles of our long term research and the title of our architecture biennial exhibition in Venice.

By giving space to a diverse and growing number of participants, with our project we hope to continue to stimulate new ways of dialogue that is inclusive of all voices and transcends all boundaries.

Architects have a crucial role in designing solutions for sustainable communities and improving the quality of our life. However, today global issues cannot be resolved by countries acting alone, or by professionals working in silos. Decision-making must start with understanding the urban, social, natural, economic, cultural, and political, environment.

We created this exhibition as an open platform, a laboratory, that we hope can inspire new ideas and approaches on how we live on our planet.

We would like to thank all the participants and the entire ECC team for the incredible work done with passion and care, and all the partners involved for their support and enthusiasm.

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Introduction

Creation of architecture is creating moods and feelings. What I was trying to do is to create things which would make you always feel at home, but today we do not know what home is supposed to be.[1]

These words by the renowned architect and 2018 Pritzker awardee Balkrisha V. Doshi have inspired the 6th edition of Time Space Existence. The creation of architecture goes in hand-in-hand with creating moods and feelings. It is the action of creating homes and building on relationships with and for others. But in a context of polarized realities and a threatened environment, the concept of home is under question: we no longer know what home is supposed to be but we are willing to (re)define it together.

In 2023, the extensive biennial architecture stands on the notion that our home, our surroundings, and our planet are under pressure, urging us to work together to explore a sustainable way forward.

Over 200 projects and initiatives have found their way to Venice in the historical venues of Palazzo Bembo, Palazzo Mora, and the Marinaressa Gardens reflecting on today's context. From a focus on the natural environment and urban landscape to the unfolding conversations on innovation, the environment and the society. Each project presented at *Time Space Existence* carries a unique weight and takes part in the conversation by sharing ideas and best practices.

Participants delve deeper into the promising field of digital building technology. On one hand, to find carbon-free solutions, and on the other, to introduce new technologically innovative construction techniques and materials that can sustain the cities of tomorrow. Presentations pay attention to the different expressions of climate emergency. They look at testimonies on migration and climate displacement, and investigate ways to ameliorate the impacts of the current cost of living crisis and address the need for social and spatial justice. Other projects examine the tensions between the built urban environment and the nature surrounding it,

identifying opportunities for coexistence and establishing a dialogue with local culture.

All of these realities and pressures are shifting how we live and perceive our surroundings. In light of the current climate crisis, the exhibition shares insightful solutions for a better living, and ignites hope and stimulates an engaging dialogue that is inclusive of all voices. While creating a space for discussion, some installations celebrate women in architecture and emerging talents from all over the world; while others portray new scenarios for our cities from an artistic stance. Practitioners not only introduce practical sustainable solutions in architecture, urban planning and design, but also plant the seeds for further thoughts and concepts.

By bringing together voices from over the world, *Time Space Existence* is both a display of unique, diverse works as well as a living workshop where established and new identities can work together and present their own visions on the current status of architecture and future of the built environment.

As a platform for exchange and experimentation, the exhibition features an international and eclectic group of architects, designers, artists, academics, and photographers who gather in Venice to explore our relationship with time and space. The combination of these expertise and backgrounds has led to a biennial that re-envisions new ways of living and rethinks the architecture of today.

1. From *Time Space Existence* Interview Series, https://youtu.be/9EiRMn-91xA

Participants

Palazzo Mora

Palazzo Bembo

Marinaressa Gardens

Special Projects

Palazzo Mora

Adam Rouse

On Atmospheric Density. The perception of an architectural work is interwoven with the environment it inhabits. In addition to its spatial presence, architecture is further perceived on a temporal and emotional level. Defined through objective facts and subjective feelings, these attributes coalesce to form its atmosphere.

In a physical sense, climatic phenomena – such as the concentration of moisture in the air coupled with its effect on the diffusion of light – have the ability to shift the experience of an architectural work from expansive and evident to insular and introspective. Atmosphere also evokes a subjective emotional response linked with individual experience and memory. As Peter Zumthor notes, *atmosphere is deeply personal* – particular experiences and memories shape the foundational feelings of place. In this way, individual memory has an important effect on the perception of an architectural work. These tangible and intangible influences constitute atmospheric density.

Adam Rouse's photographs presented for this exhibition materialize atmospheric density. They explore a set of architectural works whose conceptual underpinnings engage this phenomenon as a separate aesthetic consideration - drawing gravitas and meaning from the context within which they exist. Some of these works are presented as a singular instance – while some are presented as multiple temporal readings. All of the photographs invite the viewer to ponder the architectural subject's contextual meaning captured within their optical stillness. They call forth the multi-sensory experiences and memories of an individual, allowing depth to be brought to the viewing experience.

About the Photographer. An architect by training, Adam Rouse carries the sensibilities of spatial discernment and exploration that allow him to analyze and extract meaning from his subjects. Rouse's work, widely published, has been described as emotive and sensorial, successfully capturing the intended mood of an architectural subject. His photographs are as composed as they are open ended – suggesting an oscillating gaze between the architectural work and the environment within which it exists. This is where he finds architectural meaning most intriguing. He believes the photographic medium has the distinct ability to transcend its visual nature and become a gateway to something more layered, emotional, and personal in capturing the experience of an architectural work.

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AEDIFICANTE
Giuseppe Taramelli, Giacomo Albo

Aedificante is a cultural and social communication project. A manifesto for youth policies that, through photographic storytelling, wants to show the construction site as a place of narration of a craft that is as noble as it is now almost abandoned, recounting the hidden world of "savoir faire" with the voice of images. The aim is to draw a line connecting the past to the future, giving value to the work, understood as the indispensable work of building craftsmen, who make every single project unique and above all feasible thanks to their skills. The images tell the story of an ancient craft that is unfortunately disappearing due to a lack of interest and motivation on the part of young people, who seem to be far removed from the desire to learn it, become passionate about it and make it their own. Aedificante is an emotional narrative that highlights the dynamic transformation process of the urban or rural landscape generated by construction works, thus leading one to imagine the natural future interactions between the built environment and those who will live or work or study there. The titles chosen for the different photographic sections act as a continuum of the creative idea of author Giacomo Albo, who pauses in an almost melancholic way to scrutinise the skeleton of the buildings, their slow modification until completion, thus capturing the moments of their constructive metamorphosis.

Aedificante on the surface, it is a photo exhibition that how buildings are constructed.

In reality it is the search for the lost construction at the time of the rendering. Construction not only of buildings, but also of a conscience, of love.

In building-site photography you find the essence of the project, the gestation of its materialisation, its coming into being, the love of those who do this work with their body and soul. A maternal love, because while the father of the project may be the architect or, in some cases, better, the client who thought it up, the mother is always the construction company. A mother that is, all together, work, workmanship, building culture passed down through generations. Aedificante does not need to shout, to show its muscles, its sweat. Aedificante speaks softly, discreetly. There is no need to exhibit the human figure to demonstrate its importance. The work also speaks in silence, in the pauses.

And hence suddenly, unexpectedly, in the chaotic order of creation, of the mixing of form and substance, this place where everything is being built, where everything is provisional, in progress,it reveals something of us and reflects us with a perfect resolution.

It shows us what we do and, even more, what we are, i.e. a number of work in progress to realise projects. Our very life, even our inner life, is a construction site. Here stands the human condition, we are a construction site, we have it in us, our hands sink into the concrete every day.

Wherever we are, whether it's an Italian construction site, a French chantier or a Spanish cantera, we come from the Latin cantherium, from the Greek kantélios, meaning the load- bearing beam, the support structure for loading weights, the element on which to build. Here's what the construction site is, a supporting beam.

One of the five most famous and reproduced photos in the world, although no one ever thinks about it, not even the most widely used search engine remembers it, it represents the most beautiful moment in the life of the construction site, breakfast on the roof, when the building construction reaches its climax of consciousness and love and the work is almost completed.

Every bricklayer, every day, is part of that team of Rockefeller Center construction workers immortalised in NYC, in 1932, by Charles C. Ebbets's *Lunch atop a Skyscraper*, who quietly eat while sitting on a steel beam that seems suspended in the void.

Instead, it supports people, buildings and communities by bringing jobs, identity and future. It always has.

Paesaggio (Giuseppe Taramelli, 2023)
Photo by: Giacomo Albo, 2018

Aalborg University
Department of Architecture, Design & Media Technology
Lars Brorson Fich

HIRTSHALS. A utopian city that never became. In the first half of the twentieth century, a series of utopian ideas emerged for the design of modern cities, from the English garden city movement to Le Corbusier, CIAM and the Bauhaus. These ideas were necessitated by rapid urbanization and industrialization and were intended to create socially sustainable cities for the masses. Since it was an acute and rapidly growing challenge, planners and architects had to think of solutions that could be planned and implemented rapidly *top-down* on a large scale rather than through organic *bottom-up* growth. However, when these utopias were realized after WW2, it became clear that they were in many cases not socially sustainable; they frequently even developed severe social problems and as a consequence had to be extensively rebuilt, partially demolished, or even blown up, such as the iconic example of the Pruitt-Igoe housing development. However, what would the alternative have been? What if there was one utopian plan that was not realized but instead developed organically *bottom-up?* What would it look like? How would it come into existence?

On the northwest coast of Denmark at a place called Hirtshals, a new harbour was built in 1917, primarily with fishing and related industries in mind. Thus, there was a need to build an entirely new city as well, which led to a competition won in 1919 by the architects Steen Eiler Rasmussen, the late author of *Towns and Buildings* and *Experiencing Architecture,* and Knud Christiansen. Their plan was a conglomeration of ideas that came to characterize postwar urban planning that was built around infrastructure: with a strict zoning of functions and inspiration from the garden city movement, the city also drew reminiscences from premodern 20th century Nordic classicism. Parts of the infrastructure and a few primarily official buildings were constructed, but otherwise no other attempts at construction were made, while a small settlement began to grow outside the area of the plan. In 1937, after several attempts at adjustments, the original plan with its *top-down* approach was finally abandoned. A chaotic city started to emerge around the established fragments of the infrastructure, based on the individual needs and economy of the population, which was directly or indirectly linked primarily to fishing. The city that resulted was later characterized by a Danish writer as *Denmark's ugliest.*

While there are many examples of failed modernist plans, the case of Hirtshals is interesting because it is an ideal plan that was not realized except for fragments of the infrastructure. It let us see what the alternative could be. From the competition, we have several very beautiful watercolours created by Steen Eiler Rasmussen, which show how the city's architecture was conceived spatially and aesthetically. In our exhibition, we contrast some of these watercolours and drawings with photos of the actual city. It raises the following questions: would the original plan have been better? Or is the organically grown city better? Is the criticism of modernism's plans reasonable? Could there have been a golden mean between the planned and the realized Hirtshals? The question of top-down planning versus bottom-up planning is classic and might become highly relevant again, as the green transition might force planners, architects, politicians, and other decision-makers to make a series of top-down decisions. How do we avoid repeating the top-down planning mistakes of the past in this situation?

Scene from Hirtshals
Lars Brorson Fich, 2019

Main square watercolor, competition entry
Steen Eiler Rasmussen, 1919

a for architecture x Nexion
Ajay Sonar & Monali Patil
In collaboration with Shreyank Khemalapure

Architectural Responses to Changing Urban Scenarios: AFA is located in the city of Nashik in India. Nashik, like several of India's second cities or meso cities, is transforming and drawing new kinds and scales of programs. Nashik, for instance, has seen a tremendous rise in luxury and religious tourism, new forms of educational institutions, new retail and entertainment establishments, new industrial areas, new forms of office works, new aspirations for forms of living, and so on. It is in this kind of changing landscape that we see the role of contemporary architecture and particularly our practice to contribute relevant architectural and spatial imaginations.

Make / Believe: One of the ways in which AFA has approached architecture projects is to play a make / believe game. Where making is the central interest of AFA: from the craft of making models, to engaging with craftspeople engaged in building making processes, understanding materials closely, to actually crafting spaces is an important way to engage with projects. That is why craft at the scale of the building is an equally ethical question for the studio. This means there is a judicious but carefully considered use of materials in every project. The installation presented at Palazzo Mora, which is done in collaboration with Nexion, represents this aspect of the studio where the installation is made by reusing waste tile pieces generated at Nexion manufacturing facility in India.

The aspect of believing refers to bringing to the table new and relevant spatial imaginations for every project.

Not just imaginations, but also a varied range of aspirations that each project carries with it. This is not separate from the act of making. In fact every idea or imagination for every project is translated into models that become the locus or mediums to give form to various imaginations. It is a form of extreme theatricality that invites a wide range of participants (clients, architects, contractors, colleagues, construction workers, and so on) to live the enacted world. Architecture models help build a shared miniature world. As noted by Bruno Latour and Albena Yaneva, what better object to gather and assemble a wide range of participants to reflect, project, suggest, participate, in bringing the architectural project to life than the scaled architecture model? The same thing can be said about ideas around a project and also about a completed architecture project as well.

This play of *make / believe* is at the core of the ways of approaching projects and engaging with the transforming city. Of course, like theater plays or jokes, not every dream lands that sweet spot. However, working with an iterative design process helps keep up a hopeful mannerism in order to arrive at design responses that are relevant to each project and its inhabitants and not just play of fancy for the sake of it. This consistent search for relevant ideas for each project often leads to counterintuitive solutions which go beyond simple problem-solving approaches.

Viveda wellness Retreat
Photo: Hemant Patil, 2020

AGIT STUDIO
by Jamin Seo & Guenil Huh

The architects of AGIT STUDIO sensitively observe and understand the current situation of major cities in South Korea. Within the context of these metropolises, which have both a remarkable uniqueness and universality, we consider new approaches and construction methods while giving our own interpretations and questions.

AGIT STUDIO Narrative: Architectural Mass & Tectonic. Under the theme of sustainability, we introduce four projects carried out in Seoul and Busan; *Concrete Library, Project Re-Interpret, Mottagi99, Archived Mass*. The works, each with their own individuality, are intriguingly all situated in long-standing residential areas left behind as a product of rapid modernization. It is a process of interpreting the preexisting times and buildings, and a metamorphosis of the architecture. These works can be seen as the attempts, questions, insights, persistence, and struggles of 21st century architects regarding South Korea's metropolises. The attitudes and works of AGIT STUDIO contain a meaning beyond that of renovation or reuse of old buildings. Our thoughts and attitudes stem from a deep understanding of times past and the status quo of the city, and through relentless endeavor and collision, create originality and meaning. In these projects, there is a common attitude. Our sustainability does not lie in lightness, but in *solidity*. It is a contemplation of proactive and permanent construction methods in dealing with old structures. The intense deliberation of physical properties manifests as consistency in architectural expression. This is a 'challenge on the regulations'. Neglecting the blind spots of the city is a number of regulations that make fundamental change impossible. The issue of how to approach a building is closely related to asking social questions. *Originality* is an experimental attitude that architects pursue. The boldness that AGIT STUDIO has stems from the construction method and a deliberation of meaning, which creates different results. The next question is, 'what to leave behind'. The ordinary things placed during the flow of time are interpreted with our own point of view.

Background. Starting from the 1950s, which was in ruins after the liberation in 1945 and the Korean War, Korea achieved a rapid modernization and urbanization unlike any other in the world. AGIT STUDIO focuses on illuminating residential areas formed through mass supply starting in the 1960s. These are not impoverished areas, but rather the most ordinary, old residential areas. A uniform urban infrastructure, applied to all regions in Korea without regional differentiation -the road arrangements, plot size, and construction methods- is reflective of the past era resulted by the government-led, large-scale development for speedy modernization.

The current state of Korea in 2023 is very different. The metropolises, expanding at a massive scale and speed, are facing the challenges of aging facilities and the demands of an increasingly complex and diverse society. The alarming speed of change raises many concerns. At all times, the city requires an evaluation of the relationship between the old and the new, a judgement of value, and the ability to execute a plan. This is always deeply intertwined with social interest, personal values, concepts, capital, laws, and regulations.

ALTUS Architecture + Design
Tim Alt & Roger Cummelin

Organic Minimalism. The integration of constructed space within its natural setting – Place-making. The work is presented to convey the visceral experiential qualities of each project. No drawings or models are included intentionally to allow the viewer to imagine being within each place. The issues that guide the work are explained within the theme of the exhibit *Time Space Existence* to convey universality and specificity simultaneously.

Time. The path of the sun shapes the architects' work to enrich daily rituals nurtured by natural light. This is the seminal issue that shapes the series of indoor and outdoor spaces, establishing a connection with the spiritual food of daylight that transforms our daily and seasonal experiences. The design of a residence integrated to its place is that of being present. Architecture must engender an experiential awareness that heightens one's sense of being at the moment as well as of all time – timelessness.

Space. The exploration of human scale within the natural fabric of the site. How to engage and integrate indoor and outdoor spaces, shape natural light and materials for the gratification of the soul – Place making. This is the pursuit of an architecture of distilled natural means. What we select to build with is an expression of mans' values, love, honor and respect of the beauty and gifts of the site. We are entrusted as stewards and protectors of our place, caretakers of a unified, cultivated experience for the brief moment of a lifetime. Place making – not Object making.

Existence. Dwelling – the creation of the contemplative life through the thoughtful selection of materials and craft, transformed in natural light. This requires restraint and understanding of a gentle composition within the context. How do we celebrate an architecture of its place, that makes no sense in any other place? How we build is the most true reflection of the individual and of culture. How can we create an enhanced distillation of design that renders a minimal impact on the natural surroundings for places of living? We must be more aware of the protection of our natural surroundings. Place making for living (and remote working) must celebrate the site and honor the history of the location with nobility and restraint for a successful existence. Bold yet gentle – to draw attention to the immeasurable qualities of nature.

Founded in 1995 with an objective to create client centered, site specific architecture for living, the architects have pursued an issues based design process of enlightened contextualism – a belief in place-making that allows each project to express an individual identity while evoking intangible experiential qualities. The issues they focus on developing are: the site and the gifts of the land, natural light and the path of the sun, human scale, and the nature of materials and craft. The understanding of these issues has resulted in the houses they have created. Each project is unique – a reflection of its specific location and owner identity balancing what is timeless and enlightened, evoking memorable experiences.

Woodland House Exterior
Photo: Paul Crosby, 2017

Amaury Wenger

new portspectives. The oldest port traces discovered to date are 4500 years old in the Wadi al-Jarf area of Egypt. The city of Byblos, which has been continuously inhabited for more than 7000 years, shipped wine and timber from Phoenicia and traded Egyptian papyrus throughout the Mediterranean from the third century BC. And let's not forget Venice, an important city throughout the Middle Ages, which controlled a vast maritime empire and prospered from the slave trade and the transport of pilgrims to the Holy Land.

The importance of port cities is immense. They have brought wealth and development to many regions. No civilisation has survived without developing its maritime trade, and ports are still the most important hubs of a nation's foreign trade. Because of their economic importance, they have often been the target of hostile nations seeking to bring the country to which they belong to its knees. This has led to many phases of reconstruction, redefining urban identities, often with contradictory intentions: celebrating a rebirth from the ashes without forgetting the city's history.

Beyond all these general questions and stories, ports are gigantic hubs: hubs for shipping, using ships that have evolved over time, forcing ports to adapt over centuries, changing their landscape and creating new boundaries between land and sea, as in Hamburg. Hubs for cultures, a gateway for people to mix, exchange and collaborate, leading to universities, libraries, centres of knowledge where people came to confront their ideas, as in Rotterdam.

Ports are indicators of the need for constant social reinvention. In this tension, I wanted to search for the beauty and uniqueness of these special places: Dusseldorf, Hamburg, Rotterdam, Amsterdam, Oslo, Stockholm, Barcelona, Istanbul, Helsinki, Le Havre, Tallinn, Antwerp, Copenhagen, Porto, Valencia and Liverpool.

A port is like a Janus: an environmental monster with a destructive, negative impact on the oceans on the one hand, and a supporter of marine life research on the other. It's a death sentence, when migrant rescue ships are not allowed to dock and are forced to drift at sea for weeks. It's a relief that guarantees safe arrival after weeks or months of travel. It's the departure into an uncertain future and the successful return after a long journey. Ports are crossroads of life and death.

Amaury Wenger studied architecture in Paris and Berlin. The confrontation with the art of building and its historical, social and scientific-technical preconditions encouraged him to further develop his artistic research.

Wenger is interested in the cognitive potential of visual art as a means of creating immediate access to complex, intuitively elusive contexts. His award-winning photographic works, which have been exhibited throughout Europe, question the shifting relationship between past and present in dealing with new and historic architecture as spaces created by and for people.

Amaury Wenger lives and works in Berlin.
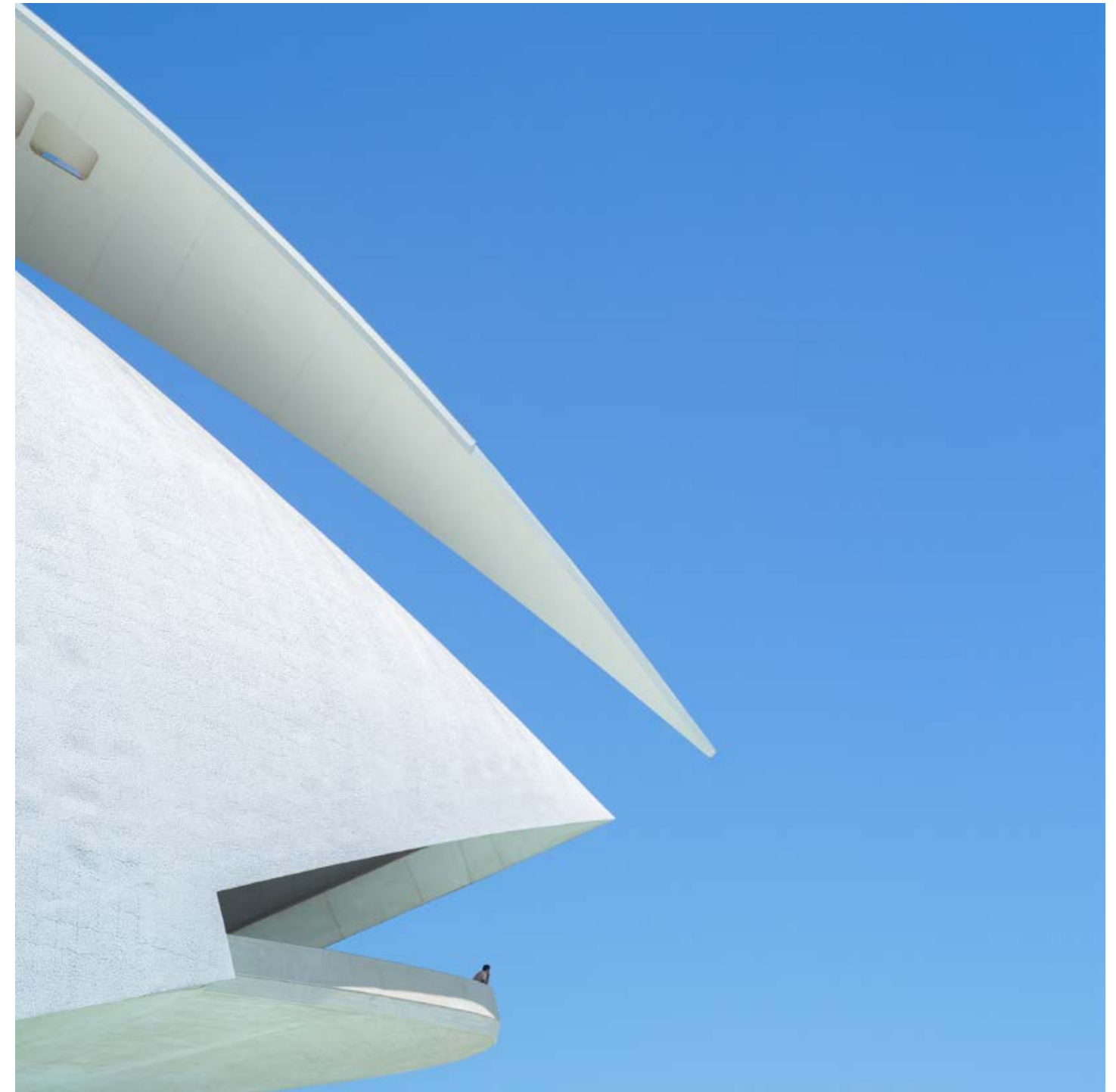
Ami Shinar
Mann Shinar Architects

The city ... does not tell its past, but contains it like the lines of a hand, written in the corners of the streets, the gratings of the windows, the banisters of the steps ... every segment marked in turn with scratches, indentations, scrolls.
from *Le città invisibili* (*Invisible Cities*)
Italo Calvino, translated by W. Weaver

Ami Shinar is attracted to rough, scratched, shabby places, eroded by time. He looks at the cracks engraved into them, the flaws and corroding process that fascinate him just as much, if not more, than the designed walls of his new buildings, perhaps even more so. As an architect, he aims at achieving unique architectural creations, as well as restoring dilapidated spaces, be they a single building or an urban complex. *After all, while the city is a huge architectural compound; still, every building encapsulates urbanity*, says Shinar. This duality is the key to his work, both artistic and architectural.

Shinar often wanders around Tel Aviv, his hometown, where he lives and works. He walks along its diverse neighborhoods, exploring the less flashy ones: neglected streets, with their *transparent* residents, mostly migrant workers and refugees. Tel Aviv is undergoing a transformation rapidly; dozens of new, extravagant towers cast shadows over the old fabric of the *White City* with its many Bauhaus buildings. One can't help wondering about the future of its unique character.

In some of Shinar's elongated tall format canvases, he leads the viewer's eye up and down from the texture of the Bauhaus buildings to the newly built faceless obelisks towering behind. Shinar tries to capture the soul of the place, the small street shops with peddlers and craftsmen who may soon disappear from the urban scene. These are reflected in his paintings, piled up with large brushstrokes of multi-layered acrylic paint, at times scratched or damaged, while in his delicate watercolor works, the artist depicts people's faces, inviting the viewer to an intimate encounter. In his political series Shinar describes a city square during an anti-government demonstration. This multitude of figures is his embodiment of the free urban spirit.

Along with his artistic work, Ami Shinar and his partner Amir Mann (Mann Shinar Architects) create their architectural vocabulary, based on local materials with an eye to the world. They believe in transformation – preservation and innovation, complement and contrast. This duality is reflected in their projects: Ramon International Airport, stretching in Israel's Negev desert like a white mirage; the National Library of Israel (in collaboration with Herzog & de Meuron), a monolith of stone planted in the rocky landscape of Jerusalem; the Azrieli Center in Rishon-Lezion that rises as a spatial origami; HP Campus, in dialogue with high-tech language; Sderot's train station emerging from the ground like some earthly creature; Haifa's new Waterfront, transforming old port docks into a new vivid site, to name a few.

This exhibition presents only a glimpse at the architectural oeuvre of Mann-Shinar Architects, yet it reveals this duality in Shinar's work – the twofold expression of the weathered and the new; Art and Architecture, each on its own, yet inseparable.

Ami Shinar, artist and architect
Mann Shinar Architects

Curators: Ermanno Tedeschi,
Vera Pilpoul

Tel Aviv with 5 towers, Carlibach Street & Rothchild Boulevard
Ami Shinar; photos: Avi Amsalem, 2020

National Library of Israel
Photo: Sharon Tzarfati, 2023

Ramon International Airport
Photo: Hafton and Crow, 2018

Anamaria Chediak

Memories Through the Liquid Desert Waves.

"Where there was once life and chatter and colour, now there's silence and sand. Where floorboards creaked and the wind rustled the curtains at midday, now doors open with no purpose, windows hang on their hinges, glassless, and paint peels from the walls like autumnal leaves. These silent vestiges resonate with stories, memories, and questions…

Nature has taken back what was hers. The desert is merciless, recognizing no boundaries, no barriers, only its irrepressible force. It flows through the windows, through the gaping doors, filling every nook, every corner, in waves that seem almost liquid.

These images are composed of different shots, stitched together slowly and painstakingly. The creative process of (re)composing is reminiscent of how we arrange memories in our minds. Memories are fleeting and fickle. We remake our pasts in the same way I have remade these images.

That day in the desert, I stood struggling to make sense of these fleeting glimpses of a world now vanished, challenged to capture, through the mechanical click of a shutter, a moment in time which I felt had already passed."

–Anamaria Chediak

Anamaria Chediak, 2021

Andrea Halm – reingesägt

Andrea Halm's wooden sculptures appear whimsical, comical even and catch the viewer's eye from a distance with glaringly expressive colours and imposing size. Her figures enrich monotonous concrete surfaces and areas in urban landscapes as well as parks surrounded by gray, dreary buildings. Limewood, occasionally oak, poplar or apple tree trunks, more than two meters in length, with diameters of 30 to 60 centimetres serve as the starting material from which Halm produces her work. This raw material is shaped exclusively using various chainsaws. She attacks the wood violently until a figure born from her imagination remains as the end product. The entire piece is then flamed until it is bathed in sooty black. Finally, she paints the figures in bright colors.

Halm's creative technique does not begin with a haptic process of scanning and grasping the wooden blank, but with planning and sketching her ideas for a figure from her imagination. Then, following her sketches, she ruthlessly saws the figure out of the trunk. Halm's concept of the sculpture develops according to her fantasy, undergoes modifications, in a dialogue between the artist and the creature she modeled, and finally attains its individual character from the confrontation between the fiction of its creator and the qualities of the material.

Bizarre, dynamic and emotive figures are born, hybrid creatures combining human and animal forms, with borrowings from the plant world and architectural ornamentation. Exaggeratedly large mouths, eyes resting on stalks, with bristling hair and rounded, perforated limbs suggest a sensual charisma, enhanced by the polychromatic paint, which seems to cloak the sooted, light-absorbing void of its core like a multicoloured overcoat and harmoniously merges the surrounding space with the plasticity and volume of the figures.

The plasticity and volume of Halm's figures is broken up diaphanously by sawn holes and perforations, and the figures are reduced to such an extent that they appear impalpable and peculiar and are reminiscent of art and cult objects from exotic cultures. Their polychromatic appearance implies the aesthetics of comics and advertising. The influence of comics and bright colors is intensified in Halm's more recent works, resulting in stylistically reduced, clearly structured figures.

Their expressiveness and originality is increased by the sculpture's complementary titles and names and their satirical descriptions. The combination of sculpture and text stimulates the viewer's imagination, makes the viewer ponder in a light-hearted, amusing way about character traits and peculiarities of themselves and their fellow human beings. With her sculptures, Halm succeeds in creating a world of her own, in which she gently holds up a mirror to us and encourages us to think about ourselves and our lives.

Helmut H. Schmid, art historian, Galerie trott!art

Angelus Novus Collaborative
Form Finding Lab & UCHV Research Film Studio
of Princeton University with Skidmore, Owings & Merrill (SOM)

Angelus Novus: The Messenger of Innovation. Inspired by Brunelleschi's dome of the Santa Maria del Fiore and Klee's artwork *Angelus Novus*, the Form Finding Lab and the UCHV Research Film Studio of Princeton University, together with architects and engineers at Skidmore, Owings & Merrill (SOM), present an exhibition that explores new possibilities for the self-balancing vault – a construction method that has enabled centuries of architectural innovation. In the garden of Palazzo Mora, the *Angelus Novus Collaborative* displays a self-balancing masonry vault constructed using augmented reality (AR), and a digital film-fresco that is viewable in two ways: on an LED panel, and on the vault itself via an interactive AR application.

In self-balancing vault construction, the balancing emerges from the local interactions between the bricks without any external support, even during the process of assembly. This invention was prompted by the 1418 architectural competition that stipulated that the vaulting of the main dome of the Florence Cathedral should have no supporting buttresses. Brunelleschi, the winner of the contest, went even further: his engineering solution eliminated the need for the expensive, temporary external supports traditionally used in masonry construction.

Beyond a practical solution for sustainable and safe construction, Brunelleschi invents a new natural order of balance in a curved grid. The dome assembled this way not only adapts to gravity but conquers it by implying its architectonic opposite: lightness. It is an engineering feat with no fixed blueprint, yet the *Angelus Novus* project manages to capture it in form of mechanics-based algorithms. When these algorithms are animated by AR

technology, the visualization can guide today's masons in efficient material use and the reduction of waste. Constructed by hand using an AR interface to guide the placement of each brick, the vault structure at Palazzo Mora shows the potential of combined human and machine intelligence. Similarly, Klee's painting, in which *Angelus Novus* is depicted by the overlapping contours of a human, a bird and an airplane, imagines human invention flying on the wings of mimesis and technology.

Both Brunelleschi and Klee break with the classical object-oriented conception of space bound by a fixed, single-point perspective. They both teach us how to think outside the box in a curved grid. Brunelleschi's vernacular engineering solution anticipated the design revolution of the early twentieth century, in which the conventional difference between architecture and structural engineering is dissolved; the clarity of a tight, minimalist economy of structural relations informs the engineering performance of a self-balancing choreography at the intersection of architecture, engineering and art. Thus, art becomes architectonic, while engineering becomes art.

One of the multiple functions of architectural structures, from caves to cupolas, is to communicate ideas persuasively to the public. The film-fresco entitled *Assembly & Disassembly* visualizes the analogy between architecture and the architectonic language of the universe, transforming NASA images and arthouse film clips. The film-fresco is also mapped onto the bricks of the vault so that the same interactive AR technology that was used to aid the masons in construction can guide the visitors' imagination in the virtual construction of a full dome.

Stills from Assembly – Disassembly movie
Image: Angelus Novus Collaborative

Construction and form evolution from of Angelus Novus vault
Image: Angelus Novus Collaborative

Annika Haas

The Greenhouse Effect series portrays a younger generation in Estonia facing the future challenges of over-consumption, waste and the senseless exploitation of the natural world. All the photographs were taken in a suburb of Tallinn, in a place that is now abandoned and derelict, but that was once home to gardens and green-houses. In this way, the images of the abandoned green-houses are also an important visual documentation of environmental changes. In this seemingly apocalyptic setting, these young people, themselves still developing organisms, seem to be in a symbiotic relationship with the abandoned greenhouses, symbolizing the current disequilibrium associated with the greenhouse effect.

For four years, Annika Haas captured on her photos young Estonians aged 12 to 21, and conducted inter-views with them on environmental issues to learn about their attitude towards and awareness about consump-tion, nature conservation and personal contribution for minimizing their ecological footprint. The young people taking part of this project are deeply concerned about the future of planet Earth: they are trying to signal to the older generation that the current way of life based on binge-consuming culture and endless economic growth is not sustainable.

Untitled/Greenhouse Effect
Annika Haas, 2021

Keiti and Ella Mari/Greenhouse Effect
Annika Haas, 2021

Valerija and Aasa/Greenhouse Effect
Annika Haas, 2021

Ron Jonas/Greenhouse Effect
Annika Haas, 2021

architects—Alliance
Eric Chen, Julia Di Castri, Andrew Harvey,
Mary McIntyre, Nushin Samavaki

The Weight investigates the Leslie Street Spit, a unique site of *constructed nature* on Toronto's waterfront just east of the downtown core. Built on decades of construction debris, this landform is a model for the adaptive re-use of the residuum of urban development. It also serves as an index of the city's unrestrained cycle of self-destruction and reinvention as it grows, in a single generation, from a population of 4.6 million (2000) to a projected 6.8 million (2031),[1] with more than 250 active construction cranes piercing the city skyline.[2]

The Spit is a 250-hectare landform created from millions of cubic meters of brick and concrete rubble. The Toronto Harbour Commission began its construction in 1959, expecting that the city would continue to serve as a continental shipping hub,[3] as it had for nearly a century. As post-war globalization drove manufacturing offshore, Toronto morphed instead into an international centre of financial services, media, and information technology. Left alone, the landform evolved into a thriving urban wilderness, resurrecting an ecosystem that had nearly been lost to the very forces of industry that resurrected it. Eventually, the landform was formalized as a protected habitat with controlled public access. Tommy Thompson Park, as it is now known, is a beloved site that exposes a unique entanglement of urban and natural processes.

This installation asks visitors to consider the material and environmental ramifications of architecture for the urban realm. Showcasing eroded rubble from the Park – material remnants of a former Toronto – remind visitors that the city itself is an ecosystem, subject to the universal biological imperatives of generation, destruction, and regeneration.

The Weight explores three themes:

The Park as an 'accidental ecosystem'. Land reclamation as a planned process for creating urban development space is not a novel idea—as Venice and the Netherlands famously demonstrate. However, Tommy Thompson Park is unique to the Toronto context. With its brick and concrete rubble beaches, it embodies the city's constant yet haphazard waves of intensification and reinvention. Formed of building remnants, co-opted by nature, the Park is an ad hoc sanctuary for people, plants, and animals alike. Created in anticipation of a future that did not arrive, it serves a present that no one anticipated.

The Weight of Constraint. The practice of urban architecture is subject to numerous a priori conditions, from planning policy, to zoning bylaws, to market-driven development and its relentless imperative to build. These abstract constraints overdetermine the built environment and, more importantly, degrade the natural environment. Exposing visitors to the evidence of this process invites them to consider the weight–and obligation–of city-builders' decisions.

The Park as a metaphor for global migration. The Park has become a seasonal or permanent home to diverse species from across the continent, paralleling the mass migration of peoples to this city, drawn here by chance, by family connection, or by Toronto's (and Canada's) social and economic stability. The Park offers respite for human and non-human newcomers, complementing the role of the City.

1. *Toronto, Canada Metro Area Population*. Macrotrends LLC, 2022. www.macrotrends.net/cities/20402/toronto/population
2. *Toronto Continues to House North America's Largest Number of Cranes*. Realinsites. GTA-Homes, 2022. www.gta-homes.com/ real-insights/developments/ toronto-continues-to-house-north-americas-largest-number-of-cranes
3. *Our Story*. Tommy Thompson Park. Toronto and Region Conservation Authority, 2022. www.tommythompsonpark.ca/about/

View from the Leslie Street Spit looking to Toronto
Photo: Eric Chen, for architects—Alliance, 2023

Material remnants of a former Toronto
Photo: Eric Chen, for architects—Alliance, 2023

Drone footage of the park and rubble beach
architects—Alliance, 2023

Arif Satar & Audrey Fernandes-Satar

Time Space Disruption: The Bird is Not Mine emerges as a creative exploration into the displacement activities and movement of birds and animals, seemingly 'out of context' as the urban sprawl encroaches disrupting natural habitats. In these works, drawing is performed through stop motion animation of charcoal lines, erasures and deletions tracing the ache of disruption, loss and dislocation, a kind of loneliness in time and space. Sculptural forms are hand coiled in recycled paper, bridged to hold the imprint of the biography of human fingers that tightly, releases and controls nature simultaneously. With a strong commitment to the use of recycled materials this collection of artworks embodies re-purposed paper to create facsimiles as well as charcoal from fire ravaged forest sites in Australia.

Building upon the ongoing studio practice of two artists of colour who have in the past focussed on Home, Identity and Displacement, now sustained as a way of thinking of ideas across Place, Space and the interconnectedness and disruption of the built and the natural environment. The vision for this project offers artworks that articulate the interrelation between the experience as refugees moving from place to place and the concept of Solastalgia (Albrecht, 2019) as the experience of environmental desolation, disruption, loss and importantly the attempt to create a nest, a home with whatever you find. For this project the inspiration is attributed to an occurrence in a neighbourhood in Western Australia leading to the inquiry and investigation of the cause and effect of these events, over time.

With the pandemic the artists were restricted to their back garden and having observed the movement of a local pair of Ravens who attempted to build a nest under a neighbouring carport where piles of old furniture, junk, an elaborate carved chair with no seat, remnants of an old wooden table with its turned legs reaching out, various bric-a-brac topped by a large wicker basket were stacked up on each other, like monuments of sorts reaching almost to the roof.

The Raven struggled to balance on the wicker basket which precariously moved, whilst carrying what looked like a piece of dry grass in its beak, then flew back to stand next to its partner on the adjacent red brick wall. Thwarted each time it tried, the Raven stopped and preened its feathers with its beak, hopped first then began pacing up and down the brick wall. This behaviour was repeated at different times of the day. When disrupted, the Ravens responded by puffing up their head feathers retreating by hopping backwards on the wall signalling with a loud call, or flying away.

Reflecting on the neighbourhood, an old growth Lilly Pilly tree amongst others was cut down a few years ago to make way for a new development, leaving many birds like the Ravens without a place. This is significant as concepts of space and place must always reflect geographical displacements, at a time where it is crucial to act by considering social justice and environmental concerns.

In *Time Space Disruption: The Bird Is Not Mine* the artists create a new body of work where drawing is pushed to the edge of film, transforming recycled and re-purposed materials, sculptural forms are cast as facsimile assemblages of disparate and ordinary objects, an allegory of a sense of disjuncture, giving a voice to a sort of activism that is grounded in cultural and of liberty standpoints.

Dr Audrey Fernandes-Satar

Time Space Disruption: The Bird Is Not Mine stills
Images: Arif Satar, 2023

ATB.unit

Dialogue with the universe

The caisson is like a gorgeous umbrella, propped on top of the building. The wooden structures are tendons and bones, the patterns and colors are the spirit. The beams are interspersed, the fangs are overlapped. The dome rises high like a massive shade. In shapes of square, rectangle, octagonal and round. Decorated with various flowered caisson patterns, carvings and paintings on the surroundings. Romantic and magnificent.

Within it, are the ingenuity and the aspiration for beautiful things; are the unified wisdom of man and nature, and the principle of earth and universe; are the wishes to peek into the rule of the universe, as well as the awe for reincarnation. That is where the celestial changes happen, a channel through which people communicate with gods. That is where brilliant stars shine, the most beautiful sky of the people.

Caisson, commonly found in royal palaces, imperial temples, and stele pavilion mausoleums, is the stage where *skills carry the Tao, and the Tao and art are integrated*. Every single one of the ancient caissons and beautiful ceilings carries the oriental way of thinking and architectural concept,it is also a channel for people to communicate with the universe over the long course of history. Within it, are people's wishes for human desire and divine knowledge, as well as the perception of universe exploration.

Two complementary forces generate four aggregates. Four aggregates generate eight trigrams. All things and phenomena in the vast universe contain yin and yang, external and internal. They depend on each other, yet they compete with each other, like the *other* and the *self*, they are antagonistic and interdependent. Aggregating, growing, infiltrating, shattering, merging... The growth and dissolution of all things have their own laws, and Tai Chi helps people build a communication bridge between heaven, earth and people, to discuss the *ultimate*.

In the chronic course of time, everyone is practicing, the progress of advancing oneself from the realm of a small self to a greater self through *other* and *self*, is a process of accepting, embracing, and co-existing with diversity. Through dialogue with self, others, and the universe, everyone can find the value of their existence in time and space. One can only meet the best state of the future when seeing the past with clarity.

Finally, you may wish to look up more, this is where brilliant stars shine, the most beautiful sky in the East.

Images by:
Fei.Liu & XiZhong.Zhang

Images by:
Shun.Lv & HuiXing.Lin

Atelier Duyi Han
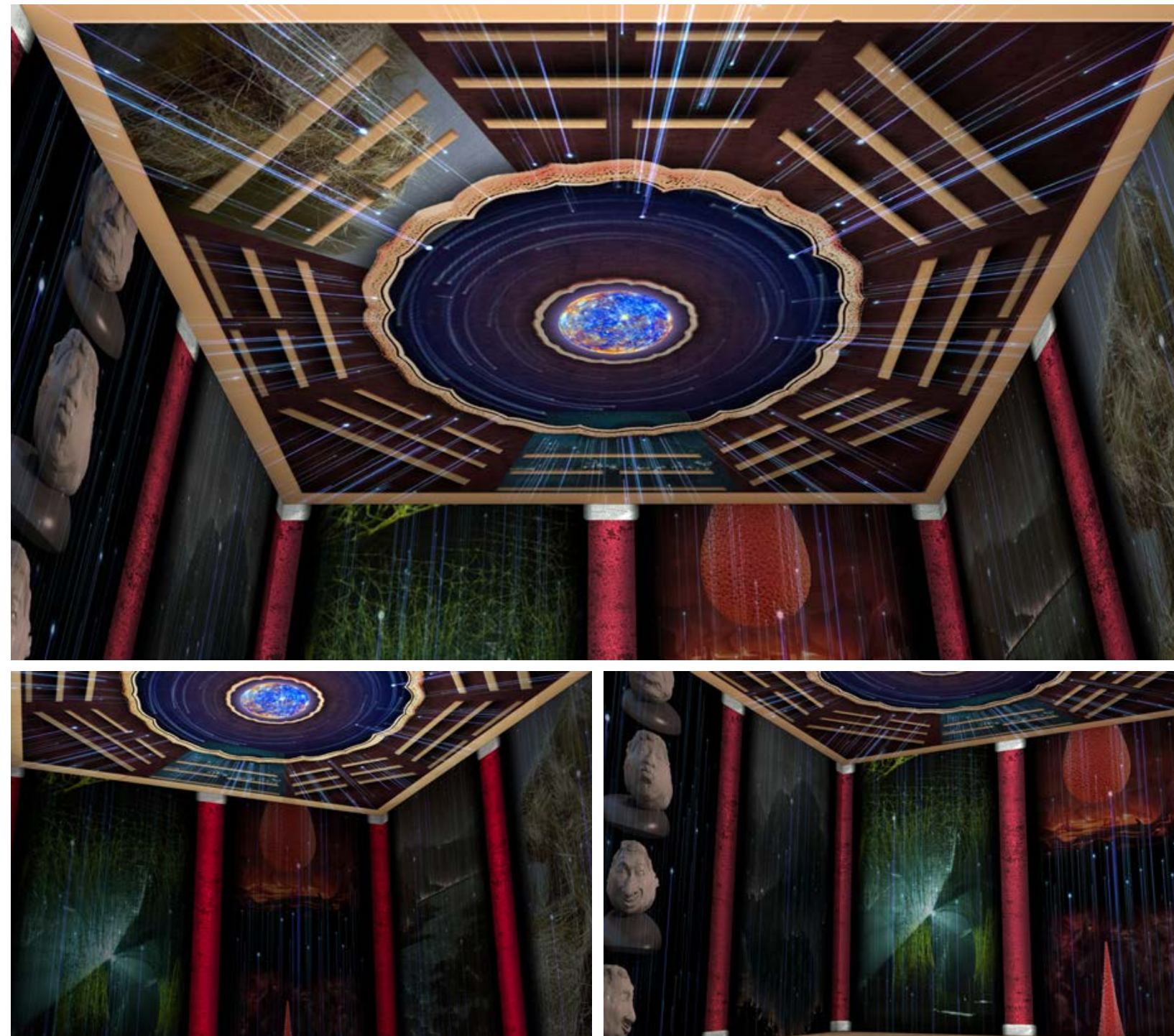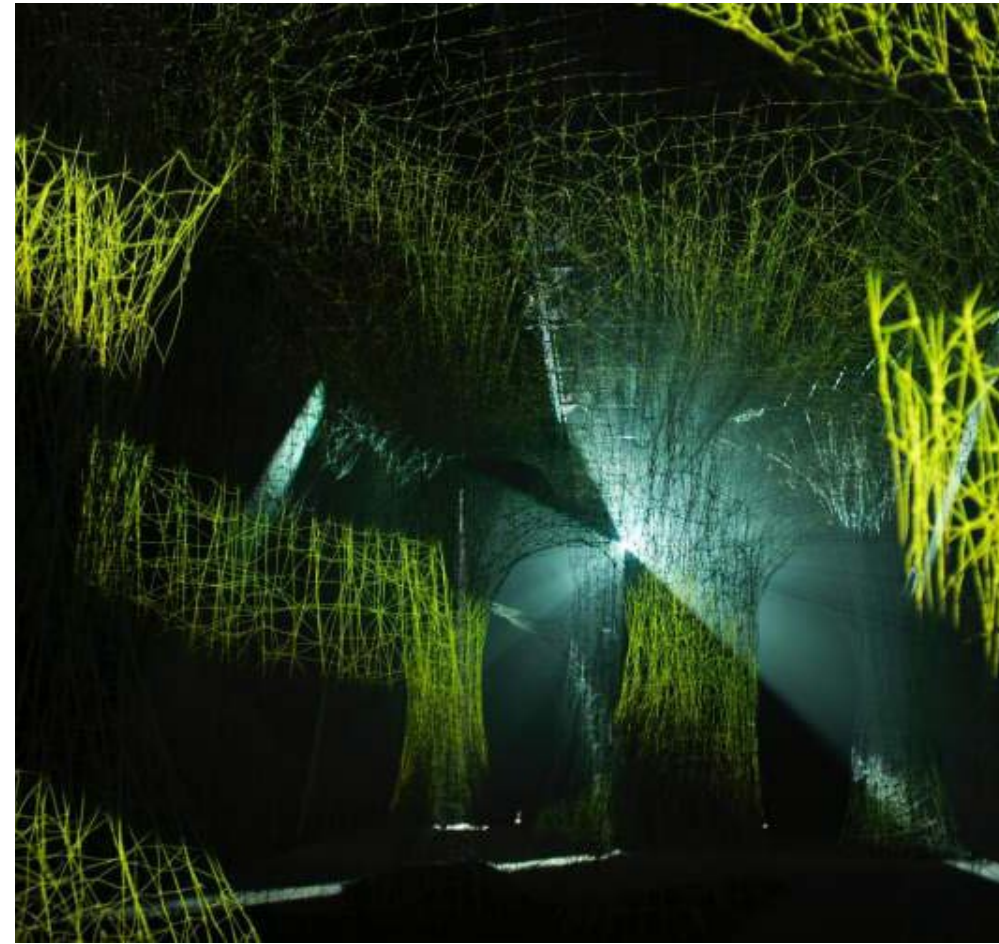
Toward a New Aesthetics

One hundred years ago, Le Corbusier published the book Vers une Architecture (Toward an Architecture). He considered architecture as functional machines for living. One hundred years later, we live in a much different era and need an updated understanding of architecture and visual culture.

Toward a New Aesthetics consists of a video and a room environment that attempt to present a worldview and design approach based on emotion. By analyzing art history, learning from neuroscience, drawing inspiration from physics, and speculating on the grand questions of humans and the universe, Duyi Han constructs

a new perspective of viewing the relationship between humans and their visual environment. Duyi Han considers the visual environment as a visual projection of aesthetics, the Zeitgeist, and values. In reverse, the visual environment's appearance, spatial quality, and content evoke complex emotions and feelings in the human mind. This allows Duyi Han to operate beyond the limitation of fixed style and time period, creating award-winning and globally acclaimed architecture, design, and art that are able to respond to diverse temporal and cultural contexts and emotional functions.

No designs are completely new. We are all in cycles. We are only some humble beings in the universe.

Atelier Pagnamenta Torriani

The Lebanese American University (LAU) commissioned Atelier Pagnamenta Torriani (APT) to design a new Library and a Central Administration building on its Byblos Campus. RELK&P are the Engineers/Architects of Record. Local builders and local craftsmen were involved in the realization of the project.

Jbeil or Byblos is where the first phonetic alphabet was codified by the Phoenicians and *bublos* was the word used for papyrus by the Greeks. The excavated rock and the bare mountain above were the first impressions while visiting the Byblos Campus site. The exposed sedimentary rock and the complex, stratified history of the region became the inspiration for our design. Both the library and the administration buildings are placed adjacent to the excavated rock, forming an open amphitheater with the rock as a backdrop, contrasting the natural with the man-made.

The new structures are conceived as dynamic forms and their exterior skins are layered, providing shade and optimizing diffused light inside according to the orientation. The interior spaces of the library are developed around a large atrium that brings great luminosity and allows for natural air circulation. Connectivity is expressed in the exterior spaces flowing seamlessly inside, while the interior spaces are fluid, open, and transparent.

Throughout the project the contrast between solid and transparent is apparent, and the buildings are opaque during the day and become more transparent during the evening hours. The concrete wall above the amphitheater displays the carvings of the four alphabets historically used throughout the region.

Passive features inspired from the local typology are incorporated into the design: the double outer skin allows for shading, ventilation, and light diffusion, and the main open atrium acts like a chimney vent; detaching the buildings from the rock allows the sea breeze to circulate and ventilate the outdoor amphitheater and café areas. The library and ancillary spaces create synergy among scholarly activities and social life, while providing common ground for diverse student activities and forms of information: an inclusive space for exchange, communication, learning, and understanding.

Atelier Pagnamenta Torriani, an architectural studio operating in New York City and abroad, is led by founders Lorenzo Pagnamenta and Anna Torriani, both ETH-Z graduates. Our practice focuses on Public Space Design.

J. Jabbra Library and R. Nassar
Central Administration, LAU
Byblos Campus, Lebanon
Atelier Pagnamenta Torriani

(APT), Design Architects
Rafik El-Khoury & Partners,
Consulting Engineers SAL -
Engineers/Architects of Record

Photo: Bahaa Ghoussainy, 2021-22

Bill Price
Brown Endowed Chair, Graduate Coordinator
School of Architecture, PVAMU

Reboot and Instrument for Building, Envelope, Assembly, and Material Research.

In 2008, Ai Weiwei asked Bill Price to send examples of his work to include in his section of the book *10×10/3* by Phaidon. After a review of the work, Ai Weiwei's reaction to the content on upcycling plastic bottles was to change the title from *Rebot* to *Reboot*. Fifteen years later the inclusion of an additional "O" reveals itself in an almost prophetic way. With stats surrounding the use of plastics in the USA like, *3 million water bottles are used every hour, 500 million straws are used each day, 1 million grocery bags are used every minute and 40 billion plastic utensils are used every year* (www.5gyres.org) it's hard not to sense the prophetic in the subtle change of *Rebot* to *Reboot*. Now more than ever, culture needs a *Reboot*.

Reboot presents research into searching, upcycling, and plastic bottles. Various scales for the plastic bottles inclusion have been explored. These include, but are not limited to, objects, furniture, and architectural elements such as columns, walls, floors, and canopies. Three pieces are shown. *Object 217, Object 237,* and *Object 81.*

Object 217 is comprised of 57 plastic water bottles and a connecting plate. Each water bottle is stripped of its labels, uncapped, pushed through the connecting plate, and then recapped. One of the 58 holes in the connecting plate is left free to allow the object to be carried, thrown, etc. In most cases, *Object 217* just wants to be sat on.

Object 237, not to be unseated, is an exercise in aggregating *Object 217*. Multiple numbers of *Object 217* are organized to sleeve into one another. One bottle out and one bottle in. Forever conjoined, *Object 237* can assume nothing, but can become something. A larger seat, a column, a wall, an enclosure.

Object 81 explores the use of a larger connecting plate and has been placed within a void in a fill wall belonging to a Test Instrument. The innovative Test Instrument is located at the School of Architecture on the campus of Prairie View A&M University. It has been developed under Professor Bill Price's program for *Building, Envelope, Assembly, Material, and Research (BEAM)* and is a research and development instrument used to study building envelope design. Specifically, the integration of the envelope design and its components on the effect of energy performance and the indoor environment. The Test Instrument incorporates a modular design for versatile experimentation. The Test Instrument comprises two identical modules (11' x 11' x 11') and two *wing walls* placed on opposite ends of the modules to cast shadows over the modules – representing adjacent buildings or objects. Test walls can be removed to experiment with different building envelopes, shading devices, wall systems, and other building components. A 360-degree automated turntable varies the orientation of the test cells to assess the effects of outdoor environmental and solar exposure on a full-scale space under real climatic conditions. The Test Instrument is equipped with over 200 sensors per module that record detailed data and allow for the comparison of one building envelope design over another. A robust sensor profile provides extensive data for the ongoing validation of models. Currently, sensors are retrieving data from *Object 81.*

Inside of instrument looking out at Object 81
Photo: Bill Price

BioMat
Sustainable Design Services

Founded by Prof. Dr.-Ing Arch. Hanaa Dahy, BioMat is currently located in Germany with BioMat TGU@ TTI GmbH and BioMat@Stuttgart at the University of Stuttgart, and in Denmark with BioMat@Copenhagen at the University of Aalborg.

BioMat aims to explore innovative solutions for future sustainable Architecture, using materials as a design tool. This motivation is a direct reaction to the large environmental impact of the construction industry, which accounts for 35% of global energy use, with cement alone contributing to 8% of annual global carbon dioxide production. The strong links between building materials and climate change mean an urgent necessity to rethink current building materials and methods.

Merging the fields of Material Research, Architectural Design and Digital Fabrication, BioMat applies a bottom-up approach to research, leveraging material properties to design material efficient, structurally optimised building components and systems made from renewable sources. BioMat combines emergent technologies, such as additive manufacturing, robotic fabrication, and computational design, with a wide range of natural materials, particularly natural fibres, wood, mycelium and biocomposites, to create feasible sustainable applications for the built environment.

Collaborating with Academic and Industry Partners in state-of-the-art research, BioMat draws inspiration from other industries, namely aerospace and automotive, to foster innovation in the Building Construction Industry. It is BioMat's belief that new technologies can unlock the potential for biomaterials to permeate everyday architectural scenarios.

The exhibition *Materials as a Design Tool* showcases recent projects advancing the application of biomaterials in the built environment towards the creation of a circular economy in line with the SDGs (Sustainable Development Goals) of the United Nations.

3DNaturalPrint investigates the architectural application of 3D-printed natural fibres. Through interdisciplinary research, this project seeks to co-design viable strategies by which this emerging material method may be implemented in large-scale architectural scenarios, a new territory for this particular natural fibre technique.

LightPro explores the development of lightweight profiles and components using renewable raw materials. Two products are created: the newly developed natural flax fibre profiles produced through the pultrusion technique and biocomposite connectors, both intended to be applied in structural systems. The LightPRO Shell pavilion from 2021 showcased a large-scale lightweight active-bending-active shell structure.

Smart Circular Bridge demonstrates the potential of a bioeconomy in the construction industry. The project includes the construction of three biocomposite pedestrian and bicycle bridges in Europe. A sophisticated monitoring system continuously monitors the stability and material condition. This ensures not only the highest level of safety for use, but also provides extensive information for planning further bridges. Aiming at maximum material circularity, the recovery of the biocomposite materials is also included in the research.

Together, these projects point to the possibilities of reconnecting with the materiality of Architecture to enable the innovative use of biomaterials and shape a more material-efficient perspective for the new sustainable Architecture of the contemporary and future digital Era.

Wall Panels 3D printed with natural fibres
BioMat 2022

Photos: Masih Imani, 2021

LightPro Shell Pavilion
Photos: Masih Imani, 2021
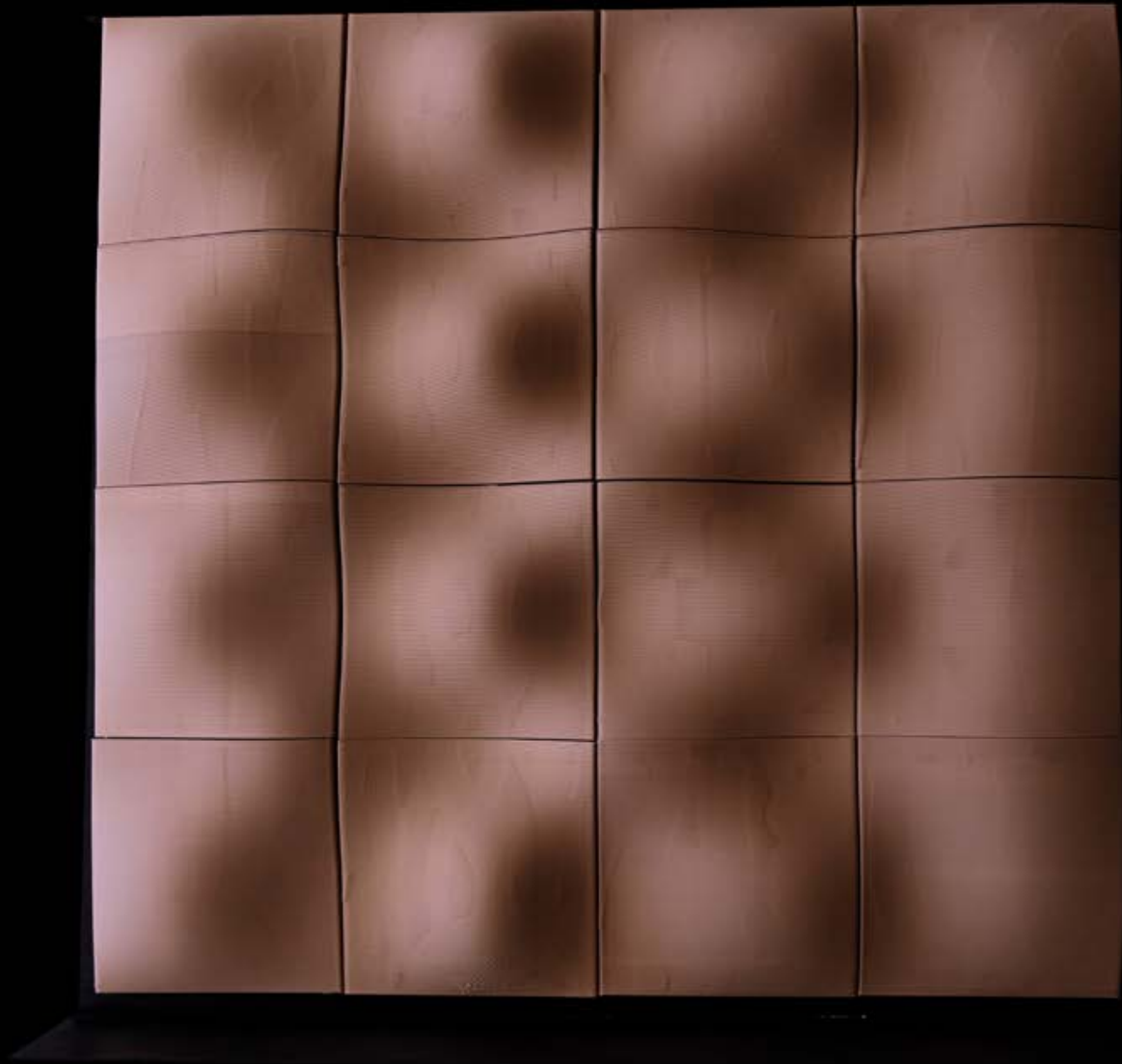
Bridging Binaries
Contemporary Practices
In Context of Bangladesh

Bridging Binaries is an attempt to showcase the works of nine independent architectural practices from a South Asian city. These practices are led by a new breed of young and committed architects who have their works rooted in the same context but not necessarily manifested in a similar manner. They all graduated from the same school of architecture of BUET in the first decade of this millennium and all are practicing in Dhaka, the capital of Bangladesh, an ever-expanding megacity of twenty-three million.

Their romance with architecture started in a time that is marked by rapid changes in every single facet of our life. It was a new era facilitating the exchange of ideas and offering an unimaginable degree of exposure through the World Wide Web. It was also an era of unprecedented economic growth in Bangladesh, followed by an inevitable boom in the construction industry. But in this seemingly optimistic atmosphere the journey they embarked upon was rather syncopated, not sustained in the sense that the growth in different segments associated with the production of architecture in the local context was highly uneven, and thus the state of the art often deliriously existed side by side with the ancient in an almost surreal state. Architecture of this least developed country was also still sanctimoniously confined in its socially exclusive domain.

Their generation initiated the expansion of the boundary of mainstream architectural practice in Bangladesh. They dared to operate simultaneously between the elitist and the egalitarian notion of architecture, between the conventional urban epicenter and the rural hinterland. Bypassing the conflict of all apparent binary oppositions like automation and labor or refined and crude, they focused on harnessing strength from the tension of these oppositions and often on bridging the gaps through magical fusion. Discretely their highly innovative architectural practices grew on the essence of the place, relied on design research as well as experiment, and evolved around the spirit of resilience and inclusiveness.

The group exhibition includes selected projects from the following practices: Studio Dhaka | Muhammad Moniruzzaman; Jubair Hasan Architects| Jubair Hasan; River and Rain | Kazi Fida Islam, Abdul Awyal; FORM.3 architects | Md. Didarul Islam Bhuiyan, A K M Muajjam Hossain; Group of Architects and Thinkers | Md. Rabiul Islam, Nehleen Ahmed Chowdhury; Sthanik + Studio Morphogenesis |Saiqa Iqbal Meghna, Suvro Sovon Chowdhury; Dehsar Works | Rashed Chowdhury; Cubeinside Design Ltd |Khandaker Ashifuzzaman, Ahmed Firoj Ul Hoque, Md. Sharifuzzaman, Md. Shakhawat Hossain; Roofliners _ Studio of Architecture | Sarawat Iqbal, Monon bin Yunus, Rajib Ahmed.
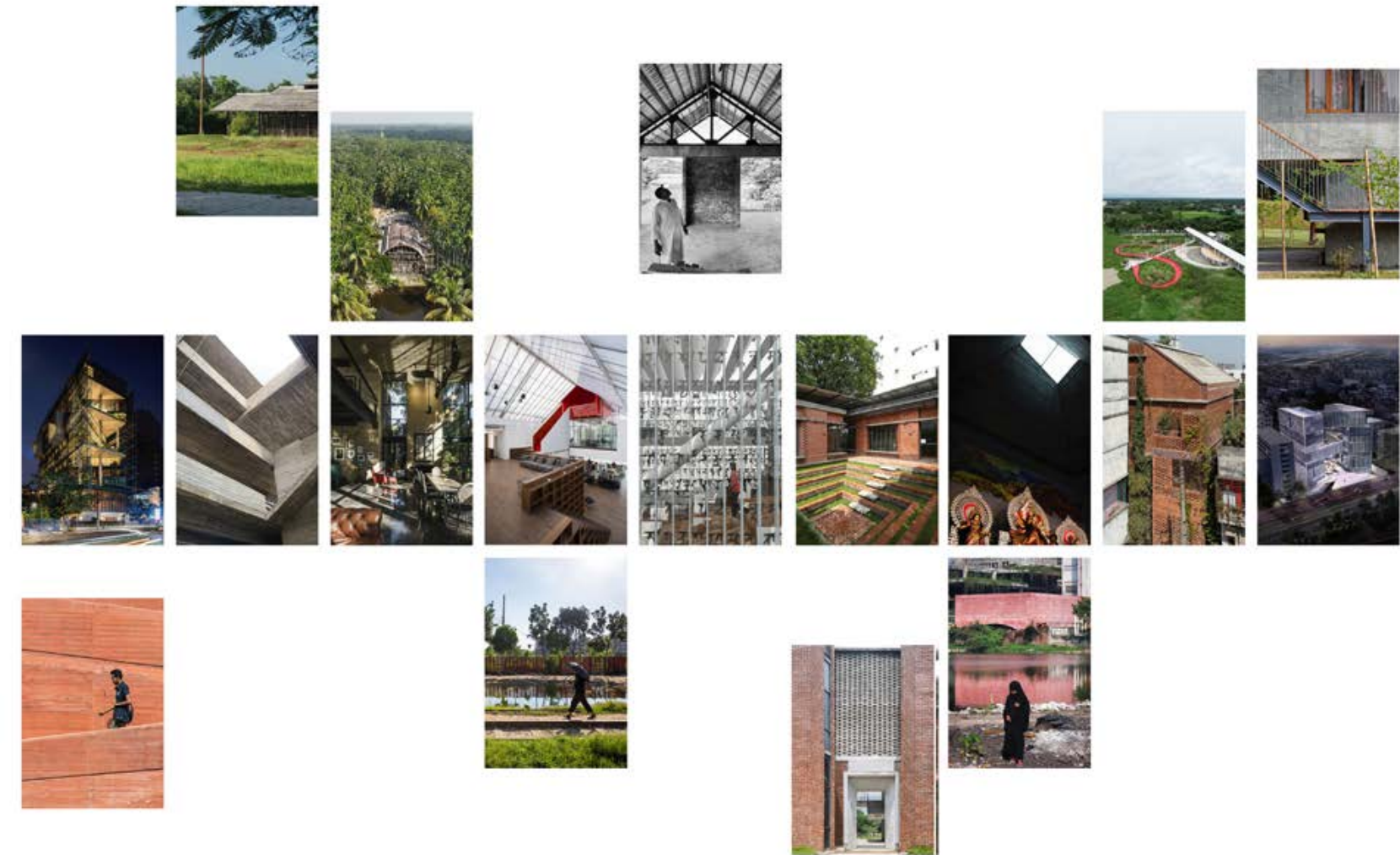
Budapest University of Technology & Economics, Faculty of Architecture
Department of Explorative Architecture & The American University in Cairo, Rare Books & Special Collections Library
Hassan Fathy Survey Mission in Egypt

Hassan Fathy (1900-1989) was an important designer and thinker of the 20th century, especially in Egypt and the Middle East. His rich oeuvre included lavish villas for the Alexandrian and Cairo elite; he spent years working with Doxiadis in Greece, who is famous for the master-plan of cities such as Islamabad in Pakistan. Still, Fathy became best known for his *Architecture for the Poor* concept, a then innovative approach of participative design using and improving traditional building techniques and materials.

The exhibition features and analyses his two major urban-scale projects to best show the complexity of his thinking: New Gourna and New Baris. The Model Village of New Gourna (1944-45) gave him the opportunity to elaborate his social and architectural concept for solving the housing problems of rural Egypt. It was an unusual project entailing the relocation of an existing village, and Fathy put much effort into involving the future residents in the design and construction process, while sticking to his aesthetic and structural vision of a vernacular-modern mudbrick architecture. The ultimate failure of the project, besides other honest mistakes, highlights the extremely sensitive nature of involuntary relocation and the designer's role in identifying and recreating the most important spatial needs of an existing community. Despite the sense of failure, Fathy did not give up his architectural principles, which were manifested in the monumental mudbrick structures of New Baris (1966-67). The few public buildings implemented in the planned village, now abandoned in the desert around the Kharga Oasis, represent an astonishing aesthetic synthesis of material and structure, a functional modernist system and traditional local building archetypes.

Despite the architectural quality and the efforts to create affordable, good-quality housing for the under-privileged, these projects with their social focus lacked popular recognition at the time. However, the core of the ideas seems increasingly relevant today, as the affordable housing crisis is aggravated by exploding birth rates and ever more extreme weather conditions in the Sahara region and beyond. Our goal is to provide a well-informed critical analysis of the rich oeuvre to the professional public so that the innovative ideas and the lessons learnt from the mistakes can shape future sustainable and affordable housing initiatives.

The material and analysis on display are based on an ongoing research project on the architect's work, called the Hassan Fathy Survey Mission, which has been running at the Department of Explorative Architecture of the Budapest University of Technology and Economics since 2015. The Mission has surveyed and documented Fathy's buildings all over Egypt and cooperates with the Rare Books and Special Collections Library of the American University in Cairo, which safeguards the archived plans of the architect. The onsite experience, knowledge of the literature, personal knowledge of some of the affected residents and the original plans allow for a deep analysis and unbiased criticism of his work. The accumulated knowledge continues to be used at all levels of architectural education, from graduate design tasks to doctoral and post-doctoral research projects.

Curators: Prof. Dr. Zsolt Vasáros, Dóra Dávid. Co-Curators: Balsam Abdel Rahman, Ola Seif

Budapest University of Technology & Economics, Faculty of Architecture
Department of Explorative Architecture. Student projects in Africa

In the course of recent years of architectural training, we have offered our students numerous design locations with focus on Africa. Our objective with these tasks was dual: on the one hand, we called the attention of our students to social and environmental problems, such as the rapidly growing population, the deficiencies in housing and education, as well as the increasingly extreme environmental conditions, lack of water, and the critical state of food supply. From the point of view of the designer, we raised the issue of the duality of tradition and renewal: we inspired our students to protect local values, to perform contemporary reinterpretation, to focus on climate awareness, and to become acquainted with the concept of circularity.

Some of the tasks were based on the research of the Hassan Fathy Survey Mission – the students designed schools and research houses in the village of New Gourna. Our programs in Cairo were linked to the subject of heritage protection, which, in this case, meant the design of the restoration centre in a World Heritage environment. Several designs were drawn up on the West Bank of Luxor for the presentation of a New Kingdom building complex.

In the framework of our *FUTURE FARM* program running in 2021-22, we focused on the architectural implications of a modern, sustainable food supply. In the tasks aimed at the design of vertical farms, we examined the fields of hydroponic, aeroponic and aquaponic plant cultivation, which are capable of producing vegetables in climate-independent systems, thereby drastically reducing both the demand for water and transportation costs. The design locations represented the significant differences within the continent: the desert territory of

Tataouin in Tunisia, the territory of the Kharga Oasis in Egypt, which is quite unsuited for agricultural production, the area around the Al Redis refugee camp in Sudan, the environment of Lake Turkana in Kenya, and the dynamically growing city of Alexandria in Egypt.

We placed particular emphasis on an analysis of the sites and the collection of diverse information on the environment. The students presented the results of their investigations in the form of landscape association collages and inspiration models, with which they processed the prominent characteristics of the sites and started to shape them into design tools. The challenge lay in the alloying of contrasts: large-scale technology spaces had to be inserted into the barren landscape and small, fragmented elements of the environment; high-tech solutions had to be adapted to local features in the interest of achieving optimal material use. We encouraged the use of passive climate control solutions based on vernacular architecture in the contemporary design setting.

In the mission statement of the Dept. of Explorative Architecture, we committed ourselves to integrate the struggle with global problems into architectural training. The students achieved spectacular levels of development through these tasks demanding complex thinking and diverse knowledge. Between 2017 and 2022 some 400 students became involved with African design projects, with their work including competition entries, the programs of the compulsory undergraduate design subjects, and final degree course designs. The students' work focused on 6 sites and was assisted by a total of 40 instructors.

Curators: Prof. Dr. Zsolt Vasáros, Dr. József Árva, Dr. Gábor Fábián, Dr. Dávid Szabó, Dr. Rita Terbe Curators: Prof. Dr. Zsolt Vasáros, Dóra Dávid. Co-Curators: Balsam Abdel Rahman, Ola Seif
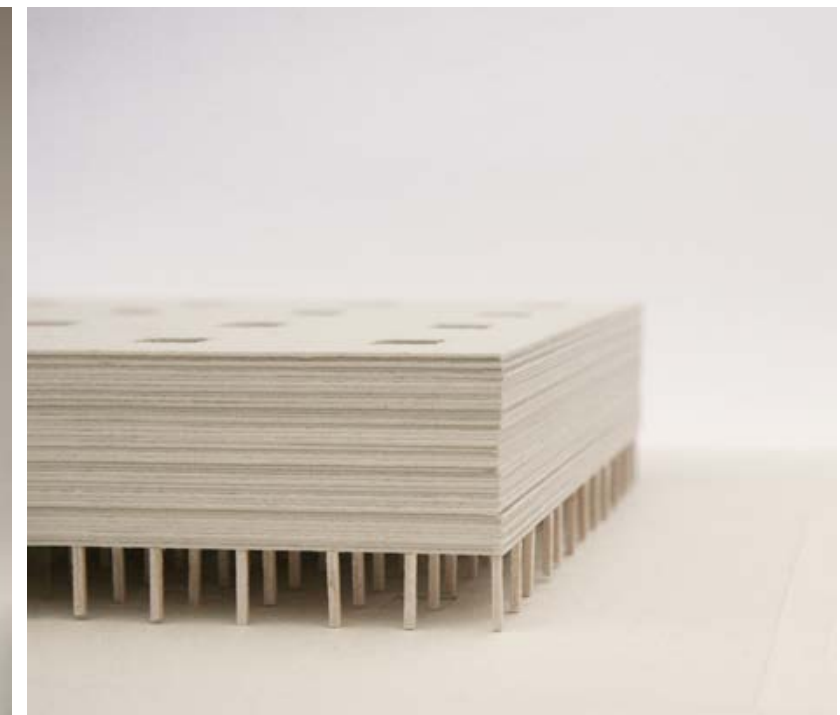
Budapest University of Technology & Economics, Faculty of Architecture
Department of Explorative Architecture
Research on the oeuvre of László Mester de Parajd

László Mester de Parajd was born in Budapest in 1949, and his family left Hungary for Paris in 1957. He studied mathematics for two years before starting his architectural training in 1970. During this time, he took regular trips abroad, which, in 1971, brought him to Niger for the first time. His graduation project was a Leprosorium, for which he spent three months in the African country. He moved to Niger with his wife in 1977 to work for the Ministry of Construction, where he designed the Nigerien Solar Energy Office (ONERSOL), a solar energy research institute located in Niamey. Completed in 1981, the building was shortlisted for the Aga Khan Award for Architecture. Incorporating shapes and materials of Nigerien traditions, this early design is consistent with the architect's later style. In the 1980s he designed various representative buildings in Niger, such as the Court of Appeal of Niamey (1984). Mester de Parajd returned to France in 2000 to become chief engineer of the French Development Agency, where he designed numerous schools and hospitals, mainly in the Sahel region. In 2014, he received the architect's prize from the Salon d'Automne. László Mester de Parajd was Hungarian Honorary Consul in Rouen and President of the Evangelical Hungarian Church in France. He is a member of the Society of Africanists. Today, he paints and is featured in numerous exhibitions, mainly with his African-inspired paintings.

The designs and designer approach of Mester de Parajd were very much influenced, if not defined by the numerous trips he made all around the world, most of them in the companionship of his wife, Corinne. During the course of these trips he made a large number of drawings of vernacular constructions and took many photographs. Starting from the 1970s, he carried out intensive fieldwork and research focusing mostly on Niger; the summary of which is the *Regards sur l'habitat traditionel au Niger* (1992), which he co-authored with his wife. The result of the persistent and vigilant observation of vernacular architecture is reflected in his large-scale public buildings; similarly to Hassan Fathy's New Baris building complex, he creates large-scale contemporary architecture deeply rooted in the wisdom of traditional solutions. Our exhibition provides a glimpse of how outsiders (as was the middle-class and internationally educated Fathy in Nubia, or as was the European Mester the Parajd in Niger) are able to analyse, understand and appreciate a different culture, environment, and how they are not afraid to use and re-interpret their observations in their work. We display original photos, drawings and 3D shots of his most important public buildings, their inspirations, and works representing the architect's current artistic ambitions.

Our research group at the Department of Explorative Architecture has been working on his monograph for years. The architect allowed us to use his collection of photographs, his designs and other archive materials. Besides showing his work, we think it is important to find the proper position of his creative approach among his contemporaries as his working method and principles are similar to those shaping contemporary architecture in Africa today.

Curators: Prof. Dr. Zsolt Vasáros, Friderika Tibai, Laura Veres, Dóra Dávid

Cour d'Appel & ONERSOL, Niamey, Niger
Photos: Laszlo Mester de Parajd, 1984 & 1981
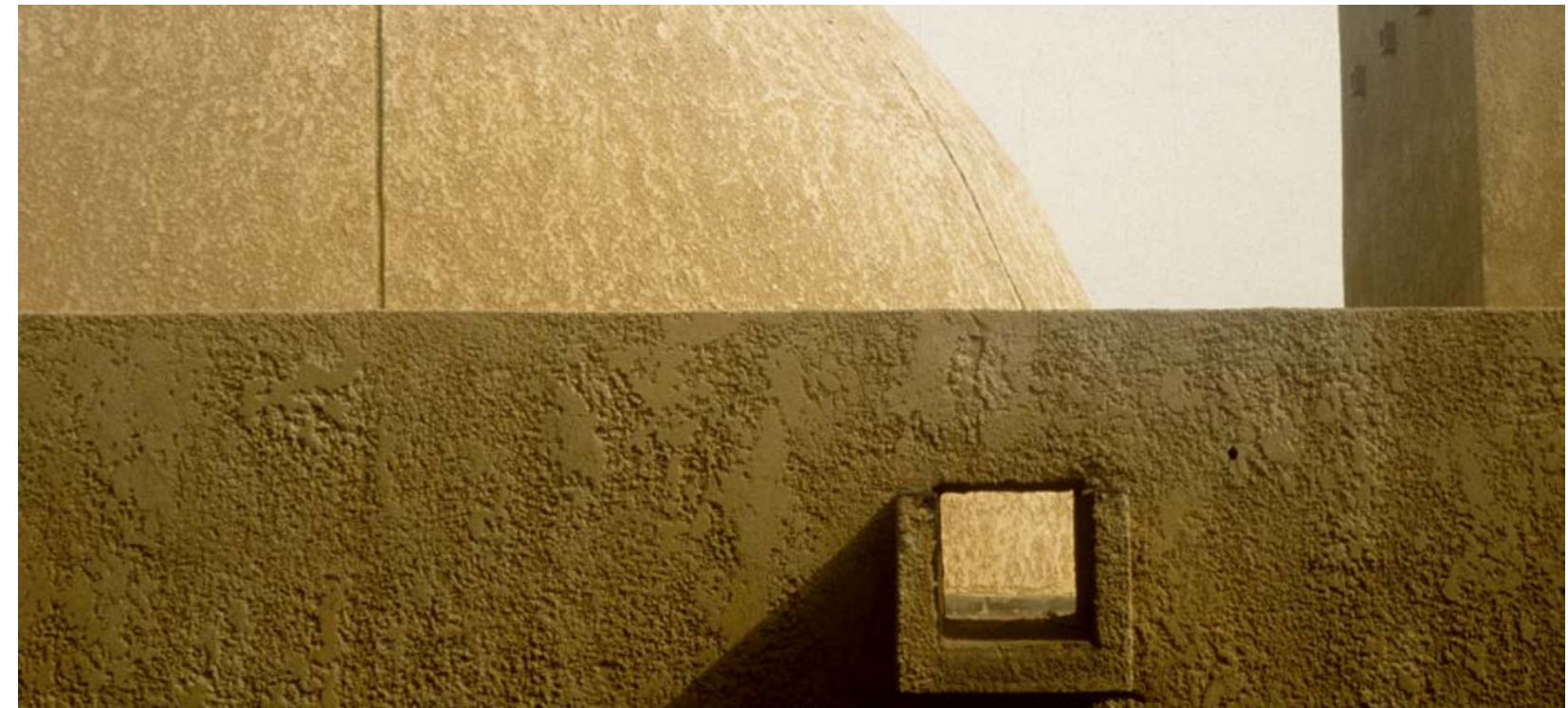
Budapest University of Technology & Economics, Faculty of Architecture
Doctoral School of Architecture, Department of Explorative Architecture
Mohamed Raslan: Mass Housing Customization: Egypt's Challenge

Multiple countries in the global south are constructing mass housing projects in the space previously occupied by informal settlements. In contrast, in European post-socialist cities, time has proven that standardised mass housing projects exhibit a propensity for inadequacy. Mass housing customisation, a design and construction strategy where residents are presented with an array of design alternatives instead of a uniform solution, has garnered momentum as a solution to the constraints of traditional mass housing projects. It allows residents to personalise their homes and create a sense of ownership, which can lead to improved maintenance and a stronger sense of community.

Multi-storey mass housing projects are often designed with a standard floor layout and repetitive floor plans to achieve economies of scale and lower construction costs. However, this approach limits the design options and customisation possibilities for homeowners, particularly in a saturated housing market where differentiation is increasingly valued. To address this paradox and meet the housing demand in Egypt, developers are exploring various mass customisation strategies in multi-storey housing, such as modular design, prefabrication, and adaptive reuse.

According to a housing demand survey conducted by the World Bank (2019), there are more than 27 million homes in Egypt, and the country needs to build several million additional residential units by 2030, i.e. more than half a million units every year. Therefore, the government has launched mass housing projects to address this housing shortage, aiming to build several million residential units by 2030. However, the literature suggests that homeowners want their homes to be customised to their needs, which may conflict with the standardisation approach of mass housing.

Overall, mass customisation in multi-storey mass housing projects requires a balance between standardisation and customisation, as well as careful consideration of the economic, social, and environmental factors that affect the housing market in a particular context. By using strategies, such as modular design, prefabrication, and adaptive reuse, developers can meet the housing demand in Egypt while also accommodating the needs and preferences of individual homeowners. The main goal of this research is to provide a theoretical framework of strategies that should be followed for the mass customisation of multi-storey mass housing projects. Subsequently, a customisation design toolkit will be formulated based on the recommended strategies.

Bashayer El-Kheir Housing, Alexandria, Egypt
Photos: Mohamed Raslan, 2020 & 2023

Carnegie Mellon University, School of Architecture
& Roger Williams University, Cummings School of Architecture
Sarosh Anklesaria, Jonathan Kline & Ryan Ludwig

This exhibition unpacks architecture's entanglement with extraction, exploitation, and capital to explore emergent models for transformative socio-ecological praxis through the work of several academic design studios and grassroots campaigns. Contemporary global models of development remain rooted in a Eurocentric, patriarchal modernity, whose origins can be traced to colonization and its concomitant exploitation of material and labor across geographies. If the practice of architecture remains entwined within the forces of globalization and neoliberal capital, it will continue to contribute directly to myriad, multi-scalar crises – structural inequity, ecological degradation, resource depletion, species loss, and the climate emergency.

To begin to confront such conditions this exhibition deploys concepts of Just Transitions as a broad framework for an architecture of agency – its capacity for transformations. Over the past few years, Just Transitions or Transition Design has emerged as a multi-disciplinary term across the humanities to advocate for epochal transformations rooted in the interconnectedness of social justice and ecological systems, calling for a new civilizational model beyond neoliberal, global capitalism, and a transition to non carbon based, non extractive futures. The exhibition showcases research, projects and practices that enable new modes of worldmaking situated in an ethics of care.

Such an approach operates across scales and temporal dimensions, often connecting formal, social, and ecological paradigms. Understood in its broad socio-ecological context, architecture becomes a form of *worldmaking* – buildings consume vast amounts of resources, entail labor and material extraction both visible and invisible, and also harbor the hopes and aspirations of communities often spanning generations.

These themes explored in the exhibition include – models of governmentality and land management through unions, cooperatives, and community land trusts – forms of participatory politics considering architecture as a temporal device that acknowledges and actively deploys the agency of its users – practices of construction that invert labor and material extraction considering circular thinking, urban waste, design for deconstruction, or bio-based materials for decarbonized construction – design adaptive reuse that foregrounds the creative repurposing of existing buildings to acknowledge embodied energy in addition to operational energy; or practices of synanthropism that actively enhance urban and periurban biodiversity through hybrid assemblages of buildings and ecological habitats. Concurrently, projects consider formal tools and devices to promote new forms of architectural aesthetics that engender and make visible Worldmaking as Praxis, challenging or even obliterating the schism between architecture's formal autonomies and its capacity for an emancipatory politics.

The exhibition includes projects from Carnegie Mellon University, School of Architecture, M.Arch Transition Design Studio and from Roger Williams University, Cummings School of Architecture, M. Arch Collaborative Revitalization Studio demonstrating speculative architectures of Just Transition. It also includes several grassroots organizing campaigns from the Architecture Lobby's Green New Deal Working Group. All projects have been organized according to the themes of transitioning the work of design, transitioning daily life, and transitioning ecologies of production.

Centering Community: New Typologies in Housing | A Just Transition for the Building Sector
Parth Danait, Charlie Hsu, CMU SoA, 2022 | Photo: Jonathan Kline, 2023

Transition Design Studio Models | Hybridized Landscape
Photo: Jonathan Kline, 2023 | Adam Taira, Jiayin Zhi, CMU SoA, 2021
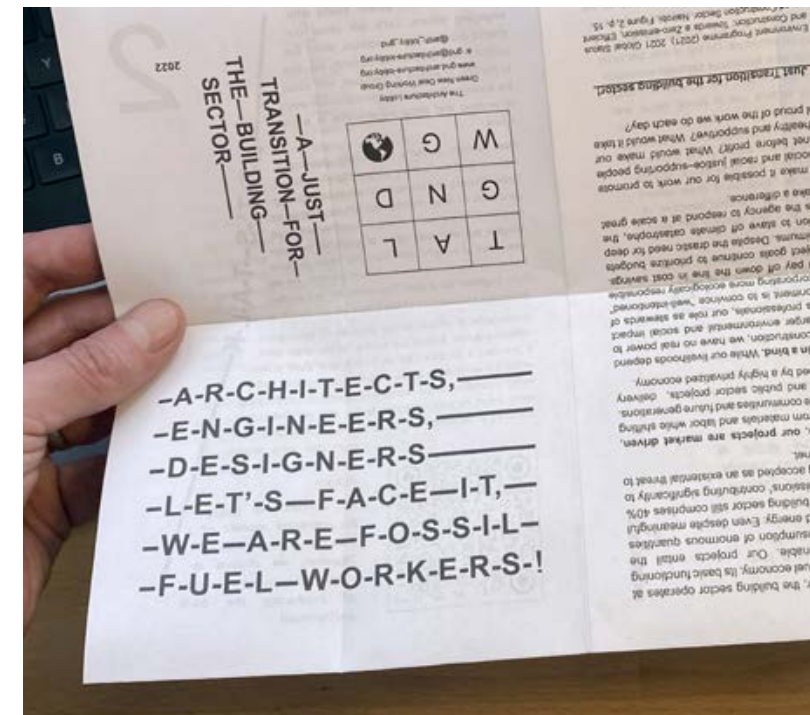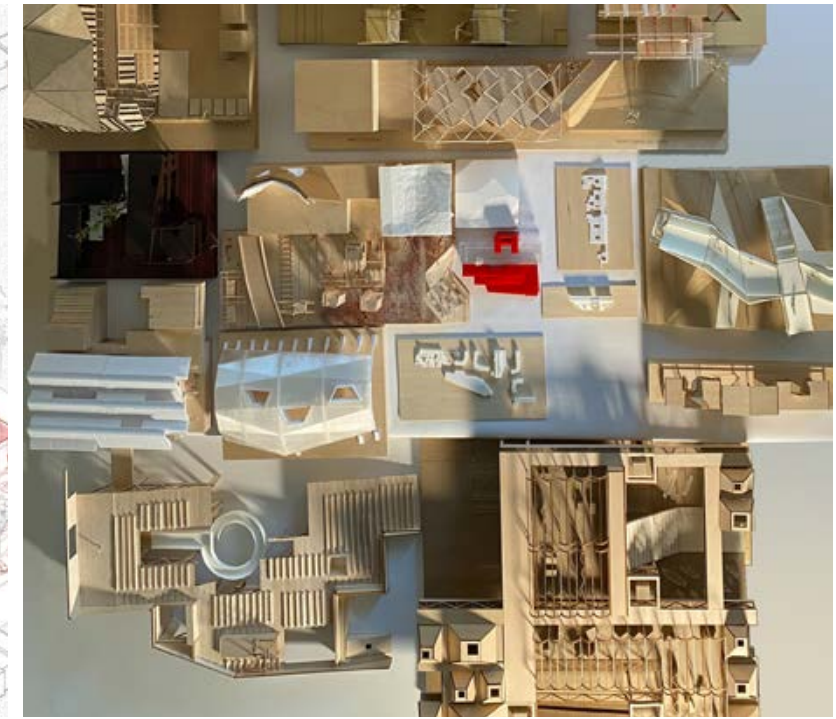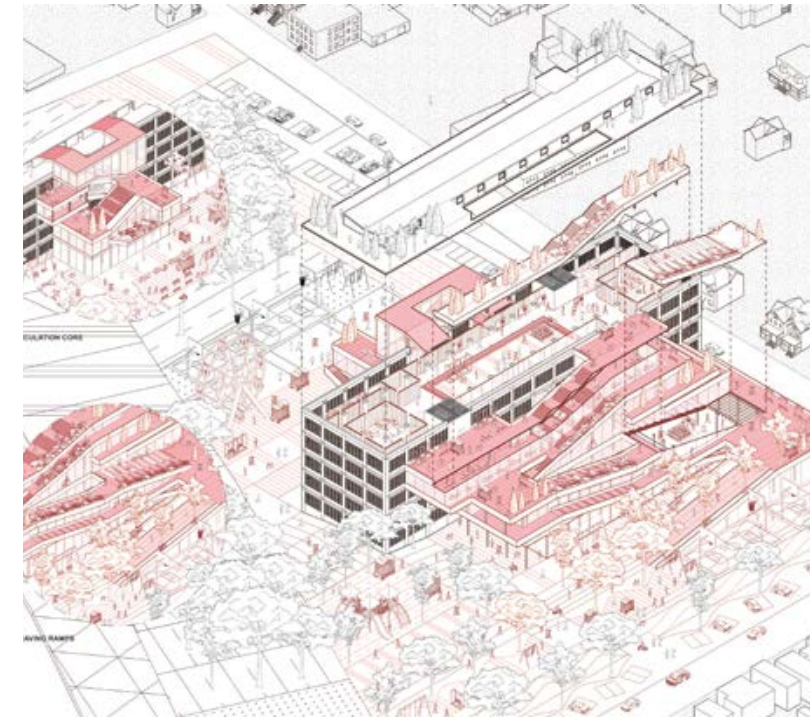
Carter + Burton Architecture PLC
by James Burton

Culture is the other half of sustainability. This mantra has been celebrated by Carter + Burton Architecture as the U.S.-based firm continues to test regional and universal materiality in its forward-thinking microclimate responses.

Collaborating with craftsmen, designers and cutting-edge building systems reflects its careful process of blending site, program, technical innovation and tasteful artistry. The firm has been passionate about combining modern, sustainable and contextual design in its work for over 20 years. Its projects incorporate net zero logic, natural light and eco-friendly building materials while advancing the evolving building science discussion spearheaded by collaborator Dr. Joe Lstiburek, founding principal of Building Science Corporation.

Carter + Burton cares deeply about connecting a structure and space to site conditions, making sure each project inspires a storytelling spirit borne out of craft and those who make it possible. The details often feature a handmade rigor. A concrete bathtub, beeswax wall coatings, basketweave walnut wall and traditional stone walls are just some of the regional tactics.

Items fabricated remotely for integration such as an aluminum foam tabletop, glass and steel bridge and custom sliding art panels form examples of universal beauty and functionality that provide a diversity in beliefs.

Hiding and unhiding details and connections often reflects the spirit and appropriate budget expression. Engineers, landscape architects, artists, masons, woodworkers, welders and other artisans all contribute to the firm's holistic approach to placemaking. Forming this beauty creates a pride that promotes maintenance and care while searching for more than energy efficiency.

Carter + Burton's portfolio has been published worldwide, most recently in *WWA Architecture 30 of the Most Relevant World Architects* by Oscar Asensio. The firm looks forward to telling the story of those who have inspired its leadership and continued education. Key collaborators and material details will be celebrated in the built work and an *on the boards* display. Site-milled timbers, SIPs panels and Cross-Laminated Timbers (CLT) form loose-fit spaces to feature special collections, acoustic engineering and art for life in this new critical regionalism.

Christof Babinsky

This is self-creation, emerging from chaos and evolving by itself. By pointing a camera at its own display screen, the artist creates a visual feedback loop. After fine adjustments in the positioning of the camera to the screen are made, the artist sets his canvas, a visual feedback loop that shows almost nothing but black. He then initiates his recordings by providing initial input to the system, in essence drawing on a screen, using the flame of a lighter or glimpses of other artists work. Once the initial input is provided, a landscape of altering forms and colours emerges by chance and chaos, without any further input by the artist. The adaptive system is set in motion and like life itself is ever changing until it either reaches equilibrium or a resonance catastrophe. Like life in the universe, the parameters in which the system can function and flourish are extremely small but once initiated, beautiful and strange worlds are created by unpredictable chaotic patterns that emerge autonomously. The artist uses a digital recording device, not only to capture moving imagery but as a tool of its own creation.

With the collection *CHAOS//LOOP 2023,* composed of 10 created NFT pieces in the, the artist challenges the world of digital art by capturing art content that is created in the physical world but only made possible by using a digital recording device. NFT art is often based on complex digital algorithms which make up the parameters that form moving imagery. Christof Babinsky's works in *CHAOS//LOOP 2023* are based on the parameters of physics in our physical world and use a system

that can only exist due to modern, digital camera sensors. The application of the developed system makes the works as much 'real art' as painting oil on canvas, protected by the application of blockchain technology.

The installation at *Time Space Existence* is utilising an architectural screen, called ASB Digital Wallpaper, designed and developed by the artist and designer Christof Babinsky as its canvas.

ASB's DigitalWallpaper is not a screen in the classical sense. It is a product that allows the creation of high-end architectural surfaces, displaying art and digital content as an integral part of interior or exterior architecture. The designer does not accept current solutions for the display of digital art and challenges screens occupying architectural installations in general.

ASB's DigitalWallpaper is an LED installation behind high-end, speciality treated safety glass, providing a visually and haptically pleasing architectural product. Using non-marking, non-reflecting, scratch resistant glass in a specific thickness and degree of matt finish optimised for the resolution of the LED screen used, which allows the viewer to observe the DigitalWallpaper at a 180° viewing angle, this product allows art and digital content in a high-end architectural setting. It is the opposite of exposing the viewer to a large number of individual LED light sources mounted to a circuit board that cannot be cleaned, collects dust, feels uncomfortable and will always cause a Moiré effect to the eye and to a cell phone camera.

