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journal

international committee for
documentation and conservation
of buildings, sites and neighbourhoods of the
modern movement

№ 73 — 2025/1

Editors-in-chief: Uta Pottgiesser & Wido Quist

Guest Editors: Zsuzsanna Böröcz, Deniz Hasirci

MODERN INTERIORS IN TIMES OF CRISIS

PUBLISHER
Docomomo Journal is published twice a year by Docomomo International.

Print-ISSN: 1380-3204
Online-ISSN: 2773-1634
Docomomo Journal 73, 2025/01
Cover image: Emigration Point at Gdynia, ca 1935. © "Mare Nostrum" Gdynia, The Emigration Museum, 2023.

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INDEXATION
Docomomo Journal is indexed in the Directory of Open Access journals (DOAJ), Google Scholar, Avery Index to Architectural Periodicals, EBSCO—Art & Architecture Complete, EBSCO—Art & Architecture Source, Electronic journals Library, European Reference Index for the Humanities and the Social Sciences, Polish Scholarly Bibliography, British Architectural Library Catalogue (RIBA), Scientific indexing Services, Index Islamicus, Latindex and Scopus.

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Uta Pottgiesser & Wido Quist

Editors-in-Chief

INTERIORS BETWEEN PRIVACY AND TOGETHERNESS

Docomomo International is proud to present the second issue of the Docomomo Journal co-edited with the International Specialist Committee on Interior Design (ISC/ID), represented by guest editors Zsuzsanna Böröcz and Deniz Hasirci. Established at the Council Meeting during the 16th International Docomomo Conference in Lisbon in 2016, the ISC/ID has since grown and evolved, as evidenced by significant activities, including seminars, discussions, and publications. Already before the establishment of the ISC/ID, interior design and modern living have been explicit themes in two Docomomo Journal issues: no. 46 Designing for Modern Life and no. 47 Global Design, both published in 2012, extended beyond the architectural scale to encompass the qualities of interior space and the constituent elements and materialities of daily life.[1]

Several Docomomo Journal issues have focused on public and larger housing estates, a recurring and relevant topic of the Modern Movement and modern living: no. 39 Postwar Mass Housing (2009), no. 51 Modern Housing. Patrimonio Vivo (2014), no. 54 Housing Reloaded (2016), no. 65 Housing for all (2021), and finally, no. 68 Middle Class Mass Housing (2023) reference the great achievements of inter- and postwar housing programs, experimenting with and celebrating light, air, and openness in combination with minimal floor plans.[2] Initially designed as a response to the poor housing and disastrous living conditions in the industrial area, post-WWII housing estates evolved into more urban and densified neighborhoods, offering space to refugees and migrants from other countries and from the countryside. Most of these cases promoted the separation of functions: housing and homes were separated from work and therefore defined the private sphere of families—or, in fewer cases—of individuals.

In contrast, the modern individual house evolved as a statement and place of modernity. "Addressing the act of living as a cultural fact, the house reflects the time and manner of its production", Tostões (2014) states, and of different lifestyles.[3] While many individual houses were presented under different thematic scopes, only Docomomo Journal no. 64 Houses (2021)—published during the COVID-19 pandemic—highlighted the single-family house to discuss how the way of living may evolve in the future.[4]

The current issue on Modern Interiors in Times of Crisis continues and expands this discussion, focusing on particular highly relevant and central aspects of the Modern Movement: health and hygiene, transitional spaces between private and public or between interior and exterior, and the relationship between

humans, nature, and culture. Nearly 100 years after the 2nd CIAM (Congrès International d'Architecture Moderne) in 1929 in Frankfurt, affordable housing, minimal spaces, and adaptable interiors remain central societal themes at the core of political and architectural discussions. The COVID-19 pandemic has again heightened our awareness of the importance of health within the home environment, influencing design choices that promote physical and mental well-being. With the widespread adoption of remote work, homes have evolved into multifunctional environments that have to accommodate work, education, fitness, and leisure activities. It reminds us of the early built utopias of Russian Constructivism, which already featured communal housing that integrated work, education and leisure into their housing concepts and realized some radical examples that inspired modern architects for decades.[5] The importance of outdoor areas and urban gardening has been amplified: backyards, balconies, and patios are being transformed into functional extensions of the home, serving as areas for relaxation, exercise, and social gathering. This underlines the importance and urgency of even small extensions, highlighting their role as transitional spaces: between the private and public spheres or between the built and natural environments, and as an expression of different cultural practices and traditions.

This pandemic shift has prompted a reevaluation of traditional housing and home layouts to allow for easy reconfiguration of spaces, thereby adequately accommodating changing functions and family dynamics. It is particularly needed for small-scale homes and layouts, and it promotes the redesign and adaptation of existing houses and housing estates.[6] In summary, the pandemic has catalyzed a transformation in residential design, emphasizing flexibility, health, technology integration, and a deeper connection to nature. These changes are shaping homes and residential spaces that are better equipped to meet the diverse and evolving needs of their occupants.

We are grateful to our guest editors Zsuzsanna Böröcz and Deniz Hasirci for their efforts and passion to document the outcomes of the online initiative Modernism Is Frozen – Urbanism and Architecture under/after COVID-19 held in 2021 during the Tokyo 2020+1 Docomomo International conference, and to extend the scope with a call for papers in 2023 in shaping this issue of the Docomomo Journal, published both in print and online via www.docomomojournal.com.

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4 NOELLE, L. and TORRENT, H. (guest editors), TOSTÕES, A (ed), *Docomomo Journal 64* (2021), https://doi.org/10.52200/64.I.5QBIMR6V.

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INTRODUCTION

Zsuzsanna Böröcz and Deniz Hasirci

MODERN INTERIORS IN TIMES OF CRISIS

The idea for this special issue stemmed from a time of crisis in the world, aiming to search for lessons from related modern interiors to shed light on the future [FIGURE 01, FIGURE 02, FIGURE 03, FIGURE 04]. Crises vary in scale and dimension, and the realization that the COVID-19 pandemic from 2020 to 2022 was not a contained crisis but one of many that bound the past, present, and future led to the broadened framework for the call for papers in April 2023.

There were many submissions from around the world, and the aim regarding paper selection was to ensure a varied outlook on the topic, focusing strictly on the modern interior while practicing a generous definition of what constitutes a crisis. The papers included in this special issue encapsulate these aspects as well as an emphasis on the spatial composition, the relationship between inside and outside, furniture, art, and the processes by which these features define the interior.

This issue stems from the initiative *Modernism Is Frozen – Urbanism and Architecture under/after COVID-19*, a series of online conferences held in 2021 in response to the global pandemic. Organized as a parallel event to the 16th International Docomomo Conference Tokyo Japan 2020+1 – *Inheritable Resilience: Sharing Values of Global Modernities*, the initiative was proposed and coordinated by the conference chairs Ana Tostões, then Chair of Docomomo International, and Yoshiyuki Yamana, then Vice-Chair of Docomomo Japan. The sessions, under the moderation of Takayuki Suzuki, explored the impact of the pandemic on modern architecture and urbanism, with particular attention to the interiors of the Modern Movement. However, it was clear that the short and long-term effects necessitated further discussion. Following are some of the questions that were believed to help expand the dialog:

- What does the Modern Movement's legacy teach us about living in health and hygiene?
- How relevant are its views on related issues, such as the modes of transition between the private and the public, between the built and the natural environment, especially in a context of crisis?
- Can concerns for the truthful treatment of functions or for an architecture focused on the scale, movement, and perception of the human body help make space for the personal, the human, and the poetic within a framework aimed at control, purification, and biosecurity?
- How can these topics influence new building and re-use design processes?

01 Pamuk Pharmacy (Pamuk Eczanesi), a space of hygiene, by Önder Küçükerman, interior perspective drawing (left) and shelf detail photograph (right), Istanbul (Turkey), 1968 and ©: Önder Küçükerman and DATUMM: Documenting and Archiving Turkish Modern Furniture Archives (datumm.org).

02 Sanatorium Zonnestraal, Hilversum (The Netherlands), architects Jan Duiker & Bernard Bijvoet, 1928. © Jannes Linders, 2003.

03 Rinsema House, bedroom 1st floor, Drachten (The Netherlands), architect Theo van Doesburg, 1923. © RCE Dutch National Cultural Heritage Agency, nr 16033-81603, Photo: Mark Sekuur, 2019.

- Do original MoMo typologies function well under crisis management?
- What might revisiting of our relationship with nature unravel, and what might this say about our interior spaces?

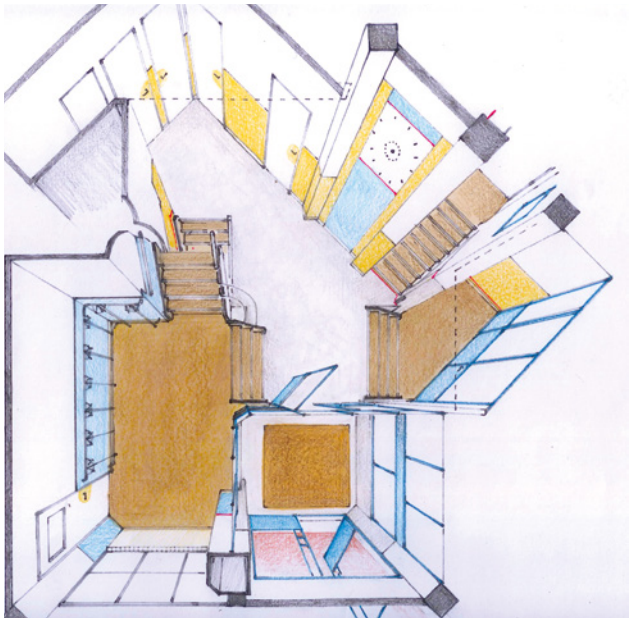
Echoing the views of the Docomomo International Specialist Committee on Interior Design (ISC/ID), it is believed that it is relevant to consider 'interior qualities' as all qualities related to human experience with reference to the Modern Movement. Thus, the open call was for academics and practitioners to contribute with articles (documentation, technical and conservation issues, case studies) and best practice cases involving endangered heritage and tributes.

This issue includes eleven research papers and one exhibition review. The papers range from focusing on the role of interior space in defining identity to geographic localities, including both research presented at the Tokyo Conference and others from an open call. Overall, it is believed that this is a rich collection of research celebrating the role of interiors in the Modern Movement. Moreover, this issue includes studies from interiors from different geographies such as Brazil, Estonia, Finland, Italy, Poland, Serbia, South Africa, Spain, and Turkey, which enabled a broader and more inclusive global scope. The papers presented may be grouped under the following headings, although most authors touch upon more than one category:

- Modern houses with specific features
- Adapting apartments, bathrooms, and entire houses
- Public spaces, buildings, and functions

MODERN HOUSES WITH SPECIFIC FEATURES

While Bonini discusses Eileen Gray's Villa *Tempe a Pailla* in Castellar, France, in detail and its close connection to natural systems, Barker focuses on the changing domestic definitions of Modernism in South Africa. Villarias and Fernandez



04 Open air school Amsterdam, entrance, Amsterdam (The Netherlands), architect Jan Duiker, 1930. © Mariël Polman, Suzanne Fischer, 2010.

highlight domesticity and incorporation of the vernacular through Peter G. Harnden's house in Orgeval near Paris, showing modernist influences in challenging times and their social and stylistic effects.

ADAPTING APARTMENTS, BATHROOMS, AND ENTIRE HOUSES

Peixoto highlights the significance of modern interiors and multifunctionality in relation to sustainable solutions in Brazilian cities. Pasin and Öztürk study the domestic 'wet space' and highlight the fact that cleanliness and hygiene represent gendered domestic norms, which creates a crisis of its own, adapting and resisting foreign architectural influences. Hasirci explains the representative quality of modern hygiene in terms of national identity in Turkey, holistically synthesizing habits of the East and West. Akerfelt, Wilczynska, Fainholtz, and Veldi discuss terms of reconstruction, identity, and ideology in modernist housing ideals, as well as the reception and adaptation of the interiors in reconstruction after crises today. The discourse on interiors and housing had a strong nationalist connotation in the selected articles, aiming to create new homes reflecting the Polish identity, breaking with historicism and its associations with German rule, replacing it with Modernism in both architecture and interior design.

