POLITECNICO DI TORINO Repository ISTITUZIONALE

Flexibility in the Workplace. Envisioning the Role of Domestic Spaces in the Era of Hybrid Work

Original

Flexibility in the Workplace. Envisioning the Role of Domestic Spaces in the Era of Hybrid Work / Cretaio, Sofia; Tamborrini, Paolo. - In: PAD. - ISSN 1972-7887. - ELETTRONICO. - 16:25(2023), pp. 169-192.

Availability: This version is available at: 11583/2985705 since: 2024-02-06T09:07:58Z

Publisher: Aiap Edizioni

Published DOI:

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)



POST-DOMESTIC HABITAT



PAD. Pages on Arts and Design

International, peer-reviewed, open access journal founded by Vanni Pasca in 2005

Editor-in-Chief

Marinella Ferrara Politecnico di Milano, Italy

Advisory Board

Tevfik Balcıoğlu Arkin University, Kyrenia, Turkey

Murat Bengisu Izmir University of Economics. Turkey

Isabel Campi

Design History Foundation, Barcelona, Spain Eduardo Corte Real

UNIDCOM/IADE, Lisbon, Portugal Antonio da Cruz Rodrigues

Universidad Lusofona, Lisbon, Portugal

Soumiya Mikou Moroccan Design Association, Casablanca, Morocco

Ely Rozenberg RUFA, Rome University Fine Art, Italy

Mireia Frexia Serra Gracmon, Universitat de Barcelona, Spain

Andreas Sicklinger Alma Mater Studiorum Università di Bologna, Italy Fedja Vukić University of Zagreb, Croatia

Managing Editor

Chiara Lecce Politecnico di Milano, Italy

Editorial Assistant

Giorgia Bonaventura Politecnico di Milano, Italy

Editorial Board

Giuseppe Amoruso Politecnico di Milano, Italy

Helena Barbosa University of Aveiro, Portugal Michela Bassanelli Politecnico di Milano, Italy

Letizia Bollini Libera Università di Bolzano, Italy

Stefania Camplone

Università degli Studi di Chieti-Pescara, Italy

Roberto De Paolis REPRISE - MUR independent scientific expert, Italy Cinzia Ferrara

Università degli Studi di Palermo, Italy

Francesco E. Guida

Politecnico di Milano, Italy Ashley Hall Royal College of Art, London, England Elif Kocabiyik Izmir University of Economics. Turkey Lia Krucken Creative Change, Brazil and Germany Carla Langella Università degli Studi di Napoli Federico II. Italy **Giuseppe Lotti** Università degli Studi di Firenze, Italy **Tomas Macsotay** Pompeu Fabra University, Spain Nicola Morelli Aalborg University, Copenhagen, Denmark Alfonso Morone Università degli Studi di Napoli Federico II, Italy **Raquel Pelta** Universidad de Barcelona, Spain **Daniele Savasta** Izmir University of Economics, Turkey Rosanna Veneziano Università degli Studi della Campania Luigi Vanvitelli, Italy Li Zhang Beijing Information Science and Technology University, China

Publishing Consultant Vincenzo Castellana, Architect, Italy

Art Direction Francesco E. Guida

Web Site Pietro Forino, www.pietroforino.com

Correspondents

Amina Agueznay (Morocco), Hèla Hamrouni (Tunisia), Vesna Kujovic (Montenegro), Can Özcan (Turkey), Ana Perkovic (Croatia), Filip Roca (Montenegro), Azadeh Sabouri (Iran), Marco Sousa Santos (Portugal), Pascale Wakim (Lebanon)

Reviewers

Anna Anzani, Laura Arrighi, Michela Bassanelli, Ondina Cafiero, Aslı Çiçek, Elena Elgani, Francesco E. Guida, Chiara Lecce, Vera Sacchetti.

PAD

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

Publisher

Aiap Edizioni via A. Ponchielli 3 – 20129 Milano – Italy aiap@aiap.it – www.aiap.it

PAD © ISSN 1972-7887 #25, Vol. 16, December 2023 www.padjournal.net

0. EDITORIAL #25

Post-Domestic Revolution by Michela Bassanelli & Vera Sacchetti	006
I. MORE-THAN-HUMAN PERSPECTIVES. COHABITATION, TECHNOLOGY, ARTIFICIAL INTELLIGENCE	
Biotopia. The Design of Decentered Domesticities by Jacopo Leveratto	020
Transhuman Identities. Rewiring the Domestic Subject by Vanessa Galvin	038
Post-Domestic Living. The Challenge of Adapting Domestic Spaces to the Evolution of Digital Technologies by Silvana Donatiello & Mariarita Gagliardi	051
Extractivism, Gendered-Computing and Online Queer Spaces. The Case of the Sims and Liquid Nitrogen Overclocking by Cyrus Khalatbari, Lucrezia Perrig & Guillaume Guenat	073
RGB Tour. Exploring of the "YouTube Bedroom" Type by Nicolas Bailleul	098
Rethinking Carceral Domesticity. Electronic Monitoring, Punishment and Home as Prison by Ece Canlı	121
II. DOMESTIC DEVICES. HOW INTERIOR ARCHITECTURE AND DESIGN REACT TO THE CONTEMPORARY SCENARIO	
Habitat as a Service. From Bespoke to Custom Interiors by Raffaella Fagnoni, Davide Crippa & Annapaola Vacanti	149
Flexibility in the Workplace. Envisioning the Role of Domestic Spaces in the Era of Hybrid Work by Sofia Cretaio & Paolo Tamborrini	169
Vicarious Domestic States. The Post-Domestic Turn of Digital Twinning Habitual Settings by Gerhard Bruyns, Daniel Elkin, Andrea Navarrete & Veronica Ching Lee	193

