

A Documentary Series and an Immersive Experience premiering  
at MEET Digital Culture Center, during the Milano Design Week,  
June 5th – 12th 2022. Private preview June 4th.

# TOMORROW LIVING

HOW DESIGN AND INTELLIGENT TECHNOLOGY  
WILL SHAPE OUR FUTURE HABITAT

New living scenarios in a mixed-reality future:  
Ubiquitous and intelligent technology to reconnect with  
nature, empower communities, nurture mind and body  
wellbeing, and optimise spaces and consumption.

**A**ccording to the UN, nearly 70 per cent of the world's population will live in urban areas by 2050. What's more, over the next three decades, humanity will be facing an increasing number of challenges, from climate change and a housing crisis to energy shortages and mass migration. In order for our homes, neighbourhoods and cities to cope with these wide-ranging issues, architects and designers will have to rethink the way they create objects and spaces. How can our habitats benefit a larger group of citizens while being less impactful to the planet? What role can design and intelligent technology play as enablers?

These questions are central to **Tomorrow Living**, a project conceived by the **Huawei Milan Aesthetic Research Center** and curated by **Robert Thiemann**, founder and editor-in-chief of **Frame** magazine.

To find answers, we interviewed 30 international creators – a selection of the world's most influential designers, architects, artists and scientists. Against the backdrop of their progressive work, they envisage a future in which designers and architects will embrace new paradigms. **Carlo Ratti**, **Founding Partner of CRA-Carlo Ratti Associati** says: *"The architect becomes some kind of conductor, being able to harmonise many different voices."*

Their visions foresee a near future with ubiquitous and intelligent technology to reconnect with nature, empower communities, and contribute to a new at-home lifestyle. Environments intuitively, seamlessly and consciously respond to its inhabitants' needs – physically or emotionally – for an ever-evolving personalised experience within any life scenario; whether it is work at home, fitness, entertainment or mobility. An intelligent technology, which, therefore, also enables environments to be more sustainable, circular and energy efficient while supporting a healthier lifestyle for the many.

*"What if the home environment reacts like an organic being?"* asks **Pascale Fung**, Director of the Center for Artificial Intelligence Research, and Professor at the Department of Electronic & Computer Engineering at Hong Kong University. *"In the future, she says We will be living more in harmony with technology, we will be more in touch with our feelings and more in touch with nature, with the use of technology."*

For digital artist **Krista Kim**, *"tomorrow living will definitely be the enhancement of human life, the extension of human life through leading-edge technology."*

The documentary series, comprising four chapters – **Responsive**, **Resilient**, **Restorative** and **Responsible** – premieres in Milano during its Design Week, **June 5th – 12th** (10 am – 7 pm), at **MEET Digital Culture Center**, a frontrunner in fostering innovative digital thinking and projects. The **MEET** transforms for the occasion into a gathering hub for exploring the future of living, with **Tomorrow Living Exhibition** co-created under the direction of **Maria Grazia Mattei**.

"THE GLOBAL HOME" BY SPACE POPULAR ↘  
↙



An immersive film, **The Global Home**, directed by **Space Popular** accompanies the unveiling of the documentary series for a 360° sensorial experience of **Tomorrow Living**. The Space Popular duo explains: *"The Global Home depicts new living scenarios in a mixed-reality future and the feeling of virtual togetherness. Starting from the idea of the Venn Room (a term we coined in 2019 to describe virtually overlapped domestic environments), and taking place in a matrix of rooms virtually linked together, the immersive experience takes us through a series of everyday events in a shifting environment that a small community of avatars call home."*

Each chapter of the documentary series explores a theme that defines the future of living empowered by intelligent technology and design.

## CHAPTER \_ 1

# RESPONSIVE

INDIVIDUALIZING AND OPTIMIZING OUR AT-HOME LIVES  
(DURATION: 29:21 MINUTES)

Making habitats more adaptive to our ever-changing needs and circumstances. Artificial intelligence, sensors and 5G will enable smarter homes and robots improving personal support and healthcare for the lonely, elderly and disabled. Virtual realities will be draped over physical spaces, resulting in inhabitable digital environments. Carlo Ratti says: *"Artificial intelligence is making our buildings but also our cities, or our objects, more and more similar to the natural world, something that responds dynamically to us. Well, today with technology, with sensors and AI, the skin of architecture can start to respond to us in a different, much more fluid way".*

This is possible thanks to an ecosystem of services and intelligent devices, creating boundless and unified experiences as envisioned in Huawei's **"Seamless AI Life"** strategy.