PUBLIC SPACES, BUILDINGS, AND FUNCTIONS

Kordic, Zoric, Todorovic, and Mrlješ tackle the difficult question of how modern architecture and design can help to provide physical distance while maintaining social closeness, empathy, and solidarity in cities. They emphasize the modern movement heritage in Serbia, its potential, and the interiors that extend outside, creating open-air interior spaces. Modern interiors remain a fertile ground for innovative approaches to creating new links between indoor and outdoor spaces. Orchowska highlights the emigration point in Gdynia, Poland, as a hygienic threshold with a very specific function and layered messages, while Avci dwells on tuberculosis and related modern health facilities hosting modern interior components designed with anthropometric data and new production techniques. Karabağ and Ballice focus on modernist interior influences through the Izmir International Fair Pavilions in Turkey.

Finally, the exhibition review—*Retrotopia: Design for Socialist Spaces*—enables visuals as well as the necessity to have a diverse range of materials based on components of modern interiors from post-socialist countries. Thus, the review by the curators Banz and Huber-Doudová provided a base for discussions of various spaces, from futurist hotel interiors to presidential airport lounges to cybernetic living spaces. The overall picture provides answers but also raises questions for future research.

The modern interior has a tightly knitted relationship regarding how one must conduct one's daily life and oneself as a member of an improved society, reaching the beacon of a more advanced, civilized, overall better life (Rajguru, 2022; Parr, 2002; Prakash & Kruse, 2008). Modernity began as a reality in Western Europe, according to Berman (1988), transforming into a so-called fantasy towards the East. Moreover, design history literature focusing on interiors often aligns with either the Western or the colonial discourse, which may be restrictive, leaving several voices around the world on the periphery. The approach is to reach a wider and more holistic understanding of the concept, including the many interpretations of modernity and reflections on interior space.

Paul Overy (2008), dealing with *Zeitgeist* aspects that deeply influenced Modernism, such as notions of hygiene and purity but also the bond between democracy and economy, touches upon preoccupations that seem to be on their return in the current era. Zooming in from the city to the house, the author describes the challenges of hygiene and cleanliness in a way that strikingly reflects our concerns when being in a situation of crisis but also when more complex questions come to the surface, such as how to organize public transportation, schools, hospitals, and (care) homes. The parallels run even deeper: calls for a new and better society are triggered, which shows many similarities with the modernist ethos. A crisis situation, in general, seems to ask for more equitable societal organization principles, and MoMo principles could be of some help.

Docomomo Journal has long prioritized conservation practices regarding the modern interior as, "key conservation issue for modern living", as well as its components, such as furniture and industrial design, materials, and details (Tostoes, 2012). Coutinho (2012a), has noted that, comprehending and experiencing modern spatiality was determined by interior design, and that it was a field requiring holistic, layered, and plural perspectives

(2012b). Normandin (2012), expressed the significance of Charles and Ray Eames' furniture shaping the vision of modern interiors around the world, prescribing a modern way of living in the wake of crisis of rebuilding after World War II.

CONCLUSION

Thus, this issue not only focuses on interiors and carries significance in terms of the output of the Docomomo International Specialist Committee on Interior Design (ISC/ID) but also presents an effort to collect an array of views from around the world. The goal was to create a special issue of the Docomomo Journal dedicated to the functioning and experience of the modern interior in times of crisis, showcasing a variety of insightful perspectives. The COVID-19 pandemic has made us more aware of our intricate relationship with the natural environment and the need for a wide range of strategies to tackle a common issue. These are topics that directly relate to qualities of the Modern Movement and are believed to inspire an expansion of existing discussions. Here, we sought contributions based on scientific research of Modernism's theoretical foundations as well as of its practices, its tangible legacy, and its most appropriate sustainable conservation techniques from all continents. The wish is to cast a more permanent spotlight on modern interiors in the context of the Docomomo Journal, as interiors reflect modern living in close range with immediate shifts and adaptations to one's needs, despite being difficult to document due to their continuous dynamic nature.

ACKNOWLEDGMENTS

The guest editors thank Docomomo International for this wonderful opportunity to showcase modern interiors in times of crises with layered meanings of the word. The editorial team Sophie Karchkhadze, Meriç Altıntaş Kaptan, and Nawelle Salaud-Mabileau have also contributed greatly to the process. The editors would also like to thank the authors who contributed with their unique work and who worked diligently on their papers throughout the review processes. The authors are grateful to all reviewers who devoted their time and energy to the selected papers and without whom this special issue would not be possible.

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Deniz Hasirci *was born in Reading-England. Hasirci specializes in Turkish modern furniture and environmental behavior as a Professor at Izmir University of Economics (IUE), Dept. of Interior Architecture and Environmental Design, which she led as head of her department between 2010-2017. Currently, she is the head of the IUE Design Studies Graduate Program. She received her PhD in creativity studies from Bilkent University, Interior Architecture and Environmental Design, and worked as an interior designer at Intema-Eczacıbaşı as well as architecture and design firms throughout her career. She is NCSU Fulbright scholar, member of The Chamber of Interior Architects in Turkey, DOCOMOMO ISC/ID member and Tr-Interiors founding committee member, project co-coordinator of "DATUMM: Documenting and Archiving Turkish Modern Furniture" (datumm.org) and adjunct "Reading the History of Furniture and Interior Architecture in Turkey with the Oral History Method" projects, funded by IUE.*

Zsuzsanna Böröcz *is an art and architecture historian who also holds an MA in Musicology. She earned her PhD in art history from KU Leuven in 2004 with a comparative study of modern stained-glass windows in Catholic churches. Since completing her doctorate, she has held teaching positions in art, design, and architectural theory, undertaken research projects, and curated exhibitions. Dr. Böröcz's primary research interests lie in interior and design-related issues within the context of heritage conservation, craftsmanship, and art education during the 19th and 20th centuries. Currently, she is a part-time guest professor at the Vrije Universiteit Amsterdam's Faculty of Humanities, within the Design Cultures program. She is also a researcher affiliated with KU Leuven's Department of Architecture, specifically the Architecture Interiority Inhabitation research group, as well as the University of Antwerp's Faculty of Design Sciences, collaborating with the Henry van de Velde Research Group. In addition, she is the President of Docomomo Belgium and serves as Co-Chair of the Docomomo International Specialist Committee on Interior Design.*

A PLACE OF INFINITE POSSIBILITIES

Tempe à Pailla (1931-1935) in Castellar by Eileen Gray

Vittoria Bonini

ABSTRACT: Petite Maison dans les Environs de Castellar: this is how Eileen Gray (1878-1976), a designer active in early 20th-century France, entitled in her cahiers the architecture she built between 1931 and 1935. The villa, later named Tempe à Pailla, is an opportunity to deepen her research on that intense dialog between interior and exterior, between domestic space and natural environment, already experimented with Jean Badovici (1893-1956) in the villa E1027 (1926-1929) in Roquebrune-Cap-Martin.
According to Eileen Gray's definition, a house is not a machine *à* habiter but 'the shell of man, his extension, his release, his spiritual emanation.' The theme of spatial flexibility is approached through the design of mechanical moving components that rotate or slide, unfold, and contract, thanks to the possibilities of new materials, in a mechanical ballet that expands the narrow dimension of a maison minimum into a dwelling with a greater width. These solutions are intended to negate the facade as a frontier line between the architectural space and the close surroundings; any hierarchical relationship between furniture, interiors, architecture, and site is denied. The kinaesthetic aspect in Tempe à Pailla is absolute, since the house lives of the relationship between the movement of architectural components and the experiential dimension of the human body in domestic space, all in relation to the surrounding natural environment. This article aims to demonstrate how Eileen Gray's innovative theoretical framework, exemplified by villa Tempe à Pailla, offers valuable lessons for addressing contemporary challenges. In this context, it highlights the design solutions adopted by the architect to ensure the well-being of inhabitants, even within minimal spaces, emphasizing the importance of transitional spaces between built and natural environments, thereby expanding the notion of the interior. At the same time, it becomes an opportunity to explore how a renewed relationship with nature can offer meaningful insights for contemporary architectural practices, which now more than ever require particular attention to environmental issues.

KEYWORDS: Eileen Gray, Modern Movement, maison minimum, modern interior, spatial flexibility

INTRODUCTION: When Eileen Gray (Enniscorthy, 1878-Paris, 1976) initiated her first architectural endeavor—the construction of the *E1027* villa in Roquebrune-Cap-Martin (1926-1929)—she already had an established career in Paris as an artiste décorateur and ensemblier but lacked formal architectural training. It was Jean Badovici (1893-1956), an architectural critic and the director of the magazine *L'Architecture Vivante*, who recognized her potential and introduced her to the architectural milieu. In 1924, he articulated in the Dutch publication *Wendingen*: "If she possessed a more confident and precise knowledge of architecture and relied a bit less on her creative instinct, she might well be the most expressive artist of our time" (Badovici, 1924, p. 12).

Villa *E1027* achieved immediate and widespread success. Upon its completion in 1929, Badovici published a dedicated issue in *L'Architecture Vivante* titled "*E. 1027. Maison en bord de mer*" [E. 1027. House by the sea]. This special issue opens with a dialog titled "*De l'éclectisme au doute*" [From Eclecticism to Doubt] in which Gray, for the first and only time, outlines the principles that have influenced and will continue to shape her architectural ethos (Gray & Badovici, 1929). She progressively presents her critical perspective on essential themes related to modernity, closely intertwined with the discussion on dwelling, which played a central role in the architectural debates of that time and holds true to this day.

In the opening of the dialog, the issue of architecture based on "rigid and cold calculations" is raised, challenging whether humans, who are "more than mere intellect," can derive satisfaction from dwellings designed under such premises. Gray acknowledges the need to break free from outdated architectural norms but warns against succumbing to "this state of intellectual coldness" that has been achieved, closely aligned with the stringent principles of modern mechanization. This recurring theme resonates in her definition of dwelling:

> *A house is not a machine for living in. It is the essence of humanity, an extension, a release, a spiritual emanation. Not only its visual harmony but its entire organization, all the elements of the work, combine to make it profoundly human (Adam & Gray, 2000, p. 309).*

Gray highlights a sense of futuristic excess and argues that avant-garde architects have become excessively enamored with mechanization, where their 'excessive intellectualism stifles the wonder of life,' resulting in architecture devoid of soul. Instead, she believes it is imperative to challenge this definition, rediscover humanity, and, in doing so, redefine an enriched "pathos of modern life" (Gray et al., 2015, p.100).

In architectural terms, Gray criticizes the Avant-garde for prioritizing exterior aesthetics over interior spaces, suggesting that houses should not be primarily designed for visual appeal but rather for the well-being of their inhabitants: "Architecture is not about constructing beautiful ensembles of lines, but above all constructing *habitations for humans*." According to Gray, internal spatial arrangements should not be subordinate to exterior aesthetics; instead, they should dictate them: "The interior plan should not be the accidental consequence of the facade; it should live its complex life, harmonious and logical" (Gray et al., 2015, p. 103). Working simultaneously in plan and section, Gray offers a highly personalized interpretation of typically modern motifs: the facade not only becomes a consequence of the plan—there are no regulating lines (Rayon, 2015, p. 114)—but it also relinquishes its traditional role of simply enveloping the plan.

It is at this transient nature junction—the threshold—that the encounter between two worlds materializes: the intimate realm of inhabited space and the external environment; an encounter that Gray is capable of managing according to the needs of the inhabitants, transforming the perimeter boundaries from impassable fronts into layered thresholds. While Le Corbusier in 1929 still advocates for thin exterior walls cut by ribbon windows or window walls with mechanically conditioned spaces (Le Corbusier & Benton, 2015), Gray diverges by layering her architecture with a facade stratification that actively interacts with the interior and the external environment through specific architectural components positioned at the threshold. These components dynamically respond to the needs of human habitation, thus contributing to a nuanced and adaptable living environment.