The Scenography of Everyday Theater. A New Narrative of Domesticity by Jiarui Cui

209

003

Vanity Chamber. Reflecting Upon Domestic Boundaries and Frontiers for a Post-Pandemic Home by Nicholas Thomas Lee	227
Post-Domestic Ageing. Living Indoors (Without) Looking Outside? Architectural Design and IT Devices for a New "Ageing in Place" by António Carvalho, Tianqin Chen & Jingya Zhou	254
Redefining Paradigms. How Technology Shapes Interior Spaces in the Age of Drones and Flying Cars by Anna Barbara & Elena Baharlouei	283

III. BIOGRAPHIES

About the Authors

303

004



DOMESTIC DEVICES HOW INTERIOR ARCHITECTURE AND DESIGN REACT TO THE CONTEMPORARY SCENARIO

Flexibility in the Workplace Envisioning the Role of Domestic Spaces in the Era of Hybrid Work

Sofia Cretaio

Politecnico di Torino Orcid id 0000-0002-0934-3136

Paolo Tamborrini Università degli Studi di Parma Orcid id 0000-0001-7577-7138

Keywords

Domestic Space, Working from Home, Hybrid Work, Work Activities, Workspace Design.

Abstract

Modern society has always pictured the home and the workplace as two separate entities: the former for personal and private space, the latter for professional growth and productivity.

The COVID-19 pandemic disrupted this dichotomy as homes became the only places to work. Companies had to reorganize their dynamics remotely, discovering new communication and resource management methods. Employees adjusted to unconventional workstations and new behaviors led to a domestic new deal. Rooms became flexible areas in which to organize work activities as well as leisure tasks. It has also become clear that the daily commute to the office is not vital, and working from home has both productivity perks and drawbacks on well-being. With the resumption of office work, employees desire to maintain work from home, urging companies to comprehend how to incorporate flexible approaches. This entails striking a balance between the home environment's opportunities and enhancing the collaborative and physical interaction that the office still provides.

To integrate new workspace habits, a multidisciplinary approach is key, merging design practices, organizational management, and behavioral analysis. The contribution aims to explore how new working practices are redefining the functions and dynamics of workspaces. The analysis of the home transformation, through a literature and case study review, will generate insights to improve mixed workplace strategies.

1. Introduction

For a long time, the conception of home and work spaces has been very sharp: the former represented a personal and private space, for family affection, conviviality, lightheartedness, and life responsibilities. Conversely, the workspace represented a context for professional growth, production, learning experiences, and social interactions. The separation between these two spaces has always been preached as fundamental, as a way to pursue well-being and life balance in a society shaped by work and productivity.

The need to define boundaries has been reflected both at home and in the office, where spaces have been traditionally organized around tasks to perform: focused or collaborative activities, breaks, and social interactions. In the late 1960s, offices shifted to open plans (Budd, 2001), modulating the space with temporary and flexible elements; conversely, houses have maintained their rigid division and its role of personal identification, security, and protection. Thus, with the Covid-19 pandemic, domestic spaces became the only places where to seek peace, and their role shifted from *home as identity* to *home as refuge* (Ahrentzen, 1987). During lockdown, the meaning of home as a physical unit merged with the idea of an *emotional territory*, reflecting the individual-environment interaction (Bettaieb & Alawad, 2018).

Domestic spaces had to adapt to multiple aspects of people's lives and replicating office work impacted the most on the layout of spaces. Working from home offered benefits like improved flexibility and productivity. However, it also introduced challenges such as meeting fatigue, reduced social cohesion due to the lack of physical interaction, and blurred work-life boundaries, leading to concentration difficulties and anxiety (Teevan, 2021). Furthermore, repurposing physical spaces for work activities has influenced the perception of ergonomics, lighting, privacy, and noise control within the home walls (Vitra, 2021).

Despite the challenges, a 2020 survey from Microsoft showed that 71% of employees and managers¹ had the desire to continue working from home, at least part-time (Spataro, 2020). However, by May 2023, full-time employees worked from home less than a day per week² with 26% working on hybrid arrangements, and 8% working entirely from home (Aksoy et al., 2023). This data indicates that houses, as well as organizations, are not fully ready to include working-from-home practices in their strategies, suggesting a review of the multifunctional home to understand how workspaces can be integrated within domestic environments.

The contribution aims to explore how homes are becoming dynamic places able to mix pleasure, leisure, and work. The analysis of the transformation of the domestic space, through a literature and case study review, will generate insights to improve hybrid workplace strategies. The findings contrib-

¹ Data retrieved from a survey commissioned by Microsoft on May 26-30, 2020, among 2,285 total adults ages 18+ who are currently working remotely across the UK, US, Germany, Italy, Mexico and China.