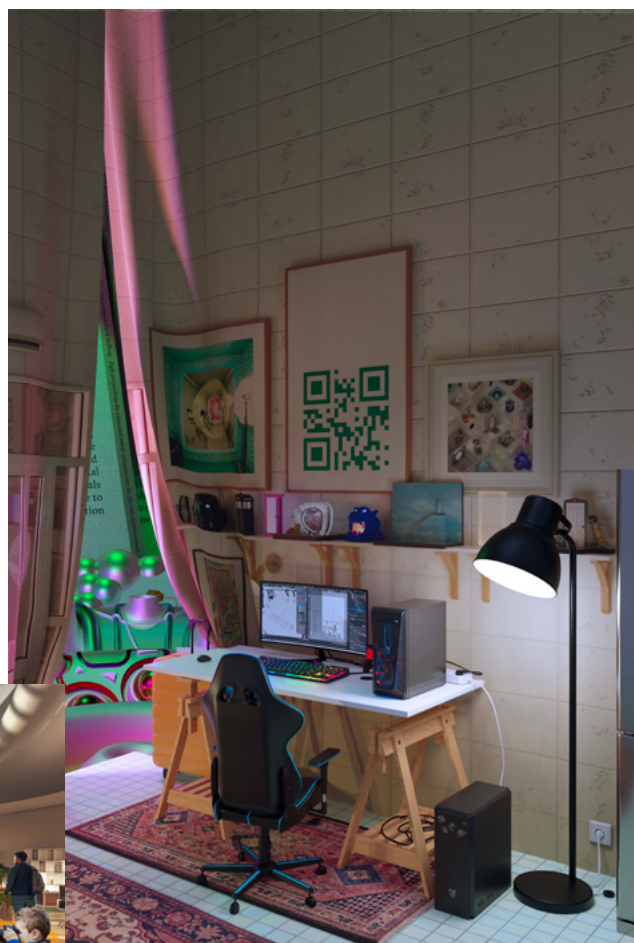
*"The focus is shifting from the capabilities of single devices (smartphone, smartwatch, tablet, smart TV) to how those devices will interweave and sum up creating a super interconnected, cohesive and continuous system. Smart devices powered by AI sensing and computing capabilities can perceive users' behaviours, expand their senses, monitor their health indicators, understand their emotions and even anticipate their needs. Interactions and experiences become more personal and the environment becomes more empathetic",* explains **Gianluca Brugnoli, Chief Design Officer of the Huawei Milan Aesthetic Research Center.**

We will flow from one environment to another with the spontaneity and simplicity of a touch on the screen; furniture and objects not only can dialogue among themselves but can also overlap their use, function, form and aesthetic. Continuous and contiguous expanded environments will offer ever-evolving boundless living, in which we can experience virtual togetherness at home.

"SMART ZENDO" BY SIM-PLEX STUDIO



"ENTER THE METAVERSE" BY SPACE POPULAR



"JIAN MU TOWER" BY CRA-CARLO RATTI ASSOCIATI





## CHAPTER \_ 2

# RESILIENT

SELF-SUFFICIENT COMMUNITIES – ON – AND OFFLINE  
(DURATION: 24:59 MINUTES)

Homes, neighbourhoods and cities can become more resilient. The key idea is to better serve the long-term needs of consumers by including them in often complex design processes, which will transform the role of designers and architects from creators to conductors. Technology will empower people to form self-sufficient and future-proof communities that are in a seamless dialogue with their living environments.

*"People are at the heart of everything we do. We co-create strategies, buildings and neighbourhoods with end-users to build strong and fair cities. Neighbourhoods are our preferred units of change because they're the place where sustainability meets human experience",* this is the core of Amsterdam-based design studio **Space&Matter**.

Thanks to an ecosystem of technologies (e.g. digital twin, big data, solar technology), cities are becoming an archipelago of self-sufficient and interconnected neighbourhoods whose beating heart is the community and its consequent cultural exchange: the Earth Stations imagined by **Michele De Lucchi** and the democratic neighbourhoods conceived by Space&Matter are visionary examples.