This unique sensitivity in the treatment of facades—sites of kinematic interaction between architectural interiors, natural environment, and human beings—characterizes the bulk of Gray's prolific oeuvre, which encompasses an extensive portfolio of over forty projects. However, she only realized three architectural works. Alongside the renowned *E.1027*, Gray designed the Villa *Tempe à Pailla* in Castellar (1931-1935) and the Villa *Lou Pérou* in Saint-Tropez (1954-1961).[1]

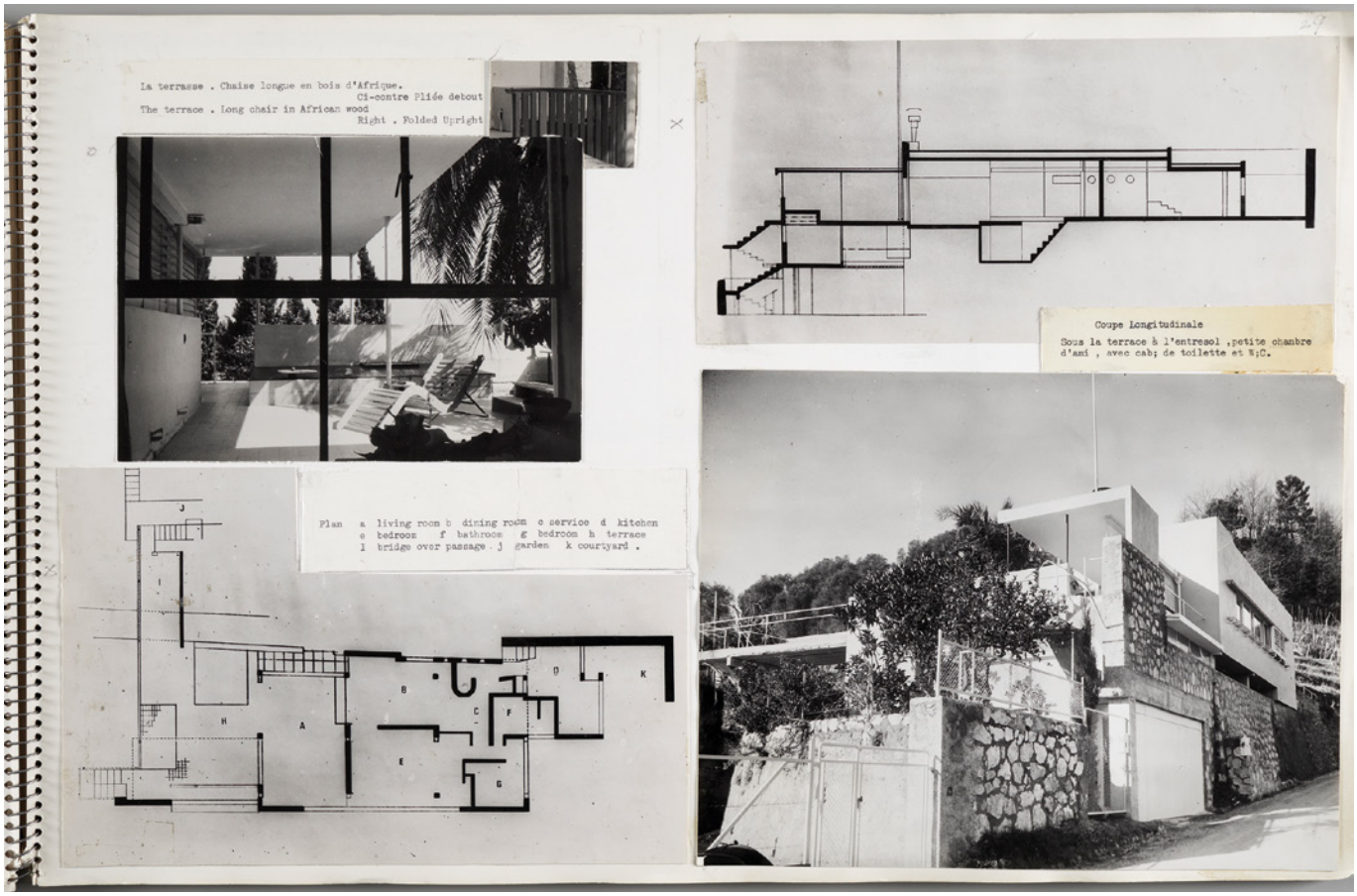
This paper concentrates on Eileen Gray's second villa, *Tempe à Pailla*, and delves into the kinematic systems that serve as primary tools for translating her design ethos into practice, imbuing her spatial representations with qualities emblematic of 'an extension, a release, and a spiritual emanation' of human existence.

In particular, with reference to the existing literature for a general framework of the villa (Hecker et al., 1996; Goff, 2015; Pitiot et al., 2017; Adam & Gray, 2019; Goff & Constant, 2020; Bonini, 2023), this study focuses on architectural components situated at the threshold between interior and exterior spaces. The intent is to emphasize how Gray, through purely architectural solutions, manages to create architectural spaces that thrive on a fruitful balance between the private and the public, between the built and the natural environment.

THE ROLE OFTHE THRESHOLD IN VILLA *TEMPE À PAILLA* IN CASTELLAR (1931-1935)

The collection of photographs and drawings accompanied by written notes contained within the portfolios that Gray began creating in 1956 is an extremely valuable legacy [FIGURE 01]. This is because, at the time of the villa *Tempe à Pailla*'s construction or in the years that followed, no written documentation or publications existed regarding her second architectural realization. The first article about the house would only appear in the pages of the *Perspecta* magazine in 1971 (Rykwert, 1971).

'*Petit Maison dans les Environs de Castellar*' is the title found on the first page of the dedicated *cahier*. It is only with its completion that the house is renamed *Tempe à Pailla*. The choice of the name is inspired by a Provencal proverb: "Avec du temps et de la paille, les nèfles mûrissent" [With time and straw, the medlars ripen] (Constant, 2020), which is a metaphor for the time required for the maturation of ideas. On the same page, the dating ranges from 1931 to 1935, though the villa's history traces back



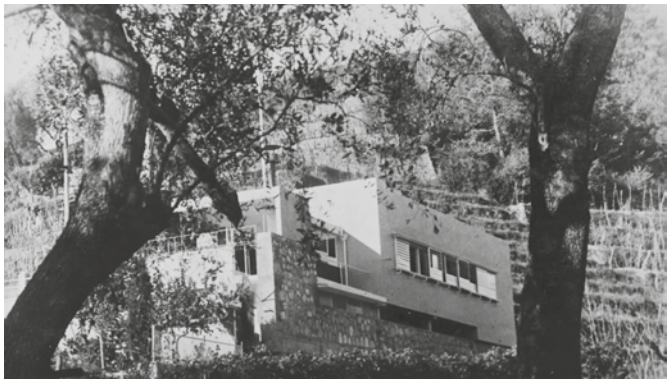
01 Villa Tempe à Pailla in Castellar (1931–1935). Page from Eileen Gray's portfolio: Floor plan, with the interior spatial distribution, longitudinal section showing the different room heights, and the photographs with a focus on the threshold between the covered outdoor terrace and the living room. © National Museum of Ireland, 1956.

to 1926-1928, when Gray acquired five parcels of land in Castellar, a small village in the Côte d'Azur hinterland between Monte Carlo and Menton (Goff, 2015).

The site is a challenging piece of land, situated beneath a ridge, along a steep and windy mountain road. The overall plan highlights a long and narrow area adjacent to a drivable road on the east side and bisected by a pedestrian path; these are the two physical boundaries that delineate the perimeter upon which the future villa will stand.

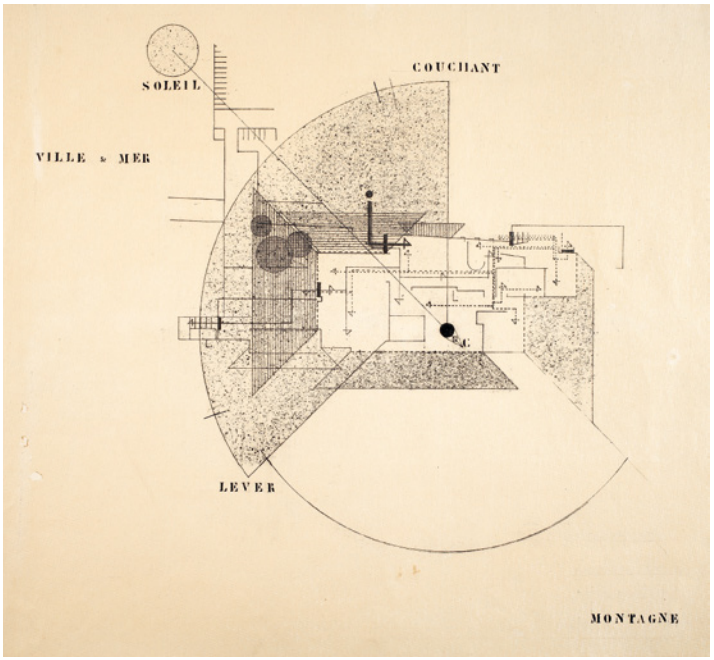
In the project drawings, the architecture is depicted in a comprehensive horizontal section that lacks details. Through longitudinal development on the eastern front, guided by the plan notes included in the portfolio, one can envision the spatial division on the main floor. Progressing from south to north, along the front facing the road, there is the terrace, followed by the living room, the main bedroom, and the guest room, each varying in height. The section on the opposite front, situated on the western side along the pedestrian path, accommodates the main entrance, the dining room, service areas, and the kitchen with a small outdoor courtyard.

The architectural program that Gray delineates for the villa is fundamental: it is a *maison minimum* (Badovici & Gray, 1930) conceived to become a personal retreat, capable of ensuring, when needed, the utmost level of privacy.[2] This elucidates several design choices employed, commencing with the treatment of the facade oriented towards the road. The front comprises two levels: the lower level, almost entirely opaque, preserves the existing stone structure[3]: the upper level hosts the new construction, characterized by a mixed structure, white plastered in the typically modern manner, horizontally divided by a single window, which integrates a complex system of independent sliding shutters [FIGURE 02].

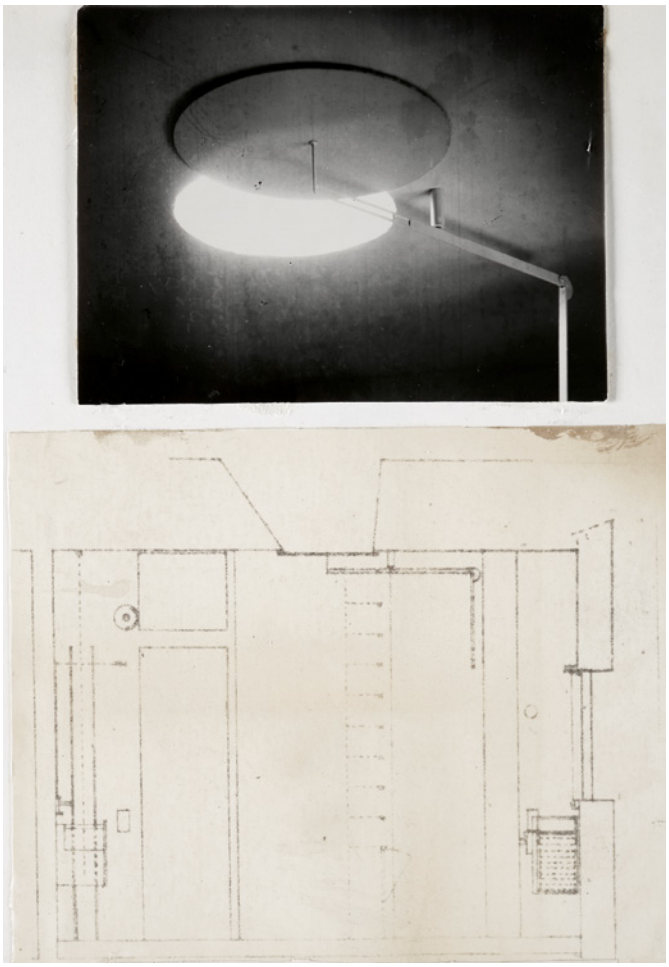


02 Villa Tempe à Pailla in Castellar (1931–1935). View from the street in the 1950s. © National Museum of Ireland, ca. 1955.

Of importance to this research are the two principles that govern the design of the internal spaces: a specific floor plan of the main level reflects the study of room distribution and movement flows within the house, considering not only the views towards the outside but also the path of the sun [FIGURE 03]. On the drawing, it is possible to read the path of the sun as it rises from the mountains (*lever*), reaches its zenith towards the city and the sea at noon,



03 Villa Tempe à Pailla in Castellar (1931–1935). Solar Diagram. © National Museum of Ireland, ca. 1932.



04 Villa Tempe à Pailla in Castellar (1931–1935). Movable metal disk in the ceiling of the bedroom. © National Museum of Ireland, ca. 1955.

and then sets (*couchant*) in the west. As typical of temperate climates, the living room and terrace benefit from the solar arc between east and south; bedrooms face northeast; the dining room and study area are situated to the west, with service areas facing northwest.

