

POST-DOMESTIC HABITAT



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### PAD

via Festa del Perdono 1 - 20122 Milano - Italy via Roma 171 - 90133 Palermo - Italy info@padjournal.net - editors@padjournal.net

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# DOMESTIC DEVICES

HOW INTERIOR ARCHITECTURE AND DESIGN REACT TO THE CONTEMPORARY SCENARIO

# **Redefining Paradigms**

# How Technology Shapes Interior Spaces in the Age of Drones and Flying Cars

### **Anna Barbara**

Politecnico di Milano Orcid id 0000-0002-9265-7290

### Elena Baharlouei

Politecnico di Milano

### **Keywords**

Drones, Interiors, Design, Buildings, Futures.

### **Abstract**

Mobility technologies, since the discovery of the uniaxial wheel, have strongly shaped the forms and times of cities and buildings and their interiors. The paper explores how newly developed flying transports, such as drones, may in the future reshape and alter the interiors of the buildings we inhabit.

Utopias about cities with flying cars are a literature full of examples and theories, such as Andrea Branz/Archizoom's *No Stop City* and *Instant City* and others, but also even more extensive cinematography such as Christopher Nolan's movie *Inception* and Stanley Kubrick's 2001: A Space Odyssey.

In fact, the flying vehicles, by which people as well as goods will soon move, introduce a fourth dimension (time) and will allow access to buildings from the roof and facades. They will recover the distributional logic of an iconic and historical typology of Milanese architecture, that of the *edificio a ballatoio*, in which the distribution of spaces followed a private/public logic that would lend itself perfectly to the buildings of the drone city. The article will explore the transformations in plans, materials, facades, ways of living, and relationships that, this coming revolution, will introduce into the interior spaces of buildings and our existences.

# 1. Elevation. How Drones Will Change Cities

In 2018, design magazine Dezeen, produced a documentary directed by Marcus Fairs and Oliver Manzi, entitled *Elevation*. *How drone will change cities*, that began questioning architects, designers, planners, and curators about the impact of drones on the city, built space, interiors, and ways of living. It was a documentary assessing both the negative and positive implications of drones arriving on our windowsills, balconies and terraces delivering goods and people at all times of the day and night.

The documentary includes interviews with Norman Foster of Foster+Partners, Anab Jain of Superflux, and transport designer Paul Priestman, who demonstrate enthusiasm in highlighting the potential of these new vehicles of transport and delivery (Hafiz & Zohdy, 2022).

There are also more critical voices who see the possibility of losing privacy and security, if not becoming instruments of risk to our safety (Baraona Pohl, Verzier, & Shoshan, 2018). There are futuristic evaluations in which drones will help us relieve congestion on the streets, enable us to control construction sites, carry out construction or decoration, as in the case of the façade painted by drones in an experiment carried out by the Carlo Ratti e Associati Studio, and help us increase our awareness of the context with a constant change of perspective.

The purpose of this article is to show how this already available technology will profoundly reshape even the most intimate parts of a building, such as the interior spaces.

### 2. Nomadic Infrastructures

The use of drones undermines the transport system that has shaped the city so far, based on linear and fixed infrastructures. Roads, streets, squares, developed linearly at ground level defined plots of land on which architecture and buildings were constructed.

The horizontal, radial, linear or gridded city has created architecture, especially residential architecture, developed by layers/layers of intimacy and privacy with a progression: public, semi-public, semi-private, private, intimate.

The foundation of cities has been shaped by streets and pathways, squares, pavements, and entrances to buildings mainly at ground level, but the visionary temptation to imagine different modes of access and movement accompanies the history of architecture and interiors.

One of the most famous reflections on the impact that flying transportations could have on living goes back to F. L. Wright's *Broadacre City*, in which flying machines were used for short-range proximity connections. That visionary project anticipated an advanced and technological system of last-mile logistics, served by flying vehicles better suited to the city environment, capable of relieving traffic congestion of the streets and allowing a reforestation of the city as advocated by Carlos Moreno's recent theories on the *15 minutes city*. We are not new to this scenario that has fed literature and movie. In Ridley Scott's *Blade Runner*, flying vehicles land on the various floors of the city, creating new connections at different heights, without necessarily entering from the ground floor. The exploration of the potential about the relationship between accessibility and the verticality of buildings has been

going on since the dawn of modern architecture, when the automobile became a popular private vehicle, but also when the first air transport began to invent prototype aircraft. The technological fervor also found expression in the movement of Futurism, which, through projects and works of art, had guessed that mobility would become a shaping force in architecture, the city, and the lives of all.

Futurism played a key role in inspiring the iconic film *Metropolis*, directed by Fritz Lang in 1927, in which spaces intertwine at all heights, linking accesses with flying bridges that crossed vertical spaces that mix public and private, inside, and outside in a continuum.