De Lucchi explains: *"The Earth Stations architecture is to create a place in which all these different communities are knitted together and I thought about a medieval cathedral that can be the best way to represent the world of today. Because today we need symbols, we need a place where to find out a reason to go and to share our knowledge, our competencies, our emotions. The cathedral of a new generation of spaces for hopefully a new humanity".*

"FLOATING AUTARKIC NEIGHBOURHOOD  
SCHOONSHIP AMSTERDAM" BY SPACE&MATTER



"CROWN STATION"  
BY MICHELE DE LUCCHI & AMDL CIRCLE  
© FILIPPO BOLOGNESE IMAGES



## CHAPTER \_ 3

# RESTORATIVE

DOMESTIC SANCTUARIES AND COCOONING EXPERIENCES  
(DURATION: 21:59 MINUTES)

“LET NATURE IN”, 2019  
BY ALEXIS CHRISTODOULOU

Working hand in hand with neurosciences, environments can become sanctuaries and places for emotional and physical wellbeing. Technology can support the creation of safe environments that can help individuals and even society at large to be more balanced, using the power of colours, art, design and nature. Artists and designers will be using technology to conceive objects and environments that put mental and physical wellbeing at the core: for example, the giant gradient LEDs by Krista Kim, supported by music, the meditation tools by **Nicholas Henchoz**, based on biofeedback technology, the virtual art galleries designed by **AORA** studio, and finally the new immersive experiences of digital nature created by **teamLab** collective. The space becomes cocooning, restorative for the mind and body, by using elements such as lighting and auditory effects based on circadian rhythm and elaborating in real time individual feedback thanks to body sensors.

*“Introducing healing light and artwork that actually does not overstimulate, but rather slows down the brain, slows down the breathing. It’s all a matter of relaxing visuals and using colour as a way to heal”,* says Krista Kim.

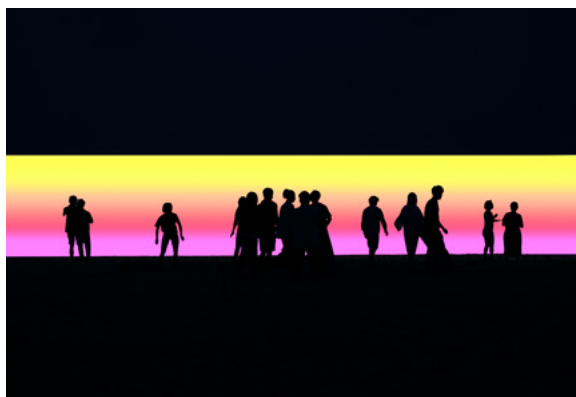
Digital art influences contemporary architecture’s forms and spaces, as shown in the artwork by **Alexis Christodoulou** and in the projects by **Mandalaki studio**. It’s a sensorial revolution, which create ever-changing atmospheres mixing texture, lights, colours and materials.

Ultimately, digital blends into reality and nature is the first inspiration.



“MING SHAN DIGITAL  
EXPERIENCE”,  
BY EPFL+ECAL LAB

“CONTINUUM”, TORONTO BY KRISTA KIM  
© AJANI CHARLES



“HALO HORIZON” BY MANDALAKI STUDIO

## CHAPTER \_ 4

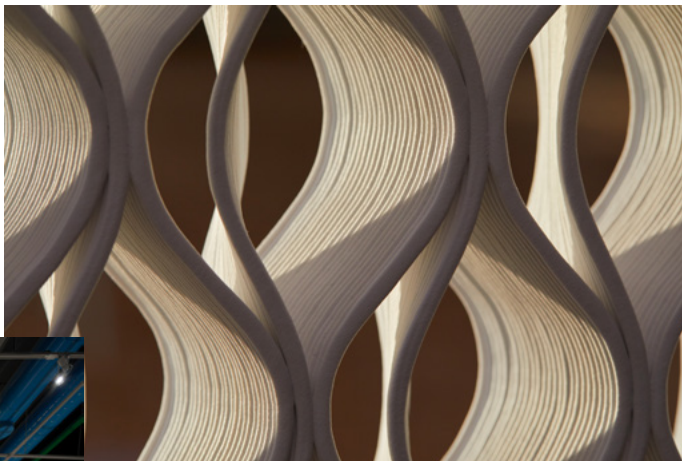
# RESPONSIBLE

VISIONS FOR A SUSTAINABLE DOMESTIC FUTURE  
(DURATION: 25:15 MINUTES)