Examining the planimetric diagram, it is evident how Gray precisely centered the solar arc on a specific point, represented in the drawing by a large black circle, graphically depicting a circular opening located in the ceiling. This opening is positioned exactly halfway between the area of the room occupied by the bed and the space designated for the dressing room. The glazed portion is situated on the outer edge, of greater dimension, while the internal shading system, a thin metal disc removable via a manual mechanical arm, is on the inner edge. The ceiling opening is designed by excavating the covering slab to facilitate the entry of sunlight and the presence of natural light throughout the day, effectively transforming the room into a kind of sundial that harmonizes the rhythm of domestic life with that of nature [FIGURE 04]. According to Gray, "light is the subtle, constantly changing medium that envelops and vivifies all our activities at all times and in all seasons" (Wilson, 1995, p. 18).

Thus, the diagram reveals a multifaceted purpose extending beyond spatial distribution. It delineates four distinct zones framed by dashed lines surrounding the windows of the bedroom, living room, study, and dining room, with lateral demarcations set at a forty-five-degree angle. This delineation serves to illustrate the dynamic interplay of light intensity across different spaces. Moreover, the tailored nature of the diagram for the villa underscores Gray's approach to facade composition. Each opening is meticulously designed to achieve thermal and luminous equilibrium throughout the day, while also considering the varying degrees of privacy (Bonini & Morbiducci, 2024). In contrast to Avant-garde theories prioritizing exterior aesthetics, Gray first works on the floor plan and then composes the design of the facades, taking into account these two fundamental principles. Thus, the facades exhibit variations generated by the study of different kinematic components—windows and shading systems—capable of creating a different relationship between interior and exterior, between private and public spaces, depending on the needs and the will of the inhabitants. Consider, for example, the living room where each of the three perimeter walls is treated uniquely: in each instance, Gray explores kinematic solutions employing varying degrees of stratification.

On the northeast side overlooking the driveway, there are two sliding windows that occupy half of the internal facade. The second half accommodates a sliding opaque panel that can slide to overlap with the glazed frame. On the external side, the wooden shutter system of the bedroom continues: sliding on an independent, slightly protruding track, they can fold laterally towards the terrace or filter light and air through adjustable horizontal slats [FIGURE 05].

On the south side, facing the terrace, the facade is entirely glazed, interrupted only by the column of the fireplace, positioned at the center. All fixtures are enclosed within white-finished metal frames. On either side of the opening,

05 Villa Tempe à Pailla in Castellar (1931–1935). External shutter system of the main facade to the northeast. © National Museum of Ireland, ca. 1955.

06 Villa Tempe à Pailla in Castellar (1931–1935). Pivoting panels in the upper part of the living room facing southwest. © National Museum of Ireland, ca. 1955.

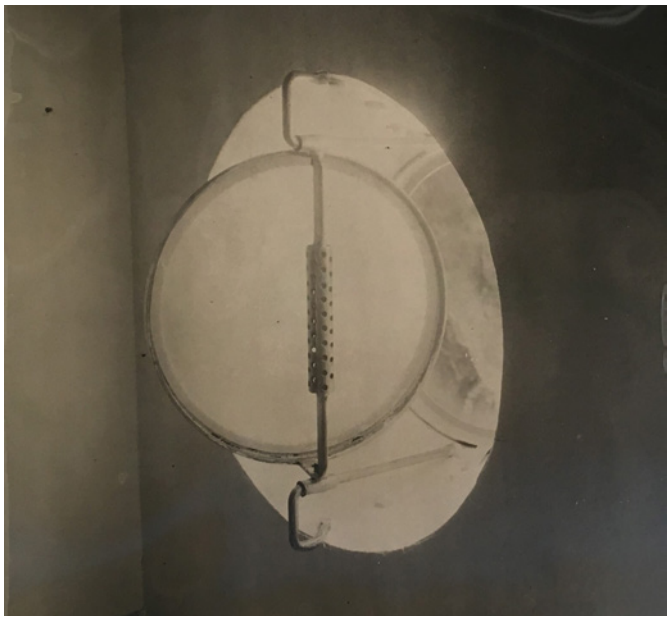
07 Villa Tempe à Pailla in Castellar (1931–1935). External shutters of the south-facing terrace. © National Museum of Ireland, ca. 1955.

there is space for a housing unit for foldable panels, which serve as an internal shading system; alternatively, a guide on the top side of the fixtures accommodates curtains. As for the exterior, there are no shutters or other shading systems; the terrace itself, equipped with a canopy, and the shade of the surrounding trees filter the exterior light.

On the third and final side, the southwest-facing one, the glazed portion is confined to the upper part of the wall, which is replaced by semi-opaque glass. There is no external shading system but rather a sophisticated internal device consisting of eleven panels. These screens rotate in unison, being connected by a horizontal frame on which each of them is hinged through the manipulation of vertical handles anchored to the two panels at the ends. When closed, the panels, working in continuity with the wall, create a seamless barrier; when opened, natural light filters inside, illuminating the interior and ensuring the appropriate level of privacy despite the adjacent pedestrian passage [FIGURE 06].

The deployment of shutter systems is discernible at various junctions within the house. Beyond the east facade, they are also integrated into the lower floor to the south and on the main floor to the north, specifically in the service room. Notably, their implementation exhibits remarkable originality on the south-facing terrace [FIGURE 07]. While visually aligned with the unique system encompassing the bedroom and living room, the shutter extends further southwards, protruding into the space. Positioned slightly recessed from the facade, it rests atop a low wall and is suspended, affixed to the canopy partially covering the terrace. The mechanized shutter system facilitates the terrace's integration into the transitional space between the dwelling and the surrounding panorama; thus, the terrace assumes the character of an open-air chamber, deliberately appointed with interior-like tiling and ambiance. Upon closure, the sliding shutters shield the eastern exposure, while their retraction behind the stair landing wall seamlessly integrates nature with the spatial ensemble.

At the southwest side entrances, laundry room, and pantry, there are three small circular openings with sliding and rotating discs resembling portholes. These openings have different diameters on the exterior and interior, creating a funnel-like effect. The opaque glass disc, framed in metal, can be moved using a handle and slides along horizontal tubes. This mechanism allows the disc to adjust its position and rotation, controlling light and air flow. When closed, it admits only light through the opaque glass. Rotating the disc allows a small amount of air to enter while sliding it inward increases both light and air flow. When parallel to the facade, it hides the interior space from view, but when rotated, it permits direct sunlight to enter without the opaque glass [FIGURE 08].



08 Villa Tempe à Pailla in Castellar (1931–1935). Moveable circular window with opaque glass disc in the southwest facade. © National Museum of Ireland, ca. 1955.

In *Tempe à Pailla*, Gray deepens her research on two of the main themes addressed in her architecture: "the problem of windows" and "the oft [sic] neglected, though crucial problem of shutters: a window without shutters is an eye without brows" (Gray et al., 2015, p. 104). In the villa, Gray masterfully controls the transition between the interior and exterior spaces with innovative architectural elements, integrating the external natural environment into the overall design. Positioned on the interior or exterior edge, sliding and adjustable or fixed and swiveling, these kinematic components transform the perimeter boundaries from impenetrable fronts into layered thresholds, places of infinite possibilities for interaction between interior spaces, human beings, and the external natural environment.

POETIC EVOLUTIONS OF MECHANICAL MARVELS

This analysis of Villa *Tempe à Pailla* reveals Gray's adeptness in designing structures that seamlessly integrate natural elements, such as light and wind, alongside the human presence, both physically and spiritually. In this sense, Gray's approach not only accentuates functionality but also underscores her innovative vision, which prioritizes the symbiotic relationship between the constructed environment and its inhabitants.

Eileen Gray assimilates and transcends the modern architectural vocabulary, with a particular focus on crafting spaces that synchronize with the rhythm of human existence. This phenomenon is most evident in the dynamic configurations that emerge at the intersections of interior and exterior spaces, as well as between public and private realms, which both show convergence as well as divergence of space. Gray refrains from abolishing boundaries; instead, she redefines them, infusing *elasticity* into her architecture. The floor plan of the house evolves into the nucleus of a potentially boundless space, where architectural elements glide, shift, expand, and contract in a sort of mechanical ballet, flexibly adapting to spatial requirements before returning to their original configurations.

The kinematic components emerge as indispensable instruments for delineating the transitional spaces as tangible, three-dimensional kinematic thresholds. No longer confined to mere passageways, they acquire an inherent spatial quality of exchange and connection. It is through the daily choreography of these architectural components that Gray orchestrates a mise-en-scène, a spectacle of light and shadow, solids and voids, fostering varying degrees of transparency and permeability. Each kinematic component, evolving into a tangible architectural threshold, transcends mere functionality, transforming into a form of expressive art. The distinguishing feature of these components lies not in their isolated mechanisms but in their potential for 'interactive kinematic engagement.' For this very reason, these are architectural solutions rather than mechanical ones.

Although the kinematic components devised by Gray within *Tempe à Pailla* are indeed products of technology, they do not conform to standardized models or adhere to a specific furnishing paradigm. Gray's sensitivity to the issue of standardization is, once again, unique: "If one is not careful, standardization and rationalization [...] will end up producing buildings that are even more soulless and lacking individuality than those we have seen until now" (Gray et al., 2015, p. 102).

The realm of technology is not foreign to Gray; Jean Paul Rayon observes how "In this field, she knew as much as the majority of her architect colleagues and was certainly as capable as they to consult with technicians and engineers" (Rayon, 2015, p. 115). At the same time, Badovici, as early as 1924, described Gray's design thinking as follows: "She knows [...] that the formidable influence of technology has transformed pure sensibilities" (Badovici, 1924, p. 12).

A closer look at the definition and detail achieved by the components that constitute her design approach reveals in Gray a particular interest in the new spatial possibilities resulting from the discovery and diffusion of new materials or manufacturing methods, which she embraces with enthusiasm. At the same time, Gray is aware that: "Technology is not everything, it is only a means. We must build for the human being, so that they find in architecture the joy of feeling themselves, like in a whole that extends and completes them" (Gray et al., 2015, p. 102).

Thus, Gray employs her technical acumen and her compositional prowess in the pursuit of a spatiality that, to echo the sentiments of Badovici, "affords the artist infinite possibilities" (Badovici & Gray, 1924, p. 27).

At this point, it is interesting to return to Gray's definition of habitation, which was introduced at the beginning of this contribution. In 1923, Le Corbusier stated:

"Architecture is beyond utility. Architecture is plastic" (Le Corbusier, 1927, p. 14). In his conception, the architect, by organizing the forms, must evoke plastic emotions, where an aesthetic, visual, sculptural definition becomes the protagonist. The *machine à habiter*, then, in its quality as a functioning mechanism, belongs to the world of engineering; what makes it architecture, at least in this purist phase, is "learned game, correct, and magnificent, of forms assembled in the light" (Le Corbusier, 2017, p. 16). Gray's architectures do not arise to be contemplated as volumes assembled under light; they find their reason as extensions, releases, spiritual emanations of man:

> *Even as lyricism can be expressed in the play of volumes, in the light of the day, the interior should still respond to man's needs, and the demands and needs of individual life making a place for repose and privacy.*
> *(Gray et al., 2015, p. 103).*

The two poetics do not differ so much in the ascetic functionalism criticized in Le Corbusier—rather a victim of labels due to a misinterpretation of his *machine à habiter* definition (Benton, 2022)—but in the different architectural conventions that lead to different research. A formalism linked to "beautiful ensembles of lines" for Le Corbusier—which leaves the question of utility to engineers (Le Corbusier, 1927, p. 24) —and a pragmatism that places the spatial quality of dwellings for people at the center for Gray.

In these terms, it would not be surprising to find in *Tempe à Pailla* a greater functional imprint compared to any purist Le Corbusier villa from the 1920s. If this were the case, it would be a functionalism that we must, however, necessarily distinguish from its generic—and often negative—connotation; a functionalism mediated by Gray's sensitivity in seeking the well-being of the inhabitants, an emotional functionalism that, in its being an oxymoron, combining material and spiritual reality, makes possible what she herself defines as "art of living."