² Survey commissioned on April-May 2023 across 34 countries. Results retrieved from "Working from home around the globe: Report 2023". The report is based on data from Wave 3 of the Global Survey of Working Arrangements (G-SWA).

ute to a wider research project in collaboration with an ICT company focused on developing the workplace of the future. The research aims to develop tools and spatial solutions to promote flexibility between home and office, focusing on employee well-being and company communication.

2. The Evolving Relationship Between Home and Work Spaces. A Literature Review

The debate on domestic spaces in current work scenarios cannot be addressed without considering the underlying connections between home and work as living spaces. The concept of working from home has existed way before the Covid-19 pandemic. Existing literature on the topic focuses mainly on two eras, the 1970s to the late 1990s and the mid-2010s onwards. The motivations can be traced to specific technological and social shifts. Before the 18th Century, homes, specifically country houses, were the businesses' headquarters (Cottage Industry). Then the Industrial Revolution disrupted the existing paradigm, with work activities that required gathering many people in larger and centralized factories (Ahrentzen, 1987). In the 20th Century information technology defined a new type of worker, less focused on manual labor and more on cognitive tasks (Lund et al., 2021). Their work required moderate physical proximity and interactions with colleagues, which required a limited workstation made of a desk, a computer, and other communication tools.

Cities became the center of work activities, with workspaces concentrated in centralized buildings (Wilkinson, 2019). The workspace has then become the place to commute every week, strongly separating home duties and work tasks. Over the years, workspaces have evolved from single to open-plan offices; architectural and design changes started reflecting a more flexible and collaborative approach to work that was made possible by technological development. Because of these improvements and the growth of the internet, in the 1970s the scientific community started to explore the concept of home-working. In 1969, scientist Alan Kiron coined "dominetics" - combining domicile, connections, and electronics - to describe the potential of computers and new communication tools in changing life and work (Waters-Lynch, 2020). In 1973 engineer Jack Nilles introduced the concept of telecommuting - using telecommunications or computers instead of commuting to work (Nilles, 1994, p. 109) - that, according to economist Schiff (1979), could have helped to save gasoline during times of oil crisis by working at home one or two days a week. It was only a matter of time before the development of technological tools such as the personal computer would have invaded the home, reducing the need for dedicated workspaces. Studies started to explore how home characteristics and physical layout impact work behaviors. Factors like availability, privacy, spaciousness, and natural light were considered fundamental for an effective workspace within domestic spaces. It soon became clear how, compared to traditional offices, working at home would be physically less defined (Ahrentzen, 1987).

It was also acknowledged that working from home would have led to a "diffused work society", requiring a re-thinking of organizational structures, types of employment, mechanisms of coordination, and supervision (Brandt, 1983). However, these studies were mainly future-oriented, thus based on the potential of telecommunications to envision innovative work strategies. These forecasts became a reality in the mid-2010s when remote work expanded in the corporate sector. At the time, personal device proliferation, cloud computing, and virtual technologies allowed employees to work from various locations, challenging the conventional "commute to work" paradigm (Baruch & Nicholson, 1997). The adoption process, however, has been really slow primarily due to three factors:

- Resistance to change: Corporate communication hinges on spatial and organizational dimensions. A hierarchical structure impacts employees' mutual awareness (Allen & Henn, 2006). This organizational mindset makes it easier for managers to monitor activities when everyone is in sight in a single workplace.
- Work coordination: Knowledge work involves tasks like thinking, planning, and organizing. When executed virtually, it requires more coordination and communication among colleagues compared to a physical office.
- Lack of empathy in virtual communication: Telecommunications lack the "face-to-face" interactions that physical spaces offer, or at least they are not as fulfilling. This gap is particularly evident in impromptu meetings, breaks, and other social moments that are fundamental for a thriving workplace (Newport, 2020).

Then in 2020, the COVID-19 pandemic forced the entire globe to pause and re-think work. At that moment, most workers



found themselves "obliged" to work from home. The emergency at which this condition happened required houses to accommodate multiple and divergent activities, generating changes in their layout and living and work patterns.

During the pandemic, homes were small experimental workshops, spaces where to reflect on the improvements to be done (Zurlo et al., 2020). Individuals and organizations experienced the limits of remote work, discerning which tasks suited home offices or corporate settings best. Employees realized the benefits of replicating traditional office setups at home, establishing clear boundaries for work-life balance, and enhancing task engagement (Yang et al., 2021). Furthermore, it became evident that organizational knowledge thrived on both explicit and tacit experiences, highlighting the importance of fostering casual and interactive exchanges among colleagues in virtual home offices.

With the end of the pandemic, the work scenario is still uneven. Homes continue to be the primary location for remote activities, but still with the pandemic's challenges. A design approach is needed to address the overlapping role of domestic and work life. Moreover, understanding which activities are better supported at home than at corporate offices can help to understand the positive impacts of flexible work arrangements.