The idea of nomadic/flying infrastructures, experimented theoretically by the radical movements in the architecture of the 1960s and 1970s, with projects such as Archigram's *In*stant City, were certainly the birth of the multidimensional mobility paradigm. Also the introduction of imagery as in Archigram/Branzi's *No Stop City*, where the building was fully accessible, flexible and therefore penetrable from all points and not hierarchically from the ground floor, led to experimental projects such as Steven Holl's Linked Hybrid building complex in Beijing, which while maintaining the paradigm of gravity and access from the ground explored the potential that access to the building from other levels could develop. The latest generation of buildings seems to consider access to all heights a possibility and no longer a projection. The Line project in Saudi Arabia, which has a popular genealogy in Mario Fiorentino's *Corviale* and which introduces the concept of an elevated development of a city that is, however, a single building, 170 km long and 500 meters high, and *The Circle* proImagining a world where buildings are accessed through all sides, rather than just horizontally at ground level, has the potential to transform urban life in profound ways. This paradigm shift redefines development, composition, and a different perspective, in which horizontal and vertical spaces intermingle, raising the baseline for the emergence of the city. For Paul Priestman, the potential impact of drones is equal to the advent of the first railway, which initiated the linear expansion of cities. So, what could happen, and in part is already happening, is that drones will redesign the various scales of design from the city to the building and from this to the interior.

# 3. Flipped Building

The arrival of drones, which will allow access from all sides of the building but before that from every other side, will allow entry from the roof. Again, this is not a morphological novelty, in fact some buildings, which may be in areas backed by mountains or cliffs, may have an entrance from the top of the building and provide a top- down development. As in the provocative project recently proposed by Oxo Architects is in fact *inverted high-rise*, a building that envisages the reuse of abandoned motorway bridges on the Salerno-Reggio Calabria motorway, accessed from above by leaving the car and descending downwards. The project envisages a pedestrian street and a road dedicated to vehicular traffic at the top, and a self-sufficient vertical village with rainwater collection

systems, purifiers, solar energy plants and mechanization of organic waste. A geothermal and geo-hydro plant would provide hot water and electricity to the inhabitants of the futuristic condominium, who would have to descend 45 meters in a lift to reach the houses embedded in the pylons.

The role of the roof, which Le Corbusier had already identified as strategic in the *Unité d'Habitation* in Marseilles, becomes even more significant because it becomes a place of access and service not only to the community but also to the city. As soon as transport moves from the ways of earth to the ways of heaven, the entire city will expand with a vertical logic and new typological forms will emerge that will serve to land, park, recharge drones (Hafiz & Zohdy, 2022).

But what the drones will be able to introduce is a real flip of the section of the buildings by reconfiguring the composition, functions, and hierarchies of all the interior spaces and especially by raising the base line and abandoning or redesigning the ground floor. The overturned building will distribute spaces according to other logics and flows, the role of roofs will be completely redesigned at the expense of exclusivity and in favor of the community.

# 4. The Street-Balcony

To understand the possible scenarios of the impact of drones on buildings, the most interesting way seems to be the one already explored in the past by all those experiments related to the typology of the balcony building or the street at height. The access, in fact, to the building from each façade entails a review not only of the roof, but also of the balconies, terraces, and service ramps of the building.

Indeed, to think that drones will dissolve the boundaries between indoors and outdoors is unthinkable now, while it is plausible to think that access will be mediated by architectural infrastructures capable of transferring certain qualities of the street to the heights while guaranteeing privacy and security. In the past, examples of the development of typologies capable of taking streets to heights, such as Ludwig Hilberseimer's attempts to develop the *Vertical City* have proved to be interesting proposals.

If the street is a room for the community, then is crucial that movements on the street are imbued with sensitivity and sense in order not to violate the home, but at the same time to offer opportunities for encounters and to adhere to a kind of pact that the street makes with the buildings facing it (Kahn, 1971). Herman Hertzberger stated that the streets of a city need slowness, concentration to ensure social exchanges and lively relations between people who do not have intimate knowledge of each other and who do not intend to have it (Hertzberger, 1996). In Hertzberger's projects, in fact, the street-living room is the one in the vicinity of residences "in which the semi-public/semi-private space outside the dwellings becomes a common living room, a shared space between those who live there" (Bernardini, 2018).

It is precisely this idea of the street-inhabitant that seems to point a sensible way forward in architecture's response to the entry of drones to safeguard its interiors. For this concept assumes that inhabitants share something and have expectations of reciprocity from one another (Kahn, 1971). The street-balcony is a form of social gallery whose function is not simply the dislocation, but that of community pact.