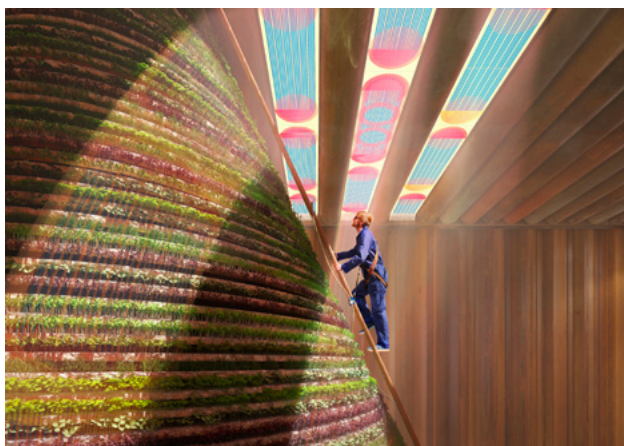
3D PRINTING BY AECTUAL



“FERAL FUTURES” BY JENNY LEE



↑  
H.O.R.T.U.S. XL ASTAXANTHIN.G”  
BY ECOLOGICSTUDIO



↑  
“THE NETHERLANDS PAVILION”  
BY MARJAN VAN AUBEL © BURO BÉLEN

Digital offers several tools for the circular economy as well as an efficient carbon neutral energy consumption. Learning from and working with nature will be key to a healthier planet.

*“We can be responsible only by looking at design and architecture through the lens of very urgent questions - such as climate, social and environmental justice etc - without surrendering to the market or aesthetics”, states **Ippolito Pestellini Laparelli**, Founder of the interdisciplinary agency 2050+.*

AI and Blockchain technology provide the material's ID (origins, characteristics, and manufacturing) enabling also to reduce waste. 3D printing and innovative materials allow re-usage in a circular way: *“We can shapeshift a product into another product re-using the same material up to 10 times for 10 different designs”, says **Hans Vermeulen**, CEO and founder of Aectual.*

Design and technology allow to fully embrace solar energy: Solar cells will be embedded in every surface of our habitat, making this energy source an integral part of our daily life. Solar designer **Marjan van Aubel** believes that *“in the future we'll say that an object or building is broken when it doesn't generate its own energy.”*

Ultimately, on a bigger scale, the re-metabolisation of cities is possible thanks to the synergy of two intelligences: artificial and biological. *“Photosynthetic architecture is able to convert carbon dioxide and other pollutants in the air into freshly metabolised oxygen and biomass”, state **Claudia Pasquero and Marco Poletto** from ecoLogicStudio, an architecture and design innovation firm specialized in biotechnology for the built environment.*

*“The first act is to cultivate and transform, not to purchase and dispose”, says ecoLogicStudio.*