The state-of-the-art aimed to define the evolving work/home dynamic and to develop some observations contributing to future research: regardless of the historical context considered, sources have rarely questioned interior characteristics required from homes to accommodate work. While corporate office work environments have been studied in various settings (closed, open-plan, ABW) few studies have dealt with the physical attributes of home office environments (Yang et al., 2021). No study has examined home-based workplaces in terms of housing and overall quality, accounting for the diverse factors influencing perception (Cuerdo-Vilches et al., 2021). Design implications are still rarely acknowledged, confirming the underexplored nature of research concerning home environments, even in the wake of recent developments.

Another observation that has emerged is related to the disciplines investigating the domestic spaces as a work nest: management, technology, sociology, economy, and urban planning are the common areas in which the topic has been analyzed. Few researches have been carried out in the field of architecture and design; this might be due to the fact that architects and designers are not used to planning and designing domestic spaces intended for home-based work.

3. Setting the Boundaries of Home Working

During the pandemic, terms like home working, remote work, telework, and smart work were used interchangeably to describe employees using technology to work outside their traditional offices. It is crucial to understand that these terms, while similar, have different nuances. Using them correctly marks the first step toward envisioning domestic spaces as parts of the future vision of work. To achieve this, it is important to define the specific context this research seeks to enrich. Amid the variety of individuals who are experiencing working from home, this analysis aims to identify and experiment with solutions for an Italian ICT (information and communication technology) company that has embraced remote work. In this company, telecommunications are part of employees' daily tasks; people are grouped in organizational units that are experiencing decentralized communication processes; their interactions are influenced by various activities including tasks, team projects, and meetings.

The term "working from home" is quite broad since it refers to work that takes place fully or partly within the worker's own residence (International Labour Organization, 2020). Initially, it was used to indicate certain working classes like clerical workers or independent artists. The spread of information technology extended its use to both autonomous workers and employees (Holliss, 2012). This research is focused on employees in organizations that have embraced remote work policies. *Remote work* refers to a situation where the work is fully or partly carried out on an alternative worksite other than the default place of work (International Labour Organization, 2020). When remote work is carried out using ICTs, it transitions into *telework*. Yet, when ICTs are integrated with remote work's spatial, temporal, and managerial flexibility, the term *smart working* is better suited (Sperati, 2021).

The research aims to explore how workplace flexibility can be integrated into innovative work strategies, moving beyond teleworking to achieve smart working (Fig. 1). Workplace flexibility allows workers to choose when, where, and for how long they engage in work-related tasks (Yang et al., 2021, p.3).

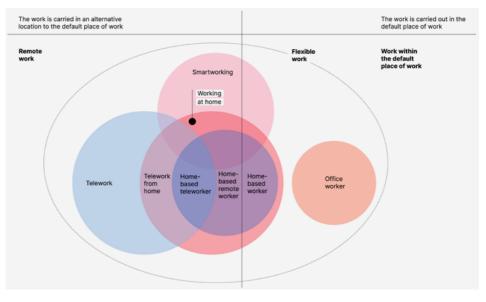


Figure 1. Concepts of remote work and work in the default place of work. Personal elaboration on the data of the International Labor Organization (2020).

Achieving this requires a shift in organizational management from control and presenteeism to trust, collaboration, and delegation (Area Centro Studi, 2021). Balancing space distribution, technology equipment, teamwork, knowledge sharing, and employee autonomy leads to a condition of *hybrid work* (Yang et al, 2021), a state that recognizes home as a feasible work location, among others.

4. Repurposing Domestic Spaces to Meet Work Needs

The current workspace scenario highlights that most knowledge jobs are technically spatial independent (Brandt, 1983). However, the pandemic emphasized the importance of flexibility in choosing where to work based on tasks, spatial characteristics, and social interactions to enhance work strategies. By expanding Jack Nilles' concept of a "distributed work network" (Nilles, 1994) to current needs, organizations must recognize homes as *one of the possible* workplaces alongside offices and other environments like co-working spaces, cafès, bookshops, and hotels (Fig. 2).

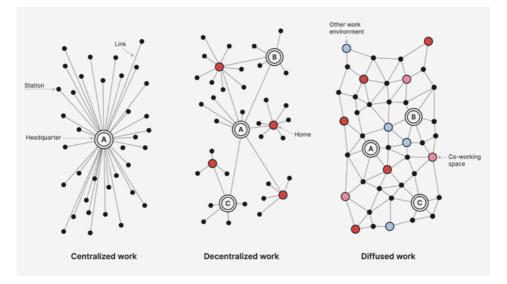


Figure 2. Centralized, decentralized, and distributed network. Personal elaboration based on Barans' diagram (1962).

The pandemic role of domestic spaces confirms Bettaieb and Alawad's notion of them being "expanded psychological spaces" and "minimized social spaces" (2018). This section focuses on understanding how physical components and behavioral patterns impact domestic spaces. Leveraging insights from the literature review, we will discuss three categories: (1) work activities, (2) spatial pattern of use, and their influence on (3) furniture semantics. Each category will integrate case studies to support the identification of practical design recommendations for the concept of working from home.

4.1. Work Activities

What employees do significantly influence their workplace experience, whether at home or in the office. Identifying the variety of work tasks undertaken is a fundamental step to understanding the ideal work environment according to employees' needs.