CONTEMPORARY RELEVANCE AND CONCLUSION

The result of this study aims to highlight how Gray takes a critical stance towards the Avant-garde doctrines, adopting a pragmatic and non-dogmatic approach to the stylistic elements of the Modern Movement. Within the realm of modern spatial devices, Gray engages with the themes posed by her contemporaries—which are still highly relevant today—integrating and successfully reshaping them within her design philosophy.

Her approach aligns with what Colin St John Wilson (Wilson, 1995) or Kenneth Frampton (Frampton, 2021) would term as characteristic of 'another modern movement.' Gray embodies a "non-heroic modernism" (Constant, 1994) whose objective, as inferred from these brief notes, is to construct an architecture of relationship focused on the art of inhabiting domestic space, distancing itself from the risk of a dehumanizing abstraction process.

> *"Formulas are worth nothing; life is everything" Gray states, "I wish to develop these formulas and push them to the point where they reestablish contact with life; enrich them, penetrate their abstraction with reality"*
> *(Gray et al., 2015, p. 101).*

Upon closer examination, the themes explored by Gray within her design philosophy to implement an "architecture of relationship" and to "reestablish contact with life" resonate with issues that remain central to contemporary practice. Consider, for example, the role that transitional spaces have played between the private and public spheres or between the built and natural environments, as well as the spatial organization of small-scale homes during recent global emergencies.

Gray's exploration of the fluidity between interior and exterior spaces challenges the rigid dichotomy that often exists in architectural literature. Her design solutions dissolve traditional boundaries, fostering a layered interaction between built forms and nature. This nuanced understanding is particularly vital in times of crisis, where access to open spaces, natural light, and air is critical for well-being. Gray's approach to kinematic architecture, through the dynamic movement of architectural components, creates spaces that breathe and adapt to their environment, ensuring that homes do not become isolating cells but rather fluid, adaptable ecosystems.

At the same time, Gray's approach exemplifies how the natural environment can be not merely a backdrop but an integral part of the interior experience. Her work in *Tempe à Pailla*, with its sensitive orientation to light and wind, reimagines the home as a living entity in dialog with its surroundings. This rethinking of the relationship between humans and nature suggests that our interior spaces should adapt to natural rhythms, optimizing environmental resources for the well-being of inhabitants.

By refocusing attention on the essential qualities of architecture and the relationships that these qualities have always been called to weave with the environmental specificities of their locations, kinematic elements can become a tangible moment of encounter between architecture and nature, not eluding the undeniable and contrasting dualism, but rather making it more productive than ever.

Thus, Eileen Gray's architectural philosophy urges us to move beyond a narrow interpretation of the term "interior." Gray fully embraces the concept of "interior qualities" as

encompassing all characteristics related to the overall spatial experience, expanding the limited dimension of a *maison minimum* into a dwelling with a broader scope: a place of infinite possibilities, which comes to life through the ever-changing relationship between components, understood as architectural mechanisms of transformation; environments, realms in which to experience spatial elasticity; and interactions, moments of encounter between architectural space, nature, and human beings—a connection of crucial importance for our way of living, both in contemporary and future contexts.[4]

ACKNOWLEDGEMENTS

Special thanks are extended to Alexia Kirk and Rebecca Evans, archivists at the V&A Archive in London, and to Jennifer Goff, curator of the Eileen Gray collection at the National Museum of Ireland in Dublin, for their invaluable support in research and accessing archival materials.

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ENDNOTES

1 *Tempe à Pailla*, located at 187 Route de Castellar in Menton, is protected by classification by the Jan. 22, 1990 ordinance. Lou Pérou, located along the Chemin des Bastidettes near Saint-Tropez, has been profoundly revised over the years: no trace remains of Gray's intervention.

2 The theme of the *maison minimum* is explored by Gray in a way similar to her renovation work on Rue Chateaubriand in Paris (1929-1931), titled 'Une seule pièce organisée en habitation,' realized for Jean Badovici (see V&A Archive AAD/1980/9/240).

3 At the time of purchase, the area had a rural house with three old cisterns. Notably, the V&A Archive holds a drawing of a small house designed on a cistern, similar in structure and access to Tempe à Pailla. This drawing, the Maison de Weekend sur Cisterne (AAD/1980/9/206/1), dates from 1933-37.

4 This contribution is based on the doctoral research conducted by the author at the Department of Architecture and Design of the University of Genoa, Italy. The research led to a thesis entitled 'A Kinematics of the Threshold. Technique and modernity in the poetics of Eileen Gray', discussed in May 2023.

A WINDOW OF OPPORTUNITY

A third, and Domestically focused, Modern Movement in South Africa

Arthur Barker

ABSTRACT: The effects of climate change, resource depletion, and volatile economic circumstances require a reflection on current design approaches that can be gained through lessons from the original and mediated intentions of the Modern Movement. An important example can be found in South Africa before WW II, where the introduction of standardized building materials, particularly metal-framed windows, generated unique, mediated Modern Movement-inspired domestic interiors resulting from responses to a burgeoning industry, physical context, and functionalist attitudes to human activities.

The clarion call of the Modern Movement for an architecture of economy, efficiency, and health underlined Le Corbusier's "Cinq Points de l'Architecture Moderne" (Curtis, 1996, p. 175). This dictum was transmigrated to South Africa through the work of the zerohour Group formed in 1932. Unfortunately, the starkness of the 'foreign' architecture did not resonate with the general public, while interiors overheated and flat roofs leaked in the summer. In 1936, Iscor, a South African company, began assembling standardized metal window frames. Architects like Norman Eaton, Hellmut Stauch, and Robert Cole Bowen, sensitive to local contexts, utilized these metal window frames to create unique architectural interiors. The windows and associated modules not only provided an economical construction and structural logic through planning efficiency but generated more contextually and climatically related interiors, healthier internal environments, and fluid internal-external relationships.

This article delves into the origins and impacts of the Modern Movement in Johannesburg and Pretoria, focusing on the transformative influence of the standard metal window. Then, the bioclimatic, technological, and spatial effects of these windows on residential interiors and their lasting legacy will be highlighted.

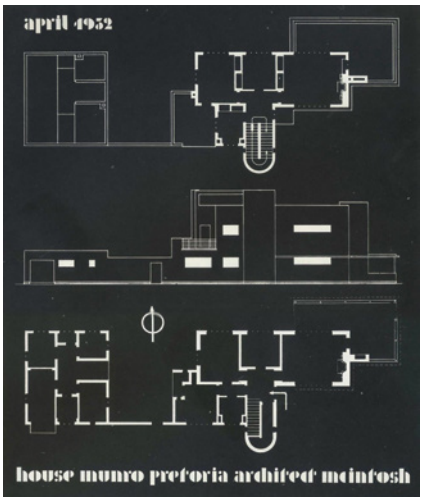
KEYWORDS: Standardization, metal windows, mediated Modern Movement, bioclimate, modern interior

INTRODUCTION: We live in testing times, enduring various impediments to the control of a secure future. The effects of climate change, resource depletion, and volatile economic circumstances resulting from, amongst other influences, the recent COVID-19 pandemic require a reflection on current design approaches. By adopting retrospective and projective attitudes, lessons can be learned from the original and mediated intentions of the Modern Movement, which grappled with similar challenges in its time. A valuable lesson can be found in South Africa, before and after WW II, with the advent of building material standardization, in particular using the metal-framed window [FIGURE 01] that facilitated the design of economic, bio-climatic, and mediated Modern Movement interiors. Through applications of the window module, opportunities presented by revised responses to industry, nature, and human activity were synergized in the design of seminal houses in Pretoria.

MODERN MOVEMENT MEDIATIONS

The first and orthodox Modern Movement (1917-1929) (Jencks, 1985, p. 31; Joedicke, 1945, p. 10), or pastoral and programmatic modernity as Heynen (1999, p. 13) has described it, called for an architecture of economy, health, and efficiency underlining Le Corbusier's (1867-1965) "Five Points for a New Architecture" (Curtis, 1996, p. 175). Le Corbusier's dicta were directly transmigrated to South Africa through the architecture and publication of the *zerohour Group* (1932) formed by Rex Martienssen (1905-1942), Gordon McIntosh (1904-1983), and

01 Metal-framed windows in the living room of Hellmut Stauch's House Kellerman, 1950, Pretoria. © Arthur Barker, 2015.



02 Houses Munro and Harris (with acknowledgment to the metal window company) published in 'zerohour,' 1933. © Architectural Archives, University of Pretoria, 009_MCI (Gordon McIntosh).

Norman Hanson (1909-1991) (Herbert, 1974, p. 95). In 1933, the band of like-minded architects drew up a manifesto for design titled 'zerohour' with the intention of creating a "living architecture in South Africa" (Herbert, 1974, p. 93) through the dissemination of the so-called International Style.

This second Modern Movement (1930-1939) (Joedicke, 1969, p. 16) extended the core principles of the first Modern Movement and found its way to non-European countries searching for a new political identity or alternatives to entrenched traditions. In 1934, Martienssen's direct encounter with Le Corbusier (Herbert, 1974, p. 100) was met with enthusiastic reception, culminating in Le Corbusier's publication of Martienssen's letter in his 1936 *Oeuvre Complète* (Herbert, 1974, p. 186). In this publication, Le Corbusier enthusiastically referred to the adherents of this movement as *Le Groupe Transvaal* [*The Transvaal Group*].

A THIRD MODERN MOVEMENT

During the 1920s and 1930s, a limited number of more aesthetically inspired than principally or functionally informed Modern Movement houses were designed and built in Johannesburg and Pretoria, including House Martienssen (1926) (Haig, 1986, p. 59), House Munro (1932) (Herbert, 1974, p. 70) [FIGURE 02], House Harris (1933) (Herbert, 1974, p. 86) [FIGURE 02], and House Stern (1934) (Herbert, 1974, p. 122). The designs were a reaction to imported Dutch and British domestic architectures (Herbert, 1974, p. 28) but represented a

resistance to moving away from traditional cellular layouts. Unfortunately, the intentions of Modern Movement efficiency and a new interior domesticity mainly resulted in compact circulation layouts. The starkness of the imported architecture did not resonate with the public, while the interiors overheated in summer and flat roofs leaked (Howie, 1945, p. 141; Connell, 1945, p. 164; Chipkin, 1993, p. 166). Martienssen's rejection of an offer from the CIAM to establish a South African arm of the organization in 1937 (Herbert, 1976, p. 187) and his untimely death in Pretoria on August 26, 1942 (Herbert, 1974, p. 245), added impetus to the demise of a second Modern Movement in single residential dwellings.[1]

After 1940 and until around 1960, a third, and regionally inspired, Modern Movement began to see the light of day (Curtis, 1996, p. 567; Prinsloo, 2000, p. 96; Ghirardo, 1996, p. 10). The major shift occurred in work outside Europe, particularly in developing countries in South America and Africa (Curtis, 1996, pp. 491, 635). In South Africa, the formal orthodoxy of the limited second Modern Movement was tempered by a more focused "counter-pastoral" (Heynen, 1999, pp. 11-14) direction through a recognition of the technical and climatic failures of buildings from the 1930s (Cooke, 1998, p. 232), place, building materials, and local 'Afrikaner'[2] culture, particularly in Pretoria. Notably, in the 1950s, there was a reevaluation of gender roles in middle-class households, with women transitioning from mere oversight to actively managing household tasks, a shift reinforced by the adoption of open-plan kitchen and dining room layouts (Jackson, 1998, p. 88) and made easier through newly available equipment and hard-wearing, cleanable, surfaces (Cole Bowen. n.d., p. 45).

During and directly after WW II, in South Africa, limited imports of building materials (Muller, 1984, pp. 447-448) led to scarcity, paradoxically prompting innovation and efficiencies in construction and space planning. By 1940, local resources allowed for the construction of concrete, metal, and brick buildings, while timber and window glass remained imported products (Hartdegen, 1988, p. 207). The housing needs of returning soldiers (Cooke, 1998, p. 233), rural migration to the cities, and the restrictions of building controls (Peters, 1998, p. 177) forced architects to focus on "more modest and therefore more realistic needs" (Hanson, 1958, p. 20). Hanson further argued that there should be a focus on the use of logical, efficient, dimensionally coordinated structural systems supportive of the local building industry (Cooke, 1998, p. 234).