The absence of vehicles has allowed important experiments with it in the history of architecture, as in many of the works of the Team X Architects, the Smithson, Giancarlo De Carlo, Bakema and Van der Broek, Candilis Josic and Woods. In their projects, this design infrastructure reinterpreted the system of relationships, both physical and social, of the traditional city, but took it to new heights, entering the buildings and giving shape to a private urban space (Bernardini, 2018). Another model that may point to interesting answers is the stem model proposed by the Candilis Josic and Woods group of architects, which envisages elevated pedestrian paths that accommodate both services and residences (Hertzberger, 2009). The stem tapers off as it proceeds towards residences in increasingly smaller paths, ensuring a mediated relationship between housing and services and urban space. In Smithson's *street-in-the-air* and Bakema's and Van der Broek's aerial walkways, whose sections accommodate activities and socializing, but above all to guarantee another fundamental requirement, that of privacy of the living quarters,

For this reason, the KCAP group, in the *Stadstuinen* project in Rotterdam, decides to move the balcony away from the façade by a few meters, then to set it apart for having the entrance area to the dwellings has a semi-private mediating the transition between the individual and collective dimensions of the residence, thus solving the problem of privacy between inside and outside. The balcony, although detached from the building, is of such a size as to invite moments of rest and not just

without which even the sociability of the balcony would be

transit (Bernardini, 2018).

undermined (Smithson, 1971).

The separation between public and private made by the street-balcony must be a *soft edge* that can filter passages to and from the interior in a gradual and pleasant way, avoiding defensive closures to the exterior (Gehl, 1977).

The street-balcony is a semi-private or semi-public space that has a strong relationship to both the interior space and the public space on the ground. Jane Jacobs about the value of this infrastructure in relation to a building in Brooklyn argues that the walkways were cleverly designed not just for transit, but for other uses as well, to solicit self-surveillance from the residents (Jacobs, 2009).

The walkway provides the necessary distance to allow frequent but not demanding contact, guarantee privacy and keep the public space vital (Smithson, 1971).

The street-balcony responds to road congestion caused by cars, making the ground zero of cities unlivable. This model has taken hold in those very high-density metropolises, where flows are separated to make mobility efficient and optimize space, and where interiors have a very substantial urban dimension. This is what has started to happen in cities like Hong Kong, which already experience this four-dimensionality. The ground floor is cancelled in favor of a connectivity that produces an urban-scaled interior (Frampton, Solomon, & Wong, 2018). In this sense, the West Village Basis Yard project in Chengdu is of great interest to us. A walkway winding through the courtyard connects each floor of the building, from the basement to the roof; it is designed for pedestrians and cyclists for leisure and sports activities. This constant change of altitude activates a dynamic flow of energy within this architectural design and gives joggers and cyclists an unusual experience.

The project aims to integrate a variety of social resources into a local collective living space that simultaneously accommodates sports and leisure activities, cultural and artistic events, fashion, and creative industries.

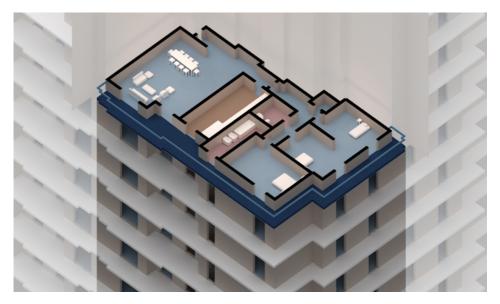
# 5. Post-Domestic Interiors

The Smithsons understood early on that a new housing model needed a new type of street, and for this reason a Post-Domestic model with drones in the urban landscape must also precede a new type of elevated street or balcony-road. In this idea of the street-balcony or ramp-balcony there is a safety dimension that allows even the most fragile categories to have autonomy. The street-balcony is a threshold between residence and sky (Bernardini, 2018).

The issue of privacy is in fact central to the management of the relationship with the interior, and this theme is often resolved by the arrangement of spaces, as envisaged by Herman Hertzberger in the *Student House* on the Weesperstraat, in which the bedrooms, facing the balcony, have a raised floor and ribbon windows that allow a view of the landscape without allowing outside glances to infringe privacy.

Regarding the threshold relationship between drone and architecture, we have arrived at the likely scenario that drones will approach buildings through the mediation of an infrastructure such as the street-balcony, but we will have to understand what will happen to the composition of spaces and the qualities of these ones. Domestic spaces will undergo the most metamorphosis, entering that Post-Domestic configuration also initiated by the digital revolution.

**Figure 1.** Baharlouei, E., Site of the building, Thesis Incubator Studio, Politecnico di Milano, 2023. (designed by Elena Baharlouei).



**Figure 2.** Baharlouei, E., The existing Apartment, Thesis Incubator Studio, Politecnico di Milano, 2023. (designed by Elena Baharlouei).