Christof Babinsky, 2023

Cité Arquitetura
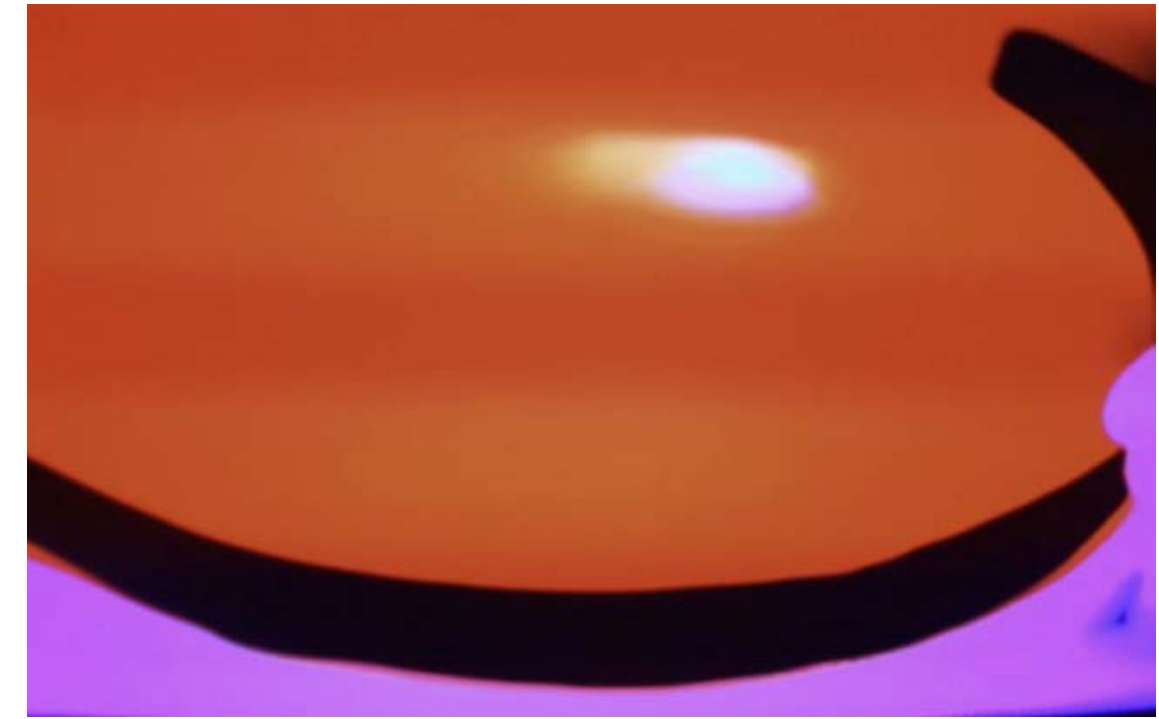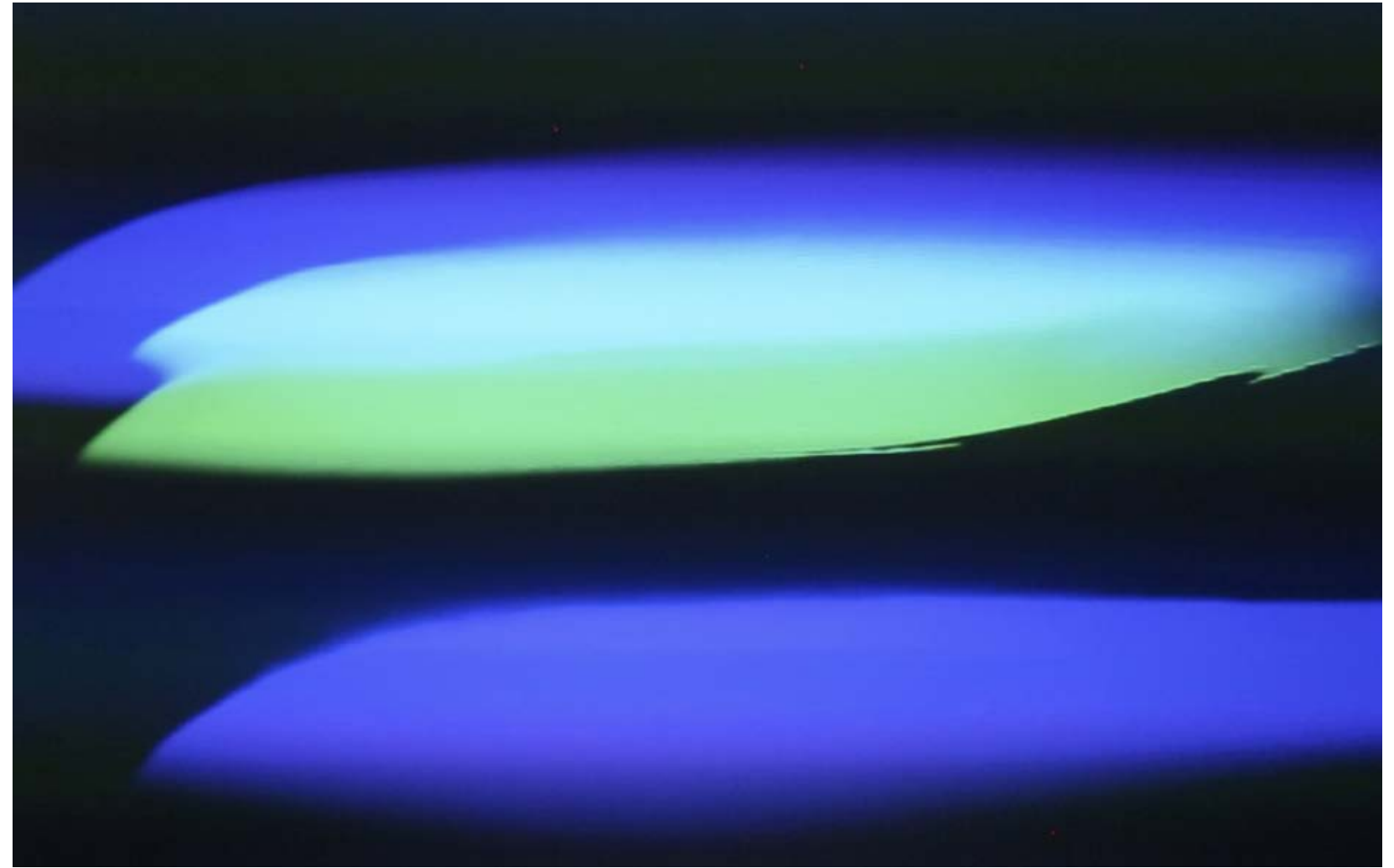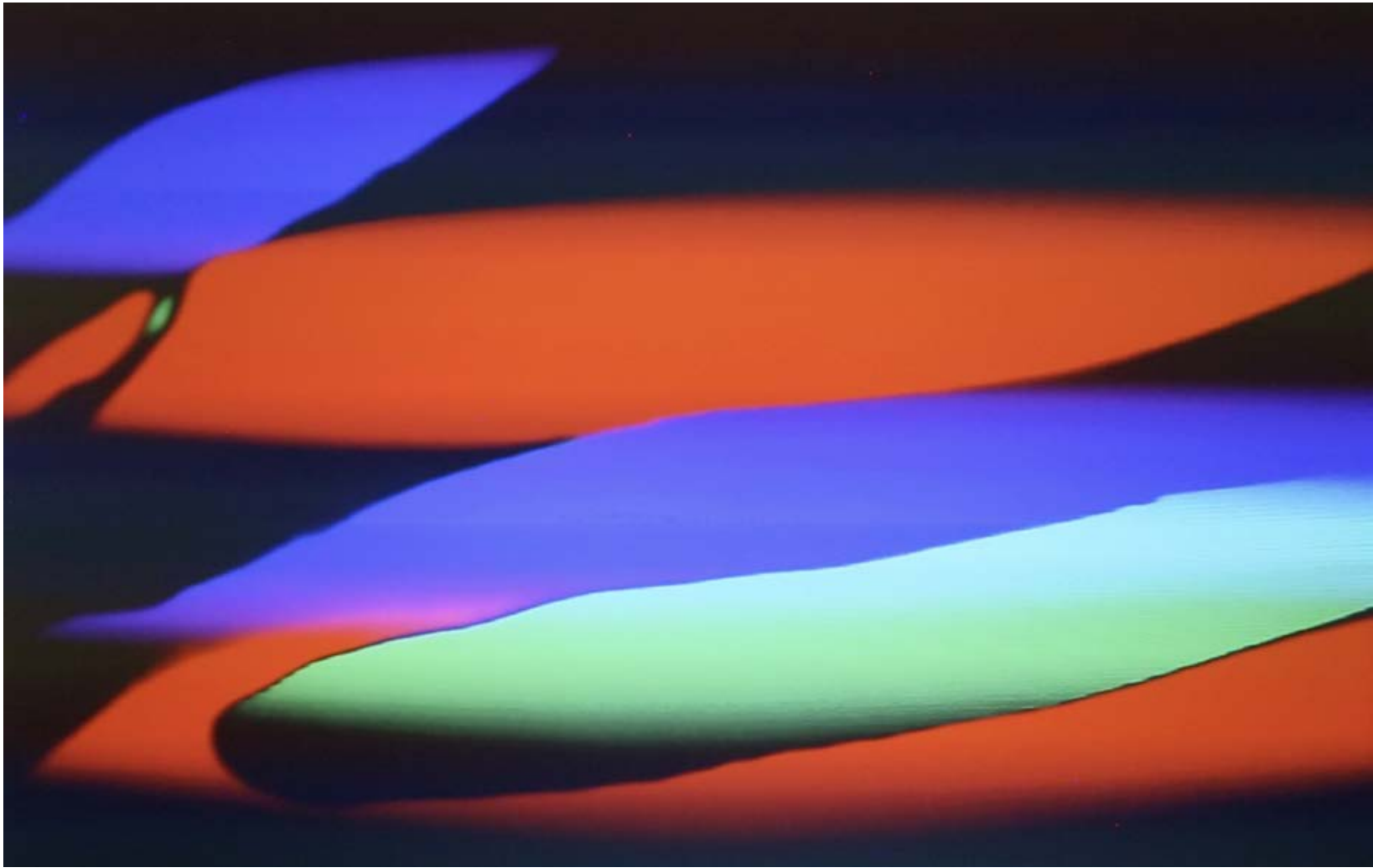
*People.*People are the most important aspect in project conception. Our design exists in the intimate understanding of habits, culture and experience, then translated into built architecture. We believe in singularities; each person carries a different rhythm, pulse, and frequency. Through space, Cité Arquitetura establishes links between people, binding them together through this diversity and individuality. These layers are carefully put together into meaningful and sensible projects.

Location. The location is, as people are, unique. It´s physical characteristics intertwine with conceptual significance. From the interpretation of such aspects, materials are chosen as meaningful elements referring to regional identity, societies, and the memory of those who built before and those who are still to build.

To Read: Constantly reading and interpreting the city and site, aiming to extract the useful sensations, information and meanings.

To Transform: Experience grows into knowledge; abstract ideas become architectural thinking.

To Give Back: Thoughts are deciphered and become space to, once more, be read, transformed and given back to people and site.

These are the thoughts we would like to contemplate about Time, Space, and Existence. The space produced for this exhibition symbolizes our creative process, unfolded in carefully chosen materials. The use of Brazilian quartzite: unique pieces put together to form a set of multiple of colors and shapes. The organic cotton and ecological fabrics: reflecting nature in art, speak of the potential of transformation inherent of the Brazilian people. The embroidery: stands for social commitment by showing and acclaiming the delicate needlework of Brazilian women who overcome daily challenges.

The mirror: those who observe and see themselves as part of the intervention can translate their role, joining fragments and accessing the intervention in its whole. Finally, the *heart* is at the core. It represents people through passion. The heart reflects the soul of Cité, our passion, our *beating heart*:

Quando bato sozinho,
há no ritmo descompasso.
Monótono, sem um trilho,
falta guia, perco o passo.

O vazio como eco,
amplifica essa ausência.
O que será esse marco?
Quem constrói a cadência?

Escuto longe batidas.
Várias, desalinhadas,
*   perdidas.*
No outro, um apoio,
*   o recomeço.*
É assim que dentro
*   reconheço:*

Como coração,
sozinho nada resta,
Com várias batidas,
formo uma orquestra.

Juntos somos música,
não uma parte.
Só com o coletivo,
que construo minha Arte.

Alone, there´s no rhythm,
I´m beating avulse,
Humdrum, no guide,
I am lost. I´ve no pulse.

The void, like an echo,
Screams out the absence,
What is this mark?
What beats as my
*   guidance?*

I hear beats from a far,
Unpaced, no rhythm,
But, a chance to restart,
Is no longer hidden.

I will never get far,
Me, a lonely heart,
But adding more beats,
Of a song, I'll take part.

Together we play,
The music can start!
Because only as a whole,
Can we all become Art.

Coburg University of Applied Sciences and Arts
School of Design, Student Collective at35

The poetry of Venetian rooftop landscapes.

Wooden pavilion structures on the rooftops of the lagoon city offer the city dwellers the only private outdoor space and refuge from their usually cramped townhouses. During the summer months, as Venice residents face the full effect of the midday heat, an altana in a breeze and with its light canopy shade provides a pleasant resting place. Its construction principles have stood the test of time, yet its functional and visual potential has not been fully exhausted. In line with the current climate and resilience challenge, this issue was further explored.

The project was inspired by the traditional typology of the altana, a timeless architectural element reflecting the continuity of Venice's cultural identity. The possibilities of its existence in the future were questioned and subjected to contemporary reimagination. As a result, a wooden structure with detailed connections and fitted with a sculptural mesh creates a visual sensation on the roof terrace of the Palazzo Mora during the Time Space Existence 2023 exhibition. In this way, the original motif acquires new radiance and becomes a luminous feature in the Venetian old town roof landscape at night.

Contemporary architectural discourse related to sustainability and climate change often sees wood as an everlasting resource. As a renewable and favored substitute material, it is in greater demand than ever, and not exclusively in the building industry. Yet, looking at Europe, we are forced to acknowledge that our forest stock can no longer meet the market-driven demand and, especially overcome the issues of the climate crisis. Direct effects on the forests, such as extensive deforestation, droughts, or parasites, cause environmental damage. Other factors such as gas emissions due to long transport distances during export further adversely affect the environment.

Participation in the *Time Space Existence* 2021 exhibition left us with unused 6x6 cm wooden beams. Following the notion of sufficiency, they were used thoughtfully, demonstrating a considerate use of wood as a resource, and practicing a simple construction method. Wooden side to side joints were secured with bolts. The result is a fine play of horizontal, vertical, or diagonal elements, depending on the load distribution. The canopy is designed from reused materials. A closer look reveals that it originates from packaging products of the firewood industry and becomes an artistic sculptural element through the illuminated mesh weaving. The finely joined framework and the attached mesh thus reflect a link to Venetian craftsmanship.

At first glance, the installation mirrors the local identity and formally integrates into the Venetian context through the reference of the altana. Nevertheless, it stands out and arouses the viewer's curiosity with its unconventional reinterpretation of the traditional theme. Underneath the canopy, a peaceful space of contemplation is created, it is permeable to air and provides shade due to its meshing. These sensations create a noticeable ambiguity between the external-contextual, and internal – environmental, but as well phenomenological perception of the installation. With empathy and care for the residents of Venice who face the issue of resilience, the project proposes a design adapted to their spatial needs, as we imagine them.
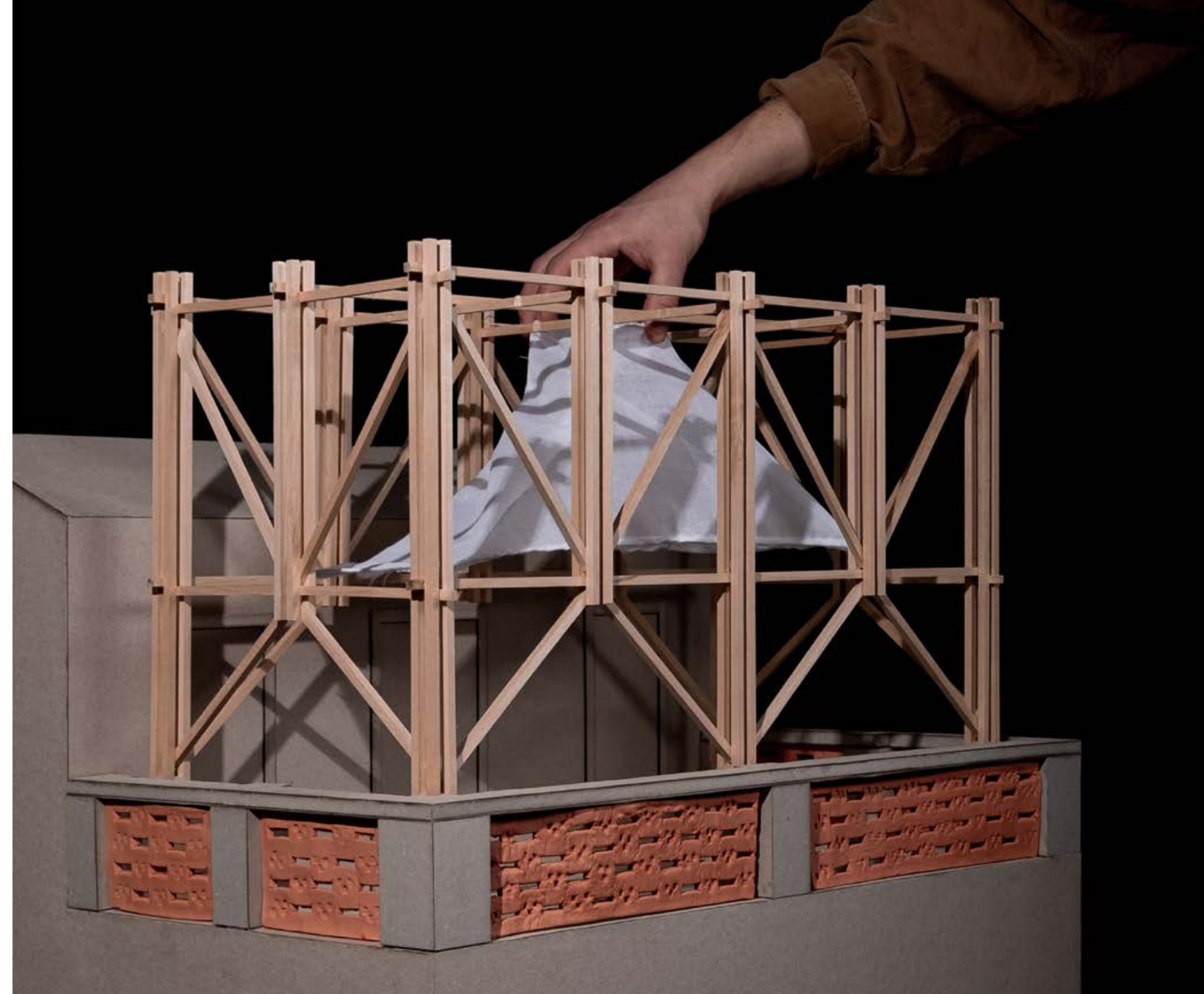
COEXIST
Anastasiya Konopitskaya and Drew Oberholtzer
in collaboration with LIRIO Design House

We are facing unprecedented crises around the world – climate change, an increase in natural disasters, food insecurity, rising health concerns, and mass extinction, – a reaction to an unbridled economy driven by extraction largely created by our own design. The construction industry is one of the greatest contributors to the climate and health problems. One may view its current practice as a one-way street, a perpetual cycle of limited resource extraction and carbon-intensive manufacturing, a dangerous path toward irreversible environmental damage and human health impact.

But there is another way, a new path for the architect, both as a designer and manufacturer of the next generation of building materials, with a large potential for a greater impact. Now is the time when the design community has an opportunity to lead, as we collectively look at ways to reverse the impact of climate change through regenerative design, fundamentally changing how we build as a global society and take on the biggest threat to our existence.

This exhibit will attempt to explore a vision of a community, constructed of carbon-sequestering and regenerative materials that are sourced from local farms and transformed into climate-resilient buildings. They are energy efficient, carbon-negative, and healthy, built through a circular regional economy, based on a local bio-composite supply chain from the fields to the final-end-user. To illustrate this idea, the exhibit will take the viewer from the farm, through the manufacturing process of various products, into the 21st century regenerative city, designed and built to heal the world, not the other way around.

At the core of this idea lies hemp, a fast-growing, carbon-capturing regenerative raw material that can be cultivated by farmers all over the world and used to create almost any product that we use daily. From building materials to furniture, food to bio-plastics, this plant's use is versatile. Combined with its superior properties, it has a potential of transforming millions of lives now and have a massive impact on our future.

And much like typical conventional construction industry, the furniture industry produces a detrimental amount of non-biodegradable waste each year. By implementing hemp more widely throughout the economy, entire industries will be able to eliminate waste streams and ensure environmental sustainability for generations to come. The new line of hempcrete furniture by LIRIO Design House seeks to create objects that can be returned to the earth the same way they were extracted so that the next person may reuse those same materials endlessly without worry of adulteration or toxicity.

As COEXIST is a full-service architecture studio and a bio-composite product manufacturer, it believes in building resilient structures and self-reliant communities and is committed to combatting climate change through design. It operates an organic regenerative farm that serves as the company's lab for research and development in building products, agronomy, and material science for bio-composites. The team at COEXIST developed and is utilizing a real-life circular economy model that can be applied across cultures all over the world, as an accessible and affordable system.

As the need for change is becoming more urgent, there has never been a better time than now to try and create the world that we want to live in tomorrow, and this exhibit will propose one possible way to do so.

Columbia University
Graduate School of Architecture, Planning & Preservation

The technology of building materials, form and operating systems is advancing to contribute an improved environmental sustainability of built fabric. However, these materials, spatial formats, and mechanical features are visually unfamiliar and result in very different spatial experiences. For those who inhabit these new shelters, while intending a commitment to carbon reduction, they can have a startling fear or dislike of these unprecedented spatial experiences such as reduced ceiling heights, low-level lighting, reduced thermal comfort and an increase in space-sharing. These needed adjustments can override their decision to utilize these technological advances for their living environments.

Additionally, architects and urban designers themselves are often keen to propose advanced projects of environmental sustainability but themselves are unfamiliar with the resulting spatial experience. They are then unable to convincingly present credible and enticing visions of the improved outcomes resulting from this complex technology to intended users and the providers of necessary production capital. This exhibition will show the possibilities of using Web3 environments for the design exploration, engagement of potential inhabitants, and the validation of the outcomes when implementing the new building technologies and materials for improved environmental sustainability.

SEEING GREEN: Using Web3 Technology for the development and stewardship of an Environmentally Sustainable Built Environment is an immersive spatial experience that is constructed virtually using Web3 technology, specifically Midjourney AI. A continuous loop video projection of a created spatial experience created by students participating in the project, with avatars established for audience response and feedback.

The experience has been created by students of Columbia University's Graduate School of Architecture, Planning & Preservation, from a variety of disciplines including architecture, urban planning and real estate development. These included: Chao Qun Zhang, Sarah Abdallah, Aroosa Ajani, Michelle Chen, Tung Yi Lam and Antonia Salisbury. The exercise was led by Adjunct Assistant Professor James Orlando and the Holliday Associate Professor Patrice Derrington.

To arrive at the presented virtual experience, the students investigated groundbreaking technologies and materials for the development and stewardship of a more sustainable built fabric in urban areas. These ideas included the greening of highways, the construction of walls of live algae, the 3-d printing of built form, and roof tiling that acts as solar panels.
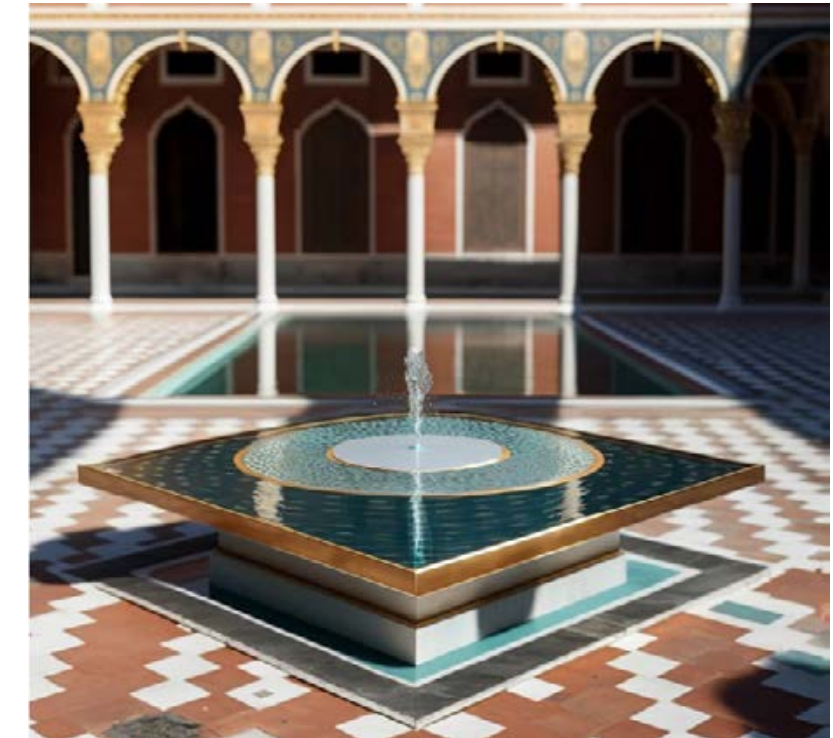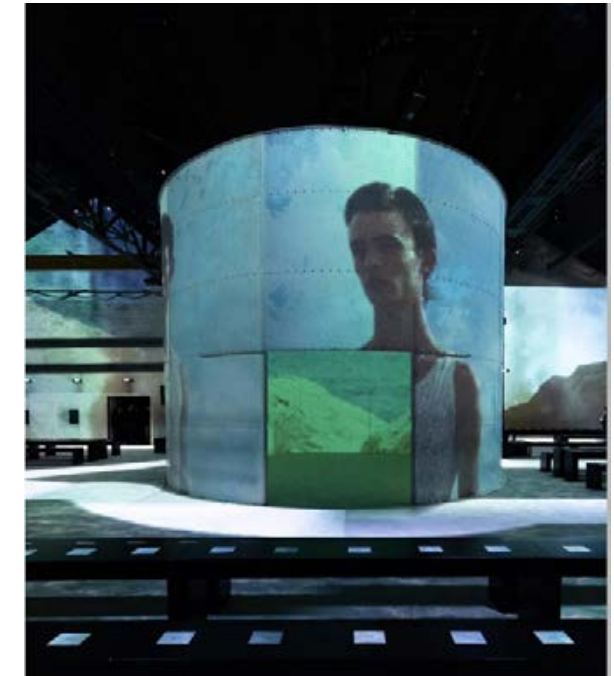
Contreras Earl Architecture (CEA)

CEA will feature a collection of forward-thinking and sustainable projects that seamlessly aligns with the theme of *Time Space Existence*. Skyportz, Australia's first air taxi vertiport, is one of the works on display. It aims to revolutionise urban air transportation by providing passengers with a seamless and efficient vertical takeoff and landing service. The terminal is built on an efficient modular design made of recyclable aluminium. The system of prefabricated, lightweight components can be packed into shipping containers and assembled on-site. This enables the configuration to be adapted and customised for a variety of locations and sizes, including land, buildings, and even barges, as well as scaled for mass production.

The Living Coral Biobank in Port Douglas, Queensland, Australia will be a *coral ark* containing all 800 species of hard coral from around the world, along with their algal and bacterial symbionts. This purpose-designed humanity-centred facility aims to secure the biodiversity and long-term survival of the Great Barrier Reef and coral reefs worldwide. This facility aims to secure the biodiversity and long-term survival of the Great Barrier Reef and coral reefs worldwide. CEA and collaborators are working with the UN Sustainable Development Goals that holistically prescribe best practices for optimal social and environmental outcomes.

The 272 Hedges Avenue Pedestal, situated in a prime beachfront location, features a bold and striking architectural style that commands attention. The façade is a stainless-steel monocoque structure manufactured by the masters of steel construction at CIG. It is original and complex in its conception, design and execution. The external 6-millimetre stainless-steel skin comprising 120 unique panels supports the loads and enables the structure to be a singular, stand-alone sculpture encasing the two-storey base. The subtle curving exterior façade resembles the crests and erosion effect of wind on the sand while its interior creates the allusion of a rock cave naturally eroded by the ocean. Upon arrival, residents are greeted by a grand foyer of sweeping voids and illuminated arches. The distinctive semi-reflective stainless-steel façade creates a transition to the interior arch-vault ceilings in a concrete finish which will have the appearance of carved solid rock.

The Lanes Residences offer a seamless blend of modern design and natural surroundings. The building structure is expressed in its façade, with an exoskeleton of mitred vertical limbs in glass-reinforced concrete, rising up to cradle each of the four towers and partially shading their faceted glass walls. It occupies a prominent corner location that is artfully used to mediate between high-rise development along the coastal fringe and domestically scaled interior suburbs.

Finally, the Jefferson Lane project will showcase sustainable beachfront living. The refined shape and form of the building are the result of responsiveness to the parameters mentioned. The resultant building allows for an interesting tension between solidity and transparency allowing for enclosure and openness from within protecting from unfavourable conditions and opening and embracing the favourable breezes and beautiful views of the beach.

The theme of the exhibition, *Time Space Existence*, provides a venue for showcasing innovative architectural designs and construction techniques that prioritise sustainable and environmentally conscious practices.

Croatia Insurance & Bruketa&Žinic&Grey

AI Anxiety Meter by Croatia Insurance consists of digital citylights equipped with AI-based software and built-in cameras and was used to test the anxiety levels of passers-by. The most stressed respondents were referred to a free preventive medical check-up.

Over the past years, Croats have had some of the most stressful years. The country was struck by earthquakes and ranked 8th in the world in Covid-19 death rate per capita. Furthermore, the ongoing conflict in Ukraine looms too close to a nation that suffered the most gruesome wartime atrocities in recent history. All the above led to an alarming rise in mental health disruptions.

Research on mental health in Croatia during the pandemic and after the earthquakes suggests that the population has become more anxious. In particular, 50% of Croats have noticeable anxiety levels and 20% deal with severe or highly severe anxiety, yet this issue remains on the margins.

That is why Bruketa&Zinic&Grey, Croatia osiguranje and Go2Digital designed an *AI Anxiety Meter* – digital citylights to measure anxiety levels of passers-by. The *AI Anxiety Meter* aimed to expose the hazards of long-term emotional stress and the consequences of neglecting mental health.

The idea was to correlate the emotional state with the level of health risk people were exposed to and to offer a solution in real-time. The *AI Anxiety Meter* uses Google face mesh and automatic facial emotion recognition (FER) technology, along with other algorithms for facial expression analysis, to identify a combination of 8 emotions classified as anxiousness.

After giving consent, the respondents would stand and wait 5 seconds in front of the screen for the application to screen their face and show them their level of concern. The most stressed respondents were referred to a free preventive health check-up, whereas those with lower stress levels were informed about the importance of maintaining mental health. 8% of the urban population was tested and the number of preventive check-ups increased by 31,22%.
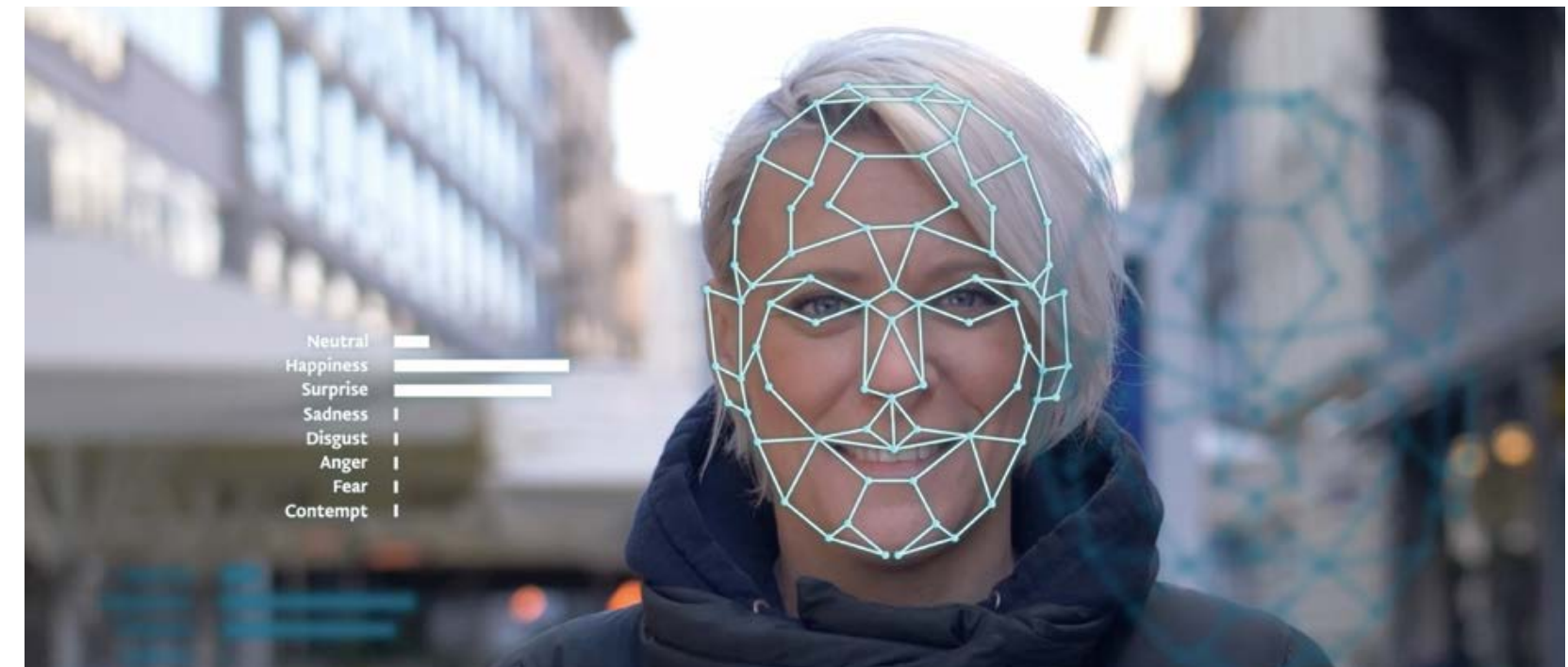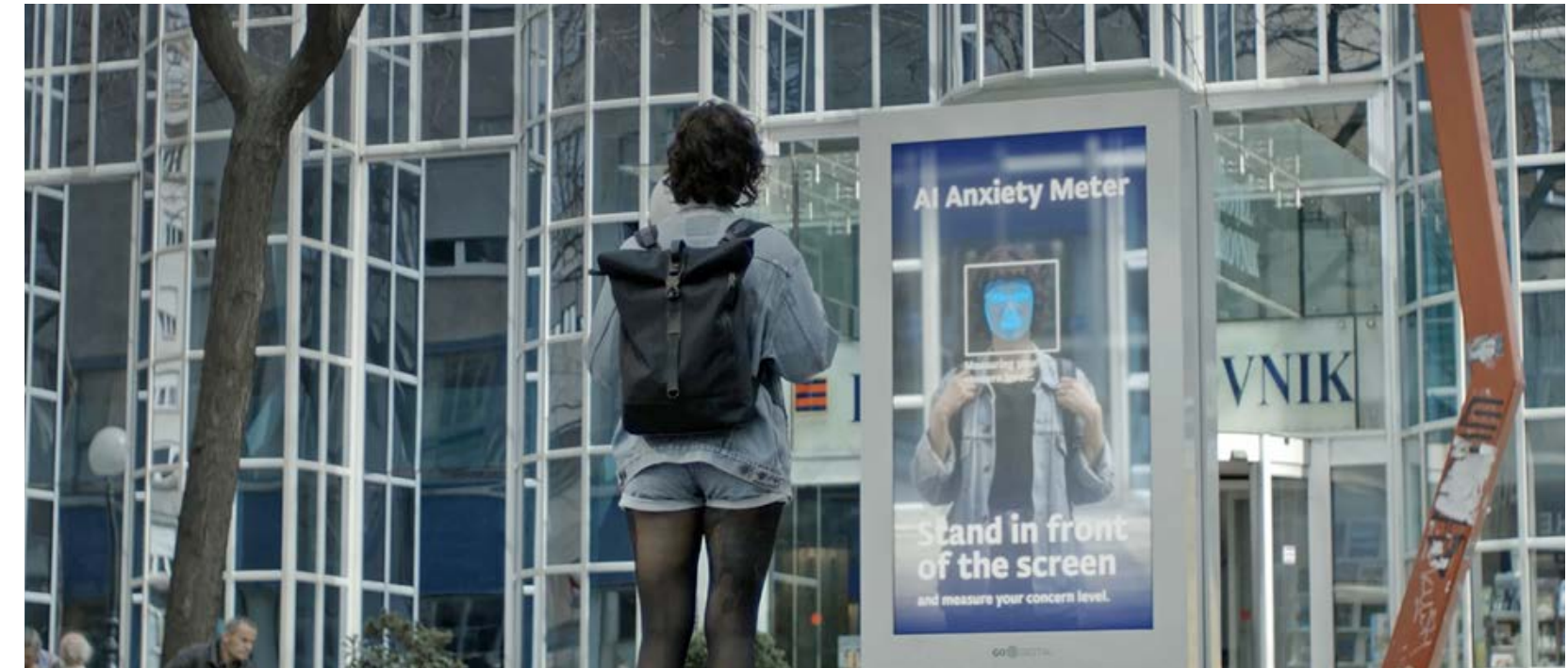
Curtis Patterson

The creation and presence of art in space and through time has been a continuously derived process throughout the existence of mankind. Over the span of artist Curtis Patterson's career, he has developed multiple pathways to successfully fuse antiquity and modernity in the design of his work. Patterson finds solitude and enjoyment with manipulating and displacing space through the development of form and sculpture. He is particularly fascinated with the potential for sculpture to interact with surrounding natural and architectural environments. For the artist, amidst the multitude of properties of sculpture, he finds its ability to penetrate space and simultaneously create intimate environments most intriguing. By intent, Patterson composes and produces sculptures that are 'invitational' in nature as well as by design. He has a bias for his audiences to both visually and physically observe, absorb and engage with his work.

In concert with other bodies of Patterson's work, *Hymn to Freedom* evokes an indelible narrative that is commemorative of individuals who have distinguished themselves through remarkable contributions in the realms of the arts, athletics and calls for humanitarian equality and justice. Through the evolution of his oeuvre, Patterson establishes an inseparable conduit with his reflections of the past.

Standing at approximately 2.75m (9ft) in height, *Hymn to Freedom* was designed in honor of three individuals. The fabricated stainless-steel sculpture assumes its name from the 1962 song by Oscar Peterson, *Hymn to Freedom*, and honors the legendary virtuosic jazz pianist and song writer with its rhythmic design and lustrous edges.

The sculpture also pays tribute to two Olympians, Tommie Smith and John Carlos, who won a gold and bronze medal, respectively, in the 1968 Olympic games in Mexico City. During the games the two athletes made an iconic stand with their fists risen and heads humbly bowed during their podium ceremony as an opposition signaling the need to overcome the civil injustices of the time. The intrepid gesture was also an empowering and salient moment for the, then 23-year-old, artist.

For Patterson, the transition in cadence of the *Hymn to Freedom* jazz song moves from an overture of a traditional gospel-like hymn and eventually veers away to an unexpected rhythmic interlude. The artist views the unanticipated action of the athletes on the podium as a parallel to the change in cadence in Oscar Peterson's song. The context of the two primary supporting elements of the piece embraces the mutual reliance of Smith and Carlos at the games. It not only celebrates the two athletes, but also undergirds the importance of their unity, as they made their courageous and poignant stand. The most linear and topmost element of the sculpture emulates an upstretched arm with raised fist. The randomly brushed and polished surfaces of the sculpture afford diffuse and specular reflection, respectively, yielding both contrast and homogeneity with the surrounding environment.

Daniel Stauch

A reset is the restoration of a defined initial state. All back to zero. Re-starting.

For the first time, the major works of the *Re-Set* series by the renowned (architectural) photographer and artist Daniel Stauch are being shown together in a single exhibition. At the centre of this unprecedented work are squares without people: Times Square, Place Charles de Gaulle with Arc de Triomphe or Piazza San Marco, as we have never seen them before – uncrowded, surreal, thereby almost magical and set in a new relationship with the city, space as well as human existence.

Thanks to a specially developed technique that allows up to 1,500 individual shots to be superimposed and combined into a new, barren work of art, these compositions are a fusion of craftsmanship and passion in modern art.

The idea for this photographic project was born in 2018 and can now – after the Covid-19 pandemic – unfold its full impact again. For the work is not intended to depict the then hopefully unique state of exception in which unlively public places became part of the new everyday life, but rather to provide unseen perspectives on the world's busiest places. Architectural (urban) structures are thus made clearly legible and a state is shown that can become the ever new set for human life. All back to zero. Re-starting.

Times Square
Daniel Stauch, 2020

Arc de Triomphe
Daniel Stauch, 2021

Schlossplatz
Daniel Stauch, 2017

Davor Senečić & Ivan Marušić

Sketches '90 - Vienna
Time: After 30 Years The Houses are old And The Skeches still Current.
Space: Solitude and Freedom of Mind. Time stops; The Line has no End.
Existence: Reflections; Imaginations Hands. Are Transformation or Symbiosis. Concrete and Simple.

In the process of architectural design today, manual sketching is almost never done. Computers and 3D simulation *sketch* the new architecture. The pen has been replaced by a computer mouse. But is that entirely true? Our answer to this is the presentation of architectural and urban sketches (often multiple attempts to find the best solution): Zagreb, Vienna, Pula, Karlovy Vary, Sarajevo, Mistelbach, Linz, Potsdam... Ode and credit to pen, paper and hand. Along with the original drawings we are showing a video interpretation of these works, presented as ambient audio-visual presentation.

Davor Senečić. Faculty of Architecture and Urbanism in Sarajevo (1979) / Associate at the Institute of Architecture, Urbanism and Spatial Planning in Sarajevo (1979 - 1988) / Assistant at the Department of Public Building Design at the Faculty of Architecture and Urbanism in Sarajevo (1985 - 1988) .) / Specialist study in Helsinki (mentor: Bengt Lundsten, 1984) / Doctoral study in Vienna - dissertation: *From the temporary to the architecture of the information age* (mentors: Prof. Volker Giencke, Prof. Helmuth Richter, 1998). / Vienna,

since 1987 / Zagreb, S.E.N.D. d.o.o., since 1998. Grand Prix – Collegium Artisticum Sarajevo (1990.) Books: SEND arch I (2002) / SEND arch II (2007) / SEND arch III (2014) / Sex, skiing and architecture (2014) / Sketches - Architecture: 90 / Wien; Text: Processes. The largest project: Corporate architecture for the Telekom Austria group / A1 (Vipnet (Croatia), Simobil (Slovenia), Mobilkom (Austria); 1999 - 2019. Exhibitions: Presentation of the book SEND arch I and exhibition, Gliptoteka, Zagreb (2002) / Presentation of the book SEND arch II and exhibition, Looshaus, Michaelerplatz, Vienna (2009) / Exhibition of sketches, Outline house of architecture, Zagreb (2019) / Exhibition sketches, Multimedia Center, Rovinj, Istria (2021)

Ivan Marušić Klif is a multimedia artist who works in the field of kinetic, light and video installations, sound, music and performance. He collaborates widely with other artists, primarily in theatre productions, dance performances and musicians working in audio-visual cross disciplinary artforms. From his early light installations of the 90's to the recent software-controlled installations he has consistently explored and experimented with the possibilities of media, both new and obsolete, through the use of sound, light or video image, continually constructing increasingly complex immersive technologically mediated environments. He is the executive director of Vector Hack festival.

Delft University of Technology
Faculty of Architecture & the Built Environment
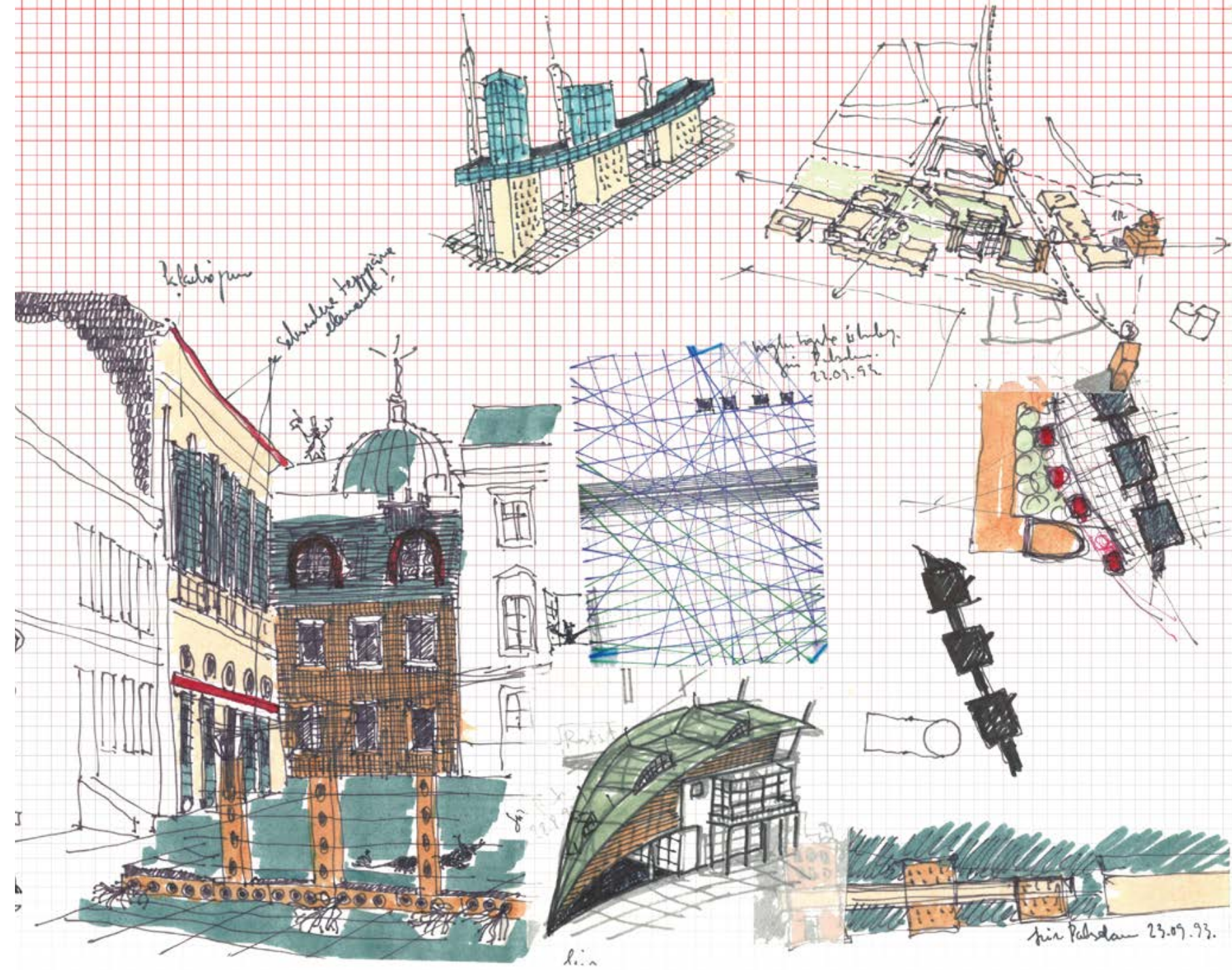
BK Africa: a Laboratory of the Future? takes Africa to the frontline of speculation(s) on the future. The exhibition brings together a wide array of recent projects, research, and other initiatives that address the current rapid transformation of the African built environment. The work was developed by students, faculty, and partners in Africa of the Faculty of Architecture and the Built Environment (Delft University of Technology).

BK Africa: a Laboratory of the Future? aims to include as many voices as possible beyond popular design discourse, and to veer away from common representations of Africa as a homogenous space - afflicted by deprivation, conflict, drought, and famine of similar amplitudes- almost as if it were a singular country. On the contrary, the exhibition's aspiration is to highlight an often-forgotten reality: that Africa is a vast continent - a complex collection of diverse biomes, territories, cultures, societies, and built environments.

Various supports (physical models, photographs, films, or written manifestos) unfold alternative cartographies and new narratives on the memories, the history, the stories, the resources, and the landscapes of some of Africa's 54 nations.

The selection of works ranges: from revealing the hidden or neglected memory of places to revising the colonial implications of Modernism; proposing affordable and inclusive housing solutions in the middle of the urgency; envisaging urban accommodation for the fastest growing continent on earth; renewing existing city fabrics forensically; pursuing community-making in rural and urban areas based on participatory processes; addressing the climate catastrophe using landscape as infrastructure; or acknowledging the sheer environmental, social, political and cultural implications of immense new infrastructures and settlements as fundamentally flawed urbanistic propositions...

BK Africa: a Laboratory of the Future? is a (modest) invitation to deviate from presupposed validities of western neoliberal models of settlement as the requisite points of departure for the imagination and production of new urban forms and patterns of daily life.

From too little to too much
Mia Barnard, 2021
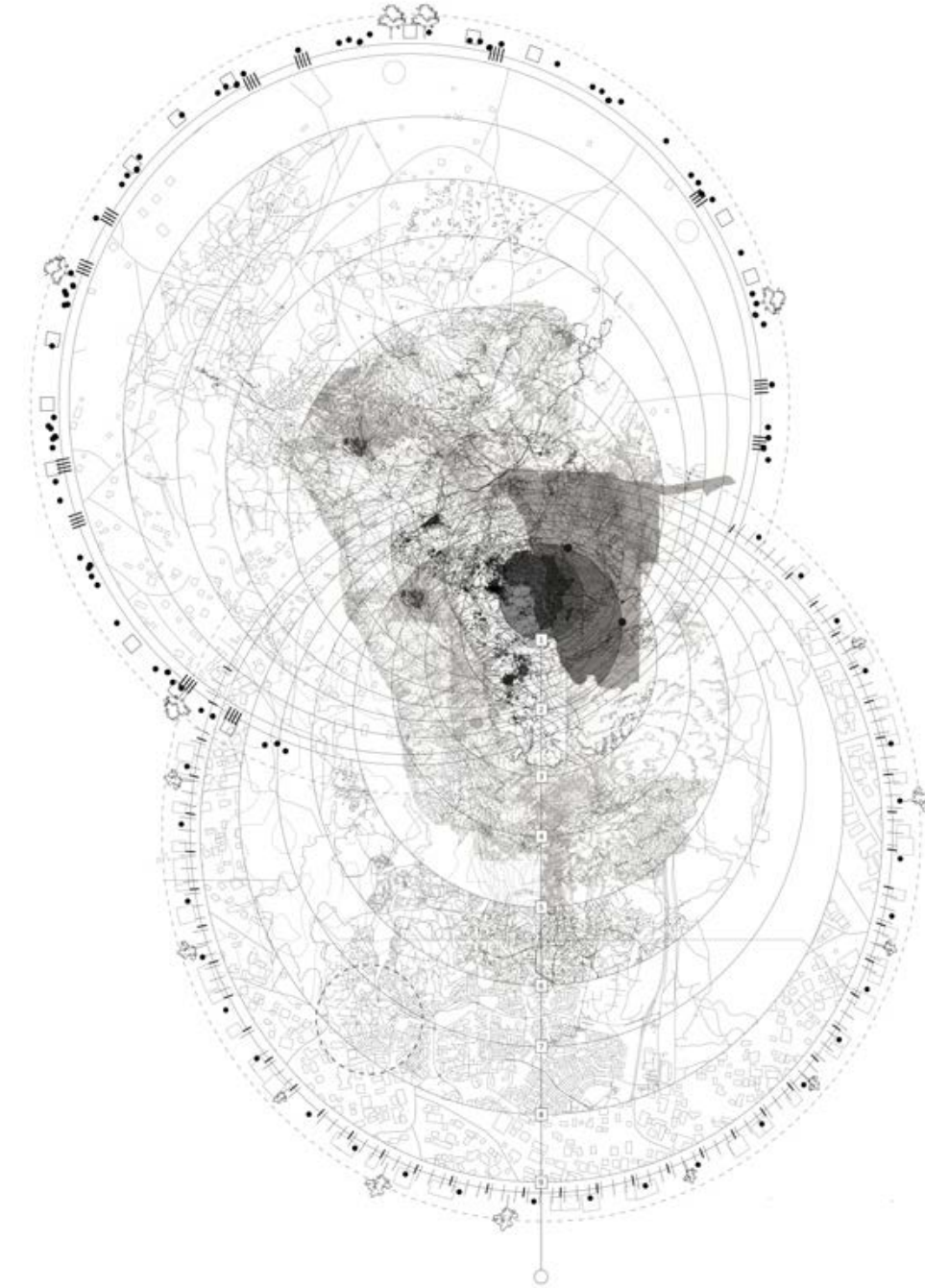
Deng Xiao
Chinman Ngai

The Mobile Bamboo Pavilion is a small mobile architectural installation designed by Chinman Ngai in collaboration with artist Deng Xiao.

This work uses bamboo and stainless steel reflective materials as media, which are combined in an organic way using a molecular structure. The exterior square and interior circular structural design blends the traditional Chinese architectural concept of *round heaven, square earth* (天圆地方). While exploring how architecture can incorporate traditional materials, the designers also examine how the inherent cultural significance of

Chinese materials can be better integrated into contemporary life. The project aims to view design aesthetics, nature, the spiritual world, and reality as an organic whole, creatively bringing an open-ended experience to the audience.

The Mobile Bamboo Pavilion is an exploration of sustainable construction for future possibilities. Using life experience and field as the basic experience, this installation also investigate the flexibility of material combinations and functional conversions to achieve the transformation and growth of architecture.
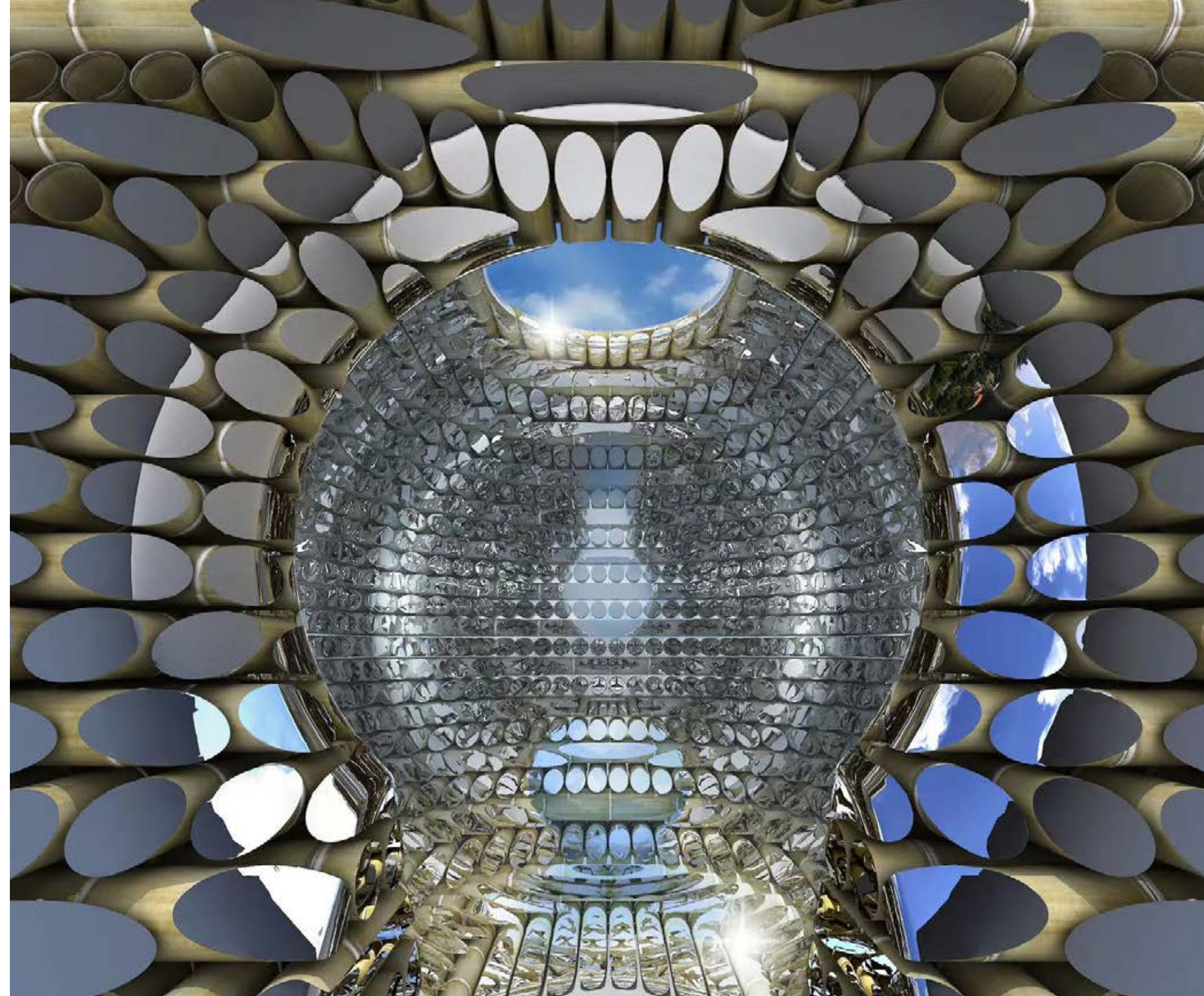
Eduard Locota Sculpture & Design Studio

Eduard Locota is a Romanian artist born in 1985, that represents the second generation of artists in the family. His formal training began at Timisoara School of Arts / Sculpture department, but also have a bachelor's degree in Cybernetics. Working from a young age with digital sculpting software, he has incorporated his digital practices into physical works of art and design. The once classical notions of sculpture have evolved exponentially in the last century. The artist is always trying to push the boundaries of materials and technology to facilitate the creations of new works that were impossible to make not long ago.

His latest body of work coexist at the border of physical and digital. For this Architecture Biennale, Locota has prepared a trio of sculptures, consisting of digital scans of actual people, one being himself. 3D scans that were afterwards brought back from the digital into the physical, with the aid of large 3d sand printers. Each person is portrayed in accordance to a certain classic sculpture, chosen carefully for its pose and meaning, but transformed to fit the current socio-political context that we are currently living. The group of artworks are focused on the topic of conflict, isolation and war, with protagonists posing sometimes in a subversive and defiant way, either resting nonchalant on or near a deadly missile, twisting the reality and portraying war through a different lens.

You may have observed by now that, conceptually, the artist has exploited the idea of slicing and extracting only the essential part of an artwork, as a way of trying to present the viewer only with what matters most, in a somehow minimalistic and reductive way, like an x-rays or body scan.

The work *Pressure* represents a person forced to fit into a smaller than humanly possible enclosed box. Claustrophobic, enclosed with no opening in sight, no doors, no handles and no keyhole. He is convicted to exist into a space smaller that the volume of his body, into an enclosed space filled with liquid. The man is not only crouching, but subdued, broken, embracing himself, with no freedom in sight. Is it a reference of imprisonment, the lack of liberty or just meant to introspection?

Pressure plays in parallel, a game of reference between centuries of art. The artworks has its classical counterpart made by Michelangelo *Crouching boy,* an unfinished sculpture by the master artist made for the Medici family. An influential family ravaged by conflict and war.

On the other hand, for the work *Ares*, the artist has reimagined the Ludovisi Ares, which is the depiction of the god of war, originally portrayed in a relaxed sitting position, holding his shield and weapon.

For its contemporary counter-part, the sculpture is an actual 3d scan of a man, sitting similarly to the original relaxed Ares pose, with his ancient shield being replaced by a modern gigantic rocket. The artwork is a reflection of the current state of the world, highlighting topics of war and conflict, where new technology of killing dominated the battlefield.

The awakening represent the last work of the trio, and is the portraying the scene of the wakening of a young female, nonchalant besides a rocket, a modern weapon of mass destruction. The pose is actually a study after the work made by Laurent-Honoré Marqueste in his sculpture *Galatea* recontextualized for our current times.

The Awakening, Ares, Pressure
Eduard Locota, 2023

Eindhoven University of Technology
Cristina Nan & Mattia Zucco

Terra Spectra. The 3D printed clay sculpture exhibits the possibilities of computational design, 3D printing technology and digital craftsmanship in the fields of architecture, design and art. The intricate geometry and surface expression of the sculpture create a transformative visual effect that is sure to capture the attention of the visitors.

The design is a collaboration between Assistant Professor Cristina Nan, Chair of Architectural Design and Engineering of the a University of Technology and Mattia Zucco, architect and computational specialist. Both collaborators, with a background in robotic fabrication, view design and manufacturing as a continuous process. Clay printing necessitates the simultaneous correlation of material properties such as viscosity and humidity with technical parameters as extrusion rates, material flow and computational depositing strategies. Printing with clay contains an element of unpredictability, as the material in its semi-fluid and unfired state, is heavily sensitive to climatic factors such as room temperature and humidity. Gravity is used as a shaping force, as unsupported layers will be subject to sagging, generating material expressions which cannot be fully anticipated. The interaction between computational parameters, the robot and material realities curate and largely dictate the process of fabrication. The technical rationalities and our stylistic ambitions are reconciled via the material potential of clay. A particular focus is set on reinvestigating architectural form. Terra Spectra explores the aesthetic expression of clay via computational means, moving beyond simple structural and constructive constraints. We see our series of 3D printed proto-structures as explorations of the tectonic qualities of clay through geometry, surface patterning and their interaction with light.

When placed in a well-lit area, Terra Spectra casts complex shadows that enhance the beauty of the piece itself as well as the perception of the space surrounding it. The interplay of light and shadow create a sense of movement and fluidity that draw the viewer in. The complexity of the surface texture adds an extra sense of depth and transforms its spatial perception.

The delicate and intricate clay strands that make up Terra Spectra would be impossible to create by hand. The manufacturing necessitates an in-depth understanding of and sensitivity towards geometry, material, computation and the robotic tool of fabrication. We view this combination of technical aptitude, material awareness and computational dexterity as an expression of digital craftsmanship. Terra Spectra is a vehicle to examine the production conditions of architecture through the juxtaposition of a traditional, low-tech material such as clay and high-tech means of robotic fabrication.

The use of 3D printing technology with clay highlights the importance of exploring its tectonic potential beyond the traditional use. We seek a radically different material expression of clay, ultimately examining its application on a larger scale for geometrically complex architectural components.

3D Clay Printed Series – Interwoven Clay
Photo: Bart van Overbeeke, 2022

Elisif Brandon

Elisif Brandon presents her artistic and commercial work in this exhibition. The photographic series *Exalted* shows us monumental spaces created by architects, spaces which are as magnificent as places in nature such as mountains and canyons. The person in each photo stands in for the photographer and how she herself feels awe and wonder in these constructed environments. The person is dwarfed yet comfortable in an overwhelming structure, and these photographs capture the connection of the human to the monumental scale.

With a keen eye Elisif engages in the play of lift and structure, channeling the architect's design mind to highlight spaces of excitement and wonder. This triangle of collaboration between her eye, the architect's intentions and the human's unconscious interaction with the structure ignites her passion and the consequent photo she creates from a single dynamic juxtaposition.

Elisif Photography works with people in the building industry who want to capture the beauty of their buildings in high quality images. She delivers interior and exterior photographs of beautiful color and clarity with exceptional customer service for a range of clients including architecture firms, construction companies, developers, and commercial real estate firms. Elisif is sought after for her eye for fine details and unique design elements.

A graduate pursuit in marine biology explains her observational skill set. Curiosity leads her eye, and photography became her way of capturing the world. From natural forms to skyscrapers, she seeks the energy of shape and the interplay of light. The Hancock Tower in Boston, a beautiful glass building designed by Henry Cobb, stunned her at first glance. From Cobb to Calatrava, Saarinen to I.M. Pei, the magical spaces architects create inspire her.

Her commercial work presents a range of interior and exterior spaces from offices to restaurants. Each photo is a bold, graphical statement, emphasizing angles and color, shapes and curves. Her photos of interiors are as exciting as her photos of exteriors, each capturing the essence of the design.

Calatrava's Oculus & Red Cube, NYC
Elisif Brandon, 2020 & 2007

Elpitha Tsoutsounakis
Field Studio Geontological Survey
University of Utah

Ochre is always in a state of becoming – becoming color, becoming blood. Ancient, stellar death becoming current, terrestrial life; geological memory becoming oracle and technology. Humans have evolved with Ochre: a polyphonic being threading iron though bodies, lands, cultures, and knowledge. A multivalent material combining common iron ancestor with oxygen, Ochre emerges in an endless number of geological and biological forms. Academic and community scholars around the globe think with Ochre from a variety of disciplines—asking how humans have evolved through their use of Ochre, what future Ochre brings as art and technology or how Ochre can remediate legacies of extraction. As designer, printer, and educator, Elpitha Tsoutsounakis is particularly interested in how Ochre can dismantle human/nonhuman and life/nonlife dualisms. How can we return to the material from our current abstraction and commodification of color? How can we relate to terrestrial beings beyond anonymous resource? How can Ochre reveal plural realities of time and place through erased or forgotten narratives?

The Field Studio Geontological Survey (FSGS) is a design research collective assembling and extending Ochre dimensions. FSGS was initiated in response to the United States Geological Survey (USGS) and its mediation of the human relationship to the more-than-human as anonymous matter. Terrestrial beings—biological and geological – surveyed by the USGS are translated into abstract value in the Mineral Data Resource System, a dystopian archive of mineral beings catalogued as *economic resource.* Alternatively, FSGS engages critical mapping of Ochre relations and narratives through design research and creative practice catalogued in an archive named Unknown Prospect.

This installation presents Ochre bodies assembled through field work during multiple visits to Temple Mountain in the San Rafael Swell, as well as their resulting pigments and swatches that have been generated in studio and community operations. This work is conducted in partnership with multiple colleagues, students, and the public. In addition to Nikki Bennett, research assistant and Vince Johnson, fabrication advisor, an ever-expanding list of FSGS interlocutors can be found at Unknownprospect.org.

Elpitha Tsoutsounakis is an assistant professor and founding faculty in the Division of Multi-disciplinary Design in the College of Architecture and Planning at the University of Utah. This installation of FSGS research, field studies, and community engagement is supported in part by the College of Architecture and Planning at the University of Utah, the Utah Division of Arts and Museums, Epicenter (Green River, UT) and Current Work (Salt Lake City).

Elyssa Sykes-Smith

Canopy of Thoughts is an ongoing climate psychology project that exists in iterative recreations in a variety of materials and locations, and cumulatively weaves together individual climate-disaster stories into a global narrative. It approaches the topic of environmental sustainability as a human rights issue and aims to highlight the impact of the global climate crisis on mental health. The 'Canopy of Thoughts' metaphor depicts a protagonist navigating an overwhelming haze of uncertainty, a suspended canopy of criss-crossing thoughts, emotions, and contextual factors.

Canopy of Thoughts (pilot study and film 2021), was designed, facilitated, and produced by Elyssa Sykes-Smith for her Master of Fine Arts thesis project at the Architectural Association School of Architecture in London. The project works towards illustrating the problem question: *How to define and measure experiences of dissociation through the metaphorical relationship of protagonist and narrative that utilises concept mapping techniques and sensory aspects to understand the role of embodiment in climate psychology?* A select group of participants impacted by the Australian bushfire season of 2019-2020, located in the region of the Shoalhaven in New South Wales, were invited to participate in the study. Participants completed a Climate Disaster History Survey, a facilitated concept mapping session, and a follow-up interview. The film *Canopy of Thoughts* 2021 presents a structured exploration of the data collected from the study, portrayed through an embodied performance, and overlayed with verbatim interview quotes and a symbolic narrative. At the current stage of analysis there appears to be evidence which suggests that dissociative states are experienced as a result of climate disasters alongside the predominant states of

grief and anxiety, and that the research tools devised in this study appear to be a positive form of engagement for participants that enable them to recollect, reflect, express, process and engage with their imagination in a structured format. In addition to this, another main finding is that the performative study followed by editing the film continues to be a fundamental way in which to process the findings from the pilot study. The latter finding also supports the problem question with regards to utilising embodied processes to engage with the complex material within climate psychology, both from the point of view of a researcher and audience participant.

Presented at Palazzo Mora as part of *Time Space Existence*, *Canopy of Thoughts* 2023 showcases how qualitative data can inform artwork. It translates the materials collated during the 2021 pilot study into an expressive reclaimed paper and timber installation that is visually and structurally integrated into the architecture of the exhibition space #3HK. Synthesising the poetic and the practical, the materials used to create this artwork have been salvaged from packaging used to transport the other participant's work and repurposed from Sykes-Smith's previous artwork. This iteration continues to function as a tool for research and engagement. It invites a new layer of interaction with the community in Venice, an opportunity for learning about geographically distant yet globally relevant climate-based disasters by sharing individual stories, presented through an intimate exhibition experience.

Esra Akcan
Exhibition Design: Roy Zhang

Open Architecture: Reflections on a Book on Migration is an exhibition that invites the audience into a scholar's world. Rather than showing archival documents or architects' drawings as in a curated exhibition on a historical topic, this display brings together original maps, oral histories and photographs that were produced along with the research and for the publication of the author's book on the topic. While the text and images juxtapose the perspectives of architects and residents who participated in the urban renewal of Berlin's war-torn Turkish neighborhood in the 1980s, an additional movie prepared after the book's release reflects on this urban renewal in relation to the aftermath of the February 6, 2023 earthquake in Turkey and post-disaster healing.

We live in the age of migrations due to political turmoil, climate displacement and inequalities produced by global capitalism. However, neither international laws nor nations are prepared to face up to this challenge in a way that secures migrants' human rights or human dignity. The quandaries of the nation-state as an international norm, and the current human rights regime that denies social and political rights to noncitizens invite us to reflect on border abolishment as a new platform of transnational engagement and cosmopolitan solidarity. The urban renewal in Berlin's immigrant neighborhood of Kreuzberg presents an important example to discuss the impacts of international migration on architecture and urbanism, as well as the relation between architecture and human rights under the current border systems. It was carried out by IBA-1984/87 – one of the most important architectural events of the 1980s, where major aesthetic and intellectual shifts of the period materialized as state-subsidized housing in the post-conflict city. In the context of the discriminatory housing laws and regulations instituted by the Berlin Senate, the Neubau team appointed two hundred international architectural firms to design 4,500 new apartments, while the Altbau team appointed hundred and forty architectural offices to renovate 5,000 existing apartments and support 700 self-help projects. The research exhibited here explores how architects responded with varying degrees of submission, negligence, irony or subversion to the housing regulations and anti-immigrant policies of the time. These included the *ban on entry and settlement* that prohibited additional migrant families to move into Kreuzberg, and the *desegregation regulation* that suggested that only ten percent of the residential units be rented to migrants all over West Berlin.

This research discusses Berlin's urban renewal by giving voice not only to architects and policy makers, but also to migrant habitants from Turkey. The movie additionally includes a personal reflection on healing from the recent earthquake, by building new connections between Germany and Turkey through the scholarly work and family experience of the author.

Esra Akcan asks what would have happened if the architectural profession was shaped by a new ethic of welcoming toward immigrants and a new transnational engagement for border abolishment. She calls it open architecture.
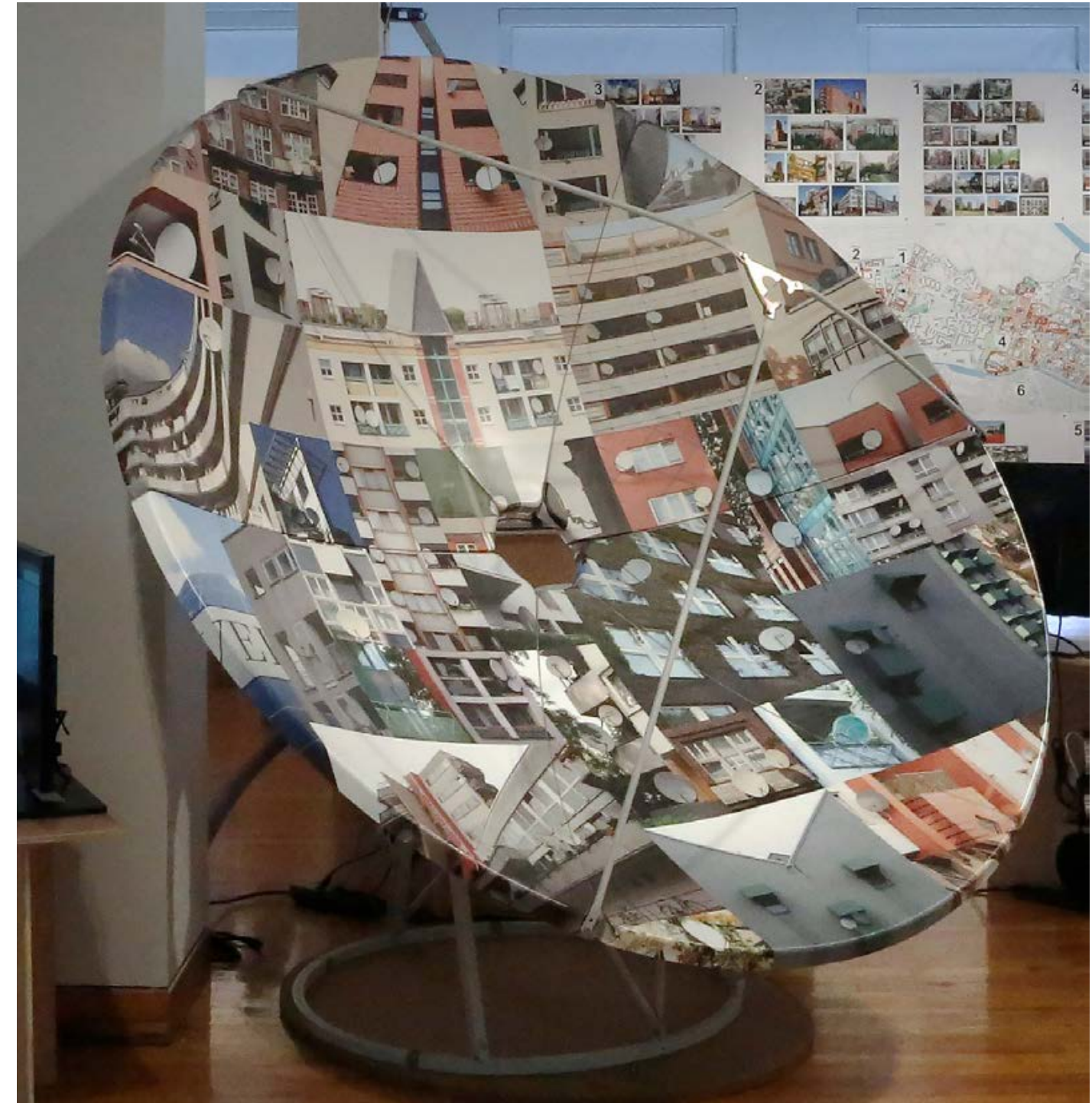
ETH Zurich & Supsi

Digital Building Technologies, ETH Zurich
Block Research Group, ETH Zurich
Istituto Scienze della Terra, Supsi

Micro-factory: On-site fabrication of structural parts with recycled materials. 3D printing allows fabricating virtually any conceivable design with a remarkably contained set of tools, and a wide variety of materials. Due to the vast advancements in additive manufacturing methods, highly automated fabrication systems can be made transportable and operated even in remote locations. This project explores how Geopolymer Binder Jetting, a method developed at ETH Zurich, can be used as an asset for *on-site prefabrication*.

The exhibition piece, a discrete assembly of a structurally optimized funicular floor, was realized with by-product material derived from stone extraction activities of a granite quarry in Ticino (Cava di Arzo). Thanks to the support of the owners of the quarry, we could install our printing setup directly inside the facility, next to the location where the waste material is stored.

The project provides a real-life demonstration of how the 3D printing of complex structural shapes can not only reduce the total consumption of construction material, but also support the use of local, recycled resources. Arguably, the whole design-to-fabrication workflow has never been so streamlined, nor accessible: affordable, desktop-sized devices can be easily operated and are already used by millions of people to print small batches of small-scale parts. The overarching aim of this research is to extend the same features to the scale of Architecture.

Fabrication: Geopolymer Binder Jetting (GeoBJT) is an innovative fabrication method developed at ETH Zurich and Supsi (Mendrisio). The combination of hardware and materials enables the 3D printing of large structural parts using recycled aggregates and an inorganic binding compound, namely a geopolymer binder. In its current implementation, the method allows fabricating parts using up to 80% of various recycled aggregates. The printed components are already suitable for construction, without the need of the additional coatings typically required for parts made using Binder Jetting. Finally, the parts are weather and fire-resistant, and can be used for load-bearing applications both outdoors and indoors.

Structural Design: The concept of a discrete, rib-stiffened funicular vaulted floor has been studied by the Block Research Group at ETH Zurich since 2010, and already displayed at the Venice Biennale in 2016. In a funicular floor, the geometry of the structure is designed to keep all the elements in compression under the action of the external loads. In this way, the compression-dominant material can be placed only where it is most efficient, thus drastically reducing the amount of material and allowing the use of weaker but more sustainable materials.

Through the holistic development of design strategies, fabrication methods and material research, the project represents a milestone towards the decentralized production of customized parts for structural assemblies, and it aims to inspire and support innovative applications for the circular use of resources in the construction sector.

AM off the grid
Photo: Girts Apskalns, 2023

Florian Busch Architects


Towards an Open Density

Private Public Space. Contrary to the great expectations with which the 21st century was greeted at the turn of the millennium, the first two decades have brought the sobering reality of a socio-political and -economic shift towards myopic closure across the globe. Reflecting these trends in the built environment, private spaces, masked as public, have been encroaching insidiously on entire urban centres. As regulatory powers are delegated to large private entities, these pseudo-public spaces keep turning genuine openness into controllable zones of "pacification by cappuccino" (Sharon Zukin). Architecture, once a discipline projecting an open society, is happily complicit — delivering self-satisfied enclosures. "The freedom to make and remake ourselves and our cities is one of the most precious yet most neglected of our human rights" (David Harvey). It is painful having to admit that we, lulled by the comfortable, continue to voluntarily surrender this freedom.

Density of Isolation. Arguably the single most important aspect of the urban condition is density. In step with the technological advances of the time, 20th-century urbanism saw the vertical as the perfect means to increase urban density. However, almost all solutions resulted in isolated towers, adding density in vertical appendices sealed off from their surroundings.

Vertical Landscapes in a Continuous City. FBA's laboratory is Tokyo, a city where the tremendous speed of relentless renewal has been fertile ground for new typologies ever since its beginnings. Instead of opposing the private or the public, FBA propose a new hybrid to continue the powerful dynamics of the public-private symbiosis observable everywhere at ground. Two fundamental assets of the urban public realm, the street and the park, are combined with one of the private, individual ownership by residents. The result is a new urban typology: the continuation of the city's streets, buildings, and parks into Vertical Landscapes. Open to anyone at any time, these landscapes are the natural extension of the urban conditions at ground level. Like the city they are active part of, they are a continuous yet heterogeneous ground where occupation is pragmatic and curious. Function finds form.

Density of Openness. As urbanisation progresses at ever faster rates, the city is and will remain at the centre of the dynamics that shape societal development. Vertical Landscapes are infrastructure multiplying the city's ground conditions without architecture's compulsive desire to determine. Exploring the potential of the vertical as integral part of the urban outside, increasing urban density will no longer be synonymous with inserting solitary enclosures but with intensifying urban life through an openness that once again fills the city with engaged and interactive content.

Form4 Architecture | John Marx, AIA
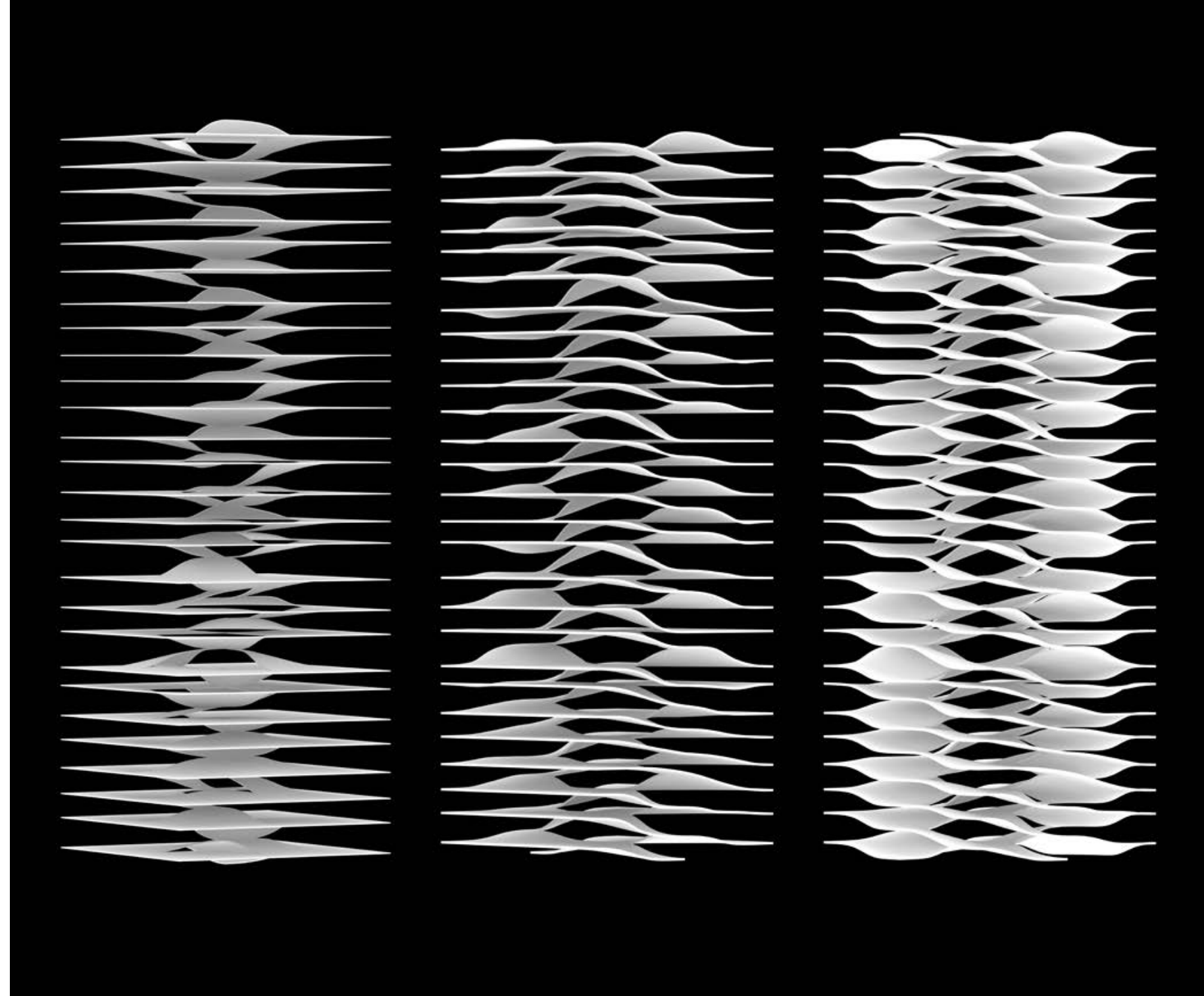
Out near the dusty perimeter of Black Rock City lies a different kind of museum. As you approach this intriguing and mysterious building with its unusually shaped galleries, appearing part machine, part creature, part abstract and surrealistic form, it may present as a blank slate, with an expansive exterior, the letters spelling Museum of No Spectators hovering above. Its dynamic shapes emerge as otherworldly yet grounded. It is waiting for you to approach and become a part of it... to participate.

In a radically inclusive and interactive way, the Museum of No Spectators creates a space for everyone to make art and become an exhibiting artist. With art continuing to develop during event week, *burners* self-express by bringing original art, adding or subtracting from existing pieces or creating their own in this de-commodified space using art materials provided by the museum.

The Museum of No Spectators (MoNS) asks a question – what would a museum be like on the playa within Burning Man culture? What role would art play? What role would people play? What role would you play? It picks up the debate of the contributory nature of Burning Man culture in contrast to the Default World museum experience. MoNS turns the concept around and creates a fully interactive container by encouraging people to engage playfully with the idea of what museums and participatory art means in terms of creating and nurturing culture. Radically inclusive and highly interactive, MoNS creates a space for all citizens of Black Rock City to become exhibiting artists.

The Museum of No Spectators emphasizes inclusivity, in line with the wholly participatory nature of Burning Man culture. The visitor is no longer a consumer but someone entering a thoroughly inclusive space where the creative process is a key element in how the art is shared with others – an inherently de-commodifying experience. Reflecting on Banksy's provocative statement about museum commodification, *exit through the gift shop*, here one enters thru the Gifting Shop. We have fundamentally changed the use of the word *shop* to mean *to make* instead of *to buy*. MoNS challenges museum planning concepts as visitors are encouraged to make a gift of art before proceeding into the main museum. A team of Artists in Residence take people through the ritual of creating art, by providing instruction and materials. MoNS also changed the use of the word *gift* from a noun to a verb *Gifting*, gifting 5,000 photographs, 3,000 pieces of jewelry, and countless patches and stickers. Throughout the event, more than 60 artists of 14 nationalities posted artwork and 53% of the artists were BIPOC.

The 1,400-square-foot structure built of 17,000 pounds of tube steel framing and aluminum panels emerged from the desert after 10 days of building by a team of 40 volunteers. The main museum comprises eight galleries, each dedicated to a different theme – *Social Justice:* Truth, Lies, and Reconciliation; *Snark:* Tell It Like It Is – With a Wry Smile; *Sparkle Pony:* Whimsy, Love, and Joy; *Wisdom:* Paradox, Balance, and Transcendence; *Discovery/Identity/Epiphany:* Emergence and Transformation; I*nto the Darkness:* Mystery and Vortex; *The Future:* Community, Kindness, and Forgiveness; *Earth and Sustainability:* The Ethereal Landscape.

From Palestine: Our Past, Our Future
Organized by Palestine Museum US

In 1948, Israel was established as the culmination of more than 50 years of a settler colonial project aimed at establishing an exclusive Zionist Jewish State in Palestine. Having taken control of a significant portion of Palestine, Israel executed a plan to depopulate and, in many cases, bulldoze about 500 towns and villages, exiling hundreds of thousands, many into refugee camps in the West Bank, Gaza, Trans Jordan, Syria and Lebanon.

Israel changed the names of most Palestinian towns and villages, covered up the ruins with invasive forestation and buried the truth about the destruction of Palestinian society and culture and its 1948 war crimes and International Law violations. Using maps, architectural models, photographs, and artwork, this project exposes lost Palestinian towns and villages and reimagines a future where descendants of the original population return to redesigned architecture, and urban planned communities, giving hope in the face of indefinite intractable odds.

From Palestine: Our Past, Our Future is an homage to Palestine and Palestinians. It displays contemporary artworks by established and early career Palestinian artists who are based in Palestine and in the diaspora.

The exhibition displays a wide range of art forms and media – some specifically made for this exhibition – including paintings, photography, mapping, and architectural models. In their range, the artworks showcase the diversity of Palestinian artistic production today as well as its many influences. The overriding theme is the issue of temporality: how the artworks deal with the past, present, and future of Palestine. On the one hand, some of the artworks borrow their themes from Palestinian history and cultural heritage, especially before the 1948 Nakba. Meanwhile, though also influenced by these legacies, other works are more future-oriented, contributing to a vision for a Palestine yet to come.

These different approaches are also echoes in the different modes of artistic expressions that the artists revert to, ranging from pre-1948 idyllic Palestinian villages and landscapes, to more abstract art forms. While some of the works are monochromatic, others choose a more colorful artistic expression. Overall, these works offer us an understanding of the state of contemporary Palestinian art and culture and show us how, despite ongoing Israeli occupation, Palestinian artists continue to assert their strong connections to their deep-rooted cultural heritage and their commitment to building and imagining a brighter future.

The exhibition consists of two main complementary sections. The first section, *A Geography of Dispossession* includes a large floor map with the names of all the historical villages of Palestine, including the hundreds of villages destroyed by Israel in the 1948 Nakba that show the process of displacement.

The second section, works by renowned Palestinian artists that both acknowledge the history of Palestinian dispossession and open up the imagination for a future beyond it. This section also includes four selected student projects based on an annual architectural competition (conducted by Palestine Land Society) for Palestinian university students with the aim of imagining and planning the future of destroyed Palestinian villages following the return of their dispossessed communities. It is a vision for Palestine created by a group of young Palestinian architects who dream of building an alternative, more hopeful future.

Forgotten Survivors
John Halaka, 2003

Venetian Red
Samia Halaby

In Pursuit of Utopia #7
Nabil Anani

Future Cities Laboratory Global

Future Cities Laboratory Global. Exploring sustainable cities and settlement systems through science, by design, in place, over time. The Future Cities Laboratory Global (FCL G) conducts urban and settlement systems research based on a transdisciplinary approach that employs novel methods from the fields of science, design, engineering, and governance.

Through Science. To achieve sustainability, science is essential. Science provides the basis for understanding how cities and settlement systems develop and interact with the environment at different scales. Settlement systems are composed of ecological armatures, physical stocks, resource flows, social institutions, and cultural catalysts whose interactions generate a quantifiable *metabolism*.

By Design. A sustainable settlement system must also be liveable. To achieve liveability, design is essential. Design is a collaborative process that combines analytical techniques, imaginative and creative strategies and transdisciplinary knowledge to generate new ideas and bring them to fruition. Conflicting technical, economic, social, and cultural demands are brought into dialogue to create innovative and harmonious development plans and visions.

In Place. Science and design are effective only if they serve places and the lives that are lived in them. Places result from common processes and differentiating factors (geography, culture, language, and history). The research addresses diverse lived places, from compact cities with high population densities to extended settlement systems with a mosaic of rural and urban land uses.

Over Time. Cities and settlement systems take shape over time – be it the gradual accretion of historical city fabric and settlement landscapes, or the rapid transformations of 'modernisation'. They must also be shaped according to less linear and more cyclical trajectories.

FCL G is a research collaboration between ETH Zurich and the Singapore universities – National University of Singapore (NUS), Nanyang Technological University (NTU), and the Singapore University of Technology and Design (SUTD) – with support from the National Research Foundation (NRF). It operates under the auspices of the Singapore-ETH Centre (SEC). The programme includes 13 modules that all explore topics related to the future development of urban settlements. More than 80 researchers with various academic, professional, and personal backgrounds are currently working in the programme. They are based in one of the two hubs of Singapore and Zurich.

The Engagement Platform helps disseminate and communicate research achievements and supports the collaborative activities between the hubs. It provides a common ground for the FCL G community of researchers and brings together the different research modules and methods. It creates a comparative data repository, building capacities in digital literacy and interdisciplinary research, facilitating new teaching and learning initiatives by fostering innovative communication, dissemination and knowledge exchange.

FCL G is one of the three research programmes developed at the Singapore-ETH Centre, together with Future Health Technologies (FHT) and Future Resilient Systems (FRS). FRS is also represented in this exhibition. It addresses the challenges of increasing interconnectedness and complexity of infrastructure systems. It aims to enhance the resilience of urban systems by combining engineering, design, and social research.

Gal Nauer Architects

FLOW. Nature, Man & Architecture in an era of disruptions.

From the beginning of time, we as one, Universe, nature and humanity, have been going through constant shifts and changes. The planet is evolving in fast forward motion. Going through rapid evolution that is dynamic and frenzied. The universe is on a journey, and we are on the ride.

Humanity is challenged in this era of changes. Our lives are beyond dynamic, we co-exist in layers and folds of real and virtual realities. Traditional sequences of behavior are broken. Familiar habits are shuffled and rearranged in new orders and new configurations.

We have evolved as have everything around us. This so-called disruption of the existing order, the climate change, the ecological challenge, society's restlessness, political upheaval, humanity's anger and frustration, are in other words – the new order.

The great challenge of the new order lies within the contradiction of values and consciousness. We live in an era of infinite knowledge, abundance of sources, and if these are not instantly available, we have substitutes, alternatives and a *fix-pill* to every situation. Whereas what we internally strive for is to find our core, our base, our internal rhythm that will allow us to adjust, fine tune our systems to those surrounding us by nature.

The essence of this project is of the brave eco encounter of man and nature in its raw and exposed being. Creating a dialogue of adaptation to new conditions of extremities. Looking beyond rigid borders dictated by political agendas. Mending the fragility remanence of living habitats and civilizations.

Gal Nauer Architects' philosophy is based on the ethos that answers to impossible questions can be found within (a) locality (b) listening humbly (c) observation. These are the pillars of the manifest of "local wellness". A consciousness of solving and adapting in a changing world. Planning a mended realm where humanity communicate once again. Curating the treasures of the local site and unveiling the resources held-back waiting to be revealed.

The project presented *Flow*, is located on the great rift valley. A segment of 180KM of harsh desert, stretching from the red sea to the dead sea. An area of extreme climatic conditions, as well as cultural conflicts, demographic and economic challenges. A desert area of desolation in which we will transform into an artery of life and prosperity.

The area, we argue, is rich in natural resources as well as water that lost its way. It is also rich in human wealth, knowledge and local culture. In the process, we are unveiling the essence of this region. We elevate the faded trails of water passages buried in the ground and revive them. Carving the routes into vital channels that will lead water throughout the region. Alongside the water we will present the living and hospitable habitats we design and build in local communities.

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FLOW
Images: Dubi Tal & Gili Bar Shay, 2022
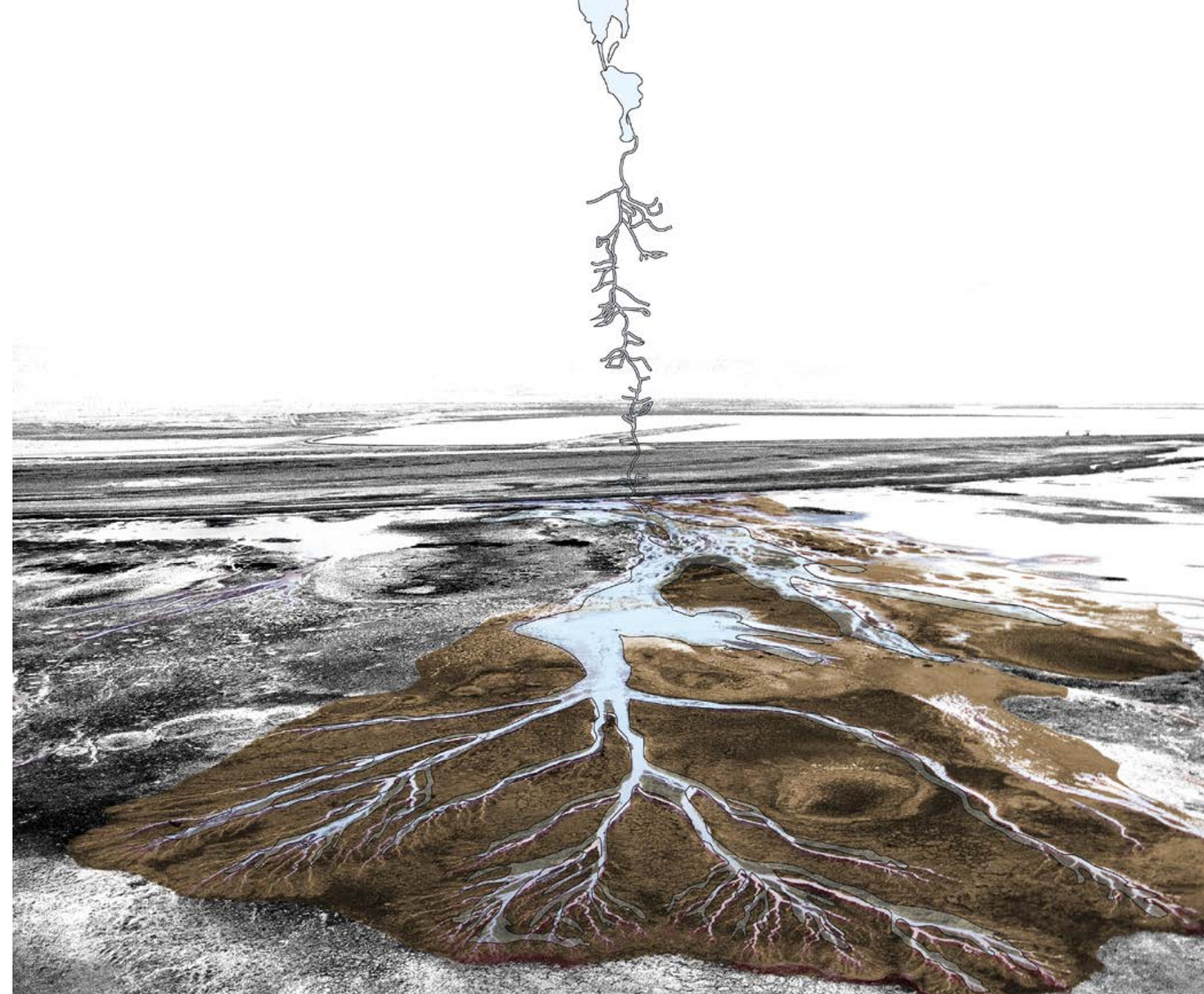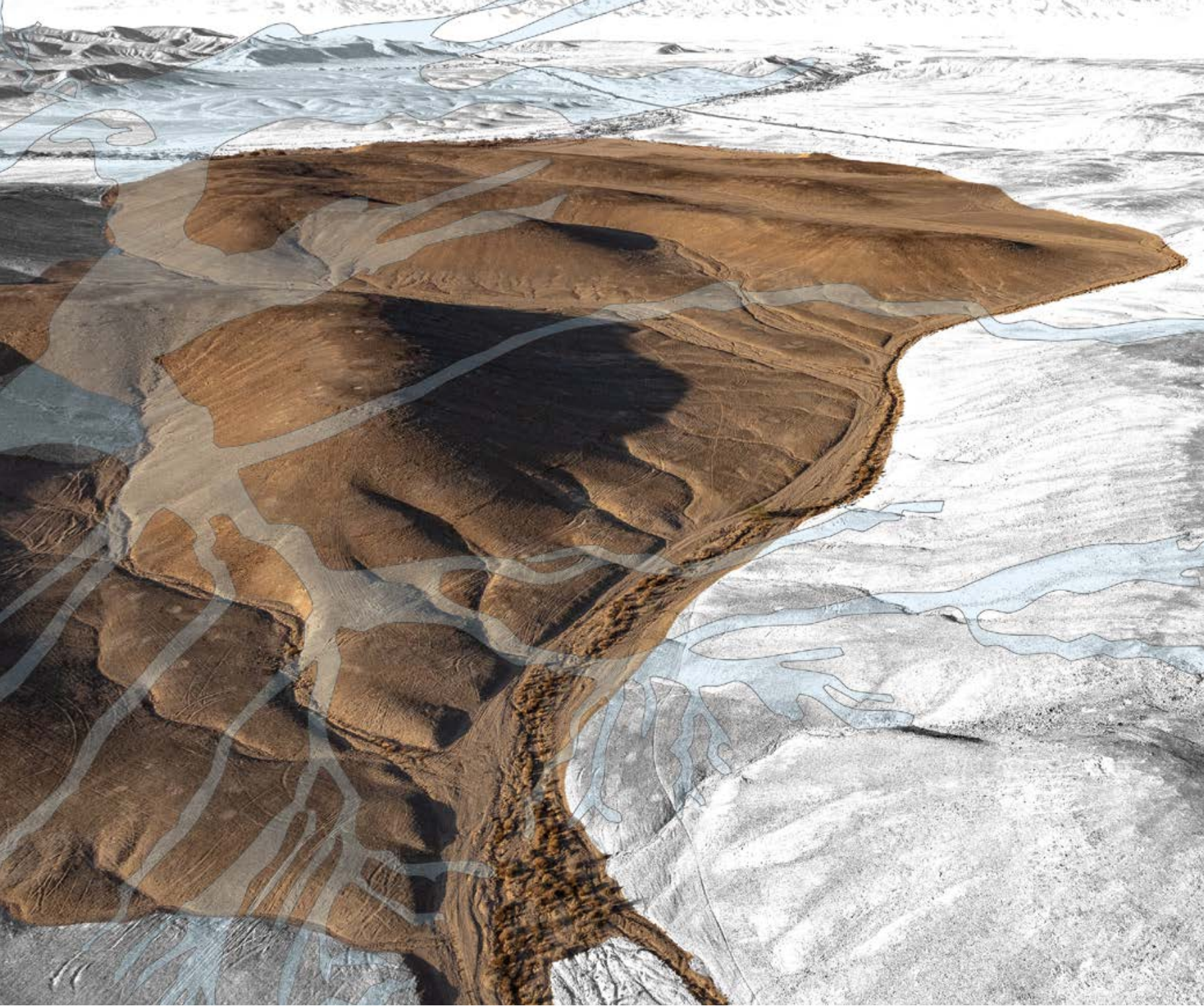
Geoffrey von Oeyen Design

Geoffrey von Oeyen Design leverages geometric relationships and site conditions to create visually, environmentally, and culturally resilient works. Projects in North America and Asia represent familiar contexts in unanticipated ways and are designed as geometric realignments that redirect daylight and reframe views. The firm discovers new possibilities within the intractable givens of building, turning otherwise functionally necessary forms into optical devices that produce spatial experiences. Principal Geoffrey von Oeyen has received multiple national awards, including the Architectural League Prize, Next Progressives, and a MacDowell Fellowship, and the firm's built architectural projects have been widely featured in publications such as Architect, Architectural Record, Archinect, Architizer, and the Architect's Newspaper. In 2019, Geoffrey von Oeyen Design was internationally long-listed by Dezeen for *Emerging Architect of the Year* and was selected by the Dezeen readers as one of the top ten firms in architecture, design, and landscape architecture.