Considering the different layout attributes of homes and offices, a hypothesis is that home spaces excel in facilitating individual and focused activities, whereas offices are more suited to promoting interactive and collaborative activities. To address this theory, Leesman³ has developed the *Leesman Office* and *Home-office Survey* to compare work experiences in the two settings. Both surveys ask how home-office environments support daily work tasks. The surveys encompass 21 work activities, categorized into individual work, collaboration, conversations, formal meetings, and others. The surveys' goal is to support companies in identifying employees' activity complexity and profiles, thereby defining workplace needs and configurations.

Ericsson, the ICT company, has used the Leesman Surveys to develop the *Helix Workplace Model:* it is based on five personas profiles, categorized according to their inclination to go to the office (have to go, choose to go, rarely go). The profiles are tailored to the insight from people's spatial interaction and the range of work activities. Each *personas' helix* is the

³ Company specialized on measuring and analysing the experience of employees in their workplace through assessment tools.

outcome of comparing the effectiveness of supporting the 21 activities in the office versus at home (Hobbs, 2021). While Ericsson's focus is on envisioning new office spaces' functions, their model offers crucial insights into how domestic settings should be modulated by tasks and behaviors. Furthermore, by prioritizing the relationship actions-workplaces, reconfiguring existing spatial configuration can be more socially and economically sustainable.

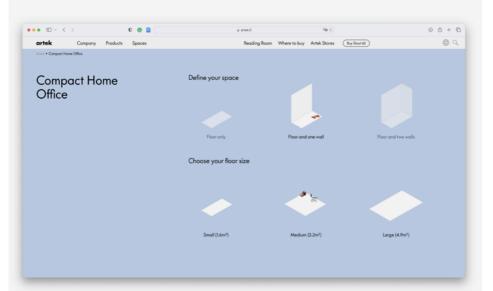
4.2. Spatial Pattern of Use

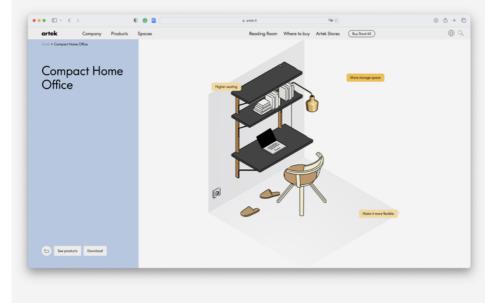
A notable distinction between home and office lies in the level of personalization and identification. In offices, employees have a limited range of workspace personalization, often confined to their workstations. Conversely, homes allow owners creative freedom, reflecting their personality while still fostering a sense of security. However, in a home-work setting, personal space needs to be both virtually connected and physically enriching (Crawford, 2020). This multidimensional spatial role highlights the significance of domestic space distribution. Two main patterns of use can be identified (Holliss, 2012):

- Multi-use space: No differentiation is made between paid work and daily domestic activities.
- Dedicated workspace: A rigid division is made between paid work and domestic/leisure pursuits. It is not allowed for paid work to migrate into living spaces (or other areas of the house), and vice versa.

It has been understood that people who have a dedicated work area at home experience better home working conditions than those working from a non-work-specific setting (Hobbs, 2022). For the latter group, it is crucial to design customized solutions that improve work quality while preserving living comfort. On the one hand, companies in the office furniture sector (such as Steelcase, Vitra, Herman Miller, Knoll) are integrating in their product catalogue a new environment, that of the Home Office. Their products do not change but they are proposed in a "unusual" context. Knoll, for example, offers on the website six combinations of their products to create different solutions – from the "work nook" to the "flexible retreat" – within the home environment to satisfy work needs.

On the other hand, design companies that have always maintained a focus on domestic furnishing have enriched their product catalogue by adding the concept of work to the one of well-being and comfort: standing desks, ergonomic chairs, storage units and sound absorbing wall dividers emerge as key components to make the home a place for work. In this field, Ikea has put a lot of effort on its product range. If in the catalogues from early 2010s the section on the workspace was integrated into the bedroom furniture (IKEA Museum, 2023), from 2022 they have been dedicating an entire brochure and section on the website to the activity of working from home. Also, the design company Artek has introduced The Compact Home Office, a tool that through a series of simple questions can suggest tailored office areas to be created in the available home space (Fig. 3). The tool spans from compact 1.6m² spaces to more spacious 5m² areas, suggesting element compositions based on existing walls (Fig. 4) (Artek, 2022).





183

Figure 3. Interfaces of the Compact Home Office Tool. Artek.

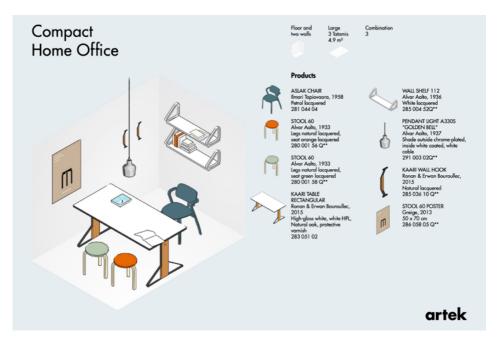


Figure 4. Brochure provided by Artek once the configuration of the home office is complete. The arrangement of Artek furnishing accessories is accompanied by their description.