The availability of technology such as drones raises political, social, and cultural issues that are perhaps the main obstacle to their indiscriminate entry onto the market today. Within residential spaces, drones will have a profound impact on the security that will require openings to the outside world, windows and balconies, to protect against intrusions by strangers; on the privacy that will have to be somehow guaranteed especially in the most intimate areas of the home; on the relationships that will have, even in the real world and not only in the digital one, continuity without any filter between public and private (Rao, Gopi, & Maione, 2016)

Drones will have an impact on the composition of the interior spaces of residences, and interior research will have to move on several fronts:

 The redesign of interior layouts with a potential move of the most private spaces away from the permeable parts of

- The exploration of new smart materials in architecture and interiors capable of filtering according to situations and moments from the view, listening, etc. of spaces to the interior and vice versa.
- The creation of buffer zones capable of interposing themselves between the airspace of the drones and the building, such as ramps capable of interrupting the continuity between outside and inside.

From research carried out within the Design Department of the Politecnico di Milano, and with a thesis developed within the Thesis Incubator Studio, we have been able to ascertain

the building.

What in the tradition of early 20th-century Milanese architecture is called the *balcony typology* thus becomes one of the Post-Domestic typologies for this potential transformation (Figg. 1-7).

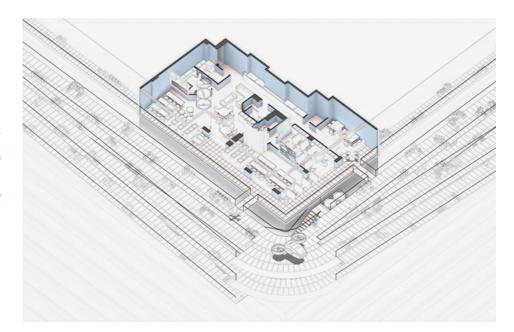
The research experimented with how an existing residential building could be redesigned should drones become the main (not only) transport system for people and goods soon. It emerged that the interior would undergo the following transformations:

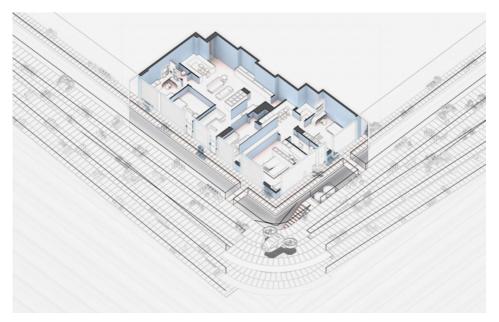
- Layout. Floor plans are defined according to the entrance, predominantly from the street-balcony and the windows that guarantee the entry of light but must not guarantee violation of privacy. Established services, such as bathrooms and kitchens, remain fixed points, while the other rooms are distributed towards the street-balcony those of living, while the bedrooms are pushed inwards or behind screens. On average, the bedrooms increase their surface area by becoming true studios, while the service areas reduce their size. Entertainment areas, on the other hand, take on a strategic role and increase in size.
- Partitions. Walls tend to take the form of movable partitions with different characteristics in terms of geometry and shading. Curtain systems with different degrees of transparency and opacity make spaces and their functions more flexible.

- Windows and shading. Windows become membranes with different levels of shading. Size and positioning are also related to the need for privacy, but also ventilation and lighting.
- Accesses. Two entrances can be envisaged, one from the inside confirming the existing one and another from the outside adapting existing balconies, loggias, and galleries to allow for disembarking.
- Balconies. They change their role and configuration in which these spaces can open or close to provide semi-private or semi-public spaces.
- Bedrooms. Each room then becomes its own place, tending to be self-sufficient with all comforts. Privacy must be guaranteed, not necessarily at night, but in intimate moments.

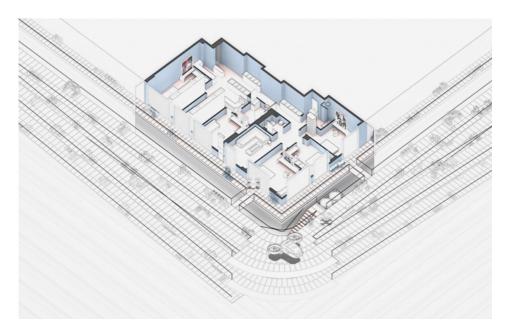
Although drones are now on our windowsills, research is still very fragmented and unsystematic, failing to offer relevant insights into a design, social, political, and therefore regulatory framework.

It will therefore be important for the disciplines of interior design to help research, explore and package possible scenarios in the immediate future for designers, builders, regulators, and ordinary inhabitants.

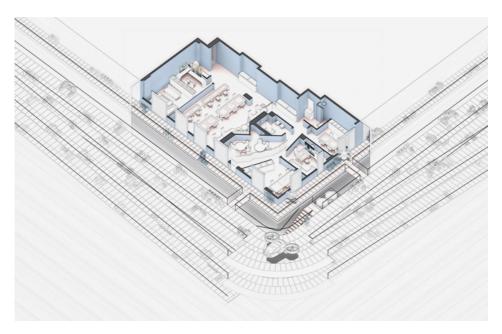




**Figures 3 & 4.** Baharlouei, E., Art School and Apartment for 2 families, Thesis Incubator Studio, Politecnico di Milano, 2023. (designed by Elena Baharlouei).