DERIVATION: MATERIAL STANDARDIZATION

The emphasis on efficiency in construction through the potential of mass production, standardization, and the use of repetitive modules was initiated during the Industrial Revolution in buildings such as the Crystal Palace (1851) (Frampton, 1992, p. 34) and later, in the 1926 Bauhaus

03 Crittall metal-framed window advertisements in the December 1928 and April 1932 South African Architectural Record journal. © Architectural Archives, University of Pretoria, 000_GEN (General Collection).

building with its 1'10" (560 mm) metal-framed window module.[3] Consequently, the use of industrialized products associated with the Case Study House program (1945-1966) in California, United States, became equally influential (Smith et al., 2009, p. 8).

For many Modern Movement architects, the value of standardization offered a way to streamline the manufacture and use of building components to limit wastage and enhance adaptability while providing the possibility of seamless additions and alterations and ensuring aesthetic continuity and control. Initially, in South Africa, modular metal products such as corrugated iron sheets were imported (Fisher, 1998, p. 31), but after 1934, metal-framed windows from England were assembled and, later, manufactured by the newly established Iscor metalworks to the West of Pretoria (Hartdegen, 1988, pp. 118, 173).

INITIATION: THE MODULAR METAL WINDOW

The use of proportion systems during the Modern Movement was a key part of the education of architectural students, not least through Le Corbusier's *Modulor*. Hambidge's 1926 publication "Dynamic Symmetry" (De Bruyn, 2018, p. 155) formed the impetus for the development of the *Modulor* in the Department of Architecture at the University of Pretoria in 1943 (Steenkamp, 2003, p. 7) through the use of proportional design grids. In addition, a more rationalist approach developed from an understanding of locally available and standardized building materials (Steenkamp, 2003, p. 8).

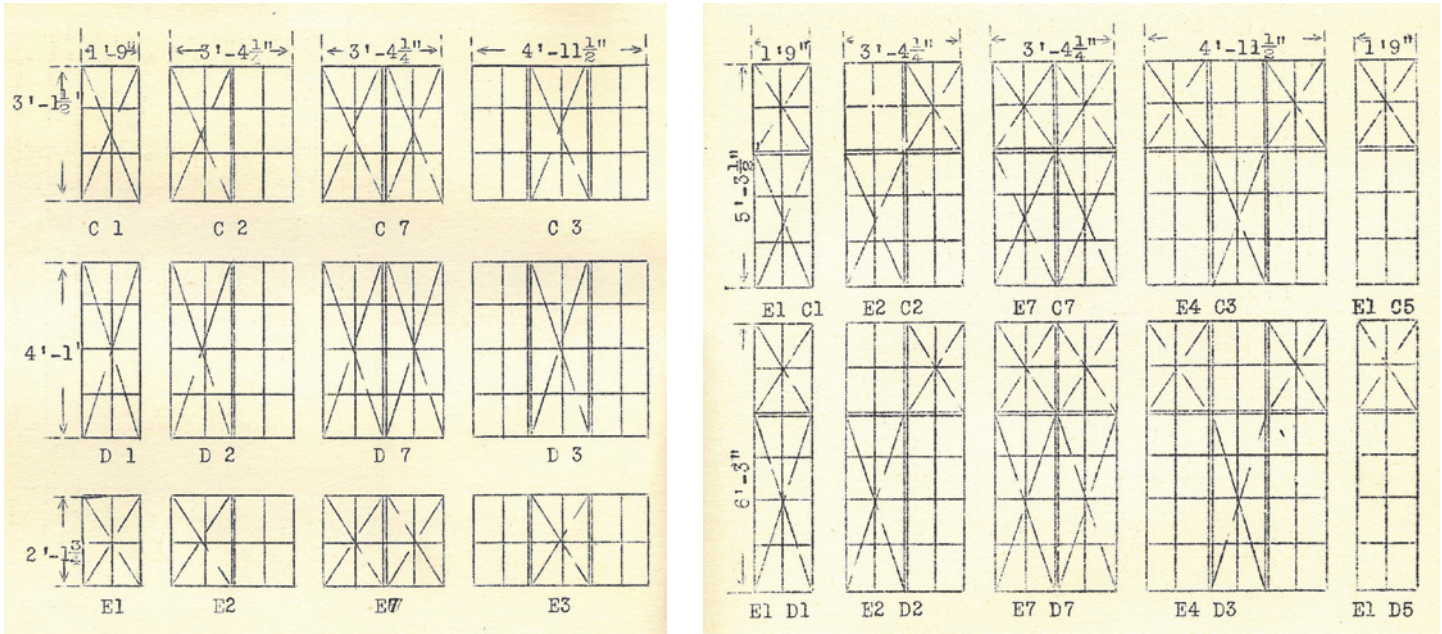
In the late 1920s, a significant advancement in construction technology arrived in South Africa with the introduction of imported metal-framed windows. After receiving a patent license on September 16, 1935 (Anon, 2023) from the United Kingdom-based Crittall Manufacturing Company Limited, Iscor began assembling standard metal window frames in 1936 for the Crittall Manufacturing Co. (S.A.) Ltd. [FIGURE 03], including 1'9" (533 mm) wide (C1, D1, E1 range) and 3'4½" (1029 mm) wide (C2, D2, E2 range) modules [FIGURE 04] imported from the parent country (Peters, 1998, p. 176).[4]

The adoption of metal-framed window modules had a profound impact on the evolution of residential interiors, particularly in Pretoria houses designed by architects such as Norman Eaton (1902-1966), Robert Cole Bowen (1904-1976), and Hellmut Stauch (1910-1970). The window modules provided structural and construction efficiency, the opportunity to create more climatically comfortable internal environments, and enhance planning efficiency while fostering contextually relevant internal-external relationships.

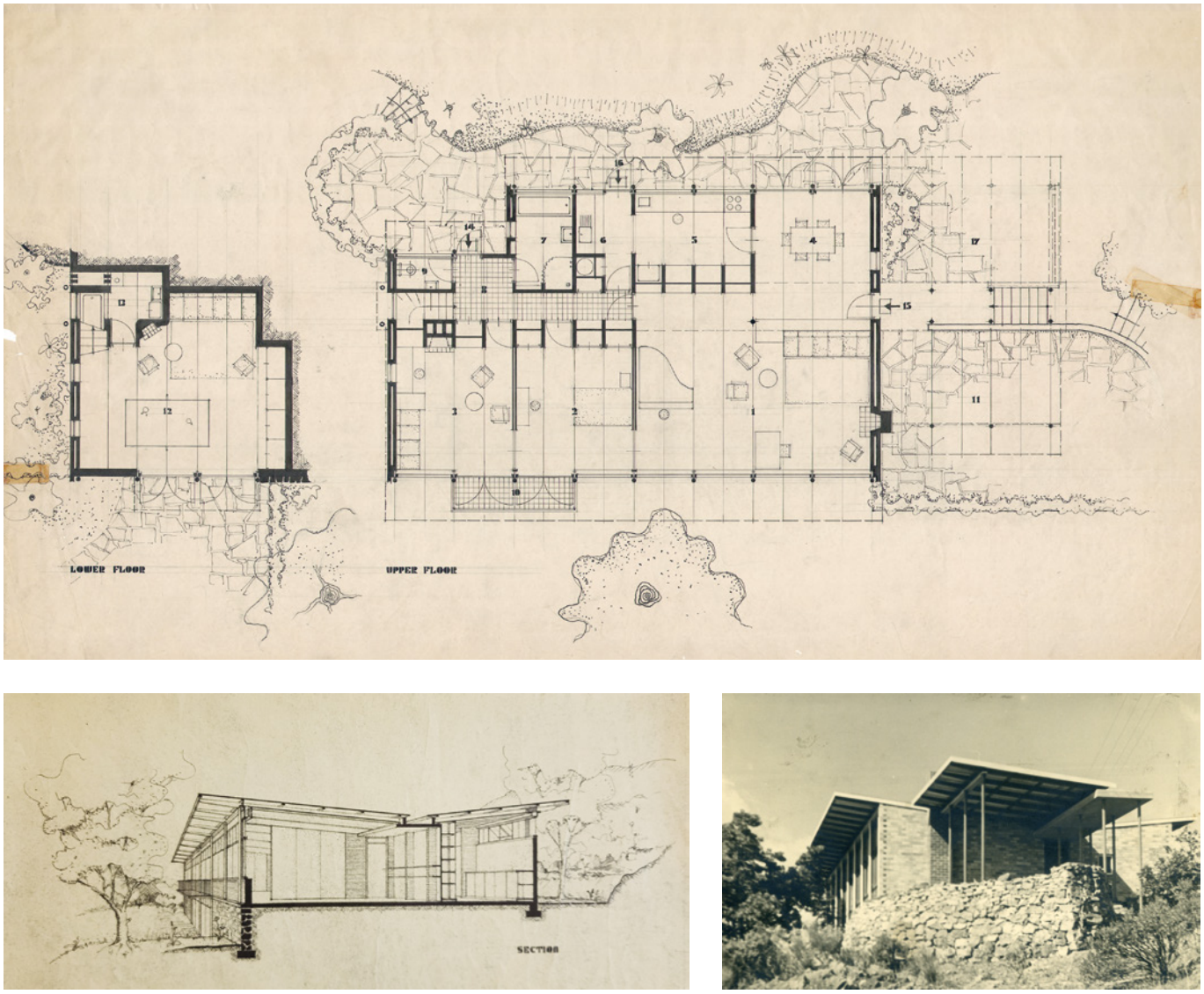
GENERATOR: WINDOW TECHNOLOGY

The use of the metal-framed window module, following European precedents, was instrumental in fostering not only a reconsideration of structural systems but also a technological revolution that shifted architecture in Pretoria from its vernacular stereotomic origins to a tectonic system.

Stauch, who arrived in South Africa in 1935 after training at the Ittenschule in Berlin from 1926 to 1929 and at the Technische Hochschule (Nation, 2014, p. 10) had already, as early as in the 1930s while working for Wilhelm Peters (Peters, 1987, p. 3), used modules of 800 mm and 1100 mm in the Kleinhaus [*small house*] designs made with metal structures and asbestos cement cladding. Stauch, a yacht designer and racer (Peters, 1998,



04 Crittall (UK) cottage-pane metal-framed windows catalog for South Africa 1930s. In South Africa, the smaller panes were largely omitted. © Braintree Museum Collection, Object Nr BRNTM:2012.571).



05 Plan, section, and photograph of Stauch's House Winckley, Pretoria, 1944, showing the metal-framed window-inspired lateral planning grid. © Architectural Archives, University of Pretoria, 011_STA (Hellmut Stauch), undated.

p. 177), also produced a 'Study for the Development of Standardised Building Elements' in 1941 (Stauch, 1941) and would have been familiar with the German metric Fenestra Crittall AG system (Lohmann, 2018, p. 104).

In Pretoria, Stauch used a lateral modular grid on the north-south axis at 3'3" (990 mm), nearing 1 m, following the German metric system (Peters, 1998, p. 185) and later adapted to suit the locally available window modules. Stauch also integrated metal column supports with metal-framed windows for the spacing of roof rafters to create a constructional whole (Peters, 1998, p. 184), for example, in House Winckley, 1944 [FIGURE 05].

Cole Bowen, a graduate of the University of the Witwatersrand (Wits), not only used a 3'4¼" (1022 mm) window module for rafter spacings [FIGURE 06] but advocated for a three-dimensional grid system, emphasizing the mathematical coordination of materials and equipment to elevate architectural theory into applied art (Cole Bowen, n.d. pp. 106, 127). He criticized the limitations of a singular 1'9" (533 mm) wide metal-framed window but argued that a doubling or trebling of the module was more efficient for roof construction (Cole Bowen. n.d., p. 10).

06 Cole Bowen's Vincent House, Pretoria (ca. 1953) with window module grid that generated bay widths and structural layouts. © Cole Bowen, Architectural Archives, University of Pretoria, 043_COL (Cole-Bowen), undated.