These companies share the vision of a domestic space that does not necessarily have to change but declines to new uses. However, there is yet no integration in terms of flexibility and frequency of use: existing solutions offer furnishing products able to dialogue with the domestic environment in terms of formal language. In a hybrid perspective where working from home is a feasible option, it must be understood that a dedicated workspace is not used every day. It is necessary to comprehend how and when it is used, to define a more integrated system within the domestic walls. To achieve more integrated solutions, design companies and work organizations should dialogue to envision connections among personal needs, work activities, and furniture requirements.

4.3. Furniture Semantics

Before the pandemic, the room setup was defined according to distinct functions: kitchen for food preparation and consumption, dining area for eating meals and having convivial moments; living room for leisure and entertainment; and bedroom for rest and quiet. During the pandemic, these boundaries have become a lot more malleable, with single rooms working as hybrid and flexible spaces.

Just as rooms have undergone a transformation to accommodate home-based work, furniture items have similarly shifted in their semantic meaning. In particular, three emblematic domestic objects have seen a transformation from their traditional use: the dining table, sofa, and bed.

Among furnishings, the table exemplifies the hybridity of home and work. Becoming the focal point for domestic, work, and learning activities, the table shift has contributed to the dissolution of the traditional workstation and dining room archetypes (Barber & Osgerby, 2020).

Softer fabrics and warmer colors of the home have questioned work seating comfort. Particularly fitting is Edward Barber and Jay Osgerby's project, *Soft Work* (2018). According to the designer, the daily use of laptops, smartphones, and tablets at home has turned sofas into common workspaces. Soft Work is both a spatial concept and a product of furniture design; it's a sofa-as-office system in which table workstations are focused around a seating landscape. It is a vision that combines the office as a public and shared space and work as a less formal activity. It's a modular platform where technology is integrated but not embedded. Technology and work have also invaded the bedroom, and the bed is now considered an epicenter of productivity; it represents a horizontal architecture where people foster efficient work-rest cycles while improving outcomes (Colomina, 2014). As for the table and the sofa, the bed is now equipped with every possible communication technology.

5. It's Not Only a Matter of Space. Social and Cultural Implications

The analysis so far had the intent to focus on spatial and functional components impacting the domestic environment. However, design practices must consider the social factors influencing the behaviors of individuals and groups. In particular, when an organization's spatial structure – that also includes people – is more dispersed, greater emphasis is required on its formal and informal elements (Brandt, 1983). This includes mechanisms of coordination, supervision, group interaction, and individual routines.

The three categories mentioned above should be analyzed considering implications in the flexible/home scenario such as *temporal adjustments* and *transitioning rituals*.

5.1. Temporal Adjustments

Working from home requires rearranging domestic and work routines. Before the pandemic, the *Nine to Five* model (Budd, 2001) offered synchronized work, enabling communication and defining work-life boundaries. However, working from home allows flexibility in scheduling work tasks, especially if combined with improved work coordination among the team. Domestic settings have emerged as the ideal location to carry out individual and focused work (Hobbs, 2022); as well, quiet hours – between 8-10 am and 6-8 pm – have seen an increase in work engagement (Spataro, 2020). This trend comes from the *lack of transitioning rituals* and by the possibility of home environments to structure the workday to personal preferences. This does not mean that every employee should freely choose when to work: establishing a range of hours in which it is mandatory to be "remotely" available, combined with flexible scheduling for the rest of the work day, can foster a better work-life balance. However, achieving such conditions requires considerable coordination and mutual trust among colleagues.

5.2. Transitioning Rituals

Rituals serve as transitions that people do to start the workday. In office settings, the commute acts as a transition between personal life and work. When working from home, the commute is absent and people need to find other activities to mentally shift roles. Additionally, the coffee break acts as another transitioning ritual: it represents an informal information exchange, that is not planned or structured, but that allows spontaneous communication and a "decelerated" social interlude, helping the shift between tasks (Barmeyer et al., 2019). Even if organizations are experimenting with virtual breaks, screen limitations only add to the feelings of community detachment and mental fatigue.

While these elements strongly influence the efficacy of home working scenarios, it should be considered that other social and human factors impact flexible work that are challenging to predict and manage. Variables like work nature and technology availability (Baruch, 1997), organizational culture, managerial attitudes, individual personality, work attitude, and household characteristics contribute to the complexity of the system.

6. Conclusions

Companies are struggling to see homes as more than temporary workplaces due to control-oriented models. Ambiguity in flexible work terminology adds uncertainty on how organizations should adopt such practices. This also leads to questions about workplace regulations when tasks are done away from the default place of work.

Domestic spaces are becoming more work-friendly reshaping the perception of home furnishings. Unlike traditional offices that favor clean, formal, and repetitive setups, remote work allows greater personalization, enhancing motivation and self-commitment. In this perspective, the management of spaces and patterns of use is in the hands of the employee, who can modulate the space according to their preferences. Here, too, we need to clarify the support required by companies to accommodate work-friendly environments.