**Figures 5 & 6.** Baharlouei, E., Apartment for working and Apartment for students, Thesis Incubator Studio, Politecnico di Milano, 2023. (designed by Elena Baharlouei).



**Figure 7.** Baharlouei, E., Offices, Thesis Incubator Studio, Politecnico di Milano, 2023. (designed by Elena Baharlouei).

# References

Baharoulei, E. (2023). *To flip the Paradigms. A Design Speculation in Corvet-to*. [Unpublished thesis dissertation]. Politecnico di Milano.

Baraona Pohl, E. B., Verzier, M. O., & Shoshan, M. (Eds.). (2018). *Drone. Unmanned. Architecture and Security Series* (Vol. 1). Dpr-Barcelona.

Bernardini, C. (2018). *Lo spazio della strada. Integrazione e accessibilità come superamento delle soluzioni tecniche standard*. [Unpublished doctoral dissertation]. Università di Roma la Sapienza.

Bharat R., Gopi, A. G., & Maione, R. (2016). The Societal Impact of Commercial Drones. *Technology in Society*, *45*, 83–90. <a href="https://doi.org/10.1016/j.techsoc.2016.02.009">https://doi.org/10.1016/j.techsoc.2016.02.009</a>

Fairs, M., & Manzi, O. (2018, May 21). Elevation. How Drones Will Change Cities. *Dezeen*. <a href="https://www.dezeen.com/2018/05/21/dezeen-drones-documentary-elevation-release/">https://www.dezeen.com/2018/05/21/dezeen-drones-documentary-elevation-release/</a>

Farina, M. (2012). Spazi e figure dell'abitare. Il progetto della residenza contemporanea in Olanda. Quodlibet.

Frampton, A., Solomon, J.D, & Wong, C. (2018). *Cities Without Ground. A Hong Kong Guidebook*. Oro Editions.

Frampton, K. (1982). La strada ordinaria come manufatto continuo. In A. Standford (Ed.), *Strade* (pp. 335–364). Edizioni Dedalo.

Gehl, J. (1977). *The Interface Between Public and Private Territories in Residential Areas*. The Department of Architecture and Building, Melbourne University.

Hafiz, D., & Zohdy, I. (2022). Smart Cities in the Autonomous Era. How Autonomous Technologies Can Change the City Design and Infrastructure. In F. Rosso, D. Morea, & D. O. Pribadi (Eds.), *Innovations in Green Urbanization and Alternative Renewable Energy. Advances in Science, Technology & Innovation* (pp. 37–45). Springer. <a href="https://doi.org/10.1007/978-3-031-07381-6\_4">https://doi.org/10.1007/978-3-031-07381-6\_4</a>

Hertzberger, H. (1996). Lezioni di architettura. Laterza.

Hertzberger, H. (2009). Come incrementare la coesione sociale nell'housing e nel progetto urbano. In L. Gelsomino, & O. Marinoni, *I territori europei dell'abitare* (p. 25). Editrice Compositori.

Jacobs, J. (2009). Vita e morte delle grandi città. Saggio sulle metropoli americane. Einaudi.

Kahn, L. (1971). The Room, the Street, the Human Agreement. *AIA Journal*, *56*, 33–34.

Porta, S. (2002). *Dancing street. Scena pubblica urbana e vita sociale*. Edizioni Unicopli.

Sapolsky, R. M. (2017). Behave. The Biology of Humans at Our Best and Worst. Penguin Books.

Smithson, A., & Smithson, P. (1971). *Struttura urbana*. *Studi di Alison e Peter Smithson*. Calderini. (Original work published 1967).



# **BIOGRAPHIES**

### Elena Baharlouei

She graduated in Interior and Spatial Design at Politecnico di Milano. She has been Design Intern at Labirint - Laboratory of Innovation and Research on Interiors - Department of Design, Politecnico di Milano. Former Designer at Fluid Motion Architects.

elena.baharlouei@mail.polimi.it

### Nicolas Bailleul

Since October 2020, he's a PHD candidate at the AIAC Laboratory (University Paris 8), under the supervision of Patrick Nardin (MCF) and co-supervision with Gwenola Wagon (MCF). Title of the thesis: *The Bedroom. A Space of Contained Creation*. Through the creation of documentary films, installations, and performances, his work is defined by the use, appropriation, collection, and exploration of platforms, virtual worlds, connected spaces, and the web's uncertain logics and geographies. By attempting to concretely depict what unfolds in supposedly unreal, invisible, and inaccessible places, he aims to bring forth contemporary issues related to creation, sociology, economy, and ecology.