## DOCUMENTARY SERIES CONTRIBUTORS

### 30 CONTRIBUTORS OF THE DOCUMENTARY



T

he contributors to this documentary series are: **Ippolito Pestellini Laparelli** (Architect & Curator. Founder of the interdisciplinary agency 2050+), **Michele De Lucchi**, **Nicholas Bewick and Davide Angeli** (Respectively Founder, Architectural Director and Deputy Studio Director of AMDL CIRCLE), **Hans Vermeulen** (Architect. CEO & Co-founder of Aectual), **Jenn Ellis and Benni Allan** (Co-founders of AORA), **Carlo Ratti** (Architect & Engineer. Founding Partner of CRA-Carlo Ratti Associati), **Alexis Christodoulou** (Founder & Creative Director of Color C Studio), **Claudia Pasquero and Marco Poletto** (Architects, Educators & Innovators. Co-founders of ecoLogicStudio), **Nicolas Henchoz** (Scientist & Design Researcher. Director of EPFL+ECAL Lab), **Professor Pascale Fung** (Professor, Department of Electronic & Computer Engineering and the Department of Computer Science & Engineering at the Hong Kong University of Science & Technology. Director, multidisciplinary Centre for AI Research – HKUST), **Itai Palti** (Architect & Researcher. Director of Hume), **Krista Kim** (Metaverse artist & Founder of the Techism movement), **Benjamin Hubert** (Founder & Creative Director of LAYER), **Enrico De Lotto and George Kolliopoulos** (Architects & Designers. Co-founders of Mandalaki Studio), **Marjan van Aubel** (Inventor & Solar Designer), **Seetal Solanki** (Material designer & Researcher. Founder of Ma-tt-er), **Sara Ricciardi** (Designer & Creative Director), **Patrick Lam** (Founder & Creative Director of Simplex Design Studio), **Tjeerd Haccou, Sascha Glasl and Marthijn Pool** (Co-founders of Space&Matter), **Lara Lesmes and Frederik Hellberg** (Architects & Designers. Co-founders of Space Popular), **Jenny Lee** (Designer & Futurist. Founder of Studio Aikieu), **teamLab** (International Art Collective), **Ben van Berkel** (Founder & Principal Architect of UNStudio and UNSense).

# TOMORROW LIVING PARTNERS

THE HUAWEI MILAN AESTHETIC RESEARCH CENTER  
PATRON OF TOMORROW LIVING PROJECT

The **Huawei Milan Aesthetic Research Center**, founded in 2018 in the heart of Milan, is the trait d'union between Italian creative excellence and the world's leading-edge technologies by Huawei. We bring together consumer psychology, trend research and digital innovation to envision and design future intelligent and connected scenarios for an improved human experience and a better society.

With **Tomorrow Living**, Huawei advances its research journey to explore future living scenarios and digital solutions to create greater value for the society at large. According to the Huawei Milan Aesthetic Research Center, intelligent and inclusive innovation also needs Art and Design's open and collaborative visions about our future needs and aspirations.

The Huawei Milan Aesthetic Research Center is happy and honoured to collaborate with Robert Thiemann on this research project, for his attention to innovation and the evolution of spaces as well as his sensibility on society's future needs and aspirations.

Maria Grazia Mattei and the MEET are the natural partners when it comes to the mission to promote digital culture and arts in a greater depth.

The intuition for the future, its comprehension and ability to convey it today - combined with the interdisciplinary attitude of the studio, makes Space Popular, with **The Global Home**, the perfect interpreter of **Tomorrow Living**.

Finally, the Huawei Milan Aesthetic Research Center has been nurturing the relationship with the **Politecnico di Milano** university in order to convey digital culture and share an exchange of visions and needs with the future generations, on a global scale.



➤  
**HUAWEI MILAN AESTHETIC  
RESEARCH CENTER**



➤  
**ROBERT THIEMANN, @DANIEL NICHOLAS**

**ROBERT THIEMANN**  
CURATOR OF **TOMORROW LIVING** DOCUMENTARY SERIES  
FOUNDER AND EDITOR-IN-CHIEF OF **FRAME** MAGAZINE

Robert Thiemann founded Frame in 1997. As its director and editor-in-chief, he's been key in making Frame a thought-leading community platform for spatial design. Based on global research conducted by a network of writers and editors, Frame reports on industry trends via a print and online magazine, books and events. The Frame Awards honour the world's most innovative spaces and interior products.

*"I've always been interested in what's next in spatial design," he says "It's therefore been an honour and great opportunity to conduct research into the way design and technology will improve our living environments. Interviewing 30 creators worldwide was a great opportunity to reflect on our future habitat: the only way to be a healthy place that supports our wellbeing while shrinking its ecological footprint is a change in the way of thinking of architects and designers. We will need to learn from nature and integrate it into our living environments to make them resilient and sustainable; we will need to understand how to use technology to empower individuals and communities to make their future habitat more responsive, self-sufficient and human-centric".*



## MARIA GRAZIA MATTEI

CO-CREATOR OF **TOMORROW LIVING** EXHIBITION  
HELD AT **MEET DIGITAL CULTURE CENTER** - MILAN  
FOUNDER AND PRESIDENT OF **MEET**

**M**aria Grazia has been investigating digital culture since 1982 as journalist, art critic and digital evangelist.

In 1995, she founded Mattei Digital Communication, a center for research, creation and dissemination of new media and communications. In 2005, she launched Meet the Media Guru (MtMG), a platform to promote public awareness of innovation and digital culture. In 14 years MtMG has brought over 100 thought leaders to Italy, including Zygmunt Bauman, Edgar Morin, Manuel Castells, Joi Ito Don Norman, John Maeda, Lawrence Lessig and many others.