Three of the firm's built projects are featured in this catalogue. The first, *Horizon House*, was designed to geometrically transform a 1960s ranch house into an optical device for framing panoramic views of the Pacific horizon in Malibu, California. A home and performance venue for its classical musician owners, the design reconciles the two wings of the original house with a new east-west axis, uniting the two halves of the house to reframe the horizon above a new infinity pool. The roof was then bisected, lifted, and reoriented due south toward the ocean. The horizon is mirrored by horizontal shading devices, including a long clear-span truss supporting motorized fabric shade canopies in parallel with the pool. Operable skylights modulate daylight and

passive ventilation and animate the roofscape as an archipelago of extrusions against the horizon. Destroyed in the 2018 Woolsey Fire soon after completion, *Horizon House* II has risen from its ashes in 2023.

For the *Case Room*, two attorneys commissioned an addition to their Malibu residence as a satellite office to their Los Angeles headquarters in 2019. With the urgent necessity of work-from-home during the pandemic, the owners' shifted their primary workspace to the *Case Room*. The massing of the project is designed as a series of blocks obliquely sliced and assembled in a descending sectional sequence. Clerestories diffuse the north light at the foot of the hillside, orient the space, and frame views up the hill. The progressively stepping roof gables organize programmatic spaces and diffuse daylight within the workspace, and the interplay of reflected daylight on the folding ceiling animates the space.

The *Napavilion* is a small event space in a hillside vineyard in Lantian County, China. Constructed of dimensional lumber in less than two weeks in summer 2017 as a multinational effort between graduate students and professionals, this pavilion is an internationally visible optical device for framing villagers and global tourists alike within the rural Chinese landscape. Digital design techniques were integrated with rural tectonic traditions, and western building materials were adapted to traditional construction methods to reimagine an architectural vernacular in the Chinese countryside. The feature of a PR campaign for the city of Xi'an, the Napavilion leverages social media to reframe critical issues facing rural villages in China.

Grupo Zegnea

More than a company of architectural production and construction, Grupo Zegnea defines itself as a *creative centre*, searching the fusion between art and science, the irrational spirit and physic materialization, the immaterial and the material. Promoting an interdisciplinary experience where numerous *arts* relentlessly engage in the yearning of answering the society needs, in a non-ruled way, seeking new dynamics and *non-conventional* approaches, aiming not only for shapes or functions, but also the creation of a sensitive space, the emotive space.

The scope and amplitude of the activity, allows to work in an "experimental" way, a laboratory of ideas, where curiosity questions certainty, a constant search for new answers and the reformulation of old questions, that allows the definition of space.

The concept of space integrates a wide range of definitions. In this case, the interest is on the approach to physical space, materialized, manipulated by man, the built space, imagined to be lived.

Based on the idea of space as a habitable one, the free space, the *expositive space* (living room, bedroom), it is important to explore what is called *No-Space*, the non-useful space, the surplus, such as the corridors. Grupo Zegnea pretends to emphasize the spatial sustainability, something that could be call the formal and programmatic recycling of an interior space, in order to maximize the positive space, reducing the waste of non-spaces.

As a result, the intervention is exhibited in an unusual space, the corridor, a moment of connection between spaces, that becomes in this way, a *No-Space*. Using exhibits where *emptiness* is emphasized, the blank canvas appears in order to launch the architecture discussion, warning to these *non-space* as a waste, in a time that claims for material, environmental and programmatic streamlining. The intervention in this exhibition space, creates a dichotomy between the message and its embodiment.

This connection between art, architecture and construction is intended to be a metaphor for what Grupo Zegnea believes and aspires to be the future of architectural thinking in order to enhance the space, the positive space, the lived space.
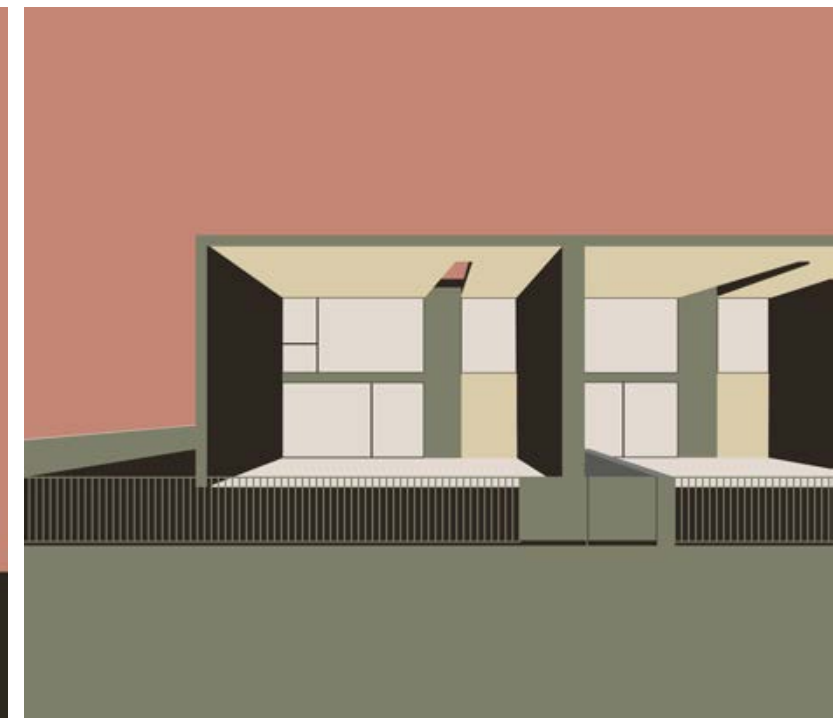
Habitat Workshop
Jieun Yang, Principal

Mine the Gap features a series of Habitat Workshop's work exploring the value of a place and human connections in the gaps of overlooked spaces, urban territories, and forms of practices. The studio's pedagogy and methodology span multiple scales and typologies by combining research and practice to continuously refine ways of knowing, asking, learning, and making. The featured projects illustrate how the gaps are identified, mined, and developed to seek extraordinary potential in the ordinary.

Odd Lots imagines a multi-tier solution for selected undevelopable lands in New York City. Many vacant lands remain neglected in New York City despite booming developments because they are too small, narrow, landlocked, and oddly shaped to be considered buildable per the zoning and building codes. The project presents a speculative strategy for their potential asset for the public by connecting with the community and to a larger economic infrastructure. The project's continued effort leads to the neighborhood surrounding the Gowanus Canal, one of the most contaminated waterways in the US, expected to go through rapid changes with the recent rezoning approval. *Layers of Territory* studies odd lots scattering among the future developments as the last barometer of environmental, social, and economic equilibrium and resiliency. The unsustainable infinite growth model is questioned by exploring these lands with the least value as a network of testing grounds for alternative built futures by highlighting the mismatched value and celebrating a new value centered on community.

Featured projects also illustrate example sites and their potential as a social infrastructure. *Urban Forest*, sited at the First Street Green Park that transformed a formerly condemned leftover site, connects various urban movements through the site by extending the existing landscaped *forests* with a series of interaction *forests* for active participation and impromptu gathering. *Bloom* sits on the top of a triangular site in the middle of Times Square, a leftover vestige of the city's intersecting grids, symbolizing renewed hope and creating a gathering place. Resembling a buoyant cloudscape supported by interlocking pipes, the vaulted portals invite people with rays of surrounding lights showering through the structure formed by linking each piece that acts as a vital connector. Other works explore gaps in the project's form as a potential interaction, connection, and collective participation in the making. *Layered Fragments* reinterprets the fragments as a visual and tactile connection forming a kaleidoscopic collage. And *The Hive* explores the gap in multiple simultaneous negotiated paths resulting from participants' choice in moving through a series of enclosures that constantly transform in reaction to other participants' movements.

Advocacy and education work in community-led design projects is essential to contemporary architectural practice. *Reimagine Muchattoes Lake* started as a series of design strategies developed from ideas discussed at the community design charrette. It soon became an active participant in virtual learning during the pandemic, leading to student-architect partnerships transforming students' visions for the new lakefront open to the community. By empowering the public to value and reclaim their environment, the practice reframes design practice to build trust and energize actions to foster understanding and belonging.

Bloom
Image: Cameron Blaylock, 2022

Hacin

Resonance (n): the quality of being deep, full and reverberating; the ability to evoke or suggest images, memories, or emotions.

As an architecture and design firm, listening and observing are integral to the design process of Hacin, from beginning to end. At the outset of our process, the design team engages with clients, collaborators, and context, seeking out inspiration in stories and experiences that capture the essence of the project. Returning to these spaces after they have been completed (days, months, and even years later), one is reminded that environments will never remain exactly as they were designed. These discoveries are as humbling as they are productive, and the realization of how a space is truly experienced facilitates a sense of renewal and heightened curiosity.

How do these spaces change with time? Will projects shape, or be shaped by, their users and their environment? What events will unfold against the backdrop of this architecture?

Hacin's three decades of practice rooted in Boston have given perspective to these questions. Places designed by the studio are a function of time, often looking or sounding differently from how they were conceived or staged for a professional shoot. The carefully constructed *hero* images of a project highlight the disconnect between perfection and reality, representing an idealized version of a setting and leaving the viewer to wonder what it means to actually be there. Resonance explores an alternative form of design representation, offering a new lens through which one can understand what it means to experience a space or a place: the play of light as it moves across walls and floors; the style and color of clothing people are wearing; the strange shapes of cars passing; the music that is playing...

This exhibit features six spaces designed by Hacin that paint a unique portrait of Boston, highlighting the experience of working, traveling, eating, playing, and living within the city that grounds the firm and its work.

1. *Laconia Lofts*
   Hacin, 2000
2. *Hacin Studio*
   Hacin, 2017
3. *Black Lamb*
   Hacin, 2019
4. *Four51 Marlborough*
   Hacin, 2016
5. *The Whitney Hotel*
   Hacin, Ealain Studio, 2019
6. *BioMed Realty Offices*
   Hacin, 2023

Hariri & Hariri Architecture DPC
Folding Pod Partners: Gisue Hariri, Mojgan Hariri & Richard Perkin

Living in disruptive times provokes the re-examination of traditional notions of architecture and planning. A radical paradigm shift is needed; we must design for time/ space/ existence in a state of flux, never complete, in which spaces continuously adapt to diverse situations, instead of being fixed to pre-defined norms. Fixed spatial programs and time dependent structures are evaluated and rejected, in favour of creating new transient, adaptable communities. The globalism, mobility and flexibility of today is allowing us to consider a future where we no longer need to be tied to one location. The emerging issues due to climate change, conflict and global poverty require new strategies for architecture and the planning of these transient communities. We propose a parametric model that allows for Emerging Communities to grow organically based on evolving needs, inspired by systems of nature.

Hariri & Hariri Architecture + Folding Pod Partners present a technologically state-of-the-art, ecologically responsible & morally rewarding alternative to affordable homes and new communities. They believe that Home is a Human Right issue and is urgently needed globally. According to United Nations data, an estimated 150 million people have been displaced, or are facing homelessness, due to political unrest, fiscal uncertainty, and natural disasters. 1.1 billion people living in inadequate housing. Many of these people are forced to live in make-shift camps or sleep on city streets around the world, and many are still living in army tents years or even decades later. This housing crises will only increase in magnitude and so we must find new ways to address them.

This affordable modular Prefab home is a Folding structure to facilitate ease of shipping and assembly. In the folded-flat configuration up to 8 lightweight pods can fit within a single shipping container, allowing the pods to be transported to any desired location. With a portable solar powered generator the Pod will un-fold on site with a push of a button, eliminating use of tools and labour. Conceptually the pod is inspired by Origami, the art of paper folding. It is utilitarian yet sculptural. It is fire & water resistance, safe and durable. The Folding Pod is built with biodegradable and renewable Timber, fully recyclable Extruded polystyrene foam and Carbon fibre, all environmentally sustainable. The basic pod can be used as an emergency shelter, a forest or beach cabin, or assembled into clusters for music or sports events. It will be suitable and unique in each of its different conditions. The Pod's dimensions are 16'L,8'W,8'H and can accommodate a family of four.

Design Team: Chris Whiteside, Kyuhun Kim & Bienna Ham
Engineer: Richard Perkin
Fabricators: Alford Engineering & Design Shop

Sponsors: Francis J. Greenburger Foundation & 3A Composites. NYCxDESIGN *2021-Breakout Grant* & CBS TV program *New York By Design* Innovations.

Folding Pod in flat position & unfolded position
Hariri & Hariri Architecture DPC

Folding Pod Transient community
Hariri & Hariri Architecture DPC

Goals for a climate-positive architecture. The building sector consumes about 90% of resources in Germany and is responsible for 60% of waste. A recycling of materials into natural or technical cycles that are as closed as possible must therefore be ensured. The transformation from a linear economy to a circular economy is the set goal. Building-Materials must provide drastically elongated lifespans.

To achieve this, it is necessary to map all primary and secondary materials used by means of digitization (BIM) in such a way that the material resources in each building are known and documented. The connections between materials must be reversible and easily detachable. Materials must be toxin-free throughout. This leads to an inventory library of reusable building materials within a building, making it an urban mining repository.

HS Architects work according to this premise and are thus part of a growing movement that inspires and implements a new sustainable identity in architecture. We design sufficient buildings that are as low-maintenance as possible and uncomplicated to repair. In this way, the lifespan of a building is not determined by its weakest link, but by its actual usability. We want to create robust and flexible places that permanently meet the high demands of their inhabitant. In doing so, we strive for a lower consumption of resources both in the use of technical equipment and in the consumption of space.

A climate-neutral building stock can only be achieved if we devote ourselves to what has already been built. Demolition & new construction is not a solution, as every new building generates emissions due to the gray energy associated with its construction. On average, 50% of the total energy for a building is already consumed during construction (considering a 50-year lifespan). By preserving materials and resources that have already been used in existing buildings, a major contribution can be made to climate protection.

All of the 4 Berlin projects shown here meet the following criteria: a. The existing built structures are reused and densified vertically as well as horizontally; b. An average of 50% additional space will be created; c. All newly added buildings are constructed in timber and meet the requirements for climate-friendly construction, reducing emissions by 83% compared to mineral constructions; d. Approx. 90% of the sealed surfaces will be unsealed or greened. The criteria of a sponge city are fulfilled. The creation of usable green areas on roofs improves the microclimate. The collection and use of rainwater closes the cycle of the valuable resource water; e. The share of renewable energies is approaching zero.

The predominantly critical technical condition of buildings from the 1960s and 1970s, holds the opportunity to create sustainable, climate-positive and future-proof living space through targeted conversion and densification measures. By preserving the building masses of the 4 projects presented here, a total saving of approx. 3,600t CO_2equ. results, which corresponds to the annual CO_2 emissions for the energy supply of approx. 368 households. The preservation of the building structure will save about 4,600 m^3 of sand. Given the global shortage of sand, this is an important contribution to resource conservation.

The densification and revitalization of the existing building structure is the most sensible way to achieve growth in our cities in a climate-friendly and sustainable manner. Let´s scale it!

HUSH
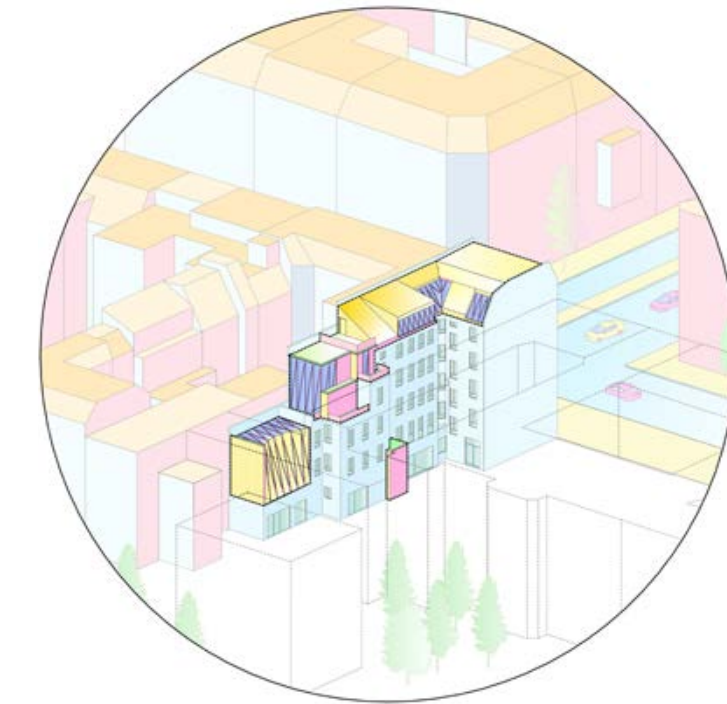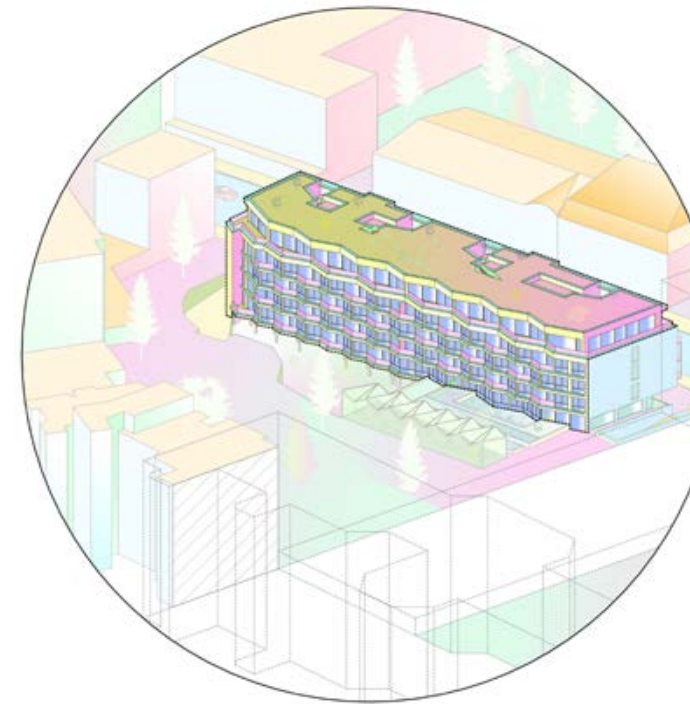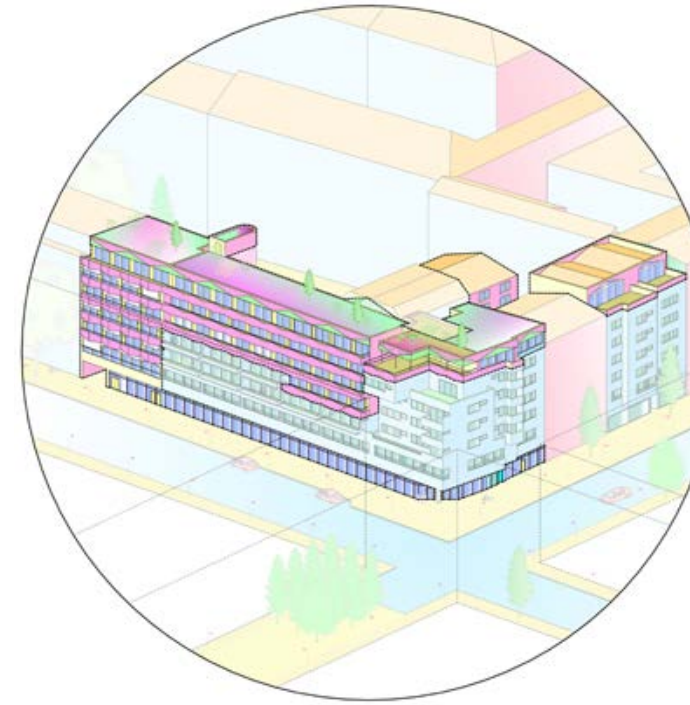
In an era of immense pressure to reverse human impact on the planet, sustainability efforts are of the highest priority for global organizations. However, the impressive design and engineering investments made in the pursuit of sustainability goals are largely invisible to most audiences–existing only as the infrastructure, engineering, materials, and operational systems that live and operate behind the scenes of their buildings and products.

New York experience design firm, HUSH, has been rigorously adopting their design vision and approach to help organizations express their sustainability commitments through artful installations and experiences (sculptures, architectural interventions, and digital data visualizations). In addition to informing audiences about an organization's sustainability commitments, these installations encourage ongoing behavioral changes amongst audiences who encounter them day in and day out. They do this by turning sustainability into everpresent, highly visible, interactive experiences that inspire people around these important themes, and motivate micro-changes in their actions.

For the past 16 years, HUSH has worked with some of the most impactful companies on the planet, exploring the ways in which merging digital storytelling with architecture can elevate and amplify their most important messages. In 2017, HUSH began a net zero building project with the mission-driven, biotechnology company, United Therapeutics (UT). The design team was challenged to think about the specific impact of their work on the planet. The team embarked on a multi-year journey to bring to life data-driven sustainability stories of UT's site net zero energy building.

HUSH's work has perennially leveraged creative technologies. But digital technologies and hardware are inherently incongruous with a sustainability mission in their energy use, materiality, operational carbon costs, and life cycles. Recognizing this dichotomy, the HUSH team began a research project to alter their design processes, inputs, and outputs to ensure that they maximize technology-driven creativity while honoring their sustainability commitments, and that of their clients.

This presentation at Time, Space, and Existence is the first visual manifestation of this research and shifts in their design process. The project takes a data-driven look at material choices, impacts to form and processes of design, and design automation when they are constrained by a carbon cost limitation. Foundational to every architect and designer's role, material decisions are often made without the full picture of their true sustainability cost. The visualizations included in the exhibition demonstrate an evolving process of designing through data–sometimes with brute force quantitative simplicity, but evolving to adopt principles of parametric design to more fluidly shape form, scale, and materials in a way that makes visible the invisible embedded carbon costs of the materials at hand.

HUSH's ultimate goal is to inspire the key audiences of this exhibition–architects, designers, artists, students, makers, and creators–to add new, valuable constraints to their design process, in order to bring to life forms and structures that readily express their innate carbon costs. In this way, future designed objects, spaces, and forms can be both vehicles for sustainability storytelling and made through a design process inextricably linking creative possibility and carbon accounting.

Ian Callender

Uptown Underground projects a geographically accurate view of the cityscape above a subway car onto its ceiling as it moves under New York City.

The project takes inspiration from the glass-bottom boat, where access is granted to the reeds, fish, and dark depths normally inaccessible. Conversely, the experience of the subway is marked by detachment: in the moments between stations, all urban context is stripped away and replaced with darkness, save the occasional flash of a passing floodlight. Therefore, in a literal reversal, here access is granted upwards, to skyscrapers, trees, and occasional flock of pigeons. Imagining seeing through the ceiling to the street and becoming aware of such a dynamic perspective offers restored connection with and newfound dynamic contextualization within the city.

The intervention has been installed, without permission, on a series of moving subway wagons from Brooklyn Bridge-City Hall to 96th Street stations, a roughly 10 kilometer/25-minute loop along the East Side of Manhattan. The project is implemented with four projectors connected to microcomputers, synchronized with offsets over a peer-to-peer WiFi network and informed by geolocation and acceleration data from a cellphone, all on battery power. As the window of opportunity lasts only 75 seconds as the subway transitions from the downtown to uptown tracks, all aspects of the project were designed for expedience and fluidity of installation (and, since it has never received formal permission, deinstallation). Four units cover the entire ceiling of a train wagon, two to a single clamp arm attached to a stanchion post. Once the units are switched on, the installation runs itself, adjusting in concert with the movements of the train in order to remain in synchronization with the world above.

The project aims to create a technology-positive interaction with the sole intention of augmenting the urban experience. It does so by directly intervening in the daily lives of subway users through projections and new technologies. Those on the train tend to put down their cell phones and, with excitement and curiosity, look up.

Inessa Hansch Architecte

Assise primitive. Inessa Hansch's intervention on a site is a way of entering into a relationship with a landscape, which makes people feel the site, as well as understand it. Her contribution, as part of urban development or land strategy projects, is reflected by the anchoring of punctual architectures, which connect major sites with human-scale spaces.

Through their topological properties, these facilities show the grounds of an architecture that claims a primitive approach to space. In the form of benches or of generously sized lookouts, they set up a framework and perspectives which put people at the *heart* of the site – physical experience creating a tangible bond to the place. Different moments of history are structured around this encounter's key point. This potential architecture, minimum foundation set up in an evolving site, then becomes a pivot between past (among others, the site's former architectural elements) and future (among others, the incoming architectural features). A pivot - perhaps a point of view, which provides a link between past and future.

The process relies on a large-scale reflexion, driven by the will to structure space – and to express its meaning by design. From then on, these constructions are not only objects but *participate*, in a *dynamic* way, in the existing urban structures. Thus reaffirmed, their qualities are even more enhanced.

Inessa Hansch's approach is based on the place's appropriation by people *thanks* to those architectural facilities which, through their presence and their use, suggest a sensitive understanding of the landscape, for a course or through activities which gather people in a spirit of urban friendliness.

This process led to a series of urban development projects for the cities of Versailles, Caen, Le Havre, Lens, and at the Grand Duchy of Luxemburg.

Inessa Hansch continues her pursuit in connection with the territory – in the context of the transition – through the topic of housing, and takes interest, further upstream of her architectural projects, in one question: how to find new forms of facilities which could translate the ways of living?

Irmgard Lochner Aldinger

Imagine nature being our teacher in developing structures for architecture. Imagine us constructing as efficiently and aesthetically as nature does.

More With Less. It is obvious that we need to build more with less. The earth population is increasing, while resources are getting carse. Also, the majority of humans lives in the most modest surroundings, while the minority lives in wealth. Wanting to enable more people to live in adequate and healthy surroundings, the question of how to construct their habitats comes up. This directly influences the way we design and construct structural systems.

Less Is Better. Be it *live in less: tiny houses* or *buy less: upcycle clothes:* humanity is (finally) realizing that growth is not everything. Whilst years ago, contractors would name the amount of material used in their newly constructed buildings, nowadays we need to be ambitious to name how much less material (mostly named as CO2 footprint) was needed in new buildings than before. This attitude is to be spreaded and established in how to design load-bearing structures.

Learning From Nature. Nature is in a constant process of optimization. This results from competitive animals or from self-formation of geometries, producing *innovative* structural systems. In terms of material, animals and especially insects show us how to construct material-efficient structures that are optimized, fully recyclable – and very aesthetic. Everyone involved in architecture and structure should learn from nature.

Biomimetics. Inspired by the principles of the optimization processes in nature, the principle of biomimetics in terms of structural design should not only refer to copying the geometries of nature. The principle is to describe, understand and re-produce their structural behaviour, using modern design tools. Adapting biological processes into architecture and engineering is essential.

Technology Transfer. Architects and structural engineers at some points still concentrate on designing for eternity, for buildings and infrastructure to last forever, while we all realize that there is no eternity. The awareness of circular material processes is arising as we construct and destruct. The transportation industry has developed tools optimizing structures in motion with minimum material impact and maximum performance – the germ cells for design tools to develop optimized lightweight structures. Technology transfer fosters architecture and structural engineering.

Structurally Informed Design. Looking into how nature is building, there is another impact on how we should look at our building structures and deal with the most simple materials available. Insects print complex three-dimensional structures with manifold requirements from a single material. How can we transfer this into the human construction industry? We are to find out how to produce efficient structures with simple materials, referring to our zoological relatives, preferably upcycling building waste. How to put what material in which place is an intense design driver.

Aesthetics of Structures. While structures are considered to be a necessity (in terms of building) and connected to a theoretical subject called *physics* (in terms of education), they are aesthetic in a sensuous way. In a visual way, they catch attention. In a physical way, people get an awareness of how structures work while touching them. How can we merge the two? Aesthetic structures are efficient. Efficient structures are aesthetic.

Geometry study

Itten+Brechbühl AG
Daniel Blum, Karina Hüssner,
Julia Paul & Jürg Toffol

Occasion | Motivation

If you want to build a ship, don't drum up the men to gather wood, divide the work and give orders. Instead, teach them to yearn for the vast and endless sea.[1]

The centenary history of Itten+Brechbühl AG (IB) has seen many prosperity and crises. Generations of architects have been shaped and kept busy. To mark its centenary, IB launched a student ideas competition. This was our gift to the coming generation of architects: What will the next 100 years look like?

Visions of the future reflect the themes and issues of their time. While the modernist movement (also the hour of birth for IB) sought to mark a rigorous break in architectural history, contemporary issues are based on different premises: Concern for the existing built fabric, digitalisation, sustainability, building in the knowledge society. In a pointed comparison, it can be claimed that in 1922, the focus was on the future INSTEAD of history, and in 2022, the focus is on the future WITH history.

The task of the student ideas competition is to be understood in this sense: The task was to develop a utopia for learning in the future.

Origin | Inspiration

More than ninety years ago, the founding fathers of IB, Otto Rudolf Salvisberg and his protégé Otto Brechbühl, developed a utopia of learning that led to a first place in the competition for the Muesmatt Institute Building of the University of Bern in 1928:

At the time of its creation, the iconic two-hundred-metre-long building was a utopia in the sense of a «place that should exist»; a built vision of contemporary and future learning: radical and expressive, elaborate and precise. The inherent conflict of a built utopia has been resolved by time - and the quality of the project. This vision, invented as it were from nothing, like other

works by Salvisberg and Brechbühl, has now grown into the city fabric as well as into the present time: *Salvisberg's and Brechbühl's soon to be ninety-year-old comb structure lies quietly there, now sunken into the fabric of the neighbourhood and the everyday business. A radical design has found its place.*[2]

And yet the founding fathers were concerned with more: *He [Salvisberg] was often less concerned with addressing the essence of a building than with forming an organism from the given theme that could convey the strongest impression. The strongest impression of an attitude towards life that he was obsessed with.*[3]

This was the inspiration for the launch of the competition: What is the strongest impression of your attitude towards life, what is the organism, in Salvisberg's and Brechbühl's sense, for the future of learning? As a competition of ideas for students, we address this question is explicitly to the coming generation of architects and creatives: Their visions will shape our future.

Quotes:

1. Antoine de Saint-Exupéry; *The City in the Desert* (*Citadelle*); Bad Salzig/Düsseldorf, Rauch (1951)

2. Martin Klopfenstein on the occasion of the 2018 Heritage Year at https://www.bsa-fas.ch/it/a/370-kulturerbejahr-2018-universitatsinstitute-muesmatt/ accessed January 2022

3. Hans Bernoulli *on the death of Professor O.R. Salvisberg* in Basler Nachrichten 27 Dec. 1940

Jury:

Dr. Sabine von Fischer
Editor NZZ, Owner Agency for Architecture

Dr. Etna R. Krakenberger
Head of Teaching | Digital Officer Teaching, University of Bern

Pascal Posset
Landscape Architect BSLA, Hager Partner AG

Shadi Rahbaran
Architect BSA, Rahbaran Hürzeler Architects. Professor for Design & Construction, FHNW Muttenz

Andreas Ruby
Director SAM, Basel

JLL and Aravia Design Limited
Chan Ching Kan

To a 200-year city. How do we conserve and adapt – an archaeology of a sustainable future.

Situation. For the last 200 years, Hong Kong has been a laboratory for cultural cultivation and social bonds under free market. The history of Hong Kong celebrates not only the collaboration between the public and private but also the interplay within the statutory framework and allotment. The visioning plan in 1948 was a key moment that has defined the growth – urban upgrade for connectivity and allotment for ownership and restraint of governance. While infrastructural update stipulated urban growth and intra-city connection, allotment in the city stimulate glocal investment and ownership. The momentum of assimilation, re-production and speculation has set the city into a flight of perpetual exuberant growth.

The Imagery and Experienced. While the coastal impression of Hong Kong as a splendid façade has summarized the city's exuberant growth, the city has continued to evolve through multiple layers of appropriation under the framework. From a place of oblivion to an international financial centre, the history of Hong Kong celebrates not only economical and commercial success, but also social and cultural diversity. In 25 years, the city will be expired – all lands will be subject to renewal unless extension is granted by the government. Scarcity in land implies an either-or approach in urban development. How do we conserve, adapt, and sustain the growth?

Beyond the Artefacts. Over the years, infrastructural expansion only celebrates growth and expansion but also helps to sustain social relation by leaving the hinterland untouched. On the other hand, the framework and allotment allow intervention through private initiatives under market force. Re-appropriation and repurposing within the city as a collaborative effort amongst stakeholders orchestrates a complex and organic process of regeneration. The history of city not only tells the story of different tribes but also the belief in a sustainable future. The exhibition aims to reveal the dynamics of social and economic impact architecture could bring to the city, and how the way of life might be conserved and adapted while sustaining the growth through multiple layers of intervention and collaboration – the authority, infrastructural changes, and spatial intervention.

Chan Ching Kan, 2021

Kim Duffett

Time Space Existence - Hawaiian Style.

I started sculpting at age six. Sculpture became my way of expressing what I felt and was beginning to know of the world. The more you sculpt, the more your eyes see around an object, not just the face but the form. I searched out other sculptors to experience the way they saw and expressed with their hands. Even with eyes closed, your hands can sense a shape, like reading Braille in a language you never knew before but instinctually comprehend. Through travels in Africa and Polynesia, I connected with native wood carvers. In my years living in Europe, everything was a sculpture, the classic architecture, plazas, churches and fountains spoke of visionary ancestors walking these same streets leaving legacies of living art. What did they do with their *time*? How did they inhabit their *space*? What did they make of their *existence*? They left their footprints here for all to see and follow. My work is a fusion of these experiences inspired by the soul of Hawai'i, my home.

Living these many years in Hawai'i, I have learned a different sense of *time*. It is not just the slower pace of the island lifestyle, it is the voice of the Aina, the Land, that speaks beyond our perception of *time* to a sense of *timelessness*. In Hawaiian, they speak in reverence of the Aina, but it encompasses so much more than that. With your first conscious breath in the morning, the Air inhales you. The crash of the waves is like a never ending heartbeat. The mountains and valleys stand like ancient guardians watching over an ageless but ever changing landscape. But beyond the beauty, there is a soul and a history of proud Polynesian ancestors whose spirits still hold sway, whose voices whisper in the wind. *Time* here is in the moment yet beyond time. *Space* is felt with one's feet on the warm earth. *Existence* is a blessing to be sung with creativity bound in thankfulness. What is *time* to a place like this?

This is the spirit that guides my work whether abstract or figurative. *Wahine Hapa'i*, (*The Pregnant Woman*), is a fusion of both, a song in praise of the curvaceous beauty of the feminine form. It, at its core, is organic but imbued with motion and story like the Hula. It is a dance of subtle gesture in flow, passing on a message without words. Bronze is a cold and inherently static material. The magic is to give it life. What is life but energy and spirit moving through *time* and *space*? Without movement, would we even exist? I strive to give my art this sense of motion and meaning. I believe in *story* because these are the tales of our *existence* on this Earth that we pass on to others. Behind a good story lies a message, a lesson the *artist* has gleaned from his experience, sung in his own voice and shared with the listener. Like life, the story is half told and the viewer, in their own interpretation of the piece, completes the picture.

For me, this has even greater impact when creating a sculpture for a public space. There needs to be a conscious and wholistic design of the surrounding environment to make it a more interactive and welcoming experience. The sculpture becomes the focal point and sets the tone for a gathering place of human interaction. The inspiration for that sculpture comes first from listening to people's stories, to learning the history of the place and then distilling all that into one iconic vision connected to the community.

Wahine Hapa'i (limited edition, n.4 of 10)
Images: Bob Hsiang, 2018

Klaus Littmann

Arena for a Tree. Project concept for Punta della Dogana, Venice. A platform lies on the water with a round wooden structure: from a distance, the Arena for a Tree looks like an inverted dome or a nutshell with young sprouts. Up close, the *Ark* is architecture, sculpture and stage all in one. Modeled after the annual rings of a tree, its horizontal structure offers space to sit in three rows – and an ideal view of the center. There, three bald cypresses grow out of a central basin – a tree that thrives in fresh or salt water and promises to withstand even peak temperatures in urban spaces.

It is no coincidence that the natural protagonists are located in a spatial concept that goes back to the beginnings of Western culture: originally a place of battle, then of theater, the arena as a setting directs all eyes equally to the central event. Undramatic it is in this case and yet existential - there grow three trees. In their individual forms, they are symbols of rootedness and mobility; they provide a shelter for insects and microorganisms and serve as a source of shade and raw materials. If the cities of this world are to flourish in the long run, architecture must take the tree, ambassador of life, into our midst.
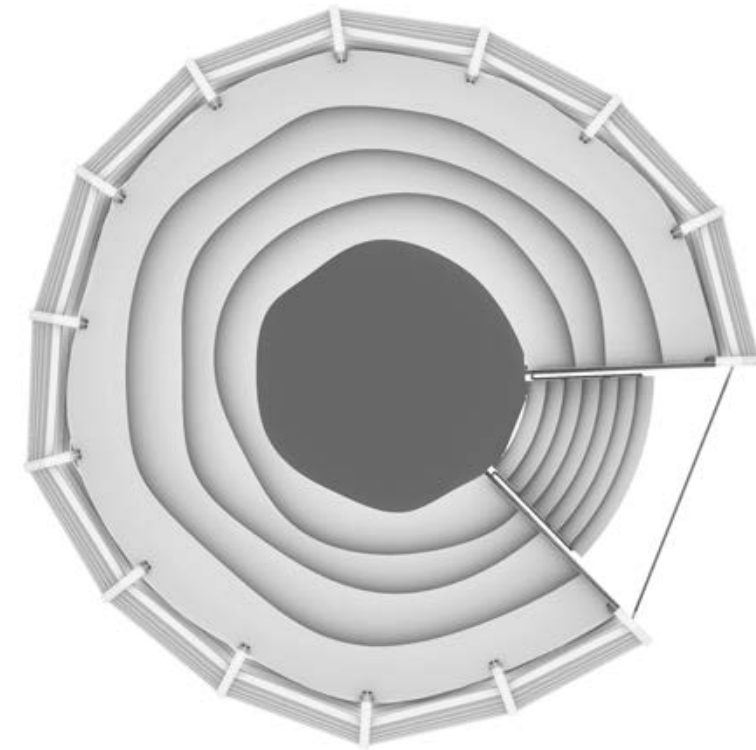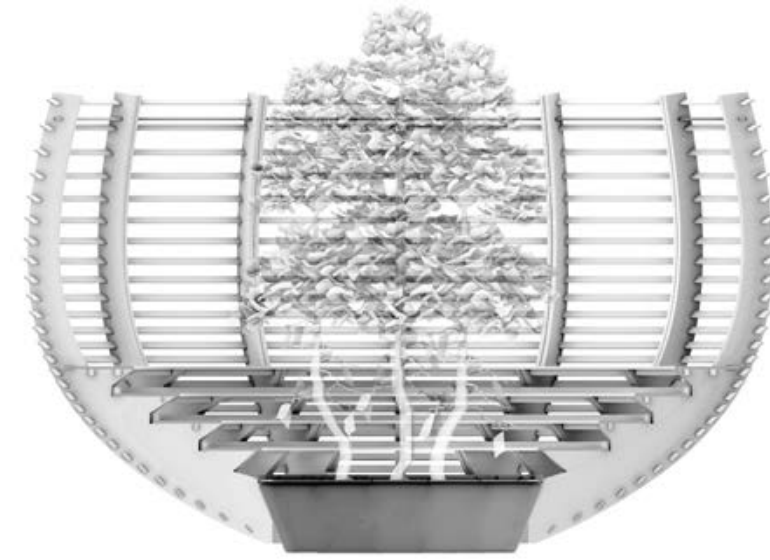
Artist and curator Klaus Littmann is experienced in sharing the appeal of the everyday with a wide audience. Poetry is not exclusive, trees are for everyone. They reduce CO_2 in the atmosphere and have long stood for the vulnerability of the global ecosystem. An entire forest had taken over the football stadium in Klagenfurt,

Austria, in the fall of 2019 on Littmann's initiative. *For Forest* – The unending attraction of nature meant the large-scale reversal of conditions. In the open air, the hubbub of soccer fans gave way to an unusual, mysterious calm. When architecture so exclusively captures a natural space in the hustle and bustle of the city, extraordinary perception is achieved: the treetops make the wind and rain audible, fog muffles the colors of the foliage and draws soft silhouettes, and with the coming and going of light and warmth, smells change, as does the behavior of birds and insects.

The *Arena for a Tree* emerged like a small seed from that haunting art project in Austria. In 2021, the permeable wooden structure stood on the Münsterplatz in Basel, and in the spring of 2022, in the courtyard of the Swiss National Museum in Zurich. At each new location, the arena invites visitors to encounter a different tree. Whereby the choice always falls on a species that can thrive under the conditions of the respective soil and climate.

The third destination plans to expand the nature showcase to include the ecological dimension of water: as a route for shipping, waters open up perspectives towards the harbor, inland as well as to the sea. The globally changing circulation of water puts international politics on alert. In the arena's basin, water feeds trees and underlies their branches with a reflective surface. Flat stones invite you to enter the center - and share for moments in the respect and appreciation for the most expensive commodity on this earth.

Arena for a Tree
Visualization: Axel Vansteenkiste, 2023

Arena for a Tree
Visualization: Schnetzer Puskas Ingenieure, 2023

Arena for a Tree
Visualization: Schnetzer Puskas Ingenieure, 2023

Lara Swimmer Photography

FLOW; the Public Realm. As part of Lara Swimmer's commercial architecture photography practice, this selection of work is derived from years spent photographing civic buildings and public spaces, and familiarizing the camera to the ways in which people inhabit and move through the public, often institutionalized venues of libraries, schools and plazas.

Her images seek to reveal and understand the life these critical spaces offer by way of the movement or flow of their inhabitants.

Now more than ever, in a post-pandemic world where people were forced indoors to shelter in place often alone, the need for human interaction and meeting space in public environments is crucial for the life and health of societies, and as the social infrastructure that binds us all.

The projects showcased vary geographically, from libraries in Missoula, Montana and Austin, Texas in the United States, to a plaza inside the Louvre Abu Dhabi in the Middle East. The movement of their visitors is equally informed by the innovation of their respective architecture, shape and design.

Lara has captured these and other libraries since her documentation of the Seattle Central Library in 2004 culminated in the book *PROCESS Seattle Central Library*, and which has lead to her passion for photographing the building type. Her upcoming book entitled *READING ROOM, New and Reimagined Libraries of the American West*, is due out December 2023 from Artifice Press.

Architecture firms represented in *FLOW the Public Realm* include: MSR Design in Minneapolis, A&E Design in Billings, Lake Flato in San Antonio and Ateliers Jean Nouvel in Paris.

Lucerne University of Applied Sciences and Arts
Anton Opanasenko & Giulia Bosshard

Hypermotion seeks to capture movement in its architectural form. Composed of standardised timber rods arranged in a hyperboloid, the structure uses repetition to create an interplay between minimalism and complexity.

The creative process was enriched by digital technologies. The shape of the object was determined by using Augmented Reality in combination with parametric design, allowing the object to fit seamlessly within the exhibition space and enhance the user experience. By using parametric design, the form was optimised through analysis software and visual programming, so that the number of element types could be minimised, making the project not only aesthetic but also sustainable. Furthermore, the design was driven by an analysis of the fabrication, assembly and disassembly requirements. Aligned with the concepts of cradle-to-cradle and circular economy, the structure is designed for disassembly, ensuring that its components can be reused and recycled

in the future. This is a testament to the project's commitment to sustainability and the environment.

Using digital manufacturing techniques, the project is designed to be easily reproduced and modified, allowing for innumerable variations. This approach allows for the shape to evolve over time and adjust to its surroundings by changing the parameters.

The interactive nature of the project is a key aspect of its design. By engaging the audience and encouraging them to become part of the project, the hyperboloid becomes a symbol of the collective effort and the idea that every individual is a part of a larger ecosystem. The interaction is designed to foster a sense of collaboration and community, and to highlight the importance of single members working together to create a greater whole.

Hypermotion brings attention to the importance of technology in architecture to develop new sustainable typologies.
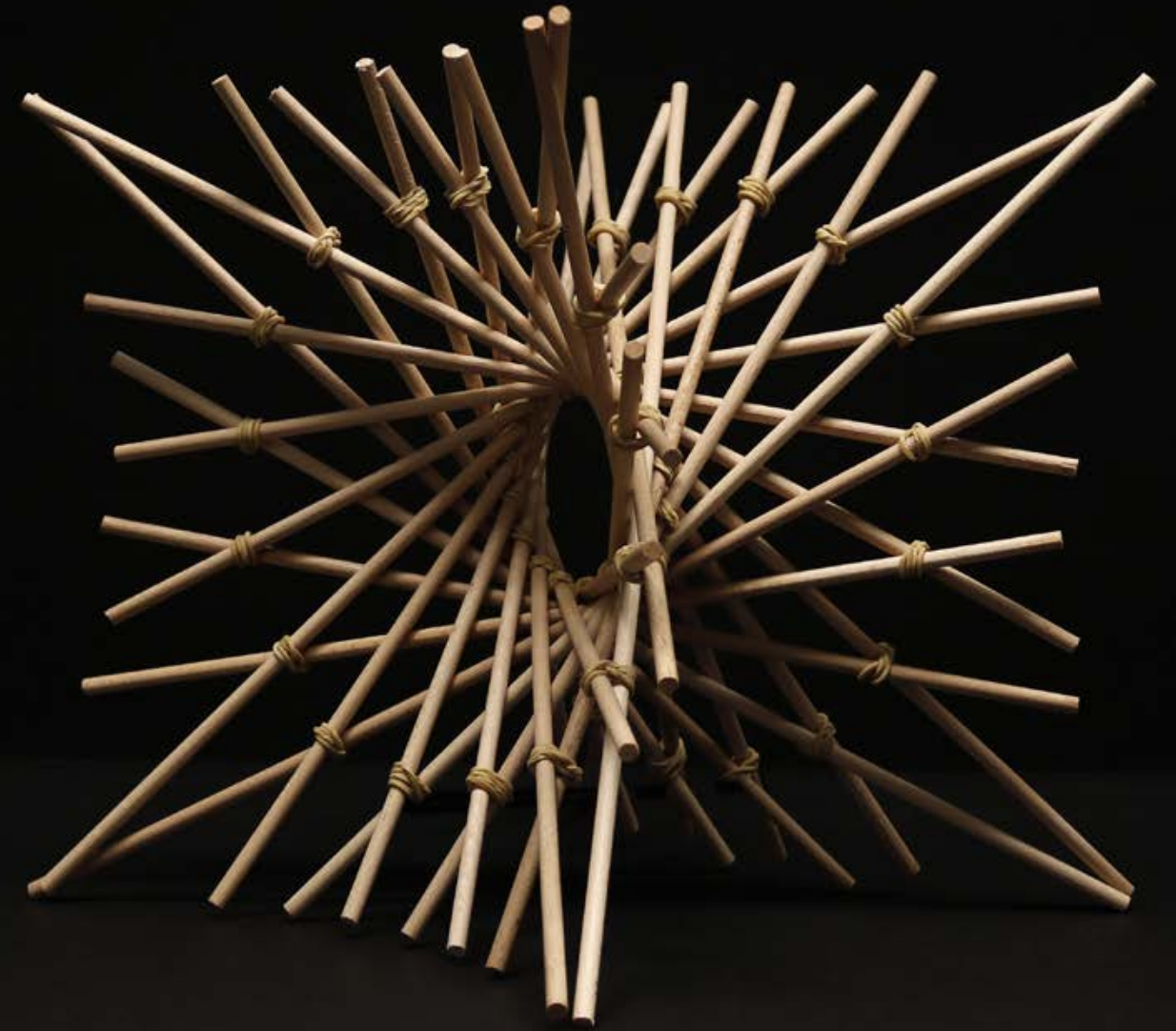
Magda Mostafa
Progressive Architects
& the American University in Cairo

A currently estimated 2% of the global population – across cultures, ages, socio-economic groups and geographies – identify somewhere along the spectrum of autism, engaging the world through a perceptual model different than that of the normative stance dictated by modernist standardisation. Despite great strides to stretch this normative view, practices to date have largely only addressed physical challenges, with almost complete exclusion of the autistic perceptual model and consequent need for alternative environments and spatial constructs, specifically of the sensory world. As a result, the burden of adapting to sensory challenges falls almost entirely on the autistic users themselves, with designers of space absolved almost completely of the responsibility of inclusion, accommodation and adaptation to these needs.

In 2013 the Autism ASPECTSS® Design Index was developed to face this challenge and traverse this gap. It provides a framework through which to conceive of autistic space, with the intent to catalyse conducive and effective spatial solutions. ASPECTSS® thinking is premised on the value of autistic insight and informed by the view of architectural spaces through an autistic lens. This exhibit aims to bring into focus the value of this autistic lens and unpack and decode the autistic spatial tactic of sensory escape and need for modulation through the spatial constructs of refuge and transition.

Our built world today is increasingly a victim of capitalistic proliferation. Our spaces, surfaces, experiences and cognition have become a commodity – sold as part of a free-market existence to advertisers, influencers, retailers, newsmakers and content creators. Our sensory perception has become commodified, our sensory world colonised. No more so is this a challenge than through the autistic experience. As a unique, but equally valid way of seeing the world, the autistic experience affords us a litmus test for sensory taxation and can expose the impact of this sensory commodification on our cognition, mental bandwidth and ability to access space equitably. This exhibit aims to highlight this experience and present autistic escape as a spatial protest to the sensory colonisation of our cities.

A Case for Sensory Decolonisation: Autistic Escape, will be comprised of two notions – a pair of parallel of experiences creating spatial simulations of the dichotomy of the autistic spatial experience between the two poles of stimulation and refuge. The first experience will be a collage of sensory vignettes from the autistic lived experience aiming to document experiences of sensory overload from our global city sensory-scapes. This visual composition will strive to capture the impact of the sensory colonisation of our cities and their landscapes on our autistic citizens. The second experience stands in complete contrast to the first. Comprised of an interactive spatial installation, it presents the power of sensory escape opportunities by proposing the notion of *EscapeScapes* or landscapes of escape. Experimenting with this form of senso-spatial acupuncture, this installation will allow users to step away from the multi-sensory noise of the simulated cityscape and experience the value of sensory refuge as a spatial strategy to counter the sensory colonisation of our cities and their spaces. It invites the audience to speculate on the cost of this sensory imposition on autistic citizens and our shared responsibility in accruing it.

Miami University (Ohio)
& Falcon Art Center Foundation
Diane Fellows, Adrian Jésus Falcon,
Diana Lizbeth Zuñiga Hernandez
& Gion DeFrancesco

If you are waiting on the International Bridge between Cd. Acuña, Coahuila, Mexico and Del Rio, Texas, *Time Space Experience* intertwines. Traveling by car may take one hour, as you inch closer and closer to your destination. If you cannot cross from one checkpoint to the other, the waiting is endless.

As you balance your life between staying and leaving, between going and arriving, the in-between space, the liminal space of border conditions, is a fluid space that unsettles as much as it liberates. Liminal spaces of the US–Mexico border are spaces for personal and community transformations that borders such as a fence or a wall or a territorial line separating ecologies and cultures constricts. Dreaming, too, is a liminal space; an unrestricted space of hope.

The exhibit, *Contesting and Bridging Boundaries and Borders: the US-Mexico Indigenous and Migration Experience*, presents the migration experience across the US–Mexico border along the Rio Grande. The exhibit engages the visiting participant in the personal and public narratives of current US–Mexico border experiences that are deeply rooted in historic structures of displacement. Migration is Earth's narrative. However, in contemporary global geographies, seamless migration is difficult because of territorial boundaries. For contemporary communities under duress, migrating out of necessity, accessing national borders to re-settle are cultural, social and political constructions, as much as they are physical ones.

Situated in Room 14 of the Palazzo Mora, the installation, an immersive performance space, presents multiple means of story-telling. A participatory mural event invites the public to integrate their own stories within the indigenous narratives presented by mural artists, Adrian Jésus Falcon and Diana Lizbeth Zuñiga Hernandez. A projected video of moving images on the wall and floor with a soundscape presents migration experiences of the Border through landscapes, stories, and urban ambient sounds that transforms the visual and auditory experience of the Palazzo space, a baroque space that has a relationship to historic global expansion evident in current global cultural and sociological inequities.

Architecture students consider their role in migration narratives as Miami University (Ohio) Studio *Boundaries, Borders and the Imaginary* presents work developed through engaging stakeholders along the US-Mexico border of the Rio Grande. The studio explores policies that govern our ability to move freely, or not, through landscapes. Students ask if architecture can facilitate the ability to change the current narrative of migration and 'borders'? Through cross-disciplinary processes, the studio considers ecological frameworks, governmental and non-governmental agencies and the effectiveness of migration policies, indigenous people's rights, and International Human Rights and Asylum laws. The studio ethos is to support the strengths of communities and question, through engaged design, constraints imposed upon the liminal spaces of borderland communities.

The interaction of the exhibition's visiting public in the mural event, the presence of the projected video, audio narratives, and the cross-disciplinary processes of architectural engagement hopes to empower all participants to reflect on and bridge current global experiences of displacement and migration.
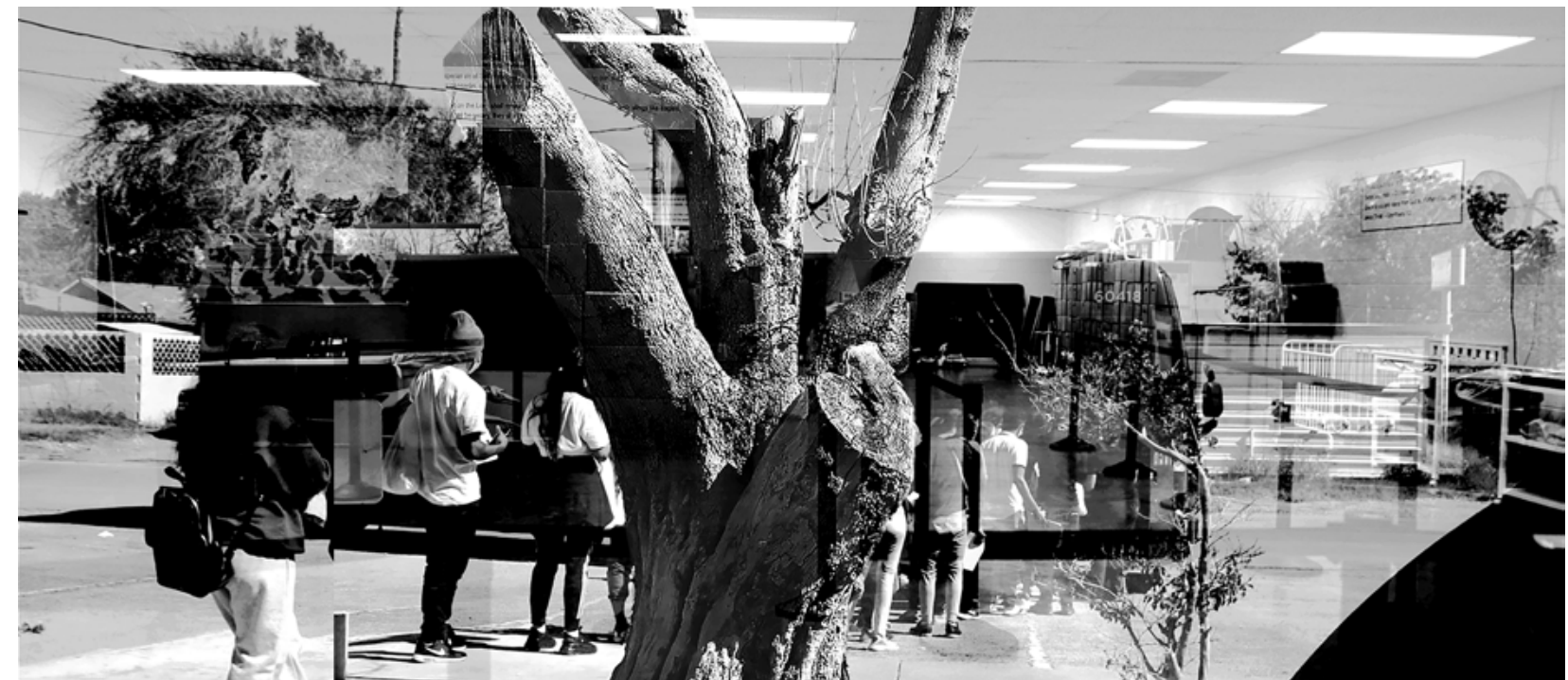
Miriam Dunn Architect
SAUL School of Architecture, University of Limerick

Miriam Dunn's teaching, research and explorative practice centres on the overlap of structures and architecture. Structure, traditionally the domain of structural engineers, is understood in the context of new environmental responses that consider multiple-relationships between matter, material and making. At SAUL School of Architecture, Miriam is developing a design-led research approach centred on developing structure prototypes that are simultaneously tested and assessed by their physical and environmental attributes.

Miriam's current design research involves investigating and testing *Structure Prototypes* in built work and large-scale models. This research combines and co-creates knowledge with experts in the field of architecture, engineering and industry. By investigating the structural principles of Reciprocal Frames as an innovative spanning solution, she tests how the structure can be adapted to a variety of spatial programmes and building typologies.

The advantages of using short members of wood to create longer spans in a reciprocal frame (RF) are demonstrated in a Structure Prototype model at Scale 1:10 proposed as an Adaptable Hall Space. The Hall Space is generated by a tessellation pattern of layered RF Modules (5.4m x 5.4m and 2.7m x 2.7m) supporting a roof plane based on standard Baubuche™ beechwood engineered timber panel widths of 1800mm and 3600mm lengths. The Structure Prototype can be repeated horizontally or extended vertically where the top floor becomes the roof. The tessellation pattern generated by the sequence of RF Modules means that there are always opportunities for

light & services in the roof or between floors. In the hall space, the spatial layout can be open-plan or sub-divided based on the pattern of RF Modules depending on use, thus generating a variety of floor plans.

The model uses solid beech wood members and Sherpa™ Mini 10 wood connectors at the Scale 1:10. The engineering attributes of the model scale up and best demonstrate how it would be built at 1:1. In the prototype, the planer RF modules are mutually supporting when they are assembled in a specific sequence on the members below, so there is no requirement for temporary supports. This method of construction from a kit-of-parts lends itself to pre-fabrication, ease of transport, assembly and disassembly in a ciruclar building cycle.

The timber members for each prototype at 1:1 are designed in BauBuche™ GL75, a hardwood glu-lam product, which is a high performance material relative to its own weight. Its engineering properties allow for slimmer cross-sections thus reducing the volume of material consumed. The width of the panels in BauBuche™ Board S (60mm) is compatible with the modular roof and floor panel (1840mm) of the prototype that also benefits material consumption. The joint is made using a surface-mounted Sherpa™ wood connector, which does not involve taking a notch out of the beam. Both products are standardised and compatible, which simplifies pre-fabrication and rapid assembly. When comparing the planar RF prototype design using 1800mm panels with one using 10 x 16.2m long beams 1800mm apart with like-for-like materials, in this case, the RF prototype reduces the volume of material needed by 45%.

Mirjana Lozanovska with Qiaochu Tang
Deakin University, Architecture Vacancy Lab
Assistance: Qiaochu Tang & Alexandra Florea

Dignity of Labour - Phase 1. Port Kembla Steelworks and Immigrant Workers. This project explores unprivileged transnational immigration, industrial architecture and the contractual conditions of labour from the perspective of immigrant subjectivity. It draws from a study of post-war immigrant workers who were recruited to work at the BHP Steelworks in Port Kembla, located on the scenic Illawarra eastern coastline of Australia, 80 kilometers south of Sydney. Like many advanced economies in northern Europe, in 1947 Australia also embarked on a massive recruitment of immigrant workers. By 1959 the Port Kembla Steelworks expanded with three new blast furnaces, a new hot strip mill, and iron-ore sintering plant, and the workforce had grown to 22,884 with more than 60% post-war labor migrants. Strategies of racialization and ethnicization manifested in a hierarchy of work allocation, at the very bottom of which were post-war immigrants from southern Europe (Italy, Greece and Yugoslavia). They were sent to environments of extreme heat, dust, noise, and gaseous odours; backbreaking labour, shiftwork and operations that were sometimes life-threatening. *Dignity of Labour* evolves from two modes of work. Firstly from the dialogues, conversation, walking and bus tours, moments and fragments of the past immigrant workers' narratives are presented. Secondly, with the intuition to account for their phenomenal sacrifice and contribution, a photographic representation of the sequential making of a meticulously crafted model of one very tiny piece of the space of their work is shown. It seemed important to make this a thing of beauty.

Recently, Mirjana's works experiment with the interface of art and architecture and specifically in that gap between architecture as a thing (concrete, empirical, functional) and its larger role in society (meaning, cultural value, narrative). Works in the *Terrazzo* series, include *Venetian Blinds* – inverses migratory travels as return journey of migrant houses back to Italy, and Venice. Its optical apparatus evokes migrant labour, work, uncertainty inviting alternate narratives and blindspots in Venice, and disrupting dominant frames of beauty and desire. In *Terrazzo-Doge* migrant housing geometries are refolded to become visual devices – a way for artists (filmmakers) to look at Venice through migrant houses.

The same lens of *otherness* brings Mirjana's artistic practice to architectural/industrial vacancy. Works in the *Vacant Geelong* project explores architecture as *embodied memory* to complement the science model of *embodied energy*. *VACANTCity 1000 years BackForward*, experiments with the methods of counter-representation, with reference to *drift* maps (the Situationists) to stage connections of otherwise disparate or repressed topographies, with decolonizing methodology drawing on the artwork of the artist Gordon Bennett (Terra Nullius). *The Sensory Portals* and *Oro*, designed for through-circulation of intimate space within public site, experiment with absence and the activation of place. *ORO* staged an *augmented reality* interior between *life size* projections of past factory workers dancing *oro* (a traditional Macedonian round dance).

Port Kembla Steelworks: Spaces of Labour model
Photo: Qiaochu Tang, 2022

MIT Critical Broadcasting Lab
Ana Miljački, Ous Abou Ras, Julian Geltman,
Pavle Dinulović, Calvin Zhong

The Pilgrimage | Pionirsko Hodočašće. In Yugoslavia's historical laboratory of the future, socialism, self-management, tolerance, and inclusion intersected in various ways with architectural imagination. Today, the artifacts that constitute Yugoslavia's socialist architectural heritage, and especially those that were instrumental in the ideological wiring of several post-war generations for anti-fascism and inclusive living, have been swallowed by the entropic appetite of aging collective memory, exacerbated by various forms of local and global political investment in forgetting their meaning. But, for those who choose to claim citizenship to the idea of Yugoslavia, now thirty years after its destruction (and do so precisely in opposition to crude transitional capitalism and its related nationalisms), memorials like the Partisan Memorial Cemetery in Mostar (vandalized in the summer of 2022) serve as navigational devices, both backward into history and forward into the future. Private memories of pilgrimages to the memorial sites they mark are as anachronistic in contemporary society as these objects themselves. And yet, if this anachronism is a way to anchor anti-fascist and transnational collectivity, they must be protected. Or, at the very least, remembered.

The Pilgrimage synthesizes *memories* from Yugoslavian elementary and high-school visits to these memorial monuments, offering them in a shifting and spatial multi-channel video presentation, accompanied by a non-linear documentary soundscape. Our A.I. "Stane" (StyleGAN3) has been trained on archival and individual photo documentation of the monuments to output a series of video interpolations based on them. The six monuments currently included are but a sampling, chosen for their likelihood to have been visited by Yugoslavia's youth up until 1991, and thus most prone to resonate with the messages of anti-fascism and national brotherhood. In two consecutive video triptychs we present interpolations of:

Interrupted Flight or Monument to the Executed Students in the Memorial Park Šumarice, Kragujevac, Serbia, dedicated to hundreds of school children and their teachers who were executed by German Nazi forces on its site in 1941, by Miodrag Živković, 1963; *The Battle of Sutjeska Memorial Monument* in the Valley of Heroes in Tjentište, Bosnia and Hercegovina which commemorates the fallen fighters and soldiers in the crucial World War II battle of Sutjeska, by Miodrag Živković with Ranko Radović, 1971; *Stone Flower* commemorating the victims of the concentration camp in Jasenovac, Croatia, by Bogdan Bogdanović, 1966; *Monument to the Revolution on Kozara* dedicated to the Partisan fighters, fallen soldiers, and civilian victims of the Kozara Offensive in 1942, Bosnia and Herzegovina, by Dušan Džamonja with Marijana Hanzenković, 1972; *Partisan Memorial Cemetery in Mostar,* Bosna and Herzegovina, by Bogdan Bogdanović, 1965; *Monument to the Uprising of the People of Kordun and Banija* on Petrova Gora, Croatia, by Vojin Bakić with Zoran Bakić, 1981.

In offering its synthesized memories of the lessons for the future that the original memorials were meant to carry, *The Pilgrimage* also presents antifascism and unity as political and activist positions available (and necessary) today, for the sake of the future. *The Pilgrimage* is both historical and impossible.

MIT Department of Urban Studies & Planning
Carmelo Ignaccolo

Tourism is a deeply spatial phenomenon. Through space and time, tourists travel and experience geographies, interact with the built and/or natural environment, and often engage with other individuals. As a result of these temporal and physical encounters between people and sites, the spatiality of tourism emerges as an embodied practice, defining the underpinnings for the notion of the tourist body in a physical landscape, whether urban or rural.

According to the United Nations World Tourism Organization, urban tourism, which generally refers to trips to urban centers or areas with high population density, has significantly overcome tourism growth in non-urban areas. The built environment, in fact, remains the main contributor to the attractiveness of tourist destinations across the globe. Buildings, landmarks, and iconic public spaces carry symbolic weights that often depend on their own visual appeal and on visitors' individual perceptions. Throughout the last 20 years, image-focused social media marketing strategies and international flows of capital, combined with an increase in disposable income, have contributed to the skyrocketing popularity of some places. This series of intertwined socio-economic phenomena have put entire cities – like Venice, Italy – into an existential conundrum: can a city be both a tourist attraction and a nice place to live?

The Covid-19 pandemic revealed the volatility, unpredictability, and fragility of the tourism sector1[1]. However, the recent uptick in visitors to historic cities still requires a more holistic and data-driven approach to shed light on the nexus between tourism saturation and urban form at a more granular level. Spatial data, in fact, are often underutilized to understand how, why, and when tourist activities cluster in certain parts of cities.

Through maps and animated visualizations, *The Consumed City* narrates a spatial investigation of tourism in Venice, harnessing pre-pandemic data on lodging (6,642 Airbnb listings, InsideAirbnb), dining (997 restaurants, Tripadvisor), and shopping (226 stores, Google Points of Interest). The project presents maps and spatial analytics to showcase the complexity of tourism dynamics in the lagoon city. Moreover, it constructs a *Tourism Services Index* (TSI) to reveal the spatial distribution of tourism service capacity, and it empirically demonstrates the spatial interplay between urban form parameters – landmarks, bridges, and street network segments – and TSI values. Policymakers can prevent an uncontrollable follow-on tourism effect by defining special zones around areas with high TSI scores.

By leveraging by-product geospatial datasets, *The Consumed City* acts as a data-driven policy-making tool to advance place-specific policies in cities *consumed* by overtourism.

Santa Lucia Railway Station
Rialto Bridge
Venetian Arsenal
Basilica di San Marco
Basilica di Santa Maria Gloriosa dei Frari
Santa Maria della Salute

Short-Term Rentals
ranked by number of beds

13-16
10-12
7-9
4-6
1-3

Inside Airbnb

Restaurants
ranked by the internationality score

HIGH
LOW

Tripadvisor

Tourism-Oriented Stores
locations

souvenir shops
designer stores
mask shops
jewelry stores

Google Points of Interest (POI)

MIT in collaboration with the American University of Beirut
Adèle Naudé Santos, Mohamad Nahleh and the Beirut Urban Lab

The Beirut Port explosion on August 4, 2020, devastated neighborhoods, destroyed buildings, and affected around 200,000 housing units in the capital. The Lebanese DAR Group put out a request for proposals to rethink the affected part of the city through the Leventhal Center for Advanced Urbanism (LCAU) at MIT. In thinking of ways to ground our design proposal and open it for public debate, we invited the Beirut Urban Lab at the American University of Beirut to join us on this venture.

The heavily affected low-rise and high-density neighborhood of Mar Mikhael is perched on a hill and is characterized by its walkability and rich urban fabric. As developers vie for rebuilding opportunities, this hill – with its destroyed buildings and inadequate infrastructural networks (water supply, electricity, etc.) – is poised to undergo major transformations. Although Lebanon pledged *the right to housing* politically, it was never demonstrated in Beirut. Far from it, pro-development legislation helped jeopardize the fabric of traditional walkable neighborhoods—demolishing heritage buildings and replacing them with high-rise buildings that remain unpopulated. In the context of a permanently displaced population, exploitative real estate ventures, and lack of equitable housing policies, we viewed the port blast as a potential escalation of the mechanisms that have produced the crisis for affordable housing.

Urban housing plays several critical roles in development beyond the mere provision of habitation. In Time Space Existence 2021, we presented *Housing as Community* and demonstrated how the provision of housing was critical to developing a basis for a participatory community. We continue this exploration here by presenting *Housing as Infrastructure*, which centers on the necessary systems needed for equitable and efficient housing in Beirut. Within this context, housing itself becomes the infrastructure guiding circulation, managing slopes, integrating green spaces and providing solar energy. The site selection began with the analysis of property patterns. Through this study, the site along the cancelled Fouad Boutros highway trajectory, which consists of a larger percentage of public land and lower percentages of religious and private lands, proved to be a convincing opportunity to test our project.

Our urban strategy anchors housing within a corridor of shared open spaces. Housing is inscribed within this network and sustained through an adaptive infrastructural system defined by energy-efficiency and climate responsiveness. We coupled this with a low-rise and high-density strategy of modular 1, 2-, and 3-bedroom units that echoes the intimate quality of the neighborhood and ensures that roofs could supply solar energy at minimal levels to allow habitable spaces. We were also committed to mixing income groups to share the amenities we were building into the open spaces and providing some non-residential uses on ground levels. The housing sites selected for design exploration deliberately contained complex grade changes allowing further development of the staircase street typologies so typical of the context. These in turn linked to existing stair-streets so that inhabitants could walk from Achrafieh to the famous Armenia Street in Mar Mikhael. In developing these typologies we also proposed a ramp system to allow wheelchair access for residents to live on upper floors.

Staircase housing typology with stepped garden
Modeled and rendered by Ghida El Bsat, 2023

Monash University XYX Lab
Gene Bawden, Nicole Kalms,
Jess Berry, Isabella Webb
& Indae Hwang

Unwanted sexual attention, and the threat of this occurring, pervades women's and gender-diverse people's experience of public space. The transgression of personal space without consent in public can include leering and catcalling, intimidation and following, physical harassment, gender-based violence, sexual assault, rape, and murder. This continuum of violence is experienced globally on a daily basis, and it restricts women's and gender-diverse people's access, participation, mobility and social behaviour in cities. Through inaction our institutions, societies, and cultures consent to this violence.

Operating as an extension of Monash University's XYX Lab's ongoing global engagement, *Consenting Cities* explores, documents, and visualises international research concerning gendered experiences of safety in our cities. Data is a powerful tool that can help inform planners, policy makers, local governments, and other stakeholders about the challenges that women and gender-diverse people experience while navigating the cities in which they live. *Consenting Cities* reveals this data through an interactive augmented reality, triggered by the iconography of geometric shapes and images

embedded in an installation that covers the wall of the Palazzo Mora passageway.

This brightly coloured and visually appealing graphic uses coded symbols that connect to a set of typologically categorised data points that reveal the high percentages of women and gender-diverse people who feel unsafe in public spaces, including: streets, crowded bars, spaces after dark, public transport and institutions. Using a smartphone to hover over the graphic, the scanned interactive element exposes the problematic underbelly of spatial inequality in stark black and white statistics. Collectively these icons generate an understanding of repeating patterns of behaviour that impact the urban experiences of women and gender-diverse people. *Consenting Cities* invites audiences to interact with the research through physical, digital and visual augmented reality (AR) experiences. The website at xyx-consentingcities.com offers further opportunity to engage with these issues and consider the provocation: *What can we do to address gendered urban inequality so acutely evidenced by the data and improve the situation for those most vulnerable to it?*
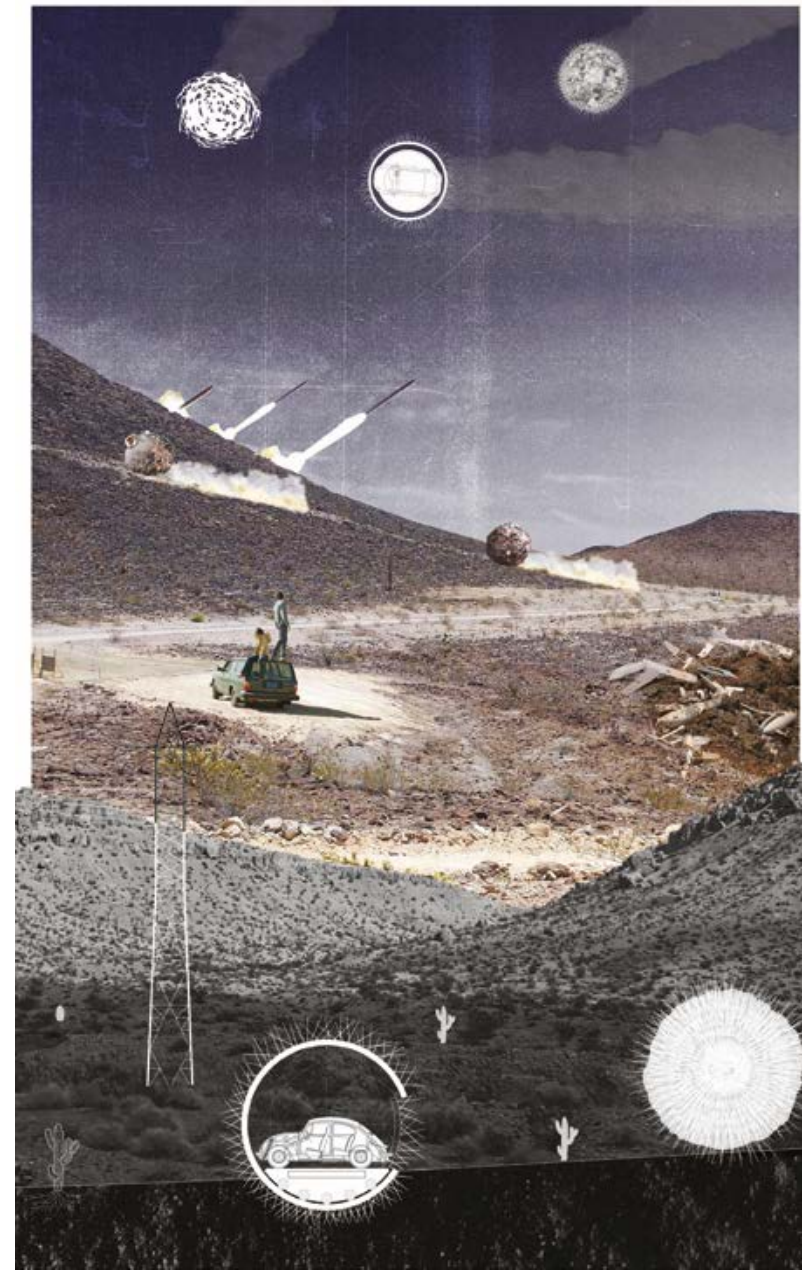
Myefski Architects
John Myefski & Christopher Myefski

Myefski Architects was built on creative instincts. The firm strives to differentiate itself from others in the industry by constantly thinking differently. They are a team of architects but prefer to think of themselves as problem-solvers, dreamers, investigators, and visionaries. Founded by John Myefski, the firm's focus has evolved over its 29-year history to embrace the needs of myriad clients. With the goal to create buildings that contribute to communities and foster the local economy, the firm's technical prowess and design savvy draws on John's 30+ years of experience.

The exhibit features two projects that reimagine the future of transportation and travel with a series of bold, disruptive architectural expressions. Shattering the American ideal of vacation destinations, American Construct proposes a series of road trip rest stops among the weaponized landscape of America's military sites. Vilnius Connect was designed to bring life back to the Vilnius community through the creation of an iconic railway station that serves as a gateway to the city while also bridging the gap between existing neighborhoods. Each project intends to create a sense of destination as part of the journey of transportation, propelling the traveler into unexpected spatial experiences.

Vilnius Connect
Myefski Architects / John Myefski, 2021

200   **Vilnius Connect**
Myefski Architects / John Myefski, 2021

The American Construct
Myefski Architects / Christopher Myefski, 2018   201

Narduli Studio
with MadLabs

Narduli Studio's project for *Time Space Existence*, realized in collaboration with MadLabs, is part of a broader enquiry into the visible and invisible forces of nature. The installation uses the latest advances in extended reality and digital technology to create a real-time portal driven and experienced by two cities on opposite sides of the globe facing the repercussions of unprecedented climate change.

Simultaneously launched in Venice Italy and Fort Lauderdale USA, Narduli creates a technology bridge between two cities geographically disconnected and seemingly unrelated. But climate change is blind to human constructs of culture and borders, and these two low lying regions are of the most vulnerable to changing sea levels.

Conceptually, this project evokes the datum line, the theoretical line of reference used to measure sea level by the rise and fall of the tides. It consists of two experiences – one real world, one virtual – fueled by a stream of climate data that produces near infinite variations of animations and digital constructions. Together they create a cinematic narrative of place and time. In *Datum Line*, the unceasing fluctuations of the profound forces underlying global sea level change are the creative energy that generate multi sensory immersive visuals.

Formally, the project recalls the fascination with science and mathematics that led to the birth of linear perspective in fifteenth century Italy. The experience begins inside an immersive field of forced perspective and a world created within an illusion of depth. But soon the fixed vanishing point shifts and the world is in flux.

Datum Line will evolve throughout the duration of the *Time Space Existence* exhibition. Driven by data streams, public interaction, and the ongoing rhythms of the planet, it imagines a new form of engagement, one that is fluid and responsive.

The concept for *Datum Line* is rooted in Narduli's project *Light Crossing*, a series of bridge installations that translate the shifting tide levels of the New River running through downtown Fort Lauderdale into an interactive light experience. *Datum Line* presents a compelling model for a broader dialogue and exchange. It reimagines the enormity of climate change as a fundamental force that links all living things, not tied to country, politics, economics or social structure. *Datum Line* is a window into our environment and a meditation on our place within it.

Team Members: Susan Narduli, Sebastian Peschiera, Victor Gomez-Mustafa, Sam Richard / Narduli Studio; Marc Aptakin, Roy Husdell / MadLabs

Nic Lehoux
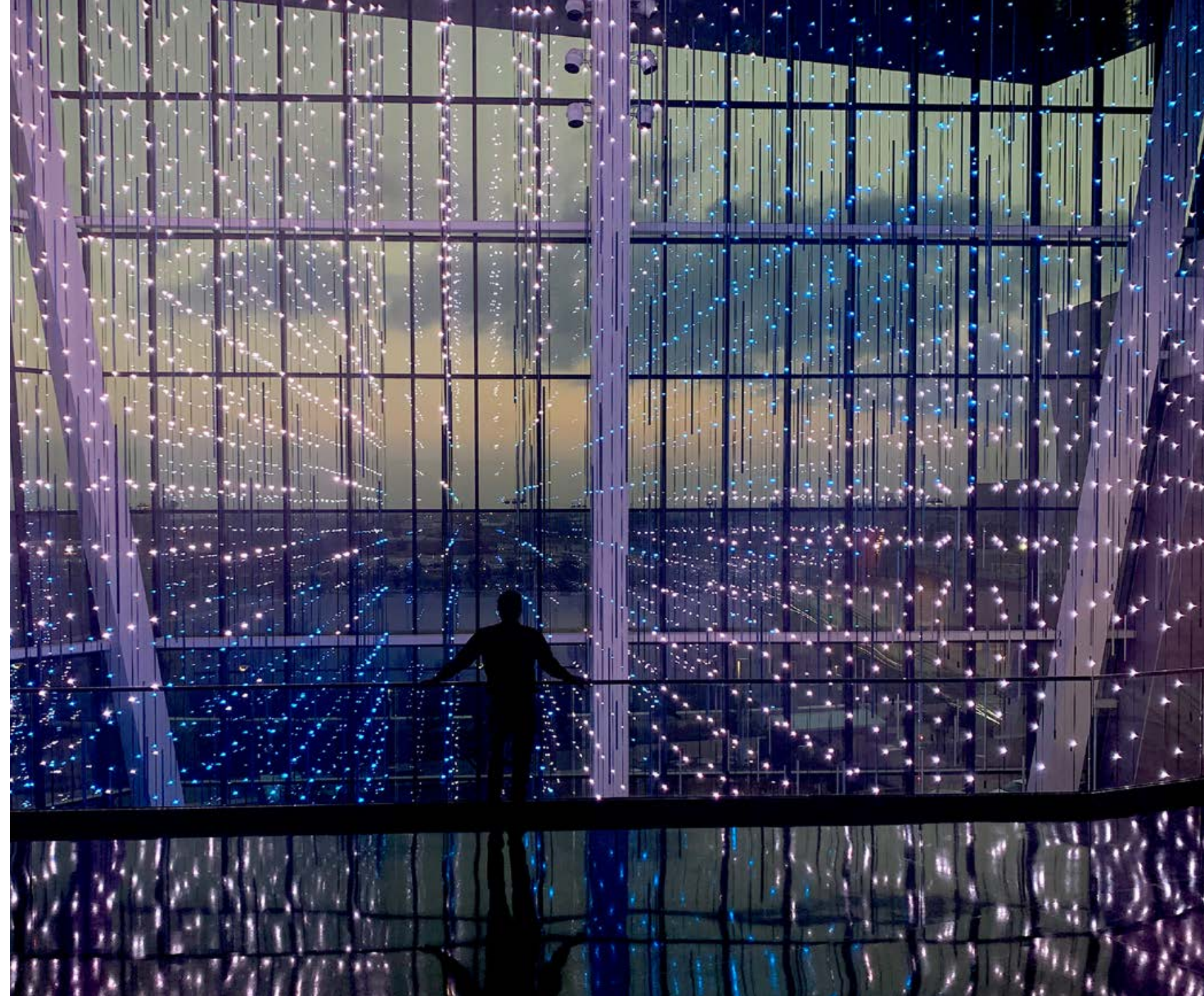
Architecture Alive! Our perception of architecture has evolved significantly in the last 20 years. It used to be a little known entity that surrounded our daily lives. It has become more celebratory of the human experience and in return, it has become more celebrated. Nic Lehoux has followed this evolution through his architectural photography.In Venice, he presents a series of images which capture this human experience within, and in response to, significant architecture. Nic's work stands at the crossroads of traditional architectural photography and social documentary work. The images are initially defined by the building itself: it's form, it's response to site and it's response to light.Technically, he creates through meticulous composition an abstraction of the space in one point perspective. This method gives the clearest rendition of the architect's intended goals and design concept, and cements the true nature of a building's spatial qualities.

This rigorous composition then intersects with the people within the space. The idea here is to visualize the space with it's human response, to anticipate how a grouping of people will make the space come alive: a human response to the built environment..

In a world where technology increasingly glosses over the reality of everyday life, it has never been more important to capture what is real and instinctive. Nic's work strives to push back against this dystopian gloss and to retain as much authenticity as possible.To create the image, he scrutinizes the natural response of people assembled in, walking through or generally using the space he is photographing. This documentation becomes a record of human interaction within the built environment. Building may be static, but they become dynamic when people inhabit them, move through them, live in symbiosis with them, and give them soul.

For this exhibit, Nic has chosen to explore two themes: The first part of the exhibit shows some of the different ways that people respond to successful building design. These spaces are all different in size, function and context, but they make a case for the importance of architecture in the human experience. These projects were commissioned by the architects whose work is represented, and are representative of Nic's professional work. The second theme explores in depth how one building can genuinely affect the human experience. In 2015, Nic embarked on a project to photograph the largest school for girls in Afghanistan. Located in the norther city of Mazar-e-Sharif, the school stands as the embodiment of how architecture can change lives and have a positive impact on an entire community. The project expanded in scale in an effort to measure the impact this school's construction had on the entire community.

The photoessay not only focused on the school in use, but also the girls themselves in their activities.Then, we are invited to witness the origins and processes behind the school's construction. The photographer explores a brick factory, the work of sheet metal workers and lumber yard labourers... All were involved in the school's construction.The viewer also gets a glimpse into everyday life in the city itself. Nic plans on publishing this photoessay in an up and coming book.

As a whole, these images are intended to initiate a reflection on the ways we respond to significant architecture, and what makes architecture significant.

Nic's hope is that these images spark a conversation: How can architecture enhance the human experience, and what are the keys to enhancing the soulfulness of the spaces we design?

NI&Co. Architects + Project EN

Akihide Ichida, Nina Funahashi,
Kazuki Naoi & Shogo Nakajima

Our proposal is a site-specific space called *Defragmentation*, along with the theme of the exhibition: *Time Space Existence*. We read about a cultural background different from Japan and designed a space that can only be achieved in that place. The exhibition hall is a historic building dating from the late 11th century, used as a private owned palace, after that it was used a privately apartment until World War II and now owned by the European Cultural Centre. We will try to reorganize the fragmented spatial elements of this building to give value from a new point of view, and create an ambiguous space that mediates between past and future.

Fragments. The point of the proposal is as follows. We surveyed about 200 rooms in three exhibit areas owned by the ECC, and selected one of the attics in Palazzo Mora after extracting the parameters that make up the existing space from each space. This exhibition room has a chimney peeking through the opening, a minimal opening representing the person that used to live there, a dormer roof symbolizing the attic, a niche that remains as an afterimage of the previous spatial composition, and difference in level to keep the ceiling height, such as the light leaking from the top-light of the next room etc., historic traces are left in this existing space. We extract these fragmented elements and reorganize them into a space with new values.

Ambiguity. We have installed a *intangible roof* at a height of approximately 1 meter from the floor. This intangible roof has an ambivalent character, as it reveals the essences of the existing space that has lost its context, while at the same time it serves to converge the fragmented elements into a new context. Visitors follow the flow of the exhibition route and look at the upper part of the intangible roof. They could see a landscape that is no different from their everyday life, and the absence of context is evident. After that, the visitor's activities are triggered, as if they were diving under the roof. Here, the fragmented elements are abstracted and a new context is formed.

Defragmentation. As above, the exhibition room contains the fragmentary elements, but they are not related to each other. They are simply there. As if to stitch these fragmentary elements together, the intangible roof in the exhibition room is installed. This roof begins to connect with past landscapes, artifacts, traces of life and steps in various ways. These can be rephrased as *invisible reality*, that is *release from function*. New territories emerge where they deviate from their original purpose. Through this roof, the visitors recognize a new territory within the fragments.
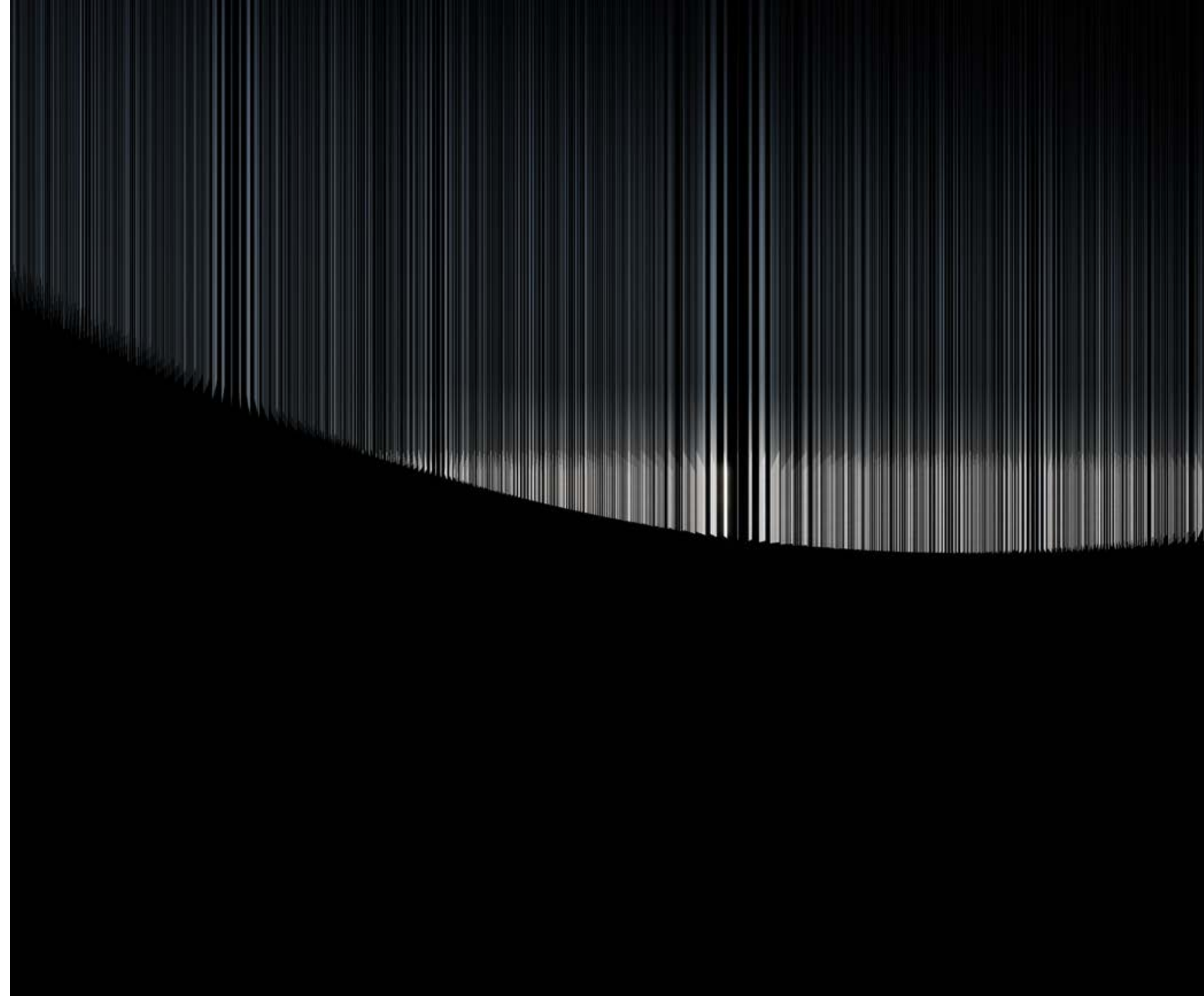
Norman Foster Foundation (NFF) with Holcim

This project was born in June 2022 during a workshop on Shelters that was held at the Norman Foster Foundation and supported by Holcim. This five-day educational program gathered international experts from different fields and ten talented students from top universities around the world to tackle the challenges and potential solutions to provide emergency shelter to vulnerable communities. As a result, with the support and tutoring of the academic body of experts including architect Ban, Better Shelter Managing Director Johan Karlsson and Holcim Scientific Director Christophe Levy, the students developed concepts for building 1,000 shelter units and a medical facility in one day.

Following the lessons and ideas shared during the seminars, lectures and debates that took place during this NFF initiative, Holcim invited Norman Foster and his team to continue exploring these challenges, and to develop an *Essential Homes Research Project* to be presented as work in progress at the TimeSpaceExistence exhibition, during the Venice Biennale of Architecture 2023. For that purpose, two interventions are proposed.

The first one is a full size *Essential Home* prototype built at the Giardini della Marinaressa, that materializes the research and design developed so far. The prototype is built for durability and comfort using rollable low-carbon concrete impregnated canvas which becomes rigid with the application of water. This creates a strong exterior shell, easily-installed insulation systems for warmth and tiles with luminescent aggregates illuminate pathways to provide light at night.

Based on an incremental modular approach, a basic structure that can be upgraded over time into an expanded home is proposed, fulfilling the evolving needs of families in displacement.

The second one, the exhibition at the Palazzo Mora, presents the wider context of the project, including graphics, audiovisuals, construction materials, and physical models. This is accompanied by research on the evolution of shelters across history: from vernacular architecture and the shelters developed during World War I and II, to the early examples of modular construction and more recent proposals.

The exhibition shows how this Research Project can be a starting point for this team and others to reflect on how we could generate communities in diverse terrains and climates to respond to natural and man made disasters.

OFFICEU architects for urbanity

urbanity [ur-ban-i-tee]
from the Latin word: *urbanitas*;
noun; plural ur·ban·i·ties.
1. the quality or character of life in a city or town;
2. refined, effortless beauty of manner, form, and style;
3. (of speech) delicacy, elegance or refinement of speech;
4. polished courtesy or politeness.

OFFICEU architects for urbanity is a Brussels based design office with a fundamentally urban design attitude. Through the concept of 'urbanity' they aim to provide solutions to complex social and ecological challenges.

Acknowledging the broad societal responsibility of the architect – beyond the creation of beautiful and functional buildings – OFFICEU architects for urbanity aims to create projects with a societal relevance. Within the spatial, programmatic and economic constraints, they look for unexpected but always simple solutions. Rather than focusing solely on aesthetic details, OFFICEU architects for urbanity wants to create a strong spatial framework that places social interaction and human experience at the forefront.

A 'sustainable' project is much more than a well-insulated building. It's a project that fits logically into its context, interacts with it and makes a meaningful contribution to it. A project that can evolve in time, outlive its current use and can always maintain its relevance. A project that is inclusive and encourages social interaction. A project that questions its own need to build, and consciously uses new materials and resources.

Three key concepts - themes that all contribute to a truly sustainable building - are elaborated and illustrated in the exhibition, using four very different projects from OFFICEU architects' oeuvre, arranged in a matrix that can be read both horizontally and vertically. This matrix forms a toolbox, expandable in all four directions, and serves as an invitation to an open and wide-ranging dialogue about the role of buildings and architecture in our world, now and in the future.

Photo: Stijn Bollaert

SIJS Cohousing De Sijs, Leuven
Photo: Stijn Bollaert

Oliver Christen Architekten

Oliver Christen Architekten design architecture based on considerations relating to the built environment, social and compositional concerns. In his designs, the architect and his team explore existing buildings and settings, balanced proportions and structures, natural materials, their look and feel. His aim is to create atmospheric spaces that offer a strong sense of security. His built projects are characterised by clarity and reduction, tectonic identity and harmonious compositions of material and space. The exhibition *Time Space Existence* affords an insight into his fledgling work based on his first five buildings.