bailleul.n@gmail.com

### **Anna Barbara**

She is Associate Professor in Architecture and Interior Design at Design Department, Politecnico di Milano. President of POLI.design; Member of the Board of Directors of the World Design Organisation; Co-founder of the Global Design Futures Network; Scientific coordinator (with Venere Ferraro) of the D\Tank, Design Department, Politecnico di Milano. Graduated in Architecture at Politecnico di Milano, she taught at Tsinghua University, Academy of Art and Design, Beijing (China); Kookmin University, School of Architecture, interior Design and at Master Brain 21 (South Korea); and in universities in USA, France, Thailand, Brazil, Jordan, UAE, India, etc.

She was Foundation Fellow 2000 at Hosei University in Japan, Special Mention of Borromini Prize 2001, selected by Archmarathon 2018, selected ADI-Index 2019, 2023, Special Mention Fedrigoni Top Award – Large Format Communication, 2023; Eccellenze della Lombardia 2019, 2023.

anna.barbara@polimi.it

### Michela Bassanelli

Ph.D., she is an Assistant Professor in Interior Architecture and Exhibition Design at Department of Architecture and Urban Studies, Politecnico di Milano. Her research focuses on domestic interiors, museography and exhibition design, and practices of disseminating collective memory through a multidisciplinary theoretical approach. Among her publications: Abitare oltre la casa. Metamorfosi del domestico (ed., 2022); Covid Home. Luoghi e modi dell'abitare, dalla pandemia in poi (ed., 2020); Oltre il memoriale. Le tracce, lo spazio, il ricordo (2015).

michela.bassanelli@polimi.it

### **Gerhard Bruyns**

He is an architect and urbanist and an associate professor of Environment and Interior Design at the Hong Kong Polytechnic University School of Design in Hong Kong. He is the PhD coordinator, the Deputy Specialisation Leader of Transition Environmental Design, and the Discipline Leader of Environmental and Interior Design.

He holds a PhD and MSc from TU Delft, the Netherlands. His research deals with the aspects of spatial forms and how typologies of use impact behaviour through the formal expression of space. This relates to the societal conditions of cities whose landscapes are compressed by speculation and excess. He has published research in journals, conferences, and edited volumes, with the most recent being a Springer-published editorial collection on Design Commons.

gerhard.bruyns@polyu.edu.hk

### **Ece Canlı**

She is a researcher and artist whose work intersects body politics, design performativities and gendered reproduction of material regimes. She holds a PhD in Design from the *University of Porto* (PT) and is a founding member of the *Decolonising Design Group*. She is currently a full-time researcher at *CECS (The Communication and Society Research Centre)* in the *Cultural Studies* cluster at the *University of Minho* (PT) where she investigates spatial, material and technological

conditions of the criminal justice system, queer incarceration, penal design and abolition feminism. As a researcher and educator, she lectured and published internationally on queer materialities, critical making and penal design. She is a member of the *Carceral Geography Working Group (CGWG)* (UK), *AtGender* (NL) and SOPCOM (PT) research entities. As an artist, she works with extended vocal techniques and electronics, producing sound for staged performances, exhibitions and films both in collaborations and as a soloist.

### António Carvalho

ececanli@ics.uminho.pt

PhD degree in Architecture with a thesis on housing design for older people. Associate professor at Politecnico di Milano, where he teaches how to design inclusive and age-friendly environments. His research interests are age-friendly housing, intergenerational spaces, inclusive environments, shared urban space, universal design, neighborhood green spaces, placemaking. Antonio Carvalho is an awarded practising architect and urban designer who runs his own architectural practice in Lisbon since 1988, with extensive built work in Portugal.

antonio.dasilva@polimi.it

### **Tiangin Chen**

PhD candidate at AUID, Politecnico di Milano, her research interest is focused on the age-appropriate architectural design in Covid-19 era.

tiangin.chen@polimi.it

### **Veronica Ching Lee**

She is a Hong Kong born interior and architectural designer and researcher. With an MSc in Architecture from the TU Delft, and a BA in Environment and Interior Design from The Hong Kong Polytechnic University, her research background and interest lies in urban interiority and the negotiation of territories from an interdisciplinary approach. Her master thesis *The interior is the exterior; the exterior is the interior* deals with the negotiation of territories between the *public* and the *private* in the hyperdense city of Hong Kong, seeking a theoretical approach to redefine and understand the complex relations between inhabitants and the collective urban city. Her PhD research extends the discussion of the master thesis and further challenge the conventional concepts of interiority and exteriority and the public-private dichotomy from a perspectivist approach.