To improve home office layouts and furniture arrangements, organizations must first focus on filtering work activities. Taking cues from activity-based offices (van Meel, 2020), we can extend this approach to homes and overall workspaces. Choosing a work location should match the task's environmental and behavioral needs, whether it requires autonomy, privacy, focus, or collaboration and interaction. This shifts flexibility from quantitative to qualitative; whereas until now flexibility has been looked at as a purely numerical benefit, i.e., being able to work fewer days in the office, the focus has to move towards a combination of spaces, tools, and actions. Design practices are pivotal, leveraging quantitative and qualitative tools, like the Ericsson case study, to help companies gather and visualize behavior data. This data informs the testing of new strategies, incorporating communication tools that enhance information exchange and help organizations in managing complex systems (Gaiardo et al., 2022).

In the 80s futurist Toffler predicted a "home-centered society", where people work at home ensuring community stability, better environmental quality, and an evolution of the service industry. The contribution goes against this vision to argue a system where work will be neither fully here nor there, and domestic spaces will be involved only when specific conditions are met.

References

Aksoy, C. G., Barrero, J. M., Bloom, N., Davis, S. J., Dolls, M., & Zarate, P. (2023). *Working from Home Around the Globe. 2023 Report.* (Report No. 53). EconPol Policy Brief. <u>https://www.econpol.eu/sites/default/files/2023-07/</u> EconPol-PolicyBrief_53.pdf

Allen, T., & Henn, G. (2006). *The Organization and Architecture of Innovation* (1st ed.). Routledge. <u>https://doi.org/10.4324/9780080545370](https://</u> <u>doi.org/10.4324/9780080545370)</u>

Area Centro Studi. (2021). *Lo smart working in numeri*. (Report No. 04/2021). Assolombardia. <u>https://www.assolombarda.it/centro-studi/smart-working-2021</u>

Artek. (2022). *Artek - The Compact Home Office*. <u>https://www.artek.fi/en/sto-ries/the-compact-home-office</u>

Ahrentzen, S. (1987). *Blurring Boundaries. Socio-Spatial Consequences of Working at Home*. Center for Architecture and Urban Planning Research Books. <u>https://dc.uwm.edu/caupr_mono/36</u>

Barber, E., & Osgerby, J. (2020). *Soft Work. The Newspaper About Work*. Vitra. <u>https://www.vitra.com/it-it/professionals/projects/themes/soft-work</u>

Barmeyer, C., Mayrhofer, U., & Würfl, K. (2019). Informal Information Flows in Organizations. The Role of the Italian Coffee Break. *International Business Review*, 28(4), 796–801. <u>https://doi.org/10.1016/j.ibus-</u> rev.2019.04.001

Baruch, Y., & Nicholson, N. (1997). Home, Sweet Work. Requirements for Effective Home Working. *Journal of General Management*, *23*(2), 15–30. https://doi.org/10.1177/030630709702300202

Brandt, S. (1983). Working at Home. How to Cope with Spatial Design Possibilities Caused by the New Communication Media. *Office Technology and People*, *2*(1), 1–13. <u>https://doi.org/10.1108/eb022618</u>

Budd, C. (2001). The Office. 1950 to the Present. *Workspheres. Design and Contemporary Work Styles*, 26–35. <u>https://www.moma.org/interactives/exhibitions/2001/workspheres/swfs/theOffice.pdf</u>

Bettaieb, D. & Alawad, A. (2018). Considerations of Interior Design in Domestic Space between Multiplicity of the Concepts and Determination of Constants. *Art and Design Review*, *6*(1), 48–60. <u>https://doi.org/10.4236/adr.2018.61005</u>

<u>6</u>

Colomina, B. (2014). The Century of the Bed. Verlag für Moderne Kunst.

Crawford, I., (2020, August 8). *The Domestic New Deal*. Vitra. <u>https://www.vitra.com/en-pt/magazine/details/the-domestic-new-deal</u>

Cuerdo-Vilches, T., Navas-Martín, M. Á., & Oteiza, I. (2021). Working from Home. Is Our Housing Ready? *International Journal of Environmental Research and Public Health*, *18*(14), 7329. <u>http://dx.doi.org/10.3390/ijerph18147329</u>

Gaiardo, A., Remondino, C., Stabellini, B., & Tamborrini, P. (2022). *Il design è innovazione sistemica. Metodi e strumenti per gestire in modo sostenibile la complessità contemporanea: il caso Torino.* LetteraVentidue Edizioni.

Hobbs, L. (2021, November 22). *Ericsson. Personal Preference for the Future Workplace*. Leesman. <u>https://www.leesmanindex.com/ericsson-person-al-preference-for-the-future-workplace/</u>

Holliss, F. (2012). Space, Buildings and the Life Worlds of Home-Based Workers. Towards Better Design. *Sociological Research Online*, *17*(2), 1–37. <u>http://www.socresonline.org.uk/17/2/24.html</u>

IKEA Museum. (2023). *IKEA Catalogue*. <u>https://ikeamuseum.com/en/ex-plore/ikea-catalogue/</u>

International Labour Organization. (2020). *COVID-19. Guidance for Labour Statistics Data Collection*. International Labour Organization. <u>https://www.ilo.org/global/statistics-and-databases/publications/WCMS_747075/lang--</u>en/index.htm

Lund, S., Madgavkar, A., Manyika, J., Smit, S., Ellingrud, K., & Robinson, O. (2021, February 18). *The Future of Work After COVID-19*. McKinsey & Company. <u>https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19</u>

Newport, C. (2020, May 26). Why Remote Work Is So Hard—and How It Can Be Fixed. *The New Yorker*. <u>https://www.newyorker.com/culture/an-nals-of-inquiry/can-remote-work-be-fixed</u>

Nilles, J. M. (1994). *Making Telecommuting Happen. A Guide for Telemanagers and Telecommuters*. Van Nostrand Reinhold.