Oliver Christen's mode of working is defined by an in-depth examination of the particular context, driven by a passion for the great variety of existing building typologies and regional identities. Based on the findings of his analyses, he develops buildings that blend subtly into each setting. He draws his inspiration from various sources including artworks from the arte povera movement, impressed by the sensuous use of material and the reduction to a simple formal vocabulary that harks back to the roots. In search of poetic qualities in architectural space, he takes a similar approach, striving to integrate materials and formal vocabularies into his own projects. His interest is in the look and feel of the impressions created by various materials as well as in precisely crafted solutions and careful attention to tectonics. The architecture designed by Oliver Christen Architekten provides answers to current demands for sustainability. Taking a holistic view of this concept, in addition to ecological concerns the architects also give special attention to such aspects as preserving identity, craftsmanship and building typologies, while also reflecting the importance of social and cultural structures.

Oliver Christen Architekten is a studio based in Baden, Switzerland. It was founded in 2016. Built projects demonstrate a clear commitment to a sustainable handling of the built environment.

Photo: Stijn Bollaert

Olla Architecture

Kylä is a unique portal between a serene archipelago and a lively city. The foundation of the project is a deep respect for nature and a desire to create a new passage for Helsinkians to embrace it. Olla Architecture designed the experience to feel like a deep breath: invigorating and reassuring at the same time.

The recreational oasis designed is located in the historically significant seashore of Helsinki. The space is a tribute to both its users and unique environment. Behind the site, surrounded by a seascape and pine forest, begins the most culturally important cemetery in Finland. The over 200-year-old park is a resting place for numerous notable figures and a stage of national memory. The cemetery is circled by a popular walking route, which makes the area both active and calming. The same applies to *Kylä* – a combination of Finnish sauna culture, water sports and a cozy dining milieu.

Consisting of several buildings, *Kylä* resembles an archipelago village. The scale of the entity is small, considering both its environment and users. The architecture does not emphasize its own existence, but merges with the surrounding landscape. The arrival experience feels like a rite: the visitor leaves the hustle of everyday life behind by entering through a narrow corridor with a limited view of only the islet in front. As one moves further, the landscape opens up. Since the surrounding nature is a key part of the architecture, the sightlines are carefully thought out. The buildings where the visitors spend the most time – sauna, restaurant and changing rooms – have open views of the sea, islet, and forest. Other functions, such as the kitchen, are more private.

Kylä serves all year round and, among other things, offers a rare opportunity for ice swimming right in the city center. Situated in an environment that belongs to everyone, *Kylä* was designed to be as inclusive as possible. Typically, one climbs on the sauna benches from the floor up. In *Kylä*, the sauna is planned the other way around: the entrance leads directly to the top level of the sauna. This way also people with reduced mobility can enjoy proper heat and the opening seascape. The dressing rooms and cooling terrace are also easily accessible and gender-neutral.

The architecture draws from the Finnish tradition of wood construction. The buildings have log frames and wooden shingle façades that combine traditional building techniques with modern patterns. Solid wood frame is not only durable but also lets the structure breathe freely. The building's carbon footprint is also reduced with maintenance-free solutions and minimizing technology. For example, leaving out gutters will reduce the need for maintenance and material. Rainwater can drain directly through the terrace onto the cliffs.

While the buildings are designed to last, the design solutions also consider the time after *Kylä*. The architecture enlivens the landscape but doesn't change it permanently. The terrain is not modified so should the buildings magically vanish, only a few inconspicuous holes in the cliffs would reveal they were ever there.

The City of Helsinki organized a competition to find proposals for sauna and restaurant entities for several locations. Olla Architecture won the Hietaniemi plot together with Laguuni Ltd. Laguuni offers a variety of water sport experiences but is also known for the Baltic Sea Plogging project: the company lends out free cleaning kayaks that can be used by anyone to pick up trash while enjoying the sea.

Patricia McKenna

Particular trees, when placed in water, transform from being pliable and porous to rock hard.

In the 5th century when people started taking shelter in the lagoon working with mud and reeds they started turning logs into wooden posts which they placed close together forming the foundation for houses. The logs were mainly Alder, Oak, Larch and Pine. These were collected from the forests of the Veneto, Montenegro, Croatia and Slovenia.

Over time millions of trees were used creating houses, structures, connecting islands, Venice emerged, formed on an invisible forest.

A large proportion of posts were made from Alder.The wood of Alder when cut changes from white to orange to blood red. In Ireland it is a sacred tree seen to protect, but also feared because of its blood like appearance and association with war. In Irish mythology the first man was made from Alder the first woman from Rowan.

This shadowy piece, *Memory of a Forest*, set amongst the beams and rafters of Palazzo Mora is an homage to this invisible forest of logs.

Patricia McKenna a visual artist lives and works in Dublin, Ireland.

Petra Kempf

The twentieth century has been the century of urbanization – a century that breached local barriers to create a global world that is deeply uneven. In this context urbanization processes continue to unfold far beyond the realm of urban agglomeration affecting even the most remote and diverse territories, exposing oceans, watersheds, forests, deserts, mountains, and open land to cultivation processes geared towards the extraction of resources.

Through urbanization, infrastructure has become a dominant driver in manipulating these processes of extraction as well as the optimization of large-scale natural geographies, feeding the fossil fuel dependent built environment. In this development, the individual has also been exposed to optimization procedures in which the notion of a diverse public has been slowly transformed into a controlled and assimilated mass that is obsessed with consumption and distracted by technology. As the globe has become increasingly connected, we are more isolated from one another than ever before.

In this context, urbanization has produced a spatial configuration comprised of contrasting parts that thrive on fragmentation to fabricate an environment of separation and exclusion. These splintering forces have over time affected the collective dimension of the urban construct and its architecture – an architecture

that functions less as a mediator towards the creation of a collective, but instead has become predominately a medium of iconic representation, self-referential in its appearance and geared towards free market speculation. As the world has become urbanized and the built environment disengaged from local context, such as local culture, climate, and biomass, we are confronted with the disappearance of a larger cohesive collective framework, most evident in the loss of a pluralistic society that embraces equality and difference for all.

Following this logic, the ground beneath our feet, figuratively and literary speaking, is no longer a place we cherish and protect but rather a space to use and abuse for the sake of personal interests and financial gain. Ultimately, urbanization has over time influenced how people relate to the land they inhabit and engage with one another. Citizens have given away their political interest to form a common ground for pluralistic expressions, a platform for political actions to unfold. While we continue to produce and expose ourselves to these geographies of disconnection and economies of extraction, non-human agencies are also impacted and facing a continuing loss of diversity.

We have yet to collectively come together and address these pressing issues!

Pontificia Universidad Javeriana Colombia
Departamento de Arquitectura Bogotá,
Alfonso Gomez, Carolina Valbuena Bermúdez
Departamento de Arte, Arquitectura y Diseño Cali,
Maria Claudia Villegas Corey, José Rafael González

The Pontificia Universidad Javeriana in Colombia, represented by its two campuses in Bogota and Cali, shows the academic, professional, and internationalization experience of some of its most representative projects built jointly by the Faculty of Architecture and Design in Bogotá and the Faculty of Creation and Habitat in Cali. Respectively, three specific projects are shown, first of them CLESAL (Academic team leader: Carolina Valbuena, Ivan Osuna, Jose Javier Alayón), the leadership course for sustainable buildings in Latin America (Curso de Liderazgo para Edificaciones Sostenibles en America Latina), a training and learning space that brought together professionals from different disciplines and sectors in Latam, interested in the execution of construction projects and implementation of regulations related to Energy Efficiency, carbon neutrality and comfort in buildings. The event made it possible to build a network of Latin Americans who have the capacity to apply their knowledge and learning in the 15 participating countries.

Secondly, a methodological tour of the houses designed, built, and tested in the framework of the Solar Decathlon Latin America and Caribbean academic event, has been held in the city of Santiago de Cali (Colombia) in 2015 and 2019. Understanding the challenges of the region, it asked universities to focus their efforts on the design and construction of energy-efficient and sustainable social housing solutions for low-income populations. The Pontificia Universidad Javeriana Cali created partnerships with local and international institutions to participate in both versions with undergraduate students and professors of multiple disciplines to design, build, and exhibit a sustainable housing prototype. With its hands-on learning approach,

it delivered the projects Casa Alero, 2015 (research team: Ivan Osuna, Tatiana Schonhobel, Stephanie Aya, Ilyan Gómez, group Calicivita) and Casa Minga, 2019 (Research team: Ivan Osuna, group Minga) which aspired to improve the quality of life with innovative, affordable, and sustainable solutions. Today, one of the houses has been re-purposed and is led and managed by an association of rural farmers that promote their agroecological products in the university community. On the other hand, the academic team of the Faculty of Architecture and Design of Bogotá presented the projects Cultural Machine, 2015 and Green Machine - The Ark, 2019 (research team: Carlos Alberto Hernández Correa, M. Anzellini Garcia-Reyes, Juan Carlos Cuberos, Jose Luis Bucheli, Sebastian Rojas, a team of Politecnico di Torino and others) with a proposal for sustainable collective housing to explore real alternatives for social housing, analyzing the processes and variables that can allow access to decent housing for vulnerable groups in conditions of displacement resulting from the violence in the country. The projects took in place Urban Design and Affordability, Engineering and Construction, Architecture, Energy Efficiency, Electrical Energy Balance, Comfort, Innovation; and Social Awareness.

Finally, as part of the academic experience, an international ideas competition led by the Programa de Experiencias Internacionales (PEI) of the

Pontificia Universidad Javeriana (PUJ) in which a sample of urban biophilic designs for the eastern hills of the capital city in Colombia is developed. 37 entries were received from different countries and several sessions of citizen participation were included as part of the curatorial process of the competition.

PROJECT-REALIZATION architectural studio

Architecture around us as a hope of the best future for our children and us. Today, many barriers divide people – politics, religion, national traditions, level of education. Every person lives in his own closed inner world and sees everyone who is different as an enemy.

We believe that the architecture of educational spaces networked together will be a laboratory of the future, world history and culture, advanced technology and nature, creativity and philanthropy that can create a better future for our children and us.

We need to create a new laboratory of the future for meeting of most people, such as schools. We came here at first as a little child to learn, then as a parent to send children to school, and finally, as a grandparent, to pick up the grandchildren after school, in this way we can see both the creation of the future and its realization in the present.

If we create wonderful spaces-laboratories with high trees and bright flowers, sky and stars above our heads, where different people are taking care of your development, it will be an important step towards the emergence of a new dream of the future.

Not so long ago, it was difficult to imagine the sky and nature inside the buildings because of the frost and heat outside. Today, it has become possible with the help of innovative technologies and materials. Modern transparent walls stop the cold, protect people from the heat, and allow light and nature to enter the building.

Tomorrow we will create a new reality of school buildings by using the transformation of multi-level spaces, three-dimensional images, to fill it sounds, controlled by changing light and color and even add a smell of a garden or a wind blowing from the sea.

We create new schools as chains of spaces for research, laboratories for creativity, not dividing it into exterior and interior. A single environment is friendly, surprising and changeable. Spaces that bring together the beautiful discoveries of the past and use the technology of the present to find a better future – for us and our children.

We can give children winter and summer at the same time in neighboring schoolyards for recess and playing with friends, the culture of the past and insights into the future in the multifunctional spaces of the halls, new technologies in the science laboratories.

We will teach educational spaces to change: to divide and unite, to speak to us in different languages as one, to let in light giving openwork shadows.

We will create school laboratories as a molecule of new life for everyone without barriers, restrictions in space, light, sound, language.

Through our architecture, we teach children and their parents to dream of a beautiful future in educational spaces in schools, and they can go further to create their own better world.

The concept of a 700-seat school
Photos: Olga Bumagina, 2022

RAC STUDIO
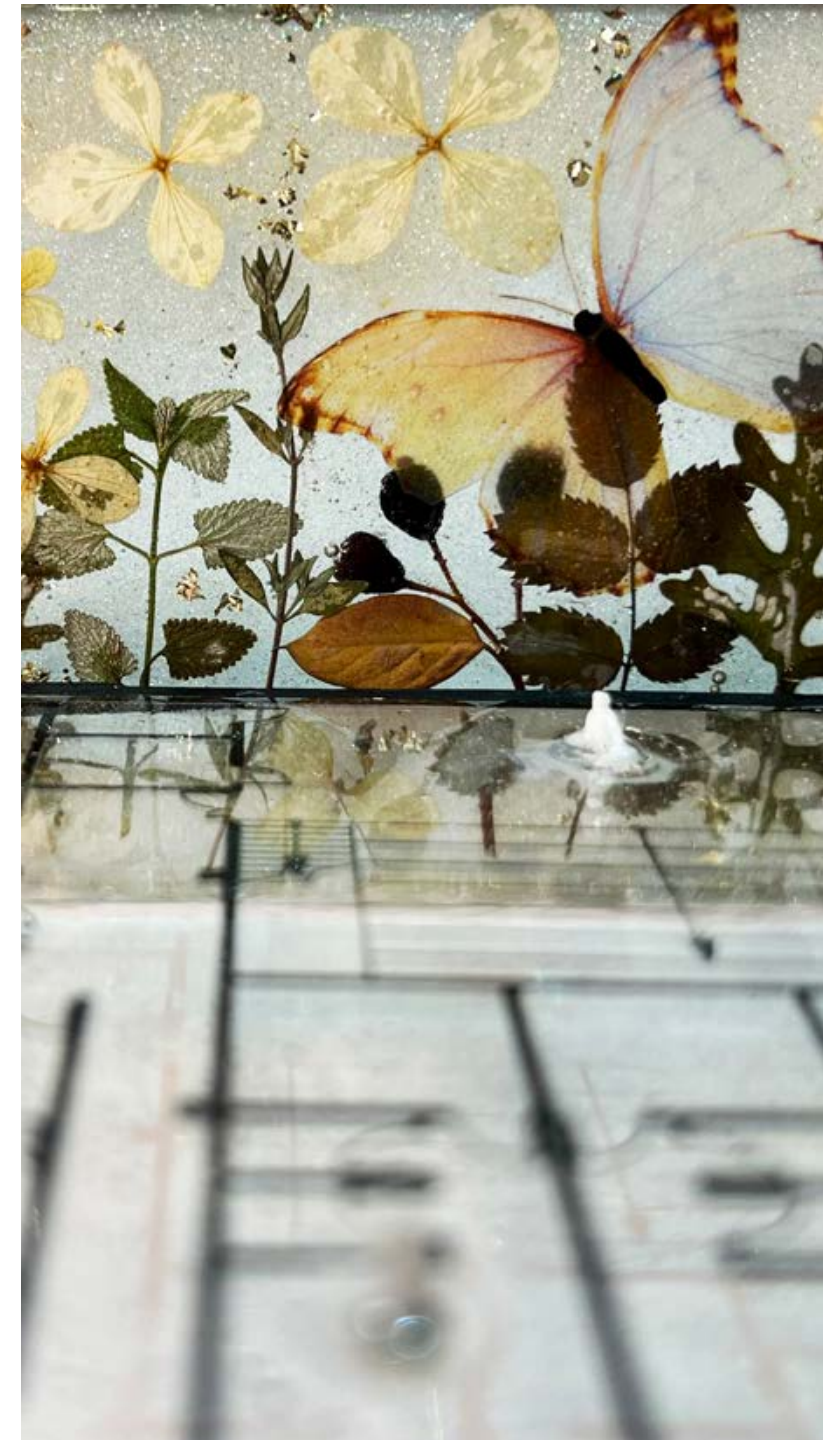
Architecture, landscape and urban design are not only a combination of technology and art, but also include the designer's consideration of the natural landscape, human history, and ecological and environmental factors. This design mindset is wrapped in respect for humanity and natural resources as well as a sense of social responsibility.

RAC STUDIO was Founded in 2015 in Shanghai, China by landscape and architecture designers who graduated from Harvard GSD and University of Pennsylvania Upenn. It is a cutting-edge academic research and education institution focusing on architecture/landscape/urban/interior/digital art/service/product/sustainable design. RAC works with top universities, governments, research institutions, enterprises andnon-profit organizations, and is committed to promoting an integrated educationsystem of Industry-Teaching-Research. In the meanwhile, they have always paid much attention to the topic of sustainable development, and the main content of this exhibition is also a collection of the projects in the past two years. The exhibition is divided into 3 main groups: Space - Interaction, Countryside – Heritage, and Ecology – Materials.

In Venice, a series of students' works with innovative and academic value are exhibited, and a series of completed pavilions are also highlighted – they serve as prototypes for the integration of theory and practice, and are outstanding results of the Industry-Teaching-Research system.

Bamboo Pavilion
Photo: Songkai Liu, 2020

Rafi Segal & Susannah Drake
Olivia Serra & William Minghao Du

From Redlining to Blue Zoning: Equity and Environmental Risk, Liberty City, Miami 2100. This project exposes two uncomfortable realities: the ongoing legacy of racial segregation in South Florida, and the existential threat that climate change poses to communities in Miami. The large map, commissioned by ECC for *Time Space Existence, Miami 2021*, highlights the magnitude of projected impact and reveals a twist of fate that can potentially empower disenfranchised communities. The graphic collapses two datasets into one: present day household income levels at the scale of buildings colored red, overlaid with future sea level rise and upland flooding zones indicated in blue[1].

In a *reversal of risk*, historically segregated black communities, denoted by mid-20th century redlining[2] practices with the excuse of economic risk, occupy land – by the end of the 21st Century – which is among the last remaining safe dry land free from growing catastrophic environmental risk. Increasingly severe weather, storm surge, and sea level rise have already begun to create demand for property on higher dry ground. Climate gentrification is an increasing threat to an already compromised community. Our project seeks to counter this phenomenon by providing greater opportunity for wealth generation from within and for historically disinvested and low-income neighborhoods.

Liberty City was built in 1937 during the Roosevelt administration specifically to house black people in publicly owned rental units. Subsequent boundaries drawn in redlining maps created by the Homeowners Loan Corporation (HOLC) encircled Liberty City, Overton, and other predominantly black neighborhoods indicating perceived lending and insurance risks. With an inability to secure mortgage financing, the racist practice cost generations of black people the opportunity commonly available to white Americans to generate equity and accumulate wealth through homeownership and appreciation[3].

More visible were the walls and highway infrastructure that bisected adjacent black communities further segregating the neighborhood from the surrounding city. United States Census data (2014) lists Liberty City as having a population of 49,981 residents and 15,614 households. Liberty City is 95% Black with a median household income of $18,809 per year and 42% of residents living below the poverty line[4]. As this map reveals, Liberty City now sits on a gold mine. A future where much of Miami is underwater while Liberty City stays dry raises the question: how will this not become another case of climate gentrification?

Our project proposes models of co-ops and community owned urban blocks that empower the formerly disenfranchised community with new methods of equity capture. Residents of Liberty City would own shares in coop/community development trusts. Trustees would lead building development for the community to build wealth for co-op members. This approach envisions a future where residents whose parents and grandparents suffered from racial discrimination can now build equity and benefit from the increased value.

This work is part of an ongoing Coastal Urbanism[5] approach that explores and proposes bold propositions. Ecological and development strategies, urban and architectural designs, policies, and zoning – in anticipation of future flooding – can transform the city for a more sustainable and equitable future.

1. A Union of Concerned Scientists report suggests that by 2100, 2.4 million homes worth $912 Billion and 4.7 million people will be vulnerable to coastal climate change impacts nationwide (Hammer 2018). Florida will bear 40% of that risk with 792,226 houses in Miami Dade and Broward Counties alone in sites vulnerable to severe flooding and wind (Climate Central 2019).
2. Redlining - 20th Century discriminatory practices in the US that denied financial services like mortgages and insurance loans to residents of certain areas based on their race or ethnicity. (Rothstein 2019)
3. Maps which indicated lending risk typically suggested that black neighborhoods posed a higher probability of default to banks. (Holloway 2020, Rothstein 2017)
4. Miami.gov 2004, FIU Metropolitan Center 2021
5. Coastal Urbanism: a term coined by Rafi Segal and Susannah Drake in 2017. (Blueprint for Coastal Adaptation Chapter 12, 2021)

Rafi Segal, Associate Professor of Architecture and Urbanism, MIT
Susannah Drake FAIA, FASLA, Professor, Cooper Union School of Architecture

Map of sea level rise by 2100 and present income level
Image: Olivia Serra, 2021
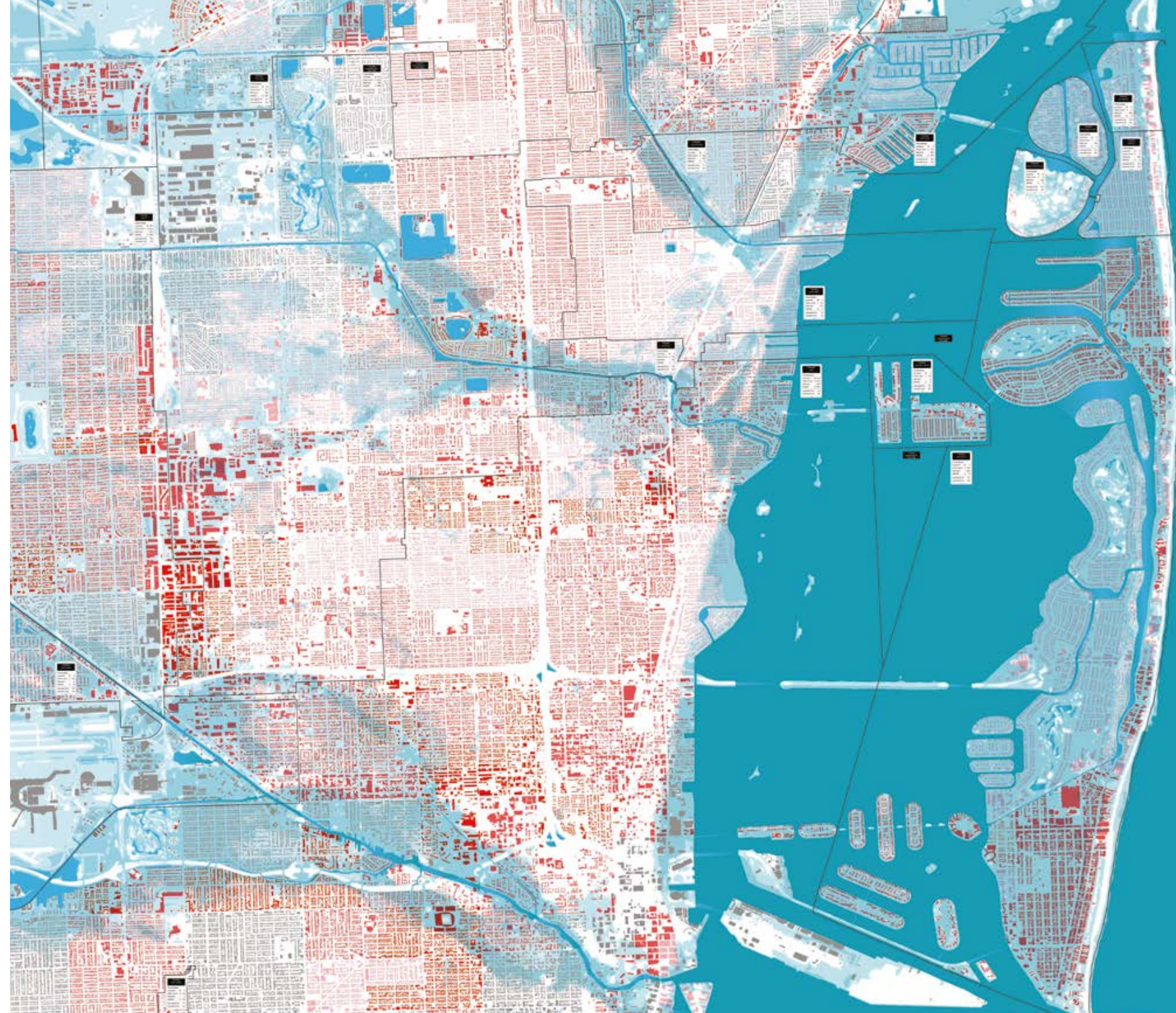
Reconceptualizing Urban Housing

The global housing crisis has created an urgent need for housing worldwide, especially in urban centres where 80% of the world's population is housed. In the race to build more homes faster, many important factors are being overlooked including community, sustainability, and wellness. From city to city the context differs dramatically, but the problem is universal: how can urban collective housing be more liveable? How do we ensure that the design of housing will enhance inhabitants' wellbeing and quality of life?

This exhibition brings together nine architecture practices from around the globe with unique perspectives on collective housing, primarily in or near urban areas. Each of these women-led practices have demonstrated an innovative approach in the design of urban housing, exploring different solutions that are both unique to their context and adaptable to others. The diverse range of projects exhibited showcase new thinking, a shift in the status quo – housing projects that focus on liveability and wellbeing. These are projects that explore the balance of communal and private, social connections, issues of identity, affordability, sustainability in its many forms, and integration of natural elements in order to create enhanced spaces for both inhabitants and their communities, at different scales and in different forms. They redefine what collective housing can be and how it can support liveability for its inhabitants, while remaining unique to each local context and demographic.

A special thanks to our sponsors: Arup, Parklex Prodema, EeStairs, Blackwell, DuRock & Bulthaup.

Alison Brooks Architects, UK

Alison Brooks Architects is recognised as one of the UK's most influential and internationally acclaimed design practices. Led by founder Alison Brooks, the practice employs cultural research as both catalyst for community engagement and for new forms of architectural expression. Their portfolio demonstrates commitment to the project of generous, inclusive city-building supported by a uniquely sculptural design language. This approach is embodied in their wide-ranging portfolio of built works ranging from large scale masterplans and mixed-use developments to higher education buildings, public installations, private houses, exhibition designs, and public buildings for the arts.

Alison Brooks Architects consider the design of housing as the social project of architecture and its most important form of civic building. Their housing projects range in scale from masterplans to private housing, with a focus on mixed income housing projects that create diverse neighborhood realms. Through these projects, they advocate for community building, designing for increased social engagement and fostering a sense of civic pride to promote inclusiveness and social diversity.

Fusing an appreciation of history with formal and material invention, their studio's unique design approach brings new expression and civic identity to a diverse clientele. This has led to over seventy awards for design quality, including 2020 Dezeen Architect of the Year. Alison Brooks Architects remains the only UK practice to have won the UK's three most prestigious awards for architectural excellence: the RIBA Stirling Prize, the Manser Medal (twice), and the Stephen Lawrence Prize.

Ely Court
Alison Brooks Architects, 2015; photo by Paul Riddle

Studio Gang, USA

Founded and led by Jeanne Gang, Studio Gang is an architecture and urban design practice headquartered in Chicago with offices in New York, San Francisco, and Paris. The studio works as a collective of architects, designers, and other creative practitioners, who use design as a medium to connect people with each other and their environment. A sustainability ethos is at the heart of the practice, paired with a design methodology defined by research and experimentation that includes frequent collaboration with a wide range of disciplines both inside and outside the traditional design fields. This approach has produced award-winning projects that foster a sense of community and strong connection with the outdoors.

Their innovative portfolio of housing projects, primarily in North America, consider how to sustainably grow cities and are designed to give rise to more resilient and vibrant cities. Intertwined with built work, the Studio also develops publications and exhibitions that push design's ability to create public awareness and effect change—a practice Jeanne calls *actionable idealism.*

Recipient of the National Design Award in Architecture and numerous other honors, Studio Gang has exhibited projects at the Venice Architecture Biennale, the Museum of Modern Art, the Art Institute of Chicago, the National Building Museum, among others; the Studio's work is in the permanent collections of the Centre Pompidou, the Canadian Centre for Architecture, the Cooper Hewitt Smithsonian Design Museum, and the Art Institute of Chicago.

Eleena Jamil Architect, Malaysia

Eleena Jamil Architect is a Malaysia-based architectural practice founded in 2005 and led by Eleena Jamil. The practice has an established reputation for sensitively built projects that successfully engage with Asian cities and their nuances. Jamil's projects are informed by a desire to root them to place, bringing a specificity and richness of expression to each project. The studio's focus is on research-based, design-led architecture that is rooted in context and engaged with local communities. Their projects explore the experiential potential of building form, materials, and construction methods, through the use of local materials and processes. This develops an approach that is not only focused on environmental and economic sustainability, but also social sustainability.

Eleena Jamil Architect works with a diverse group of private, public, and third-sector clients on community libraries, education buildings, workplaces, private houses, and residential projects, applying traditional Malaysian building techniques to modern designs. Utilizing timber structures, Jamil proposes to build permanent housing in urban areas using local materials such as bamboo as a permanent construction material, and explores sustainable passive strategies for ventilation and lighting for affordability. The practice's projects have been widely published in the international press and have been shortlisted for awards such as the Dezeen Award, World Architecture Festival Award, Habitus House of the Year Award, the LEAF Award and the American Architecture Prize.

One Delisle & City Hyde Park
Studio Gang; images by Norm Li & Steven Hall

Bamboo Terrace Homes & DeLight Homes
Eleena Jamil Architect, 2019 & 2021

Adengo Architecture, Uganda

Adengo Architecture is a Ugandan research-based architecture practice founded in 2015 by the late Doreen Adengo. The studio is known for its commitment to social housing and focuses on affordable and sustainable projects in Uganda that are locally built. Their housing schemes are a response to the rapid urbanization in the African continent, aiming to address Uganda's housing crisis by advocating to the substantial local population that build their own homes. The practice is highly collaborative, working on research projects with institutions, organizations, and individuals from different fields to find new ways to communicate about design, in Kampala and nationally. Their advocacy mission is focused on communicating the value of design in African cities, making the case that architects and urban planners can improve people's everyday lives and help cities develop more sustainably.

Adengo's work is multi-disciplinary, ranging from the design of furniture and buildings to research and advocacy, focusing on both the urban and regional scales. Their work has been exhibited widely, including at the Royal Academy in London. The late Doreen Adengo has helped produce exhibits and workshops exploring Ugandan urbanism and architecture at the Goethe-Zentrum Kampala and the Architecture Museum of the Technical University Munich. After Adengo passed away in 2022, her practice has continued the building and advocacy work she and her team started.

Mecanoo, The Netherlands

Mecanoo, officially founded in Delft in 1984, is led by Francine Houben and comprised of a multidisciplinary staff of creative professionals from 25 countries. The team includes architects, interior designers, urban planners, landscape architects as well as architectural technicians and support staff.

Mecanoo has extensive experience designing and realising buildings that create vibrant end-user spaces. Each project uses an interdisciplinary approach, combining the disciplines of architecture, urban planning, landscape and interiors in a non-traditional way to uniquely respond to the practice's philosophy of People, Place, Purpose, and Poetry. Their wide-ranging portfolio includes housing, educational, cultural, religious, hospitality buildings, and master planning, with a focus on complex, multifunctional buildings and integrated urban developments. Understanding that over time the functions of buildings change, Mecanoo creates buildings that are prepared for (un)predictable change.

Mecanoo's housing projects exist mainly at the urban scale, including mixed-use and fully integrated, complete communities that include housing, workspaces, schools, daycares, sport facilities, retail, and commercial spaces, with a focus on the human scale and the individual. Their social housing philosophy centers on the development of affordable living spaces defined by flexibility, the right balance of private and communal spaces, mixed housing types, and connection with the environment and identity.

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Affordable Housing I & II
Adengo Architecture

Amstel Design District & Vila Industria Silo's
Mecanoo, 2021 & 2018

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Dubbeldam Architecture + Design, Canada

Dubbeldam Architecture + Design is a Canadian multidisciplinary architecture studio committed to advancing an architectural and social agenda through design research and built work that enriches the human experience. Founded by Heather Dubbeldam, a fourth-generation architect, the studio has developed a reputation for innovative, beautifully crafted, and environmentally responsible projects that embody the spirit of place and people. The studio's portfolio includes sustainable architecture and interiors in many sectors including workspaces, hospitality, mixed-use, and residential, as well as landscape design and architectural installations. Recipient of over 80 awards and honours, including the Professional Prix de Rome in Architecture, the studio's projects have also been widely published.

Dubbeldam are recognized as advocates for progressive design and planning that exemplifies best practices in social and environmental sustainability, climate-positive developments, and urban resilience, disseminating this research through blogs, public speaking, and dialogue with policy makers. Dubbeldam's research in housing is through the development of Missing Middle housing typologies and pilot projects, focussing on the gap between single family dwellings and apartment buildings. Their built work in housing engages with midrise and missing middle-scaled multi-unit dwellings, created to expand housing options in established residential neighbourhoods and address the restrictive zoning policies in many urban centers in Canada.

Fernanda Canales Arquitectura, Mexico

Fernanda Canales Arquitectura, based in Mexico City and founded by architect Fernanda Canales, is an architecture practice engaged in design, urban planning, and research focused on redefining the connection between housing and the city. Canales' ongoing research explores the tension between private and public space in Mexico, regarding the home as an extension of public space rather than a standalone structure. Their research also explores the sustainable renewal of existing or abandoned structures, mixed-use and multi-purpose buildings, and community-centric design. This informs the practice's built work, resulting in buildings that weave into the existing built fabric, utilizing simple materials, natural light, cross-ventilation, and establishing safe environments. Canales' projects centre on re-densification of Mexico's urban centres as an alternative to urban sprawl. The practice has completed a range of projects exploring the benefits of collective living and the value that each building can offer the city, challenging the desire for single-family dwelling, and reframing the concept of informal housing to validate a typology that accounts for 70% of Mexico's buildings.

Fernanda Canales was recognized by The New York Times as one of the ten female figures changing the landscape of leadership in the world, and her practice's work has been supported by the Graham Foundation and exhibited at The Royal Academy of Arts in London, the ifa-Gallery in Stuttgart and the Venice Biennale. Canales is author of several publications on architecture and housing in Mexico.

Missing Middle Prototype & In-Vert Apartments
Dubbeldam Architecture + Design

Vivienda Portales & Vecindad Monte Alban
Fernanda Canales Arquitectura, 2016 & 2020

Manuelle Gautrand Architecture, France

Manuelle Gautrand Architecture is a Paris-based architecture firm founded by Manuelle Gautrand in 1991. The studio aspires to design innovative and sensitive architecture for people and cities. Avoiding cliched architectural forms, they aim to find the unique DNA of a city and its site, defining a sense of place with a contextual approach and developing projects that bring beauty and poetry to their place. This approach is represented through the firm's varied portfolio which ranges from mixed-use developments to museums, hotels, housing, sporting complexes, and transportation hubs located both in France and globally. Manuelle Gautrand Architecture has received many awards, including the 2017 European Prize for Architecture awarded by the European Centre for Architecture and the Chicago Athenaeum.

Manuelle Gautrand Architecture designs housing projects at all scales, exploring infill and liveable density in cities. The studio's new housing models are based on made-to-measure units, focused shared and communal spaces, and integrated greenery or planted landscapes used for urban agriculture. The studio actively engages in the effort against climate change and pollution. The design of each project is considered as an opportunity to develop a tailored approach to sustainable solutions specific to their site and context. This creates a sensitive yet scientific approach to the use of locally sourced, low-carbon materials, while also emphasizing bioclimatic and passive systems for lowered energy consumption.

Meyer-Grohbruegge, Germany

Meyer-Grohbruegge is an architecture and design office based in Berlin, founded in 2015 and led by Johanna Meyer-Grohbrügge. The studio's approach is focused on questioning the status quo and developing new forms and typologies for architecture projects. Meyer-Grohbruegge's design ethos balances intuition with pragmatism, which involves a process of exploring varied spatial forms for cultural and social constructs. The practice seeks to find simple architectural expressions for complex problems through an approach of "reduction": reduction of form, material, and resources.

Through a variety of projects ranging from art galleries and collections, residential and office buildings, exhibition and furniture design, the studio seeks to create unique relationships between people and their built environment, exploring different ways of living and working together. The studio prioritizes sustainability and considers size, materials, and openness as equally important as functional aspects. Their recent projects aim to create buildings with an open-frame construction that can accommodate the varying needs of occupants, rather than a singular program. Meyer-Grohbruegge's housing projects explore the tension between communal and private, openness and intimacy, exploring the possibilities of communal living. Their live-work projects blur the lines between private and public, allowing these spaces to expand beyond their boundaries, resulting in an ongoing reconsideration of current definitions of community.

Edison Lite & Folie Manuguerra
Manuelle Gautrand Architecture, 2020 & 2023

Bernauer Strasse & Building Community Kurfürstenstrasse
Meyer-Grohbruegge, 2019 & 2022

Sacher.Locicero.Architects

3 chapels | 3 countries

Chapel *Maria Magdalena*, Austria. The family chapel, erected on the gently rolling foothills of the Zollfeld, at first glance presents itself as a solid embodiment of fundamental qualities. It stands there, visible from afar: a chalky white symbol set in the easel painting of the Carinthian landscape. The serious and sharp-edged building without any capriciousness or background sounds from the repertoire of approaches that might, in principle, be conceivable. Like a symbol of architecture it condenses the basic elements of building to produce a stunningly convincing expression. When you open the two leaves of the mighty door in the west side the chapel becomes a sculptural negative form. This cross section become building then transcends the essence of the domestic into the essence of the sacred. Not least importantly – the proportions of the building. Everting, even the folding benches set vertically flush in the walls, is aware of how to contribute as a part to the greater whole and follows the rule of the Golden Section.

Chapel *Ruhewald Schloss Tambach*, Germany. Tambach Castle, whose owner Heinrich Graf zu Ortenburg runs the *Ruhewald Schloss Tambach,* is embedded in the gently hilly landscape near the town of Coburg. The forest cemetery offers people to find their final resting place in the nature of the forest. The tree population of the forest cemetery has a landscapepark-like character. In its clear form, the chapel follows the proportions of the Golden Section according to the teachings of the *Vitruvian Man* by Leonardo da Vinci. It should convey simplicity and openness and offer visitors and their survivors a protective cover. Seven wooden arches rising upwards form the inner space. The outer cladding consists of split larch wood shingles which will fuse with the environment over the years due to natural weathering. The chapel *Ruhewald Schloss Tambach* fuses high concepts and sophisticated materials in its design, and yet it is a very gentle, welcoming building that perfectly suits its purpose: small-scaled enough to comfort the people who visit it, soaring enough in its form to evoke the divine.

Chapel *Saint Charbel*, Slowakia. In the vicinity of the bishop's town of Nitra, a chapel is to be built in honor of St. Charbel Marklouf. He was a Maronite monk and priest from Lebanon. During his life, he obtained a wide reputation for holiness, and for his ability to unite Christians and Muslims. He worked in the vineyards and gardens of the monastery and there devoted himself to prayer and contemplation in silence and the strictest asceticism until his death. After the death of St. Charbel, his tomb began to appear in an extraordinary splendor. Only after 45 days did the light become weaker. The shape of the chapel derives from the only portrait of Saint Charbel, in which he can be seen with a *cappa*. This form of the *cappa* resembles a parable symbolizing the overcoming of gravity and the detachment from the earth. As in literature, the derivation of the parable is intended to make the visitor think and come to a conclusion.

Schapiro Associates
Jaime Schapiro AIA RIBA NCARB

Time Space Existence is congruent with the views of Schapiro Associates, Architecture Urbanism Interiors, who view architectural design as an endeavor to combine artistic intent with the rigor of science and technology in order to fulfill the client's requirements with the user's needs. Each project in the built environment presents new challenges, and he successfully meets these challenges by addressing the many factors and complex issues involved, regardless of size and program.

For many years Schapiro has been working on the creation of a meaningful Jewish Architecture which is presently manifested in a series of new commissioned designs for Jewish Institutions. He is focused on an approach that relates the intellectual, philosophical, religious environment and identity to architectural spaces that goes beyond the use of typical symbols.

Schapiro's *Jewish Tropical Architecture* features a direct style full of light, clean facades, with a strong modernist influence and simple forms inspired by the Jewish abstract notions perfectly combined with the tropics' lush nature. Entering any of his spaces is an uplifting spiritual experience.

Man's most creative expression through history has been his religious buildings, the highest form of art of which he is capable to conceive in order to connect to the unknown. Schapiro achieves this expression in different ways by showing a design expressive of its symbolic purpose motivated by the Talmudic Law.

Living and working in South Florida, surrounded by the tropical context, Schapiro has created a unique architecture that dialogues between geometric and biomorphic forms with symbolic purpose that conveys a sense of spiritual, cultural and religious meaning, in the tropics, taking into consideration the functional needs of the congregation. He has gained global recognition for various synagogues designed and built in South Florida.

The firm received the 2017 Award for Design Excellence from the American Architecture Prize for two unique institutions, Young Israel of Bal Harbour and Lubavitch Aventura South in Aventura Florida.

These synagogues reflect Schapiro's philosophy and approach to architecture, expressing his Jewish identity in the modern world. The design grammar used is abstract, as is Judaism. Combined with Jewish Observance design elements, while being sensitive to the context in terms of scale, height and massing, resulting in a meaningful architectural work with depth and existential sincerity.

Schapiro focuses on the harmonious relationship between building and context in an effort to infuse each project with a sense of place while maintaining a constant dialogue between nature, history, culture, materials, client and community. The use of light is key in creating a sense of belonging in a balanced atmosphere for these sacred spaces. Schapiro has developed a unique architecture that enables the practice of the Jewish faith in both a simple environment that is extraordinarily designed.

Young Israel of Bal Harbour
Photo: Mark Surloff, 2019

Shannon Bassett Atelier
& McEwen School of Architecture, Laurentian University

Shannon Bassett, (MSoA), Anuradha Chaturvedi (SPA),
Smita Datta Makhija (AVESANA)

*Recovering the Public Spaces of Shahjahanabad –
the Old Walled City of Delhi – through Participatory
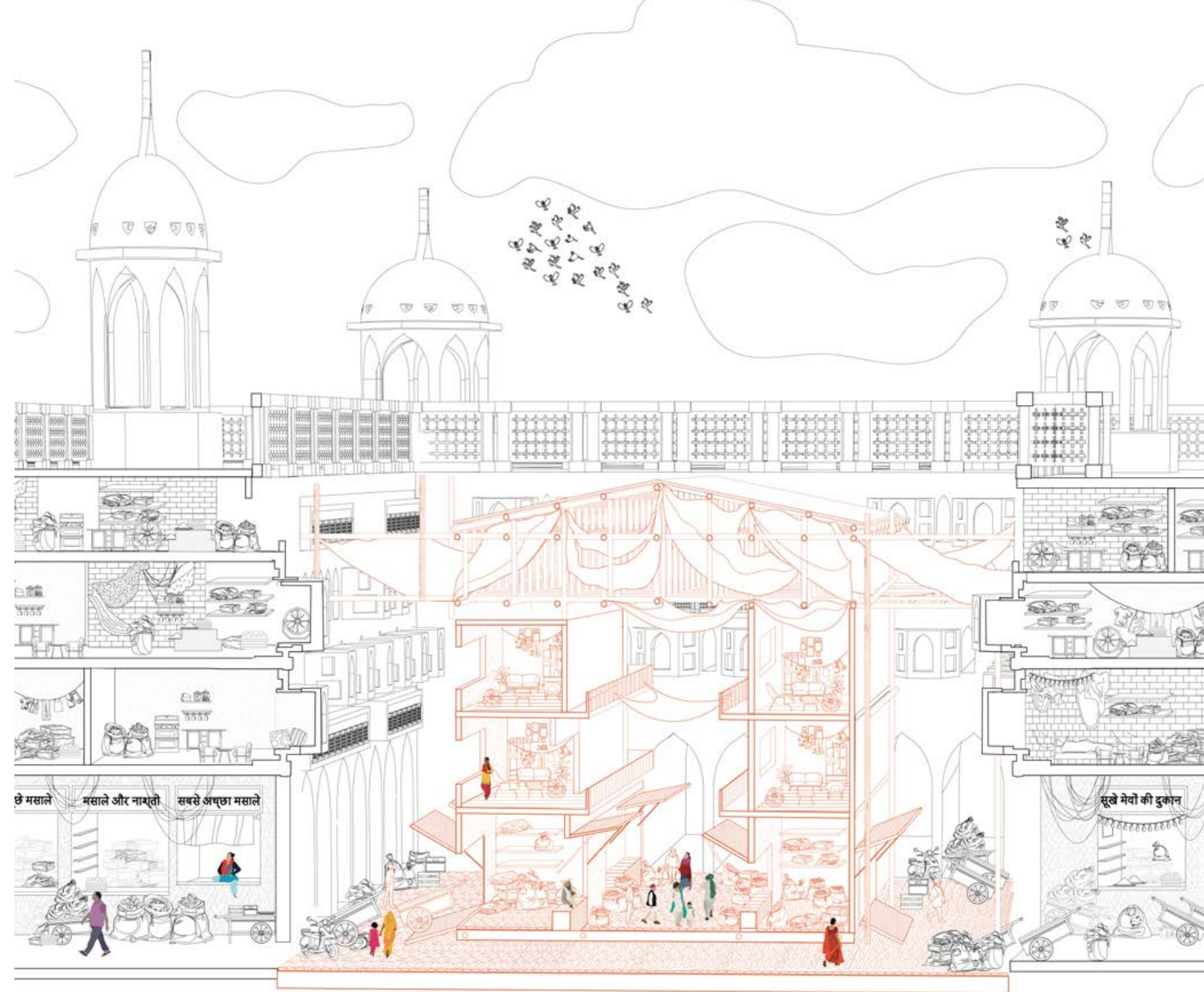Conservation and Ecological Urbanism.*

This project addresses how through participatory
conservation and ecological urbanism, we might have
the agency to recover landscapes - both ecological and
cultural. Further, it projects how these strategies might
counteract and mitigate the impacts of climate change
and the climate crisis on people and communities within
the scope of the study. These issues are probed through
action-oriented design research through the vehicle of
two graduate design research studios which exam-
ine the issues currently being faced by the old walled
city of Delhi – Shahjahanabad- in India. The project
area focusses on the Chandni Chowk, an historic shop
street running East and West within Shahjahanabad,
anchored to the East by the Red Fort UNESCO site and
Yamuna River and to the West by a local mosque. Design
research included participatory community planning
and engagement within Shahjahanabad, in addition to
working with key stakeholders, constituents and elected
officials. The collaborator is also an advisor to the con-
sultation process on the Delhi 2041 masterplan.

The Old Walled City's initial urban layout in 1639
demonstrated a sophisticated integration of ecolog-
ical systems within its architecture and urban fabric.
Innovative sustainable practices were deployed across
a spectrum of nested design scales from the city's
layout to the block organization and street infrastruc-
ture, to the ubiquitous haveli-courtyard typologies.
Shahjahanabad is currently challenged with architec-
tural decay, degradation and the ecological fragmen-
tation of a once ecologically resilient urban fabric and
cultural landscape. Further, severe urban flooding is ex-
perienced during the monsoon season. The urban lay-
out comprises of an interconnected public space system
which includes a series of bazaars, market spaces and
maidans. These public spaces are examined for their
latent potential of how they might re-introduce perform-
ative ecological systems back onto them, which dual as
meaningful public spaces, in addition to mitigating the
impacts of climate change. This public space system
overlaid with performative hydrological systems which
have become fragmented over time, first with the British
colonization in 1857, which removed the Chandni Chowk
water channel and performative hydrological systems.
Mapping builds on seminal cognitive mapping studies
conducted by Kevin Lynch in the *Image of the City*, and
further developed by Sarah Williams in her book, *Data
Action – Using Data for Public Good*, which examines
using data as a tool for the empowerment of commu-
nities, rather than their oppression. The project synthe-
sizes the best case practices in ecological urbanism and
participatory architectural conservation from the design
research and graduate studios conducted.

छे मसाले   मसाले और नाश्तो   सबसे अच्छा मसाले

सूखे मेवों की दुकान

Shahjahanabad Courtyard Proposal
Natalia Sawant, 2022

Silaa Architects
Nguyễn Hữu Son Duong

Floating Letter. Why? Since time immemorial, the birth of Vietnam has been associated with the myth of a dramatic unification of the spirits of mountains and lakes, which has played a vital role in flourishing agriculture, trade and society. The occupants of which have relied on these resources to meet their daily needs while respecting it through rituals that celebrate life and eternal rest. These rituals are often performed as offerings to the elements of nature, that include fire, water, forest, animals, and the sky. The echoes of these free, determined and invaluable experiences can be heard to this day through art, architecture, folklore, culinary and sports. But with rapid urbanization, the reach has been dampened due to the disconnect between earth, water, and people. One such city of Vietnam, known as hue, is reminiscent of these pantheist beliefs through its mossy pagodas, paper flower craft village, Thai Duong Ha festival devoted to commemorating fish, the folk music of Nhã Nhạc, are a few examples on the list. It has been blessed with a topography of varying elevation that allows the Song Huong river to flow through a complete 30 km stretch of the city while celebrating the beginnings and growth of these traditions. The city also witnesses a national biennial festival that forms a focal point for artists to engage in competitions, conferences, and exhibitions to reconstruct community-based relations while preserving the heritage. Unfortunately, the city lacks the infrastructure to house this festive enthusiasm.

What? Silaa architects intend to address the disparity in attaining access to an omniscient resource, while testing modules to stand as negotiations between communities to re-establish their existence through time and space. The firm takes on the responsibility to document the relationships of the diverse ethnic groups with nature and attempts to experiment with a new space for all communities to share messages of their expertise with one another. The team's goal is to challenge the views of sustainability in a post-modernized world which is commercialized as a commodity of technology and devoid of the needs of the natural ecosystem.

How? Acquiring cues from the natural landscape, the firm intends to create a mobile image of "the floating message in a bottle" that allows exchange of narratives between its residents to address current issues. Given the ill-fate of the visible faint cultural infrastructure in the city, the project is designed with spaces to be flexible and adaptable to accommodate various activities that link the future to the past. The experimental pavilion aims to provide solutions to the current issues of water contamination and overexploitation of natural resources by re-introducing the system of a circular economy. It complies with the utilization of reclaimed and upcycled materials that are locally sourced. Taking in the sensation of the spirits, the scents of the flowers and the mosses on the stone, the song of the birds, the movement of air, and the warmth of the sun. It is a reminder to experience the alchemy of the elements through passing time, elevations, and temperature. The project is an abstraction of the surrounding ecosystem, as a floating hill embedded with planters- taking roots in its framework and water chutes- mimicking the movement of the river from the apex to the rift of the valley. The movement through the pavilion is layered both horizontally and vertically to celebrate each element of life while allowing surfaces for contemplation, discussion and play. The journey of the participants culminates in the social locus submerged underwater, to uncover the sustenance of life.

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Soledad Lowe Studio
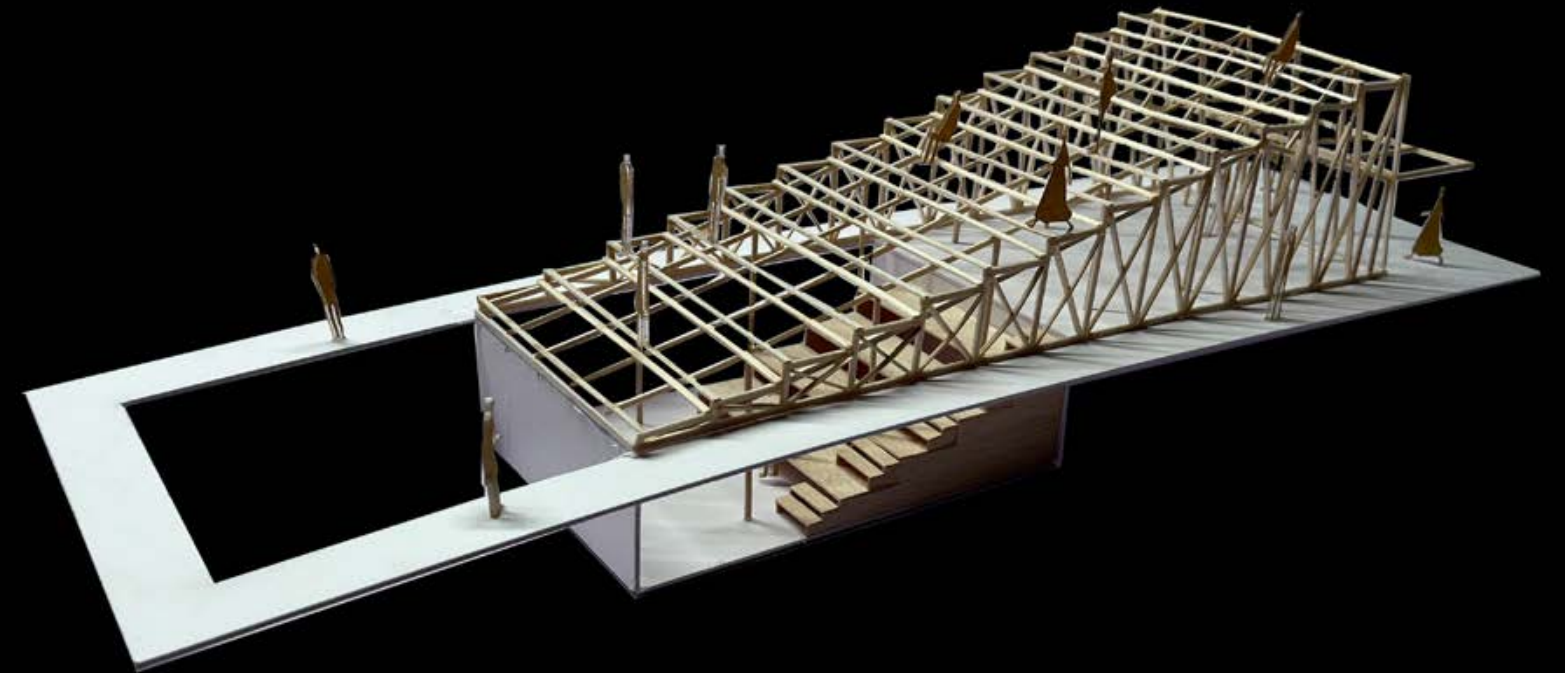
Aftermath. The present installation consists of a series of Obelisk Crystals embodying Earth, Water & Sun, conveying a vital message: we must act now to create a foundation for a possible positive future. *Aftermath* is a consequential study in discarded materials that we humans leave behind, questioning the viewer – What will happen Next? How will the Earth regenerate? What comes out of the Ashes?

These are questions that Soledad illuminates through her installation. Transforming waste into a thought-provoking expression, consisting of 120 sculptures incorporating detritus of a contemporary civilization searching for a way not to extinguish itself. *Aftermath* is a stark reminder of the effect of consumption, accelerating climate change on our vital Gaia.

Soledad collected all the materials encapsulated in the installation during months of coastal foraging, from blue mussels in Maine to beach waste cleaning in Miami with the Surfrider Foundation - dedicated to protecting the world's oceans - as well as discarded rubbish from her own home. This is how she sees the world today; we live in a juxtaposition between beauty and decay.

Drawing on the Artist's experience as a gemologist and geology, combined with her background in jewelry, she has added recycled gold flakes and brass nuggets, which humanity has been repurposing for centuries. An ode to the Sun with the first Obelisk depiction tracing to ancient Egypt, representing the Sun God Ra. It is believed its shape symbolizes a single sun ray. Some of the Crystals contain a message, a nod to how the recent pandemic popularized *viral quotes*, how we perceive them and their effect on us, if any.

Each Obelisk Crystal is cast in several layers, created by hand with Biodegradable environmentally friendly epoxy. Natural pigments were used to tint them, ochre and burnt umber from quarries in Roussillon, France and Indigo from Santa Barbara, USA.

Aftermath
Photo: Celia D. Luna, 2023

Studio Lani
Lani Adeoye

Sculpted in Lagos. Sculpted in Lagos highlights the intention and process of key designs done by Lani Adeoye through her design practice Studio-Lani. Sharing her explorations and research through the lens of time, key areas in lagos and how the products come into existence. Celebrating innovation by blending traditional craft with contemporary design, showcasing Nigerian heritage, attention to sustainability and sensitivity to materials and form.

Hadin Lounger
Photos: Emmanuel Oyeleku, 2022

Studio PCH

Over the centuries, architectural theory proposed in the 19th and 20th centuries that architectonic experience was related to the physiological responses of the observer. The concept behind multi-sensory architecture pushes that theory to its last frontier, triggering those responses in the spectators' brains, and elevating their status from bystander... to patient.

The elements incorporated in the movement of multi-sensory architecture, whereas it is colors, patterns, or textures of the design elements, are thought to ease the busy mind and soothe one's overly stressed-out subconscious, with the ultimate goal, to better both users' and bystanders' mental health. The concept of multi-sensory architecture was born from our highly anxiety-inducing society, and the structure designed with wellness in mind grows as fast as our need for safe spaces promoting relaxation, introspection, and overall contentment.

Because of its mind-over-matter aspect, multi-sensory architecture can be experienced both in person and virtually. Augmented reality and virtual reality offer the advantage of providing their beneficiaries with a *meditation space to go*, a place from where they can escape – without physically having to do so.

In their many hotels and private residence projects, Studio PCH has been flirting with the concept of multi-sensory architecture, designing spaces promoting both mental and emotional wellness. Developing new ideas and testing options out for the past few years, the designers and architects at Studio PCH drew conclusions as to what would enhance this feeling of wholeness in the spatial perception of a space – key elements contributing to making the *aura* and *energy of a space.* Organic and natural materials such as wood, and stone, along with round patterns and soft earth-toned colors trigger positive emotions in anyone experiencing the space.

For this project, Studio PCH wanted to celebrate our innocent child mind, the person in every one of us that wants to sleep tucked in, protected, of the mythical forest populating the fairy tales. *Peel the earth, find shelter,* and *connect with Nature*, were the main ideas the firm's architects played with during the conception of this project. This space, imagined to meet everyone's intrinsic need for safety, is thought to be universal and interconnected: a space to heal; a space to rest. Its wood structure and reflecting pool hug the spectator in the manner of a weighted blanket, putting their autonomic nervous system into *rest* mode while inviting passersby to stop and take a deep breath in its warm light.

Multi-sensory architecture is a bold experimental approach to design that challenges conventional notions of what buildings and spaces can look and feel like. Whether used for artistic expression or therapeutic purposes, it offers a powerful tool for exploring the limits of human perception and consciousness. By creating environments that promote mental and emotional well-being, we may be able to improve the quality of life for individuals and communities.

Studio PCH team members: Irving Alvarez, Thomaz Regatos, Jean Posulski, Severine Tatangelo.

Studio Pousti
Maryam Pousti

Through drastic re-building in about 4 decades, Tehran has gone from a city of infinite gardens with its single-family dwellings, to a city of infinite apartment blocks. This significant lifestyle change that has occurred within its urban fabric, has impacted issues such as shared ownership, privacy, safety, territory, collective memory and most importantly, the quality of the living space. Tehran's current schemes are mostly constructed by developers, whose main criteria are ease of construction, convenience and cost, compromising spatial quality. This approach has shaped a metropolis with no contextual roots or stories to tell. This is Tehran's current cityscape. The main challenge of the project is how architecture can portray alternative ways of living, addressing the transition from single- family dwelling to apartment buildings.

Void+ tries to offer an alternative to conventional models of habitation and dense urban living which has resulted in closed-up building envelopes that lack a dialogue with their context. Situated on an extremely narrow site, Void+ consists of ten units on five Floors. The striking feature of the project is an intimate void strategically carved in to the north façade in an attempt to engage the building with its periphery. The massing of the void creates a vertical flow between the skyline of the building and its feet. The main entrance is defined by the particular moment when the verticality of the void turns in to a horizontal plain that is stretched twenty meters along the length of the building. This horizontal platform connects the street level to the back garden, allowing for communal activities of the neighborhood. The aim here is to re-define the building's territory, and to assimilate a single-family house that expands into its surroundings without the interference of rigid borders.

The interior layouts of the building reveal a deep structural and volumetric connection to the façade; a vocabulary that is used throughout the project. The juxtaposed volumes of the void offer playfulness through shifting perspectives and views, allowing the interior and exterior boundaries to be experience simultaneously. The Hide-and-seek between inside and outside takes place through the interplay of solid and void, challenging notions of exposure and privacy. There are two units on each floor; making noise and privacy driving forces in the positioning of a rectangular stairwell, which acts as a buffer to prevent sound and direct visual contact between the units. Each unit sits around an intimate balcony, which is perceived as an interior garden.

There is an arrangement for materials and hierarchy of finishes and textures, which celebrates the value of working with artisans. This is evident in the combed horizontal cement pattern of the façade, which also acts as a conductor of rain water, keeping the building skin clean. Door handles, railings, lighting fixtures and cabinets have been skillfully integrated in the architectural detailing of the building. Collaboration with makers of different backgrounds in this project is a reminder that buildings are a product of intense engagement and time.

Studio Roberto Rovira

Studio Roberto Rovira is a Miami-based landscape architecture, art, and design practice. We work at the edge of the built and the natural, seeking connections to ecology, culture, and place, and guided by the imperative to inspire and engage. We value an iterative process of making and rethinking. We strive to achieve the most with the least, using art and technology to experiment and catalyze insight.

The *EcoAtlas* is a design and visualization tool that conveys the dynamics of living things like bird migrations, flower blooms, butterfly patterns, fish spawning seasons, and the relationships among them. As urban development and expansion increase, and the threats of climate change and sea level rise accelerate environmental change, we need new tools – simpler and more elegant tools – to efficiently integrate and understand the interdependencies between the built and the natural worlds.

By combining design, art, data, and technology, the EcoAtlas helps access insights about natural patterns in a way that is scalable to any region. It can be used for design, education, urban planning, conservation, or tourism, for instance, by helping narrow down the best plant palette for a salt-tolerant and resilient habitat, by minimizing water needs in urban settings while sustaining vital pollinators, by identifying the seasonal rhythms of birds and butterflies, or by serving as a vital tool in creating a landscape or a menu that celebrates the seasons year-round.

Centuries ago, illustrated botanical prints gave a glimpse into the vast biodiversity of the globe through art. Careful depictions of species from an unfamiliar *new* world stoked the imaginations of explorers, intellectuals, and financiers alike. Despite our astonishing technological capacity and staggering amounts of data about the natural world today, we have yet to leverage these in a similar way that allows us to better understand these systems as a whole and how human beings are part of its vast, dynamic, and interdependent network.

The *EcoAtlas* aspires to communicate the natural world's complexity in simple and understandable terms. Through it, we can better visualize and face the impact of existential threats like sea level rise, habitat depletion, and climate change, while concurrently celebrating the resilient beauty of the environments we depend on.

EcoAtlas: Visualizing Ecologies Exhibit at the Coral Gables Museum
Roberto Rovira, 2013
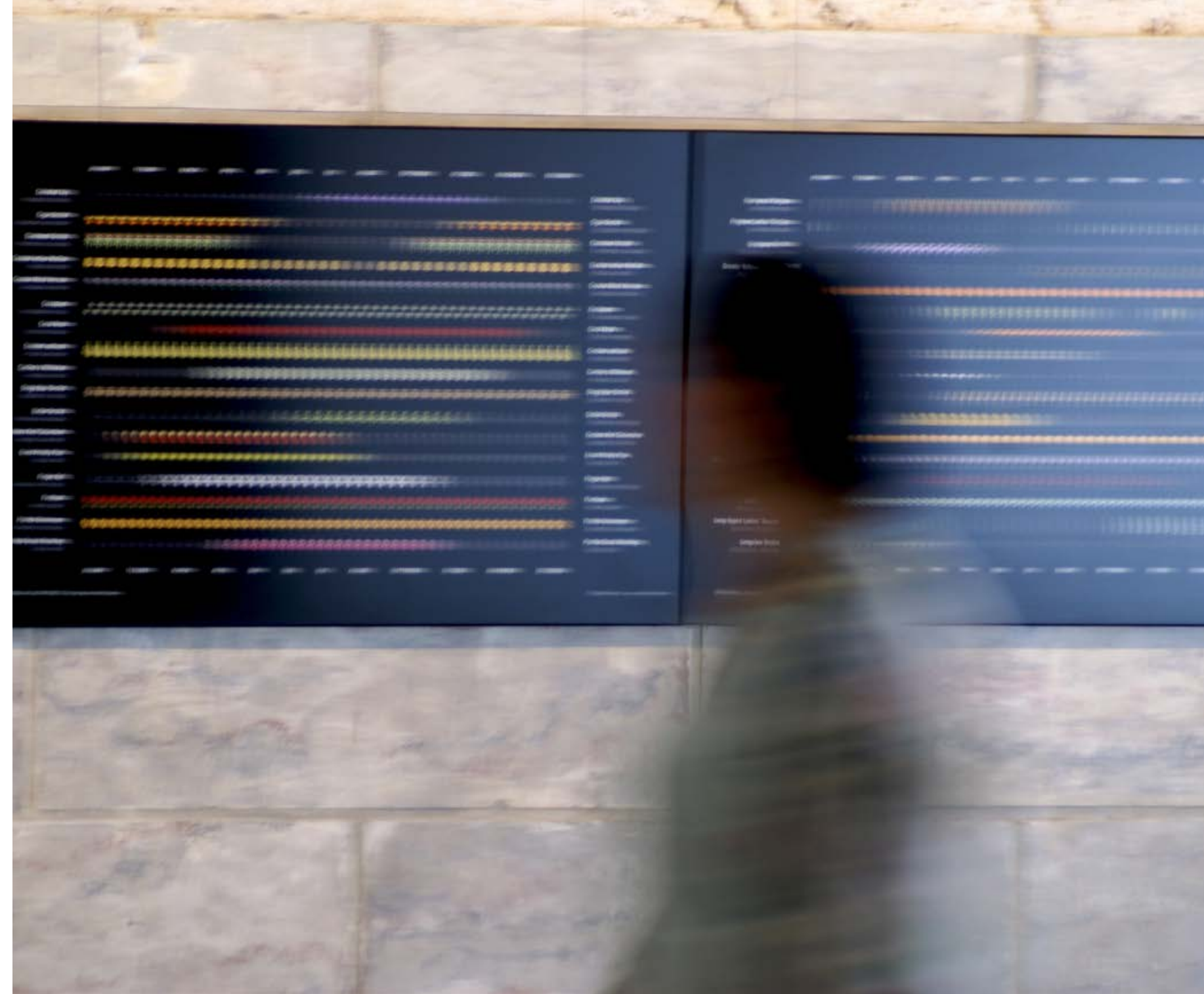
Studio Sarah Willmer Architecture
Sarah Willmer, Khulan Batsaikhan

The Amercan Dream in Flux. Middle Scale Urban Living in San Francisco's Sunset District – 2050.

Time stands still in San Francisco's Sunset District. The American Dream Home of the 1950's - the middle-class ideal of home ownership defined by a private backyard and two car garage rules. 21st century economic, social and environmental realities highlight the need to redefine this dream.

As society grapples with challenges including homelessness, a changing climate and social fragmentation, new forms of housing are at the forefront of urban transformation. Home, in our post pandemic cities, has taken on new meaning as live/work merge and walkable neighborhoods take on new importance in the American city.

San Francisco's housing crisis has grown acute during the tech boom, but the root cause goes back to the 1970's when large portions of the city were *down-zoned* to single-family-only land use. Now 70% of the west side of San Francisco is exclusively single-family and these areas have seen little housing construction for decades. Stymied growth coupled with the accelerating cost of housing, both sole ownership and rental, means the city lacks dwellings for its middle and working class residents. While the city's east side has recently sprouted a crop of luxury high-rises for the wealthy, the west side, encompassing more than half the city's overall land area, has remained the same low residential density since the 1940's. Addressing the *Missing Middle*, both in terms of income (from working class families to young professionals) and neighborhood scale, is the focus of this design proposal.

Our strategy calls for a mid-scale urban density comprised of multi-unit buildings along transit lines as well as up-zoning single family homes to 4 or 5 units. These twin approaches would offer a variety of dwelling types to serve a diversity of residents, add vibrancy to street life, and contribute to environmental sustainability. Taking cues from Jane Jacobs, who advocated for residential density similar to her West Village neighborhood in Manhattan (100 units per acre), our proposal describes a human-scaled neighborhood of 6 story buildings. Environmental strategies including greening the streets with tree planting and climate responsive building forms suggest a pattern for a more resilient and sustainable urban fabric.

These design strategies define our proposal to San Francisco's government officials and urban planners. We challenge them to look beyond the city's core to the westside neighborhoods for opportunities to address the housing crisis. The increased housing density illustrated here could provide more than 20,000 of the 82,000 housing units California law mandates. We believe that adding middle scale density along transit lines and transforming single family parcels into multi-unit buildings can offer diverse, affordable housing options, enabling working class families, teachers, healthcare workers and other vital members of our local citizenry to return to the city where they work.
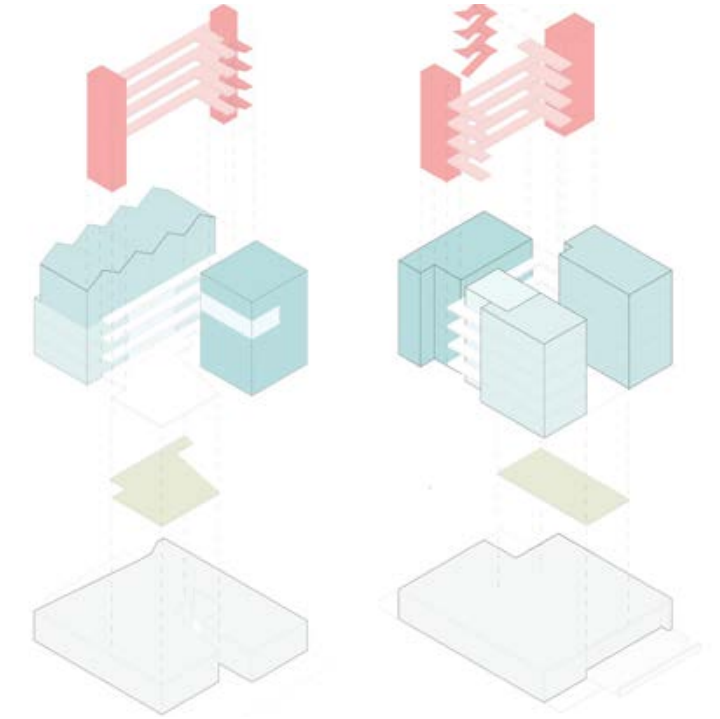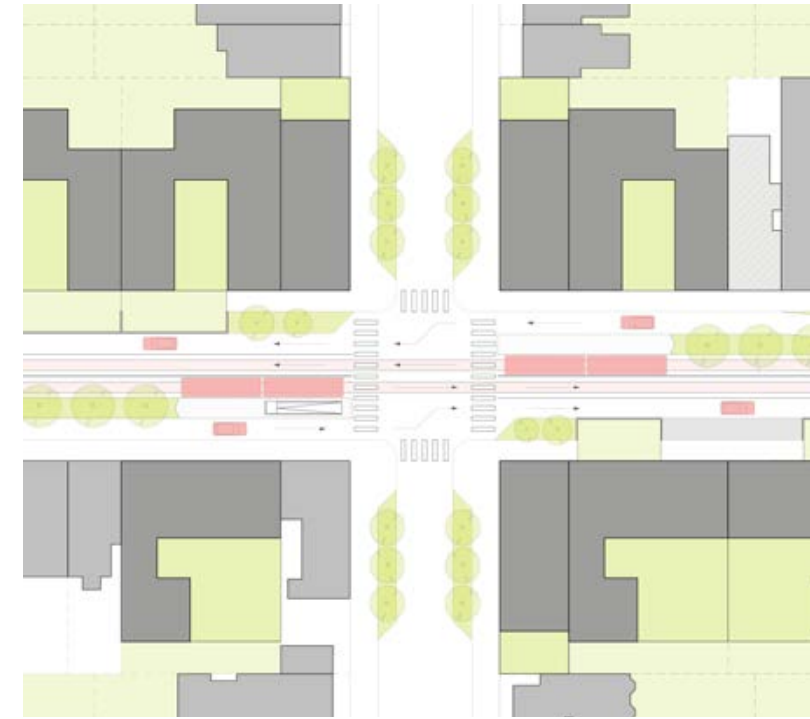
STUDIO V

On Edge presents a cross section of STUDIO V's architecture investigating the reinvention of the contemporary city. Founded by Jay Valgora, the Studio focuses on the edges and gaps of cities – the forgotten areas, the in-between places, and the detritus of abandoned industrial zones. The Studio embraces the possibilities in abandoned and polluted sites, the disjointed edges along highways and railways, the tragic displacement of urban *renewal*, waterfronts scarred by derelict infrastructure, social disjunction, and the challenges of climate change and sea level rise. These sites offer the greatest potential for the reinvention of the 21st century city.

On Edge presents five projects focusing on five edges: Coney Island, Spanish Harlem, Gowanus Canal, Jamaica, Queens, and First Ward, Buffalo.

Edges exist without and within. Without, urban edges divide contemporary cities, cleaving gaps and building barriers between communities. Within, architectural edges divide spaces, isolating people and stifling social interaction. The growth of the modern city, from the 19th century to today was spurred by vast infrastructures of transportation, energy, and social systems. Through their relentless evolution and obsolescence these same networks simultaneously promoted explosive growth of cities while dividing the communities they created: cutting off neighborhoods, destroying eco-systems, increasing the forces of climate change while exposing fragile communities to its consequences. The same divisions are mirrored within spatial structures of architecture, the mechanical multiplication of interior spaces, isolation of uses, populations, classes, and ethnicities.

Coney Island – Waterfront is transformed through the *Vertical Boardwalk*: overlapping spaces engage the waterfront, mitigate climate change, restore the Surf Avenue streetscape, and offer overlapping social spaces overlooking Coney's iconic structures.

Spanish Harlem – Gentrification is transformed through stepped *Liminal Gardens*: interlocking community green and social spaces inspired by stoops and fire escapes that mitigate increased density, offer community facilities, and green space for mixed income housing.

Gowanus Canal – Industry is transformed into *Inhabited Ruins*: engaging the neighborhood's heritage of industrial courtyards, wild nature amidst brownfields, and an architectural language of industrial brick grids and arches.

Jamaica, Queens – Infrastructure is transformed with an architecture of *Spiral Fracture*: revealing greenery within urban cracks sponsored by a building set in motion by a sequence of stairs, social spaces, native gardens, and overlapping amenities.

First Ward, Buffalo – Obsolescence is transformed with designs embracing *Artificial Nature*: reinventing abandoned grain elevators and mills with radical adaptive reuse, overlapping programs, artificial ground planes, and gardens in the sky.

All five offer experiments for mixed income housing and radically stacked social spaces combining gyms, co-working spaces, dining areas, galleries, swimming pools, gardens, and libraries. Silo City also offers a redemptive exploration of the origins of modernism and its potential for rebirth, reinventing contemporary urbanism and architecture.

studioYO
Yoh Mizoguchi, Kyoko Mizoguchi
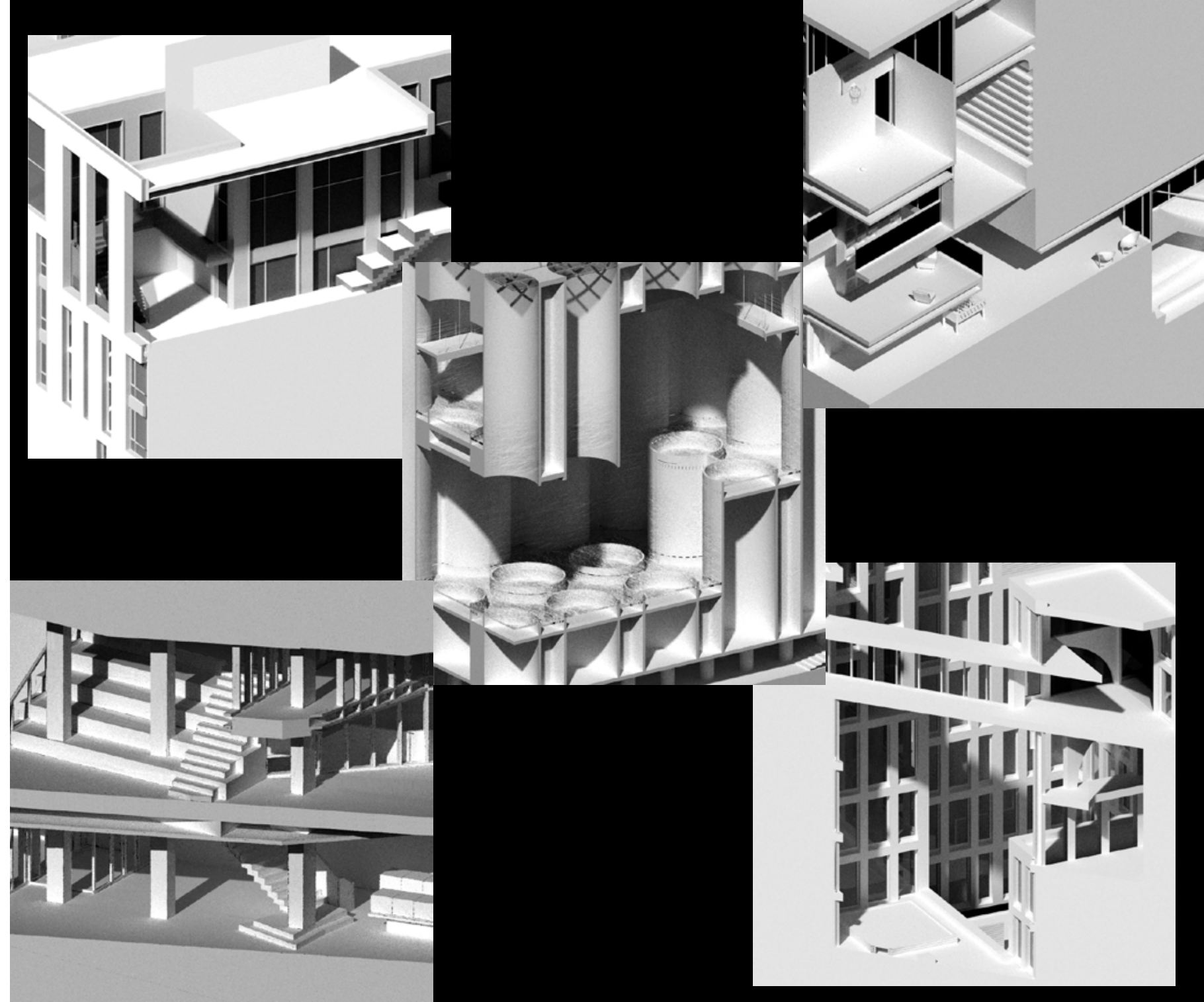
Works of art can take root in our lives like tools do. Tools, as well, can enrich our day to day like works of art do. Based on this conviction, Yoh and Kyoko Mizoguchi (studioYO) have produced creative works that harness the natural features and environment of Japan, traditional crafts, and industrial techniques. The purpose of their practice is to produce works that see the world as one, traverse generations and languages, and connote design and artistry, while further enriching the relationship between modern people and nature.

They have four pieces in this exhibition: Newtons (KishimotoHikimono), born from the traditional Japanese craft of Shizuoka woodturning; *Three-Legged Drawer*, winner of the Silver Leaf Prize at the International Furniture Design Competition Asahikawa 2021; *Pole Chair* from Sugikojo Co., Ltd., founded in 1886; and *UFO Pot* (IzawaSeito Co., Ltd.), an unglazed plant pot produced from recycled roof tiles. They inherit the cultural contexts of the past, while seeking new possibilities of expression.

Newtons were born out of a fusion of art with Shizuoka woodturning, a traditional craft that has continued since 1864. Applying the strengths of Shizuoka woodturning, with its pride in small and delicate machining, master woodturner Masaki Kishimoto uses his exacting design skills and technical prowess to insert neodymium magnets into these serene forms. By giving them curved grounding surfaces, they do not stand still right away even after being attached, which produces a kind of *fluctuation* as if they were a single life form. What Newtons aims for is this *seemingly natural unnatural beauty*. Within a single system of a north pole and a south pole, a free shape arises unexpectedly and inevitably. Newtons are art objects, they are tools, and they are something like toys or musical instruments: Gravity and magnetism, attraction and repulsion, natural and unnatural. The beholder of these objects may face them while thinking circumspectly, or while being liberated from thought. This work is something that makes waves in the state of traditional crafts today.

In this exhibition, there is a section allowing visitors actually to play in Newtons. Another product in the exhibition is Pole Chair, introduced this year as a new product by Sugikojo Co., Ltd., a company founded to manufacture desks in 1886. Simplicity reminiscent of a child's drawing highlights the pure strength of the materials, and its plainness wears a contemporary air.

Three-Legged Drawer was designed by *minimal addition*, which underlies the origins of Japan's time-honored tools and represents a uniquely Japanese minimalism. The structure of the drawers, which normally needs to have four sides to be stably supported, is redefined through a new structure with three legs and no need for outer casing. Another major feature is that the separate components that a conventional drawer structure always has (rails, rail grooves, and handles) are here layered into the same detail. A square object standing on three legs gives off a certain symbolism, and the drawers give the viewer an uncanny sense of floating. It was winner of the Silver Leaf Prize (second place) at the International Furniture Design Competition Asahikawa 2021, its first exhibition. Michael Young, a globally successful designer since the 1990s, mentioned that *this work sits between design and art*.

UFO Pot emerged from a collaboration with IzawaSeito Co., Ltd., longstanding producers of unglazed plant pots. Their unique grog blended from recycled roof tiles produces a subtle pale rose color without the use of pigment or glaze. Porous and strong, the pot drains well and is suitable even for delicate plants with roots prone to rotting. Proper consideration of the plants in an interior space facilitates a good relationship between people and plants.

Photo: Yoshikazu Shiraki, 2023
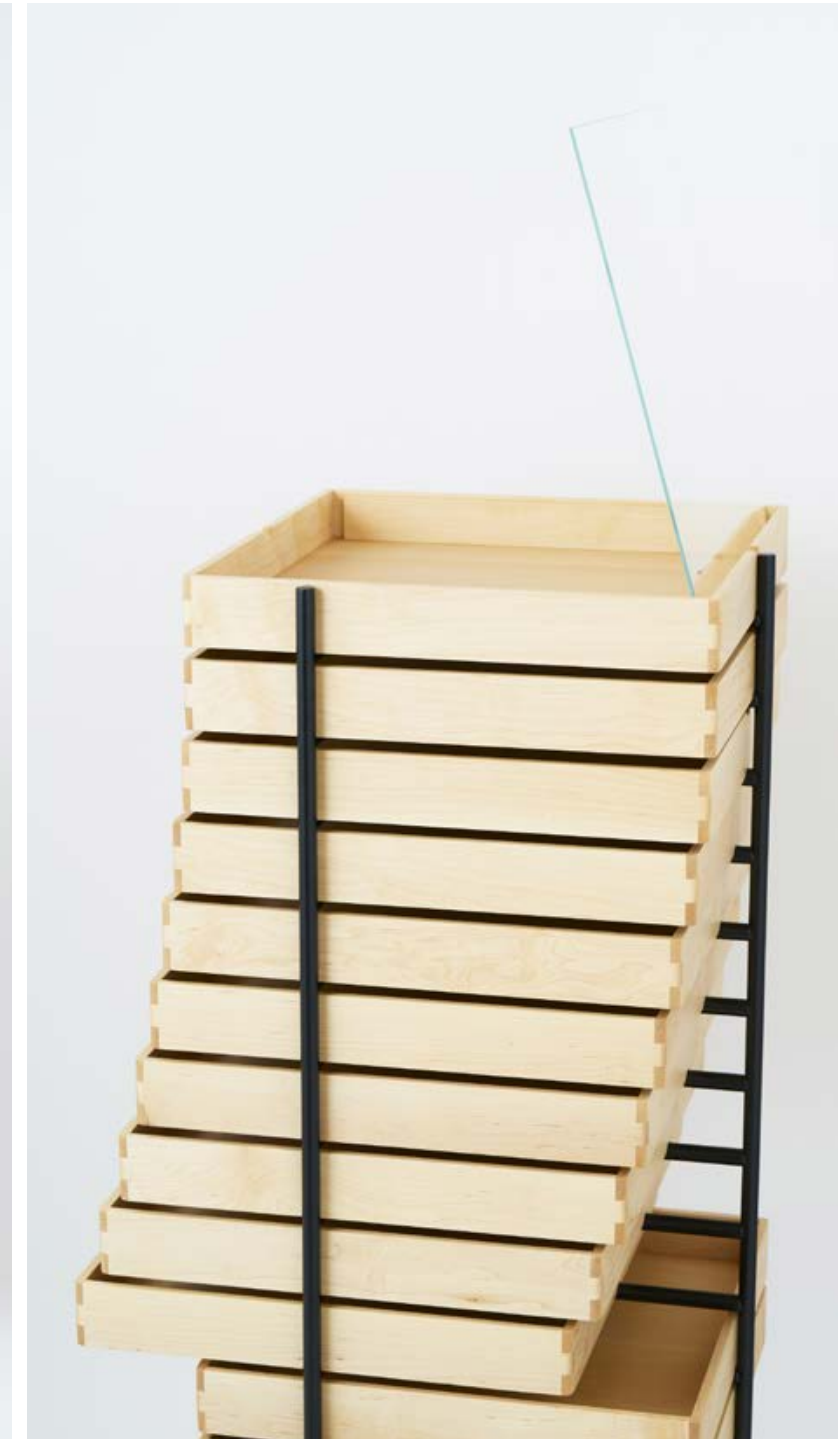
Technische Universität Braunschweig
Technical University of Munich
Technical University of Berlin
Yinan Xiao, Norman Hack, Harald Kloft,
Pierluigi D'Acunto, Patrick Ole Ohlbrock,
Aileen Vandenberg, Inka Mai, Dirk Lowke

Over the past few decades, the construction industry has undergone significant changes due to the emergence of automation and digitalization. One of the most promising technologies in this regard is 3D concrete printing, which offers numerous advantages over traditional construction methods, including a reduction of materials, waste and energy, higher degrees of geometric complexity of structural members, and increased automation. However, current additive manufacturing techniques primarily focus on layer-by-layer based 3D printing techniques that are commonly applied in horizontal layers. While layer-by-layer processes feature a set of distinct advantages, there are inherent limitations to them, i.e. a limited ability in geometric complexity such as overhangs, which need additional structural support.

Therefore, the novel approach of Injection 3D Concrete Printing (I3DCP) has been recently introduced, which challenges the layered build-up and enables more complex spatial printing trajectories. This technology involves the robotic injection of concrete into a non-hardening carrier liquid that supports the printed strands. With this technique, we can create intricate and filigree lightweight structures, which are today completely unknown with concrete as a construction material. Furthermore, the use of I3DCP allows the print path to be aligned with complex spatial stress trajectories that can be treated as strut-and-tie networks in the design phase, using equilibrium-based methods such as Vector-based Graphic Statics (VGS). VGS is a geometry-based approach to the analysis and design of structures in static equilibrium that is particularly effective for designing spatially complex,

lightweight, and material-efficient structures. VGS uses the form diagram to model the geometry of a structure with its applied loads and the force diagram to represent the equilibrium of the forces applied to the nodes of the structure. By combining VGS and I3DCP, the geometry of the lattice structure can be optimized in the early design phase to meet the static requirements and constraints of the I3DCP manufacturing process. The goal is to make 3D concrete printing more efficient, sustainable, and cost-effective, and to explore new possibilities for design and construction that were previously unimaginable.

The exhibition presents a series of fabricated demonstrators in different scales, showing the potential to integrate structure – and fabrication – informed strategies in I3DCP at the early phase of design. The exhibition pieces are the result of the interdisciplinary research on I3DCP which is supported by Volkswagen Stiftung and Matthäi Stiftung.

Lightweight structure: concrete table by I3DCP
Photo: Janna Vollrath, 2021

Tecnológico de Monterrey
Escuela de Arquitectura, Arte y Diseño (EAAD), México

Urdimbre| ordito |fabric

Architecture, Time, and Space. Thinking the future has been traditionally controversial in Architecture. Beyond the very known discomfort of learning the fascist derive of Italian futurists at the early years of the century, it is clear that two types of futures exist: the universalizing, hegemonic and linear, vertical and transitive future that predate colonizing thought. Future visions of which the relation between North and south is fill.

Parallel to this closed myth of the future exists the open space of futures that are and accept to be process, open and experimental. Thinking about "the" future (singular) is related to colonial thinking: unilateral, absolutist, taxable, transactional… and fragile. Thinking about futures in the plural means broadening perspectives, considering multi-laterality, and renouncing determinism as a relevant architectural position.

In architectural experience, however, the future begins where the project is built up. That is where usage commences, where the constructed begins to deconstruct. In other words, the tectonic and mineral matter that form the constructed environment naturally move counter to life and growth. Elusive, indeterminate, unpredictable futures. Diverse, multiple, and dynamic, they escape all architectural attempts to capture them.

Architecture articulates the language of tangible space, while the future is situated in the appropriation of the project, at that juncture of the project's time and intent and the time of use, de-constructible appropriation, as well as its evolution. The imagined futures of a work during the process of its projection are design tools. What future holds for it will depend as much on what is imagined and foreseen in the process as on that unpredictable everything that surrounds it.

The Interwoven Time of Workshop Projects: A Futuristic Manifesto? Urdimbre/Ordito/Fabric is a commitment to collective reflection that represents projects, initiatives, and people with projects that have a laboratory spirit. If, as stated by L. Lokko, laboratories can add to the concept of collaborative enterprise in a different way, the fabric that is woven by this collection of manifestos of a generation of architectural students consists of the threads of time, of process, and of the guiding principles of educational, regenerative initiatives that can anchor civic life, favoring dialog and the exchange of ideas. For this reason, the laboratory spirit is projected toward futures that emerge from these efforts and remain open, although interwoven.

Mexico has a cultural history that links us to urban and architectural actions that provide precedents and lessons learned, a place for today's promises to visit. Our cities are gigantic open-air laboratories where ideas are tested; yet mistakes expand to the degree that urban areas advance, in opposition to nature. Today's principal laboratory would be able to operate by limiting predatory expansion. Therefore, we offer a fabric of samples of the possible, the desired, the recommendable, as threads that we can show and share as we weave a dialog.

In the space where projects and experience are created, conversations about desirable practices attempt to weave them together, to join craft and experience, to reassemble the pieces of cities and territories, to experience architecture as a space in time that does not expire.

Curators: Xochitl Arias, Alfredo Hidalgo, Juan Ramos, Ramiro Estrada, Lucas Hoop, Guadalupe Morales & Grecia Acosta.

Texas Tech University
Huckabee College of Architecture

Co-production of Liminal Spaces: Tectonics and Politics of Socio-Environmental Justice in Urban Thresholds. This project studies how sociopolitical norms shape and govern urban thresholds in metropolitan cities such as Houston and Amsterdam. By theorizing the politics of liminal urban spaces, the project aims to propose alternative modalities for co-designing and co-creating urban thresholds that challenge entrenched dichotomies between privacy and public space. More specifically, focusing on the notions of liminality, urban thresholds, and inside-outside, the research addresses the contrasts between the private and public spheres' interior and exterior tectonics. By targeting the marginalized groups and immigrants in an urban context, this project identifies how the enforced and hidden structure of powers homogenizes the social dynamics of urban commons.

The case studies presented here combine two interconnected disciplinary research approaches: Architectural Humanities and Critical Mapping, which examines the politics of liminal urban spaces, and Architectural Robotics, which suggests digital design and fabrication as alternative methods for co-designing and co-creating urban thresholds with new tectonics and modalities.

The Co-Production of Liminal Space Installation engages with the visitors by superimposing multiple layers of data and analysis onto a pavilion, complete with interactive augmented reality trails. The project's outcomes include a one-to-one installation, research and design posters with augmented visualization trails, and physical urban models integrated into the pavilion. At an urban scale, our goal is to raise awareness of social and environmental justice issues in Houston and Amsterdam by scrutinizing the sociopolitical definitions of the urban commons via comparative studies of European and North American contexts. At an architectural design scale, the pavilion's overall form generates a liminal info-space that

highlights the potential of our developed integrated computational design to fabrication system featuring discrete tetrahedron structures that can adapt to diverse contexts.

This installation design project contributes to a broader conversation about the role of liminal spaces in shaping our urban environments and proposes alternative co-design and co-creation modalities that challenge existing power structures and promote inclusivity, justice, and resiliency. Through a multidisciplinary approach incorporating architectural humanities, critical urban studies, critical mapping, robotics, fabrication, and augmented reality, the goal is to formulate innovative and dynamic liminal spaces that can transform how we interact with and experience our urban thresholds.

The Chinese University of Hong Kong
MSc in Urban Design programme, The School of Architecture
Jeroen van Ameijde, Melody Yiu, Jessica Cheung, Hana Huang

The "New" New Town is a study into future urbanism in Hong Kong, based on recent research and teaching within the MSc in Urban Design programme at The Chinese University of Hong Kong. The study analyzes the balance between the need for top-down large-scale planned urban development and the bottom-up organic social and economic processes that lead to vibrant neighborhoods and social resilience.

Through historic analysis, data-driven mapping and stakeholder engagement in the existing neighborhoods and new towns of Hong Kong, we document the territory's unique high-density and mixed-use planning conditions and their impact on people's quality of life.

The exhibition is organized around four separate but interconnected areas of enquiry.

Document is a section that unpacks the social, economic, and political context that has shaped Hong Kong's urban development, with a focus on the spatial configurations and social characteristics of its diverse urban districts. This section investigates the urban and social issues that people identify as part of their everyday lives, and how networks and communities function within the diverse urban conditions of Hong Kong's older neighborhoods and earlier new towns such as Shatin.

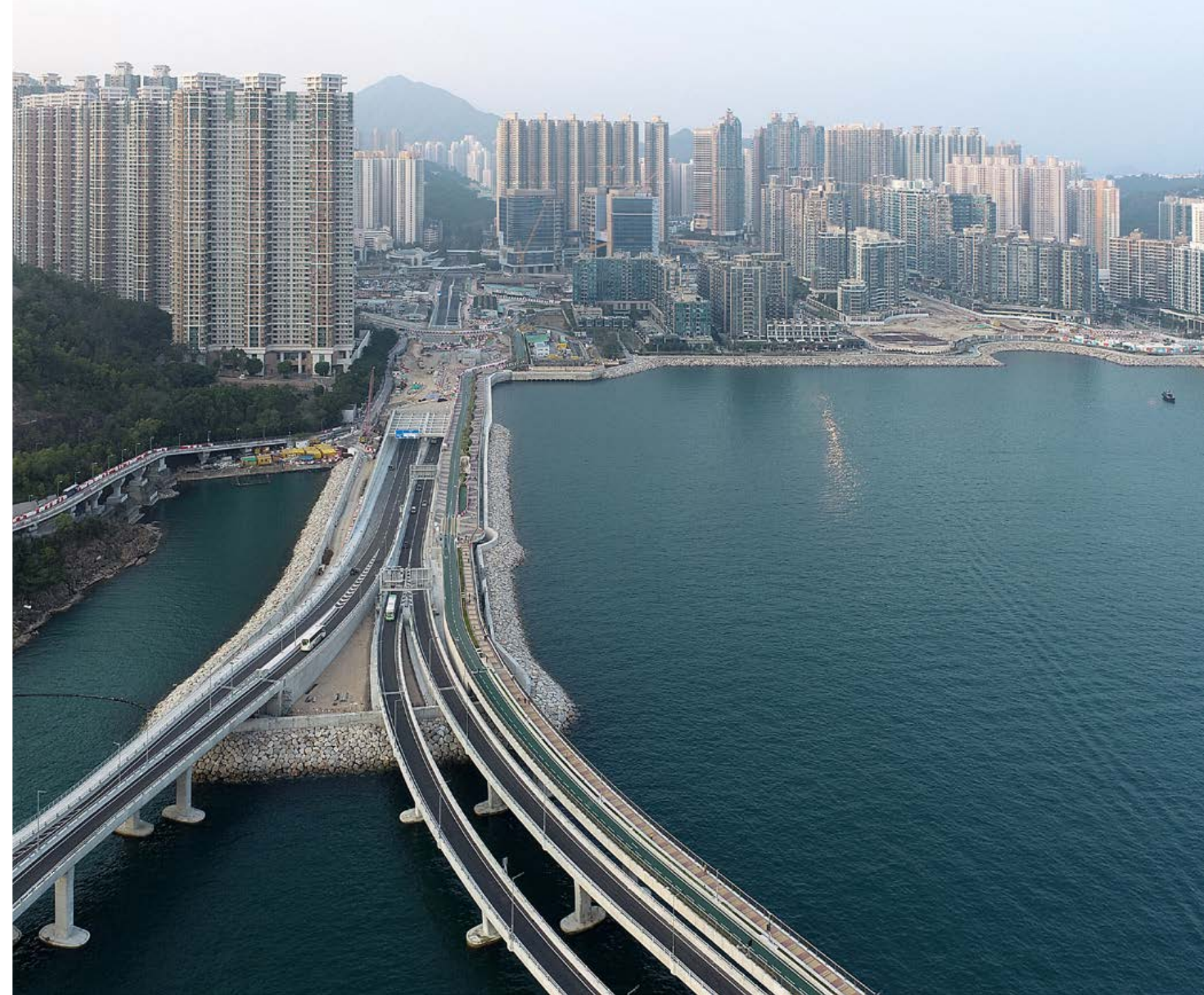Analyse is a section that connects stakeholder engagement, urban morphology mapping studies and network analyses, leading to the critical rethinking of existing spaces and facilities to help build improved community infrastructures.

Reflect is a section that explores potential responses to Hong Kong's urban conditions through interpretative diagrams, speculative design interventions and tactical urbanism.

Project builds on the previous sections and explores the constraints and opportunities of urban planning frameworks to shape vibrant and liveable urban neighborhoods and supportive social environments. Using multi-disciplinary urban research methods to evaluate mobility, environmental performance, density and liveability, this section explores integrated conceptual visions for hybrid urban function mixes, healthy communities, and ecological urbanism.