### **Sofia Cretaio**

PhD student in Management, Production, and Design at the Polytechnic of Turin. Her research focuses on using data to innovate spatial and organizational dynamics in the workplace, fostering safety and sustainability. She has a Master's Degree in Systemic Design and she is a member of the Innovation Design Lab and the Graphicus magazine.

sofia.cretaio@polito.it

### **Davide Crippa**

He is a senior researcher at Università luav di Venezia, where he is also director of the Master in Innovation Design Management. He obtained a PhD in Architecture and Interior Design in 2007 and has taught at the Milan Polytechnic and the New Academy of Fine Arts in Milan. Head of the ADI designer commission until 2012, he writes articles and publishes books on theory and criticism of the project, always projecting his attention towards constantly evolving scenarios. In 2004 he founded Ghigos studio and, since then, has carried out both theoretical research and projects awarded in international competitions. In particular, he is now investigating the potential of interaction design and new digital fabrication technologies from a circular economy perspective.

dcrippa@iuav.it

### Jiarui Cui

He is a PhD candidate, Department of Architecture and Urban Studies at Politecnico di Milano, Italy. With a background in architecture and interior design, Jiarui has pursued academic research and practical projects in both China and Italy, providing a rich, cross-cultural perspective on spatial design and urban development. His primary area of research focuses on the *Pro-*

ductive Environment, specifically exploring the redefinition of spaces designated for production in a contemporary context. Through his studies, Jiarui aims to unravel the complexities of how spatial configurations and urban designs influence, and are influenced by, the evolving nature of production in modern societies. His hands-on experience in architecture and interior design projects enhances his academic inquiries, offering practical insights into the theoretical frameworks he examines. Jiarui's interdisciplinary approach leverages both qualitative and quantitative methods, blending architectural design, urban studies, and sociocultural analysis.

jiarui.cui@polimi.it

### Silvana Donatiello

She is a research fellow in Industrial Design at University of Naples Federico II. Her research focuses on ecological transition, with a specific focus on social design, Nature Based Solutions, digital manufacturing and community-based systems. She has a Bachelor's Degree in Architecture and an international Master's Degree in Design for the Built Environment from the University of Naples Federico II. She has been a visiting student at the University of Applied Sciences Fachhochschule Potsdam, Germany.

silvana.donatiello@unina.it

### **Daniel Elkin**

He is a researcher and designer specializing in spatial agency research, agency driven design, and housing science. He is an associate professor and the Deputy Discipline Leader of the Department of Environment and Interior Design at The Hong Kong Polytechnic University School of Design. Educated at Cranbrook Academy of Art (MArch) and the University of Cincinnati (MArch, BSArch), Mr. Elkin's career spans between sociological research, architecture, product design, and activism. Elkin has established scholarship in spatial agency research and housing science, branches of social and spatial research concerned with individual and collective decision making, particularly regarding housing acts and artifacts. daniel.k.elkin@polyu.edu.hk

### Raffaella Fagnoni

She is full professor of Design at Università luav di Venezia, where she teaches design laboratories and civic space design. She also directs the PhD school in Science of Design. She has lectured abroad, in Iran and China, and has coordinated local and international research groups, both public and privately funded. Her research topics focus on design for social impact, service design for public interests, social innovation, reuse and recycling, and design for sustainability, with the aim of intervening in emerging issues through active stakeholder involvement and the enhancement of local heritage. She is focused on the ongoing role of design in contemporary society, considering environmental emergencies and the state of alert in which our planet finds itself, working on the circular economy, local territory, waste recovery, and care for people and habitats. rfagnoni@iuav.it

### Mariarita Gagliardi

She graduated with honours in the international master's degree DBE Design For The Built Environment at the University of Naples Federico II. She is currently a full-time research fellow in industrial design at the University of Naples Federico II. She is specialised in the field of digital manufacturing and and parametric design, participating in several international workshops. Her research topics focus on the field of Nature-Based-Solutions (NBS) and IoT (internet of things). mariarita.gagliardi@unina.it

### Vanessa Galvin

She is a lecturer in the Department of Interior Architecture at the School of Design and Built Environment, Curtin University. She completed her PhD in Architecture: History and Theory at the University of Western Australia. Her dissertation is theoretical, and it adopts a Foucauldian approach to the history of the domestic interior. The research extends to questions of inhabitation that include notions of subjectivity and the processes of self-formation as they relate to the built environment. In addition, her research often explores the counter-positioning of fictional and imagined regimes against empirical bases for understanding and managing domestic environments.

v.galvin@curtin.edu.au

### **Guillaume Guenat**

He is a PhD student at the Institute of social sciences at UNIL, where he's working on a thesis about the social History of video games practices in Romandy, directed by Prof. Gianni Haver. Graduated in political science, he focuses his research on the social, political and historical dimensions of leisure, games, media and images.

quillaume.guenat@unil.ch

### Cyrus Khalatbari

He is an artist, designer and PhD candidate of the joint program between the Geneva Arts and Design University (HEAD – Genève, HES-SO) and the Swiss Federal Institute of Technology (EPFL). Inside his PhD, Cyrus' bridges ethnographic fieldwork, Science and Technology Studies (STS) with arts and design methodologies in order to address, at the level of the Graphical Processing Unit (GPU), the ecological implications of computing power and the digital.