Schiff, F. W. (1979, September 2). Working at Home Can Save Gasoline. *The Washington Post*. <u>https://www.washingtonpost.com/archive/opin-ions/1979/09/02/working-at-home-can-save-gasoline/ffa475c7-d1a8-476e-8411-8cb53f1f3470/</u>

ზ

Spataro, J. (2020, June 8). The Future of Work. The Good, the Challenging & the Unknown. *Microsoft 365 Blog*. <u>https://www.microsoft.com/en-us/mi-crosoft-365/blog/2020/07/08/future-work-good-challenging-unknown/</u>

Sperati, A. (2021, July 16). Lo smartworking. Così vantaggioso da restare dopo la pandemia? *Economia Comportamentale*. <u>https://www.economia-</u> <u>comportamentale.it/2021/07/16/lo-smartworking-cosi-vantaggioso-da-re-</u> <u>stare-dopo-la-pandemia/</u>

Teevan, J. (2021). *The New Future of Work. Research from Microsoft into the Pandemic's Impact on Work Practices*. Microsoft Research. <u>https://www.microsoft.com/en-us/research/uploads/prod/2021/01/NewFutureOf-WorkReport.pdf</u>

Toffler, A. (1980). The Third Wave. The Classic Study of Tomorrow. Bantam.

van Meel, J. (2020). *The Activity-based Working Practice Guide* (2nd ed.). ICOP. <u>https://www.fsre.is/media/fsr-eldri/ABW-practice-guide-2nd-edition.pdf</u>

Vitra (2021). New Dynamics in the Home. Vitra.

Waters-Lynch, J. (2020, April 7). 50 Years of Bold Predictions about Remote Work. It isn't All About Technology. *The Conversation*. <u>https://theconversation.com/50-years-of-bold-predictions-about-remote-work-it-isnt-all-abouttechnology-135034</u>

Wilkinson, C. (2019). The Theatre of Work. Frame Publisher.

Yang, E., Kim, Y. and Hong, S. (2021). Does Working From Home Work? Experience of Working From Home and the Value of Hybrid Workplace Post-COVID-19. *Journal of Corporate Real Estate*, *25*(1), 50–76. <u>https://doi.org/10.1108/JCRE-04-2021-0015</u>

Zurlo, F., Maurer, D., & Pei, X. (2020). *Home Bridges the World. Promising Domestic Scenarios in Response to the Covid Crisis*. Creative Industries Lab. Politecnico di Milano. <u>https://www.designplusstrategies.polimi.it/home-bridges-the-world-promising-domestic-scenarios-in-response-to-the-covid-crisis/</u>



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

About the Authors

conditions of the criminal justice system, queer incarceration, penal design and abolition feminism. As a researcher and educator, she lectured and published internationally on gueer 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.

ececanli@ics.uminho.pt

António Carvalho

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. veronica-ching.lee@connect.polyu.hk

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. cyrus.l.khalatbari@gmail.com

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. lucrezia.perrig@unil.ch

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

307



Progetto Grafico From 2003, the only Italian magazine totally dedicated to graphic design



CDPG Folders

Booklets dedicated to the AIAP's Archives Funds and personalities of Design History.

ALAP WOMEN # DESIGN AWARD	2
AIAPEDIZIONI	Ū

AWDA The International AIAP Women in Design Award

	_
CAMPO GRAFICO 1933 /1939	independent spirits
NASCE IL VISUAL DESIGN THE BIRTH OF GRAPHIC DESIGN	
La riveto indicera di The Baline invento of enderios e tencaro gattori conclutare solgorgate alle origini della technique et feu origini of comunicatione moderna moderna comunication	
1995 - Contraction - Contracti	liberi e endenti
di bit	spirifi indipe

CAMPO GRAFICO 1933/1939 The Birth of Graphic Design

AIAP PUBLISHES BOOKS, MANUALS, POSTERS, A MAGAZINE AND A JOURNAL. GRAPHIC DESIGN, COMMUNICATION DESIGN, DESIGN.



aiap.it/libreria/













MUSEO DELLA GRAFICA AIAP CDPG

FATE SPAZIO! STIAMO PER USCIRE.

Aiap CDPG, the Graphic Design Documentation Centre. Working to collect, catalogue, archive, enhance and promote any documents related to graphic design and visual communication. These documents (originals as well layouts of projects, books, posters, prints, catalogues, correspondence, photographs) help reconstruct the history of graphic design in Italy and support research and educational activities, as it is the CDGP's intention to make these documents widely available.



Aiap via A. Ponchielli, 3, Milano aiap.it — aiap.it/cdpg @Aiap_ita



PAD. Pages on Arts and Design International, peer-reviewed, open access journal ISSN 1972-7887

#25, Vol. 16, December 2023

www.padjournal.net



AIAP associazione italiana design della comunicazione visiva