Norman Eaton, another South African Wits graduate, had already experimented with a continuous band of metal-framed glazing as early as 1933 in House Boyes in Brooklyn, Pretoria (Harrop-Allin, 1975, p. 27). However, it was not until 1948 that he began employing this approach as a modular grid in projects like House Greenwood (1949-51) in Pretoria (Harrop-Allin, 1975, pp. 72-77). Eaton's travels to the Americas, including

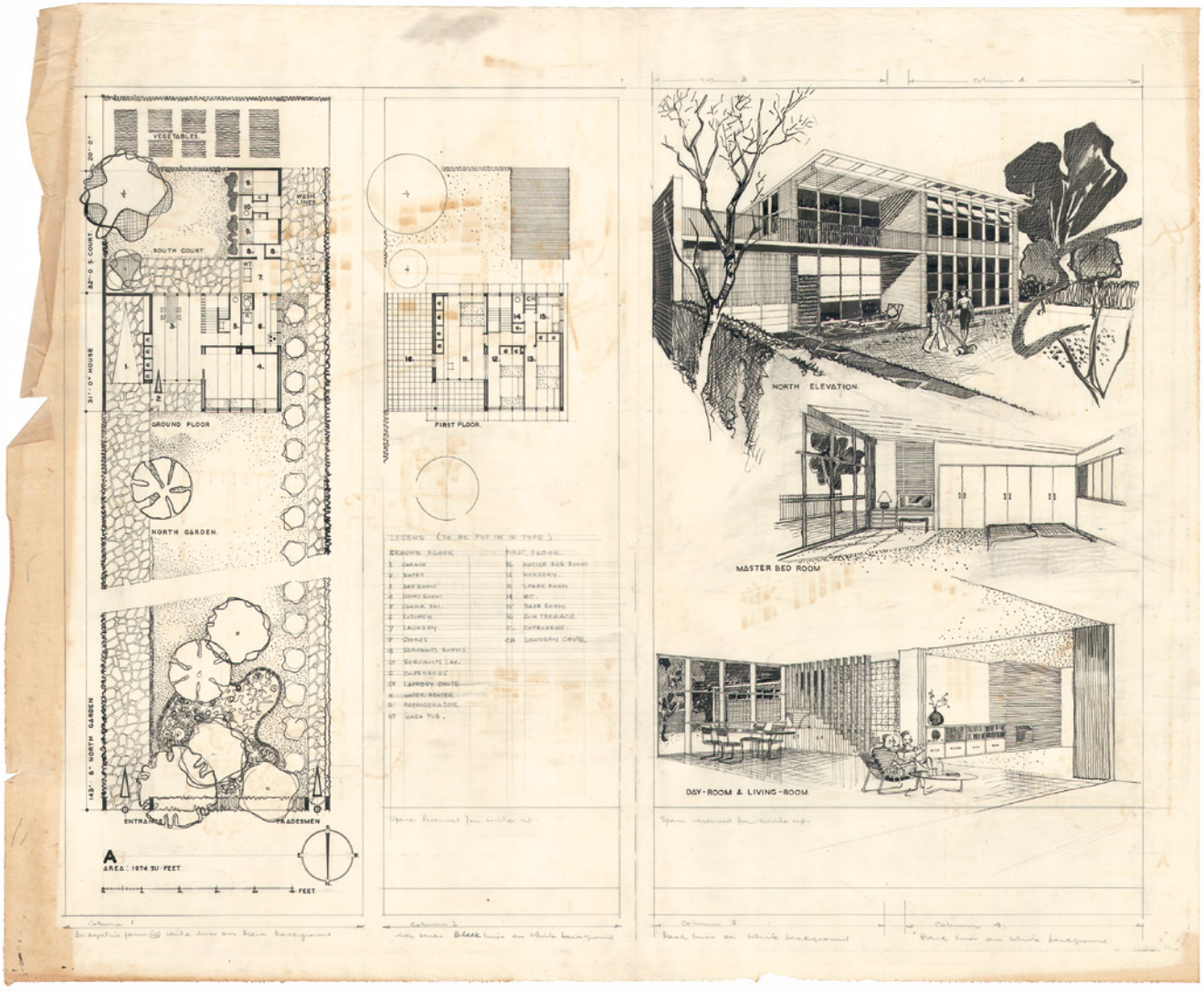
to Los Angeles in 1945, where he met Richard Neutra (1892-1970) (Pienaar, 2013, p. 198), heightened his awareness of standard building elements like the earlier 3'3½" (1003mm) system used in the Lovell Health House (1927-29) (Fisher, 2009, p. 403) and later the American Truscon metal-framed window system, available in 1'8" (508 mm) and 3'4" (1016 mm) modules, as used in the Eames House of 1949 (Eames Foundation, 2024).

FACILITATOR: ECONOMY OF THE WINDOW

Post-WW II South African economic challenges and material shortages, compounded by war-related manufacturing constraints, significantly impacted the availability of building products (Peters, 1998, p. 177). This, together with a constrained economy and architects being better educated to deal with new functionalist attitudes, fostered the design of efficiently organized space and the economical use of materials.

Teeger (1965, p. 7) described Cole Bowen as adept at creating economical homes within tight budgets, while Stauch focused on minimizing waste both spatially and materially, a mindset cultivated during work with Fred Forbat (1897-1972) and Peters Bau in Berlin (Nation, 2008, p. 28). Eaton, on the other hand, utilized cost-effective materials like peeled cypress poles for modular column and roof construction, along with locally sourced stone and bagged brickwork (Harrop-Allin, 1975, p. 79-80), effectively managing restricted budgets, all lessons so valuable in our current environmental and economic crises.

The dimensional coordination provided by the metal-framed window module facilitated the accurate spacing and sizing of elements such as columns, roof rafters, and purlins so that they could be used without physical or structural wastage while ensuring an economic and structural logic (Cole Bowen, n.d., p. 106). For Cole Bowen, the 1'8'' (508 mm) module dictated cupboard and counter depths while the 3'4¼" (1022mm) module [FIGURE 07] was ideal for circulation spaces and door widths. The 4'11½" (1511 mm) module suited the length of a "centre-based



07 One of the twelve alternative designs for the Average House by Cole Bowen showing the lateral window-inspired planning grid at 3'4¼" (1022 mm). © Cole Bowen, Architectural Archives, University of Pretoria, 043_COL (Cole-Bowen), undated.

sink and drain, double compartment wash tub, two-place settee, a babies' cot or an ironing table … while the quadruple module accommodated the length of a bed or bath and dining room table" (Cole Bowen, n.d., p. 109).

Eaton designed economic structural and spatial organizations by using the 3'4½" (1029mm) window grid module in two directions, as evidenced in the pencil grid underlying his floor plan design for House Heystek (1957) (Pienaar, 2013, p. 113). In Stauch's designs, the vertical module facilitated the varying heights necessary for butterfly-shaped roof sections, ensuring adequate light, solar gain (and protection), and purposeful ventilation while opting for a monopitch roof without a ceiling, maximized usable roof space (Peters, 1998, p. 178).

The functional requirements of homes, combined with the window module, significantly enhanced planning by creating efficient circulation spaces. Moreover, the adoption of metal-framed windows alleviated the constraints imposed by traditional cellular plans (De Bruyn, 2018, p. 153), leading to improvements in interior comfort through control of the local climate.

MEDIATOR: THE BIOCLIMATIC WINDOW

The application of a pastoral modernity (Heynen, 1999, p. 13) by the zerohour Group had neglected the effects of local climate in Pretoria and Johannesburg. However, those architects educated in a more functionalist and scientific manner (Peters, 1998, p. 182) in Europe in the 1920s and in South Africa in the 1940s and 1950s (Steenkamp, 2003, p. 4) designed buildings in a bioclimatic manner to provide interior spatial comfort. A northerly orientation was favored, with a large equatorial window[5] for winter solar gain in living and sleeping areas and pitched roof overhangs for climatic control. These design strategies were further supported by architectural-climatic diagrams, such as those by the Olgyay brothers in the 1950s (Olgyay, 1962), and the establishment of institutions like the South African Council for Scientific and Industrial Research in 1945, including its arm known as the National Building Research Institute (CSIR, 2024). The latter entity provided detailed research on climate and building design from around 1950.

However, before leaving Germany, Stauch had already embarked on solar studies (Nation, 2008, p. 26), exhibited in his initial work in Namibia as early as 1929 (Nation, 2008, p. 28). Stauch designed dwellings with openings facing east and west to avoid the extremely hot northern aspect, while sheltered outdoor living was created through a recessed veranda (Peters, 1987, p. 24). These approaches were developed in later residential buildings in Pretoria and through publications depicting appropriate sun angles for building sections emphasizing northerly orientation (Stauch, 1945, p. 207).

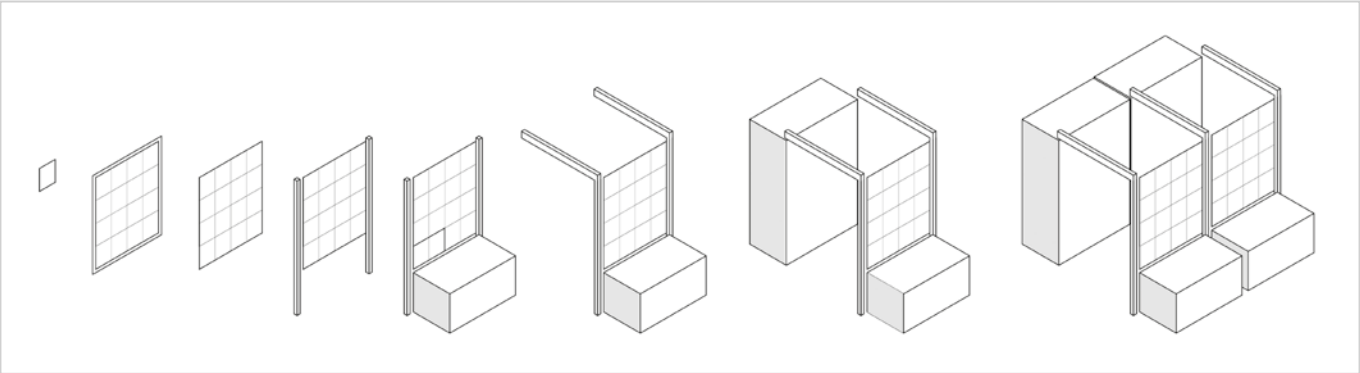
Stauch further refined his understanding of climate-responsive architecture through practice and part-time teaching at the University of Pretoria from 1943 to 1948, significantly influencing students (Steenkamp, 2003, p. 7). His use of metal-framed windows extending from the floor to the underside of roof rafters, butterfly-shaped roof configurations, and extended eaves not only enhanced solar control but also facilitated efficient night ventilation while optimizing the use of ceiling space. Stauch also incorporated clerestory windows (Peters, 1998, p. 182) to allow for adequate ventilation at the center of a deep plan while appropriate window heights provided adequate light and sun. Window locations, such as between kitchen counter and overhead cupboard, provided comfortable working conditions with a framed view of the outdoors.

Cole Bowen embraced a similar approach to Stauch's by designing double-banked residential buildings on narrow sites. This provided expansive north-facing glazing that extended seamlessly from floor levels or low windowsills to the ceiling plane. Cole Bowen (n.d., p. 65) asserted that the design of fenestration for a house had evolved into a science [FIGURE 08] and that the organization location of windows must consider lighting, prospect, privacy, sun control, solar heating, and ventilation. This complexity required an infinite variation in window opening adjustments and coordination and a roof design to limit stale air pockets.

Cole Bowen advocated for both fixed and adaptable window systems, such as louvers (Cole Bowen, n.d., p. 68), where air movement could be directed by changing the angle of the window blades to create comfortable indoor conditions. He also referenced the opaque louvers of the Brazilian Ministry of Education and Health building in Rio de Janeiro (Cole Bowen, n.d., p. 68) that would later serve as the precedent for sun shading in Stauch's 1952 Meat Board Building in Pretoria (Gerneke, 1998, pp. 216, 224). Eaton, in his later works, reinforced the use of extensive north-facing modular screens, complemented by attenuated design layouts that facilitated effective cross ventilation (Pienaar, 2013, p. 45) while optimizing spatial organization.

ORGANISER AND CONNECTOR: AN OPPORTUNE WINDOW

By the late 1950s, the metal-framed window module had resulted in a design grid that guided not only room widths but also roof rafter spacings, structural support positions, and the organization of internal fittings and equipment. As a response to functionalist ideals, the module became a plan and sectional controlling device providing a wholeness of design through its three-dimensional spatial



08 Isometric drawing showing the development of the three-dimensional module from its origins as a windowpane, inserted into a timber frame, then metal, and finally the repetitive module informing structure, space, and fittings. © Arthur Barker, 2023.

organization.