Throughout her career, Maria Grazia has been the Italian curator for Pixar retrospectives, has promoted numerous initiatives dedicated to the diffusion of digital culture in collaboration with international organizations including Venice Biennale (Italy), Siggraph (USA) and Imagina (France).

*She says: "MEET is as a guiding light that takes shape through continuous new meetings, ideas, projects and formats. We offer innovative visions always with critical thinking, creativity and cultural depth. We like to think in terms of collaborative projects, co-creation and co-participation. That's why we have decided to be an active part of this unique project, focused on the human domestic dimension. It will be an Immersive experience, that will remain impressed in our minds because it is able to give a very personal meaning to all the nuances of the future."*



**MARIA GRAZIA MATTEI,**  
**@MEET DIGITAL CULTURE CENTER**

## POLITECNICO DI MILANO



## POLITECNICO DI MILANO SCHOOL OF DESIGN

**T**he School of Design in the Politecnico di Milano is today the largest international university for the training of product, communication, interior and fashion designers, both by number of students and of teaching staff.

It is active in the recently built Milan campus with about 4.300 students, over 450 teaching staff and over 400 research and teaching assistants working in various sectors.

According to "QS Rankin by Subject" the School of Design is 1st in Italy, 3rd in Europe and 5th in the world.

**SPACE POPULAR**  
 CREATOR OF THE IMMERSIVE EXPERIENCE  
**THE GLOBAL HOME**  
 MULTIDISCIPLINARY STUDIO

S

pace Popular is a research-driven architecture, design, and media studio that explores the future of spatial experience through virtual reality, film, exhibitions, and writing, as well as buildings and objects.

The studio is directed by architects Lara Lesmes and Fredrik Hellberg, both alumni of the Architectural Association in London (2011).

They founded the practice in Bangkok in 2013 and have been based in London and Spain since 2016. The studio has completed buildings, exhibitions, public artworks, furniture collections, and interiors across Asia and Europe, as well as virtual architecture for the immersive Internet (aka. the metaverse).

Lesmes and Hellberg both have extensive academic experience having taught architectural design studio since 2011, first at INDA, Chulalongkorn University in Bangkok from 2011 to 2016, at the Architectural Association in London from 2016 to 2021, and currently at Daniels, Faculty of Architecture, University of Toronto since 2020, and UCLA Architecture and Urban Design since 2022. Their current MArch design and research studios both at University of Toronto and UCLA investigate visions for civic architecture in the immersive Internet.

Among their clients, collaborators, and commissioners: MAXXI - National Museum of 21st Century Art, Rome, Italy; The Swedish Centre for Architecture and Design - ArkDes, Stockholm, Sweden; Royal Institute of British Architects, London, UK; National Museum of Modern and Contemporary Art, Seoul, South Korea as well as independent galleries such as MAGAZIN, Vienna, Austria; and Sto Werkstatt, London, UK.

They say: "Our work as Space Popular explores the relationship between architecture and media, both from a historical perspective and in the form of near-future speculations. The Global Home is our latest immersive film exploring the future of virtual togetherness in the home. Initiatives such as Tomorrow Living at MEET enables us to present ideas to a wider audience in a space that brings us closer to what such a future might feel like. We hope to inspire both enthusiasm and caution as we step into an exciting and uncertain mediascape."

LARA LESMES E FREDERIK HELLBERG,  
 SPACE POPULAR, @ANNA HUIX  
 ↘



Project by Huawei Milan  
 Aesthetic Research Center



Research conducted  
 by Robert Thiemann

**FRAME**

Exhibition  
 co-created with

**MEET** DIGITAL CULTURE CENTER | Fondazione CARIPLO

Educational  
 partner



**POLITECNICO**  
 MILANO 1863