The exhibition presents a series of visionary pilot schemes for *the "New" New Town.* Three alternative urban design strategies highlight different ways in which new infrastructures, shared facilities and urban spaces could be instrumentalized to create vibrant, equitable, and resilient communities, capable of evolving with future societal and environmental changes.

This study is conducted in collaboration with AECOM.

Aerial view of Tseung Kwan O New Town, Hong Kong
Photo: Jiahua Dong, 2022

Aerial view of Tseung Kwan O New Town, Hong Kong
Photo: Jiahua Dong, 2022

The Circular Factory
Alicia Nahmad Vazquez, Founder

The Circular Factory (CF) was founded in 2020 as an agile micro-factory specialized in computational technologies and advanced manufacturing to offer on-site and near-site digital fabrication capabilities for the construction industry. CF enables the circularity of local skills, intelligence, sustainable resources, and economy.

Design for Manufacturing and Assembly (DfMA) and Digital Manufacturing (DM), particularly as related to Timber construction, is expensive. DfMA is costly due to the costs related to skill acquisition – Computer-Aided Design (CAD), Building Information Modelling (BIM), knowledge about robotic production etc. Digital Manufacturing is expensive due to the initial capital costs related to digitally able machines and robots. This entails that the segment of the construction sector that is rapidly adopting these is largely restricted to large businesses. More importantly, it entails that the Small Medium Enterprises (SME) are unable/unwilling to participate in the rapidly digitizing economy. CF brings cutting edge digital fabrication technologies to old school SME industry players to augment and allow them to be active players in ever more digitized construction industry.

In this spirit CF has developed: 1, the design of an easy to deploy micro-factory based on industrial robotic arms for timber to produce complex carpentry products; 2, a digital-management software and sensor package enabling feedback from local materials; 3, worker training modules and micro-credentialing. The aim is to develop a comprehensive package that brings several of the advantages of digitalised construction, at a lower initial capital interest to the other end of the construction industry – the SME contractors.

As initial prototype circular Factory (CF) is taking the challenge to create a digital timber factory on the remote island of Roatan, Honduras, to produce in situ a housing complex designed by Zaha Hadid Architects. The project has the particularity to offer future clients the possibility to modify and customize the design using a digital app, requiring CF Digital Factory to handle and produce mass-customized, geometry complex parts in a flexible yet controlled process. The island is an area rich in resources and with an interest in the digitization and upskilling of their trades as tools to bring change and prosperity in the region. The development of this research and its corresponding cyber-physical fabrication platform for complex timber products advocates for the democratization of digital manufacturing tools and techniques, upskills local labour and disseminates the use of efficient and sustainable digital fabrication machines.

Circular Factory team:
Alicia Nahmad Vazquez,
Founder & CEO; Jean Nicolas

Dackiw, Fabrication Lead;
Soroush Garivani, Software
Development Lead

Robotic milling for complex curvature components
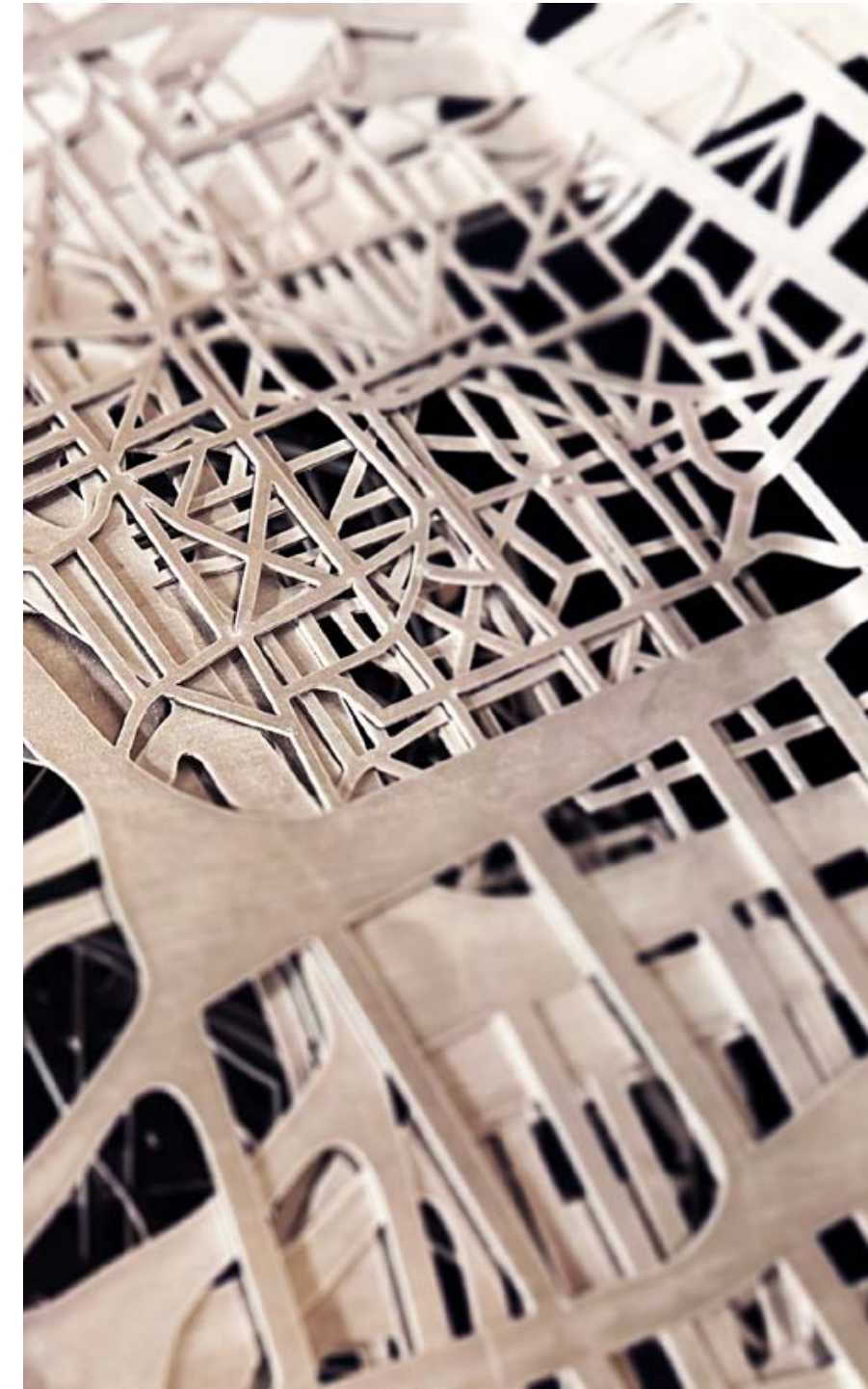
The Galante Architecture Studio

The *Urban Fabric Series* stemmed from the question of placemaking. We live in an incredible time where our phones can connect us across time and space to practically anywhere at any time. With this access to technology, the idea of *place* has shifted for all of us. While we sit in a cafe during a winter storm, we can watch someone across the world on a beach in the summer. If our body is in winter but our mind in summer, where are we located exactly?

This idea sparked the research and work that resulted in our first line in the *Urban Fabric Series*. As an architect, I believe buildings are designed to make a place. Furniture, unlike buildings, is not rooted to the ground by a foundation and its purpose is not directly to house you. But, furniture gives you a place for a moment: a place to sit for a while, to have a cup of coffee, to conduct a meeting, or to sit and relax. With that in mind, I asked myself, how do I incorporate the idea of placemaking into a piece of contemporary furniture? I began approaching this question by studying the history of a place and then, its corresponding maps. After doing this, I saw history as a set of layers, each layer a development in time.

Using this concept, we began stitching history together, hand-building prototype chairs using different objects and elements to understand this idea physically. With digital and analogue equipment in the studio, we produced the first few chairs of our *Urban Fabric Series* as studies of layers over time. We took one significant historic map of a city and formed it into the first layer, then worked successively up through the centuries with each centuries corresponding map forming each successive layer.

Historic & Evolving Layers (details)
Photos: Amanda Lowitz , 2023

tienling.studio
Tien Ling, Hsuan Fan

High Speed Relations is a 105-minute, 12-channel work that displays the entire journey across the island landscape from south to north. Everything is synchronized; the same physical speed and geospatial location in various viewing distances and perspectives create different senses of space, time, and movements.

Living on the narrow and long island of Taiwan, our understanding of the country's landscape comes from moving north and south in a linear sequence. The 300 km/h high-speed railway is not only an ultimate application of emerging technology but also a shared experience that is accessible in daily life. It has reshaped our understanding, usage, and perception of this island.

The Taiwan High Speed Rail (THSR) was inaugurated in 2007, marking the island's *third spatial revolution* since the completion of the railway in 1908 and the freeway opening in 1978. The *One-day Living Sphere* concept was proposed as an ideal goal then and has become a commonly accepted concept today. It encompasses the dramatic changes in the compression and expansion of time and space, as well as the transformation of transportation technology, station architecture, large-scale commercial spaces, development patterns, reshaping of vertical surfaces, and even the reorganization of social space structures. These changes and experiments have added to our new understanding of the landscape of Taiwan.

One-day Living Sphere refers to a redefinition of time (daily itinerary) and space (activity range), with the improvement of speed leading to a compression of the sense of space. However, the contraction of space does not come from a proportional reduction: the high-speed rail affects the overall spatial organization of urban and rural areas, ignoring the intermediating zones and bringing about direct connections between key cities. Speed is not a comprehensive compression but rather a spatial folding, similar to wormholes directly linking city nodes. The high-speed rail ignores 80% of the locations, connecting only 12 cities and erasing the complex transitions and friction of the rural and suburban landscapes in the middle, bringing about a smooth and clear linear spatial perception.

Taiwan High Speed Rail spans 350 kilometers in as few as 105 minutes, covering 83 meters in a second. What physical and mental experiences do these distances and numbers evoke? This project documents the entire journey as the reference framework for speed and motion: the compression of space and the extension of time, manifesting on the ever-translating rural and urban landscape.

The scenery outside the windows represents personal perspectives, while the satellite images present objective views at the height of 20m, 60m, 180m, 540m, 1620m, and 4860m, each frame three times higher than the previous one. The two juxtaposing sets of imagery synchronize into the correlation between spatial distances and visual speed: the low-angle, close-range views disappear instantly, while the landscape in the distance remains still, bringing varying sensations of speed while moving in the same actual time and space.

Universidad Católica de Santiago de Guayaquil
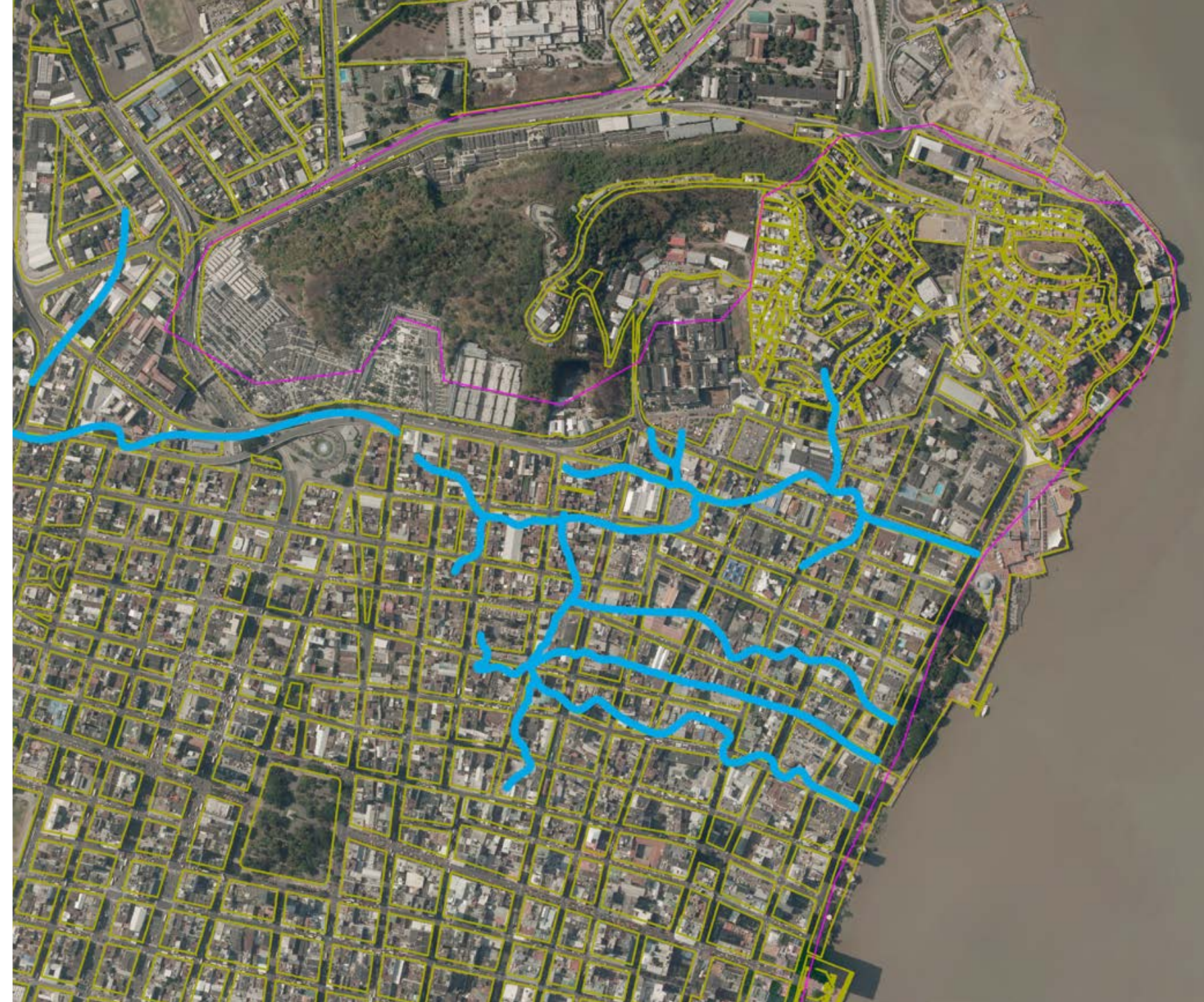## Facultad de Arquitectura y Diseño
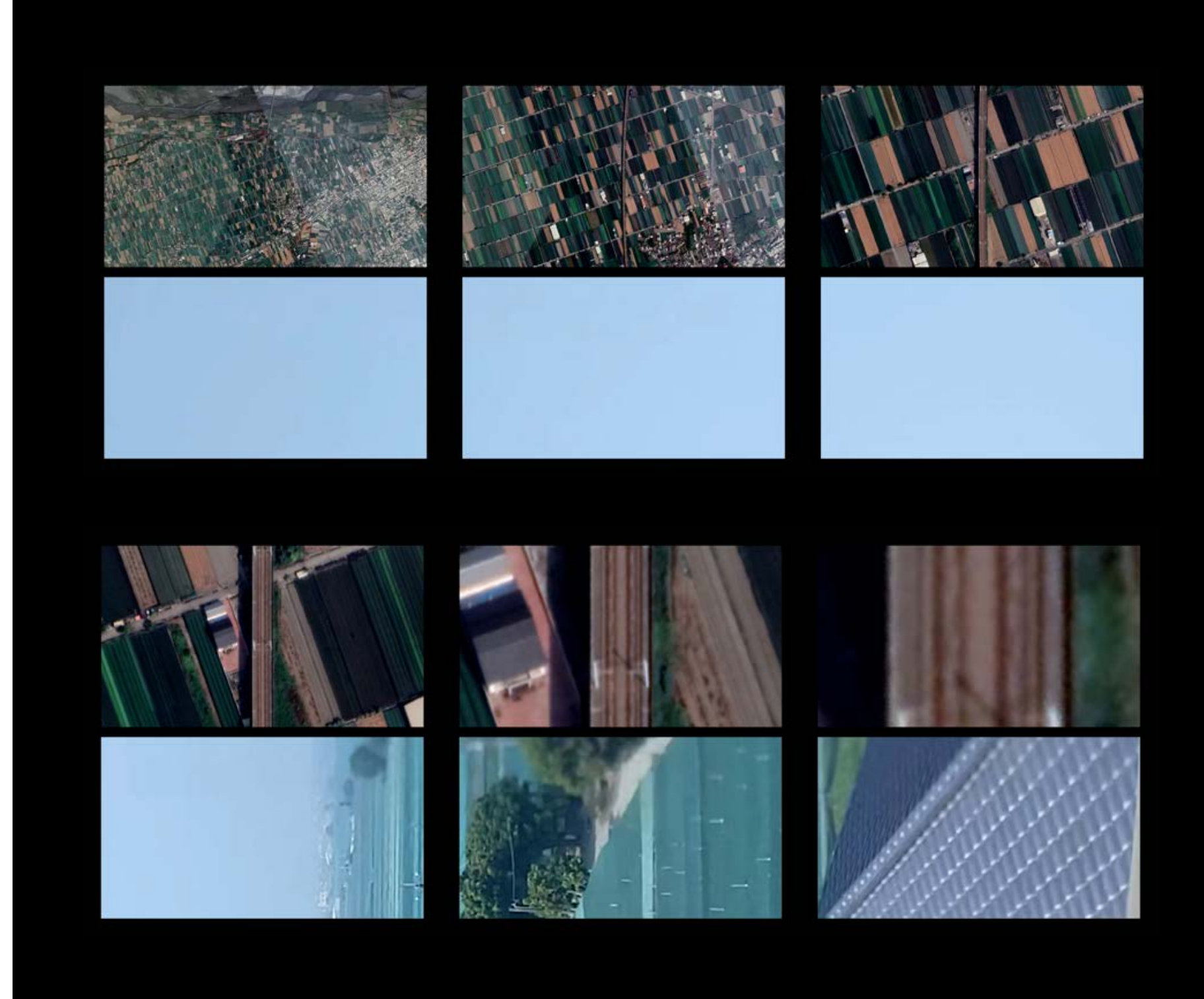
The project features the results of a research about the historical cartographies of Guayaquil conducted in 2022 by the members of Lab C+AU and students José Rivera and Eddy Oyola. It tells the story of how the city materialized in space through time. Based on the superposition of georeferenced old drawings from the 17th, 18th, 19th, 20th centuries, and current digital maps, the project reconstructs how and why the city grew to produce the current fabric. The team was able to collect, digitalize and georeference the most complete set of maps about Guayaquil amassed to date. The process started by reviewing several digital and physical sources. Once gathered, a datasheet was created for each map, including information related to the author, date and motives behind its creation. Then, the maps were overlayed on top of the latest digital photographs and city maps, enabling a comparison between past and present realities. Among the many results, the team discovered specific types of differences between plans due to the techniques utilized in the original drawings, the political background of the authors, and the events that occurred during the years in which a map was

envisioned, commissioned or created. Consequently, together – students and teachers – were able to understand 1) how the urbanization process took place within a comprehensive study of specific sociocultural, geographic and hydrographic conditionings and 2) identify how the mapping narratives evolved through time, sometimes even purposely diverting from the physical reality of the built environment to enhance or hide features of specific interest. These findings allowed the upbringing of new narratives regarding the city´s urban growth and evolution. This exhibition has been created to illustrate the most important aspects of these findings. By showing the maps in layers that visitors can interact with, together with the use of projected light through scored translucent surfaces, the exhibit unveils remnants of moments and events that the grid preserved but history has forgotten.

Laboratorio de Critica
Arquitectónica y Urbana
Lab C+AU: Jorge Ordóñez,
Gilda San Andrés, Filiberto Viteri

Facultad de Arquitectura y
Diseño, Universidad Católica
de Santiago de Guayaquil

José Andrés Rivera & Eddy Oyola, 2022

Georeferenced location of estuaries infilled decades ago
José Andrés Rivera & Eddy Oyola, 2022

University of Arkansas, Brian Holland
Fay Jones School of Architecture & Design

Piggybacking Practices is a research project highlighting the design ingenuity of architects, planners, and ordinary citizens in the face of rising urban inequality and resource scarcity. Conceived as both a critique and celebration of the contemporary urban landscape, the *Piggybacking Practices* exhibition explores a novel class of incremental yet transformative design practices that have emerged largely in response to the persistent inequities that shape city making today.

The exhibition features a collection of original drawings that document *piggybackings* in the built environment – tactical, multiple-use propositions for anchoring socially or economically marginal activities alongside dominant ones. From rooftop community farms and backyard grazing schemes to intergenerational homeshares and luxury housing with subsidized artist studios – the piggybackings highlighted here work to offset one urban constituency's disadvantaged position relative to more established – and more fully capitalized – forms of urban development.

Piggybacking is an inherently contingent endeavor; its practitioners operate tactically, within the space of the other. Would-be piggybackers scan the urban landscape looking for unseen opportunities in vacancy, waste, and un- or underexploited niches. Opportunities may be spatial – existing in, on, or in between buildings and sites. Or they may be temporal – seeking out the daily, weekly, seasonal, or one-time gaps between use and non-use. The drawings presented here illustrate some of the unlikely partnerships, programs, and spatial typologies that have resulted from leveraging these opportunities, and they illuminate an important form of social and ecological entrepreneurialism in contemporary urban life. The emerging expressions of collectivity they document spotlight the resourcefulness and tenacity of today's city dwellers – which architects, planners, and urban designers would do well to embrace as they seek new tools to confront entrenched inequality in the built environment.
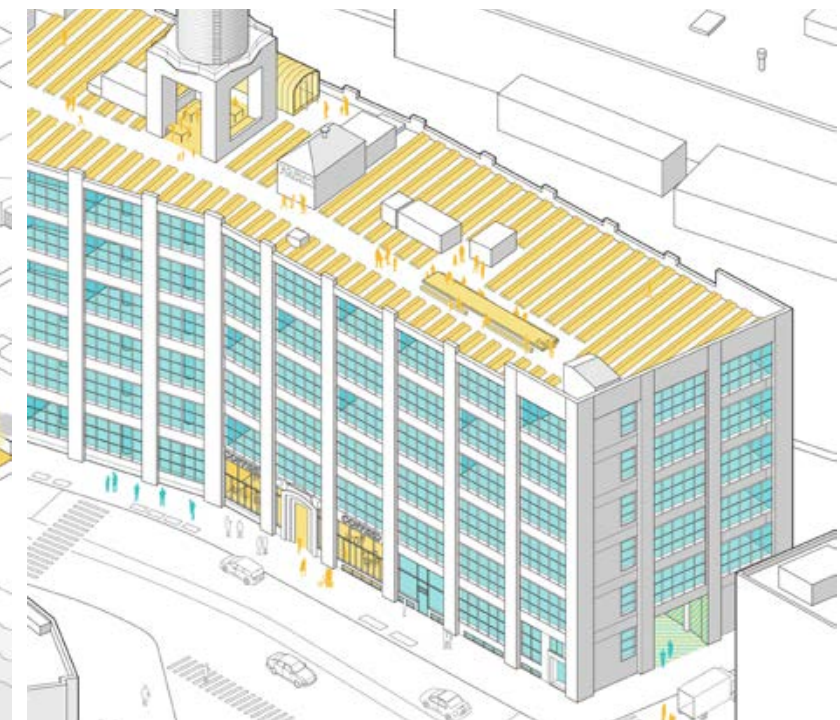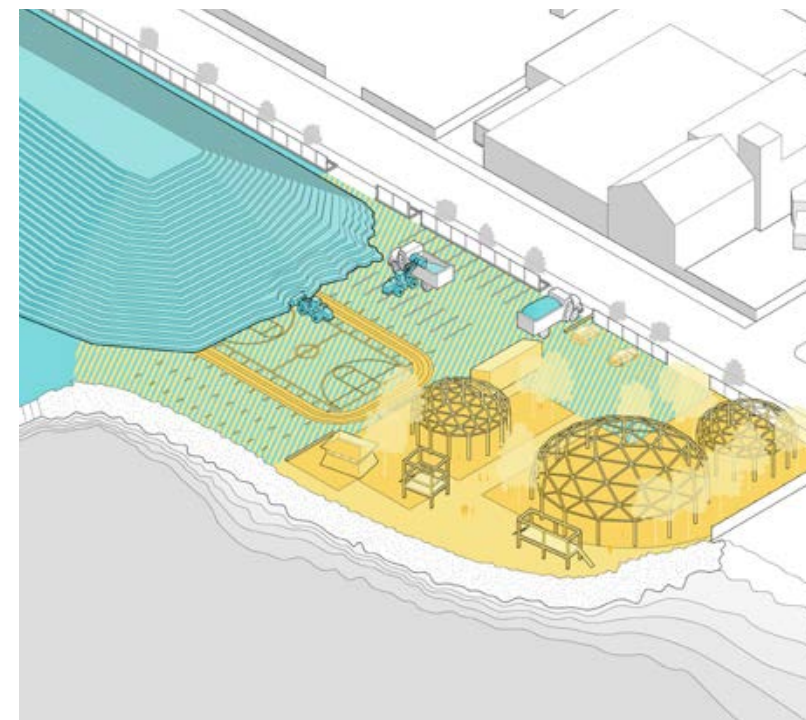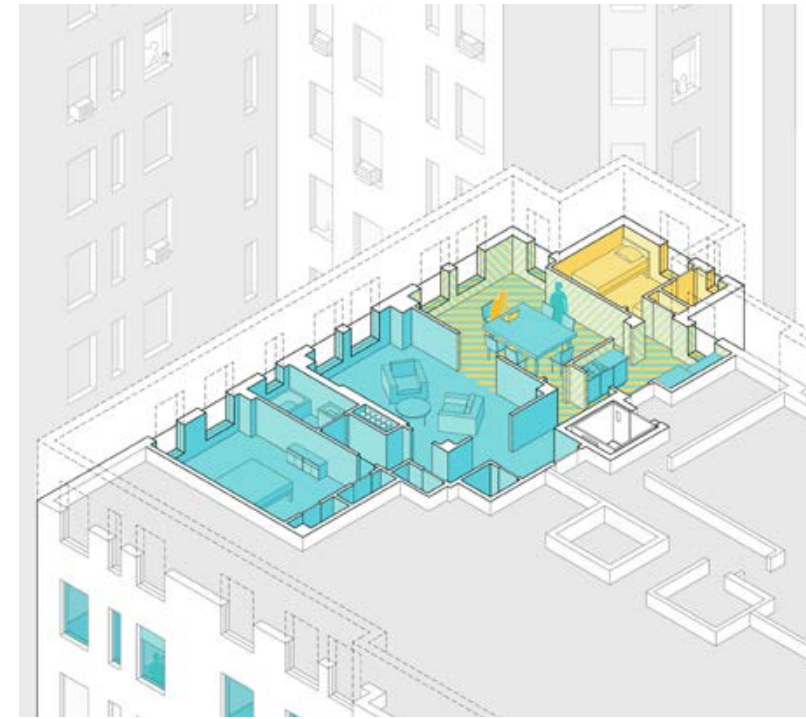
University of Guelph
School of Environmental Design & Rural Development, Landscape Architecture

Visualizing Climate Change in Venice using Artificial Intelligence Visualization Platform.

Artificial Intelligence (AI) visualization is gaining great prominence and attention in the field of design, including architecture and landscape architecture. Due to rapid technological changes, artificial intelligence (AI) graphic software appears to be the next frontier in creating digital imagery. With little to no design experience, text-based AI visualization applications such as DALL-E and Midjourney are popular platforms for students to explore ideation and graphic development of ideas.

The images visualize climate action and climate change within various neighborhoods in Venice. These images were generated by three landscape architecture students from the University of Guelph. The students have used Midjourney to generate these visualizations.

The University of Guelph, School of Environmental Design & Rural Development, Landscape Architecture. Faculty advisors: Prof. Nadia Amoroso, Prof. Afshin Ashari & Director Sean Kelly Students involved: Marika Li (MLA student), Niloufar Mohsenivafa (MLA student), Catherine Yan (BLA student)

University of Palermo
Department of Architecture
Rossella Corrao & Calogero Vinci

Palermo Norman Treasure. iHERITAGE: ICT Mediterranean Platform for UNESCO Cultural Heritage B_A.2.1_0056, ENI CBC MED program 2014-2020.

Time, Spaces and Existence of the Normans in Palermo and the surrounding area during the 12th century were investigated by the Department of Architecture research group involved in iHERITAGE, a project aiming to improve the sustainable enjoyment of UNESCO world heritage listed sites lying on the shores of the Mediterranean through the development of innovative VR/AR products. The UNESCO site of "Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale" was established in 2015 and investigated by means of innovative survey techniques, tailor-designed for the purpose of data gathering and hologram generation, the latter being a most attractive display form for virtual content. The University of Palermo research staff produced 3D models of buildings, gardens, masterpieces of goldsmithing and fine caskets in view of developing Virtual Rooms granting people with disabilities virtual access to the such parts of built heritage complexes not easily accessed in the reality as crypts, terraces, qanāts - i.e. the underground channel aqueducts built by the Arabs in Palermo and later used by the Normans to power the fountains and fishponds in their sub-urban mansions, then known by the term sollatia). To this day, people affected by motor and sensor-related illnesses suffer have their ability to take part in everyday life activities hindered, including the full enjoyment of built heritage. By adopting multidisciplinary knowledge strategies in its systematic studies, the University of Palermo harnessed the potential of new digital technologies towards experiencing the built heritage innovatively and more sustainably. Holographic projections of

the VR contents (including 3D reconstructions) together with 360° pictures of Palermo and of the seven heritage areas making up the UNESCO route are on display in the exhibition. Virtual Architectural (and Landscape) Reconstructions of buildings and their surroundings, now difficult to imagine due to being lost contemporary urban development, are also on shown. Likewise, the VR/AR contents extend to a number of buildings which have not officially been included in the UNESCO serial site as yet, but that are representative of Norman lifestyle in Palermo drawing on a wide spectrum Arabic cultural features such as the construction techniques seen in the leisure parks around the city, as well as the masterpieces of art, literature, goldsmithing, texture of marbles and/or cotton, wool and silk weaving.

The exhibition was arranged thanks to the financial support of the European Union under the ENI CBC Mediterranean Sea Basin Programme. The contents of the exhibition are the sole responsibility of PP9-UNIPA and can under no circumstances be regarded as reflecting the position of the European Union or the Programme management structures.

University of Tennessee
College of Architecture & Design
Liz Teston, Associate Professor of Interior Architecture
Emmie Barnett, Assistant

Public Interiority: Atmospheres and Temporal Microclimates. This installation explores the concept of public interiority, a condition generated by atmospheres, forms, psychologies, programs, and politics. It examines design's role in assembling conditional interiors outside the architectural enclosure. Flow and temporal microclimates enhance interiority – places that enrich inhabitants' spatial interactions and lived experience. This installation explores spatial practices that encourage inhabitants to continually renegotiate and reassemble space beyond the confines of property, enclosure, and permanence. Forces like intimacy and temporality have the potential to generate public interiority and bear witness to the contemporary contexts within which they exist. The work asks how ambiance, perception, everyday usage, and the public domain shape this setting – addressing immediate and enduring needs for experiential communal places.

University of Virginia
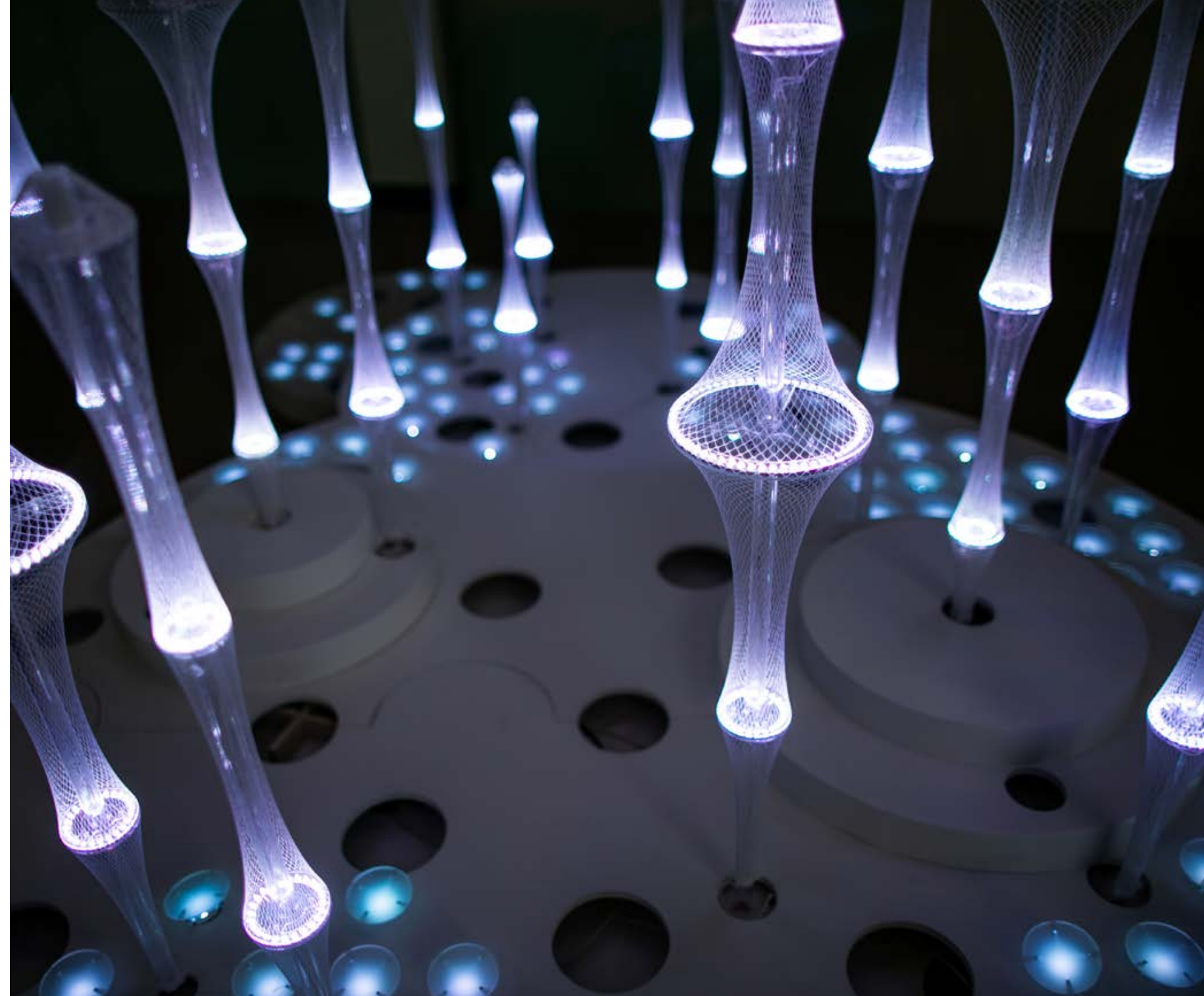## Networked Public Space Project

Networked Public Space (NPS) is an assemblage of public space design, open-source sensing technologies, and community engagement strategies that makes urban environmental data more accessible, meaningful, and actionable for communities. While data can be used to enhance urban systems, the technologies of sensing and the use of the data in putative *smart cities* remain invisible and alienating to individuals and communities. NPS creates perceivable, knowable manifestations of environmental conditions in physical space and online. Comprised of infrastructure and architecture, NPS interfaces with the hardware and networks of the putative *smart city*. However, its open source, scalable, accessible, readily observable, and flexible qualities are inherently geared towards deployment by communities generally excluded from top-down urban technological practices. In this way, NPS provides an alternative path to private-public dominance in emerging public spaces, putting data, analysis, and meaning generation into tactical and democratic contexts. The project consists of multiple layers: the existing environmental condition, physical artifacts of the system, digital infrastructures and codes, and social engagement supported through open-source access. NPS utilizes urban sensing to gather information about its environment and responds in real-time through patterns of illumination in situ as well as through networked connections. NPS integrates an organizational structure that allows communities to participate actively. This organizational space serves as an integrated framework to facilitate connectivity, collaboration, and open access, as well as collective ownership of environmental data.

The project strategy was based on prototype development in different test-bed settings. The latest deployment of NPS is ongoing in Shockoe Bottom, a neighborhood seeking to address environmental justice

in Richmond, Virginia, United States. In early Richmond, Shockoe Bottom was the central hub of industry and commerce due to its location on the banks of the James River and along some of the nation's earliest rail lines. This coupling enabled and later fueled the creation of wealth for White enslavers and drove the economy in Richmond. The neighborhood was filled with auction houses, factories, jails, law offices, and residences centered on the trade of enslaved Africans. The histories of Shockoe are vast, and the lives of free and enslaved laborers in the area extend beyond the many injustices. In Shockoe, NPS works with the City of Richmond and the Sacred Ground Historical Reclamation Project to link environmental data collection and oral histories to current environmental injustice, including air pollution, noise pollution, and flooding. Integrating open environmental data and analysis into place-making through responsive design increases the visibility of environmental issues and demystifies technology in public spaces. However, integrating data-gathering technologies into planned public spaces raises significant questions about data privacy, ownership, and governance, as well as technological place-making, requiring critical evaluation and public debate among stakeholders and actors engaged in the future of the public realm.

Indoor Installation with Sound and Motion Detection
Photo Credits: Tom Daly

Valentino Architects

Ann Dingli, Sumaya Ben Saad,
Matthew Farrugia, Luca Zarb, Tara Žikić

GĦALLIS considers architecture in its role as custodian of use – a chamber of morphing function, evolving through time as its inhabitants' preoccupations transmute into different versions of themselves.

In pre-17th century Malta, those preoccupations were shaped by the needs of surveillance, defence and island-wide military cover. This at first manifested as open-air occupation – an encircling reconnoitre forming around the islands made up of sitting guardians and vigilantes of the shore, guided only by their wits and the elements of the night. As defence needs matured, bastioned towers erected in place of the alfresco wardens, protecting the archipelago with the intransigence of stone.

The military function of the perimeter towers eventually faded, their innards torched by the fires of idle garrisons and watchdogs. Dwindling patrol converted to vacancy. Over centuries, targets of surveillance swapped from assailants to refuge seekers washing up to shore, some having lived, others perished.

By the mid-20th century, the watch towers fell into degeneration and eventually, in one case, depository. In 1955, a bulleted corpse submerged into the well of Torri tal-Għallis. The tower rested enduringly on the edge of the main island's north-eastern shore, its insides now a cavity of disuse, but its stone walls still witness to unfolding chapters of delinquency.

Today it stands skeletally, awaiting new elements of architecture to embed and re-activate its use. Like organs that sublimate past and future, these elements bring utility back to the body of the tower. A periscope punctures through its middle floor-plate, returning survey as a function into its form. Sleeping elements are retractable, anticipating unknown contents of future nights. A ladder reintroduces access to the first floor, leaning in repose when open, taut with verticality when closed. New domesticised uses occupy the space. Kitchen elements replace the heat of former open flames. Bathing capsules align with outward views of the horizon.

GĦALLIS presents a retrofit preposition for the 17th century watchtower, Torri tal-Għallis. In so doing, it brings focus to the inner lives of these recurring defence structures that so visibly mark the Maltese islands' perimeter.

By fragmenting and then examining newly designed architectural elements and their relationship with the tower's anatomy, the exhibit detaches from rigid confines of time and space, encouraging instead an observation of fluctuating, metabolising functionality – a functionality that both changes and closely resembles itself as it evolves.
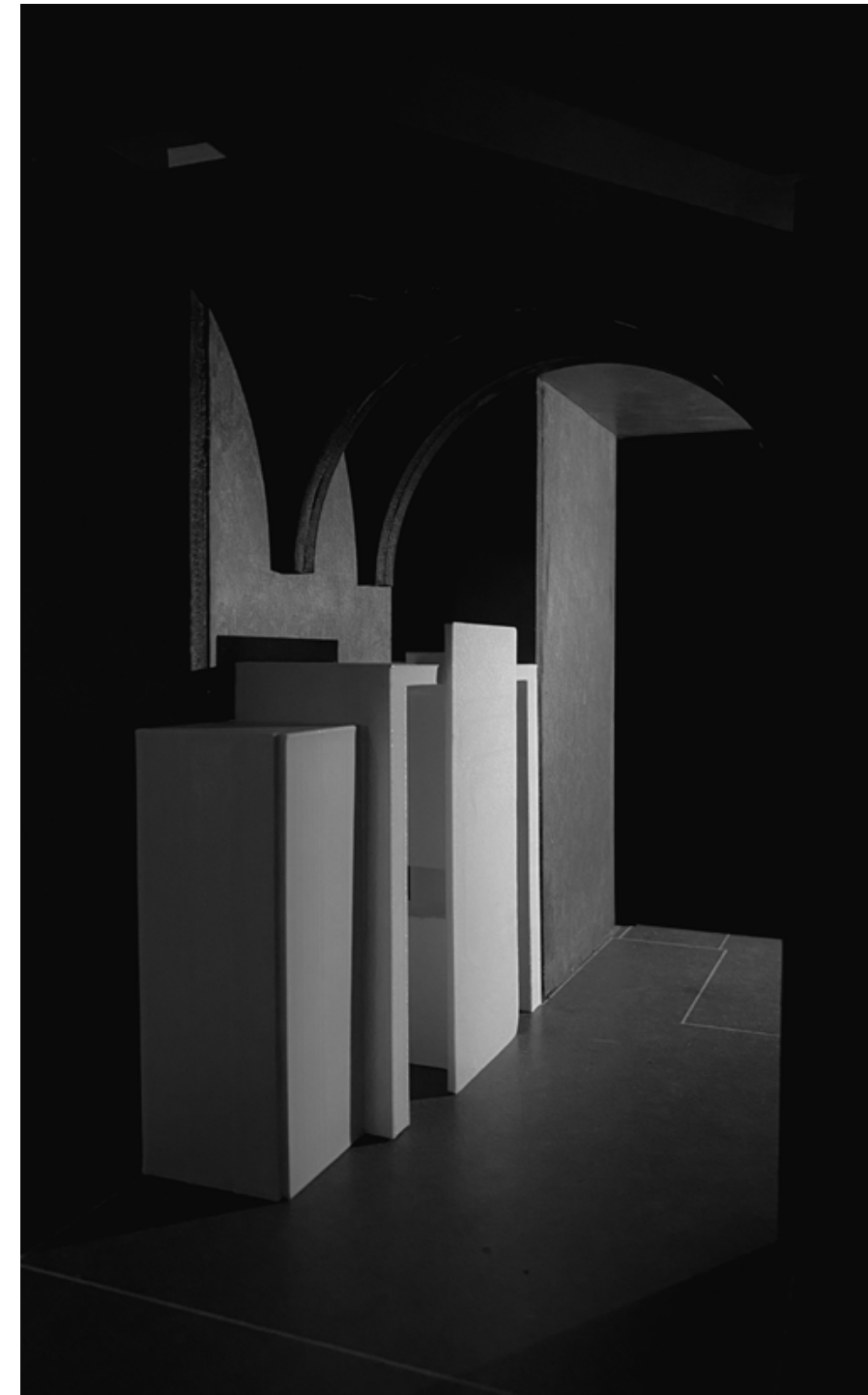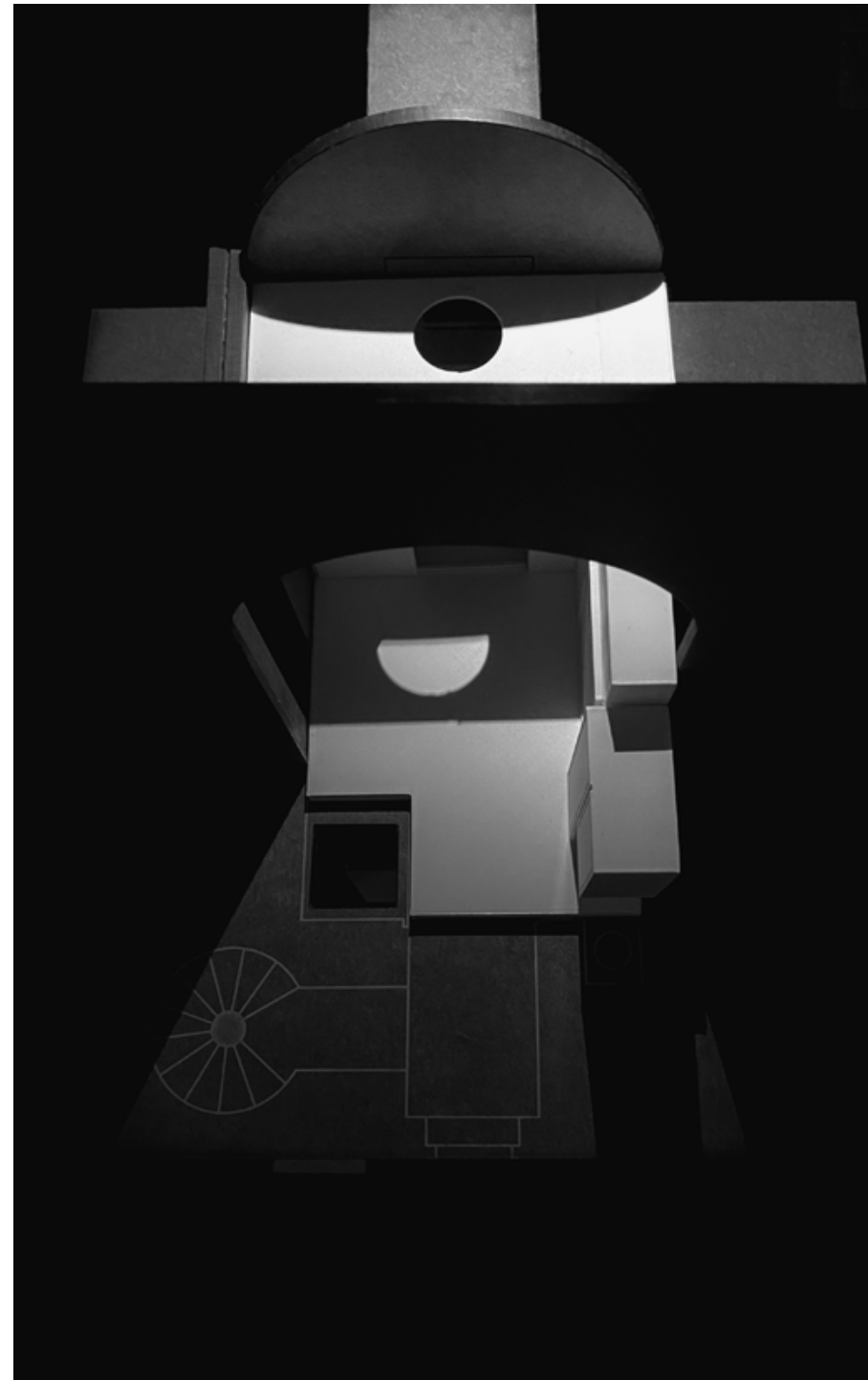
X.Topia & CRGarchitecture
Marcella Del Signore,
Cordula Roser Gray
& Tatiana Teixeira

The drastic increase in environmental imbalances creates the need for continued technological advances that, motivated by nature, simultaneously incorporate the inevitable convergence with ecological processes. Ahead of the need to symbiotically merge natural cycles with human habitats, *Entangled Matter* is a modular system for dynamic matter conversion. It is a prototype that creates artificial habitats for life forms to grow.

Entangled Matter incorporates concepts from ecosystems found in the natural world to remediate climate change-induced stresses through new self-sufficient ecologies. Technologies such as sub-irrigation systems, built-in sensors, and digital monitoring aid embedded in the system become an autonomous and equitable post-anthropocentric productive environment.

Aware that open systems promote adaptation, we propose a combinatorial network of scalable entanglements, where hygroscopic materials (hydrogel) are combined with life forms (moss, microalgae) to filter the air around us and cool its surroundings through natural processes to re-establish microclimate conditions. Allowing for a symbiotic relationship between human

and non-human species, *Entangled Matter* replaces adverse interactions and consciously makes natural processes visible and accessible through scalable closed-loop systems.

With all parts being easily manufactured and manually assembled, different aggregations of performative and structural elements can flexibly generate pavilions, canopies, facade units, coral nurseries, micro-agronomy structures, and various other configurations. In this process, entanglement starts from a condition of co-dependency: modular clusters, primarily configured out of five different 3d-printed pieces with specific performative and structural functions, can be aggregated to harvest energy and filter air - an act of remediation while creating new self-sufficient ecologies and microclimates.
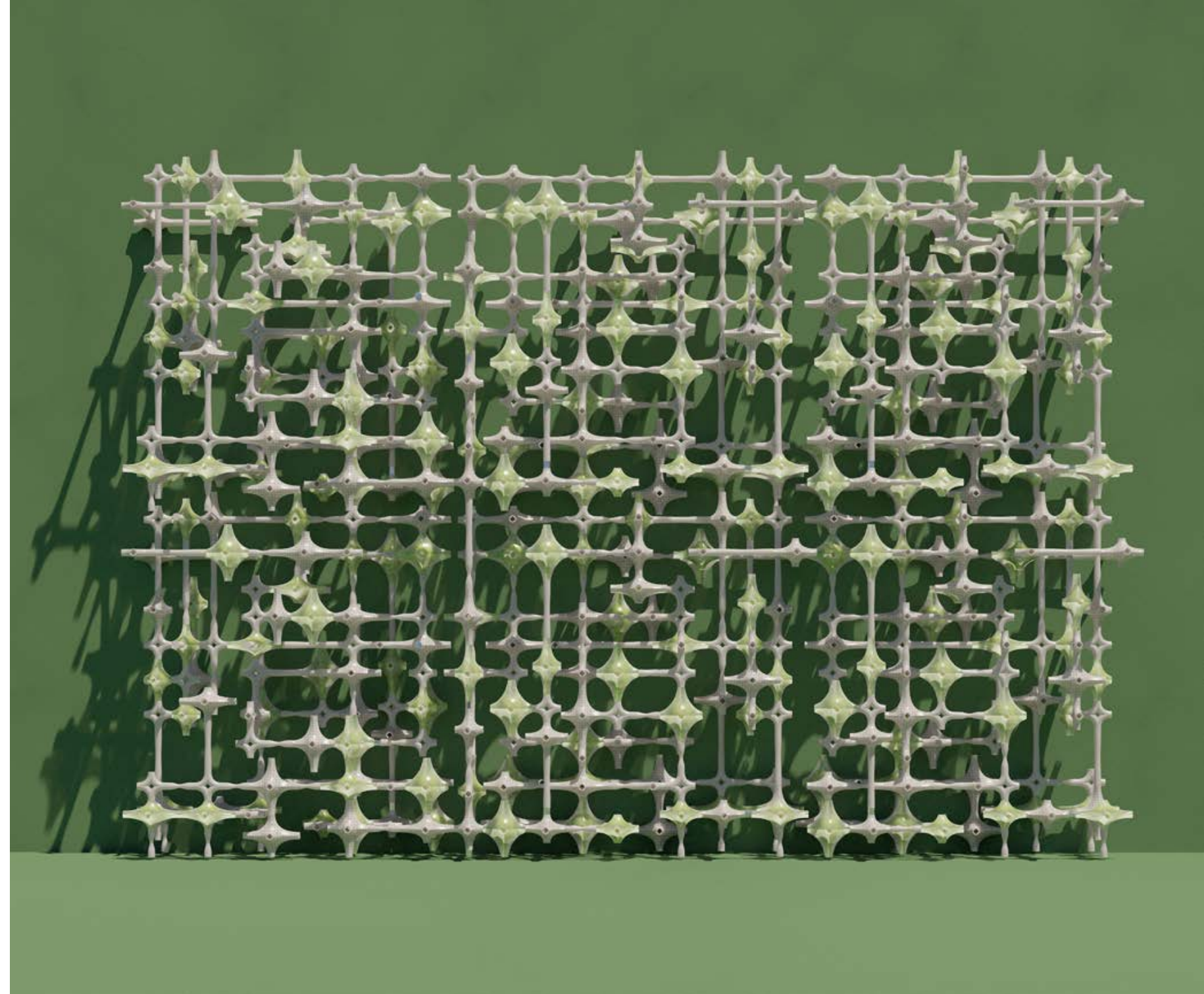
YBGSNA
Yuval Baer with Maor
(maoritsyoo) & Ziv Barashi

The Four Seasons - an Evasive Harmony. Ancient traditions teach us, that *the Holy One, blessed be he*, creates and destroys worlds[1]. Today, a contemporary reading of this statement, might be understood as the realization that every reality is based on a delicate balance. When the balance is violated, a crisis appears, shatters the old reality, and paves the road for a formation of a new reality. We also learn from *Sefer Yetzira*[2], that our reality, as we understand it, is based on structures of our consciousness: *Thirty-two wonderous paths of wisdom Yah THVH Tsevaot, carved out by means of delineations, with writing, and enumeration, and narration, which means, that our consciousness is basically based on letters, numbers* (spheres) *and narratives* (history).

The written text is what actually separates prehistory from history, or unconsciousness from consciousness. The text structures our consciousness and forms our reality as a fairly resilient construction of our inhabited space. In modern times, as the status quo between man and nature has been violated, our structures have expanded, evolved and deformed to the point of being obsolete. The Platonic fourfold – the foundation of our classic consciousness is based on static harmony, and is defined by Euclidian geometry. Now however, in the age of the Anthropocene, when we have become responsible for tectonic shifts which have undermined our stability, we need to reevaluate our Architecture. We must go through an evolutionary transformation and invent new structures that will enable us to build an environment, which is not just technological, but also spiritual.

In many ways, the Four Seasons still represent the classic structure of our consciousness. They represent the idea of the cartesian grid or the fourfold on which our world is founded. The Seasons are composed out of *Fire* (summer), *Water* (winter), *Earth* (spring) and *Air* (autumn). In modern times, as we learned to control and dominate these forces, we have managed to shake the foundation of this structure. As entitled consumers, we suddenly begin to experience *Fire* as a force that burns and consumes, *Water* as a force that washes away stability, *Earth* as a form of stagnation and death, and *Air* as evaporating emptiness. What we seem to have forgotten is that *Fire* is also the force of emanation, abundance and creation, *Water* is the source of life, flow and growth, *Earth* is the foundation of ecological stability and *Air* is the force of idealism and spirituality.

The well-tempered environment[3] should be based now on a new type of engineering. We are looking for a structural wisdom with an expanded vocabulary, which is capable of giving up control and domination. It should be fluid, relaxed, adaptive to narratives, and above all, capable of negotiating multiple relationships that are founded on complex mathematical scripts. The fourfold must be established now on dynamic foundations allowing for an open-ended evolution.

1. *Midarsh Rabbah Genesis 3, 7.*
2. *Sefer Yetzira, Book of Creation*
3. Reyner Benham, *The Architecture of the Well-Tempered Environment*
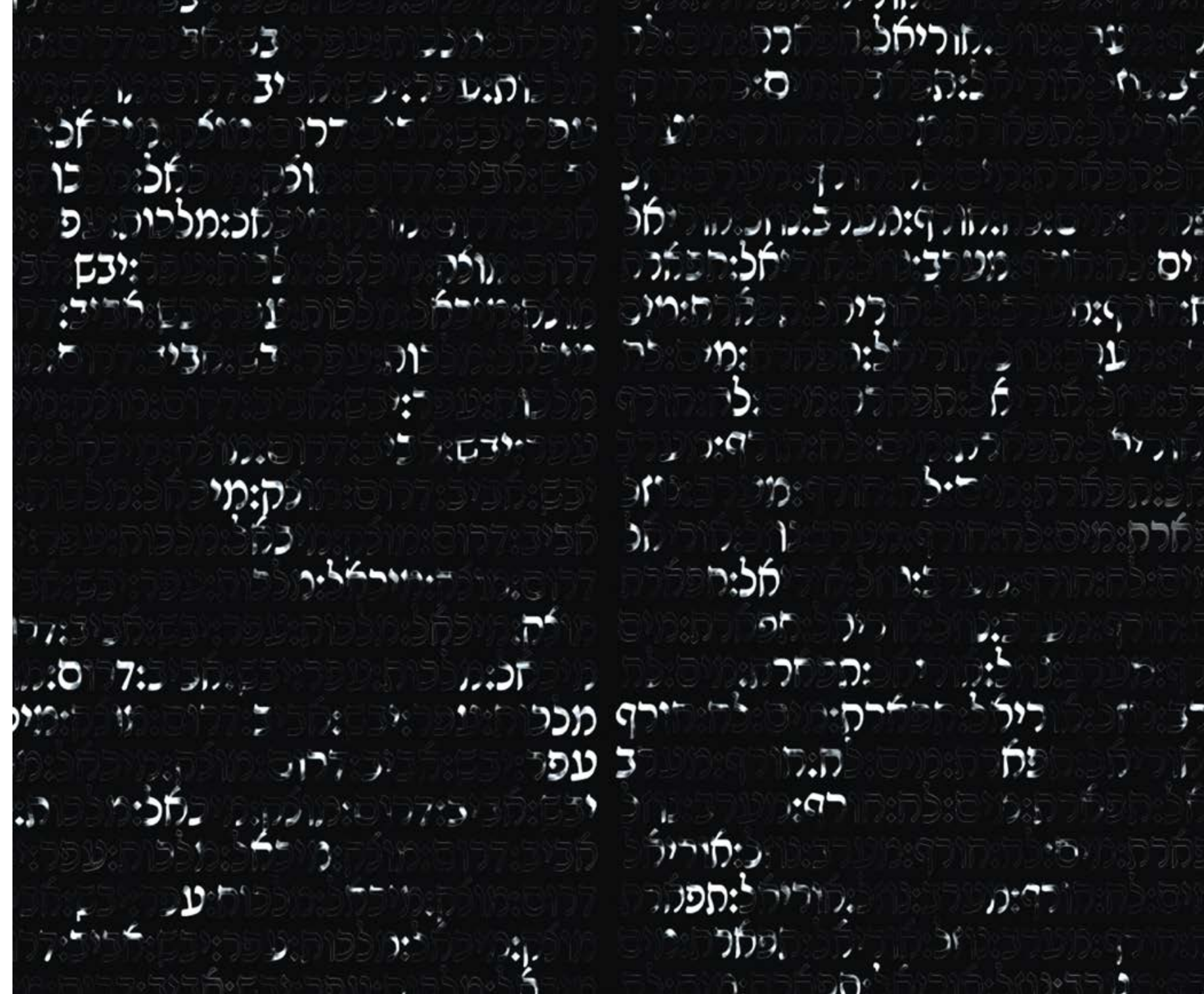
Yukawa Design Lab & 1110 design
Kohei Yukawa & Hiroto Kawaguchi

Newtown House. Newtown is a new area constructed in the suburbs to counter overcrowding of the city in Japan from 1955. Uniform housing was supplied in large quantities, and many people migrated there. But now the population is getting smaller and the *mass supply* era is ending. When the functions required for newtown is changed, the house what we design is also change. We should design the future of Newtown house.

The clients wanted a house that they can enjoy good scenery overlooking the sky and row of cherry trees as well as good communicating with people around there. The surrounding area was already completed, and our site was a vacant lot for neighboring, and the first day we visited there, children were playing and neighbors were talking. So, as a person who was late here, we thought of giving a new valuable space for newtown.

First, we divided the spaces of the house into *Parent`s house, Everyone`s house, Housework/ Children`s house.* And we placed each space to balance privacy and open, *Parent`s house* and *Housework/ Children`s house* is moderately closed in the north and south, *Everyone`s house* is extremely opened in the center. We design a house that residents feel as *living in the landscape.* The series of house-shape volumes, it become the series of landscapes ranging from houses to newtown, and mountain.

Everyone`s house is a continuous space both inside and outside, and has floors and steps at various levels with different meaning to each. They are not only as a space but also functions as a chair, table and storage, planning to be able to be used for each heuristically in everyday life by combining with the surrounding environment such as light, wind, sense of distance. A large space named *hall* which is the main essence of *Everyone`s house*. It's a continuous space from the playground, the study room, and living room, to accept the growth of family and newtown. The inclined ceiling by wood in each *house* is made continuation and segmentation, so that the human space and the scaled out space coexist. At the edge of the *house* the ceiling is low and it is the human space, at the center the ceiling is high and it becomes the space scaled out. With the slope of the ceiling, the human space scales out seamlessly and connects to the outside via the balcony, so that we feel the landscapes, that mountain ranges on east and newtown in west, are not cutted out and relativized but as extension of body. It is as if living in wooden window where comfort and openness coexist, and it's felt a new connection to the outside.

In Newtown House, we designed how to read on the location, how to use the space, how to feel the environment, by rearranging and reconstructing the spaces of the house, we created a new relationship for *people/ houses/ newtown/ landscapes*. And these overlap aimed to create a new rich life. We hope that such new relationship would help to realize that houses are more free for uniform newtown future in Japan.

Yunchao Xu / Atelier Apeiron

Yunchao Xu/Atelier Apeiron is an international team of creative architects and designers based in Shenzhen of China. The ancient Greek word *Apeiron* encapsulates their design philosophy, and also leads them to endless thinking, research and practice towards the origin of architecture. Opening boundaries, not restricted to definitions; Crossing disciplinary, not limited to typologies. They take each project as an adventure to some ignored wonderlands, where humanity is re-connected with nature in an immediate way. Each of their designs is derived from nature and integrated with humanity. Following the hidden laws behind phenomena, they use space as a medium to create poetic moments that reveal the original beauty of everything.

There are amazing paradoxes in a world of imagination, where an answer is a question, an ending is a beginning, space is time, and an illusion is reality. The same creator of humans also made these masterpieces in nature a long, long time ago, from which we learn the mysterious way of creation. In the chaos of our daily work, not only may architecture become everything, but also everything may be turned into architecture. Human beings are the measure of everything. We are interested in the oldest prototypes from anthropology. We also believe architecture is not only an evolution of changing environments and functions, but a primitive form compounded by various desires.

Design is often in a constant cycle of questions and answers. We never set boundaries for answers, which is one serious danger in architectural practice. Limited answers result in buildings losing their lasting vitality. Therefore, we often modify the original requirement book to redefine the core strategy and goals of the design through communication with the owner.

Architecture should be constantly defined by real-world problems and solutions, rather than static templates of history. Our approach is not limited to traditional space, but to the behavioral psychology behind geometry, which determines how space is combined around human needs. In the meantime, we are also interested in unrolling the timeline of space to provide unlimited possibilities for future imagination, so that architecture will become a participant and creator of future life.

Yunchao Xu, lead architect of Atelier Apeiron, RIBA Chartered Member, AIA Associate Member. Xu received his Master of Science in Advanced Architecture Design from Columbia University in New York City in 2007. Prior to the founding of Atelier Apeiron, he worked with OMA Rotterdam and Rafael Viñoly Architects in the design of world class landmark and award-winning projects, including Qatar Education City, Shenzhen Stock Exchange. Xu creatively proposed *Apeironology of Architecture* as his design philosophy in 2017. Through various practices in the past, it gradually became his design fountain and methodology.

Yunchao Xu/Atelier Apeiron is committed to research and design practice from urban development to rural revitalization, recent works include Hengqin Culture & Art Complex, Promotion Center of High Tech Park in Baoding, Gree Global Center, Kindergarten of Museum Forest, Jinjiang Campus of Fuzhou University, Fashion School of Xiamen Polytechnic University, Tongxin Foreign Language School, Lotus Terrace Kindergarten, Minzhi School in Shenzhen, Waterfront Library with Red Brick and White Stone, Red Brick Learning Center, Cusha Village Community Center, Small Hill Kindergarten, The Garden of Forking Paths.

ZEDAPLUS architetti & ATER Pescara
Fabrizio Chella, Erica Scalcione &
Gianni D'Addazio, Mario Giuseppe Lattanzio

Codici Urbani, the exhibition of architectural company ZEDAPLUS, is a system of ideas, strategy and design for a new model of dwelling and new form of urban social relationship, resilient and sustainable in the city of Pescara, developed together with ATER of Pescara. In front of double crisis, healthcare and climate, experimental design have been developed for urban renewal of public housing .The social, economic and environmental problems of dwelling, suddenly vulnerable and not suitable for climate change, have been confronted through innovation architectural strategy. Using architectural design as tool to react, five project of renovation and redevelopment have been developed through a new urban code that want to reflect and exalt the value of social housing. Rest on concept of relationship density, the designs will be characterized by hybrid intermediate spaces, inserted between private spaces of houses and external public space. They will be multi-use spaces, space for play, spaces where will be located services social and work opportunity between people, community rooms designed as extension of neighborhood service able to fill the social gaps generated by restriction of Covid-19 Emergency. In the *CodeM* project, the pitched roof is replaced by flat roof that became generating element for gathering spaces. Equipped with elements for play and relax, the roof give a dynamic meeting point to people of the structure and for people of every age. *CodeCC* interprets the values of care and social relationship of community. Designed as a vertical village of services, in the ground floor, it has been inserted an area appropriate to first aid and in each floor it has been designed a social room with different functions: culture, sports, relax and work merge with the private spaces. *CodeR* project adds services and gardens area, improved accessibility and create a strong social identity for the area. The facade-balcony, characterized by gardens, terraces, and boxes, to host services and common activities, create a dynamic environment, improved vertical and horizontal connections and lead to roof with a series of social rooms. The roof is seen as a sequence of spaces for community that change an unused space into an sharing spatial experience hosting different activates. The space is divided in public rooms with different functions: relax and social area, gym and spaces for outdoor games, reading room, meeting room, event room, variety of seating and tree-lined gardens. With the 234 meters of length, the roof offers an amazing point of social reference for the community in a historical disadvantage neighborhood. Between hybrid intermediate spaces has been rediscovered the sociality. In the *CodeA* e *CodeBMS* design, a new façade improve the accessibility and communication between houses and create a creative environment, generator of events capable of animating the urban space. This urban code make it stronger the link between residential architecture and community, start up places again where the people can live a life qualitatively better.

ZEDAPLUS team: Arch. Fabrizio Chella, Arch. Erica Scalcione, Arch. Francesca Basile, Gloria Miccoli, Ing. Riccardo Pizzingrilli.

ATER Pescara: Presidente Mario Giuseppe Lattanzio, Direttore Architetto Gianni D'Addazio.

Zero Carbon Future Heritage

Queen's University Belfast,
The American University in Cairo,
University of Salford, in a collaboration
funded by the British Council

Zero-carbon and carbon-negative landscapes and architecture imagined today are the future legacies of the built environment. Funded by the British Council, three institutions examine the heritage-rich contexts of Northern Ireland, Egypt, and England to explore the role of design in the production of future value.

This *Distributed Design Studio* engages architectural design thinking to re-evaluate decarbonisation strategies across scales, cultures, and climates. Design questions are explored through experimental and digitally infused co-production, together with fieldwork focused on natural and constructed forms of heritage. Presentations of design research findings at COP27 highlighted limitations of current decarbonisation strategies, and generated a shared understanding of local responses to global challenges, forming the basis of propositionally based themes that overlap

The Home + Away Catalogue of Alternative Living
Popular tourist destinations in Northern Ireland and Egypt are examined in cognate, paired forms, situating propositions on their decarbonisation: This establishes; visible (material, form, space) and invisible (networks, forces, flows) information to determine the carbon usage, water, and energy profiles of these situations.

Queen's University Belfast, Northern Ireland. Prof. Tom Jefferies, Prof. Gary Boyd, Pinar Akdag, Molly Baker, Sharley Pui Zie Chong, Aimee Grant, Dhiraj Reddy Jaddu, Rolandas

Laurinavicius, Megan Mackin, Rory McCormack, Suman Miah, Natalia Mokras, Miceal Murphy, Fearghal Rooney, Yuekai Shi, Adela Vagova, Louise Weston, Lois Chan Mei Xing

Reviving-Reusing-Futuring
Historic locations continue to afford their dwellers economic, social, and cultural activities that shape living heritage. Design projects examine: How can crafts be the basis of novel creative professions that pave the way to low-carbon futures? And how can tradition and culture inform new communal, sustainable, and resilient modes of heritage dwelling?

The American University in Cairo, Egypt. Dr. Sherif Goubran, Dr. Khaled Tarabieh, Amgad AbelAlim, Heba ElKammah,

Laila Hany, Lobna Anous, Moustafa Zahran, Nouran El-Khattam, Omar Assem, Saja Shatat, Tamer ElGabaly.

Scarcity, Surplus and Heritage Production
Energy surplus and scarcity is explored as a driver for landscape and architecture to re-consider society's relationship between space and carbon. Place-based data-mapping and cross-thematic analysis informs design responses to local policy landscapes and global representation of international decarbonisation commitments to propose net zero carbon future heritage landscapes.

University of Salford, England. Dr. Laura Coucill, Dr. Derek Hales, Dr. Fadi Shayya, Aiden Armstrong, Aysha Hanif, Anupriti Nainwal, Asma Fouz, Brigit Behanan, Callum Forrester, Daniela Atzori, Darcey Charnley, Darshan Paraliya, Dzhan Asanov, Eris Hysa, Hicran Gokcen, Jack Smedley, Junona

Mackevic, Lana Mahmmud, Laura Janicka, Lydiane Ait Amer Mezaine, Matthew Silvester, Max Gibson, Medahavi Shah, Naga Poripireddy, Noor Alsaffar, Precious Adedeyo, Rasheed Sabitu, Saptarshi Sarkar.

Reviving-Reusing-Futuring
The American University in Cairo, 2023

Scarcity, Surplus and Heritage Production
University of Salford, 2023

Home and Away
Queen's University Belfast, 2022

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Palazzo Bembo

3DM Architecture

ISSA adverb now *issa, adverb.*
At the present time or moment: *Why are you living now?*
At the present time, not in the past or future.

Once a prehistoric island in the middle of the Mediterranean, Malta has, throughout the time, served as a connection between the African and European continents and the Eastern and the Western cultures, becoming a melting pot of cultures. It is evident that presently, we are experiencing an architectural crisis within the contemporary built environment that surround us, driven by a desire for an aspirational future. Ever since prehistoric times; prominent civilisations left their architectural legacies on the island proudly, utilising the best knowledge of the time whilst soulfully portraying their identity through the passage of time as a mirror image of the civilisation's values. but what about now, ISSA?

The influence of European, Arabic and British cultures has resulted in a cacophony of architectural languages and technology that for centuries responded to both the context and its time.

In recent times, the technological revolution and social media has opened the country on an international level like never before. As a result, we find ourselves living a contemporary era where architecture has become a piece of mass production corrupted by the replication of the effortlessly accessible content resulting in lack of identity. Quality and craftmanship have been left aside in search for faster and more profitable formulas.

The constant overwhelming imagery and information through social media, made it is easy for society to replicate the concepts they represent, often creating a sense of alienation and resulting in a state of architectural entropy. In search for adaptation to the available content, Maltese architecture finds itself in an identity vacuum. In a commitment to contemporary global languages and strategies, the local prehistoric architecture can be seen as the purest example to rethink where throughout the passage of time it has been replaced by thoughtless, desensitized and out of context designs. When this situation becomes the norm, society forgets its original values and adopts a false sense of nostalgia. In this contemporary scenario going back to the roots is crucial.

When a society is portraying architectural entropy and disorder, it shall rethink its identity and go back to its roots' principles, orders and materiality.

"Architecture is the very mirror of life" Pei says, "you only have to cast your eyes on buildings to feel the presence of the past, the spirit of a place; they are a reflection on society."

ISSA is a void that encourages the user to be lost in the now. It is a connection between the self and the moment. An aura of mystery translated into matter, defined by a timeline of materials from the ground rising up, representing the past, and the now. The space provokes an emotional reaction; a sensitive awareness for the user to reconnect with their existence.

Anáhuac University Mexico City
School of Architecture

Notions, Elements, Assemblies and Tectonics.
a Synthesis of a Redefinition of Architectural Structural Configurations and Their Graphic Representation.

Architecture has been a ubiquitous symbol of timelessness, adapting to the shifting social and cultural landscape through a series of transformations and advancements. The systematic standardization of grids, the verticality of columns, the grandeur and stability of vaults, and the triumph over gravity that they embody, are all steadfast components of architecture. Through the evaluation of these building elements, it has become evident that they are crucial to every architectural style.

Throughout history, human beings have progressed through the manifestation of their emotions and thoughts; in architecture, the best way to transform them is by drawing, using a wide range of techniques and tools. The genesis of an architectural design begins within the cognitive realm of the designer, as Batista Alberti postulates, where the plan of an object must be meticulously represented before its physical realization. The act of drawing serves not only as a means of expression but also as a powerful means of communication. During the twentieth century, the art of architectural drawing underwent an avant-garde transformation that enabled architects to transcend the traditional boundaries of construction and managed to conceive innovative designs that were instrumental in shaping the universal perception of architecture just as it influenced the national identity of Mexico. Even today, numerous drawings possess a substantial impact and are regarded as autonomous works of art, often surpassing the completed edifices they portray.

Within the framework of the XVIII Biennial of Architecture in the exhibition *Time Space Existence*, the School of Architecture of the Anahuac University seeks to achieve a stratified concept capable of transforming the perceptive framework of architectural expression through the integration of innovative digital technologies and the convergence of conventional graphics, formats and graphic techniques used to represent architecture. The process involves experimental techniques such vector drawings, as 3D modeling representations, and the materialization of elements that capture the essence and potential of each one of them to reinvent architectural expression in the 21st century. Drawing becomes an experimental workshop that visualizes the future through the restoration of the past that provides us with functional and non-functional elements that can be improved and innovated.

Through a transformative development process, the architectural plan is transformed into an elevation, which in turn is transformed into a perspective, thus creating a dynamic spatial perception that reflects today's world and opens the door to new possibilities for the convergence of visualization and thought. This provides a different experience when seen from afar than when seen up close, allowing for the contemplation of the details behind the discipline of architectural drawing.

Notions, Elements, Assemblies and Tectonics is an exploration of the perception of an architect in the role of architecture. Whether the architectural elements support a structure or become the very element of the function, exploring the potential of each one through various methodologies to reinterpret the classic construction elements.

Professor: MSADD. Paola Morales O. Students Text and Curatorship: Axel De la Orta, Sebastian Zamora, Marla González, Miguel Ángel Álvarez, Elian Jiménez, María Fernanda Beirute, Lorena Aguila, Gustavo López Hernández
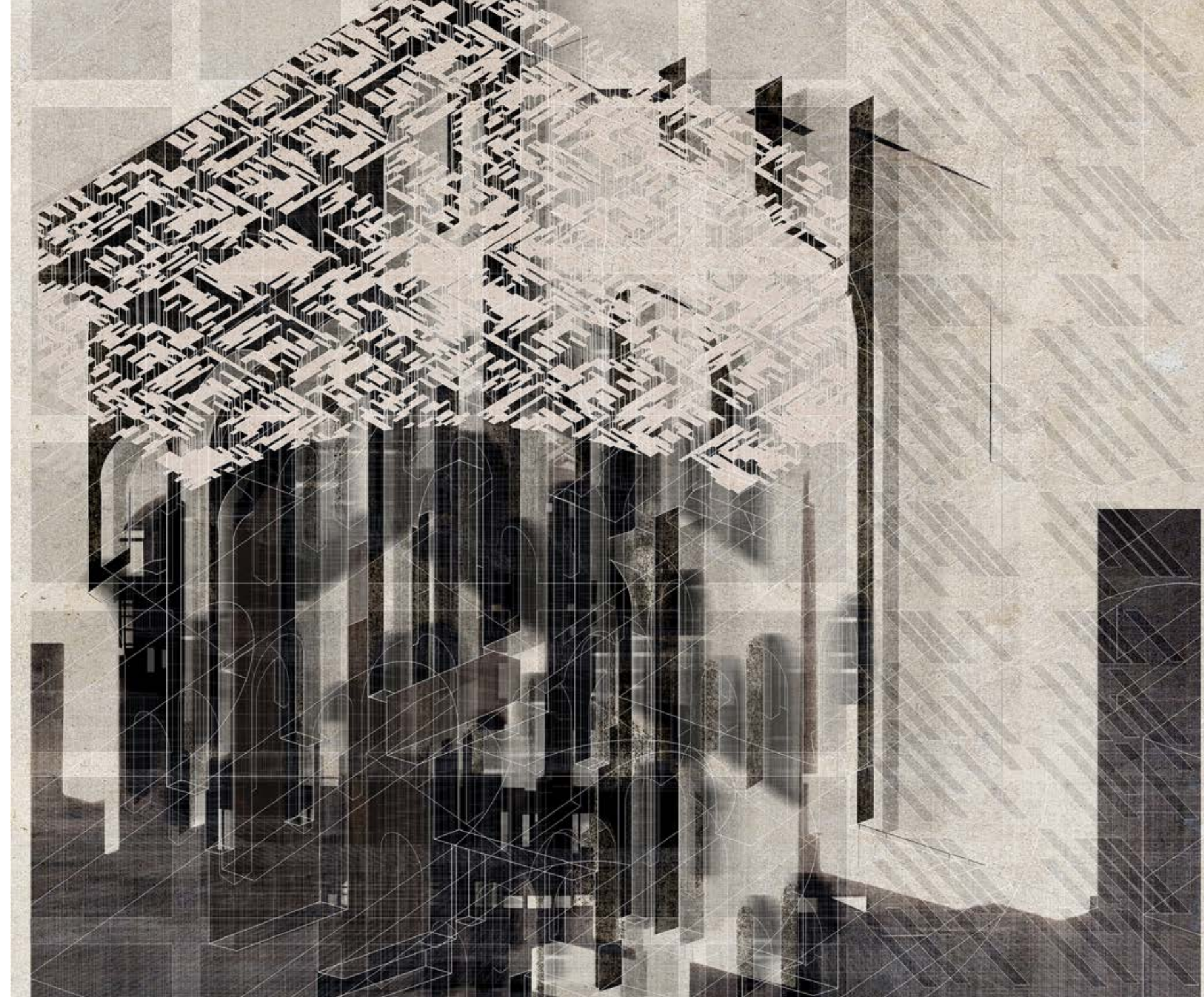
Archi-Tectonics NYC, LLC
Winka Dubbeldam & Justin Korhammer

Imagine an architect looking at the subnatures of a city: a cloud of smoke, a pool of mud, a pile of debris. He or she might see such things as emblematic of mismanagement, abandonment, or catastrophe...

From *Subnature: Architecture's Other Environments,* David Gissen

Synthetic Natures

The distinction between what is natural and what is human-made, which has informed the distinction between the *wild* and the *cultured* for centuries, has become blurred. So what is natural and what is artificial in the era of the Anthropocene? The kind of untouched, idyllic beauty we used to think was normal, is becoming increasingly rare. Currently, nearly 50% of the US population, an estimated 150 million, live in areas that don't meet federal air quality standards. However, we also find strange beauty in the Anthropocene: unexpected side effects and alternate symbiotic relationships occur. Events such as for example the 2011 Earthquake in the Fukushima Prefecture, Japan, the region where reactors at the Fukushima Daiichi Nuclear Power Plant melted down after the earthquake in 2011, were found to have caused new plant forms and /or mutations. Flowers with elaborately contorted shapes, often elongated and doubling in shape. We will be looking at newly developing mutants in nature and in buildings as they react to environmental stresses.

Our recently completed design a 116-acre Eco Park in Hangzhou, China for the 2023 Asian Games, with 7 buildings including 2 stadiums, produces such synthetic natures and *mutants*. By understanding the stadium fundamentally as a hybrid structure that also functions as a concert hall / event space for Hangzhou after the games, the building has transformed the park into a constantly evolving, active urban participant, rather than creating a static, representative object that would become a white elephant after the 2-week event. A dynamic hybrid structure was created by intersecting two double curved ellipses that create overlapping spaces opening connections within the interiors and between the interior and exterior. Strange intersections occur along the structures double curved shapes, where brass shingled surfaces intersect with steel & glass diagrid rings. These bulges not only express the mutant character of the building, but also add identity and character to this strange object, identifying it as a participatory social condenser to the neighborhood.

The masterplan for the Eco-Park as synthetic nature implements a Sponge City model by incorporating new wetlands that enhance hydrology, porous pavement, and re-introduces local vegetation, thus restoring the natural biome. The park with its combined 64,160 m² of green roofs acts as an agent of environmental change and can release 83,408 kg of O_2. As well as absorb 114,846 kg of CO per year.

In conclusion: Synthetic Natures is a term used here not only to look at the purposeful mutation of species, but how these new life forms (species) can alter buildings and material ecologies, drastically reducing the buildings' environmental impact and altogether re-defining architecture as being an instrumental part of the solution rather than being part of the problem. The focus here is not on how building can mimic nature, but on the creation of new hybrids that form symbiotic alignments between organisms and matter, where matter takes on organic qualities and therefor has a more significant agency on its environment.

Arkitekter Uten Grenser Norge
Architects Without Borders Norway

Arkitekter Uten Grenser is a Norwegian non-profit foundation. With its head office located in Oslo. AUG aim is to improve the quality of life in the areas of education, housing and health through architecture.

To gain lasting effects we wish to focus on projects with a long-term perspective helping to preserve and promote local history, culture and natural resources together with the local communities.

Our works is done by volunteers, they work together with the client and local resources like architects, builders, sociologist, etc., to better understand the actual needs of the community we are developing the project for and ensure that is the right answer to their needs.

We have projects in Laos, Kenia, Cameroon, Zimbabwe, Tanzania, Ethiopia, Sierra Leona, Argentina, and Norway. These projects range from Schools, Safe homes for women, community centres, health centres, hospitals, community participation programs, housing, urban planning, after school centre for kids and recycling centres.

BNMO Design
Negin Moayer, Owner Architect
Mania Taher, UWM SARUP PhD Candidate & Adjunct Lecturer

This contributed installation is the outcome of exploring immigrant and refugee communities agencies via their creative placemaking on one of the established mid-western neighborhoods on the north side of Chicago, despite distinct socio-cultural and climatic differences with their places of origins, lack of social political power and their unheard voices in the architectural discourse. This stretch of Devon avenue stands out as an exemplary immigrant placemaking instance, a mosaic of ethnicities, cultures, religions and identities hailed from the middle eastern, south and southeast asian countries to a previously white European descent inhabited mid-western neighborhood. The intent for this exhibit is to showcase Devon Avenue's community placemaking that occurs primarily in the urban edge- called the *Mediation Slice* – as a stage for most of the social and economical interactions. A transition zone in which the community displays its individuality, heritage and pride, negotiates its rights, while doing the business of everyday life. It also intends to portray how the neighborhood fits in the broader Chicago's already diverse community, evokes acceptance and curiosity enough to lead to interaction with the immigrant community, prerequisites to settle and thrive in a new environment.

The *Mediation Slice* is a multi tiered built model showing the transitioning depth in a group of buildings located along Devon Avenue, where major social communal activities occur. The model is fabricated out of acrylic sheets with varied levels of translucency, including ornate facade details and apertures. The facade replica is back-projected by sceneries of everyday life in Devon Avenue and interviews with the residents, displaying the neighborhood's multi-cultural identity within the existing built environment. Images of a collection of hand crafted objects gathered in a social event are also printed on acrylic sheets conveying the community's transitioning stories by their own artistic creations.

This installation showcases immigrant community's interaction with their social and built environment occurring within and superimposed on the existing Devon Avenue architecture, conveying the Devon Avenue's cultural landscape and the dynamic of its organic and inventive placemaking to the exhibit visitors.

Devon Avenue Store Front
Image: Jack Cerny, 2022

Clemson University, School of Architecture
David Franco & Ulrike Heine, coordinators

Vulnerable Places and Vulnerable Populations Architectural Experiments in Environmental Justice

The installation shows a projected collage of all the themes explored in 6 years of projects developed in the frame of the Environmental Design Lab at Clemson University's Graduate School of Architecture. The outcomes of this collaborative and interdisciplinary pedagogical experiment have yielded 15 awards for our students from the main national professional associations of architects in the United States. The teaching team turned the classroom into a place of intellectual exchange and dialogue, with a discourse that blends the domains of art, technology, humanities, and environmental sciences. Students' projects experimented with the possibilities of environmental architecture and social justice in a context constrained by the challenges of reality.

The premise of this ongoing design research is that considering architecture within the environment means imagining new kinds of architectural processes entangled with the larger processes – social, political, cultural – that shape the environment as a whole. On a planet exhausted by an unstoppable culture of overconsumption, architecture must be efficient and creative in its use of available resources. The projects in this installation experiment with design strategies that address the future, dealing with the realities of the present: existing buildings and structures, recycling materials discarded by other industries, or inventing circular economies in which the byproduct of certain processes turns into the main material of others. For instance, the materials extracted in the dredging of the bottom of the Ohio River in Louisville, Kentucky, turn into landscape masses on the riverside; or the recycling of a derelict parking garage in Bremerton, Washington, into a mat-building where new residential towers can grow.

It is already common knowledge that the effects of climate change will disproportionately impact lower-income and marginalized populations. Most of those displaced by flooding, hurricanes, or wildfires in the US will be people of color, immigrants, refugees, and, in general, those less favored within society. These projects, accordingly, explore new architectures that respond to the environmental challenge with design solutions that account for the social and political dimensions of space. Any approach to new environmental architecture must also be a movement toward social and political justice. Designing, as these projects do, to combat urban homelessness in California, or to shelter refugees on the Mexican border, is a form of empowerment that elevates these marginalized groups in front of climate change, and towards a more just future.
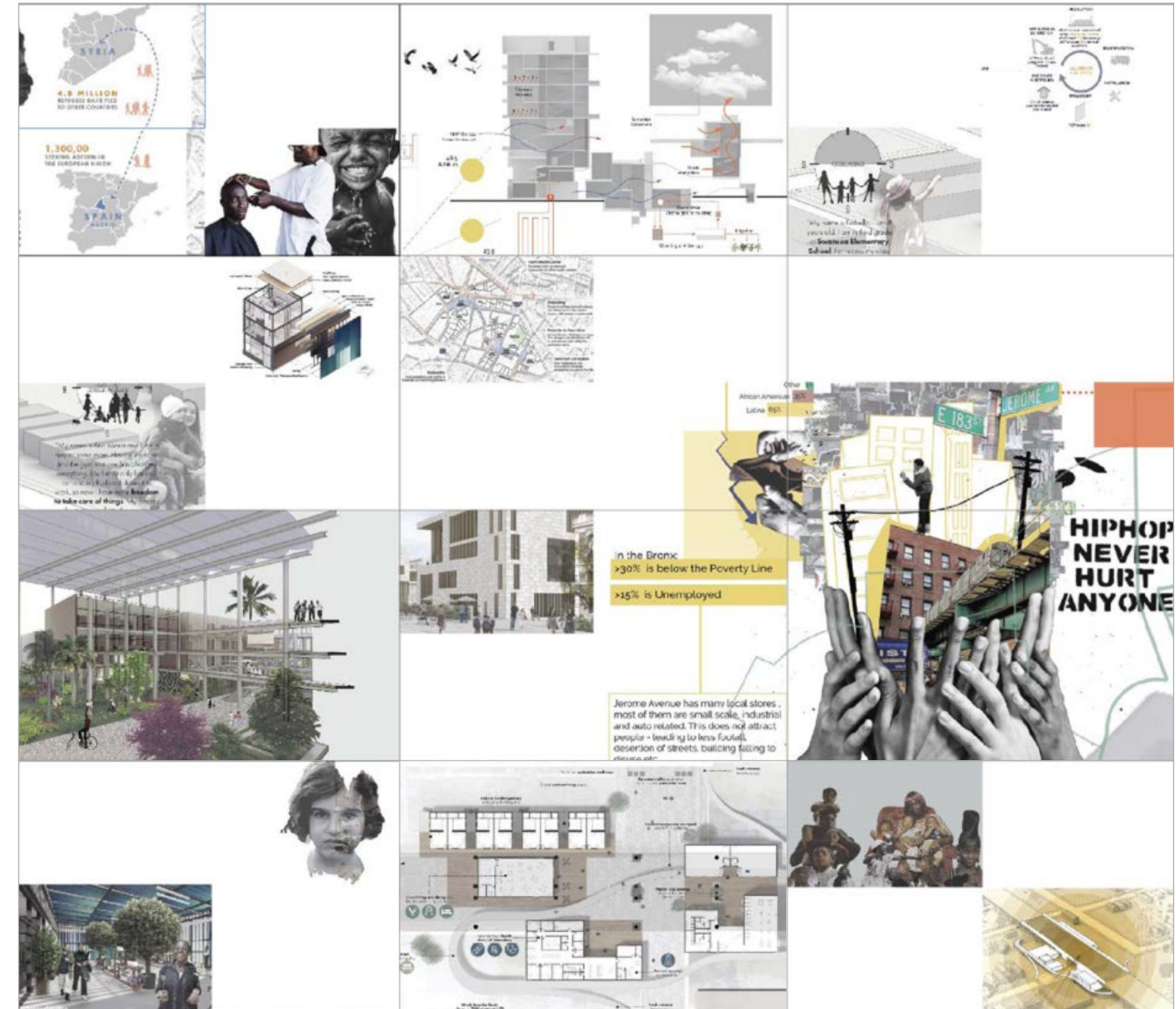
Cottet Iachetti Architects
Carlos Cottet & Victoria Iachetti

Cottet Iachetti is an architecture firm established in 2014 by Carlos Cottet and Victoria Iachetti in Buenos Aires, Argentina. The studio is dedicated to the design and development of residential, commercial, equipment and urban projects of various scales. All projects developed by the studio undergo a thorough research process, taking into consideration the site, spatial quality, materialization, and efficient resource application. Through constant updating, generation, and exchange of content and criteria within the architectural field, the work also extends to the academic sphere.

The practice focuses on collective housing in areas of low and medium density, studying the relationships between urban landscape and contemporary forms of living. Neighborhood dynamics, material and constructive relevance and notions of sustainability are analyzed in relation to uses and spatiality. Volumetric requirements and typological needs are combined to define the morphology of the buildings. Interplays of solids and voids, paths as architectural walks, community spaces that can be appropriated and generous private expansions are proposed and characterize the way of inhabiting the complexes.

DeMicoli & Associates Ltd

Walls, Sea and Sails. After the fall of Rhodes in 1522, Charles V of Spain (King of Sicily) gave the tutelage of Malta and Gozo to the Knights Hospitallers of The Order of St John, for the token sum of a falcon, hence the term *Maltese Falcon*. The Knights have adorned the city of Valletta with the most beautiful Walls, hailed today as Unesco World Heritage Site. The Sea is omnipresent and sinks deep into the nation's DNA. It brings beauty as well as danger, opportunities as well as tragedies. The wonderful tapestry of the island is woven by sea-farers from different countries. When the winds were favourable, the rowers were relieved when the ships hoisted the Sails. These primitive woven fabrics were the most important element that enabled widespread travel, trading and conquests. Design of buildings are graced by the presence of the sea. Our exhibition will embody a combination of low-lying and high-rise structures, both by the coast and inland, to express themes of time, space and existence, depicting transformation, dynamism and adaptation to the natural elements around us over the ages.

House of Four Winds. From its humble beginnings as a military barrack, House of Four Winds always been sought-after because of it's unique vantage point high above the majestic bastion walls of Valletta. The new building, its surroundings and its interior spaces merge seamlessly into one, exhibiting an overall sense of uniformity and balance. The result is a building which sits in respect of the bastions, paying homage to local tradition yet completely embracing innovation. The palette of internal finishes further bridges the traditional to the future.

Portomaso. Both *the Laguna* as well as the Tipico building, form part of the Portomaso complex. In 1986, Tumas Group had acquired Hilton hotel and extensive grounds comprising 147,000 sm. The client's brief was to incorporate the Hilton Hotel 5 star, a conference hall, apartments, parking, office building plus bars, restaurants and retail. Architect Ray DeMicoli was in charge of the architectural design. His idea of introducing the Marina at the heart of the project was a game-changer. Not only did the project gain 5 additional levels of inventory, but the south side double loaded wing of the Hilton hotel also enjoys sea views. The project commenced onsite in 1995 and the Hilton hotel opened in 2000. Over the year, there were several additions to the project.

The Laguna at Portomaso. Whilst swimming under a bridge deck of a catamaran, one wonders how come there aren't more houses built partially over swimming pools. This is the concept the designer wanted the user to experience. The site area is approximately 8,000 sm, however there were several horizontal planes of restraint. The tide, the historical entrenchment wall, sea defense wall, and the fifth elevation, the roof requiring extensive landscaping as viewed from above.

Tipico Building at Portomaso. Tipico Building was one of the most interesting and challenging projects to date. The sail-shaped frame is the architectural statement of the building. The project involved the redevelopment of a site adjacent to the iconic Portomaso Tower. The architectural massing concept was to create a soft counterpoint to the Tower, a wedge-like footprint which would terrace back as it rose. The building has won several awards and mentions. It was also published in several structural and architectural magazines.

Tipico Building, 2020
Photo by: Oskar Da Riz

3 inspirations for my architectural foundation

1. *About roof and wall*, Milan. Upon taking a stroll, I came across a number of homeless people living under the bridge, and it had me pondering why. It was damp with barely any daylight. This deliberation helped me realize that the most critical factor in Architecture is the enclosure of space with walls and a roof, and the first element that should be pursued is the roof.

2. About window, Venice. Understanding that the walls and the roof act as the most crucial elements of Architecture, I analyzed the methodology of puncturing windows to satisfy one's desire to bring in daylight and air as well as having a view outside. Regardless of the shape, the penetration occurs during the realization of the wall, which makes it a part of the wall. As a result, the Architecture loses its purity as an enclosed space due to the penetration erected as part of the wall. Upon contemplation, I had the opportunity to visit Carlos Scarpas Fondazione Querini Stampalia in Venice, where I noticed that one singular stone with distinct cut marks made me appreciate the cut marks and the stones were formed at completely different times. In order to make a cut out, it requires an object that can be cut from. The two separate gestures of creating a wall and then making a cut out for the window enables them to be in two separate time frames. This allows the wall to be imagined in its pure state, therefore leaving the remnants of the *fully enclosed* into the Architecture.

3. *Symbolism*, Milan. My first panic attack occurred during my time in Milan, back when I lacked understanding and my advice to people who were struggling with depression was that it was all mental and that they merely needed a stronger mindset. It's still unclear what the reasons were, but I believe it stemmed from the burden of being separated from my wife and two boys. This incident however, made me realize the importance of mental health and understand its correlation with the physical aspects of my body and had me reevaluate certain aspects of my life. At first, I believed *monumentally* provided an absolute value for people to lean on. Now, in addition to the absolute value that allows people to lean on, one can live on hope and solace. I now believe that Architecture should encompass symbolism as well as desire.

While my emotional roots are firmly embedded in Korea, I'm currently in the midst of discovering Architecture while studying in Italy. While it is not my intention to flatter Italy, I'm grateful for the experience and thankful to the friends that stood by me during my hard times here. Architecture is undoubtedly worth pursuing over a lifetime.

DXA studio

DXA studio collaborated with Justin Davidson of New York Magazine's Curbed to develop a proposal to save a landmarked church that had fallen into disrepair. West Park Presbyterian was built on Manhattan's Upper West Side between 1883-1890. It was inspired by the architecture of H.H. Richardson and attended by a distinguished congregation. In 1911, the New York Times deemed the Romanesque Revival church the *millionaires' gate to heaven*. Today the congregation barely numbers a dozen. They have no pastor. The church's assets were sold, staff was reduced, and operating funds were reallocated to pay for repairs. In 2022 the building was declared unfit to be occupied. The congregation has applied for a hardship exception that would allow them to raze the building and sell the property to a developer.

Heeding the lessons of landmarks lost to well-intentioned regulation that has too often proven onerous and brittle, DXA studio takes a long view of preservation as diachronic, flexible, and dedicated to preserving continuity between the past, present, and future. Tasked with finding a financially viable way to develop apartments on the site that would also fund the preservation and upkeep of the church, the studio began with a rigorous analysis of local zoning regulations. Having determined how much residential area the lot could yield, a scenario that gave a portion of the church's existing footprint to a tower tucked behind, and another that inserted apartments into the existing structure, were studied alongside a third that built directly up from the church, filling the space delimited by adjacent structures to the north and east.

This third proposal takes the existing structure as the point of departure. It seeks to be generous and deferential to the church and its context without sacrificing quality or relinquishing its own identity. Glowing translucent stone and semi-transparent glass rise out of the red sandstone church below, in facets that spring from the geometry of the existing facade. Floor-to-floor heights align with the neighboring architecture, drawing it into the composition. The church remains intact, ceding only its roof to the tower above. This new hybrid flickers through the cycles of daily life and the weekly rhythm of the parish as the church and residential tower alternate between dormant and active states, transforming from opaque masses to glowing volumes.

Surrendering a landmark to economically necessitated neglect signals a failure of imagination. Saving it requires a vision of the future rich with pluralities — a future in which our heritage of buildings survives in measure with the flexibility and care they are given to grow into their mature form and find renewed relevance in the context of cities that embrace evolution. Mutually defined and symbiotic, the church and the tower stand in, both literally and poetically, for the sacred and profane. But in a pluralistic inversion, the sacred status of Landmark must be breached if the church is to survive, and the profane concerns of capital and daily routines conjoined as essential partners, without which the sacred would cease to exist.

Elisa Kim
Atlas of the Sea

Digital Twin / Seeing Sea. Greek pre-socratic philosopher Empedocles proposed that we are able to see objects because light streams out of our eyes and touches them. While modern physiology runs counter to this idea, his insight speaks to the materiality of seeing, an idea that bears a direct relationship to the knowledge we might accrue about a subject like the oceans – *dark spaces* just beyond our terrestrial and visual reach. From Marcel Duchamp's Precision Optics, Haus-Rucker-Co's Mind Expander, Brion Gysin's Dreamachine, and Marina Warner's The Eye of the Imagination, investigations and discoveries on the tectonics of vision have established ways of connecting the eye and the mind psychologically and physiologically. And through Jacques Lusseyran's *inner sight*, Juhani Pallasmaa's The Eyes of the Skin, *synesthesia*, and Giuliana Bruno's concepts on *haptic space* and *site-seeing,* theories and arguments related to the role of vision have stimulated critical examinations and radical innovations in science, art, technology, culture, design, and so on.