### **Nicholas Thomas Lee**

PhD, Architect MAA, he is an Assistant professor at the Institute of Architecture and Design, Royal Danish Academy – Architecture, Design, Conservation. With an academic and professional background in both architecture and design, his research interests occupy the fertile domain between these disciplines, with a particular focus on domestic architecture. He is specifically concerned with *In-between places* within, thresholds between, and the morphology of domestic land-scapes. As a core scholar at *STAY HOME* and the Center for Interior Studies, his post doctorial research project, entitled *Dwelling in a Time of Social Distancing*, examines the unprecedented demands that the Covid-19 pandemic has placed on the private home and its architectural arrangement. He actively works with a *Research by Design* method, whereby architectural installations and exhibitions are central to both knowledge production and dissemination.

\*\*nlee@kglakademi.dk\*\*

### **Jacopo Leveratto**

PhD Architect, he is a senior lecturer at the Department of Architecture and Urban Studies of Politecnico di Milano, where he focuses his research on radical forms of habitability and posthuman architecture. Local Principal Investigator of the European Research *en/counter/points* (2018-22) and head of Walden Architects during the last Seoul Biennale on Architecture and Urbanism (2021), he is now a coordinating member of the Italian National Biodiversity Future Center (2022-25), and the National Coordinator of the research project PRIN *DT*^2 (2023-25).

Besides having authored numerous publications in peer-reviewed journals and edited volumes, he published *Posthuman Architectures: A Catalogue of Archetypes* (ORO Editions, 2021).

jacopo.leveratto@polimi.it

### **Andrea Navarrete**

She recently gained a doctoral degree from the School of Design at The Hong Kong Polytechnic University. Her research focuses on the promotion of autonomy and decoloniality through design. After graduating from a bachelor of Industrial Design in Mexico – where she investigated design's impact and its possible future within a Latin American context – she realized that the role of design in the ruling economic dynamics promotes unsustainable ways of production and consumption, leading her to study a MA in Social Design & Arts as Urban Innovation in Vienna.

She has worked with participatory processes through design workshops, creating synergies toward endogenous forms of development, design and autonomy.

andrea.navarreterigo@connect.polyu.hk

### Lucrezia Perrig

She holds a Bachelor's degree in philosophy from Saint Louis University, and a Master's degree in political science from Lausanne University. She wrote a dissertation on visual arts students' relationship with politics, and then spent two editions of the feminist festival Les Créatives in Geneva, where she co-wrote a guide to gender equality in culture. <a href="Lucrezia.perrig@unil.ch">Lucrezia.perrig@unil.ch</a>

### Vera Sacchetti

She is a Basel-based design critic and curator. She specializes in contemporary design and architecture and serves in a variety of curatorial, research and editorial roles. Recently, she co-founded *Fazer*, a new design magazine in Portugal; co-initiated the *Design and Democracy* platform (2020–); and served as program coordinator of the multidisciplinary research initiative *Driving the Human: Seven Prototypes for Eco-social Renewal* (2020–2023). Sacchetti teaches at HEAD Geneva and Design Academy Eindhoven, and in 2020 joined the Federal Design Commission of Switzerland. vera.vilardebo-sacchetti@hesge.ch

### Paolo Tamborrini

Full professor in Design, in 2015 he co-founded the Innovation Design Lab. He has coordinated numerous research in the field of design and communication for sustainability. He is the director of "Graphicus - designing communication", a magazine that tells the world of communication involving authors of distant but connected disciplines. paolo.tamborrini@unipr.it

### Annapaola Vacanti

She is a junior researcher at Università luav di Venezia, where she teaches in design laboratories for the curricula of Product design and Interior design of the master degree design courses. She obtained a PhD in Design at the University of Genoa in 2022. Her research focuses on Interaction Design and the opportunities offered by data-driven tools and Artificial Intelligence for design, exploring the challenges that lie at the intersection between technology, human factors, and sustainability issues. She is working within the iNEST (Interconnected Nord-Est Innovation Ecosystem) project, funded by the National Recovery and Resilience Plan (PNRR). Alongside her academic career, since 2018 she has been art director and organizer of TEDxGenova, an autonomous event operating under official TED license for the local dissemination of valuable ideas.

avacanti@iuav.it

### Jingya Zhou

PhD candidate at AUID, Politecnico di Milano, her research interest is focused on curability and impact of architectural space design on depression in older people.

jingya.zhou@mail.polimi.it





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