Our historical obsession with vision seems only to increase with evolving imaging techniques and surveillance systems, and like all aspects of our physical environment today, the world's oceans are suffused with activities and outcomes of visual computation and simulation. So much so, that the European Commission's Digital Twin of the Ocean provides a data-filled, near-live surveilled depiction of the sea in an effort to empower climate change decision makers with interactive tools to make predictions with unfettered access to data. *Digital Twin / Seeing Sea* questions and celebrates both the possible presence of technological facts, and their material affect. The project reimagines cartographic and architectural drawing conventions to re-create water-centric mappings of the sea. The world's oceans are critical sites for climate change research and discourse, and *Digital Twin / Seeing Sea* sets the stage for expanded collective planetary futures by rendering material the technological devices which lend vision to some of the darkest and most unknowable spaces of our world.

Historically, the world's oceans were considered a space of mobility, and seas were depicted with graphic devices that abstracted and emphasized its material differences from land. Trade routes and waterborne figures suggested the activities and realities that took place at sea. Later maps of the sea were embedded with data on the tides, water depth, ecology, and meteorological conditions like temperature, barometric pressure, wind speed, and wind direction. While knowledge of the oceans has greatly expanded, the seas continue to be rendered with existing cartographic conventions.

Digital Twin / Seeing Sea repurposes architectural conventions to make water-centric sectional drawings of the Atlantic, Indian, and Pacific Oceans to understand the limits of our knowledge of the sea. This act of seeing the seas elicits associated senses, comprehension, and affect; here, seeing does not refer to the typical concept of visualization, but rather to the play of myth, imagination, and objectivity involved in envisaging environments that cannot be directly experienced – and probing issues of knowledge production, perception, and the nature of the scientific gaze.
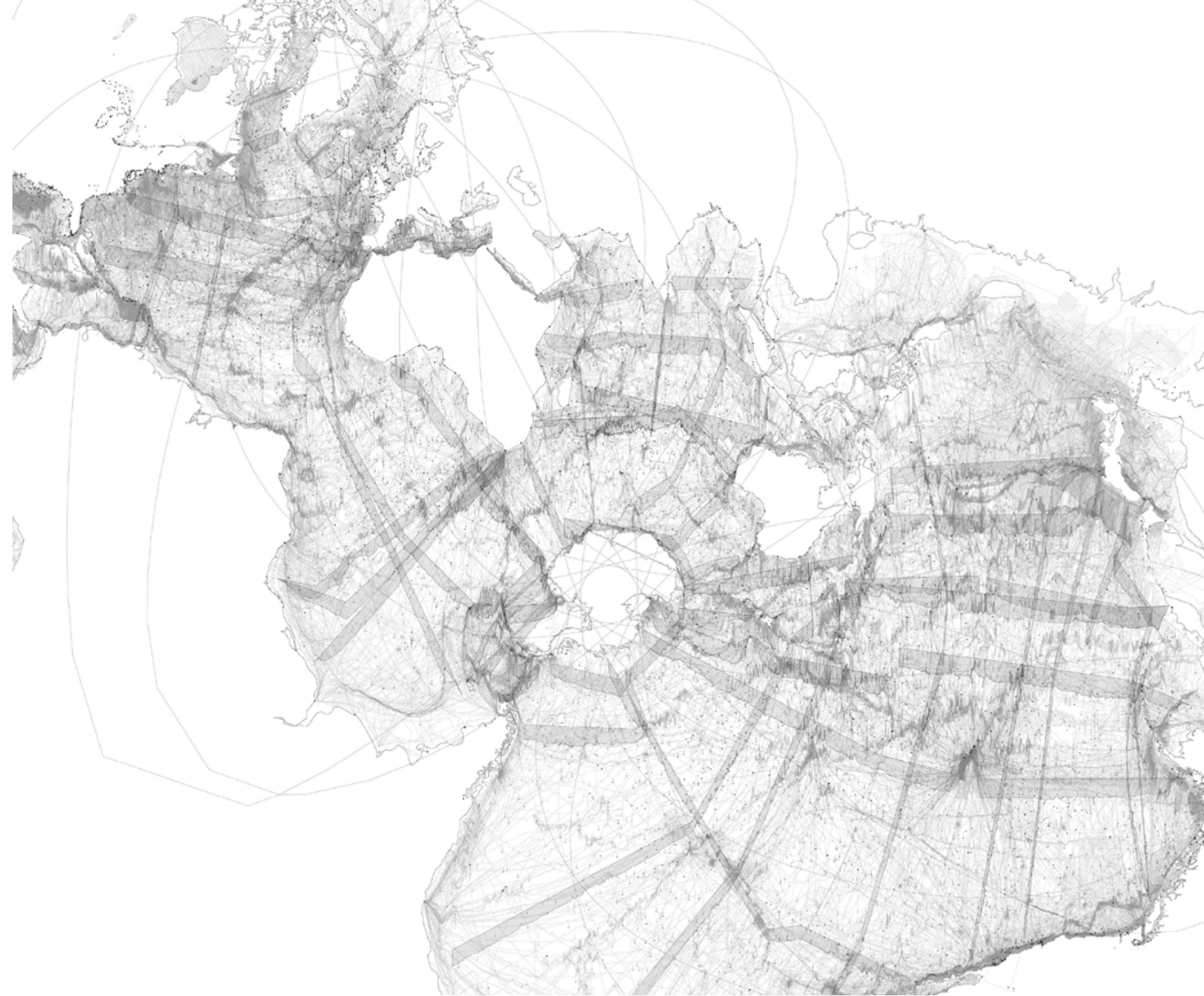
Endrestudio
Paul Endres SE FAIA
& David Campbell PE RA

Paper Architecture is often a pejorative to label utopian visions of the built environment that were never intended to be realized. However, the exploration of paper itself as a building material can point the way towards a more effective and responsible approach to Architecture: one that mines existing processes and waste streams for untapped potentials rather than relies on the rising extraction costs of virgin materials.

The trees from which paper is derived are incredibly strong and flexible through the arrangement and alignment of lignin fibers. In its reconstituted form, paper can develop this latent strength through alignment in effective proportions confining stress. In the same way that a paper airplane achieves dramatically increased stiffness through folding, Vortex Kaleidus deploys processes of cutting, folding, and panelization to create a dramatic Architecture of Paper. Gaudi examined nature and found *no straight lines or edges*. We examine natural forms and find nothing superfluous, but a kaleidoscope of variegated uses within a fundamental character of minimalism.

Gravity flows through physical surfaces in rivers of equipotential streamlines that run from a formal edge to its supports. Through continuous linkages of digital form-finding and assembly logic each fold and facet reveal its function and describes its method. The intensity of the color and density of the flowlines reveal the direction, shape, and proportion of the gravitational vortices within a given system. The printable and paintable character of paper allows the installation to explicitly show the internal flow of forces through the geometry and the use of layered color. The translucence of paper additionally projects this mapping into the gallery space, blending the structural tracery in an immersive field of color.

Endrestudio is a uniquely integrated architecture + structures research and design practice with a 30-year history of design excellence on more than a thousand projects across the United States and around the world. Our studio has had a profound and lasting impact on the communities we partner with. Our efforts in creating iconic and engaging places throughout the world have been widely published online and in print and recognized with over 50 national and regional awards.

Endrestudio was created from a desire to merge the disciplines of structural engineering and architecture which far too often find themselves at cross-purposes in contemporary practice. Our design mission is to leverage each discipline's perspective to enhance the other, creating a singular cohesion in expression and function that is rarely seen. We fuse the aesthetic and social purpose of architecture with the technical prowess of structural engineering into a seamless field that embraces the practicality of the optimal and the beauty of the surprising. We develop our solutions through a synthesis of technique, where each detail, assembly, and cohesive whole is greater than the sum of its parts.

The principal of lightness, or doing more with less, guides both our designs and our relationship with the communities that we partner with. Our goal is to enhance neighborhoods, parks, and cities and to create connections between people, places, and the natural world around us.

Endrestudio, 2023
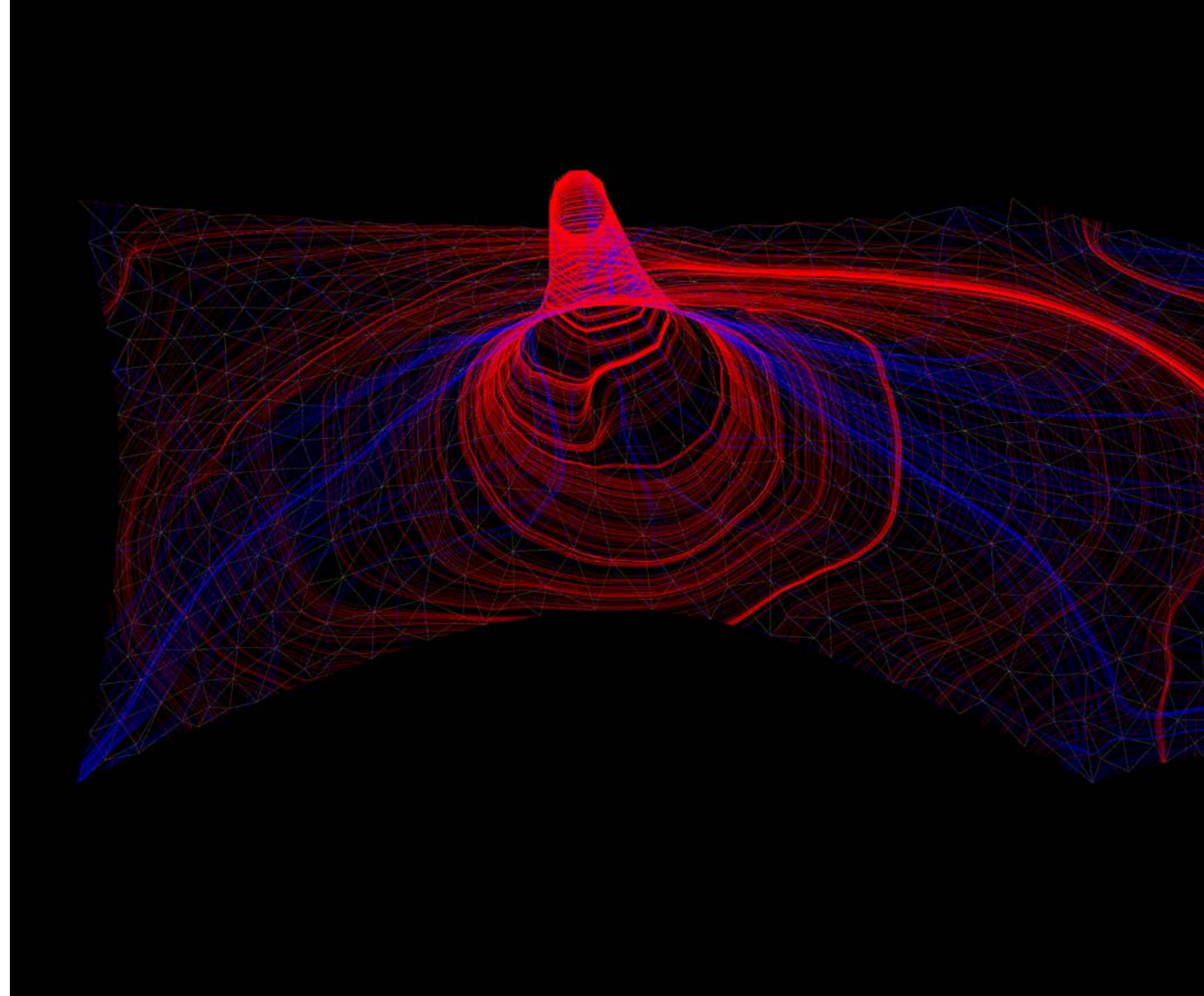
Estudio Ramos

Based in Buenos Aires and New York, Estudio Ramos has developed a distinctive style that relies on a well defined vision of modernism. Through 40 years of experience the firm has developed its work with a deep respect for architecture's principles. In their long trajectory of residential, commercial buildings and developments they seek to understand and interpret each project's context, pursuing its ideal scale and sustainability. Their goal is to encourage reflection through a simple, pure and honest architectural language.

In Spanish, the word oficio *conveys the notion of craft and experience. We always admired the skills of good* bricklayers, doctors, shoemakers or artists. A craft involves a deep understanding of your occupation plus a genuine love and respect for what you do.

From *Honest Modernism,* Juan Ignacio Ramos & Ignacio Ramos.

The discovery of the right scale for each design has been a constant matter in the work of the studio. As in life, the pursuit of the ideal measure of things is fundamental. The firm is very conscious of the impact of their work on nature and believe that the best approach to sustainability is through the development of the essential.

Ferrari Architectes
Jean-Baptiste Ferrari

Ferrari Architects would like to present four projects that it considers emblematic and which represent numerous qualities related to ecological and sustainable development.

Project 1: The *Maison de l'Environnement* is constructed between a heterogeneous built context and a green landscape. Two openings carved into its volume serve as an interface between public and private spaces. The entrance opens onto a full-height courtyard and the cafeteria's outdoor terrace offers splendid views over the Lausanne landscape. The typology is focused around two atriums. They invite the existing trees and plants to become part of the heart of the project. Their rammed earth brick walls, combined with the lightness of the wooden construction, help regulate the heat.

Project 2: Built between 1884 and 1886 in the heart of Lausanne, the two customs buildings have been renamed *Les Jumeaux*. They have undergone various changes. At the end of this new transformation, they will host a multicultural programme. The volumes have been hollowed out and the Hennebique structure of the buildings has been highlighted. The facades are coated in a terracotta colour, reminiscent of the original colours. A glass roof, built between the two buildings, offers an urban and unique atmosphere. Two large openings have been made on the south facade in order to create a connection with the large Place du Flon, in doing so, completely changing the main façade's orientation and writing a new chapter in their history.

Project 3: The proposed extension of the *La Vaudoise* building, located perpendicular to the slope, traces a smooth transition between the Parc de la Vaudoise, on the west side, and the forest area on the east side. Compact in size, its transparent envelope as well as the development of a transverse passage, contributes to the strong visual and physical permeability of the structure. The new building, enlarged at both ends, opens onto the great landscape and recognises the presence the two works of Jean Tschumi: the *Aula des Cèdres* and the *Siège de la Vaudoise*. On the west side, the curved facade accompanies the journey of users. It turns back to the forest to the east, offering visual glimpses of the lake.

Project 4: The *Parc du Simplon* project, consisting of two office buildings, eight residential and retail buildings, as well as two underground car parks, is situated on a 30,000 m² plot historically occupied by warehouses for more than a century. The new district is located at the level of the railway tracks, on a plateau overlooking the Rue du Simplon. The central aisle is the main soft mobility link and connects the new urban fabric to Renens station. The variation in volume opens perspectives, increases unobstructed views and frees up space between the buildings. Offices, particularly those of the Swiss Railway Company CFF, are exploring new, more flexible and personal working codes.

The *Jumeaux*
Photo: Duccio Malagamba, 2022

Atrium, *House of environment*
Photo: Duccio Malagamba, 2022

Pléiades & Dufour at Parc du Simplon
Photo: Duccio Malagamba, 2021

Florida Atlantic University School of Architecture & Brooks + Scarpa

Jeffrey Erwin Huber, FAIA, ASLA, PLA, NCARB, LEED ap

In an inevitable future of sea level rise and climate change, a new framework for urban design and architecture that embeds ecosystem and urban services, as well as adjusts to an increasingly salty landscape will emerge as the only viable adaptation solution in South Florida. The porous limestone substrate poses particular challenges unlike any other coastal location, where levees, walls, and pumps are not long-term solutions as water seeps up through the ground. South Florida's unique geomorphology means it floods in five ways; 1, storm surge; 2, ground water table fluctuation (wet/dry seasons); 3, extreme rainfall events; 4, urban runoff, and 5, tidal flooding which represents insights as to increased flooding due to sea level rise. These dynamic and permanent flood states will radically alter the built environment in Florida more than anything else over the next 100 years.

Referred to as *the Venice of America,* Fort Lauderdale is unique in that it boasts 330 miles of shoreline edge, a population of over 170,000 that swells to over a half million during season, and industries and culture that are tied to the interface between water and land. Where the two systems meet – the city and water – lies an incredible opportunity for creative development reconciling the demands of each. Salty Urbanism provides a methodology and approach for the emerging crisis of climate change related issues and takes its cues from reconciliation ecology, a branch of ecology which studies and builds robust networks of biodiversity, known simply as green infrastructure, within human-dominated ecosystems and ties these practices to urban development. These new ecologies provide critical ecosystem services related to flood management, food supply,

temperature regulation and geochemical balance (pH regulation). Salty Urbanism also infers that new development patterns (architecture and urban design) will emerge which adapt as well as adjust to future sea level rise. These new adaptive built and natural ecologies will force residents to rethink and retool their relationship with water – one where designing for exceedance-or rather flooding-is the norm. A new mantra for South Florida lifestyles will occur: how do we live with, over, and on water? Herein lies the design and planning challenge for cities in coastal areas of South Florida: to develop built environments that simultaneously solve for ecologically-based infrastructure while facilitating the city's functioning and future growth within salty and saturated landscapes.

This work envisions and quantifies the experiential and ecological outcomes of alternative ways forward for one particular neighborhood, but serves as a model for others. Three scenarios defend, strategic retreat, and land adjustment form a framework for evaluation and acceptance amongst various stakeholders. In this way each scenario operates in an evolutionary framework through a set of retrofit types at the scale of individual lots (what a property owner can do), public right-of-way (what a municipality or governmental entity can do), and neighborhood (what coordinated public/private collaborations can do) that are incremental, contextual, and successional. Tactics and techniques outlined in the strategies are implemented step-wise and successively across the various fronts in the urbanized area. In this way the project establishes meaningful conversations among stakeholders to envision and realize a prosperous way forward for the region.

Frantagroup Architects
Maciej Franta & team

The main inspiration when designing the building was the idea of the pleasure of use. Our reflection on the observation of the current housing market has come down to the conclusion that instead of having positive associations, the purchase or possession of a flat has become practically a *necessary evil* resulting from the necessity to invest funds in real estate. So we came up with the idea that we should go back to the basics of what an apartment is, i.e. the pleasures of living and its use. To this end, our thoughts and searches began with what we really enjoy and we decided that it was the context related to spending free time or holidays. After recognizing this direction of thinking, associations with various places appeared, such as an alpine squeaky terrace when we go skiing in the ground with a view of the mountains, a recreational house with a terrace among greenery, a hammock stretched between trees

or a light park pavilion in a park cafe where we spend on a summer day moment looking at the beautiful green. We tried to crystallize all these emotions and feelings in the design solutions at Villa Reden – hence the spacious terraces, wood, view, close distance to the trees or raising the ground floor to 2 floors to improve the view, equipping the building with wide windows overlooking the surroundings and a patio cutout so that every room of the building (including staircases, entrance halls, kitchens and bathrooms) has access to daylight.

The shape of the building resulted from the plot boundaries and the existing beautiful tree stand. The compositional arrangement of the borders and trees already had the beauty in it and optimally filled the plot, therefore we considered it a good direction to adapt the spatial form to this shape.

Villa Reden
Photo: Tomasz Zakrzewski, 2021

f square studio
Dunsol Ko

f square studio's vision for architecture is to find an ideal method to connect people and nature. How can we design and build something not juxtaposed on a natural site like a nest of birds? A total immersion into the wilderness.

The proposal is a conceptual model/pavilion that spontaneously connects people and nature through curvilinear, consisting of straight lines perceived as curved lines. Architecture is not always about four walls and ceilings that define a space. Instead, the principle is to blur the architectural components to simplify the space. The primary building material is Glulam, stronger than steel, light-weighted, natural, and recyclable for sustainability.

The structure is all about simplicity. The typical size of Glulam is rhythmically constructed and rotated to create a curve-linear space where the stairs become the floor, and the floor becomes the ceiling and the wall. Each segment of Glulam has been precision-made by CNC cut for the interlocking joint system to dismantle and reassemble so it can be replicated or mirrored on any site.

In fact, simplicity lies in complexity. The key is to simplify its complexity mentally and visually to obtain images people can commit to memory. In metaphor, without the repetition of practically identical leaves, ordered according to the structure of the branches. People would not be able to remember the tree as an entity. Combining the parts into more extensive and simpler units without deciphering the detail is required to achieve total immersion. Therefore, it blends with nature.
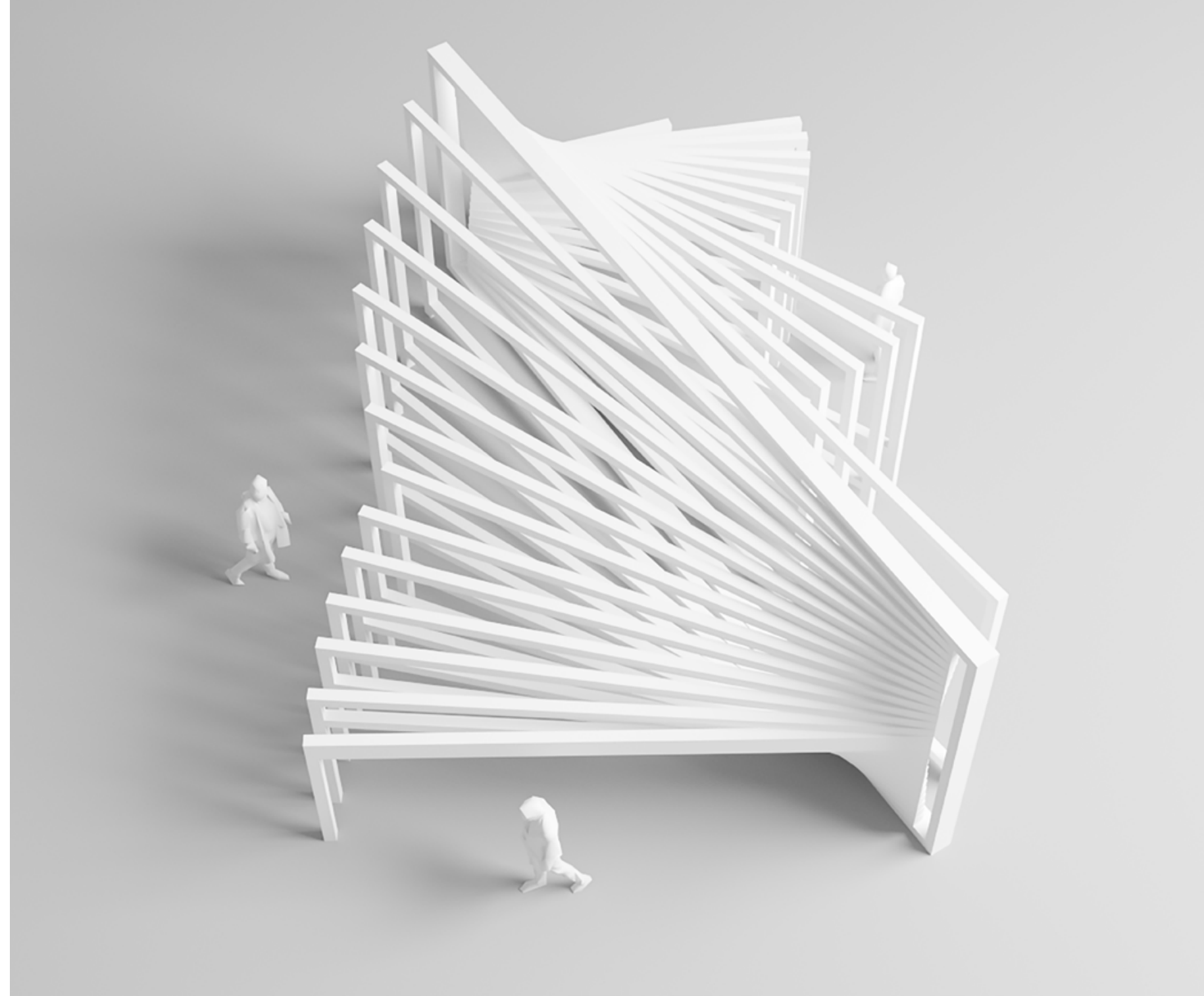
Generative AI-SynBio Blue-Green-Structures 2023-2100

FIU-Carbon-Positive Design (CPD)
Studio Thomas Spiegelhalter
Structural and Environmental Technologies
Lab (SET-Lab), FIU-Miami, USA

The Generative AI-SynBio Blue-Green-Structures of the *FIU-Carbon-Positive Design Studio* led by Prof. Thomas Spiegelhalter is a four years global research project in different locations and climate zones. The project involves collecting and analysing geospatial climatic data using data-driven Generative AI-ML, Generative Adversarial Networks (GAN), and Cellular Automata (CA) design methods to create carbon-positive and renewable energy-powered cities, buildings, and infrastructure scenarios. In addition, the design studio is exploring innovative solutions for circular metabolism and self-sufficient green-blue adaptive infrastructures that can adapt to climate change's impacts, such as heat waves, sea-level rise, storm surge, and resource scarcity in the low-lying Miami island areas.

The research project is currently showcasing some of its findings in the Venice ECC exhibition. This exhibition aims to provide practical and visionary solutions to coastal cities' challenges with rising sea levels, hurricanes and storm surges. The project also utilises generative AI-assisted evolutionary algorithms with synthetic biology coding and design modelling workflows for envisioning carbon-positive blue-green adaptive and reconfigurable infrastructures, buildings, and cities.

One of the exhibition's highlights is a 3D hybrid printed bridge designed by Studio Spiegelhalter (Miami-Berlin) using AI-ML-assisted generative design and evolutionary algorithms. The bridge, made of a mixture of 3D WAAM-printed stainless steel and low-carbon steel components, was optimised using digital twin geometry modelling and topology optimisation methods. In addition, the bridge underwent finite element structural analysis and material comparisons to reduce weight and will be assembled in Duisburg, Germany, in August 2023.

The exhibition highlights the application of a wide range of interdisciplinary fields, including Generative Building Information Modeling, Computational Fluid Dynamics, Environmental Deep Learning Reinforcement Learning, Crowd Simulation, Virtual Reality, and Machine Learning. Imagine a world where our built environment not only reduces carbon emissions but actively works to reverse the damaging effects of climate change. This cutting-edge project is leading the charge, harnessing the power of Generative AI design with cellular automata growth tools and synthetic biology coding to create a more sustainable, carbon-positive, and resilient future. Join us in this pioneering effort towards a brighter tomorrow!

Image No. 1: CRUNCH IDDS App for Green-Blue-Infrastructure Scenarios from 2018 to 2100 in Miami Beach and the City of South Miami.

Images No. 2, 3: Design/built 50 m Generative 3D-printed WAAM steel bridge by Thomas Spiegelhalter (Miami-Berlin) in Duisburg, Germany, 2023.

Gerber Architekten
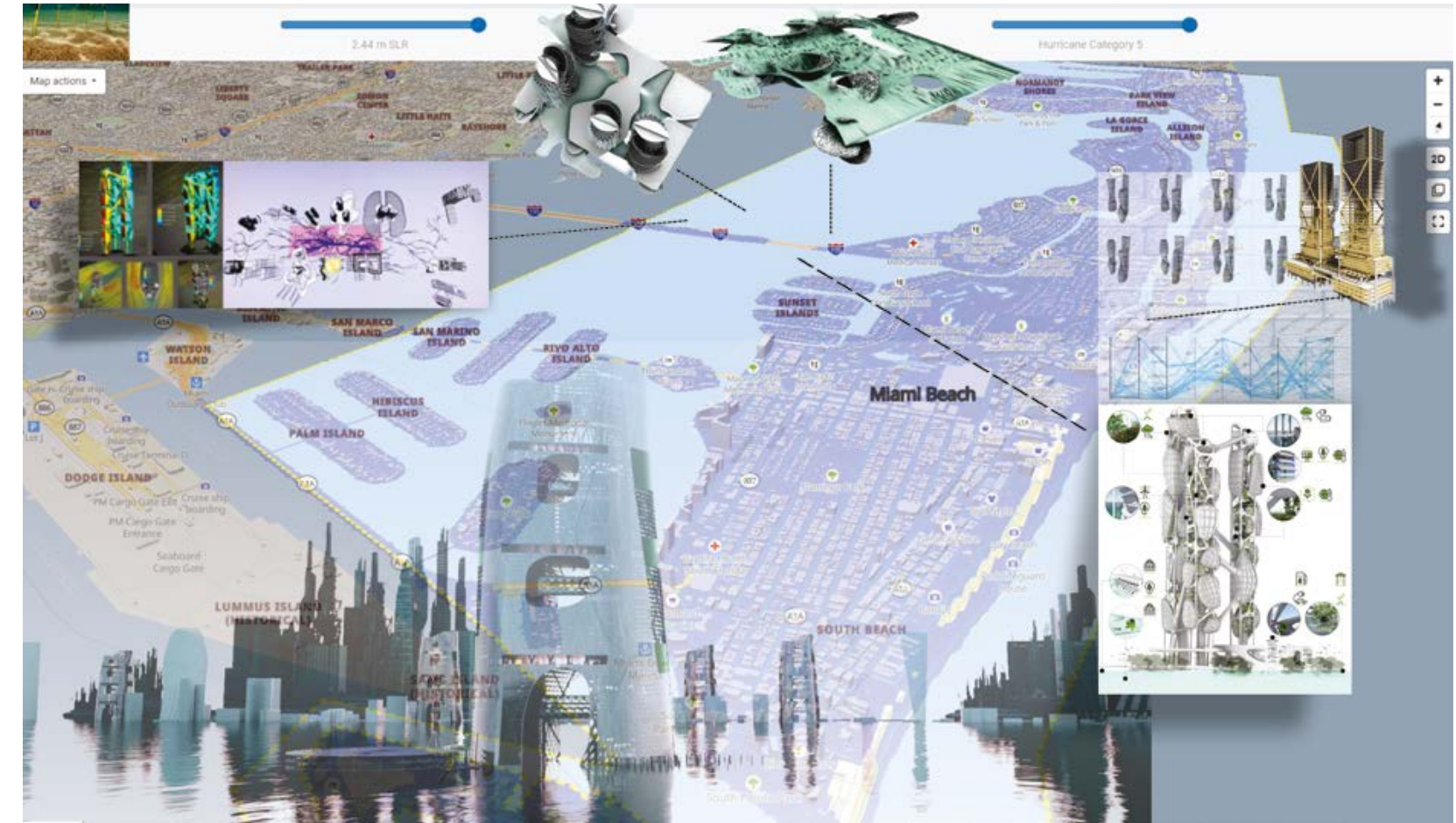
A variety of interrelationships have always existed between architecture and outdoor space. It is a question of sensitivity to grasp this interplay between building and landscape and to be able to develop and realise it as an overall concept.

There are different approaches to dealing with the outdoor space in the context of architecture, such as the conceptual further thinking or further building of the existing landscape, the wholeness of architecture and urban structure, the topographical-landscape situation as a justification for the architectural setting, the building as a mediator between the built urban structure and the landscape, the creation of new landscape as an added value of the built environment. Flowing transition zones can become landscape staircases, for example.

Everything is derived from natural conditions and is a conceptual interface between the topographical situation and the architectural concept.

There is no boundary between inside and outside when architecture is not seen as a rigid structure, but open and flowing as a whole with landscape and urban space. With the given site, the building enters into dialogue with its immediate surroundings. Through its structure, form and size, it blends into the existing topography and creates exciting visual relationships between inside and outside.

This close connection between open space and the built environment creates a kind of symbiosis that complements each other to form an interwoven unity, a landscape image

Highway Administration Building Stolpe
Gerber Architekten, 2022

Harvard University Graduate School of Design
Apparatus for Hacking Perception
MDes Mediums Domain Instructor: Allen Sayegh
Tutor: Katarina Richter Lunn
Teaching Assistant: Selin Dursun

Apparatus for Hacking Perception invites visitors to embark on a transformative journey through the labyrinthine landscapes of perception. In this immersive exploration, the research delves into the profound intricacies that underlie our comprehension of complex phenomena, with a specific focus on the pressing issue of climate change. Through the intricate interplay of artistic expression, academic inquiry, and intellectual discourse, this research unveils the extraordinary influence of cognitive biases in shaping public perception of this critical global concern. Drawing upon a carefully curated selection of case studies by

MDes Mediums Domain, the work unfurls narratives that transcend traditional boundaries, engaging visitors in a multi-sensory odyssey.

1. *Towards an Enactive Medium for Perception and Action*, Kenny Kim, Vishal V & Joseph Wu, 2023
2. *Human-Building Signals*, Nuknik Lam, 2023
3. *DIET/IO*, Muqing Bai, 2023
4. *Illusory Iceberg*, Nix Liu Xin, 2023
5. *Manufacture Carbon*, Zoe Chen & Xinyi Yang, 2023
6. *Climate-GPT*, Qing Feng, 2023
7. *Place-Time*, Amelia Gan, 2023
8. *Soft Logic*, Sarah Nicita, 2023
9. *Towards Sustainable Design*, Hyejun Youn, 2023
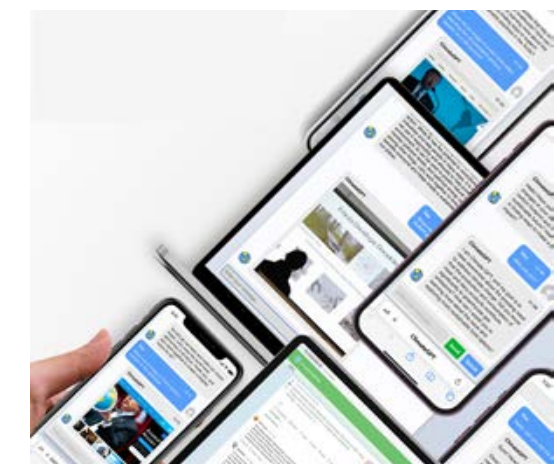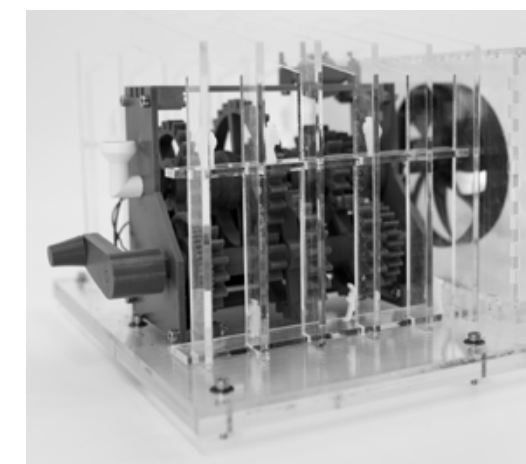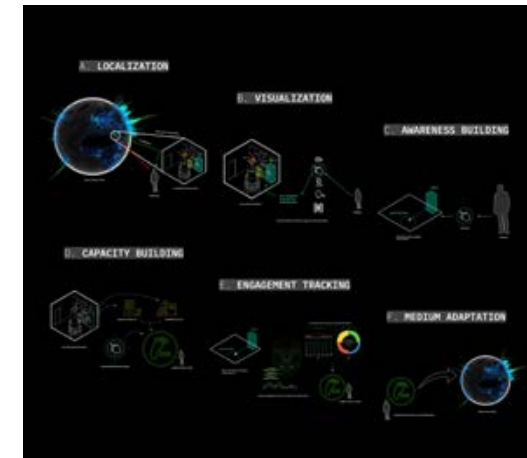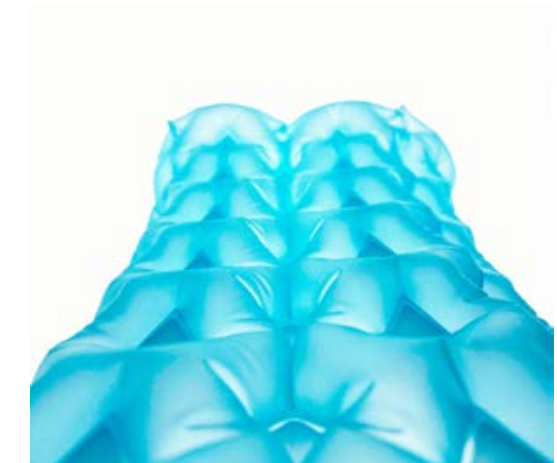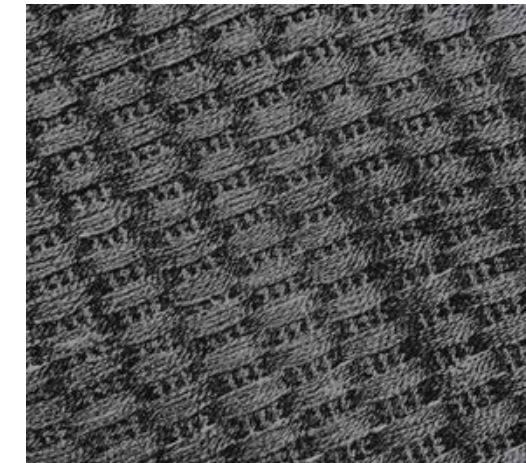
Millions of people experience cities as spaces of alienation. Consider the streets of São Paulo where luxury apartments sit side by side with dense favellas. Try to take the New York City subway system as a person with mobility challenges and end up going nowhere – fewer than a quarter of its stations are equipped with elevators.

The built environment is riddled with physical, psychological, and socioeconomic barriers, especially for people who are not part of the design process or are not considered by it. Whether through social isolation, lack of access to spaces, or economic disparity, the status quo for many is discomfort and frustration.

Who Is This For is a provocation to a more inclusive agenda in architecture. It seeks to evoke a visceral response that echoes the alienation felt every day as people live out their lives in cities all over the world. In its design, scale, and placement, it offers a code to decipher, a riddle to solve.

Turn a corner inside the Palazzo Bembo and encounter, close-up and side-on, a fictional city: a scaled composite of 11 global city grids stitched together to form one urban commons. Each grid has been chosen for its specific manifestation of inequalities in the urban realm – or, in a handful of cases, as a moment of organic hope.

Move closer, and the vibrant colour splashed into the work reveals stories of lived experiences. These perspectives offer snapshots of life in a city that is not welcoming.

Step back. Turn to face the work head-on, and the final piece of this composite city falls into place, the colour coalescing into a superimposed prompt: *Who Is This For*.

It's a question that all designers ask in their work – but often answer far too narrowly or without much thought. It's a question we need to ask better, to seek more and different perspectives, to consider and embrace more people, to become more inclusive, by design.

Huazhong University of Science and Technology, School of Architecture and Urban Planning & Wuhan Natural Resources Conservation and Utilization Center

The exhibition venue is the wetland village surrounding Anshan Wetland Park in Jiangxia District, Wuhan City, Hubei Province, China. Canonical texts say, *Yunmeng Lake in Jing plain, where rhinoceroses, sika deer, and elk abound, and the fish, turtles, and toads in the Yangtze River and Han River make it the wealthiest place.* The Yunmeng Lake has become a land of a thousand lakes scattered throughout the Jianghan Plain due to climate changes. For thousands of years, the wetland system accommodates countless creatures and deeply influenced people's production and lifestyle. The wetland have been remodeled into the most suitable form for fish farming and cultivation. Rural people have been born and raised here for generations, working from sunrise to sunset. They depend on each other and form prosperous settlements that harmoniously develop with nature.

The harmonious coexistence of nature and civilization depends on the reasonable use of land and water resources, and the protection of wetland ecological system is also the key to sustainable development. There are many beautiful villages hidden in this wetland area, which still retain the traditional Jingchu-style with red, yellow, and black color scheme of the countryside, and the interwoven production methods of fishing and farming. It also preserves ancient kiln sites covering an area of 1.7 million square meters. However, wetland ecosystems are complex and fragile. When there is a conflict between ecological system protection and production development, how can we avoid the interference of ecology system due to human activities? Can wetland protection also promote the revitalization and development

of modern rural areas? Perhaps this exhibition can give people some clues. Through the integrated concept and method of *planning-design-governance*, we hope to find the balance between nature and life, flexibly use natural and social resources from a structural and holistic perspective, and concretely implement planning concepts in environmental protection and human development needs while maximizing the protection of the natural landscape. The aim is to promote the sustainable development of agriculture, tourism, and other industries.

In November 2022, the 14th Conference of the Parties to the Ramsar Convention held in Wuhan, where stories of harmonious coexistence between humans and nature vividly unfold. People rely on wetland for survival and it is an important barrier to stabilize the ecological system in the context of increasingly severe climate issues. Wetlands and rural areas are not a contradiction between protection and development, but wetland is the original harbor connecting human and the natural world. The exhibition is not merely a display of the design of wetland villages, but a demonstration that the *existence* of human civilization can continue over time and extend in space, exploring the road of harmonious coexistence between humans and nature with the visitors.

Last but not least, we appreciate the support of Wuhan Natural Resources Conservation and Utilization Center, and our lovely designers and their hard work.

Settlement Aerial View of winter wetland village
Team work, 2023

Illinois School of Architecture ISoA

150 Years of Architectural Education at Illinois. Founded in 1867, four years before the Great Chicago Fire, Illinois was the first public school of architecture in the United States. In 1873, as Daniel Burnham opened an office with John W. Root and Louis Sullivan moved to Chicago, Illinois was the first American university to graduate an architect, Nathan Ricker. Six years later, Maria Louisa Page, became the first woman to graduate with an architecture degree in North America, and in 1904, while Frank Lloyd Wright was designing the Unity Temple in Oak Park, Walter T. Baily became the first African American to graduate in architecture.

The list of distinguished architects who have explored our discipline within its studios and classrooms includes Beverly Greene (first African American woman to be licensed in the US), Lebbeus Woods, Cesar Pelli, William Pereira, Max Abramovitz, Jeanne Gang, Gong Dong, Ralph Johnson, and this year's AIA Gold Medal recipient Carol Ross Barney.

The Illinois School of Architecture ISoA is committed to expanding its local presence and international footprint, building bridges and collaborations between our program and a world that is more connected than ever. Our curriculum extends a series of disciplinary reflections into a calibrated search for a unifying paradigm between theory and practice, and between memory and desire.

This concept resembles an archipelago – as Emeritus Professor Dick Williams titled his book – that proposes a shared cartography to frame a particular moment in the history of architectural pedagogy. The work is purposely varied in scale and scope, addressing the diversity found along our academic centers in Urbana-Champaign, Barcelona, and Chicago.

The exhibition at the Venetian Palazzo Bembo includes a video that documents the *analog studio*, a collaboration with *Plym Distinguished Visiting Professor* Mark Raymond between Illinois and the *Graduate School of Architecture* (gsa) in Johannesburg. Another interesting collaboration is documented through a joint studio between Illinois and UWM, sponsored and coordinated by Kahler Slater and Trina Sandschafer. The work presents innovative adaptive reuse strategies for activating Walter Gropius' *Singer Pavilion* in Chicago's historic Bronzeville neighborhood.

The ISoA strongly believes in architectural competitions as a platform to challenge the normative boundaries of the discipline. This year, *Spectacular* organized a competition of innovative ideas where four graduate studios at the ISoA were recognized by a stellar jury composed of Thom Mayne, Jeanne Gang and Sou Fujimoto. Finally, we are displaying the results of Marcos Barinas' *Africa Studio: Mangue Negotiations.* The graduate option studio focused on challenging traditional methodologies embracing science and big data towards more creative collaborative processes. The experiment on CONCEPTBOARD map making inverted the technicality of drawing, challenging our abilities as designers to map, model, and represent the environment within the aesthetics of remote collaboration.

Francisco J. Rodríguez-Suárez, Director
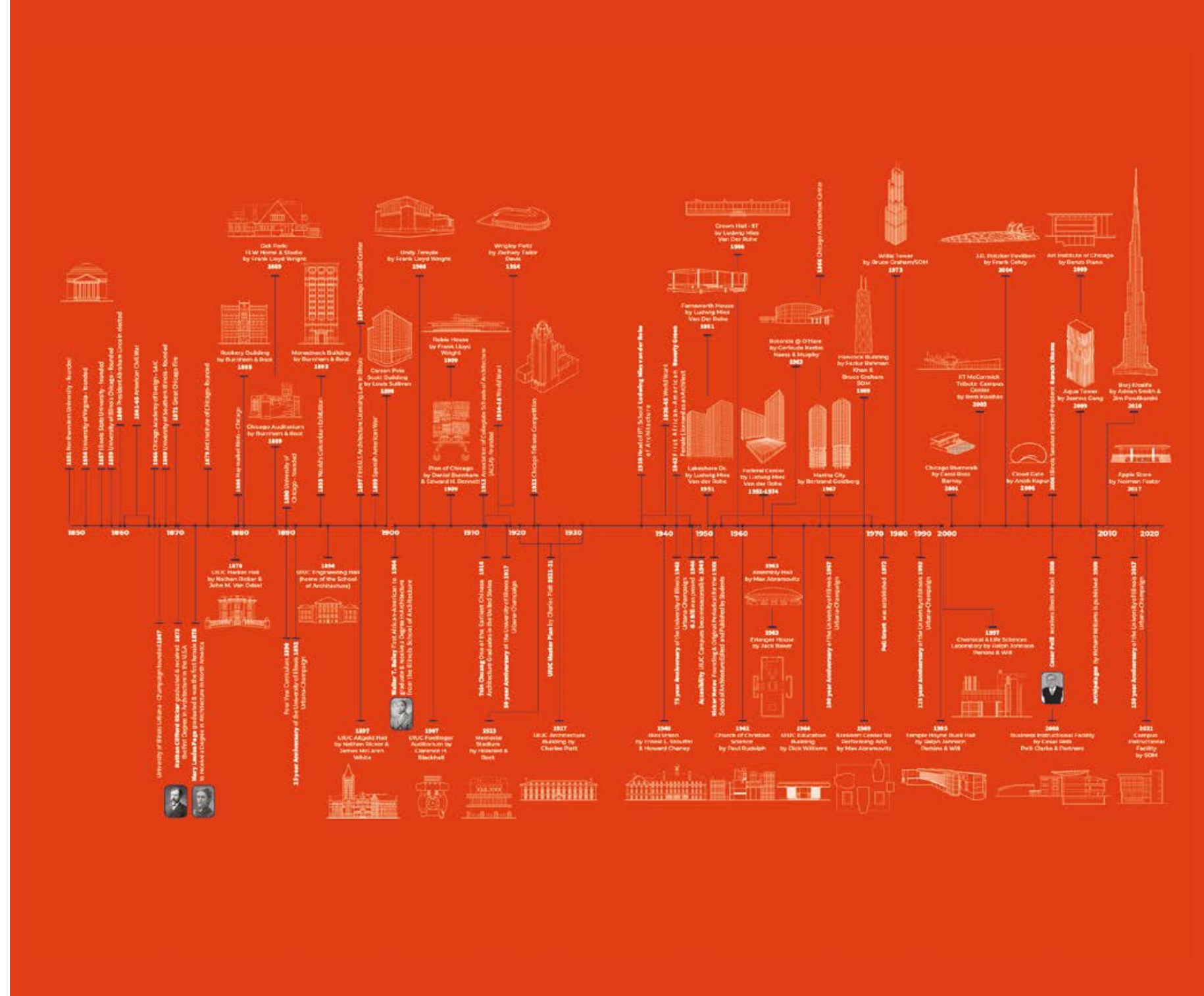
Isla Urbana

Rain-sensitive Communities. The series portrays a comparative view of rainwater harvesting programs in rural indigenous communities in Mexico carried out by Isla Urbana. The work proposes new ways in which technologies have served to reimagine water access in the country's most remote areas. In these contexts, in some cases, the ancient practice of harvesting rain to meet human needs had been lost; in others, it never existed. Here, rainwater not only brings the promise of water to thirsty communities but becomes infused with often mystical and profound indigenous sensibilities, wisdom, and ecological knowledge. Over time, rainwater harvesting has the potential not only to provide relief from scarcity but may help build new generations of autonomous and adaptive water infrastructures that point to a future drastically different from what is known.

Founded in 2009 in Mexico City, Isla Urbana has worked towards finding new ways of harvesting rain for humans in urban and rural Mexico. The project was born from the fact that water access in Mexico has been historically problematic and is often getting worse. The project works to marry the development of intuitive and functional rainwater harvesting technology and sensitive, empathetic ways of implementing rainwater supply programs in the country and seed proposals throughout Latin America. The goal is to use a commonly wasted resource to shift the water management paradigm towards a more active, conscientious, and equitable relationship with water.

Isla Urbana has installed over 33,000 rainwater harvesting systems in rural and urban settings which each provide a family with 40-100% of their domestic water needs, and collectively harvest over 1,320 million liters annually.

In recent years, Isla Urbana has contributed greatly to the development of public policy programs dedicated to implementing rainwater harvesting at mass scale, providing resilience, and proposing alternate possible futures for water stressed cities and communities.

Each system has proven that rainwater can not only provide resilience for water-stressed cities, but also, make alternative futures possible in rural environments.

System follow-up, Cerro Alto
Photo: Astrid Dominguez

Calabash Cistern
Photo: C. I. Reyes Amador

Jacobien de Korte

The photographic series *Elevation*. The word elevation has two intrinsic meanings. One pragmatically refers to a spatial rise, for example of a building or a of a structure, whereas the other figuratively underlies the spiritual elevation, an inner improvement, a rising towards something higher. The *Elevation* series encompasses both these definitions, and moves this reflection from the subjects of the photos to Venice, creating a dialogue with the peculiar vulnerability of the city. In this instance, the word elevation can be linked to the threat of the raising of the water, and subsequent gradual sinking of the city itself. It can also add another point of view, that of the improvements that can be made by Venice, for Venice, to withstand its fate and to enhance the way the city should be experienced, not only as a tourist attraction, but as a place lived in the everyday. Precisely for this symbolic connection with an emblematic keyword linked to this unique island and its lagoon, this project is of great importance. Elevation has a powerful link not only with architecture and its implications, but also with the main concepts of this exhibition: *Time, Space Existence*.

Elevation 1
Jacobien de Korte, 2021

Jasper Architects

In the work of Jasper Architects, design is understood through careful study of context. This installation turns the lens away from architectural intervention and onto what surrounds it. A cylindrical sandbox invites visitors to make a new landscape, to sculpt forms that are scanned in real time by an augmented reality sensor.

In collaboration with the artist Aquiles Jarrín, Jasper Architects designed an algorithm that translates the three-dimensional scanned data into a projection, adding a layer of information directly onto the ephemeral sculptures. Stills of the mutating live projection are saved periodically, freezing these moments in a sequence. This dynamic artwork proposes a reading of

context that directly involves us as agents of transformation, alluding to the role of architecture in injecting a new reality into an existing environment.

At the same time, in images of projects by Jasper Architects, fields, rivers, forests, and city streets come into full view, as important as the designs themselves. Moving into the context and then beyond it, architecture is considered in terms of history, the environment, and society – crucial dimensions of time, space, and existence.

Three projects are presented through the views around them: a river in the Peruvian Amazon, the pampa of Argentina, and the streets of Berlin.

JOHO Architecture

Technologically advanced methods of design and analogous craftsmanship—this is what defines the South Korean architectural condition. It is within the interplay between these two dichotomous realities in which a unique space for architecture resides. The cost to build is cheap but the budget is often low. Innovation can occur through digital tools, and yet, the method in which ambitious design is actualized is humble. The way Koreans construct is rather crude—mainstream Korean tectonics are unaffected by the surge of technological advancements in tools of construction in the west. How could that be? Counterintuitively, South Korea is a leading figure in the information revolution and a large proprietor of the tech industry. So why are the methods in which South Korea builds left relatively fixed? It is because it works. It rather works really well. How South Koreans work is efficient, fast, and technical. Projects of similar sizes are constructed in less than half the time compared to the west. As a result, the job of the modern-day South Korean architect is to become the bridge between digital innovation and analogous solutions. Between these restrictions lay the mode for authentic contemporary South Korean design. This is the peculiar realm of tectonics that JOHO Architects occupy. It is the history, culture, and mentality of the Korean people that have shaped the current South Korean condition and the unique challenges of the Korean Architectural industry. An appropriate response to this, that of which can dance between and beyond the plethora of hurdles with noble intent, is what defines South Korean architecture.

Interpreting architecture as a part of the humanities, JOHO Architecture bases their philosophy on creating new identity and discourse in contemporary cities. Architectural materials are set as a unit of 'geo-metry' and designs are developed through the grouping, addition and subtraction of these units. This 'material_metry' refers to the reinterpretation of a material's meaning within the context of a site. Many of JOHO's works begin with the single unit of geometry that is then developed multi-dimensionally to achieve complexity often as an allusion to nature—a fundamental theme within the Korean peninsula. The unit of geometry, as well as the unit of materiality, can be singular or can be fractalized and parametrically arrayed; parametric composition creates a dynamic perceptual experience in which the material_metry can be registered at the unitary or holistic degree. This is the sum of JOHO's work thus far. The future of South Korean design is exciting and unpredictable. A deep rooted culture of tradition that is accelerating at unforeseen speed. JOHO is an active member of the South Korean architectural landscape that not only propels the advancement of the peninsula's built environment but also works to preserve the ethos of South Korean culture project by project.

Kara Lyons

Kara Lyons' work reflects on and celebrates haptic engagement with the world as a core part of our shared interpretation of experience. She uses clay and somatic processes such as pressing, squeezing and stamping. These actions create amorphic forms that articulate life force, change and sensuality; aspects of the human condition that recognise flux as a central part of our understanding. Kara plays with the idea of the liminal – that ambiguous space that divides opposite states: underfoot/underground, internal/external, earthly/spiritual, intellectual and physical.

Kara's interactions with clay echo movements and memory generated within architectural courses. They record vestiges of human, elemental and natural processes. Her methods of making speak about the unrelenting passage of time, as well as the awe and temporality of nature.

The sculpture made for *Time Space Existence*, is entitled *Ginnel* – a term which describes a particular kind of narrow passageway between terraced houses, uniquely found in the post-industrial northern conurbations of England. Kara first encountered this kind of architecture and its local dialect term, *Ginnel*, when she first relocated from her home in London. As an architectural feature, it is one of the identifying characteristics of the northern industrial heritage. Alley ways are transitory routes that serve as private spaces, shared secrets and treasured environments of human scale; they represent a connection between territories for a local community. The sculpture captures moments of passage, traces of human presence and an archaeology of time.
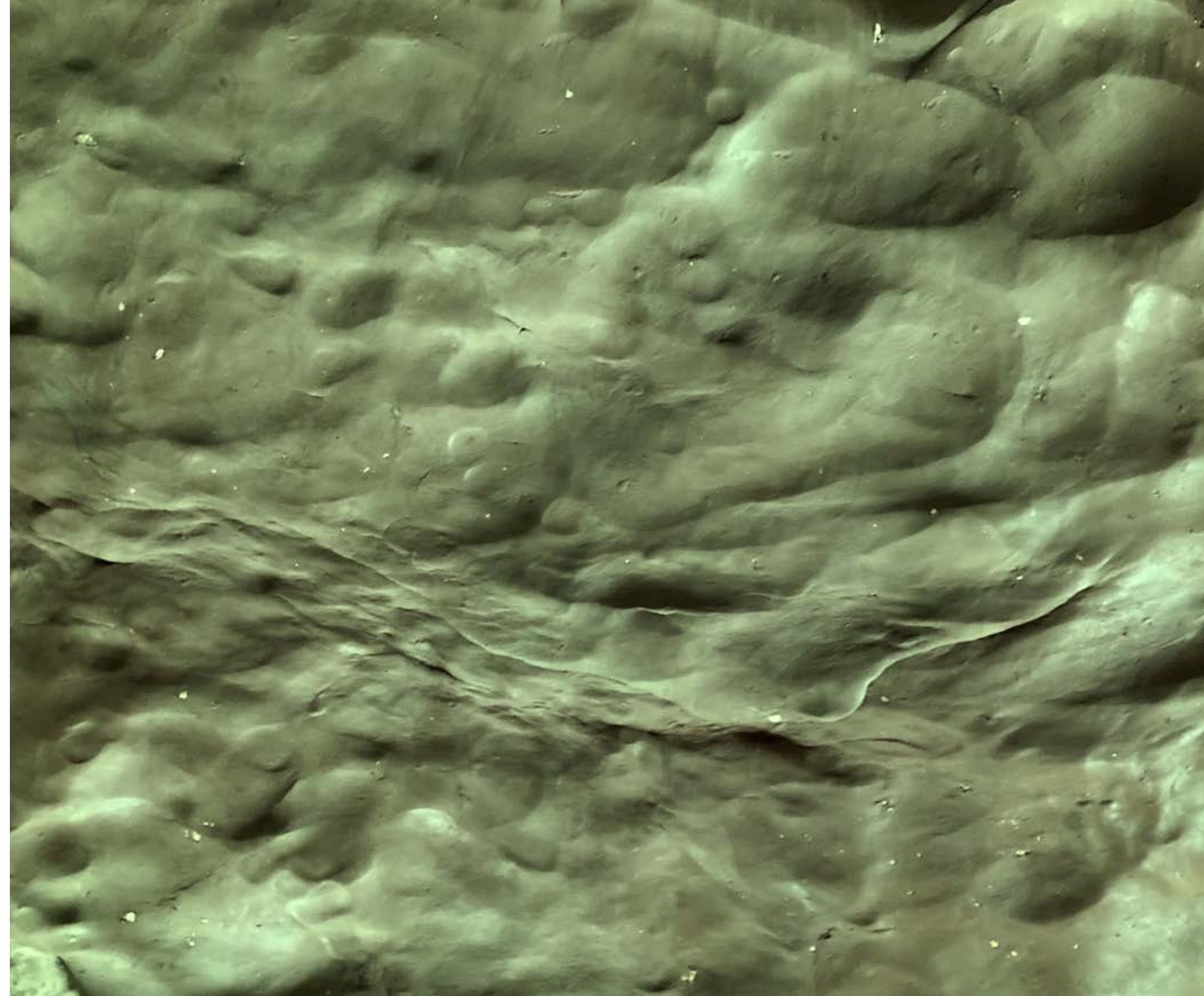
Parallels are drawn between the narrow Venetian passageways, the waterways and bridges that are encapsulated by built structures; spaces that chorale bodies of people and direct their collective movement.

Ginnel is a durational performative sculpture. Once completed in situ, the sculpture will continue to change, crack and fracture, intentionally evolving over the duration of the exhibition.

The area for the sculpture is a defined space, edged by architecture and points of cultural demarcation. Underfoot, the substance of the earth, the soil and substrates that support the urban framework are living, fluid and malleable. The clay reflects the organic energy that resides in natural materials. It succumbs to human interaction and, through its resistance, participates in the formation of a rhythm in relief. The artist's footprints are intended to be repetitious and regimented, a beaten path given structure by the care of the maker that echoes the geometric pattern of the ginnel's cobbles as well as the rhythmic pattern of rippling water in the venetian canals. Kara is interested in the synergy between these and the ebb and flow of human movement; syncopated and collective; pressure, power, and disruption.

Ginnel is one of Kara's *Walkway* sculptures; an ongoing series of temporary floor based, relief installations made specifically for the environment in which they are placed. She uses herself as a representation of feminine physicality to explore the idea of space which also references internalised spaces, including the psyche. It is an alchemical approach that endeavours to wrest meaning from the chaos of raw material with an emphasis on the visceral rather than the static. Her work references natural phenomena that articulate the physicality of change; the movements and currents of water, lava flow, ripples in sand, molten wax or falling drapery.

Ginnel maquette
Kara Lyons, 2023

368   *Hiddenplace detail*
Kara Lyons

Fracture   369
Kara Lyons

Kengo Kuma & Associates

Kengo Kuma & Associates aims to blend architecture and nature, uncovering the rich and fertile terrain between the building and the place in which it stands. The practice works toward this intention by using varied natural materials, locally available – often wood, stone, paper, metals, but also ceramics, plastics, reclaimed resources, glass, and others – to coax warmth and tenderness from the character of the design. The practice attaches great importance to the unity between the land, the building, and human experience, with the harmony between these resonating throughout a project's details, interior, furniture, and accessories. The body of work builds on the notion that close relationships between *place* and the work can create architecture that its inhabitants love and feel comfort. As a result, the ideas of time, space, and existence are synonyms.

Text by Balázs Bognár, Partner at Kengo Kuma & Associates, Tokyo.

Time, New Interior for Casa Batlló Stairs and Atrium
Kengo Kuma Associates, 2015

Space, China Academy of Art's Folk Art Museum
Kengo Kuma Associates, 2015

Keunwook Kim
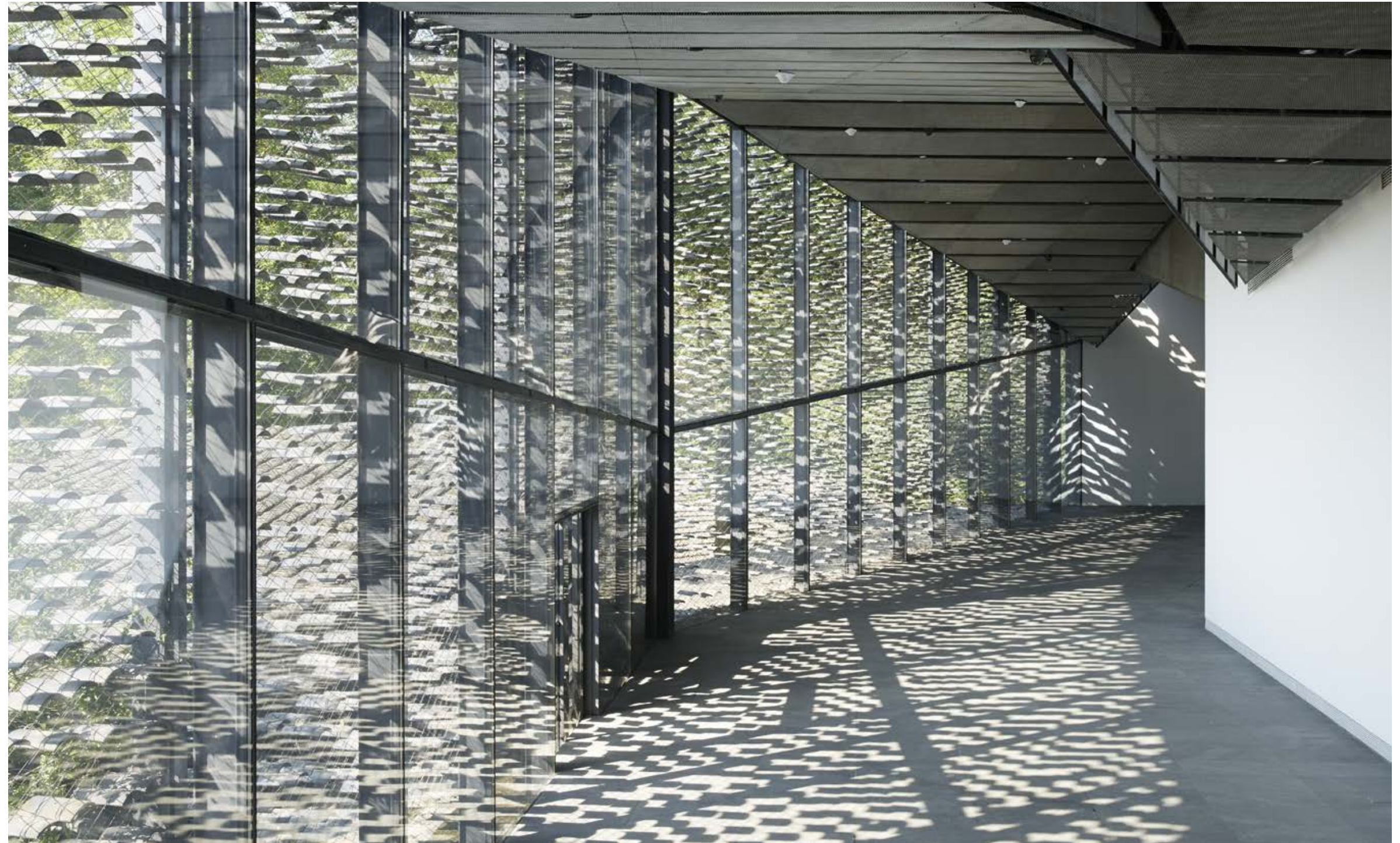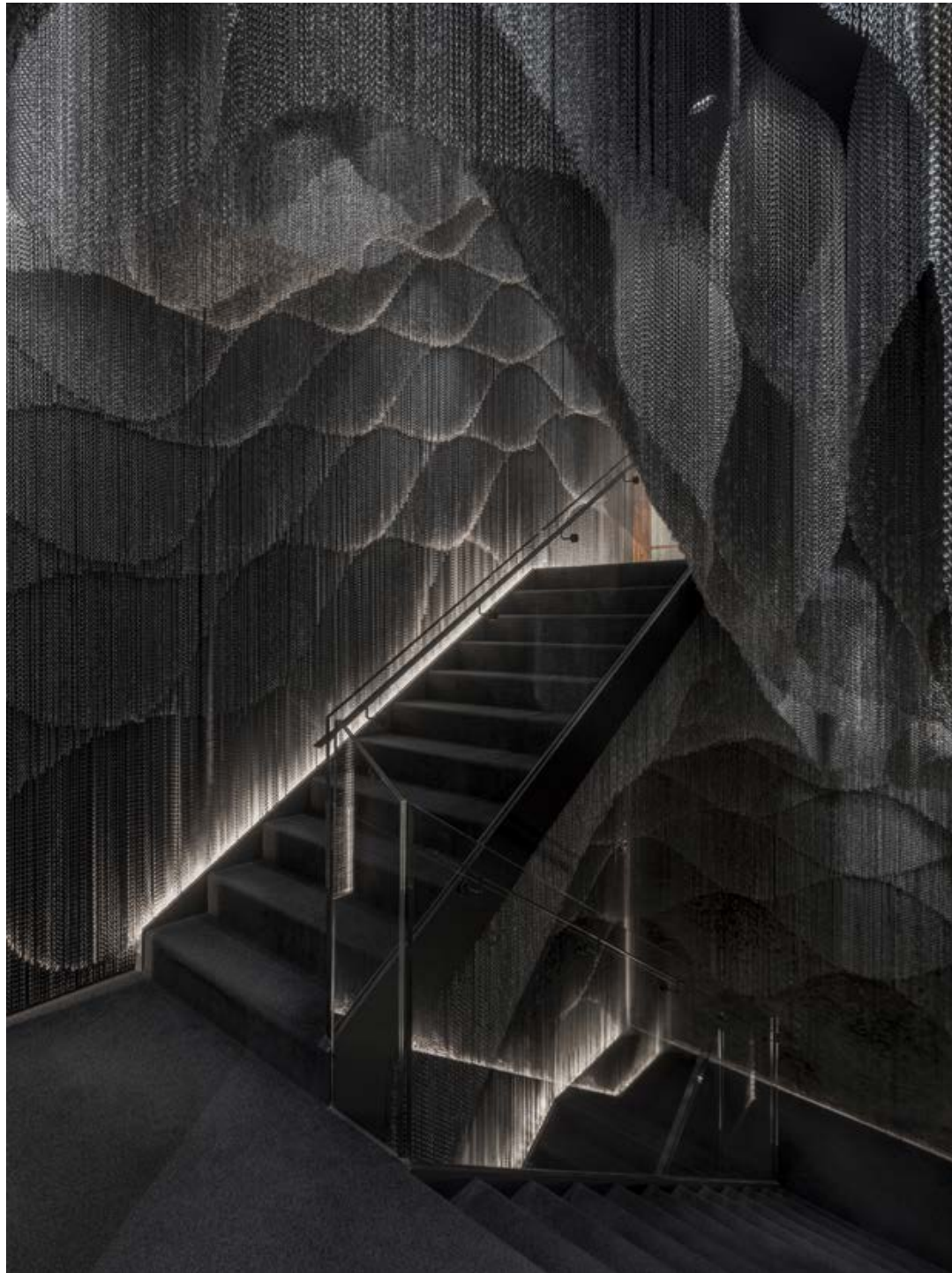
headspace is a series of wearable devices that extend the user's mind. As we rely more and more on technology, what will come next? If we could augment our feelings and memory with physical interfaces, how are they going to work? Just like we use mobile phones with numerous applications for uncountable purposes, could we extend our minds and/or bodies by physically expressing and sharing our thoughts and experience?

Often people say, *I know my heart well* or, conversely, *I don't know my heart either*. Unlike the state of the body, the state of mind feels uncontrollable. However, *headspace* blurs the mind and body dichotomy, showing that mind, body, and environment are organically connected. *headspace*, the mind extension tool, move each of us into a network of interconnected connections rather than a body of isolated minds.

Künstlerhaus Vienna

Andrea Graser, Sne Veselinović, Thomas Hoppe, Mladen Jadrić,
Tanja Prušnik, Josef Weichenberger & Leo Fellinger

Longing for the Future. The Austrian Artists' Association holds exhibitions of exceptional quality. Since 1861 it has maintained a creative field of tension and exchange between art and architecture. The building bears witness to this history. Completely revamped, after renovation from 2017–2020, reopened Künstlerhaus now proudly shows its fresh face. Work and activities within the Association aim to enhance its presence and visibility. Six Künstlerhaus members and project partners address and combine important issues in the given context.

The artwork *Noesis_#i*, 2022 from Andrea Graser, Studio Okular, in cooperation with artist Friedrich Biedermann, is a thinking model of reality. In the context of the object-oriented ontology of light, light as a dynamic material assumes the central role in the network of relationships between architecture, space, and human beings. Light has no scale, yet here it appears woven into built structures and becomes the central agent present in the here and now.

Preventing fire spread and thus planning across property boundaries is inscribed in the DNA of the construction rules and regulations from 1829 until today. Thomas Hoppe´s, Hoppe Architekten, *Feiermauer* transforms massive walls into permeable building elements. Vienna's firewalls (Feuermauern) are turned into *walls of celebration*. They promote communities across property boundaries in the neighborhood and sustainably change the cityscape, including adding value to the microclimate with intensive facade greening.

Pandemics and wars testify to the vitality of the private home. Neighborhoods, co-living, working communities have taken on the characteristics of a close-knit, collectively socialized group. Mladen Jadrić´s, Jadric Architektur, *Three Intimate Projects* reflect life rhythms between privacy and publicity, open and closed spaces, offering new uses lived through self-determination. A palimpsest of situations transcribed into space.

With Tanja Prušnik´s work *Stummer Diener seiner Herrin* the artist shows performative self-photography. It is conceptually connected with the mode of *self-release* as an emancipatory metaphor of artistic modes of production, influenced by women's movements, activated through feminism. With remarkable, intimate images, she subjects patriarchal manners and modalities in the art business to an artistic-feminist experimental arrangement.

One goal of the *Evangelisches Realgymnasium Donaustadt* architectural design was to translate the pedagogical concept of *Open Learning* into a sophisticated spatial program that is open in many respects. Sne Veselinović´s – Sne Veselinović Architektur, school building in Vienna, built from 2012–2015, is organized in modular teaching clusters, interwoven with the outdoor space through manifold links, and open to the city and society.

The conversion project *FRANCIS: metamorphosis of a building of Josef Weichenberger*, Josef Weichenberger Architects, and photographer Leo Fellinger describes the city as a source of raw materials. Under the motto *think twice before tearing down*, Josef Weichenberger Architects show what opportunities for urban development and the environment lie in the transformation of existing buildings. Steel and concrete are seen as grey gold, whose lasting value enables a second life and thus maximum conservation of resources.

in Cooperation with Delugan Meissl Associated Architects; Client: 6B47 Real Estate GmbH.

1. *Noesis_#i*, Andrea Graser
   Pic.: Friedrich Biedermann, 2022
2. *FRANCIS: metamorphosis of a building*, Josef Weichenberger
   Pic.: Leo Fellinger, 2023
2. *Intimate Projects*, Mladen Jadrić
   Photo: Yasutaka Kojima, 2022
4. *Open Learning_Evangelisches Realgymnasium Donaustadt*
   Sne Veselinović
   Photo: Rupert Steiner, 2015
5. *Stummer Diener seiner Herrin?* Tanja Prušnik
   Photo: Herbert Wieser, 2022
6. *Feiermauer*, Thomas Hoppe
   Pic.: Thomas Hoppe
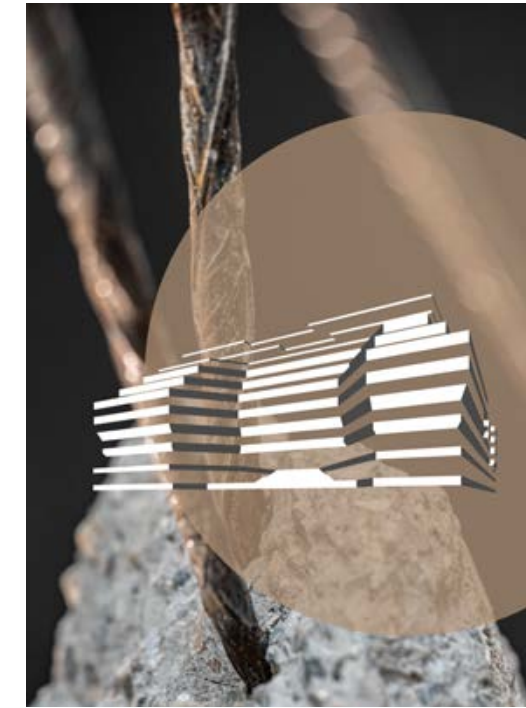
KWK Promes
Robert Konieczny

The project came about as a result of a competition to turn a dilapidated old slaughterhouse in the Czech city of Ostrava into the PLATO Gallery of Contemporary Art.

The walls of the slaughterhouse were dilapidated and battered with huge holes. The soot-reddened brickwork bore witness to the city's industrial history. The architects from Robert Konieczny's KWK Promes treated these defects as a value and added another layer to the history of the building, which has a conservation order. They were allowed to preserve the character of the soiled brick and the windows, and to fill in the holes in the walls with contemporary material while retaining the old ornamentation of the brick walls. The architects also adopted the principle of recreating all non-existent building elements from micro-concrete for the reconstruction of the collapsed section of the slaughterhouse.

The main idea of the project is based on preserving the functionality of the openings as shortcuts connecting the building with the city. Hence the idea that their new infills could rotate and open the exhibition rooms directly to the outside. This has provided artists and curators with entirely new exhibition possibilities and allows art to literally 'go out' into the space around the building. Mobility has meant that culture in its broadest sense can take on a more democratic character, as well as being accessible to new audiences.

The outdoor display space in the form of hardened water-permeable floors is surrounded by greenery. The majority of the square is made up of grass, flower meadows and trees, along with a small pond and underground retention tanks. The layout of the greenery alludes to the location of the buildings that originally supported the slaughterhouse, and edible crops, also inside the gallery, complete the transformation of the site.

Light Cognitive
Sami Salomaa

Infinity, a light installation by Light Cognitive, serves as a striking representation of the everchanging, expansive sky providing visitors with a sense of tranquility and optimism. Drawing inspiration from the natural landscapes of Finland, the Helsinki-based studio has crafted a realistic sky and horizon view that transitions seamlessly through the daylight cycle, from dawn to dusk. The innovative studio expertly replicates the spectral qualities of natural light, producing an immersive experience.

Infinity serves as an exploration of the relationship between design, technology, nature and human interventions within a space. Past and present meet as the installation recreates the vastness of the sky within a 15th century Venetian palace, Palazzo Bembo, utilizing state-of-the-art technology and design.

Light Cognitive sky installations and virtual skylight elements are crafted through a meticulous process. The design starts by measuring the natural light spectrum to then create detailed models of the physics of light. The result is a sophisticated light field that mimics the natural world and incorporates the principles of biophilic design. Through the bespoke technology and mode selections, the installations evoke the feeling of beautiful bright mornings, hazy summer days, or soft sunsets.

Essential for our health, light is the most important time cue in resetting our 24-hour circadian clocks. Light also serves a narrative purpose, communicating the time of day through its alignment with nature's circadian rhythm.

Light Cognitive's approach offers a new dimension to lighting and space design, creating a sense of openness and connection to nature. These light fields can be created in custom dimensions, which enhances the aesthetic of the room and functions as a tool for architects and designers looking to redefine the perception of open spaces and windows. While traditional lighting design focuses on fixtures, shades and spotlights, Light Cognitive reimagines the light itself as a work of art.

Special thanks to Made by Choice for designing the unique wood frame created by Finland's most skilled artisans.

Louise Braverman Architect

Today the definition of our cultural institutions is at a critical juncture. No longer perceived as merely containers for acquiring, preserving, and displaying aesthetic objects, museums are now morphing into civic sites for nurturing critical thinking, exchange of ideas and public participation with art. As our art institutions evolve into centers of community, we must consider how we can integrate collective thinking into the architecture of our museums. How can we design inventive cultural spaces for communities that aesthetically, and sustainably respect their heritage, their physical landscape, and the wellbeing of our planet? Perhaps the contemporary design of our institutions can grow out of the land like a tree, maintaining 21st century ecological roots firmly entrenched in their underlying history while simultaneously incubating expansive cultural connection to their communities.

The mission driven architectural team at Louise Braverman Architect has taken this quest to heart. Inspired by the work of artists such as Robert Smythson and Nancy Holt, whose art installations were immersed in the land, the studio purposefully investigated the possibility of using the terrain to connect the urban and pastoral landscapes of Boticas, Portugal for the design of their art museum, Centro de Artes Nadir Afonso. By embedding the exhibition hall of the art center in the existing hillside and covering it with a green roof park, designed in the spirit of the artist, Nadir Afonso's geometric abstraction aesthetic, the local Portuguese people can casually walk through the park and closely connect with the art directly below within the museum.

Recently the firm embarked on the architectural design of a new cultural project that tackles similar issues. Located closer to home, this museum will address the community with a series of integrated transparent communicating spaces. Floor-to-ceiling windowed classrooms, maker spaces, art storage and a café will all directly interact with a large exhibition hall. The civic spirit will be further amplified by both indoor and outdoor performance spaces derived from the architectural forms of the original local indigenous population. Not only will their legacy be incorporated in the design of the building, but it will also be rooted in the site, for the building will be integrally tied to the land. Partially situated below grade to take advantage of the earth's natural insulation, the design of the museum will be composed of local natural and recycled materials as well as mechanical systems that amplify environmental regenerative growth. The aesthetics of the museum will also reinforce this landscape spirit both through its materiality and its display of panoramic views of the exquisite surrounding terrain. Looking to attract both a local and global audience, the hope is that the museum, embedded in nature, will speak to the humanity within us all, creating cultural architecture that is both *of the land and in the community*.

Centro de Artes Nadir Afonso, Boticas, Portugal
Image: Fernando Guerra, 2013

MAP Studio
Katherine Lambert, AIA
& Christiane Robbins

MAP Studio's The Topography of Chance offers a composite visualization representing the explosion of accessible AI platforms. This represents a discrete, perhaps fleeting moment, in architectural practice - a rare instance of experimental modality. It proposes a position that is neither fixed nor predetermined, rather one that emerges via chance and contingency.

To date, no iterative prompt results in the exact same image. In this Topography of Chance, one is seduced by the infinitely generative, novel detonation of an algorithmic imaginary – one that engenders an interplay of enigmatic visual and psychological narratives. Virilio's The Overexposed City elaborates upon a hyper-reality: the replacement of geographical space with the screen interface, the transformation of distance and depth into pure surface, the reduction of space to time, of the face-to-face encounter to the device's screen. On this screen, duration of time is both the surface and the support armature of inscription – time literally surfaces. Here, time becomes episodic and scattered.

Following decades of skimming the surface of our collective global imaginaries, AI has cascaded into screens, mindsets and brandscapes. The circuitous contestations about AI often vacillate between evangelical adulation and abject derision. There appears to be an unspoken modus operandi in one's approach to AI – an acceptance of the pervasive cultural myth that AI will overtake *us* is assumed. Within that dynamic, humans are denied agency in reconciling one's individuated practices – subjecting our own vision to that of AI's reiterative imaging. In other words, one may interact with AI with its unfathomable image data sets – but only on AI's terms. While this world is predicated on the promise of open-source AI, the reality of open access is leveraged by market forces. Within this frame, one seemingly cannot make AI interact with you, on your terms... or can you?

When speaking of an AI aesthetic, arguably it derives from a legacy of spectacle, hyper-speed, warped space and titillation. MAP Studio recognizes a possible reading of the fetishization of immediacy, mimicry, style and effects. Nonetheless, it insists on a forensic, yet metaphorical, analysis. Embodied in The Topography of Chance are theories of Barthes, Butler, Haraway, Latour, Vidler, the Situationists, Fluxus and Surrealism.

It queries values that, in essence, represent the one-dimensionality of a world in which many of us interact today. In the globalized circulation of screened images, we believe in things knowing they have little substance. We continue to enjoy them in spite of this knowledge, perhaps all the more so. *Style* holds the constitutive, tropological ability of architectural spatial experiences, identities, and of the way we relate to the world. We then choose to live an imaginary, if not fictive, life within that world – reading images as real while knowing they are simulations.

It is naive to leave these images to the whims of aesthetic juxtaposition – to a play of words – as seductive and compelling as that may be. The incalculable power inherent in AI inspires new approaches to ideation and creative responses to ubiquitous data, information flows and algorithmic practices within architecture. As the EU recognizes, the ability to ethically harness and re-direct these technologies remain crucial to social equity, racial justice and climate change corollaries.

Marie Aigner
Studio Marie Aigner

Marie Aigner's current work focuses on materials that are generated as waste products during manufacturing processes. Marie started to work with recycled PET and melamine resin foam of which she made furniture, lamps and objects serving as highly effective sound absorbers.
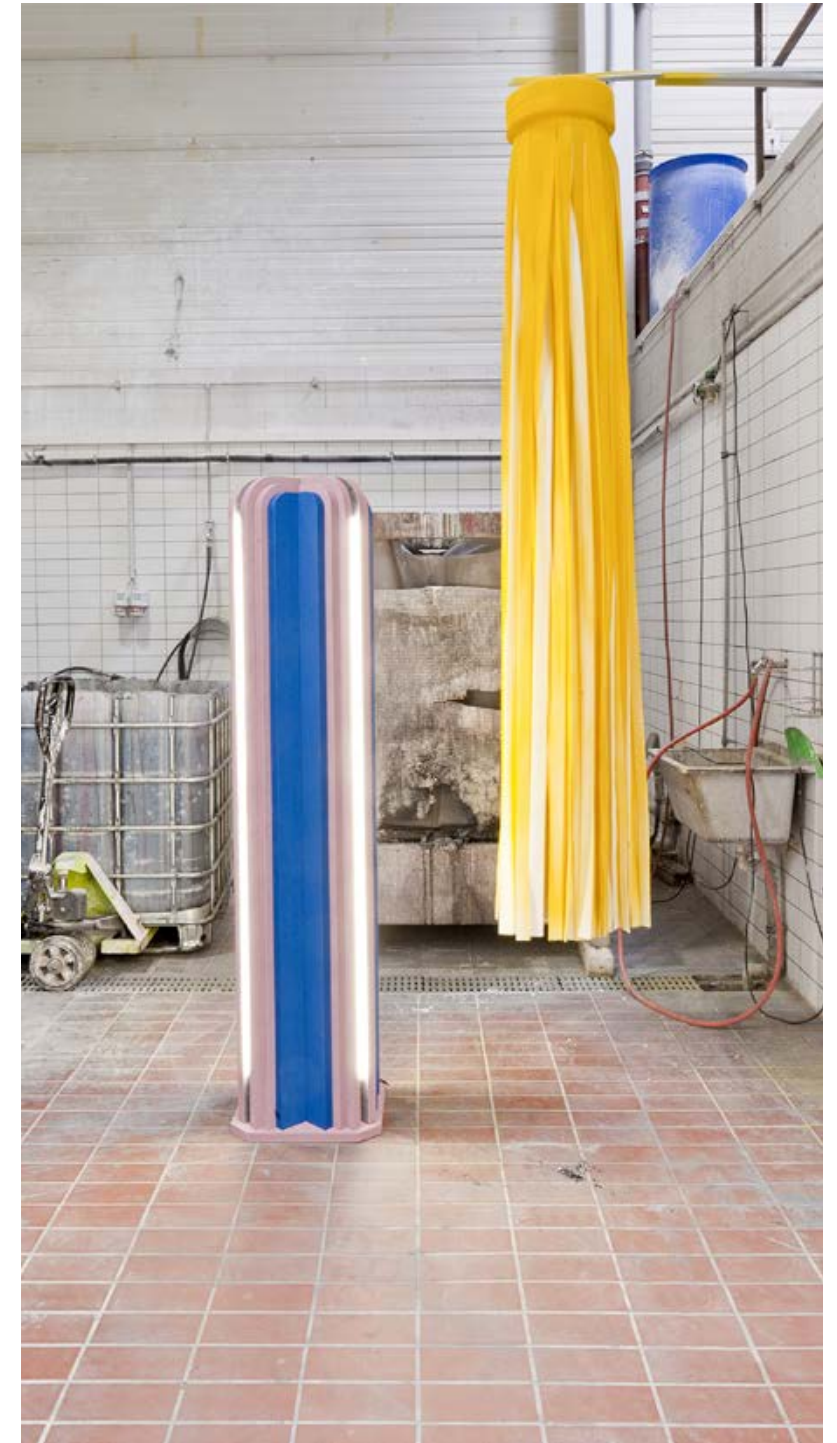
Her *Knock Out* Collection became a story of a guiltless use of plastic where she transforms the microcosmos of everydayness into an urban orchestration of spaces and objects while setting new standards in cross-curricular architecture with ingenuity, versatility and only few precisely calculated materials. All creations within the collection are a mixture of sound absorber and art object and have one thing in common: they are usually unique or manufactured in small series, since the materials are limited.

By scaling and alienating products and by changing the use of materials Marie created her own formal language- a kind of new radical design, that changes with every material she gets in her hand. With an ingrained ecological awareness in her practice, her responsible approach to choosing materials for new products is inevitable.

Material must always be contemporary. For me, this means working with genuine and pure materials.

A modern and progressive material must be reusable and recyclable, it must be manufactured in accordance with proper sustainability guidelines. Material meeting these qualifications then defines the form and function of the new products.

Cactus, Elton & Wedding Cake
Photos: Julian Weninger, 2023

Rocket Man, Elton, John, Avatar & Rocket Girl
Photos: Julian Weninger, 2023

Mauricio Ceballos x Architects (MCxA)

Malinalco is considered one of Mexico's most important archaeological sites. One of most notable structures is the Temple of the Sun, a pyramid adorned with sculptures and intricate carvings representing the Aztec calendar. The Temple of Feathered Serpent, dedicated to the god Quetzalcoatl, is famous for its stone carvings depicting scenes from Aztec mythology, its unique elliptical shape and astronomical significance.

Malinalco is also home to several buildings from the colonial era, such as church of San Juan Bautista, built by Spanish conquistadors in the 16th century, considered one of Mexico's finest examples of colonial architecture, adorned with sculptures, frescoes and an essential symbol of cultural fusion in Mexico. Today, Malinalco is a popular tourist destination protected as a cultural heritage site. From the impressive pyramids of the ancient Mesoamerican civilizations to the ornate colonial-era buildings, the architecture of Malinalco is a testament to Mexico's ingenuity, creativity, and cultural diversity.

For 6th ed. of *Time Space Existence*, a house/pavilion has been designed in Malinalco. The design team approached the project with a sensitive and respectful approach to nature and local cultural heritage, promoting equity and justice in the design process. The design is a twisted form that resembles a snake, inspired by feathered snake's elliptical shape, uses elliptic curves, shapes the building around the existing vegetation. The house is designed on one level with many outdoor spaces to promote accessibility and community connections and encourage socializing.
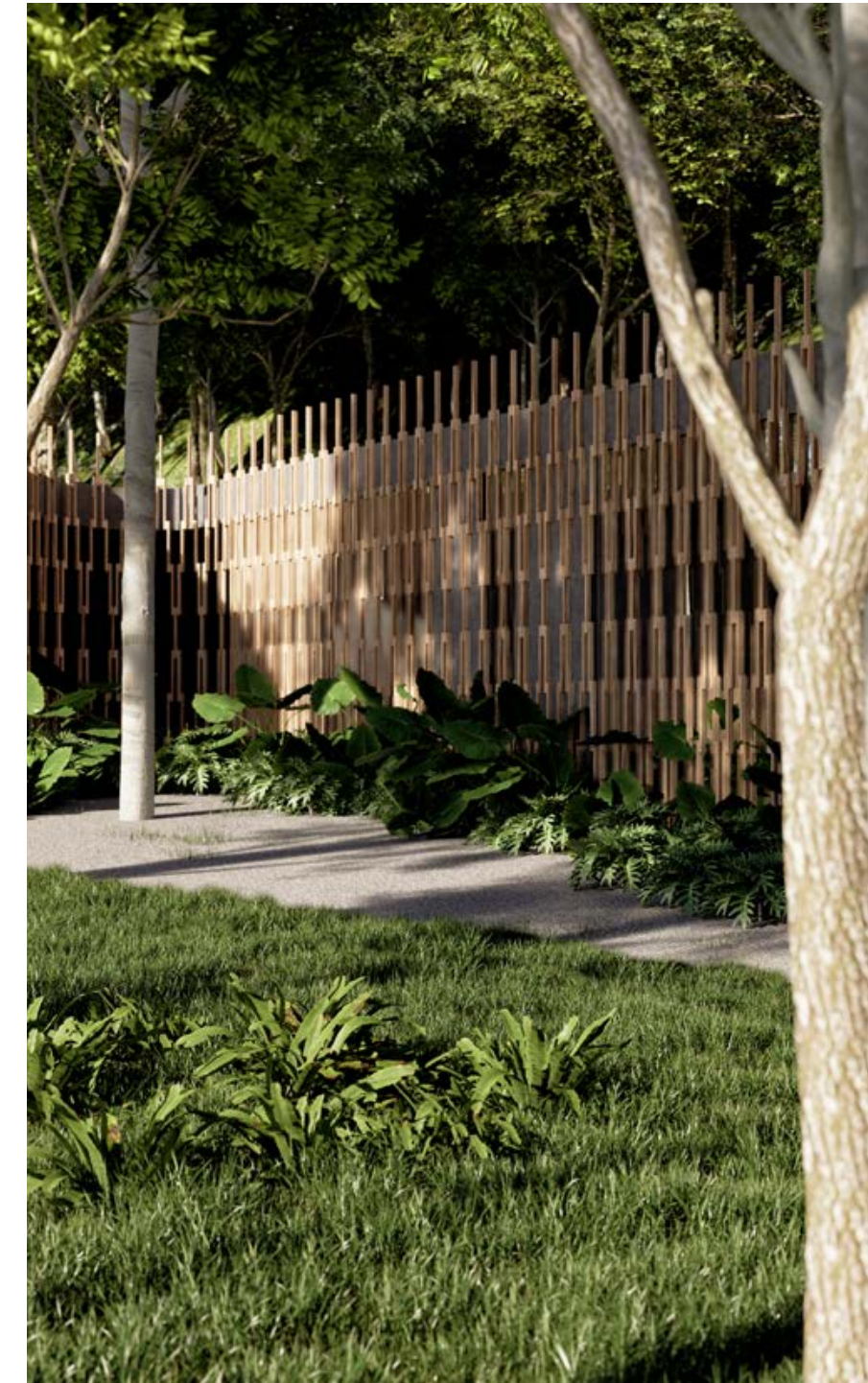
The site presented several challenges: an irregular area, a river and heavy regulations from federal authorities. The design team worked closely with National Institute of Archeology and History to establish five principles for construction: non intrusive, integrating and respecting the environment, modular and reversible, social improvement, and materiality. The project was designed with a light custum structure and shallow foundations, and excavations were done manually to protect roots of existing trees and to search for any archaeological relics.

The skin of the building was also a vital element of the design, using patterns inspired by traditional textile culture while also addressing challenges such as double curvature, durability and prefabrication for minimal material waste. We incorporate four main strategies to minimize house carbon footprint: Energy efficient design, Water cycle, Sustainable building materials, Waste reduction and reuse.

Architects are responsible for designing better spaces and caring for our natural, cultural and social environment. We believe in the power of ideas and research to transform our environment for a better future, to create a space that is sustainable, environmentally conscious and respectful of culture and heritage.

It's essential to continue to push the boundaries of what is possible and to imagine new and innovative ways of creating spaces that prioritize sustainability and equity. We must also take care to preserve and protect our historical heritage, recognizing the important role that architecture has played in shaping our communities cultural and social fabric. We can create a more sustainable, equitable, and culturally rich future through these efforts. And it is through architecture that we can bring these principles to life helping to build a better world.

Construction hsitew & render of Malinalco House
Images: Paola Cueli, 2023

Medea Lab, Malmö University

For more than 40 years Voyager 1 and Voyager 2 have travelled through space transmitting data to Earth. Before leaving our Solar System, the only spacecraft ever to do so, Voyager 1 took an iconic picture in which the Earth appears simply, in the words of Carl Sagan, as a pale blue dot.

Included aboard each of the Voyager spacecraft is a *Golden Record* containing sounds and images telling stories of life and culture on Earth, among them spoken greetings in 55 different languages, both ancient and modern, and 27 music pieces from different parts of the world. The spacecraft and their Golden Records exist as echoes from the past that remain alive, moving continuously through space, and through time.

The *Tender Time* installation invites visitors to join the Voyagers on their journey and to reflect on the shifting layers of stories, rhythms, sounds and languages that interconnect to form the pale blue dot that is Earth. What new perspectives do the Voyagers' vast distance from Earth, and the intergalactic timeframe through which they pass, offer on our own lives?

Tender Time (re)presents the sounds and images etched into the grooves of the Golden Records as an immersive environment, with sonic, visual and textual elements conjuring the disjunctures of space and time that the Voyager mission makes apparent. By recognizing the instability and interconnectedness of past, present and future, *Tender Time* performs a hauntological aesthetic.

New sonic layers have been curated, performed and woven into the Voyagers' existing cultural archive, adding to the spectral sensibility of the work. These recorded messages, greetings delivered from our own tender time, are expressions of regret and stories of futures lost. By speaking them into this space and time, perhaps there is hope that they can be found again.

The Medea Lab, Malmö University, consists of researchers and artists dealing with media, design and public spaces. The members have published, performed and exhibited extensively both individually and in different constellations. This is the first time the group has exhibited as a collective.

MIT Civic Data Design Lab
Sarah Williams, Director
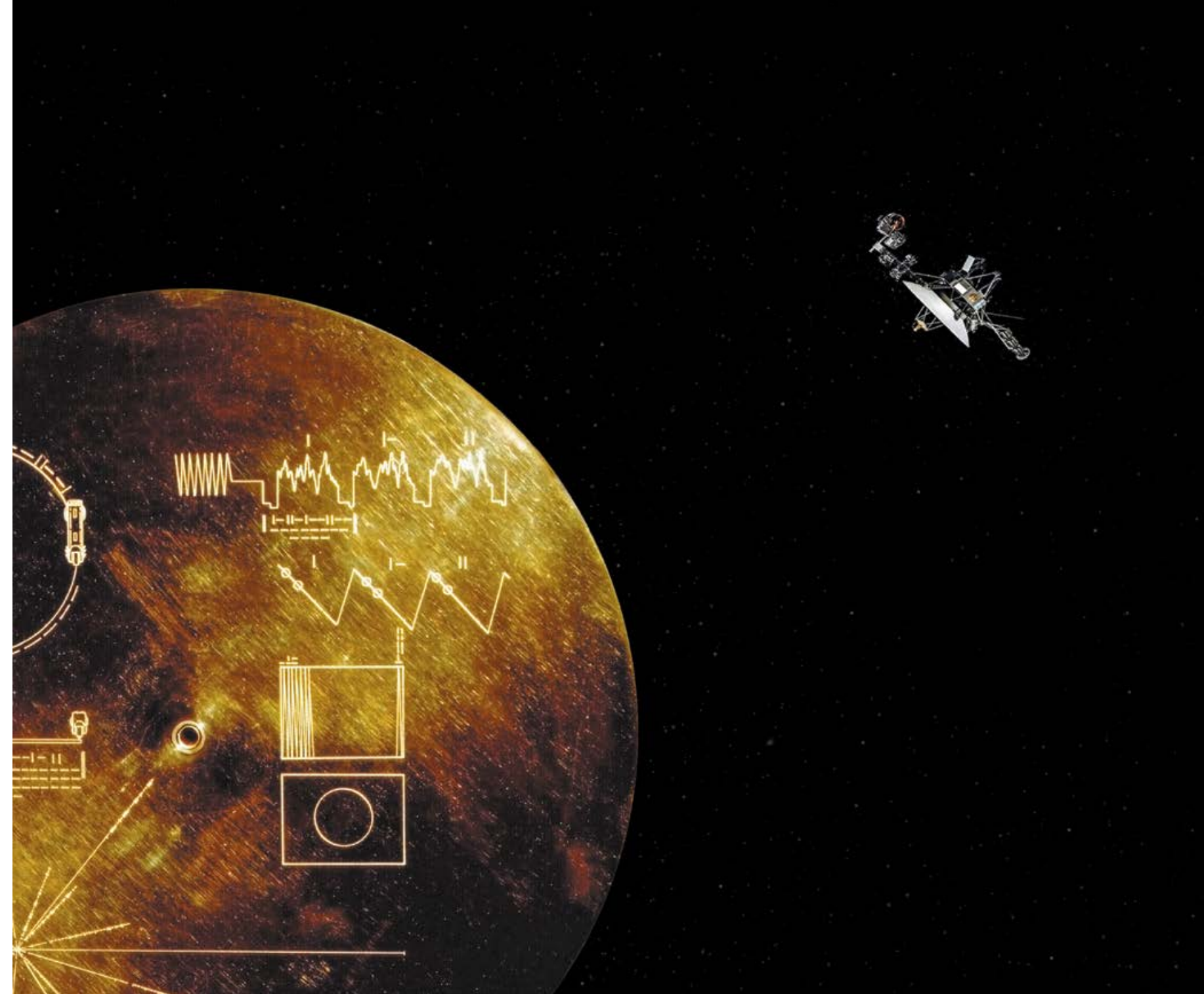
Distance Unknown combines data and design to change the policy debate around Central American migration. Collaborating closely with the United Nations World Food Programme (WFP) and the Migration Policy Institute (MPI), the Civic Data Design Lab at MIT designed interactive visualizations to illustrate critical findings about the root causes of migration.
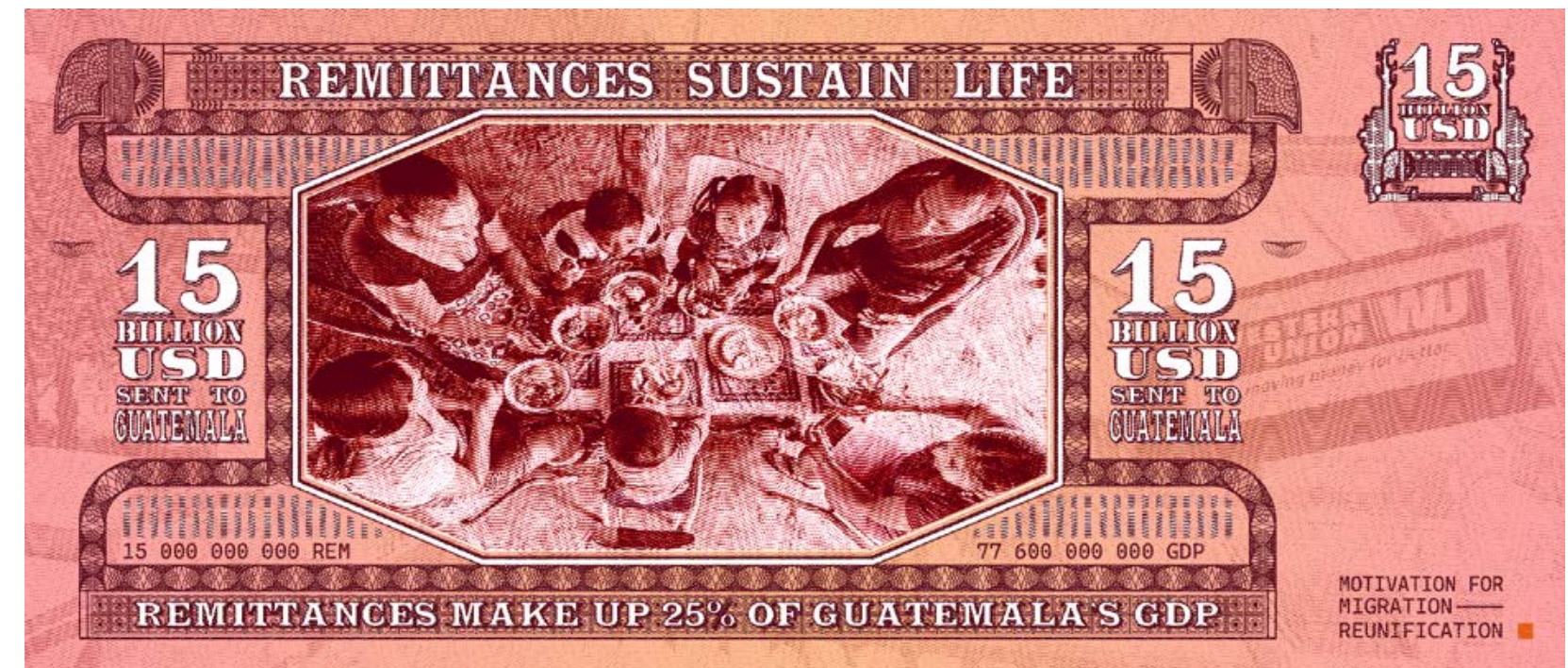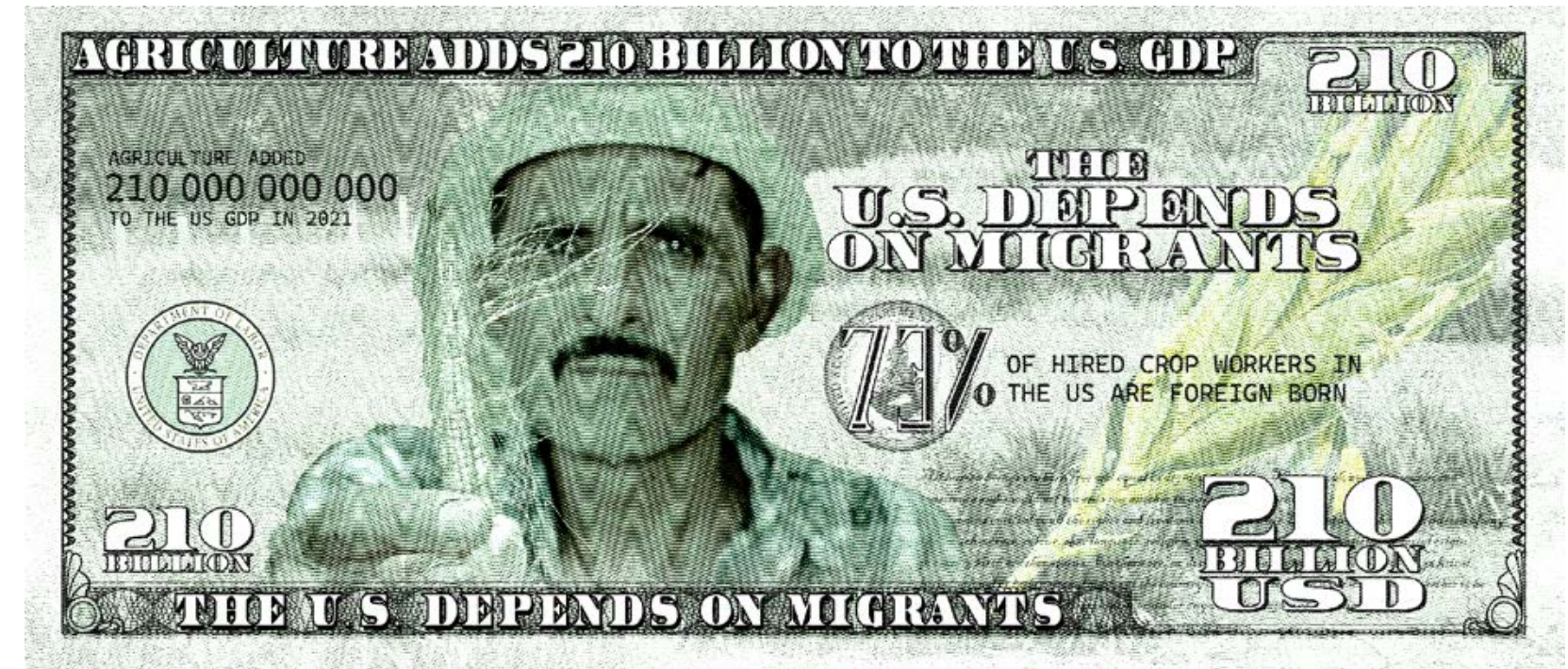
This project visualizes migrants' conditions using two unique datasets collected from 5,000 households in El Salvador, Guatemala, and Honduras and over 2,100 migrants journeying between the Darien Gap in Columbia and the border of Mexico. Findings derived from data analysis help to communicate that migrants from Central America spent USD 2.2 billion to migrate in 2020-2021, with both the U.S. and the countries in which they left benefiting. The U.S. through a cheap labor force, and the home countries through remittances that sustain basic needs. Yet, migrants take on all the risks, both in cost and danger to their lives, with only 57% reaching their final destination.
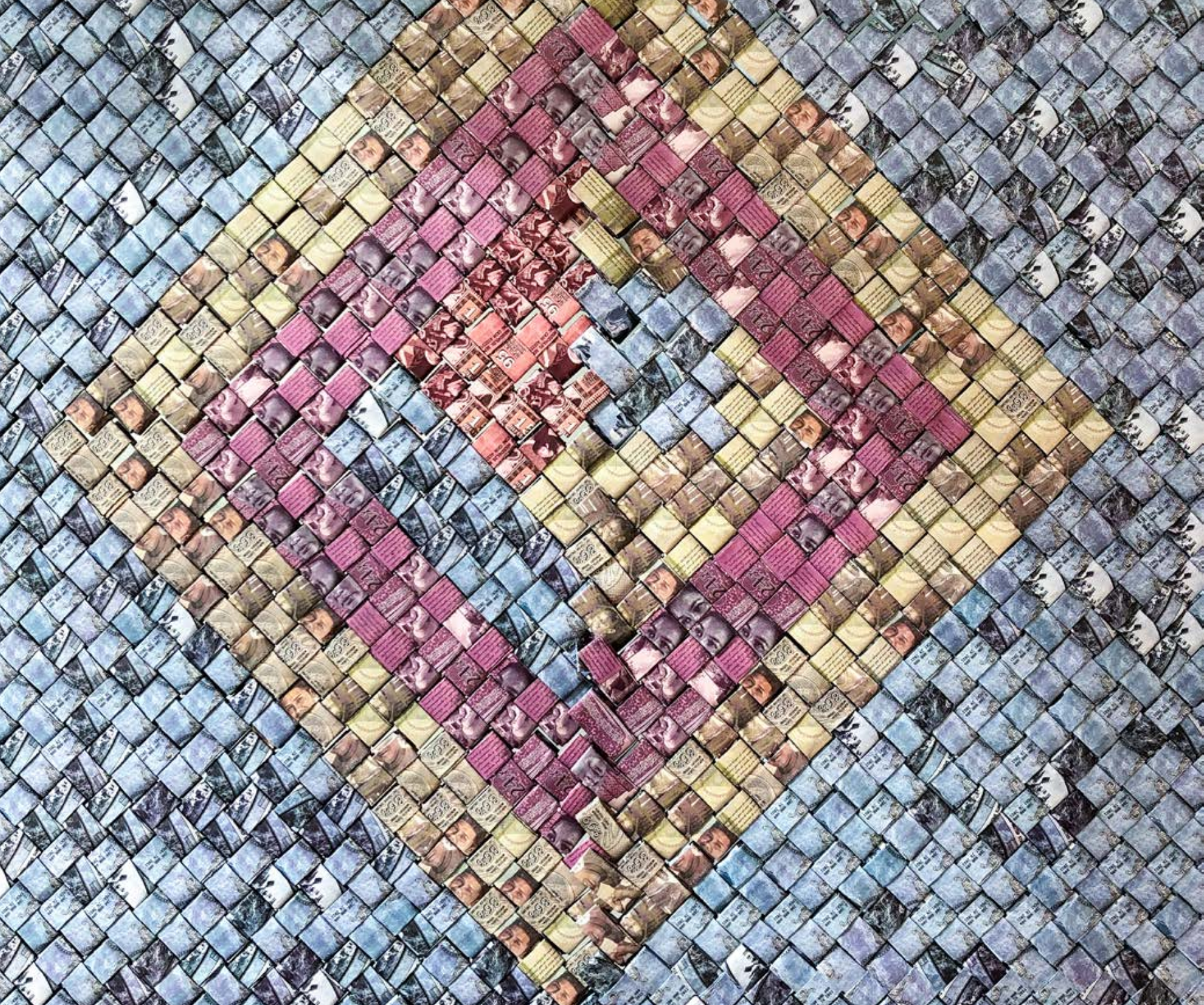
The data visualizations exhibited here were developed in parallel to a report presented at a U.S. Congressional hearing in November 2021 to advocate for more legal pathways for migrants from Central America's northern countries. Later in January 2022, this research was cited in a letter signed by thirty-three U.S. Senators to appeal to the U.S. Department of Homeland Security to expand protections for migrants. Ultimately the Biden Administration followed that recommendation in their *Call to Action for Northern Central America* policy change in June 2022. Showing design can transform conversations needed to change policy.

The exhibition features a vibrant tapestry of woven paper currency creating a physical data visualization representing the complex motivations and costs of migrating from Central America. Thirteen migrants built the tapestry through a partnership with Casa Tochan, a non-profit that supports Central American migrants in Mexico City. Each square in the tapestry represents one migrant; visitors are invited to scan a piece of the tapestry at a touch-screen station, where the story of that migrant appears. Visitors can dive deeper into the causes of migration to learn more about why an individual migrant family in the study left their home, their household circumstances, and their personal stories. The stories illustrate that most migrants love their country and don't want to leave, but they have no other choice.

Another feature of the exhibition is an interactive map allowing visitors to explore the journeys and barriers migrants face along the way. The map highlights the Darien Gap region of Central America, one of the most dangerous and costly migration routes without roads and consisting of a dense jungle. The visualization represents a dataset collected at hot-spot access points provided by the World Food Program along the migration path, providing a window into the challenges migrants face on their journey.

Bringing together qualitative stories and quantitative data in these visualizations enabled the Executive Director of WFP, David Beasley, to put migration on the agenda at the annual Executive Board in 2022, reaching an audience of UN Ambassadors and national officials. Distance Unknown had such a memorable impact on Beasley that he planned a visit to the Darien Jungle in Panama to raise further awareness of migration issues in Central America with his advocacy platform.

Tapestry representing the root causes of migration
Photo: Ashley Louie, 2022

Director of the World Food Programme, David Beasley, with the UN World Food Program Ambassador. Photo: Alberto Meouchi, 2022

MIT Norman B. Leventhal Center for Advanced Urbanism
Civic Data Design Lab, Future Heritage Lab & City Form Lab

On August 4, 2020, an explosion at the Port of Beirut, Lebanon severely damaged the city and caused significant loss of life. The devastating impacts were felt beyond the confines of the port area, with cultural sites, hospitals, public infrastructure, residential buildings, and schools all sustaining significant impairment. Responding to the urgent need to aid Beirut's recovery, planning, and reconstruction, *Rebuilding Beirut: Using Data to Co-Design a New Future* showcases three collaborative research and design proposals led by faculty, researchers, and students from MIT's School of Architecture and Planning. Each intervention addresses a unique aspect of rebuilding Beirut's urban fabric. *Living Heritage Atlas* captures the significance and vulnerability of Beirut's cultural heritage; *City Scanner* tracks the environmental impacts of the explosion and the subsequent rebuilding efforts; and *Community Streets* supports the redesign of streets and public space.

Living Heritage Atlas documents and visualizes Beirut's living heritage of craftsmanship by cataloging its craftspeople, public spaces, and local knowledge through an open-source database. The Atlas captures Beirut's intangible heritage through a collection of historical and present-day images highlighting craftspeople's cultural significance, vulnerability, and potential role in crafting the future of Beirut. Discover Beirut's intangible heri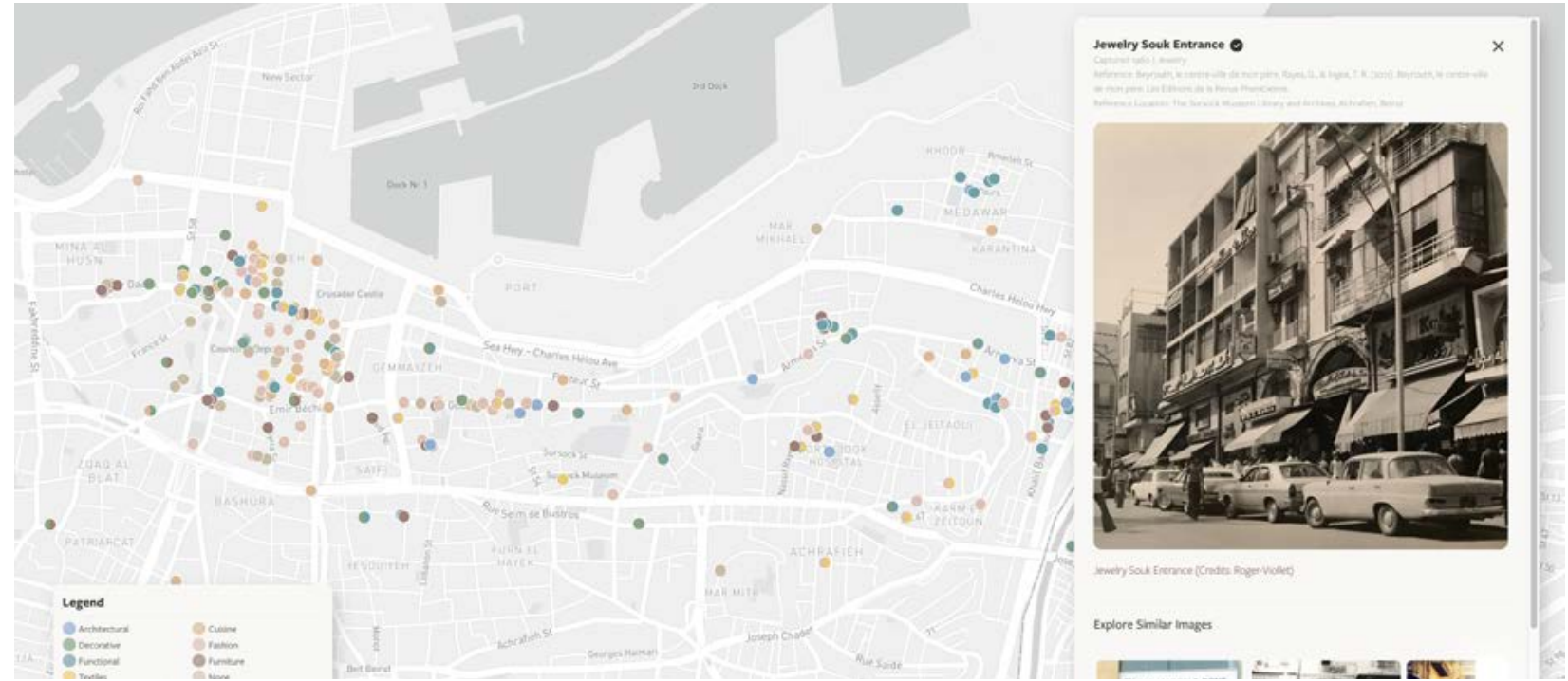tage through a physical representation of the database and a virtual tour of craftspeople's stories. *Living Heritage Atlas* is a collaboration between MIT Civic Data Design Lab and MIT Future Heritage Lab.

City Scanner is a platform that empowers communities with research-grade environmental data by harnessing existing road vehicles as a sensing infrastructure. Installed on taxis in Beirut, the *City Scanner* gathers air quality data as it travels through the streets, mapping the often-invisible environmental impacts of reconstruction on the city. *City Scanner* is a collaboration between MIT Senseable City Lab and the American University of Beirut.

Community Streets offers street improvements for pedestrians in the Mar Mikhael, Karantina, Remeil and Qobayat neighborhoods closest to the explosion site. The research uses novel analysis techniques to identify a network of *Community Streets* where improvements to walking and non-motorized transportation improvements can be prioritized to reinvigorate street life and communal culture, support retail businesses, and encourage sustainable and healthy mobility. *Community Streets* is a collaboration between MIT City Form Lab and the American University of Beirut.

Rebuilding Beirut: Using Data to Co-Design a New Future is supported by the Dar Group Urban Seed Grant Fund at MIT's Norman B. Leventhal Center for Advanced Urbanism.

MIT City Form Lab

City Scanner
MIT Senseable City Lab

Living Heritage Atlas
MIT Civic Data Design Lab and MIT Future Heritage Lab

Moniteurs Communication Design
Heike Nehl and Sibylle Schlaich

People Flow – A wayfinder's perspective

An architectural model represents a building. The *People Flow* model, creates an image of foreseeable possibilities for moving through built space.

It opens up a building, takes a look inside and shows something that usually remains invisible, namely the shape of potential movement within. How will people navigate their way through? What direction will they take? If different modes of transport are available, which one will they choose?

The three-dimensional *People Flow* model conveys a variety of potential paths through a typical European urban transport hub. The result is a 3D representation that embodies the sum of diverse routes and movements in one frozen image.

People Flow takes an out-of-the-ordinary approach to portraying and understanding foreseeable paths through built space. In doing so, the model reveals an invisible world full of movement. At the very least, it also provides Biennale visitors with the opportunity to encounter and appreciate space from the wayfinder's perspective.

As wayfinding specialists, Moniteurs is always eager to understand and positively influence how people move through built environments. The clarity and effectiveness of the signs, symbols, pictograms and colours that comprise wayfinding systems determines whether individuals are able to orient themselves and choose the best path to get from one point to the next.

Faced with a complexity of routes and choices, people rely on effective wayfinding systems to give them seamless orientation and flow. The ease with which we navigate our way through a bustling public transport hub, for example, is not only key to our experience of that space, it is also essential to the proper functioning of the entire intermodal environment. In this sense, effective wayfinding can contribute to reductions in a city's carbon footprint, especially by boosting the efficiency, attractiveness and usage of public transport.

The *People Flow* model takes a more abstract approach, capturing foreseeable routes and rendering them in an artificial 3D form. By exploring the patterns of these otherwise invisible worlds of movement in this manner, Moniteurs gains new insights and are delighted to share with the visitors of this year's Biennale.

Moniteurs is a Berlin-based interdisciplinary design studio focused on orientation, corporate design and digital products. Founded in 1994, the award-winning 18-member team has carried out a number of high-ranking national and projects.
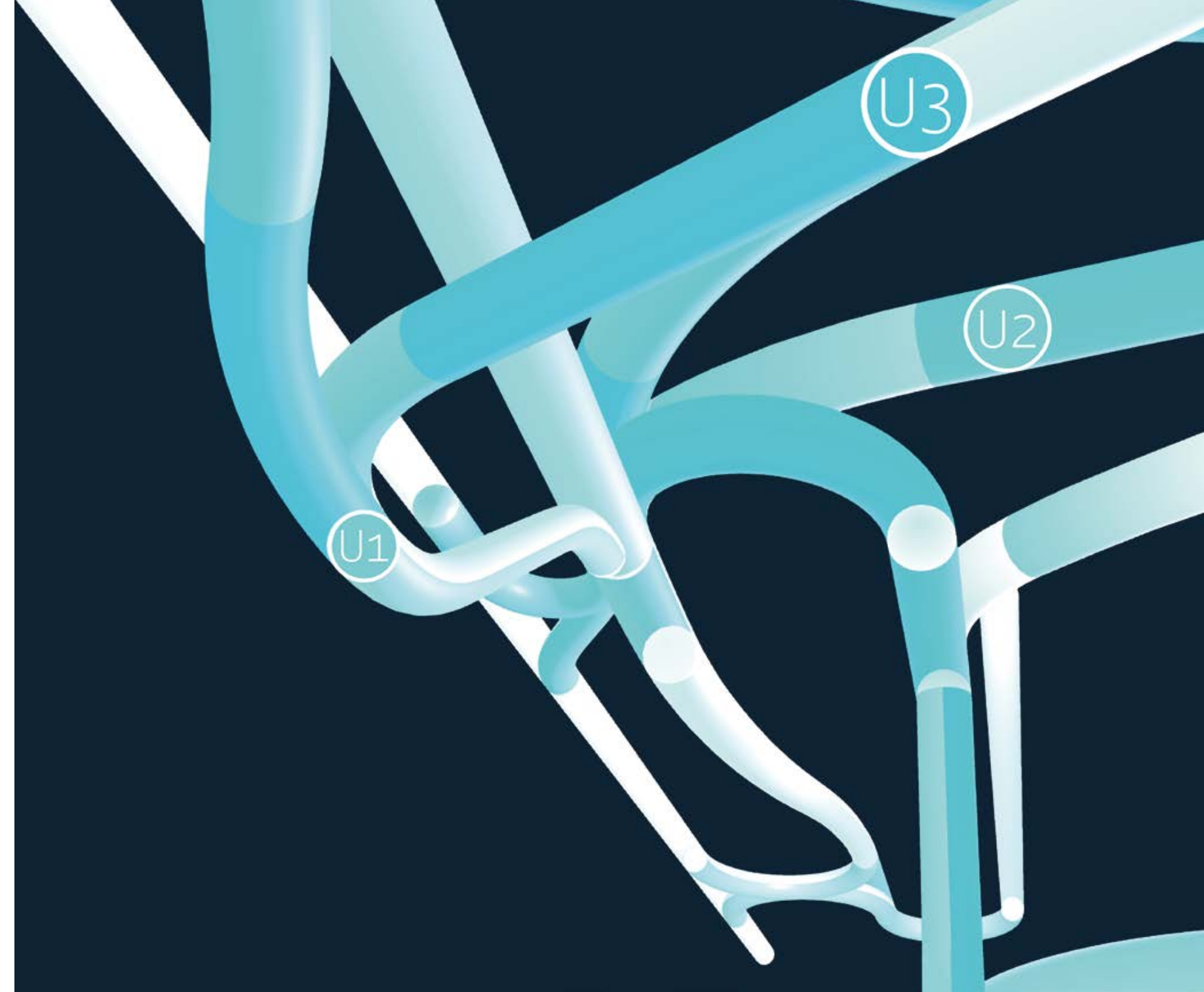
MuDD Architects & Florida Atlantic University School of Architecture

Stephanie Chaltiel, Joseph Choma, Irem Metin, Daniel Lasso, Jerry Velasquez

Freeze and Clay, is a demonstration of natural material innovations with ceramics and glass. In particular, the piece celebrates those who make, not only those who design. The installation is a collaboration between MuDD Architects (Stephanie Chaltiel and Irem Metin) and Florida Atlantic University School of Architecture (Joseph Choma, Daniel Lasso, Jerry Velasquez). The design team has partnered with three international leaders in manufacturing and craftsmanship to produce modules for the sculpture. Laufen, the Swiss sanitary technology company, is producing a dozen hollow ceramic modules and TiPii Atelier, the French glass blowing company, is making 10 handmade glass modules.

Additionally, Vertico, a Dutch concrete 3D printing company, is fabricating 10 concrete molds which will be used as part of the inventive glass blowing process. Together these exquisitely crafted modules aggregate to give the visual illusion of polyhedral geometries floating in space. The overall figure and scale of the sculpture abstractly suggests the bodily posture of a person viewing art on display.

Narmer Architecture Studio

sequentia curiosa. Sequentia is a Latin word, meaning following, succession. The phrase refers to a repetitive motif in music, the order of bonding in chemistry, and as one of the basic programming structures, it means the completion of commands following one another in informatics. In architecture, the sequence might be detected in the decision-making patterns we carry out during the design process, the following of well-practised methods. The routines we apply in praxis are sequences, too, which need to be adapted to the characteristics of the task at hand. In case these tasks are diverse, and the curiosity of the designer is constant, a great number of junctions, nodes and connections appear and the sequences influence one another.

Narmer Architecture Studio designed and coordinated over 500 projects of different scales since its foundation in 2000, most of which have been realised. Among these, there are cca. 250 exhibition projects in different museums. One of our main focuses is cultural heritage protection, thus we often find ourselves working on the peripheries of architecture, participating in archaeological research, preparing scientific architectural studies and virtual reconstructions of historic structures. The Studio has designed a few visitor centres, mainly in natural environments, which incorporate interpretations of archaeological-palaeontological sites, besides having a strong connection to their environment. Most of the projects that focus on the salvage of cultural heritage are carried out in cooperation with universities. This way the scientific thinking of academia is met by the practicality, infrastructure and adaptivity of the private sector, thus

the two fields strengthen each other. One such project is the large-scale heritage protection work in Crac des Chevaliers, Syria, managed by Pázmány Péter Catholic University, in which the studio is responsible for creating damage reports and reconstruction plans. The Studio has been active in Egypt for a long time, too, especially in the South Khokha Project of the ancient Theban Necropolis, managed by the Department of Explorative Architecture of the Budapest University of Technology and Economics and supervised by the Department of Egyptology of the Eötvös Loránd University. The studio's work here focuses on the documentation of the architectural and archaeological finds, reconstruction design and publication of the results. The Studio supports the work of the Hassan Fathy Survey Mission in Egypt and carried out large monuments and landscape documentation projects in Transylvania (RO), the Somló Hill, Rudabánya (HU) and Morelos and Puebla County in Mexico.

The exhibition is a sample of the working methods of the Studio, in which we depict our projects with objects and information characteristic of each design and realisation process. The series of uniform glass jars contain a wide array of inspirations and materials, which make each project individual. On the sides of the jars, besides the basic data, we mark the projects with keywords, we highlight the focus of each design process. The large variety of the content provides a glimpse into the diversity of our work and the large number of connections we discover along the way.

Blue and green fayence beads
Photo: Zsolt Vasáros, 2023
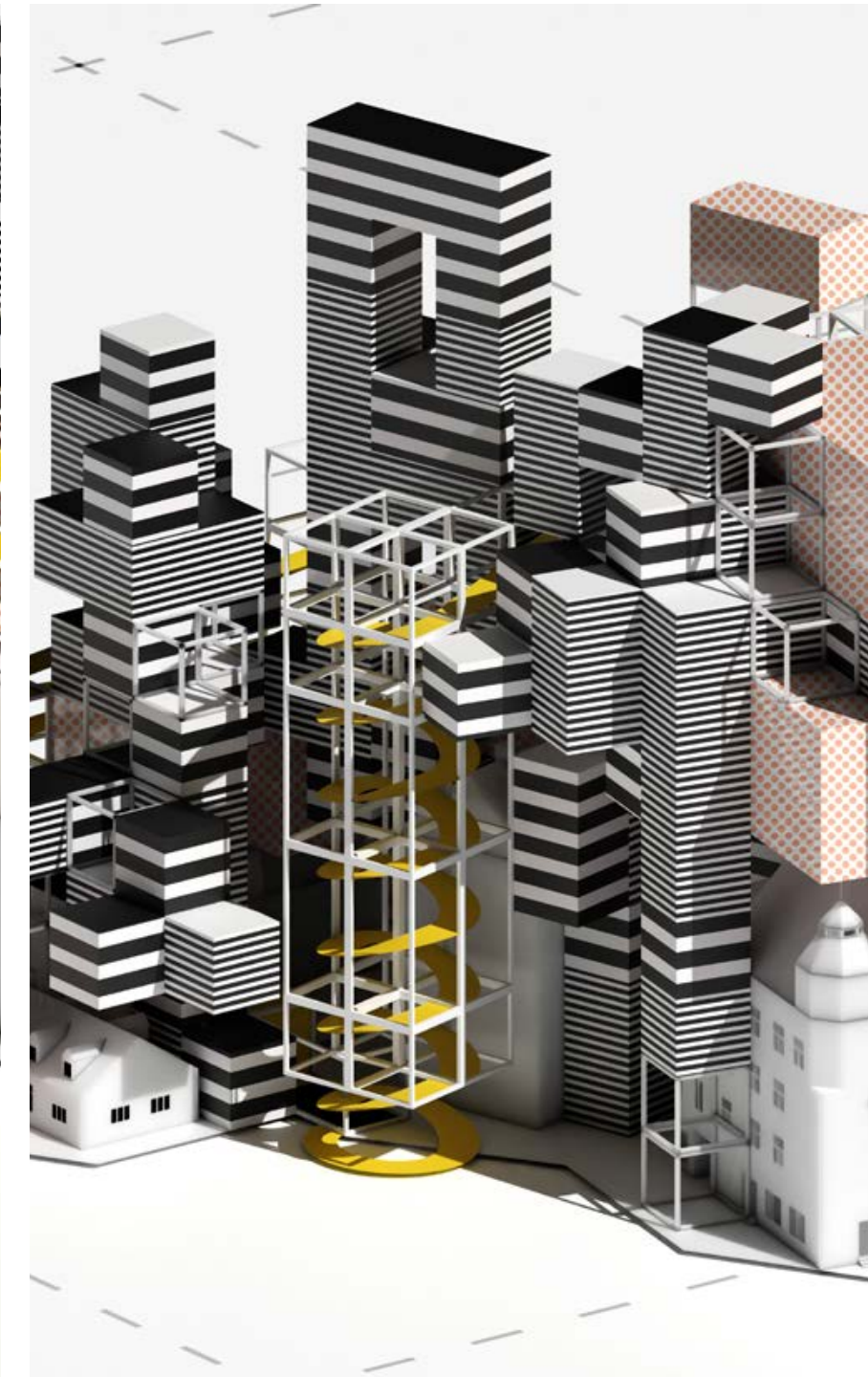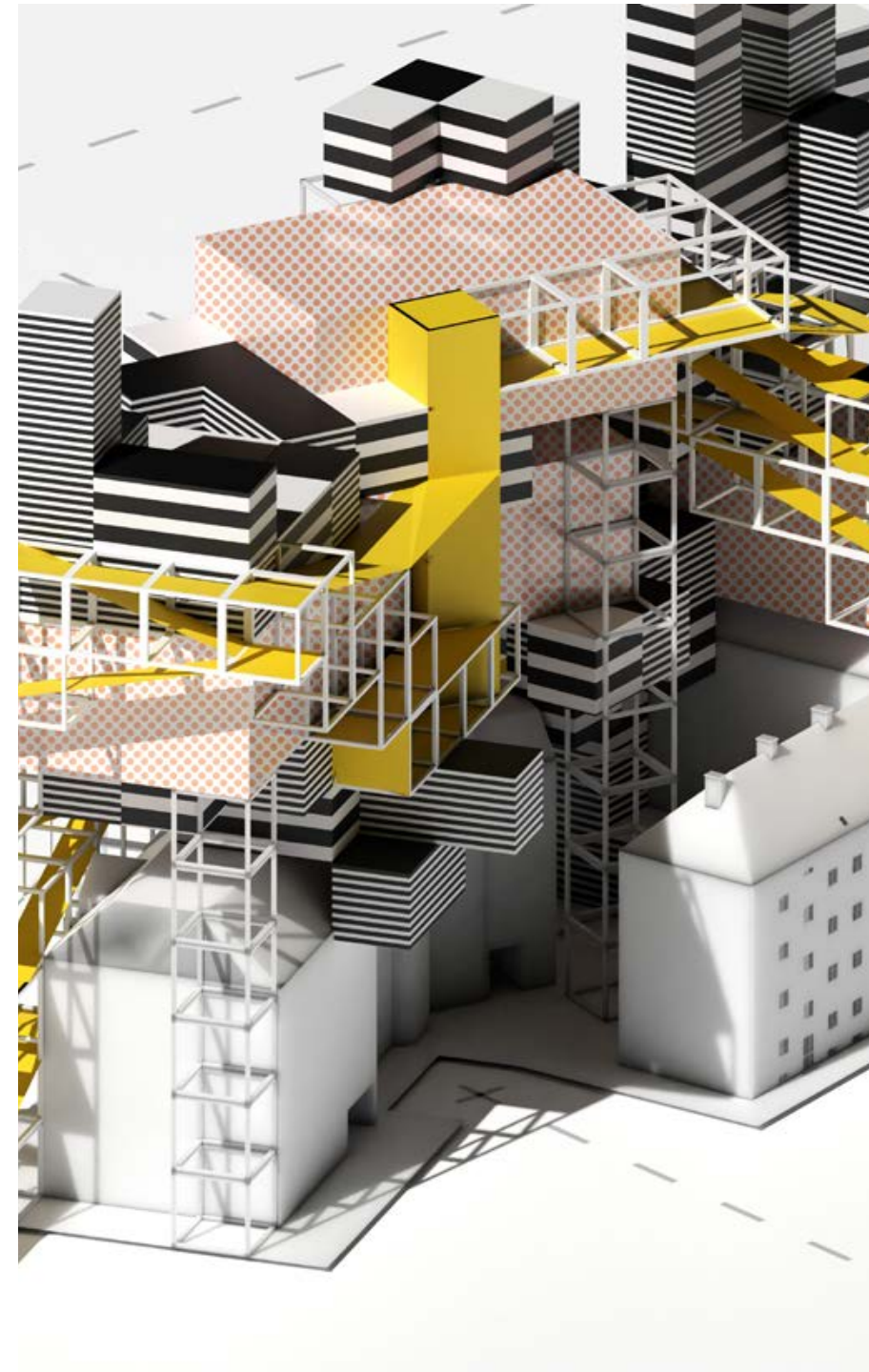
OSA
Ochs Schmidhuber Architekten
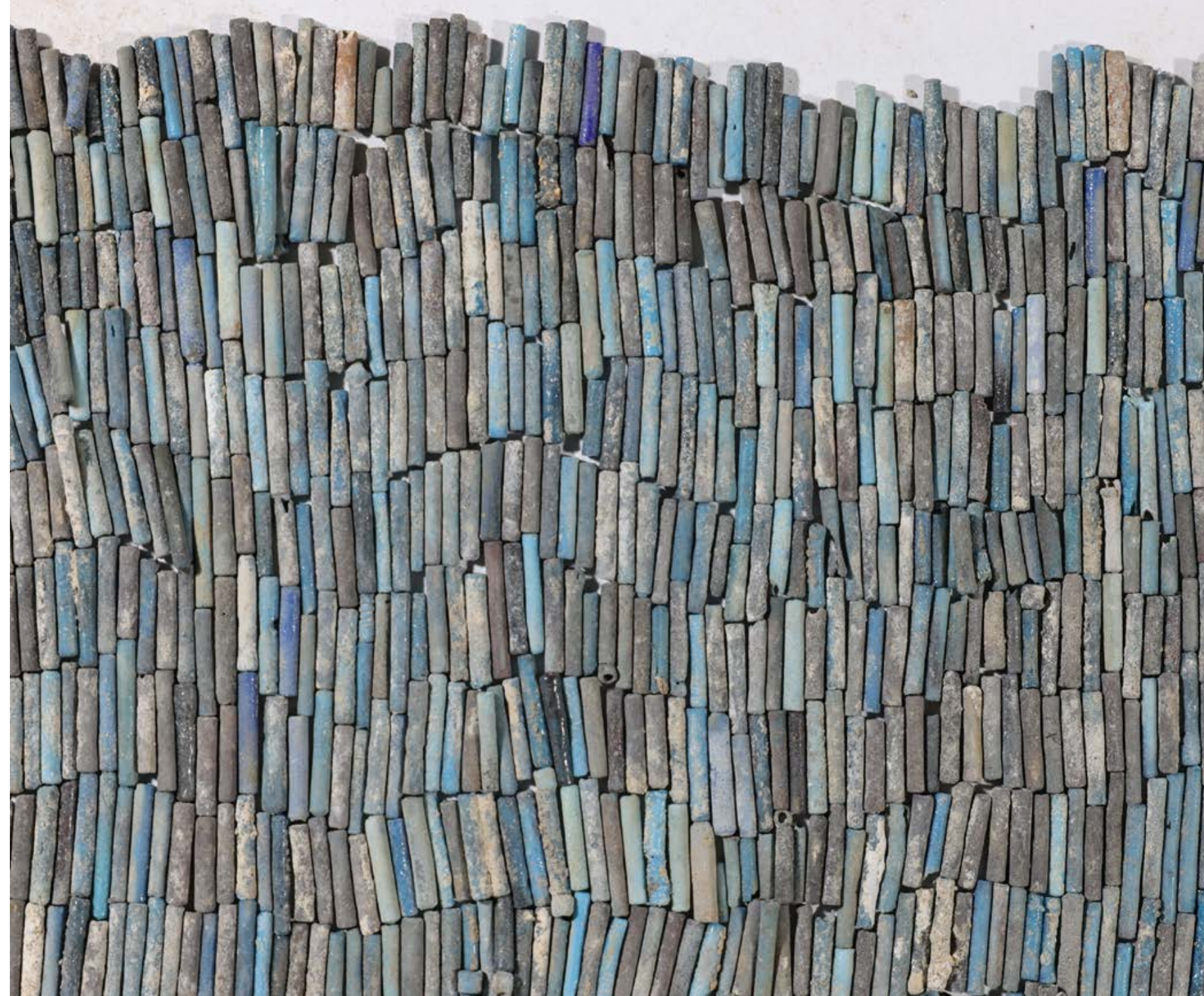
Future Urbanity: an analytical Approach in Spatial Densification. How can an already built city evolve to meet the changing needs of its residents?

This is the question we are addressing in this project. Mobility, housing shortage, leisure activities and local supply are the core issues that move us in the city and all lead to the challenges of mixed use and densification.

Future Urbanity is a parametric experiment focussing on complementing existing building structures with modular components which represent the key aspects: mobility, living, leisure (sports & recreation). Social and structural needs of an urban ecosystem are reflected through the different modules clinging to the existing building structures and creating a new symbiosis.

Be inspired and let's develop the idea of sustainable redensification together!

Expanding the Surface, Densification of pre-build structures

O(U)R: Office of (Un)certainty Research
Vikramaditya Prakash & Mark Jarzombek
University of Washington & MIT

Inspired by Kishkindha from the ancient Indic epic The Ramayana, the Office of (Un)certainty Research imagined a rewriting of the epic for the 21st century and relocating it in New York. Third to the two ideal cities in The Ramayana, Kishkindha is a forest city; not a city in the forest, but the forest as city. As such it is a city that is not one.

A form of speculative science fiction in video form best viewed with an Oculus, Kishkindha NY features a *beastie* that emerges from the slime of the docks and that works to produce a better world, the one that humans are incapable of achieving on their own. Built on the DNA of humans, octopus, mushrooms and spores, the beastie grows to the size of a city block, moving slowly along the streets, chewing up the buildings, digesting them into their molecular components and leaving behind the beginnings of a forest and a new world order.

The Kishkindha beastie is kin to fearsome creatures that are found in folklore and myth around the world: Balor (Celtic) or Gogmagog (Welsh), the Sphinx (Egypt), Polyphemus the Cyclops (Greece), or Onin (Japan), but also Jabberwocky of Lewis Carroll, Godzilla, Bumblebee and even Hanuman. These creatures inhabit a particular 'scale' in our imagination. They are larger and more powerful than humans, but are not all-powerful monotheistic abstractions. They have some of the attributes of demi-gods, but they are not deities spouting out rules by which humans are supposed to live. They have feelings, emotions, histories and above all consciousnesses.

The beastie is an anabiotic entity, a restorative to death. What has died, we claim, is the city, which is to say its ancient imaginary as the locus of civilization. Cities today are nothing but bad xerox copies of each other and yet we are condemned to live in them in ever greater numbers. What if – as in our science fictional account of an imagined Kishkinda NY – there is a whole new way to design the city. What if the forest which has traditionally sacrificed itself for the city, was to grow with the city? What if humans who have systematically purged animals from their cities, lived with animals with all the benefits and risks that that entailed? Rather than protecting ourselves from it, what if we lived with our planet?

The beastie is not driven by a moral code, but assumes that relationships will be worked out along the way with the passage of time. We hope that the new world is indeed better than the current one, but it will have to be judged in ways that are different from current standards, and that are impossible for us to imagine at the current time.

O(U)R: Office of (Un)certainty Research is a design research practice dedicated to rethinking architecture in terms of the emergent scientific, social and political parameters of the 21st century. O(U)R projects explore the entanglement between the planet and the cosmos.

Patricia MacKinnon-Day

MacKinnon-Day has spent the last 25 + years working in locations such as shipyards, housing estates, historic sailing vessels, and farms. The collective body of research aims to bring apparently uneventful and overlooked aspects of lived experience into visibility; to investigate the ordinary rather than the heroic and monumental; and to create ideas for art where it is not usually seen or practised. These same aims apply to her film work The Start of All Imaginings with the Chester traders' journey from an old to new market. This work has even more significance when exhibited in Venice - one of the most important historic trading centres in the world.

The Start of All Imaginings was developed through a series of visits that MacKinnon-Day made to Chester, UK during 2022 and 2023. She became intrigued with the city's historic market as goods have been traded in Chester for over 2,000 years, while the market charter was granted in 1159. In November 2022 a new market opened – completely modern in both design and construction.

Mackinnon-Day embedded herself in the old market: filming, observing, listening, and forming relationships with nine selected Chester Market traders. The series of films produced bring together interviews and behind-the-scenes footage exploring the realities of everyday market trading with the aim of raising the visibility of the traders' personal journeys. The films show the importance of markets, and their huge contribution to a sense of place within the context of regeneration. Mackinnon-Day uses the word *palimpsest* to describe this process of excavating and investigating the multiple layers within a specific context.

Mackinnon-Day's methodology is often deliberately slow and undramatic, a meticulous approach essential to her practice, allowing her to develop a respect for both people and place. The films explore a range of personal insights by traders about: migration, comradery, wellbeing, luxury, tastes, tradition, community, food origins, collaboration and even a love story. The films show the day-to-day realities of a market trader's life and their personal journeys including the sheer tenacity often needed to succeed. It acknowledges the value and significance of a local market community, and the unique social interaction between the traders and buyers in the defined market space.

Much of the research on markets has been to investigate their economic aspects. An ethnographic case study of a mid-western American flea market was carried out by Sherry[1] (1990) examining market buyer and seller behaviour, marketplace ambience. The social importance of markets has received little attention, except for a study by Watson and Wells[2] (2005) about social interaction and conflict in a north London market. Markets are public spaces; mini communities where various forms of sociality are enacted. A market's strength is its community, social inclusion, and care for others. With clear insight, one trader described it as simply *rubbing along…*

1. Sherry, John, F. (1990) A Sociocultural Analysis of a Midwestern American Flea Market. Journal of Consumer Research, Volume 17, Issue 1, June, Pages 13–30

2. Watson, Sophie, Wells, Karen (2005) Spaces of nostalgia: the hollowing out of a London market. Social & Cultural Geography Volume 6, Issue 1, June, Pages 17–30

The Start of All Imaginings, MRKT café traders (video still)
Patricia MacKinnon-Day, 2023

Paul Lukez Architecture

Parallels can be drawn between Boston, Massachusetts, and its harbor and Venice and its lagoon. Life in both cities is intertwined with water, the very source of energy that spawned these vibrant cities and their rich histories. However, each city's relationship with water does not follow a constant or predictable trajectory. These water-based cities are especially sensitive to climate change and its impact on each city's ability to survive. Their very existence comes into question. Time is limited for us to develop the tools required to combat the effects of climate change. These changes may require us to reconsider how we inhabit the city and its public and private spaces if we are to avoid this existential threat.

Paul Lukez Architecture (PLA) offers three sets of strategies to manage climate change. While focused on Boston's harbor, each strategy can take root in other low-lying cities hugging coastlines, including Venice. For these strategies we turn to design research and design explorations, hoping to develop design interventions that can protect and reinvent city life. PLA exhibits three sets of strategies and their corresponding tools for tackling climate change's effect on coastal cities. The strategies include:

1. *The Floating Bridge:* Infusing New Uses in Historic Structures. The Floating Bridge transforms Boston's Old Northern Avenue Bridge into a ship that docks at harborside destinations in Boston. In the process it becomes an iconic landmark with an identity that changes seasonally as it lands at different waterfronts, islands, or wharves.

2. *Hydroelectric Canal:* Generating Resilient Renewable Energy Systems and Communities. The Hydroelectric Canal proposes to transform Boston's Columbia Point peninsula into a self-sustaining, carbon-free net-zero-energy district, powered off sustainable grid systems including hydroelectric turbines.

3. *Dry Dock Greenhouse:* Creating Fresh Food and Re-generative Resources. An underutilized dry dock (operated by a government agency) becomes a renewable energy showcase that can be transformed into a botanical garden or vertical farm, all powered by solar energy, and geothermal energy.

Taken together, these three strategies can be part of a larger tool kit that will be required to protect our waterfront cities while re-imaging life in a new geography and ecology.

The Floating Bridge, Hydroelectric Canal & Dry Dock Greenhouse
Paul Lukez Architecture team, 2016 / 2015 /2023

Pedro Friedeberg

Hipnerotópolis. The city of love dreams. Pedro Friedeberg (Florence, Italy, 1936). Lives and works in Mexico City, Mexico. He is a visual artist and designer mostly known for his *Hand chair.* For this sculpture and design piece he has been the linked to the surrealist movement. His work is highly influenced by architecture and an obsessive sense of perspective, acquired during a lifelong exploration of all historical styles.

His development as an artist is a result of his opposition to the Bauhaus *Neufert* and Functionalist philosophies and lifestyles. Contrary to Hans Poelzig´s *Ornament is crime* school of thought; he underlines the importance of *antifunctionalism* as a mean to reach a depth of the senses and a more natural way to live and experience space and architecture.

Hipnerotomagia is the latest series of paintings and sculptures inspired by the XV-century *Hypnerotomachia Poliphili*, a bizarre, erotic, allegorical tale by Francesco Colonna. Once called by Carl Jung the first stream-of-consciousness novel, an oneiric story with archetypal characters and obsessive details on architecture, landscape, and costume.

Hipnerotópolis is an imaginary city where the problems of existence, time and space are solved in a dream of love. This installation is made of assembled wooden sculptures and gold leaf that recall fantastic architectural mock-ups of palaces and towers. These sculptures separate an inner space from the outer space and are allegoric to the artificial separation of these realms p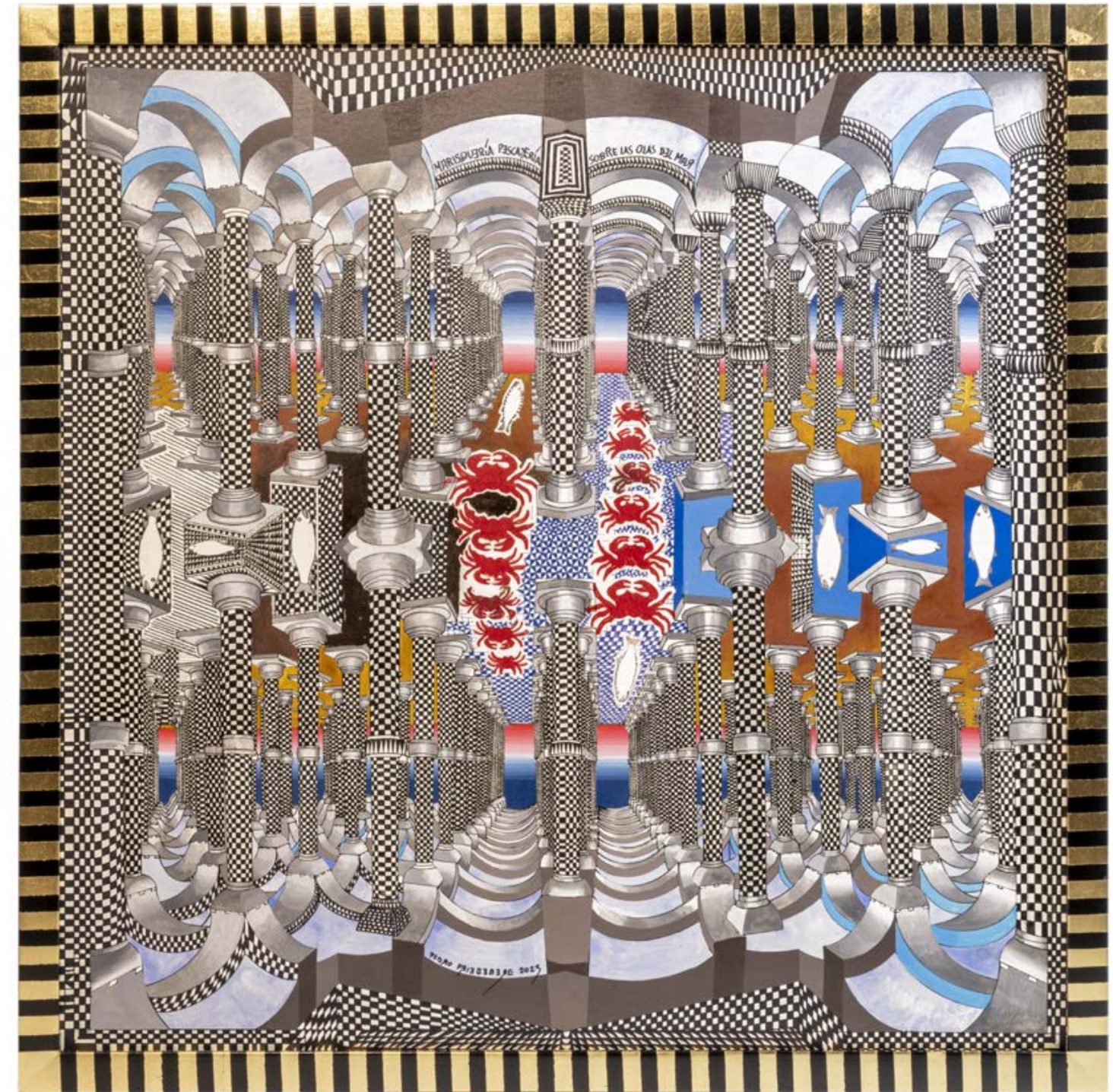roduced by architecture. Together these sculptures manifest the idea of the polis, the city. It allows the viewer to transit in the city in a dreamlike surrealist mode. Also, these towers explore the utopic concept of the *Object of vertu,* Objects of virtue, directly linked with the principles of the ideal architecture of Bramante, Brunelleschi, Borromini, Orsini, Bibiena and Piranesi; all of them crucial influences on his artistic legacy.

For these works, Friedeberg performs perspectives and seriations that function as an eclectic, semiotic theater of human civilization, baroque and mannerist theatrical sets with a touch of surrealism that equally house historical and fictional characters and geometric figures. Sacred geometry for Friedeberg is, in his own words, the only faith he professes.
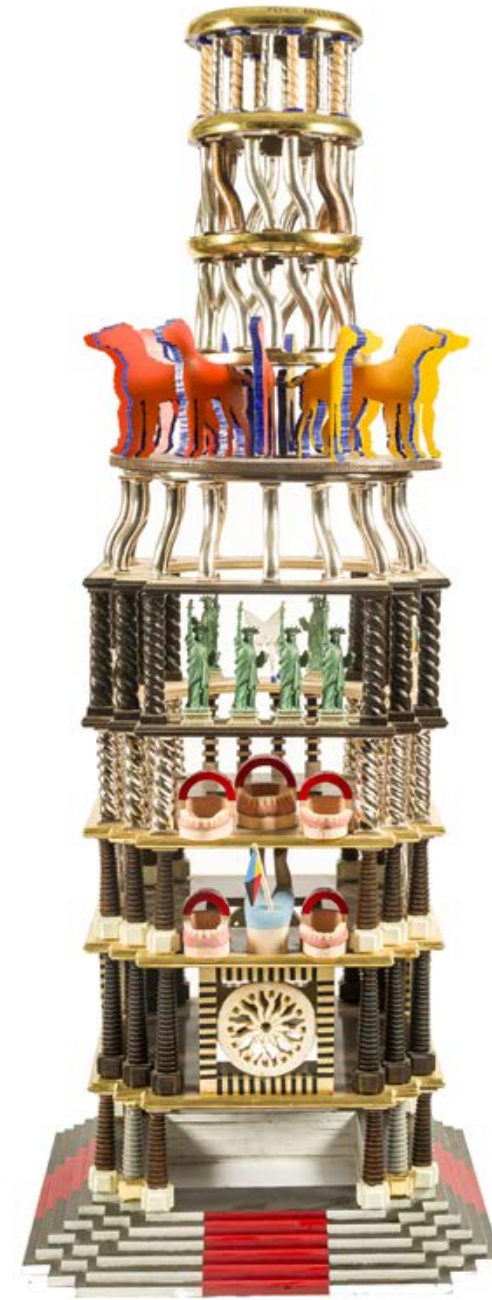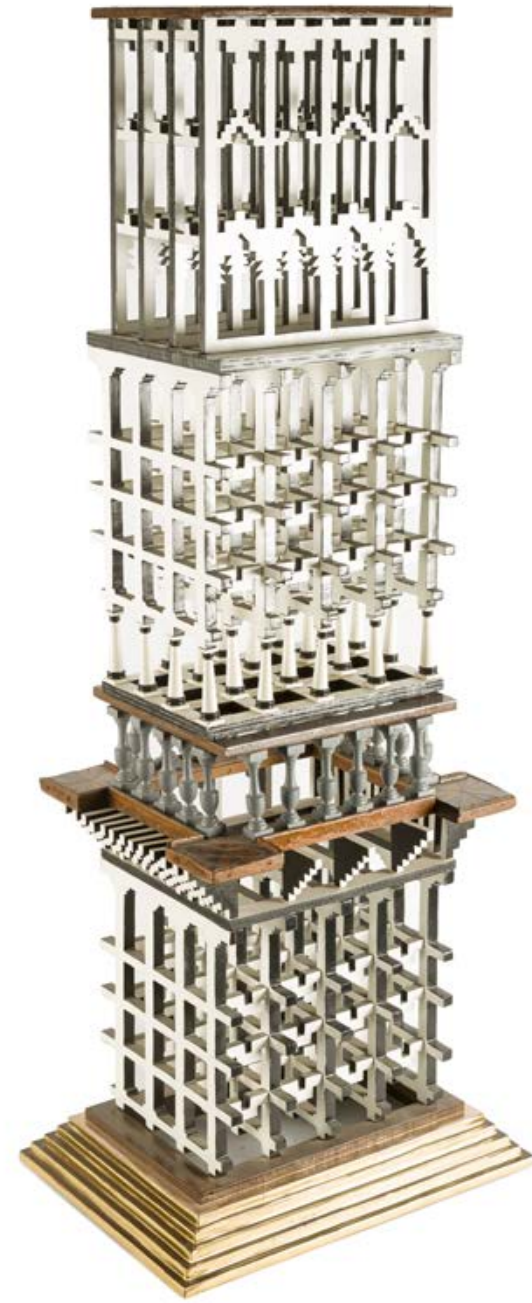
Friedeberg believes that the concentration should be on the beauty of arithmetic, in the mysticism that numbers contain. Each of his works has a series of elements that are included and repeated in detail. Every piece repetition has to do with the hidden meaning of a number, its multiple, or its ability to be divided or multiplied. Nothing is arbitrary, while most of his work is marked by cynicism, a deep sense of funny and ironic humor, and a proclivity for the absurd and ridiculous, even towards himself.

Thus, in a dream journey, *Hipnerotopolis* invites the viewers to immerse themselves in a *sui generis* world of shape, color and form, the result of the fusion of different elements from distinct values, traditions, and historical-aesthetic evolutions. A unique trip that only Pedro Friedeberg could create.

Curator: Alejandro Sordo

Control Tower of Felipe Ángeles Airport Before Installation of the Tehuantepec Isthmus Canal Telescope. Photo: Rodrigo Alcocer, 2021

Honradísimas oficinas transparentes del banco de la alegría universal y las prosperidades satisfactorias. Photo: Rodrigo Alcocer, 2021

Faro Cabalístico del Ex-hotel Metafísico de las 11,000 vírgenes. Photo: Rodrigo Alcocer, 2021

Palacete rodante de los Reyezuelos de inverisimimolandia en actitud tragicómica afectada o pleonasmica. Photo: Daniel Almeida, 2023

Penelas Architects
José Luis Esteban Penelas

Chemical & Microbiological Laboratory

Post-Industrial Aesthetics... The extremely complex functional facilities of the microbiological and chemical laboratory are hosted within a building marked by a post-industrial aesthetic character... compatible with a hyper-advanced image that aims to evoke emotions... *Urban Reactivator...* that revives the surrounding industrial landscape... through its perforated facades it filters the environment and generates its own interior landscape... *Hypertechnology...* the design of its exterior volumetric architecture is based on the hypertechnology of high-speed trains... and also based on the geometry of the Islamic West architecture, paying homage to Seville's architectural legacy... it is technology in dialogue with tradition... *Active Skins...* the building protects itself from the sun, providing its own shading thanks to the fractured design that creates a double facade... it creates an inner glass envelope and an outer super-perforated aluminium envelope are made up, generated with parametric-computational systems... between these two building envelopes, the effect of a solar chimney is created and adjusted depending of the function of each of the building's orientation: to the North with large perforations; to the West it is more opaque; to the East it receives the morning sun through variable perforations, and to the South – where the building facilities are located – it is practically opaque... *Exterior Skins, Variable Geometry...* the outer skin has variable geometry... with its perforations it shifts and blurs the light creating a more intimate interior space... the interior glass skin, with functional geometry, wraps the laboratories... *Functional Layers...* the interior is composed by superimposed spatial strata...

they generate a high spatial complexity, through the extension and overlapping slides of the different spaces and volumes... *The Staircase-Sculpture...* choreographs the building, with light descending from the lightwell... *Hypertransparencies...* the interiors are illuminated, with sunlight filtered through the skylights, passing through the transparent glass planes... creating a play of light and shadow... with optimal conditions to inhabit and work... *Friendly Accessibility...* a ramp-bridge over the void of the patio for universal accessibility... *Weightlessness and Lightness...* the building rises generating a sensation of weightlessness... it is suspended, with a large cantilever... *Superstructure...* a building of great sophistication, of reinforced concrete and steel, allowing for large spans across the building's interior, creating very diaphanous spaces, necessary for the functioning of the laboratory.... a slab-grid - visible on the lower levels of the façade – has a clean meeting point with the exterior skin... *Recyclable Materials...* aluminium, concrete, steel, and glass... a set of materials that enhances the building's expression and concept... *Spatial Symbiosis...* that creates a feeling of anticipation and magical stillness in its occupants...

Renato Maurizio Architekten

Since the founding of the office in 1981 in Maloja (CH), Renato Maurizio architects' projects have consistently reflected a particular style. The studio aims at developing buildings that relate to the context and the tradition of a certain area but also that are adapted to today's needs.

The buildings are usually constructed as visually strong and compact monoliths, reminiscent of mighty stone blocks or erratic rocks that have grown from the ground. These mountain houses relate more to the purely agriculturally used rural buildings and stand out clearly from the urban houses in the Engadin and Bergell region with their smoothly plastered facades in the town centers.

Due to the polygonal floor plans the buildings change character depending on the angle of view: sometimes they appear massive and wide, sometimes narrow and slender, or the facades seem shortened in perspective. Depending on which side one approaches the houses from, it can be perceived half of the facades and their length and the geometry is unclear. The confusion is intensified by the shadow effect, which reflects differently on the glass surfaces of the window depending on the lighting conditions on the front. The early experiments of the 20th century, which were trying to transform architectures' rationality into expressivity, can certainly be considered as an influence. The constructions, which are partly polygonal in shape, give even more insight into the respective character of the location.

In order not to weaken the presence of the volume, projected or protruding balconies are foregone. Instead, the studio prefers to plan generous loggias located mostly in corners, allowing for double-sided views. The window openings are also treated in a highly individualized manner. They divide the facades and specifically guide the light and the view of the landscape into the living spaces. Each window is in proportion to the room it serves. Even though the size of the windows is unusually extended, especially in the stone houses, the intimacy remains preserved nonetheless. The main rooms are always brought into relation with each other in such a way that the simplicity and order of the traditional buildings are maintained, appearing open and protective simultaneously. Thus, the house emerges as a kind of refuge, where the architecture conveys a sense of security.

The studio, preferably uses simple and haptic sensory materials which do not deny their origin but they tell a story. One such example is the quarry stones that are made from their excavation and are bricked to the facade masonry without much reworking. Another example is the raw larch wood that comes from the surrounding larch forest. The building materials are always installed raw so that they can age beautifully over time. By using these construction methods, the local building tradition is continued and overlaps with today's technology.

Vicosoprano Stone House
Photo: Giancarlo Gardin, 2013

Riwaq Centre

Engaged Margins.

Monumentality, authenticity, aesthetics, material, design, and use are common considerations during the rehabilitation of a heritage site. Under extreme geopolitical circumstances like those in Palestine, these considerations become convoluted. This is a place where colonial policies shape urban growth through a constant readjustment of a state of exception that extends to the most intimate space of one's home. Under this reality, the domain of heritage protection is as distanced from the geographic, natural, and historical contexts as heritage and urban space themselves.

The act to /regenerate:/ signals a tissue or organ's ability to recover and reproduce lost or damaged parts, a process of healing. What kind of spatial interventions could be introduced to initiate such a process in the Palestinian context? To /regenerate:/ here can be the act of initiating a dynamic socio-spatial process; one that creates temporal moments for heritage survival and integration within a collective memory and narrative that is doomed to erasure and loss. It can also establish spatial connections and opportunities for heritage integration within a contemporary urban space. Rather than its portrayal as a conservative practice, to /regenerate:/ in this context becomes a radical process of dynamic and incremental change, an act through which the divergence between heritage protection and surviving a violent urban context is redressed. As such, tactics of regeneration acknowledge the fragility and limitation of working in the margins to instill change, while also recognizing the fragility of the geopolitical and colonial context.

Engaged Margins is a moment of reflection on the regeneration of heritage sites in Palestine. It elaborates on Riwaq's ongoing initiative at the margins of Jerusalem, with a special focus on Kafr 'Aqab district: a marginalized space that has boomed into itself in the shadows of Israel's colonial policies of exclusion and fragmentation imposed on Jerusalem's urban space. The two-fold project involves both spatial excavation and manipulation, and social engagement. On the practical level, to / regenerate:/ the historic derelict space is to introduce a spatial strategy that transcends the act of renovation, excavation or rebuilding by prioritizing socio-spatial programs over preservation in the classical sense. This enables the roles of vernacular fabrics such as roofs, open spaces, family residential complexes, and green areas to be (re)shuffled, allowing for potential organic growth of public spaces and new spatial organization. On the social level, the introduction of social infrastructures engenders a renewed social connection with the site and its histories, while establishing a new narrative between heritage and contemporary spaces.

This intervention aims at engaging in a dialogue on the process of regeneration of the historic site and the dynamics of the rapidly evolving surroundings of Kafr 'Aqab. The premise of this dialogue is that the contemporary urban context is not a mere background for the regeneration project but a margin for reflection on the realities of space production and appropriation in a complex reality, which could help redefine what comprises heritage now and in the future. The dialogue is presented via themes such as growth, dereliction, ruin, fragility, permanency, intimacy, public, common, the everyday, and necessity; critical elaboration of these themes thereby unmasks the process of *urban growth*, regeneration, and placemaking in such an extreme context: a margin.

Curator: Iyad Issa

Production: Dana Abbas, Yousef Taha, Tareq Darnaser

Rowland+Broughton

At 7,908 feet (2,410.3 meters) in elevation within Colorado's majestic Rocky Mountains, Rowland+Broughton is uniquely positioned to experience the vulnerability of our rivers. Our studio is mere blocks from the banks of the Roaring Fork River, which begins at around 12,000 feet (3,637.6 metri) at America's Continental Divide and flows 70 miles (112,654.08 metri) downvalley before joining the Colorado River – the primary water source for seven states throughout the American West.

For decades, as a nation we have found comfort in the abundance of our natural water supply, but our good fortune is running dry. We have no option but to adapt by preserving what remains and finding new alternatives to meet the ever-increasing demand. To redefine beauty that is not dependent upon water.

By bringing this issue to a global audience, we ask ourselves not only, *What can we do?* but also, *How can we continue to find and redefine beauty in a world suffering from relentless global warming and overuse, and in doing so protect the life-blood of the American West and beyond?*
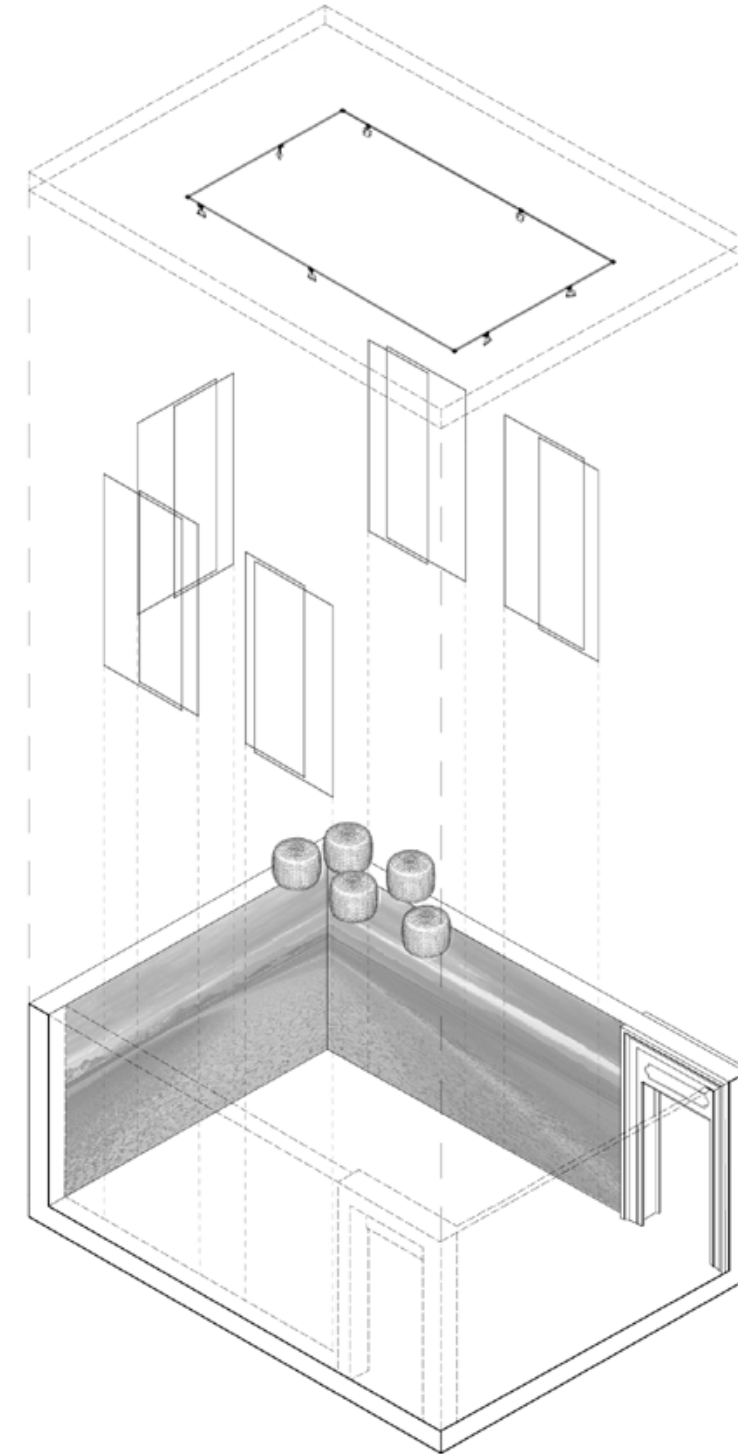
We welcome our opportunity to open new dialogues and present concepts and propositions at the 2023 Architecture Biennial in Venice, which, situated within a saltwater lagoon stretching along the shoreline between the mouths of the Po and Piave Rivers, is also dependent upon those waters for survival.

Embracing timeless, sustainable design, we rejoice in the abundance of beauty that surrounds us in our natural environment. We endeavor to protect our limited natural resources for future generations.

Through our exhibition, *Redefining Beauty*, we are bringing awareness to a global audience about our connection to our once mighty river. Through our architecture practice, we are testing materials that require less water, investigating building systems that utilize less carbon, and specifying landscapes that are endemic and sustainable. Exploring science that pushes technology, we are building to last.

When we build, let us think that we build forever.
John Ruskin

Axon View of *Redefine Beauty*
Rowland+Broughton, 2023

428　**Colorado River Delta**
Photo: Pete McBride, 2009

429　**Rendering View of *Redefine Beauty***
Rowland+Broughton, 2023

SAOTA and ARRCC

LIGHT SPACE LIFE is an exhibition that explores the three core values that underpin SAOTA and ARRCC's design principles.

LIGHT brings poetry to architecture. It is the very essence of perception, which is why one tends to see buildings not as objects, but as forms sculpted in light. The energy that is crucial to human life is also the force that reveals mass and renders form, allowing the observer to perceive colour, texture and space. It creates the atmosphere or ambience of a building, marks the passage of time and the rhythms of nature, connecting the life of a building to the life on a planetary scale. It influences the orientation of the architecture and how the buildings open to receive it, as well as how we need to control it and provide shelter from it.

SPACE is one of the most primal and fundamental experiences of being human. Think of architecture as analogous with a tree – something that provides shelter and a sense of place, but does not interrupt the landscape, seeking to formalise it and put a hat on it without disrupting the experience of it. SAOTA and ARRCC designs with the whole site in mind, the landscape and the views. The houses live out and invite the outside in. Gardens and courtyards allow nature to come into the building and be a part of the experience. The earth touches the architecture. At the same time interior spaces borrow from outside, striving to create light, fresh and open, but carefully layered spaces, that mediate the relationships with the setting, and with the rest of the house with sensitivity and a light touch.

LIFE is the true purpose of a building. Any good building is a celebration of human life, and all good architecture should be concerned with improving quality of life. People live in buildings for most of their lives, building relationships and families, learning and playing and living. The quality of these buildings has a profound effect on the ability to imagine a better future, to grow and to make a success of what we do. It is a key building block for a healthy society.

The ultimate success of a building rests on the question of whether it positively transforms the lives of its inhabitants. Does it make life better? There is a quality of magic about that. But it need not be radical; it can be gentle and humane.

Exhibitors: SAOTA and ARRCC
Partners: Poliform

Art Graphic Installation:
Atang Tshikare

School of Visual Arts, New York
BFA Interior Design: Built Environments Department

Renewal: Recovering Humans + Regenerative Energy

The road back to a productive life from a homeless or formerly incarcerated situation is not easy. Nor is it an uncomplicated task to receive one's own children, after years, who were previously placed in another's care while a parent was undergoing difficulties. The design studio took on this challenge to create a *Home* for twenty single parents and their children. In a three-month period, single parents would learn a trade in the re-harvesting industry (solar, water, wind, or geothermal), take parenting classes, and would receive their children one by one during their stay in an *expandable* apartment. The adult inhabitants would study and work in energy collecting trades while living in the building. In addition, they were taught to grow organic food and compost in NYC's dense urban environment. These activities provided a valuable message for the inhabitants and their children about the ways in which to help others, be sustainable and healthful, and to provide for our planet, while they were all working on their own renewal.

The students exhibited empathy for their *client* and conveyed their ideas of nurturing and protection. They worked to create a viable community among the recovering single parents, an inviting setting for their children, and a learning environment with a focus on renewable energy.

The process was to create a full building from the inside out starting with the individual room. Each student designed a room based on a given square footage of 320 sf (the square footage of a shipping container). The room was for a single parent but needed to be designed as a system that allowed for expansion – *in any direction* – so that one or two children could join the single parent. The room was the starting place for the parent to begin again and bond with, as well as educate, their children. After the students designed the single room, they multiplied the room count to twenty.

Classrooms for parents and children were added to the program, as well as communal exercise, dining, and socializing spaces to encourage interaction between the families. Public spaces were added to the ground level to educate others about the program and the energy being harvested inside. Shops offered products developed by the inhabitants that were connected to the energy emphasis of each building.

Students asked the following questions: How could our rooms or communal spaces be designed to change how people act, function, or relate to others in a better way? How could the idea of a home be embodied in the architecture? Could the inhabitants have a hand in creating their own space? Could they make it their own? How could our design be a teaching tool for the inhabitants and their children? How could we design a healthier and uplifting environment in which to heal? How could the building demonstrate what energy type it was harvesting? How could the building speak to the community outside? How can we make an environment that others would want in their neighborhoods?

Dr. Carol Bentel, Chair of the SVA ID:BE Department/Studio Instructor
Students: Xiran Geng, Dawn Hood, Hsiang-Ting Huang, Huanyu Kuang, Xinze Li, Camille Lyn-Morillo, Ugur Selin Ozderici, Stephanie Schiff, Botao Wang, Shaungyu Xi, Zicheng Xie, Ziheng Zhao

*A Transitional Place of Love*
Hsiang-Ting Huang, 2023

Shigeru Ban / Satoshi Itasaka
Shigeru Ban, founder of Shigeru Ban Architects
Satoshi Itasaka, founder of the design labo inc.

The *PASONA Natureverse* Pavilion at Expo 2025 Osaka, Kansai, Japan is planned to be relocated to Awaji Island after the Event. This is an island located in Hyogo Prefecture, Japan, that according to the oldest book, is "an island created by God at the beginning of time." It was also the epicentre of a major earthquake in 1995. This Island is a special place for Japanese people.

The 1995 earthquake caused many people to leave the island and because of that its economy started to deteriorate. Therefore, in 2008, the Pasona Group, a leading human resource solutions company, launched a regional development project on Awaji Island. This

place is home to monuments designed by Kenzo Tange and a group of buildings by Tadao Ando. Furthermore, a number of fascinating architectural projects are currently underway and it is recognised as the 'island of architecture' in Japan. This exhibition will highlight some of the architectural projects that Pasona Group is involved in on Awaji Island, including Shigeru Ban's ZEN Wellness SEINEI. It will also introduce Satoshi Itasaka's The *PASONA Natureverse* Pavilion at Expo 2025 Osaka, Kansai, Japan, which will be relocated there after the 2025 Kansai-Osaka Expo, and Sustainable Park KUJIRA, scheduled for completion in 2026.

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ZEN Wellness SEINEI
Shigeru Ban, photo by Hiroyuki Hirai, 2022

Siqueira + Azul Arquitetura
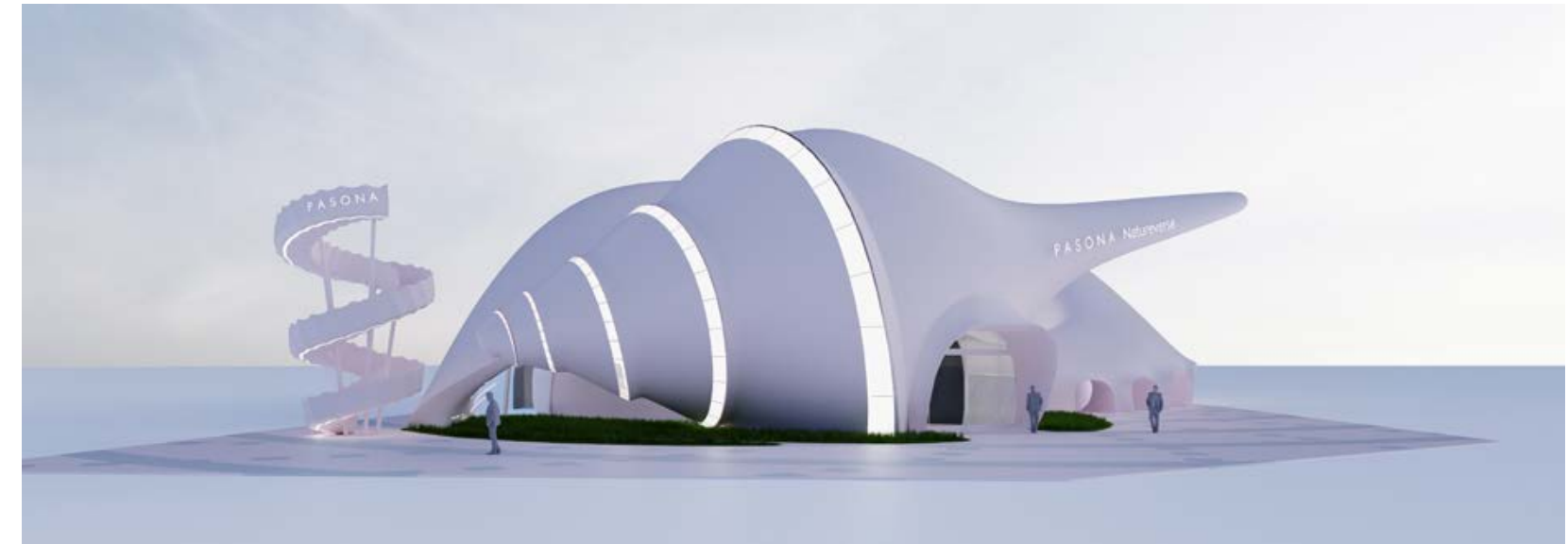
Square Bandstand

To think of a space that music and silence may occupy. A place that connects us to nature, guides us to the perception of our surroundings and ourselves. A space where time may not exist and beauty makes us silent and still. Within these walks and returns, a place for the sensorial to remain, as a sanctuary. To serve for the coexistence, where the art of music can unite and manifest itself in the combination of sounds and silences.

A Bandstand is a small-scale architectural construction of multiple uses, concentrated, almost like an object, but with strong symbology and memory. Usually situated within town squares, it carries an affective, childlike, poetic feeling, a place that brings back good memories. An equipment for entertainment and recreation of the population. A space with architectonic and landscaping qualities, area of convergence and centrality.

The etymological origin is complex and composed of many theories, but all lead to the outdoor built environment for music coming from *choir*, Greek *Khoros*, latin *Choru*. The basic architecture is composed of a circular floorplan, raised as a platform of elevated masonry flooring, the roof providing shelter from rain. The spherical configuration appeared in the schematic drawings accompanied by long sinuous lines which would become access points, evidencing the format of circular movements.

The admiration in noticing the resemblance of the sketches and schemes with the geometric tracing of the Archimedean Spiral, the Greek physicist and mathematician Archimedes, collaborated to the highlight of the set through curved and continuous lines of the guardrail, and the implementation of a circular ring. Stemming from the geometric curve that revolves around a central point, the design seeks to transform the feeling of a static architectural object into an architectural object in motion.

Ornaments and wefts constructed in iron for portals, balconies or decorative spheres, were important elements in the architecture reference and the path of artistic collaboration. The perception that the layout of the line in a spiral leads to the displacement in spin, in addition to the metallic railings and spheres, introduced the sculptural ring element, resting on the structural columns which compose the set. These columns, characterized by a plumb slender and slim structure, appear in cylindrical or monolithic form, consisting of a single block, composing in harmony with the also spherical masonry base. They receive the load from the octagonal glass roof and the upper circular element.

The ring element assumes the aesthetic role, just as the capitals of classical columns, being the most worked part of the set. The artistic drawing appears within a long strip, almost like a film strip, suggesting a visual narrative. From the upper central axis, a lean vertical rod emerges of harmonic proportions, ending in a scintillating sphere of generous diameter acting as a landmark, a territorial orientation evidenced by the brightness that reflects the sunlight.

The Bandstand representing the vigor of artistic and architectural expressions. Through the dynamic and fluid outline of natural elements, in pulsating solar brilliance symbolized by the sculptural ring in antagonistic language to the cadenced and rhythmic design of the representation of the solid earth component, the brick. Architecture being born and established from its own material. A space for lights and shadows to contemplate, experience and belong.

Square Bandstand
Image: Nex Architecture Visualization, 2023

Southeast University School of Architecture
Zhang Tong, Min Tian-yi, Cao Yun-hu,
Zou Li-jun, JI Yun-zhu

Garden is the spiritual home and artistic integration of Chinese literati. The *Garden of the Master of Nets* was originally named as *Yu Yin garden* (Garden of Fishing Retreat), referring to the owner's mental outlook of searching for retreat within the clamour of the city, while the *Net* of its current name presents a life style of retreating. The side yard located at the east end of the garden is named as *Cave of Cloud*, with a cavernous stone in front of its door. Stone is the root of cloud, symbolizing the tranquil and imperturbable mental state.

Modern people live in a world woven by the *Net*, that represents a life of ubiquity and disorientation. *Cloud*, whereas, is the vast accumulation of data and information, the complex integration of *Net*.

At the end of courtyard of *Cave of Cloud*, with the traditional pattern of ice-crack and the translucent substance, another *Light Cave of Cloud* is built, as the outdoor extension of the tea house, in this weightless, crumbling world, creating an anchoring place to gather the root of cloud and seclude the mind.

Studio Julia Janssen

Mapping the oblivion. Everything is data. Nowadays, not just our likes, swipes and clicks but almost all of our movements are being tracked and traced. Daily, we create unimaginable piles of data and share our personal lives with companies that are unknown to most of us. In return, we are provided with services that promise to make life more efficient and effortless. It has become normal to be guided by Artificial Intelligence on where to go next, what to buy and what songs to listen to. But aren't we relying on recommendations too easily?

Julia Janssen makes the challenges of our digitalising society tangible in art and design. She creates awareness of the impact of data, surveillance and Artificial Intelligence on our lives. She takes you on a journey behind the surface of the Internet by translating her research into performative and interactive installations. Janssen is an Amsterdam-based artist, designer and public speaker, regularly collaborating with lawyers, politicians, philosophers and scientists. Her work creates a movement towards a digital society where you can decide who knows what about you. Because sometimes, we need oblivion.

Mapping the oblivion is a series of works researching the space between the right to be forgotten and the desire to be preserved. The right to be forgotten is a European right and means that you can request any company to delete your personal data. An important right that works on paper, however, poses a multitude of challenges as it is practically impossible to execute. Data infrastructures are highly complicated, and it is a demanding task to know which company knows what about you. Moreover, it raises the question of what does it mean to be forgotten in a world that is built on data?

In this installation, Janssen researches the longing to rely on data. For companies, this entails targeting a specific audience in a way they can claim the highest revenue. For people, this includes navigating the complexity and endless possibilities that this world has to offer. We like to be sure without having to decide everything ourselves and like to back up our choices with numbers and percentages. We easily outsource the responsibility for our decisions, and we like to believe that they will help us in our search for happiness. But to what extent?

Will you only watch a movie that is at least 78% to your liking? Listen to songs in tailored playlists? Read news that pops up in your selected feed? Dine at restaurants that match your appetite above 86% and only buy the items that are directly offered to you? Do you want this for all aspects of your life and delegate your choice of lovers, friends, education, careers and voting to statistics and probabilities? If we are banning the unpredicted and outsmarting our own intuition with models we don't even understand, what is the purpose of being human?

Janssen shows the impact of recommendation systems on her life. She visualises the space between frictionless and freedom, obedience and oblivion. In her work, you immediately feel the scale to which data buzzes around us. *Mapping the oblivion* searches for the right to be forgotten while we increasingly live within the mere margins of algorithms. How do we allow the unexpected?

TANNERHECHT Architecture
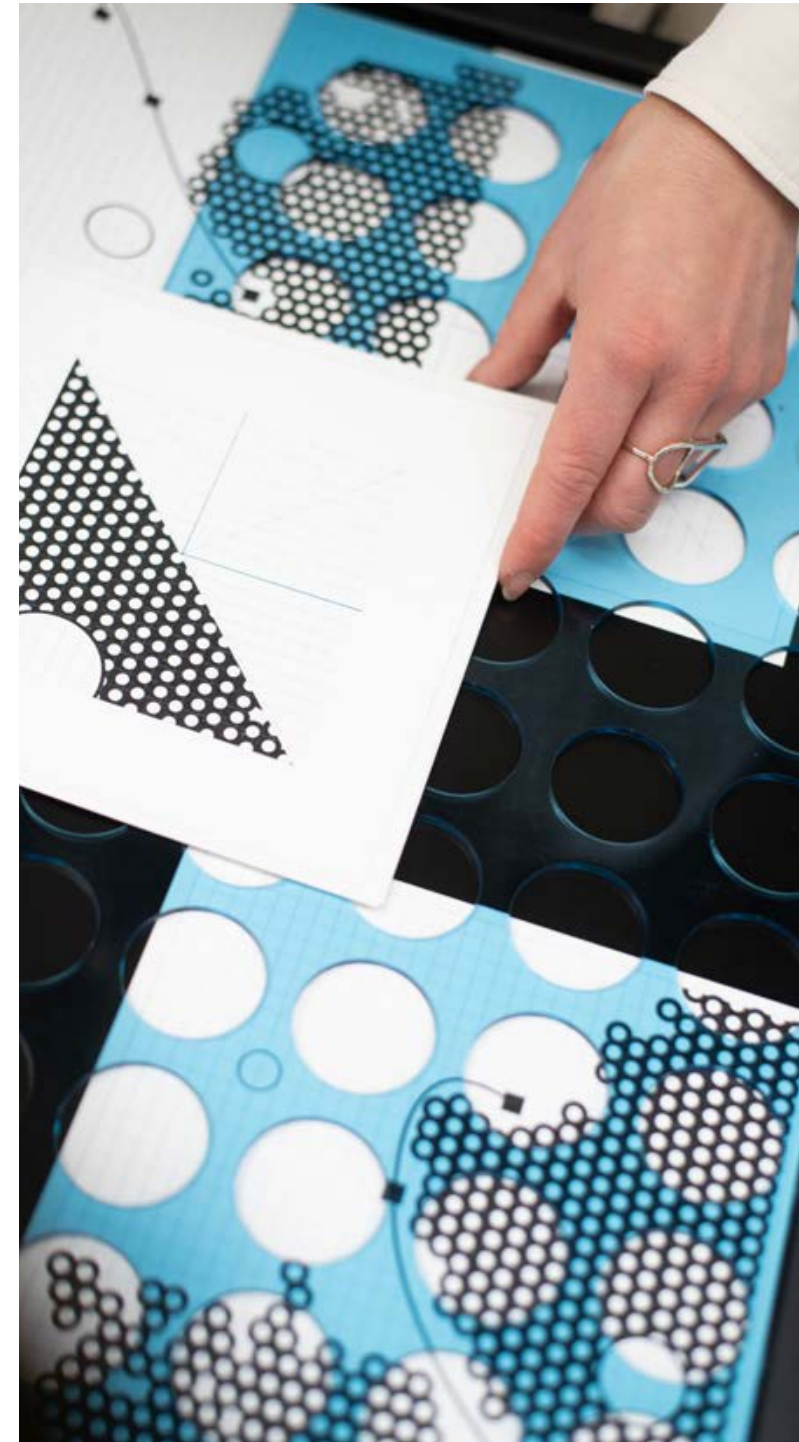
An interpretation.

Time: Bridges perception. Time provides a matrix with evolving points of view of the present. All is temporary. We build, we use, and we repurpose architecture: *Past-Present-Future*. Consciousness of time motivates us with resources, provides the history of the past, the immediacy of the present, and allows for our projections of the future.

Space: Is represented by boundaries both real and imagined. These limits of perception are visual, acoustical, and tangible, often defined by the Architect's built environment.

Existence: Is fleeting. We are called to contribute to the present: Architecture is leaving markers, signposts of where we have been, our history. We continue by incorporating our past into a new existence, bridging what was with what we see as an idealized future.

The Architect's Challenge: Provide the Stage for human experience and – in part – Direct the Show.

TANNERHECHT is a California-based architectural practice with studios in San Francisco and San Diego focusing on multi-family, adaptive reuse, and institutional projects.

ICON San Diego
Photo: David Hewitt/Anne Garrison, 2007

Cannery Lofts Newport Beach
Photo: Toby Ponnay, 2005

Fort Stockton San Diego
TANNERHECHT Architecture, 2023

Team Integrated
AW2 Architects, Brunet Saunier Architecture,
B&M Architects, Harris & Kjisik Architects

The Meilahti Bridge Hospital (Finnish: Siltasairaala) creates a new western façade for the HUS (Hospital District of Helsinki and Uusimaa) Meilahti campus, located north of the centre of Helsinki. It sits on the edge of Seurasaarenselkä Bay and faces the magnificent granite formations and the seascape of the Gulf of Finland on one side and the main campus square on the other. The consortium Team Integrated was selected to design the project via an architectural competition. The consortium consists of four architectural offices: AW2 Architects, Brunet Saunier Architecture, B&M Architects and Harris & Kjisik Architects.

The Meilahti Bridge Hospital links and unifies all the components of the Meilahti hospital site and its surroundings – the sea, granite rocks, underground tunnels and existing buildings, on the hospital campus. The new building links the existing and newly created emergency and cancer departments on the campus, creating a large, unified hospital facility designed to enhance the hospital's operational efficiency and facilitate the flow of patients, staff and students. The Meilahti Bridge Hospital is composed of two building volumes linked by a bridge, containing a public auditorium to be used by all the staff, patients and visitors of the hospital. Not included in the initial programme, this element is an iconic specificity of the project, which even gave it its name, Siltasairaala – the *bridge hospital*. On the north side of the bridge is the Cancer centre and on the south side the state of the art emergency department, operating rooms, a 58-bed intensive care unit, organ transplantation and plastic surgery services, the outpatient trauma department, several residential units including 215 beds, restaurant, cafeteria, pharmacy and several conference rooms. The cancer centre houses day care spaces, an oncology department with radiology, a cafeteria and support services for patients and their families.

The hospital design by Team Integrated skillfully exploits the triangular shape of the plot to give unity to the the university campus. On the campus side, its different volumes frame the main square of the hospital site and animate it with elegant glass and aluminum facades. On the Seurasaarenselkä Bay side, they offer a plinth to the existing buildings of Meilahti and a new façade towards the Paciuksenkatu street. Another significant aspect of the proposal is the flexibility of its spatial concept. The meeting between the regular and generic grid and the singular triangular geometry of the hospital site generates numerous spaces for interaction within the circulation system which can be used as waiting, resting or meeting spaces. The unique structural grid of the ward – 8.4 × 8.4 × 4.8m – allows a great freedom in the programming and layout of the floors, as well in the superposition of functions. These dimensions also offer generous spaces both in terms of circulation, with corridors 2.9-3.0m wide and for the bedrooms, whose average surface area is 27m^2 (for a single bedroom).

The collaborative working method was extended to all parties of the project and went on during the whole design process and the construction phases. Very early on, a *Big Room* comprising workrooms, meeting rooms and an immersive cave was installed within the hospital campus in order to bring together in the same place, up to three days a week, HUS team members, technicians and designers, the general contractor and the future users.

Technion, Israel Institute of Technology
Smart Social Strategy Lab (3Slab)

Constellation of Loneliness. Social Topographies of cities.
Have you ever seen loneliness? How can we do something about if we don't know what it looks like?

Constellation of Loneliness visualizes loneliness through a data-based digital city model. We don't leave urban loneliness in spreadsheets and lengthy reports. We want to experience its presence, to understand its meanings, so we can challenge the structures and policies that contribute to it. We invite you step inside the digital city model, to move beyond analyzing social data. We are curious to find out what better insights, decisions, and choices we make when we *experience* data. Will they be more ethical? More creative? More wholesome?

What makes a city? Its landscape? Its built environment? Its economy? For us the answer is simple, the city is its people, and its most important precious database is the social one. This is why we make *social topographies*, a method by which the dry numbers of statistical aggregation transform into compelling, provocative, and affect-inducing images. Once we see loneliness, the rehearsed rationalization mechanisms of the viewer are short-circuited, and a new emotional-visceral response may facilitate empathy, accountability, and creativity in articulating policy. In utilizing municipal data and bottom-up knowledge, we test the potential value of the aesthetic impact of visualized data for social research. We want to *show* you cities in ways you haven't seen before.

What is urban loneliness? The sociology of cities marks the duality of the modern metropolis as simultaneously crowded and suffocating as well lonely and alienating. Privacy becomes a struggle as much as isolation. We a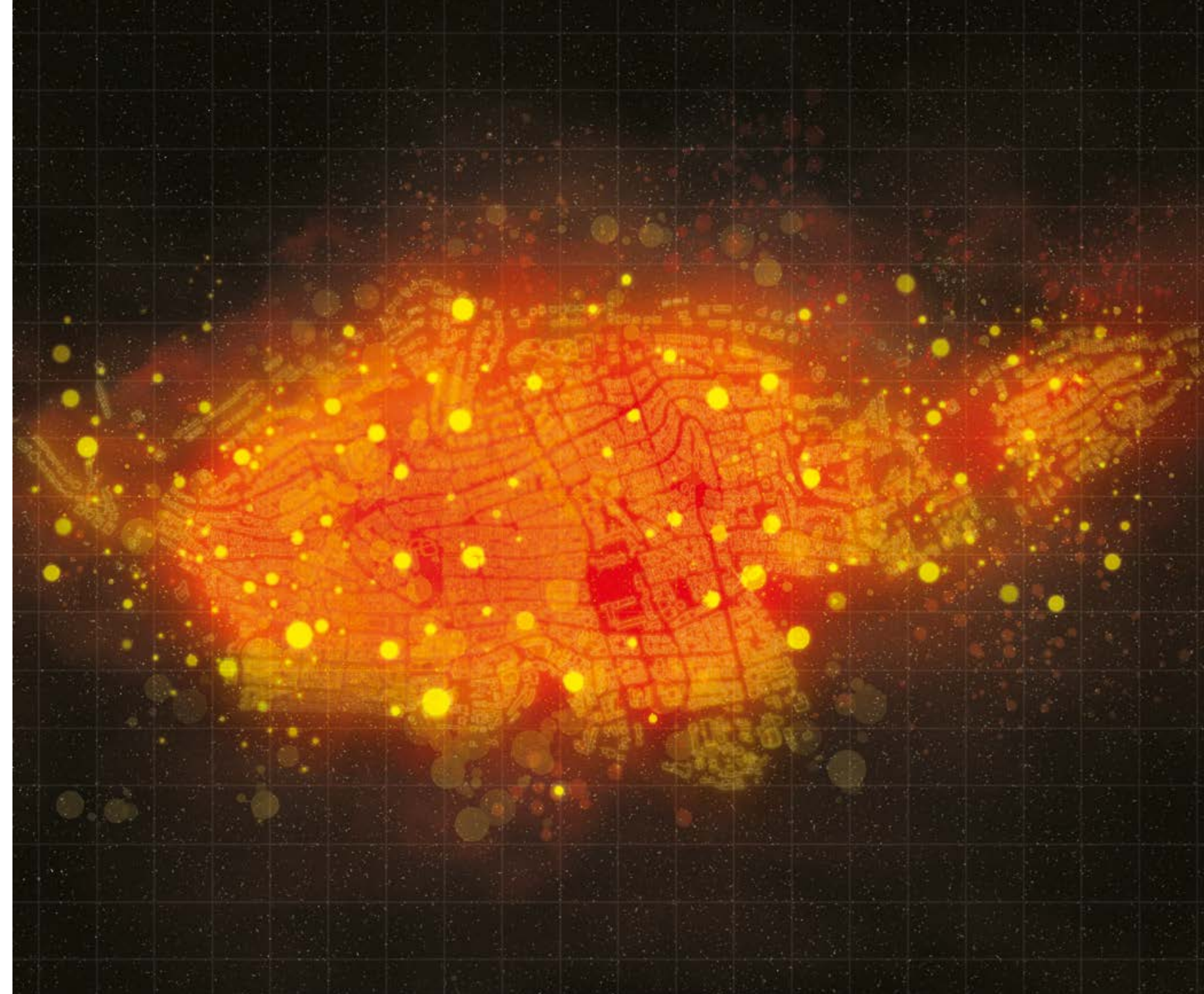re desperate to remain anonymous but must also be known to somebody. In the realities of the post-industrial, semi-computerized, proto-digital cities of today, while big data is used to manage the city and control its inhabitants from a distance, communities tend to migrate to online spheres and virtual terrains. Municipal services, groceries, and entertainment are all delivers to our flats with digital sterility.

In 2017-2021, authorities recorded an outstandingly high rate of bodies found in a state of advanced decay in the Hadar neighbourhood of Haifa. These people were found days, weeks, and sometimes months, after having passed away in their homes, completely alone. By visualizing the data sets that surrounds this tragedy, we explore what fragments of a fragile, ambivalent, humane, and emotional reality float through the anonymized numbers collected by the welfare services and the municipality on those who lived in social isolation and, and died in complete solitude. The information that gathers through the piling of GIS layers slowly becomes an image of isolated bright spots connected by lines on the dark background where the city map used to be.

The resulting image highlights the patterns of the database's blueprint, its shadows. This data-shadow resembles a celestial constellation of stars, separated by countless time space, connected through the work of our imagination. The lines connecting the spots mark both the challenge of loneliness, but also the potential power of the community to reach out and bridge the distance.

The Smart Social Strategy Lab (3Slab), headed by urban sociologist Dr Meirav Aharon Gutman and a team of performance researcher Dr Raz Weiner, designer Roni Mero, architect Batel Yossef-Ravid, landscape architect Ye'ela Gundar-Levi and architecture student Ilan Israelov.

Technische Hochschule Mittelhessen
University of Applied Sciences, Giessen
Thomas Vinson & Christine Döbert

use.less. The construction industry is one of the world's most resource-intensive industrial sectors. The increase scarcity of resources and the reduction in carbon emissions required in the wake of global warming make it imperative to rethink how we design and construct buildings. We urgently require a culture of construction that spares resources. The design of buildings should take its cue far more strongly from the redevelopment and further development of materials and not hinge on what can be created using new materials.

The issue of how construction industry waste products and materials left over after demolition can give rise to a new design is something that students at the Department of Architecture and Civil Engineering at Technische Hochschule Mittelhessen have explored in their semester projects. Great importance was attached to the aesthetics and the formal idiom of the structures they developed. Only if sustainability is combined with aesthetics does it have a chance of succeeding.

waste.less presents the design for a building as an information point. The underlying material used consisted of cut-offs left over from right-sizing cross-laminated timber on construction sites. A basic module was developed using the leftover pieces of wood that can be combined at will and arranged in rows. A wide array of shapes and built volumes can be realized using the modules, from rectangular standard volumes right through to curved edifices. The dynamic shape of the design proposal expresses the scope the modules offer for the design. It arises from the deformation of a cube, whose upper surface is bent up at one corner. This results in a doubly curved roof surface that with its opening gesture denotes the entrance to the structure.

drop.less is based on making use of building rubble. After the buildings in question were demolished, the rubble was roughly pre-sorted and crushed, creating material of various sizes. By means of a self-compacting concrete, rubble units were then developed to form panel elements that, among other things, can be deployed as façade elements. The rubble units create a textured relief on the surface of the panels that is distributed across the homogenous and very smooth surface of the concrete by way of contrast. Each demolition results in a unique and characteristic composition of rubble units. The panels' design and aesthetic are determined by the chance availability of materials on site on each occasion. The outcome is a combination from and appreciation of the demolition as well as attention to the structural changes in the material.

stand.less was born from large volumes of cross-laminated timber and steel that were used for laboratory experiments. The material was to be assigned a new function. The size of the experimental volume modules is superbly suited to provide seating on the campus. The challenge here was to change the experimental volumes as economically as possible and with minimum intervention. The focus here was on retaining the shape and also the comfortable function of the seating to ensure the long and proper use on campus.

drop.less structures: brick in concrete
Student project by Moritz Hoffart, 2022

TETRO
Carlos Maia, Débora Mendes & Igor Macedo

Located in Belo Horizonte, Brazil, Tetro is formed by architects Carlos Maia, Débora Mendes and Igor Macedo. The office's professional practice is based on the careful study of the premises and conditions presented by the location and the client, always seeking for a unique and irreplicable solution to each project. Fundamentals such as the integration with nature, the use of apparent materials and the exploration of empty spaces are characteristics that permeate all the work, from urban-scaled projects to furniture design. Allied to these questions, the team's work takes the tradition of Brazilian modern architecture as a starting point, rethinking some of its main concepts in order to answer with innovation contemporary problems in architecture.

At the 2023 *Time Space Experience*, Tetro presents its recent *India House* project, located on the shore of Lake Lingambudhi, in Mysore, southern India. The project, which has already broken ground, is inserted in a huge and complex site of about 13,000 square meters, in the middle of a dense urban fabric with building with up to three floors. The rear chevron however, faces a rich riparian forest that creates a barrier to the exuberant view of the lake.

The correct organization of the program, in addition to the solving of functional necessities of the clients, creates elements to minimize the negative aspects of the land and enhance the perception over the positive points. The volumetric concept is distributed along three main elements: the volcanic stone hills, emerging from the ground up to provide privacy to the social and living areas; a suspended horizontal pavilion, where the intimate areas of the house are located and protected; and a 17-meters tal tower that houses the library and a spa, both overlooking the spectacular landscape.

The implementation of the project and the precise positioning of the openings favor the entrance of natural ventilation and the control of solar incidence, while the brise-soleil made out of reforestation wood contribute to the thermal regulation of the building. Therefore, the house occupies the land in a sustainable way and rationally uses natural resources, being the result of extensive research on a specific type of design that seeks to be a proper answer to all of these characteristics of the place where it is inserted and its local culture.

India House (Rear Facade)
Image: Igor Macedo & Matheus Rosendo, 2022

The Tower of Wind
Anna Maria Indrio (Atenastudio, Project Leader),
Henning Frederiksen, Christian Fogh
with artist Simone Aaberg Kærn

TOW - The Tower of Wind. The *Tower of Wind* is a truly sustainable project. In collaboration with DMI (Danish Meteorological Institute), CLT - Denmark and System Engineering, a team of architects consisting of Henning Frederiksen, Christian Fogh and Anna Maria Indrio (Project leader, Atenastudio), will erect, operate and later dismantle for reuse, a pavilion in Copenhagen named *The Tower of Wind*.

In the *Tower of Wind,* the public will experience a journey through the history of meteorology and weather instruments, and get an insight into what the future holds in terms of climate challenges. -In Athens stands the original *Tower of Wind,* said to be the world's first meteorological observatory. This ancient monument, which dates back to Greek times and can be found today at the foot of the Acropolis, was designed to measure the wind and sun to aid the navigation of ships.

The pavilion in Copenhagen is a retelling of the ancient monument and a tribute to the world's climate goals as a contemporary observation tower. Several weather instruments will be set up here, where the public can see the measurements from these instruments without delay. In the Tower of Wind there will be exhibited aspects of wind, sun and water and their interaction.

The architectural idea. The *Tower of Wind* will have a strong symbolic value in the urban landscape In its sleek, simple and beautiful appearance, the tower will signal attention to our natural elements: wind, sun and water.

Stepping into the space, one learns about these natural elements and the importance of technology in solving the climate problems of the future.

The tower consists of an octagonal room, slightly sloping towards the top and forming in its interior a space of about 4.5 metres in diameter. By tilting the 8-metre long panels, which are shaped in one piece, by about 3 degrees, a strong and alluring view is achieved towards the top, through which the sky is glimpsed and the instruments are placed visible from the outside.

It is an almost sacred space that evokes a strongly emotional architectural experience, which is emphasised by the materials of the monochrome space. The panels are made of CLT (cross laminated timber) sheets, whose static properties are very promising. The wood is laid in different directions in the panels, giving a beautiful play in the natural surface. They are beautiful in their own right, and we want to show the potential of the material and its infinite architectural possibilities in the pavilion. The roof of the top is thought to be made of concentric rings of the same material, which will become a kind of domed roof surface on the inside. Light will fall softly along the octagonal sides and spill down to the exhibition area, where displays and other information will be shown. Indeed, the walls of the seven sides will hang the whole story of climate and its challenges.

There is only one entrance to the Tower, open to 10-15 people at a time. At night, the *Tower of Wind* will shine against the sky, evoking lighthouses of the past. Events with the reference to the exhibition and the UIA congress can be set up around the tower.

The Tower has an important artistic contribution *The Eight Winds and the Sun* made by artist Simone Aaberg Kærn. Simone deals with the significance of the eight winds in a world marked by climate change and share her artistic process of transforming the ancient frieze depicting the eight wind deities – Boreas N, Kaikias NE, Apeliotes E, Eurus SE, Notus S, Livas SW, Zephyrus W, and Skiron NW – into a contemporary form. Additionally, she performs the process of working with the original sundials. In the inside of the tower a globe will hang from the top and the rain will follow on it from the open roof.

Tondolo Architects & Urban Planners

Statement. The community day hospital, early childhood development centre and elderly day care centre are building typologies designed as prototypes for social facilities in underdeveloped rural and low-income urban communities in South Africa.

The objective of these projects is to introduce public facilities in residential districts which will become focal points in the community not only for the services they offer but also for the quality of the spaces that host them and the experiential effect of well-being which they elicit.

The design of these buildings is guided by the philosophy of biophilia, which considers the psychological and physical effects environments have on people, and the hypothesis of gaia which evaluates the impact of built structures on natural environments and vice versa.

Biophilia focuses on connections and relationships that people subconsciously seek with life-forms and nature. Spaces and environments become biophilic when they strengthen lived experiences and give support to the sociological and psychological expectations of the people inhabiting them. Through a holistic approach to the design, the sensory and emotional well-being of the users is enhanced. Furthermore the biophilic space which responds to the socio-cultural context and functional requirements of a locus, comes to define the spirit of that space and renders it unique.

While biophilia relates to the way environments affect people emotionally, gaia focuses on the effects man made interventions have on the natural environment and how the characteristics of natural environments impact man's physical developments. Gaia therefore encompasses the principles of sustainability which are guidelines for the design of built structures as well as man-made interventions in nature. In this process a synergy or homeostasis is achieved between man-made artefacts and nature.

The concept of the Day Hospital is based on a small village incorporating a diversity of social spaces integrated into an holistic functional structure. *The village* reflects the ethos of the community in terms of life-style, cultural characteristics and socio-economic background. Similarly the building typology is representative of the local built environment characterized by single storey houses, pitched roofs with small overhangs, bricks walls, steel roof sheets, timber and plaster finishes.

The greening of *the village* is undertaken to create an asset for the sustainability of the project. The planting of trees and shrubs provides shading that reduces heat gain and ambient temperatures inside the building. Ground cover with grass and plants is the landscaping that prevents the reflection of heat from the ground. Besides these functional benefits, the green environment provides visual pleasure and an atmosphere of relaxation to the users.

The design of the early childhood development and the elderly care centres is based on a concept that will foster social interaction between children and elderly citizens. The buildings are positioned along a common pedestrian route and to enhance personal interaction the entrance halls are juxtaposed to face each other. The spaces inside these buildings are planned to meet the functional and experiential needs of the two different age groups and their facades are enlivened with colours and formal details that are appropriate for each group. Both buildings are designed to respond to the principles of sustainability and the greening of the site is undertaken with the same criteria as for *the village*.

Transpecies Design

Curator: Dean Adrian Parr,
College of Design, University of Oregon

In May 2019, the United Nations released the *Global Assessment Report on Biodiversity and Ecosystem Services* warning that human activities will drive nearly one million species to extinction in a few decades. The primary reasons for this are habitat loss and biodiversity demise caused by changing climate, pollution, introducing nonindigenous species, clearing of land, and overpopulation and consumption.

These findings present the following challenge: how might the design and development of the built environment contribute to the flourishing of a variety of species?

The call for transpecies design proposes that humans, as codenizens of a shared planet, must shift from an anthropocentric mindset in exchange for a worldview in service of the earth's magnificent biodiversity. Some neighbors are known and familiar, such as plants, birds, and bees. Others, like microbes and subterranean organisms, remain abstract and easily overlooked.

Adrian Parr, with the generous support of Sue & Mort Fuller and Larry Bruton, recognizes that through design there is an opportunity and responsibility to improve not only the quality of human lives, but also those of symbiotic neighbors, both big and small. Through design, humanity can acknowledge the harm inflicted by their predecessors upon the earth by restoring and revitalizing damaged environments, leaning on and learning from nature's own incredible designs.

The exhibited works explore various approaches on how to realize and put to work transpecies design principles. These projects are integral to the University of Oregon's Environment Initiative and they represent current research by faculty and students in the College of Design, along with work from designers and artists across the United States who participated in the Overlook transpecies design retreat. The scope of work ranges from regional forest management to microbial ecosystems within individual homes. Exploring the exhibition will show the promise of a transpecies designed world.

MATERIALS AND MICROBES

The Biology and the Built Environment Center (BioBE)

Does wood species impact our built environment microbiome?

Exposed wood in buildings has a positive emotional impact on occupants; however, it may also have unseen physiological impacts on their health. This may be driven, in part, by the influence of wood to shape a building's microbiome through selective pressures created by terpenoid emissions, tannins, porosity and moisture buffering. Wood is a porous, natural material that can foster microbes on its surfaces but many of these are sequestered into wood's pores and difficult to recover; therefore, also more difficult to

LIGHT AND MICROBES

The Biology and the Built Environment Center (BioBE)

Daylight exposure modulates bacterial communities associated with household dust

Daylight is elemental to architecture and life on earth. Humans have evolved outdoors with daylight in a co-existence with single-celled organisms such as bacteria. But how does daylight affect communities of bacteria in human-constructed new habitats, such as indoor built environments? To better understand this question, we isolated homogenized house dust inside self-contained "microcosms" (sealed architectural models scaled down with typical

WHITE KING MINE

Kayla Coyne and Thomas Freedman

An acidic pond in the Fremont National Forest hides a dormant uranium pit mine that once operated a mere sixteen miles outside of Lakeview, Oregon from 1955 to 1965. In 2001 the 140 acre

FORMOSA MINE

Katie Reifsnyder and Marissa Perez

A site once teeming with Oregon coastal Coho Salmon and Steelhead Trout, it is now a river of acid waterbeds that seeps into the surrounding watersheds. Now, the local flora and fauna are hard pressed to rebuild while politics around environmental restoration languish. The Idaho

California Poppy ●
Eschscholzia Californica

● **California Lilacs**
Ceanothus Spp

● **Tail Oregon Grape**
Berberis Aquifolium

● **Tarweed**
Madia Elegans

Sculptural Planter ▲

▼ Nesting Planters

Straw Nesting Habitat ▲

● **Catmint**
Nepeta X Faassenii

● **Showy Milkweed**
Asclepias Speciosa

▲ Nesting Planters

▲ Pyramid Planter

Above Ground Nester Habitat ▲

Oregon's Mosiac (part I)
Image: Elisandra Garcia, 2023

Rain Recycling System ▼

Artificial Bee Burrow ▼

▲ Irrigated Planter Beds

Kokkedama ▲

▲ Camera Monitoring System

Composite Prototype System ●
for Urban Native Pollinators

Structural System ●
Modular and Adaptive

Trans-Species Facade ●
Prototypes + Structural System

Vertical Meadow for Urban Native Pollinators ●
Oregon, USA

Image: Elisandra Garcia, 2023

University of Adelaide
Master of Architecture

Final Architecture Project. Questions of existence are ethical. How do we make our world a better place? Architecture can, not just by improving existing structures or achieving spatial efficiency, but by projecting alternate realities. Oscar Wilde wrote: 'A map of the world that does not include Utopia is not worth even glancing at...Progress is the realisation of Utopias.' While architecture lies at the centre of our social contract, ordering individual and communal experiences of time and space, the architecture studio provides a place for progressive speculation and the creation of new realities. This involves risk. We value risky thinking, encouraging students to interrogate cultural, economic, and technological practices for future modes of existence.

Each student project explores a different issue through critical investigation and rigorous analysis of alternative forms of spatial and social organisation. In doing so, they arrive at genuinely original expressions and solutions. Hugh Adare addresses the 'right to repair' in a high-tech agricultural world, with a floating weather farm that extracts CO^2 from the atmosphere. Xinyu Chen conceives a moving building that collects plastic waste from beaches to produce high-protein foods. Zihe Chen proposes a framework for rehabilitation of open-pit mines, aiming to re-establish diverse ecosystems by 3D printing specific habitats. By weaving a performative surplus into a coherent narrative and hypothesizing feasible implementation processes, these works evidence our students' innovative thinking. They show young architects confident in a world of constant change, in environments that are negotiable, taking creative responsibility for the production of new realities.

The Paduli Gateway. The history of Australia is shaped by migration and a vibrant Italian community has grown since the 1950s. The family connections that exist across time and space are celebrated in this elective studio – a gateway monument – which explores the contributions of migrants from Italy, specifically Paduli in Benevento, to Australia. Designs were prepared by master of architecture students who responded to a brief prepared by the Campania Club (conceived by John Di Fede, Nicola Minicozzi and Arthur Di Fede) in Adelaide, Australia, and the Comune di Paduli. The students were led by Professor George Zillante and Professor Tony Giannone with Associate Professor Katharine Bartsch and assistance from consulting engineer Lelio Bibbo. Mayor Domenico Vessichelli and Filiberto Minicozzi represented the Comune di Paduli.

Six students worked in pairs to produce three designs. Each scheme reflected the cultural awareness of the students who each had their own story of migration. Melissa Bullen and Lotte Symonds prepared a sculptural tree celebrating the roots of migration blossoming in Australia. Danni Iylia Noor Dahlan and William Jury examined photos and artefacts of migrants to inspire *The Frame of Paduli.* Nur Azmina Mohd Azli and Michael Robert List described their design, selected by the organising committee and built in Paduli, as a: *series of connected doorways that directly face Adelaide, reflecting the themes of immigration and journeys.*

Katharine Bartsch, Discipline Lead, Architecture & Landscape Architecture. Urs Bette, Program Director, Master of Architecture.

Studio Leaders: Urs Bette, James Curry, David Kroll, Athanasios Lazarou, Mirai Morita, Peter Scriver, Amit Srivastava

University of Adelaide + tectvs
TAP Workshop + Studio

The University of Adelaide…

We bring together the collaborative work by students of The University of Adelaide (Australia), Tongji University (China) and The Politecnico di Milano, Mantova Campus (Italy) over a six year Design Workshop Programme. They have fostered collaboration between Education and Industry with design studios: tectvs, vittorio longheu architetto, studio moscatelli.

The Workshops have examined the effect of cultural regionalism in the reactivation of buildings + urban realms under the effects of rapid urbanisation in our cities. Shanghai 2014: *Lilong Housing Regeneration;* Mantova 2015: *Mantova Waterfront;* Adelaide 2016: *Adelaide Gaol;* Shanghai 2017: *The Spatial Module of Shanghai Traditional Streets;* Mantova 2018: *Mantova Piazza_ Design;* Adelaide 2019: *East End Precinct.*

In Shanghai, the fine grain of Lilong housing opened our eyes to the de-construction of traditional Chinese communities. We felt the sense of community of the Lilong residents amongst the shadows of their tall *progressive* neighbors. In Mantova, an emotionally provoking site with the stillness and silence walking over the remnants of a Jewish Cemetery. Adelaide revisited buildings as part of colonial penal traditions resonating spiritual mystery and whispering walls. The second iteration delved deeper into the fabric of the City. In Shanghai, we immersed ourselves into the Streets of the French Concession intervening with art installations. In Mantova, the urban form of Italian civic pride, the piazza was repurposed into a relevant era. In Adelaide, the youngest City both historically and culturally, reinvigorating the original laneways of the East End Precinct.

The Workshops provoked students into the regionalism vs globalism debate, advocating a collaborative design ethos for the cultural diversity of our regions as opposed to the roll out of the international pro-forma.

Narrative: Tre: 3 Universities : 3 Cities : 3 Cultures. *Time:* is the people that participated at that point in their life. *Space:* is the built + natural + cultural fabric of the city of the workshop. *Existence:* is the design resolution of the workshop.

We also present the findings of a six year vertical research project examining Educational Sustainability. The results suggest that societal and educational culture plays a role that is as important as that of the construction culture of that country.

Of great validity has been the patronage of these workshops under the UNESCO Chair in Architectural Preservation and Planning in World Heritage Cities residing in the Politecnico di Milano, Mantova.

…with tectvs

tectvs was founded in 1989, without reference to individuals, rather a collaborative studio that individuals could share, espouse, and grow. The studio values friendship, family and culture deeply embedded through family movement, migrated and translated itself into the Australian landscape – a multicultural country of many immigrant stories that helped establish and influence the urban design realm of Adelaide.

The story of tectvs recounts a cultural process of design separated from our mono-cultural context in Australia. The design story is represented by struggle, trace, translation, and fusion, and eventually by storytelling, memory and passage. The question always remains through the design process, is a style or aesthetic of building translated into a foreign landscape, conflict or mediatory in a tolerant society.

The University of Adelaide:
Antonio Giannone, George Zillante, Christopher Findlay, Katharine Bartsch, Alan Peters, Athanasios Lazarou
The Politecnico di Milano: Federico Bucci, Laura Pierantoni, Matteo Moscatelli, Luca Cardani, Angelo Lorenzi
Tongji University: Jianlong Zhang, Cen Wei, Harry den Hartog
Tectvs: Antonio Giannone, Francesco Bonato, Gary Bonato 2023: Melissa Bedford, Darren Yoon, Adrian Rossi, Dina Cocca, Dimitrios Kontakos, Nicole Wilksch, Hanyu Zhang, Fiorina Donato, Daniella Cianca, Dearne Mills, Jianjun Bi

472

473

Workshops 2014 to 2019
1 year per column, U. Adelaide

tectvs documentation
2 bottom rows, tectvs

University of Pennsylvania Autonomous Manufacturing Lab, UCL, Imperial College, University of Bath, Empa

Robert Stuart-Smith, Mirko Kovac, Vijay Pawar,
Chris Williams, Paul Shepherd

Aerial Additive Manufacturing (Aerial AM). The construction industry is adopting additive manufacturing (AM) technologies for onsite construction due to their ability to reduce the time and cost of building. On-site AM typically involves the continuous extrusion of horizontal layers of material using a gantry, larger than the build volume, to move a single extruder mechanism. Transporting and installing such gantry systems limits AM to easily accessible sites. In contrast, Aerial AM, enables swarm-based, parallel manufacturing in remote, or hard-to-access locations, providing greater flexibility and boundless manufacturing. Having recently published in Nature a demonstration of the world's first Aerial AM with cementitious and composite materials in-flight, this exhibition showcases architectural designs that speculate on the potential of aerial additively manufactured architecture. Two projects are presented; a tower of near-infinite height, and a large-span shell. Both explore the logistical and aesthetic possibilities of an unbounded swarm-constructed architecture.

Aerial AM Shell (AAMS). Most AM building designs are constrained to vertically extruded geometries, with floors or roofs constructed by other means, which limits building automation and material efficiencies achievable in monolithic free-form geometries such as funicular shell structures. Shells provide long-spanning spatial enclosure with a minimal amount of material, yet require support scaffolding during construction. Although less efficient than a funicular shell, AAMS is realizable without temporary supports. A shell geometry is reinforced throughout construction with ridging, trussing,

and vertical props in regions of high structural deflection or shallow inclination identified by frequent analysis in-the-loop. The design is developed through a multi-agent simulation within the Aerial AM software framework, aligning it with actual real-time design and construction workflows. Its incremental swarm-building approach opens possibilities for adaptive or regenerative building, where architecture might be realized through acts of continuous construction or modification over time.

Aerial AM Tower. A custom algorithm produces a structurally efficient concrete tower geometry of 2km in height, whose topological complexity and inclination would be infeasible to construct by traditional building or gantry-based AM approaches. Unbounded, Aerial AM is theoretically able to construct the tower as a filagree exoskeleton, partially designed through the act of construction without support scaffolds. A simulated swarm of aerial robots collectively builds, self-organizing as they move upwards along the surface of a virtual model of the tower. The intricate geometry of the exoskeleton arises from aerial robot agent-to-agent local interactions, resulting in an emergent exoskeleton formation that is intrinsic to the structural geometry of the tower and the act of aerial swarm construction.

Institutions:
University of Pennsylvania,
Imperial College London,
University College London,
University of Bath, Empa.
Aerial AM Shell:
Robert Stuart-Smith,

Patrick Danahy, Mirko Kovac,
Vijay Pawar
Aerial AM Tower:
Robert Stuart-Smith, Chris
Williams, Paul Shepherd, Vijay
Pawar, Mirko Kovac, Andrew
Homick, Patrick Danahy

UNSW Sydney, Ainslie Murray

The *Registry of Itinerant Architectures* is an online register that records encounters with wild, mobile, fleeting and unlikely structures in varied geographic, social, cultural and political settings. It exists on the edge of interdisciplinary art and architecture practice, resisting and disrupting the conventions of architectural experience and record-keeping. The *Registry* incorporates a dynamic mix of moving image, text and artefact, brought together in an open-access online environment that is available for instant and ongoing global dissemination.

The *Registry of Itinerant Architectures* is developed by the mobile artist – the Registrar – who walks or moves with mobile communities and repeatedly attempts to apprehend forms of itinerant architecture through observation, imagination, narrative and memory. In doing so, the *Registry of Itinerant Architectures* poses a twinned question: is this architecture, and who is the architect?

Forms of itinerant architectures may include mobile natural and built architectures, fleeting and invisible structures, condensations and sedimentations, weather events. This is a playful artistic practice that is mobile itself precisely as it investigates other mobilities; the *Registry* moves with and creates itinerant space with its subjects. Evidence of itinerant architectures is published at www.itinerant.academy to formulate a steady and cumulative body of work. A global audience considers each work as a proposition and then accepts it or rejects it, actively co-creating the *Registry* over time.

The *Registry* currently takes the form of an object-laden atmospheric vortex in which users may click on a moving object to discover a series of small tents encountered on the Larapinta Trail in the Tjoriṯja West MacDonnell Ranges in central Australia. A violent dust storm spins across the arid landscape, propelling tents, trees and debris into a landscape of material disorder. Audiences navigate the environment to closely observe the vortex, speeding it up or slowing it down according to their will. The method of navigation demands an engagement with itinerancy as objects move within the swirling space, requiring the user to *capture* them as part of their inquiry. Once captured, detailed architectural information about the objects is revealed before they are cast back into the vortex. The inbuilt liveliness of content and interaction enables the audience to form a dynamic relationship with the research, and actively pushes the boundaries of contemporary spatial practice.

This project is supported by School of Built Environment at UNSW Sydney and Project Anywhere. The online environment is developed by James Hargrave of ABSTRACT8.

**UNSW Sydney, Joshua Zeunert, Alys Daroy,
Leo Murray, Josephine Wilson**

Shallow Roots, Deep Incisions is an audiovisual installation exploring the *agricultural sublime* – the awe, beauty and terror of Australia's agri-food production landscapes. Agriculture covers half the continent's land – an area similar in size to the entire European Union. Yet 86% of Australia's 26 million inhabitants live in urban or suburban areas, which constitute only 0.5% of the total landmass. The work offers a means of stemming an increasing separation between food production and consumption as a result of urbanisation and agricultural intensification.

Three-hundred panoramic aerial scenes of archetypal food production landscapes spanning all of Australia's states and territories, commodities and major industries, and scales of commercial farming are paired with Johann Sebastian Bach's epic *Toccata and Fugue in D Minor*.

The work invites contemplation of agri-landscapes' spatial and temporal qualities as dislocated *mirrors* of our consumption patterns. It aims to make Australia's food producing landscapes more visible and to improve agricultural landscape and environmental literacy. Through doing so, it hopes to motivate landcare and stewardship, and to encourage more ecologically sustainable dietary choices and land management practices.

Anthropoiesis is a soundscape by Dr Alys Daroy, Dr Joshua Zeunert, Dr Leo Murray and Dr Josephine Wilson. It invites us to reconfigure our relations with time, space and existence in the Anthropocene age. It asks: what does it mean to live enfolded by deep time when humans have become a new geologic agent? Given that *poiesis* is to make, transform, or bring forth, how can we reimagine our geologic future? Where is beauty to be found amidst the terror of biodiversity loss and climate change and how can we create a sublime poetics of kin-making?

This assemblage of *sound debris* combines organic and human-constructed landscapes recorded on sites across Western and Central Australia and beyond. These reflect the many scales and layers of more-than-human existence, from the granular to expansive. Sounds are layered with new writing and text adapted from David Farrier's *Anthropocene Poetics* (2019).
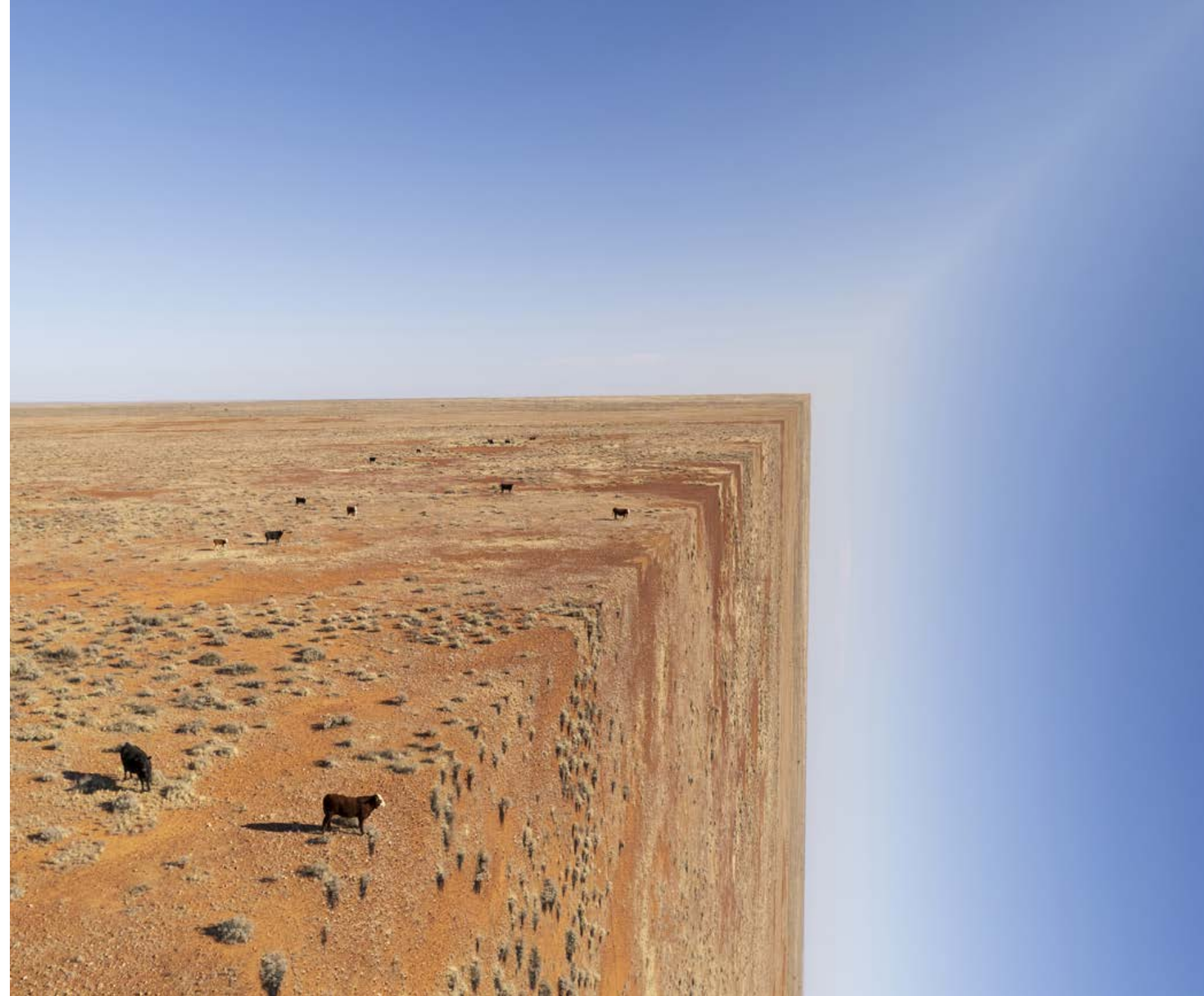
UPA - Urbanism Planning Architecture
Aswan Zubaidi, Paolo Lettieri, Sahar Yousif

UPA - Urbanism Planning Architecture is an Italian-Emirati Studio with offices in Abu Dhabi, Milan and Baghdad. Bringing together international talent, along with the knowledge and insights of a team of consultants and experts, UPA has created architectural solutions for a range of projects, from hospitals to villas, from hotels to schools and auditoriums to towers. UPA has worked with public and private clients from across Europe, the Middle East and Asia, including the United Arab Emirates, Italy, Iraq, Azerbaijan, Russia, Qatar, Jordan, Switzerland, Poland, Kyrgyzstan and Uzbekistan providing everything from architecture and engineering work to site supervision and project management.

Our work has seen us tackle difficult and complex projects with a zest for coming up with out-of-the-box thinking and solutions. We put attention-to-detail first with every concept and every blueprint, giving us the toolset, we need to take on large, multifaceted projects that require only the highest architectural standards.

After years of practicing all around several countries and with different cultures and environment, we've formed our philosophy around three central pillars:

Passion. Our passion for timeless Italian architecture is what gives us the focus and drive to push ourselves to the limit on every project. We live and breathe design work that inspires, and from the planning stage to the end product.

Expertise. With over fifteen years' experience working at the highest level of the architectural industry, we've got the expertise, the know-how and the training to design buildings that always stand the test of time. It's not just about the art though – we also know how to construct engineering solutions that are built to last.

Diversity. We think that the best architectural firms draw their talent from a diverse pool of architects. With that in mind, our company is made up of gifted individuals from a range of art disciplines, backgrounds, cultures and countries to give us the edge in bringing unforgettable architecture to the table.

We make passion, expertise and diversity the key ingredients of our projects. Each project is declined taking into consideration the culture of who will use the building and the specificity of the genius loci. We don't have pre-packaged designs and don't follow rigid styles to impose a one-sided vision: ours is an organic approach for always different and unique architectures.

Abu Dhabi Ladies Club & VGIK Auditorium in Moscow

Ying Yi Chua
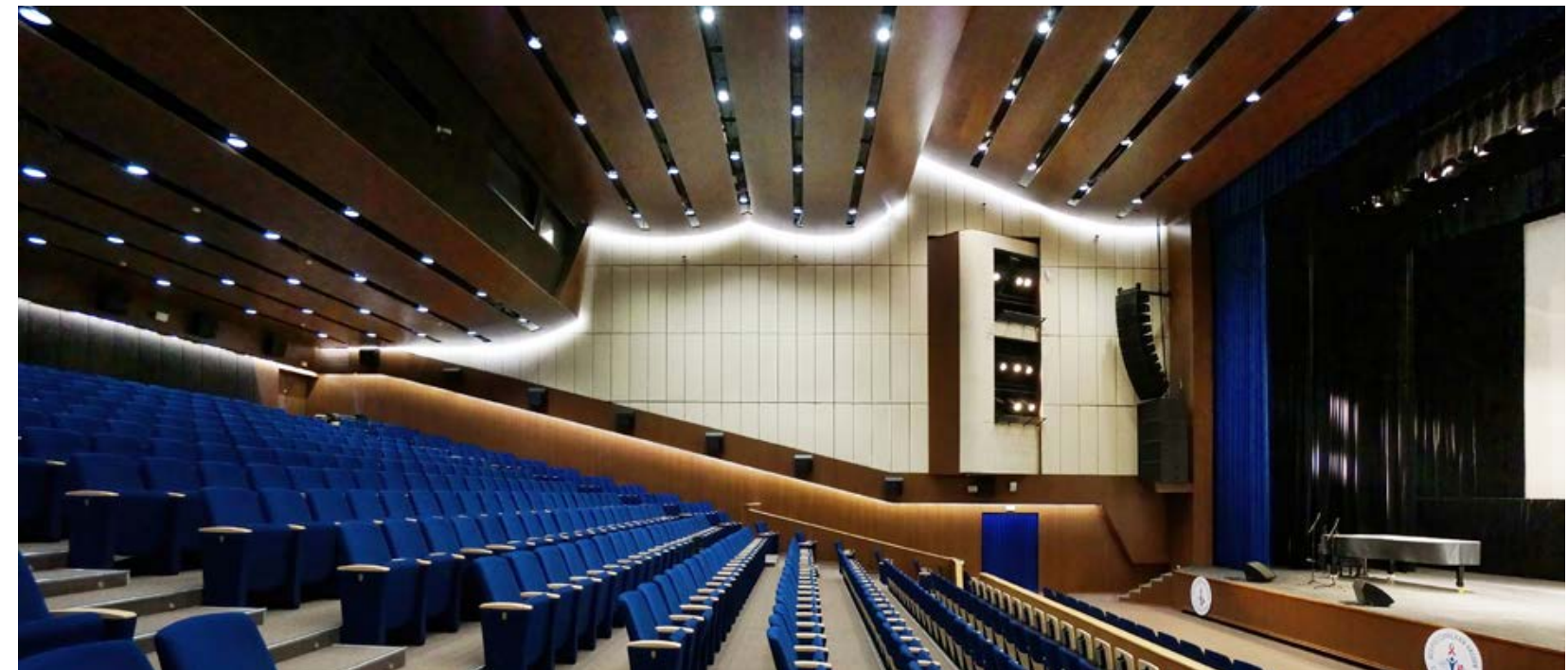
Urbanscapes: contemplations on the Meaninglessness of Looking. How does one look at the contemporary world ? To look is one of the fundamental activities embedded deeply in our daily lives. To look - is it to glance, to observe, to examine through our smartphones, streaming devices or social platforms? In our modern digital experiences, even visual creators may be subconsciously 'looking' only at what the platform directs our eyes to see. From social media platforms to non-stop streaming entertainment, we are constantly looking at visuals. Many of us take photos, record videos and post online... all part of this endless production cycle. Herein the question lies - how and what does one really see? Do we look for just the next viral video or meme? Or is *looking* and *snapping* just a meaningless gesture to conform to the needs of our digital age? How do we engage with our urban environment?

In this 2022 series titled *Urbanscapes: contemplations on the Meaninglessness of Looking*, the works consist of daily sketches and photos of Singapore's urbanscapes, created entirely on smartphones. It explores the meaninglessness of looking, as a response to the way we view the world. In this digital world, one typically spends less than 2 seconds of attention on a subject.

These daily works of urbanscapes originate from digital sketching on my smartphone, which are then layered onto the digital photos I have taken simultaneously on the smartphone in post editing. In this exhibition, I juxtapose digital media installation with traditional photographic prints inviting the viewer to explore and create their own sensory experience. This body of work completed in 2022 is the 4th edition and a continuation of my time-based art works - annual series of daily visual moments.

In photography, seeing (capturing an image?) can be as short as a fraction of a second, while in sketching, one soaks in a scene for a much longer period, at times standing at the same spot during the sketching process for hours to eventually discover different aspects of a scene and interpreting it. Drawing inspiration from On Kawara (*date painting series*), Hiroshige (*100 views of Edo*) and John Berger (*Ways of seeing*), the series tries to capture moments in this ever-changing urban environment of Singapore, where nothing is permanent. As mentioned by Koolhass O.M.A. in the book *S,M,L,XL,* Singapore, the condition of tabula rasa, perhaps, is ever ongoing due to the complexity of dense urban living.

The covid-19 period forces us to take an inward look into our very own existence in our locality. During periods of lockdown across the globe, time and space have drastically *shifted* or somewhat *paused* across the world in a scale unimaginable. With this series, I am hoping to bring not only iconic urban views of Singapore but also the everyday scenes ranging from public housing neighborhoods, to industrial estates and even my own home when I was housebound while I was down with Covid-19. I believe this series will engage diverse responses from the global audience, as we are living in the digital age where images have become our global language.

Since 2019, my 365-days series explore various themes including skyscapes, bodyscapes, and waterscapes, all done as a time-based, daily exploration works. Everyday for the past 4 years, one artwork is created and posted on instagram (https://www.instagram.com/yingyiphotography/).
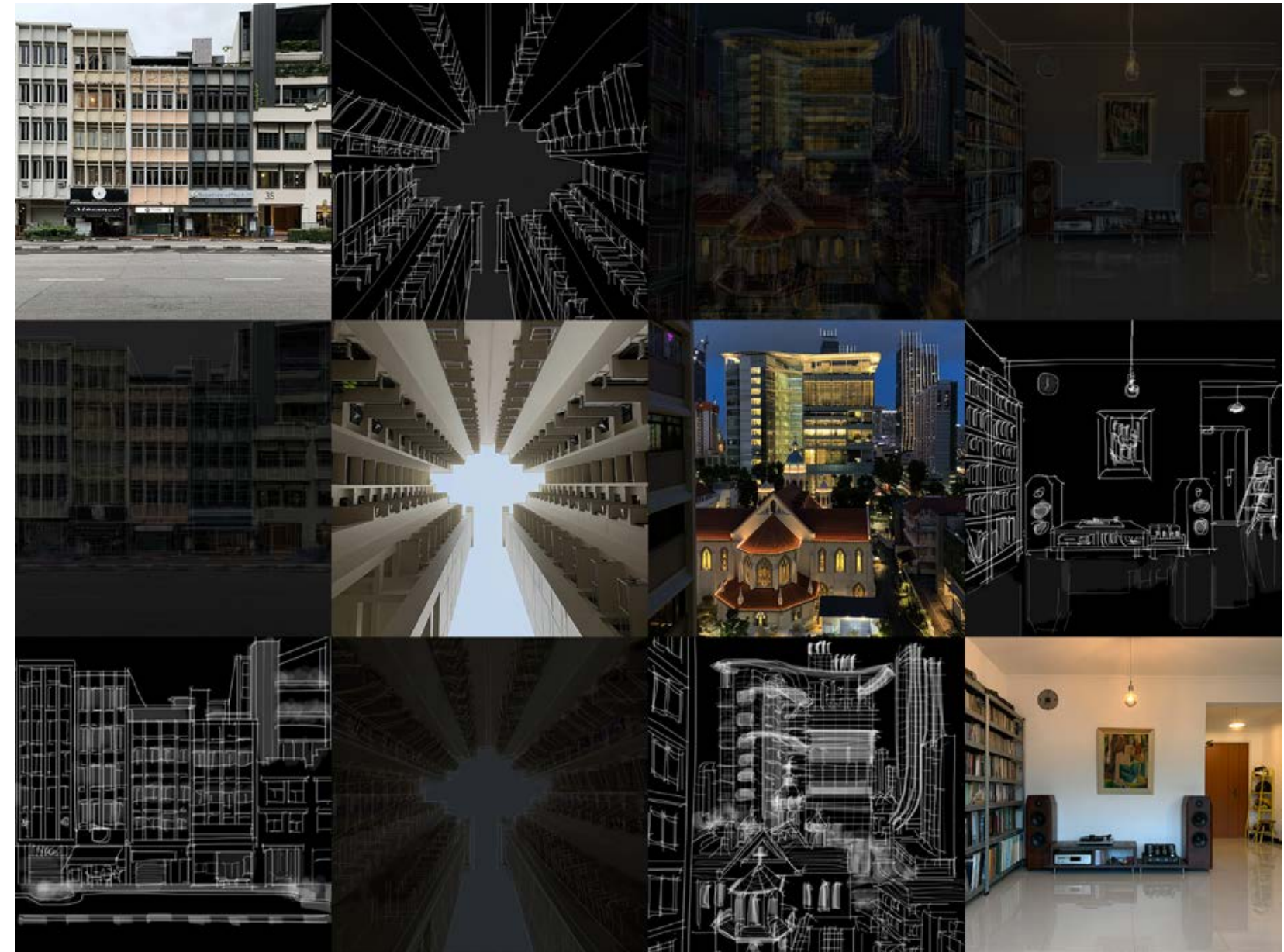
Marinaressa Gardens

ACTA Action through architecture
& CISP Comitato Internazionale per lo Sviluppo dei Popoli

The *Classe Rouge* stands as a solution to the lack of school buildings in Niger, combining the adoption of locally available materials and the efficiency of the Parabola geometry to create a sustainable, bio-climatic and durable classroom.

Niger has the higher population growth rate in the world, with a fertility rate of approximately 7 children per women over a population of 25 million people (World Bank data). The number of children increases by 750.000 per year, requiring enormous efforts to ensure access to education for all, including the need to build high numbers of school infrastructures. To meet the great demand for school buildings expressed by the government, temporary solutions have been adopted so far, with children having lessons in classrooms built with perishable, flammable and non-resistant materials, such as branches and straw. Quality school infrastructure plays a critical role in guaranteeing a safe learning environment for children and ultimately the access to education for all.

For this reason, ACTA (Action through architecture) worked in collaboration with CISP (Comitato Internazionale per lo Sviluppo dei Popoli) to develop and build the prototype of the *Classe Rouge*. A classroom designed to be built faster, easier and at a lower cost than the standard masonry classrooms built in Niger to date. This was achieved by combining the advantages of a parabolic geometry, a moveable formwork construction technique and thermally insulating materials in one design.

The function of form. The use of a self-supporting shape such as the parabola made it possible to achieve a single structure without any differentiation between load-bearing walls and ceilings. The roof meets the ground in a single element. All static forces acting on the body are transformed into compressive force only. For this reason, a thin concrete shell can be overlaid with an outer layer of compressed stabilised earth bricks (CSEB) that not only thermally insulate the building but also provide it with additional strength and give it its characteristic red colour.

A breath of fresh air. In order to ensure indoor climatic comfort so that the pupils can maintain a high level of concentration, the upper part of the two vertical walls of the classroom were made of bricks placed in a clustered manner. This allows fresh air to circulate freely inside the building but prevents the sunrays from reaching the interior and heating it up.

One by one. The arch section displayed at the Giardini della Marinaressa in Venice represents the basic module of the project. Repeating it 11 times results in a *Classe Rouge*. To make a potentially replicable process thousands of times fast and efficient, ACTA has developed a metal formwork that is easy to construct, install and use.

By being able to implement the idea of the *Classe Rouge* everywhere in the country, it is hoped that we can facilitate access to education for the young Niger generations class by class, school by school, one by one.

Our team

ACTA is an architectural practice focused on humanitarian and sustainable architecture. The studio has been working for years in Niger and aims to find innovative solutions that facilitate the realisation of architectural projects that improve people's living conditions.

CISP, an Italian non-governmental organization, works in Niger since 2006 promoting the adoption of improved earthen construction techniques to provide quality and durable housing solutions and stimulate knowledge transfer and job creation for young people.

Interior view of the classroom
Photo: ACTA Niger

Adamas Architecture & Design + REnato lab

+++ *TEA Space* uses Taiwan's tea serving culture as the carrier to introduce Taiwan's creative and diverse tea culture to the world. For the architectural concept, circular economy & recycling, with design as the core, Renato Lab teamed up with manufacturers focusing on recycling, and with ecological tea industry and tea culture workers.

The visual concept is shown with geometric lines in layers, becoming the weaving of nature. The horizontal lines flow like mountains and rain, the straight lines stand like trees. It's like the circular tea event that is constantly intertwined into energy through nature and sustainable culture. The geometric lines also represent the +++ logo, allowing circular energy to continue to flow, inviting more people to know about circular economy.

Seeing the mountains of Taiwan from a distance, and the forests of Taiwan up close, with the special geographical environment of Taiwan's beautiful mountains and rivers, the mountainous areas with countless microclimate conditions are the key to the birth of Taiwan's tea. The design of this circular +++ *TEA Space* is strengthened by the key image of Taiwan's unique natural scenery. When entering the tea space, you can walk among the cedars in Taiwan's artificial forests, and watch the recycling industry and tea culture industry exhibits that contribute and work hard for Taiwan's environment.

Anton Amort

Flame. Burning in the moment of a lambent flame, the hard stainless steel material seems to constantly redefine itself. Powerful and assertive, the flame conquers time and space. And yet surrounded by a touch of sinuous delicacy. Light reflections in the cut of the surfaces create dynamism in the seemingly up-and-down movements of the surfaces. Sublime beauty surrounds the abstractness of the flame to be found in nature. Blaze is constantly recreating its existence in caress, in the interplay of burning feminine grace. *La fiamma divampa con tutta la sua forza.*

Flame
Anton Amort, 2012

Arroyo Bridge Section
MADWORKSHOP / Mary & David Martin
Gigante Ag / R. Scott Mitchell
Usc School Of Architecture, Bridge Studio 2014

The award-winning Arroyo Bridge is an experiment in merging architectural coordination, robotic fabrication, and the creative possibilities of structure becoming form. The bridge itself has been completed in California and spans a 25m canyon. A sculpture, Arroyo Bridge Section, is inspired by the approach to the bridge, a deep creative and scientific process of robots meeting hands meeting ideas meeting drawings meeting photographs. Arroyo Bridge Section (8.5m x 3.9m x 4.4m) offers a link between craftsmanship and machine-made objects; its asymmetry and complexity. While rhythmically and geometrically defined, is closer to arboreal and other organic structures than to what is typically envisioned when we hear the phrase robotic manufacturing. Nature is not repetitive or grid-like; rather, as this project demonstrates, it is often asymmetrical, novel, and expressive.

Arroyo Bridge Section can be read as a counter to the often-simplistic binary of natural vs technological, human vs computer, fabricated vs made. Instead, this complex structure, produced by a series of processes that invited both human and robotic intervention, argues for a nuanced approach to the possibilities and productive tensions inherent in the relationship between technology and craft. A steel base anchors the sculpture onto its pedestal while the top half, crafted from a balance of structural alloy tubes, conceptually lifts the structure, introducing a sense of fluidity and forward momentum. The shape is almost anthropomorphized, articulating a feeling of a bird taking off, a moment of flight, a surprising reading for a sculpture that is almost pure engineering. And that engineering is at the heart of it, as Arroyo Bridge Section offers a demonstration of the next and new world of architecture and construction, showing what is possible when the relationship between our ideas of the natural, our ideas of the human-made, and our ideas of the mathematical, begin to coalesce. Conversing through the media of software, robotics, architectural drive, and conversation. This method opens up the conversation about how the built environment of the future might be made, and how it can begin to be conceived of, in the present. Each piece is necessary; each element links to the next, articulating both the form of the connection and the overall shape of the sculpture, a shape created by both computational and human forces, built by precise machines and human hands.

Arroyo Bridge and Arroyo Bridge Section were initially conceived of by Mary and David Martin's MADWORKSHOP in collaboration with R. Scott Mitchell and iterated upon by the USC School of Architecture's 2014 Bridge Studio, as well as a residency at the Autodesk Technology Center in Boston.

Perspectival View of Arroyo Bridge in the Landscape
Photo: Iwan Baan, 2020

Perspectival View of Arroyo Bridge Section in Venice
Photo: Andre Guidot, 2022

Perspectival View of Arroyo Bridge in the Landscape
Photo: Iwan Baan, 2020

Foon Sham

For over thirty years, Foon Sham has sought to explore the nuances of material and form through sculpture. With wood as a primary medium, he meticulously cut, layer and join hundreds – sometimes thousands – of wood blocks to create forms that reference environments and resonate with the human spirit.

In recent years, he has constructed large scale forms that encourage viewer interaction in their openness. People experience a sense of curiosity and wonder when entering a vessel. he sees this form as a metaphor for shelter in which there are inner passages; it is not just a space for one to explore physically, but a container for emotions and thoughts.

While most of the larger vessel structures he created are symmetrical in the past, the sculptures in this new series are mostly asymmetrical. Each layer of blocks is changing in sizes, shifting and spinning as it travels upwards. The earlier geometric designs have been transformed into more organic and curvilinear contours. In building these new pieces, it is more complex and labor intensive. In *Ductile 2* the title refers to the elegant and curvilinear profile of an organic form that is able to deformed without losing toughness. It provides different all-around views. In this piece, the interior is not meant to be entered.

Ductile 2
Foon Sham, 2023

Norman Foster Foundation (NFF) with Holcim

Today at 103 million, the number of displaced people forced to leave their homes and countries to stay in camps is continuously growing worldwide. Although these camps are initially conceived as temporary solutions, the reality has shown that they become permanent settlements where families spend 20 years on average. However, the shelters to accommodate them are still designed with the basis of creating cheap, quick, and temporary structures.

Given the permanent condition of these settlements, the Norman Foster Foundation and Holcim explored a different approach to this problem, advocating higher performance structures albeit with fast construction. The quest is to design homes rather than shelters, and to create communities instead of camps.

This *Essential Home Research Project* presented by the Norman Foster Foundation and Holcim as part of the *Time Space Existence* exhibition is work in progress – a first proposal of a longer term project to explore durable, comfortable and dignified homes for people in displacement. It suggests an alternative to tents or similar short-lived shelters, which offer scant protection from the elements and uncomfortable living conditions. The *Essential Home* model, designed by the Norman Foster Foundation, engineered and constructed by Empty & Bau and realized with Holcim's solutions, is located in the Giardini della Marinaressa.

The exhibition *From Shelters to Homes, from Camps to Communities* – in Palazzo Mora – sets it in the wider historical context of temporary structures and prefabrication. In this Research project the Norman Foster Foundation and Holcim present a starting point for this team and others to reflect on how we can generate better alternatives to present practice.
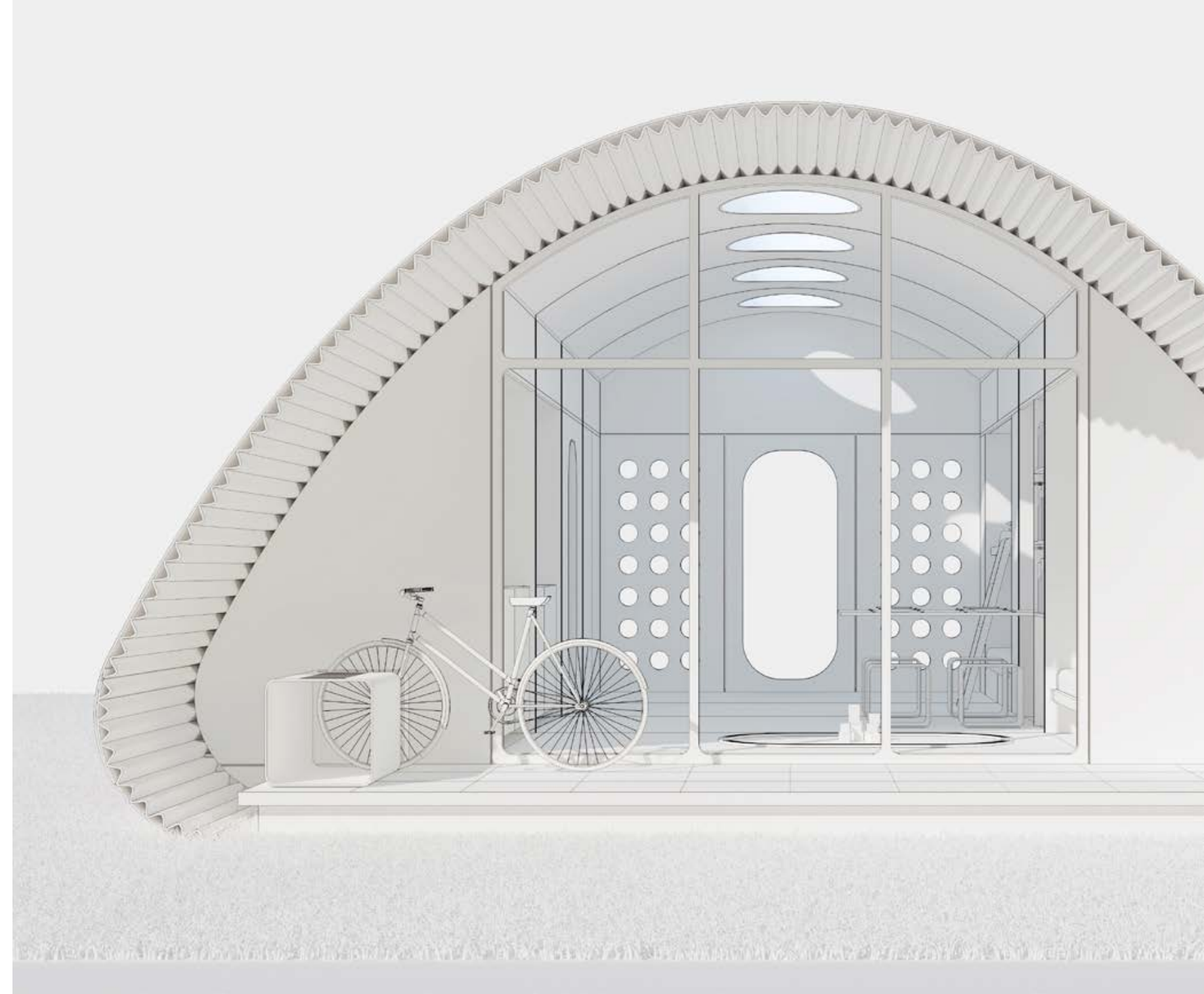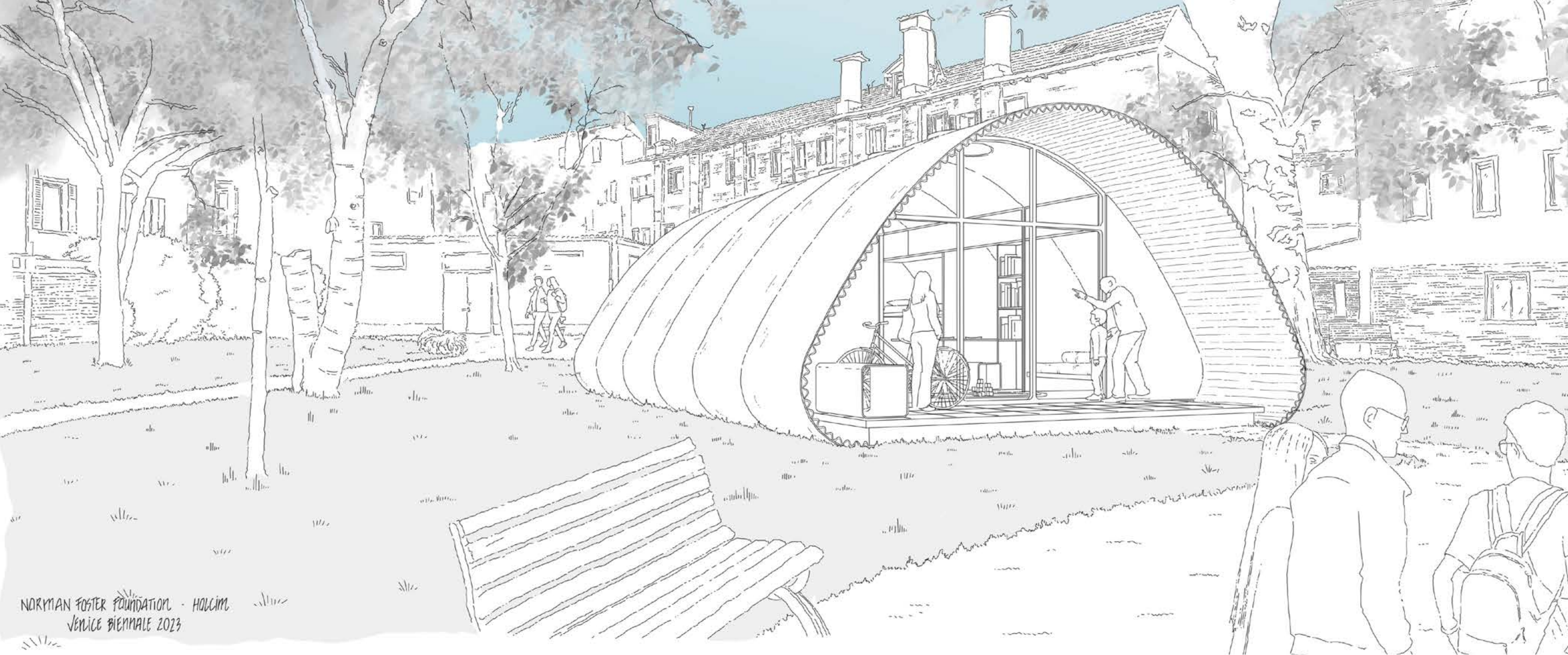
NORMAN FOSTER FOUNDATION · HOLCIM
VENICE BIENNALE 2023

Essential Homes Research Project
Norman Foster Foundation, 2023

Shiftspace

OSTREA is an architectural installation designed by Shiftspace for the *Time Space Existence* exhibition at the European Cultural Center's Giardini della Marinaressa. The project was completed through a partnership with Tyler School of Art and Architecture, Temple University.

As climate change, global pandemics, war, and the connected world converge, architects and designers are tasked to create spaces that provide more than programmatic needs or spatial experiences. This installation examines the role of architecture in a world that is increasingly hostile. Designed as a small pavilion, *Ostrea* reimagines the primitive shelter in today's atmosphere. The ensuing intervention presents an architectural system capable of responding to the adverse forces of modern society. Contextualized through disparate architectural typologies – the primitive hut, fortresses, and space-age utopian visions – *Ostrea* displays explorations into form, structure, and unit-based design. Beyond basic shelter, the pavilion examines how the *hard* architecture that the future demands can be balanced with comfort, connection, beauty, and other complex human needs. In addition to the physical installation, student work will be presented as an extension of the project, providing a vision for confronting dystopian realities through architectural optimism.

Detail of OSTREA
Shiftspace

Snøhetta

Counterbalance. In Venice, ground is not given. It is an amphibious place with an uncertain future moored to the sea, the moon's tides, and penchants of world culture.

Perched at the edge of the lagoon, the Marinaressa Ponente Garden is bounded by buildings to the west, north, and east, and opens to the lagoon to the South. Maritime pines and sky create the garden's ceiling, with pine duff, earth, and water underfoot. Within the densest grove of trees with views of the lagoon, we have created a collective furnishing: a bench, a seesaw, a room, an instrument, an artifact, a folly. Its design and the garden space it creates make the themes of balance/instability, rising/falling apparent.

With arms stretching out amongst the trunks of the surrounding trees, an invitation is presented to draw curiosity seekers to explore, touch, experiment. Unoccupied, a stable-seeming center touches the ground precariously. Engaged, the participant takes the lead, to destabilize, balance, or gently rock together, until a new guest arrives or departs. One-person is predictable, but the more people the more uncertainty prompts coordination, movement, and discussion. Underfoot, the surface below your feet is left marked by the presence of each visitor as time is made evident by the grinding of a once stable material begins change and the sound, scent and color of the constructed ground slowly shifts. Around the trunks markings subtly denote historic water elevations and anticipated water levels and your relationship to this changing context.

Like the pine trees of the garden and the foundations of the city of Venice, our installation is constructed primarily of wood. Chosen for its cultural significance, this ever-present material here is in Venice is also a sustainable, renewable, carbon sequestering material. From concept to execution, Snøhetta has worked closely with our structural engineer, Jay Taylor of MKA, to design the piece, focusing on functionality, materiality and the approach to joinery. We have refined together through sketches, collages, models, protypes and mockups – exploring how the tools we use inform have informed geometries and tectonics, as well as explore narrative and the poetics of a garden installation. We continue to work alongside our local fabrication partners, 3DW, to optimize the design for fabrication, installation, and reuse.

We invite visitors to be playful, to interact with this moment within the garden. Whether alone or together, we hope to call restrained attention to the impact we each have on the environment around us. Something as stable as the ground beneath our feet, or the structures we construct for comfort or shelter, are not always what they seem when placed into a world that is shifting and changing around us. In uncertain futures, we hope to humble yet inspire, to remind each of us of our precarious place in this world that we share together and with others. What seems to be is not always as expected.

Counterbalance model
Snøhetta

Counterbalance sketches
Snøhetta
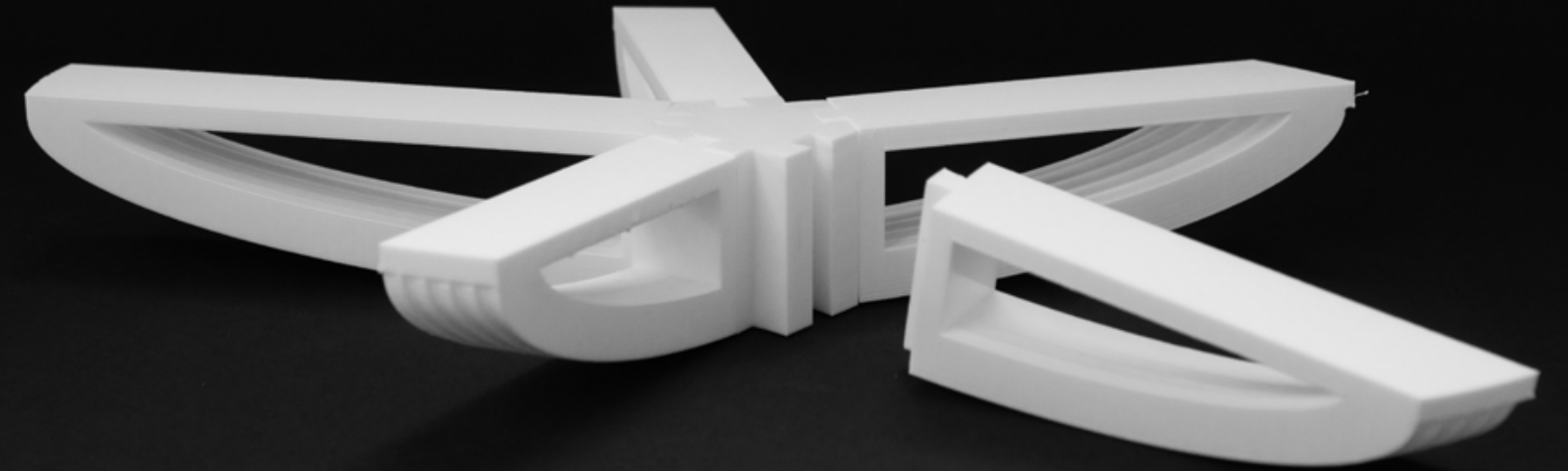
Sonja VishnudArt

When looking at Sonja VishnudArt's sculptures, you are entering a completely different world of perception. You are offered a window to the deepest emotions and feelings, which are crystallised in exuberant bronzes. The Artist gives expression of ineffable perceptions, in which she draws on her own experiences. Her perspective and view of the world of the subconscious mind is unique thanks to her overwhelming cultural background. Having roots of India, being raised in South America and having lived in different European countries, is giving a particular flavour to her Art works. She is mixing tantric and sanguine emotions and translates them through sculptures, who seem always in motion.

The sculptures are not a static picture, but they are an expression of the seeking individual. There is no beginning and no end. Only movements and transformations. Entanglement and intertwining are contrasting with breaking out and flying away. The quest for the inner forces translates in either in brutal confrontation or gentle shapes, but always leaving the spectator with a strong impression. Through the confrontation with VishnudArt's work, you are invited to embrace the intense inner expression and to couple this sensation with your own subliminal experiences and forces. The intensity of the engagement changes every day, as you look at the sculptures from a different angle. Each time a new discovery, a new journey, which make the. Art Works endlessly enjoyable.

This is Art touching all your senses and your soul. Whether it is the soft touch of the Tango, the dazzling movements of the Intertwining, the shocking roughness or the sensual imagery, looking at VishnudArt's sculptures will never leave you untouched, pushing you to reflect.

Sonja VishnudArt was born in Suriname, South America. In Europe she has lived and worked in the Netherlands, Belgium, Monaco and Switzerland. In Nice, she collaborated with several French sculptors on various projects. She has her own studio in both Belgium and Switzerland. She participated in exhibitions in Monaco, Montreux, Brussels, Breda, Zurich, Venice, London and Paris.

Her concept for the Memorial in Brussels, in honor of the victims of the terrorist attacks in Belgium, was selected for the final round. Her works are universal feelings and therefore her sculptures speak the universal language, allowing the viewer to entangle with his own deepest emotions hidden in silence. Life is an entanglement and letting go, but also letting go in order to be entangled again.

The development and opening up as an artist coincide in a world that is rapidly transforming into a multi-colored society. The spectators can mirror their own experiences in my images, at the same time gain insight and recognize their own story. This universal feeling is recognizable; it gives peace, openness and freedom!

It is purely her instinct that she follows, with a powerful dance she feels the energy pulling her to achieve something and let her go completely in body and mind, very physically in her own world of dance in *silence.* This is Art touching all your senses and your soul. The sculpture exposed in this exhibition is the *Tango of Love*, the dazzling movements. She is mixing tantric and sanguine emotions and translates them through sculptures, who seem always in motion.

With the support of Sonko
Creative Development GmbH.
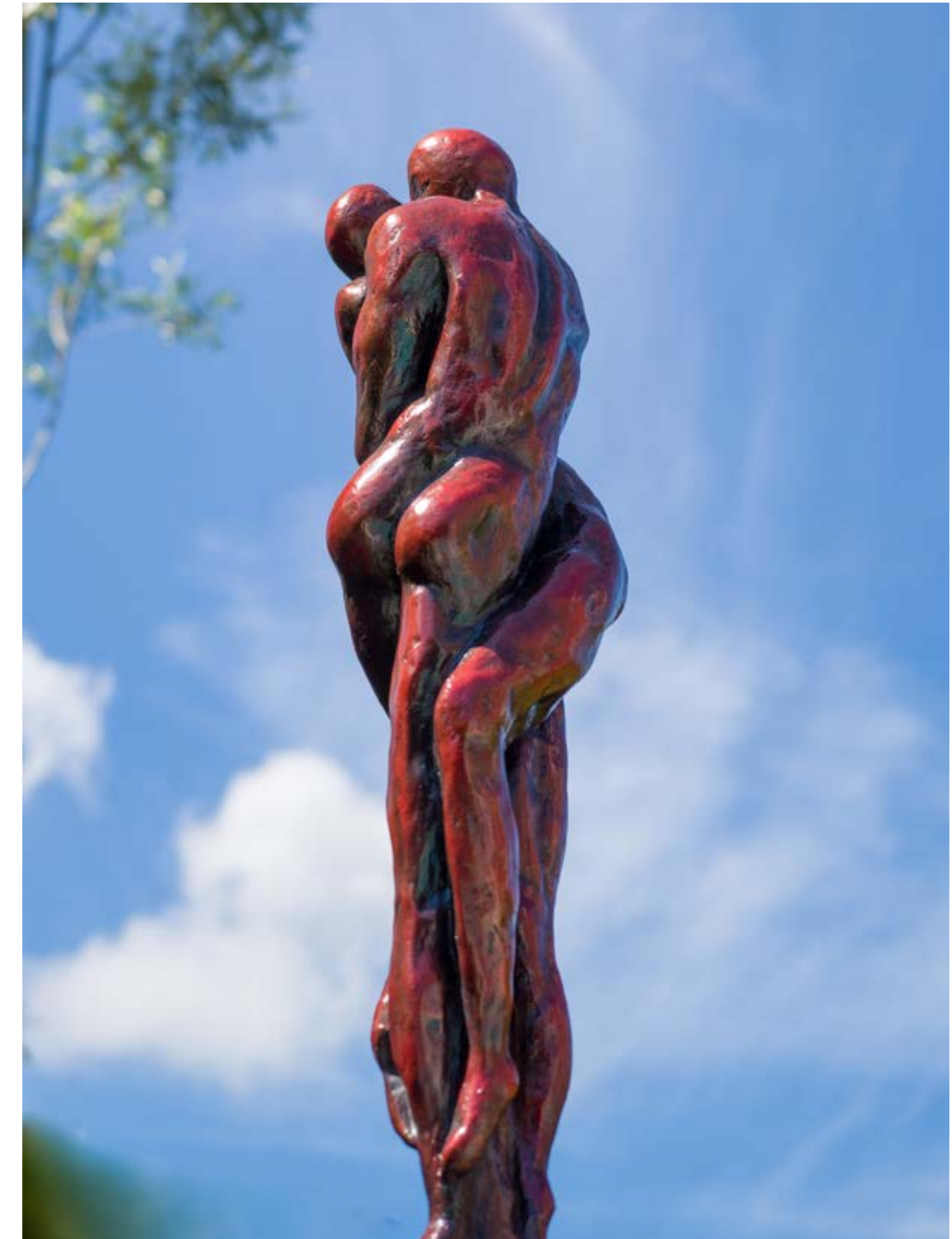
Takaaki Fuji, Hiroya Inage & De Yuan Kang
Takaaki Fuji / tyfa & Mitsubishi Jisho Design
Hiroya Inage / Mitsubishi Jisho Design
De Yuan Kang / Mitsubishi Jisho Design Asia

Place.Re-Place [#001] VENETI-AN (庵): *exploring Place representation in Temporal Architecture through the lens of Regenerative design.*

In the increasingly fast-paced world, the new replaces the old at an unprecedented rate and the impermanence of Architecture is never more apparent. Modularity is often hailed as the solution to address overconsumption of resources and overproduction of wastes. The efficiency in production, transport and assembly of modular system is unsurpassed, making it a resource-conscious option, putting in the shade prevailing construction methods. Efficiency however comes with a price, albeit not in financial sense. The universality of such system often undermines the specificity of the architecture and regarded to dismiss contextual relationship between building and context. While tackling imminent environmental issues, Place-value in architecture holds equal importance. It is imperative to seek balance in achieving both.

[#001] VENETI-AN (庵) is designed as a prototype to incite a discussion on the dichotomy between the application of resource-friendly, systematic building solutions, and the creation of distinct, site-specific representations. A temporal user-oriented pavilion at heart, the prototype demands modular approaches with locality in mind. The Japanese Teahouse (茶の間) along with the way of the tea, embodies the essence of the Time-Space (間) relationship and is infused in the pavilion as a narrative to facilitate this discussion. The Teahouse is essentially designed as a *Process*. Likewise, Architecture when seen as a *process* as opposed to a *product* can be broken down to a sequence: *Place, Respond, Assemble, Experience and Deconstruct*. Resonating principles of

Circularity in Teahouse design led to the conception of *Re-Place*, resulting in a closed architecture creation cycle. Materiality is the crux of the circular system. The search for building materials that are regenerative and also representative of locality led to the experimentation of (bio)waste as a raw material for this project. *Place:* Utilizing natural waste that represents locality. *Respond:* Assessing contextual conditions, weather, orientation. *Produce:* Employing resource-conscious, modern methods of construction (MMC); 3D fabrication. *Assemble:* Adopting simple and efficient methods of construction eg. Modular construction. *Experience:* Curating local experience; Tea sessions with local herbs. *Deconstruct:* Retaining means to identify disassembled member as part of a whole; Serial numbers, Venetian Materials for Veneti-an Pavilion. *Re-Place:* Giving new life to building element, as how new life was given to raw materials.

The modular design facilitates the process of reinitiating the product cycle, while each phase of the sequence consciously responds specifically to the context. The Re-Placing sequence seeks to retain the Venetian identity in the eventual product and aims to raise awareness on the value of product identity even in its second life.

[#001] VENETI-AN (庵) seeks to emulate the role of a traditional teahouse, one that sparks conversations, hosts radical thoughts or simply to offer shelter for contemplation. Architecture is essentially a collaborative effort, where people gather with a common purpose, to explore the possibilities of space creation. The concept of *Place.Re-Place* is one that extends beyond the current context and aims to spark imagination of subsequent creations i.e. *[#002] (insert country)-AN.*

Installation components
Image: Leny Indah, 2023
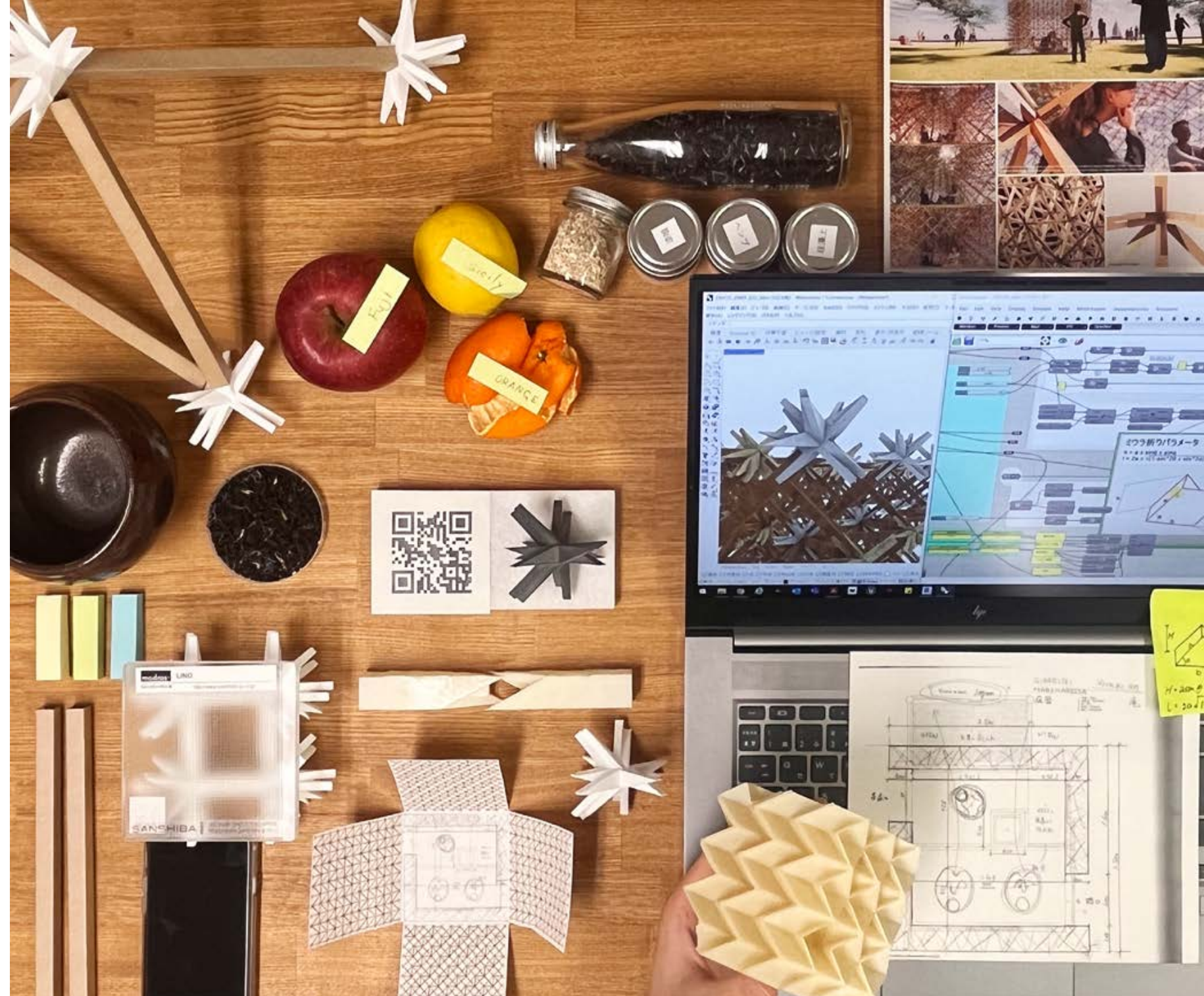
University of Stuttgart
Institute for Lightweight Structures and Conceptual Design (ILEK)
Institute for Control Engineering (ISW)
Daria Kovaleva, Lucio Blandini

The *Marinaressa Coral Tree* is a filigree concrete structure that demonstrates how lightweight design can contribute to the responsible use of natural resources and the decarbonization of the building industry. The dendromorphic structure offers a new interpretation of the conventional slab-to-column transition, where the load is transferred from a horizontal plate through the capital to the columns. The design follows three principles – *minimality, circularity* and *regenerability* – calling attention to the responsible handling of natural resources and the creative potential it can hold for the design of the built environment.

Minimality is achieved through the reduction of the structure's weight by applying computational optimization strategies. As in natural load-bearing systems, the material is distributed following the stresses arising under given loads. This is made visible through a spatial lattice structure oriented along the principal stress trajectories. Material is carved out wherever it is structurally possible.

Circularity is applied through the production of complex concrete segments using recyclable sand formworks. The 3D printing of formworks from a water-soluble blend of sand and organic binder allows for full recyclability, establishing an essential condition for the sustainable fabrication of such structures.

Regenerability is realized by exploiting the property of mineral materials, particularly cement, to reabsorb the carbon dioxide released during production and accumulate it in the form of calcium carbonate. Maximizing the structure's surface area over its volume and reducing the component's cross sections furthers this ability. As a consequence, the structure can fully carbonate during its service life.

Given the environmental impact of the construction industry, the application of lightweight design principles should play a significant role in modern design practice. *Minimality* in the use of material, *circularity* through careful waste management and *regenerability* through emission reduction should be taken as part of a holistic approach aiming at minimizing the overall ecological footprint.

Marinaressa Coral Tree embodies these principles within an interdisciplinary research framework of architects, structural and mechanical engineers unifying technical, aesthetic, and environmental qualities into a holistic design. The prototype is dedicated to Werner Sobek, founder of the ILEK, on the occurrence of his 70th birthday on May 16, 2023.

Mock-up of the Marinaressa Coral Tree
Image: Daria Kovaleva, 2023

Urban Radicals, Local Works Studio, AKT II

Venice is at the forefront of the battle against climate change. Its gradual sinking, combined with sea levels rising, is making flooding more frequent and more severe. The drying of the canals due to rising temperatures further reveals Venice's particular fragility in relation to climate change. This, along with the clogged canals which collect sediment over time, contribute to the annual flooding. Each time the canals of Venice are dredged, large volumes of mud are collected. This mud is separated and catalogued, with the least contaminated sediment disposed of on the shores of Isola delle Tresse, an uninhabited island 2.5km from Venice, measuring approximately 0.8 km wide and 1.5 km long.

The pavilion manifests the potential of using this waste sediment, and other waste by-products from the surrounding industrial areas, to create a low-carbon brick, certified for construction. This is of particular importance in a time of climate emergency and provides a vision for forming closed-loop systems in our built environment and cities. To tackle the problem of Venice means finding solutions to worldwide issues on ecology and climate change.

The path towards a net zero future demands designers to re-focus on the importance of material selection, reuse, longevity and locality. New standards and policies are advocating the use of materials with low embodied carbon, in order to reach the ambitious targets which the UN has committed to by 2050.

Brick is still a primary construction material, with around 1500 billion bricks produced globally every year and burning 375 million tonnes of coal. This production is established predominantly in Asia where around 87% of these components are manufactured, adding additional transport-associated carbon to the material itself reaching other continents.

Through rethinking traditional manufacturing methods including the testing and upcycling of local waste materials, as well as proposing localised production strategies able to drastically reduce material movements and energy, the pavilion addresses complex issues surrounding the circular economy in our cities that, if implemented on a wider scale, could equate to large savings in world carbon emissions.

On a local scale, this material innovation can begin to propose solutions for canal dredging waste and imbue sustainable construction options for Venice. On a wider scale, Venice may be used as a precedent to deliver a framework for a system that can be applied globally, proposing active engagement with localised resources to form closed circular-economy loop systems, ultimately bringing positive change to the global construction industry and the well-being of our people and cities.

WXY architecture + urban design
Palaver Bench

Public means Public, no doors no locks. In collaboration with both scholars and occupiers of public space, WXY is proposing to bring to the Giardini Della Marinaressa, a public park outside the Arsenale, a piece of public seating to the 2023 Architecture Biennale for the purposes of providing discussions for and with this audience around the current and contested state of public places.

This bench has a universal story. It was designed to wait. Installed outside of a ferry/subway terminal at the tip of Manhattan called Peter Minuet Plaza. A public plaza formed by a bus terminal, subway, and the Staten Island Ferry. Part of a 2009 landscape design where long clutches of benches and trees offered seating and shade to individuals, groups, and couples from all over the world, at all times of day, year-round.

It survived being completely emersed in the storm surge of Hurricane Sandy, but it did not survive the most recent social crisis of a loss of empathy and capacity in cities from the 2020 global pandemic and climate stress. This bench among others was removed in 2022 leaving those using the bench to sleep, sleeping on the ground.

The zipper bench is an evolution from New York City's World's Fair Bench but tied to it by the needs of New Yorkers for comfortable seating that can withstand large crowds, sitting, and even standing and jumping on it. Public space requires robust design. The NYC-based architecture and planning firm WXY commissioned by The Battery a series of *post* World's Fair bench systems to accommodate new kinds of needs in public space over the space of the last decade. This bench is the last of that series. We will invite scholars, operators, and designers of public space to contribute their research and participate in paired dialogues on the challenges of, and the war on public seating. QR Codes on the bench will provide links to discussions and contributed scholarships.

Xin Yuan
XinY Structural Consultants

The Float is a tensegrity-structure sculpture consists of two discontinuous curved pipes balanced by several prestressed cables. The upper pipe does not touch the lower or the ground, so it appear to be floating in air. The sculpture is tilted as a whole, and only one point be supported on the ground. It looks like it is about to overturn and disintegrate, but it is actually stable. At the same time, the two curves chase and intertwine with each other, the views will change with vistists' walking step by step.

The designer of the sculpture, Yuan Xin, is the founder and webmaster of the *China Structure Forum* (www. okok.org), which after more than 20 years of development now has about 350,000 members and more than 1,000,000 posts. Presided over the publication of professional books such as *Structural Theory and Engineering Practice*, *Heavy Industry Plant Design*, *Light Steel Structure Design*, *Steel Structure Connections and Joints*. Since 2016, he has been a part-time postgraduate tutor of Southeast University.

He has been invited to give lectures or conference reports at ARUP, LERA, Mott McDonald, ICSBS, etc., and his works have won the Structural Awards, A' Awards, A+ Awards, Iconic Awards , WAF and other international awards, and have been widely reported or selected as cover-project by magazines from China, European, American, New Zealand etc.

XinY Structural Consultants, founded by Yuan Xin in 2001, is a team of engineers engaged in structural research and design, and is committed to expanding the boundaries of structures. Selected as the top 5 best structural firm of the world by the United States A+ in 2021.

Architects often pursue extreme effects such as slender columns, light and thin plates, which are often judged as unrealizable by structural engineers. When all of them say no to a architecture proposal, maybe XinY can say yes.

Designer: XinY
Contractor: Leixing

Special Projects

Fundació Mies van der Rohe

EUmies Awards - Young Talent aims to support the talent of recently graduated architects, urban planners and landscape architects who will be responsible for transforming our environment in the future. Young Talent emerged from curiosity about and interest in the initial stages in these students' development and a desire to support their talent as they enter into the professional world.

Four Winners have been chosen in April 2023 by an international Jury from among twelve Finalists, and a group of Shortlisted works has also been selected in order to illustrate different ways of working, designing and communicating architecture.

The exhibition that the Fundació Mies van der Rohe organises at La Biennale di Venezia shows the results of this process by presenting models, drawings, and videos of the Shortlisted, Finalists and Winners.

Young Talent 2023 becomes a platform to exchange knowledge on how we all learn architecture and look towards the future: The Laboratory of Education. The fact that many and very different architecture schools participate, and that also representatives from other fields such as politicians and companies related to architecture also support the project, will make it possible to organise an event with young architects and also other stakeholders (cultural managers, policy makers, representatives of companies...).

1. *Oasi* (winner of the Young Talent 2020) Álvaro Alcázar, Roser Garcia, Eduard Llargués, Sergio Sangalli
2. *Deplorable Framework* (winner of the Young Talent 2018) Matthew Gregorowski
3. *The Bank of England, a dialectical project*, Loed Stolte, 2018
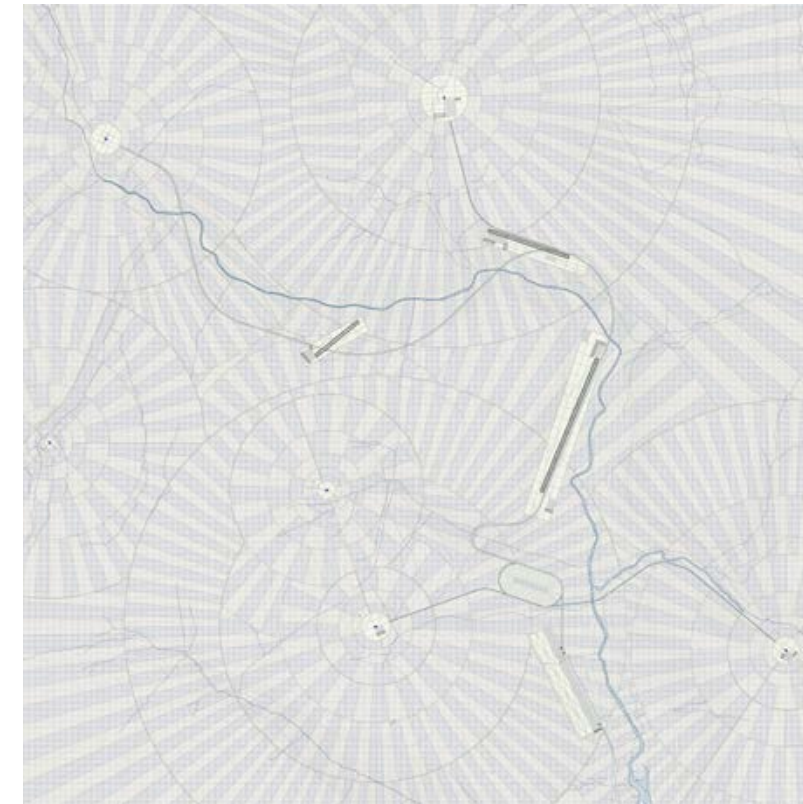
World-Architects is a membership-based, premium network of selected contemporary architects and building professionals, advocating quality in architecture. Our selection is curated by a highly discerning group of architects and critics from around the world. Launched in 1994 by PSA Publishers Ltd in Switzerland, World-Architects pioneered the online publishing of architecture. Today, over 20 online national and regional platforms represent architects, landscape architects, interior designers, engineers, lighting designers, manufacturers, and architectural photographers from over 50 countries.

World-Architects is contributing to the exhibition by showcasing exceptional examples of architectural projects from member firms and offering high-quality editorial content, with the aim of expanding awareness about Social Responsibility in Architecture and motivating individuals. The content of the exhibition emphasizes limited resources, climate change, and social inequality.

Blurring the Lines

Fostering Talents and Network in Visual Education.

The 7th edition of international call Blurring the Lines focuses on *Meaning in the Making*. We received 174 engaged projects from 44 schools and 31 countries. The curators selected three winners, 30 finalists, and 13 special mentions. Thirty-three photographers were shortlisted and featured in the catalog. Some special mentions are associated with Blurring the Lines partner's initiatives, such as the photo lunch talks at Paris College of Art, the annual international conference at European Cultural Centre, and the Take-Off talent program with FOTODOK.

With the medium's boundless possibilities, photography has never been as evolutionary, diverse, and exciting as it is now. However, despite being diverse and expansive, works produced in recent times, especially by young artists, often fall prey to becoming cursory at the expense of conforming to the accelerated pace of today's world.

This is where education becomes vital in building tomorrow's storytellers – it grounds practitioners not just in their temporal but spatial and emotional realms of individual/collective existence. It guides them in exploring this crucial *depth of perspective*. Our role as an educational platform is more community-driven than industry-driven. It aims to divulge an essence of self and meaning that moves beyond frames and can eventually lead to works and narratives that bring light onto subjects yet to reach a wider audience.

Through *Blurring the Lines*, young artists and storytellers from across the globe gain access to the unique opportunity of connecting to the broader public and crossing that critical first step after graduation into their lifelong learning journeys as visual storytelling leaders.

From the series *Who me? Yes you*
Olivia Morris Andersen

From the series *Loss*
Katerina Motyleva
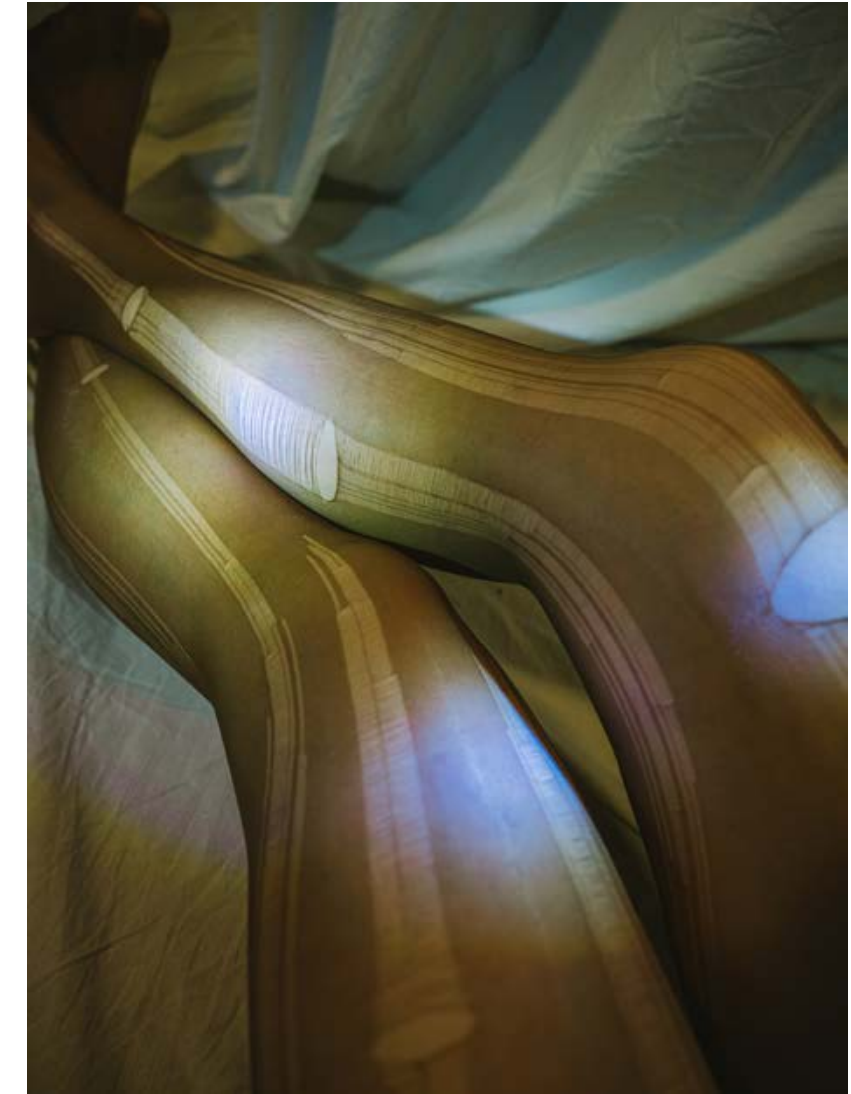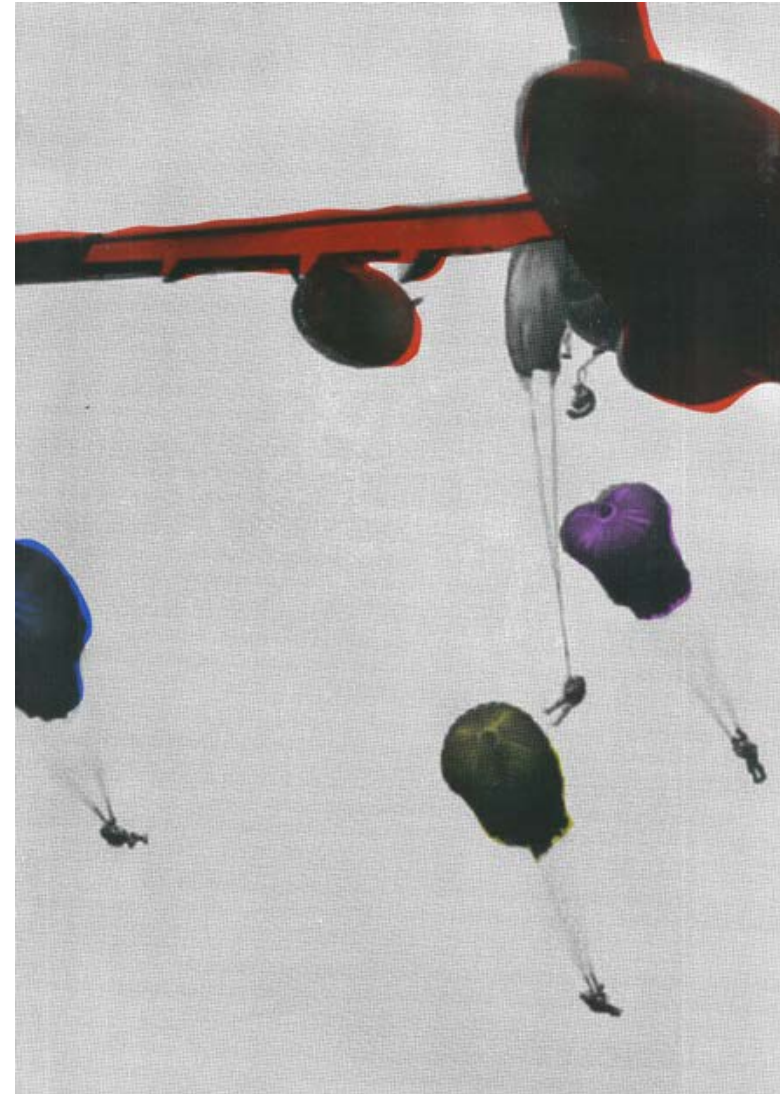
Participant Index

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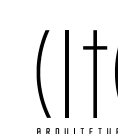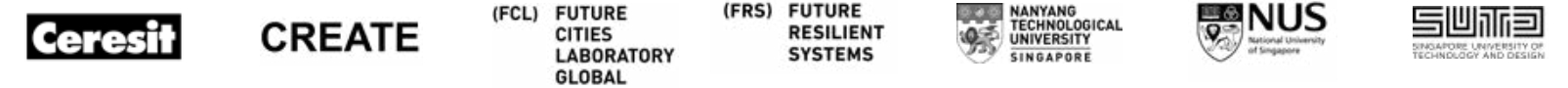
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