The metal-framed window grid facilitated vertical organization of space based on the available heights of modules like 2'1¾" (654 mm) (E), 3'1½" (953 mm) (C) and 4'1" (1244 mm) (D). Combining modules C and D created a 7'2½" (2197 mm) high module, equivalent to a standard metal-framed door height of 7'0" (2134 mm). Substituting a C-height module at the ground floor level with a built-in fitting allowed for appropriate worktop heights in bathrooms and kitchens.

Stauch (1945, p. 207) emphasized the importance of generating and linking building sections from repetitive basic domestic elements. This sentiment echoed that of Cole Bowen (n.d., p. 24), who suggested designing the interior first and then working outwards so that there was surety in the process (through an understanding of the various internal activities) and product (through the application of an appropriate module generated from accurate measurements of equipment and utensils).

In line with Cole Bowen's ideas of designing with furniture in mind, Eaton often integrated furnishings such as seating with walls, as in House Scully (1962), where the kitchen, bathroom, and fireplace acted as a piece of furniture that defined spatial zones (Pienaar, 2013, p. 120).

The window afforded an improved connection between inside and outside, even when doors were not present. Bedrooms were often designed with bed-height exterior walls and windows above. This condition not only provided a sense of security and privacy but a seamless visual connection to the outside. In living areas, floor-to-ceiling windows and external doors heightened the indoor-outdoor experience. The placement of openings also paid homage to a South African tradition, the *stoep*[6], that served as a vital space for shielding buildings from excessive summer solar heat while facilitating comfortable outdoor living.

CONCLUSION: A WINDOW REFLECTION

An influential, local, domestic architecture and associated interior emerged in Pretoria after WW II, prompted by reactions to the failed, formalistic orthodoxy of second Modern Movement experiments. This third, or regional, Modern Movement approach synthesized industry, nature, and human activity through the use of the metal-framed window. The associated module-initiated changes in the use of structure and technology and was instrumental in forging a new contemporary and tectonic architectural identity that improved familial relationships through fluid spatial connections and practical efficiency for the homeowners. Concomitantly, a new type of interior condition provided more comfortable indoor environments and more fluid indoor-outdoor relationships.

Pretoria architects Stauch, Cole Bowen, and Eaton contributed to the evolution of comfortable, efficient, and economically viable interiors through their design explorations. Despite their diverse educational backgrounds and experiences, they shared a common focus in designing spatial and material solutions that harmonized with new lifestyles within a specific climatic context and the socio-cultural and economic setting of Pretoria society.

The value of these endeavors in a time of climate change, resource depletion, and volatile economic circumstances highlights the importance of a contextual understanding, rooted in a philosophical approach suited to the times, with an appreciation of the economic, spatial, and physical possibilities of available technologies and changing ways of living.

The timeless quality of the interiors of many of the houses that still exist in Pretoria serves as a testament to thoughtful and principled design approaches, originating from the early Modern Movement but refined in the hands of well-educated, creative, and forward-thinking individuals. These lessons retain relevance today, urging us to reflect and contemplate on and further develop as a clearer window to a sustainable and secure future.

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ENDNOTES

1 The second Modern Movement had a greater and more long-lasting impact on multi-story residential designs in South Africa, including the still extant Hotpoint House (1934) by Norman Hanson (1909-1991), Samuel Tomkin (1908-2012), and Nathan Finkelstein (1909-1964) and Aiton Court (1937) by Bernhard Cooke (1910-2011), both in Johannesburg (Herbert, 1975: 138 &142).

2 The term 'Afrikaner' describes a cultural and social grouping typically among white South Africans of Dutch origin.

3 Measured by the author on a visit to the Bauhaus in June 2023.

4 The *Crittall* metal windows catalog of the time also included an L Series with 1'8"- and 3'3¼"-wide options.

5 The windows stretched from floor to underside of the roof, providing a glazed screen rather than individually placed windows in a stereotomic framework and were combinations of 2'1¾" (E)-, 3'1½" (C)- and 4'11" (D)-high modules.

6 In the South African and Afrikaans language, this means outdoor undercover terrace.

DOMESTICITY IN TIMES OF CRISIS

Peter G. Harnden's house in Orgeval: Modern Hybrid Transatlantic Interiors

Héctor García-Diego Villarías and María Villanueva Fernández

ABSTRACT: In 1952, both the French magazine L'Architecture d'aujourd'hui and the Italian magazine Domus published a small house built by an American architect on the outskirts of Paris for his personal use. The outsider they highlighted to was Peter G. Harnden, the architect who directed the American propaganda campaigns in Europe in the postwar period.
This was not a new project but a renovation. A single house with the characteristics of the traditional houses was not sufficient for the model of domesticity practiced by the architect. Moreover, Harnden needed the house as soon as possible. Therefore, the operation consisted of joining two small vernacular buildings in the small French village of Orgeval: a house and a barn. The strategy was completed with a garden that resulted from the demolition of four other buildings.
Inside, the architect exhibits an interest in objects of everyday life and authorized designs that extend throughout the spaces of the house. Furniture from the Eames, Prouvé, or the Viennese school is mixed with African rugs, mats, wicker plates, German porcelain, and different versions of vernacular stools. This studied and photogenic accumulation of pieces and ornaments supposedly made the house a more comfortable, fun, and pleasurable experience. It was a fundamental characteristic of the American Way of Life launched to the world by the United States of America, of which Harnden was a loudspeaker in Europe for more than a decade. Consequently, in this work, the American architect would interweave architecture and domesticity in postwar Europe through the combination of respect for a well-understood tradition and the materialistic world typical of his place of origin. This, in part, helps to understand the exoticism with which the magazines mentioned this project. The study and analysis of this hardly known case include its deliberate diffusion and propagandistic impact, in which the design of the interior space is crucial in a context of crisis and emergency in devastated Europe.

KEYWORDS: Peter G. Harnden, USA-European Campaigns, modern interior, domesticity, postwar design

INTRODUCTION: In 1952, a small house built by an American architect for his own and his family use on the outskirts of Paris was published in the French magazine *L'Architecture d'aujourd' hui* (Harnden, 1952 a, p. 39) and in the Italian *Domus* (Harnden, 1952 b, pp. 26-28). Both magazines coincided in highlighting this project as if the appearance of an American designer in those years denoted a certain exoticism. It was not for nothing that *Domus* unambiguously entitled its article *Un americano a Parigi*. For its part, the title of the chapter in the French magazine announced in capitular letters *LA MAISON D'UN ARCHITECTE AUX ENVIRONS DE PARIS* [FIGURE 01]. Below, a photograph of the designer and inhabitant himself seated by the fireplace challenged the camera with his gaze. These two articles are not the only magazines that showcase this Harnden house in Orgeval but have been selected specifically because they are contained in architectural journals, because of their prestige, and because they have continuity throughout the presentation of the works of Harnden and Bombelli that are analyzed.[1]

Peter Graham Harden, the subject of the photograph, was the son of an American diplomat. His childhood and youth as a traveler earned him his cosmopolitan character. After founding his design and architecture studio called Design Project in California in the 1930s, he enlisted in the army in the early 1940s. At the turn of the decade, he would be appointed in charge of the American propaganda campaigns[2] that would tour the devastated Old Continent after World War II in the preamble to the confrontation of blocs that would lead to the Cold War

01 Peter G. Harnden's article published in the French magazine L'Architecture d'Aujourd'hui. © L'Architecture d'aujourd' hui, 1952, 39-40.

(García-Diego Villarías and Alcolea Rodríguez, 2019, pp. 155-169). To address the governmental assignment, he would set up his first office in Paris (Harnden, 1957, p. 45). Harden would be forced to look for a house to live in the French capital with his family.[3]

It is, therefore, the crisis following the devastation of World War II that is the primary reason for the arrival of the American architect in France in the early 1950s. In terms of architecture, among many other considerations, the climate of cultural confrontation of the Cold War contributed to founding and spreading the Californian domestic ideal, which was so popular at the time. This was a paradigm forged especially on the Californian West Coast, where John Entenza's famous Case Study House Program would achieve notable popularity in the media and an international diffusion that would be difficult to compare[4]. Ideals that are truly close to Peter G. Harnden (he would publish his first article in *Arts & Architecture* magazine) and that he would contribute to spread as one of the main actors in postwar Europe[5].

In this context, the house presented in the articles of the French and Italian magazines is a rare case of hybrid architecture worth studying for three fundamental reasons. Firstly, the urgency for the architect's accommodation, coupled with the scarcity of resources caused by the crisis, pushed its designer to carry out the rehabilitation and transformation of a previous construction from the commitment of the American architect and propagandist. This entailed an obligatory conjugation of the tradition of the place, both physically and culturally, with the modernity imported from California in terms of language, material culture, and model of living. Secondly, the house is in itself a means of disseminating the American Way of Life, which is worth analyzing with the change of physical and cultural coordinates. Finally, Peter G. Harnden, its inhabitant and designer, embodies in his person a hypothetical cultural fusion between Europe and America that could affect both the interior design—since it will be inhabited by him and his family—and its dissemination in different media as an influential actor in American propaganda campaigns.

FROM FRENCH OLD BARN TO MODERN AMERICAN LIVING

The Harnden house in Orgeval[6] was a renovation project, and all the work on the site was done by local craftsmen. The article reflected the American architect's sensitivity to the particularities of the place and emphasized that the architect had tried to "preserve the character of simplicity in harmony with the village" in his own words (Harnden, 1952 February).[7] To enlarge the space, Harnden joined two small vernacular buildings in the small French town [FIGURE 02]. The house "is composed of two old rustic houses, joined today, and which were independent; one of them, deteriorated and abandoned, had no roof, and the other had no comfort, not even water" (Harnden, 1952 February).[8]

02 Exterior view of the two volumes of the house, the barn and the tradictional house, taken from the garden. © Domus, 1952, 271.

The greatest efforts were aimed at making two autonomous elements of different sizes into a single dwelling.[9] This significant formal difference between the volumes has its logical transposition in the program. The larger, original construction was intended to house most of the living quarters. The former one-story barn, however, was reserved to create a large living and working space in direct contact with the garden (Kellog, 1957, p. 49).

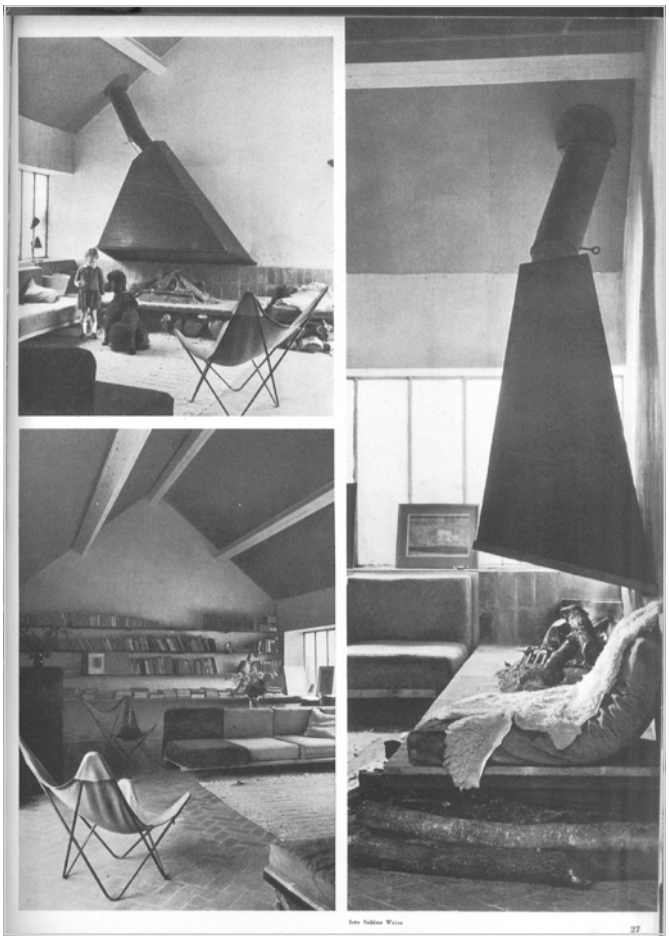
To homogenize both buildings, Harnden spread a common brick block pavement. In addition, he showed the beams and pillars of the two buildings. With the same criteria, simple materials such as iron, oak wood or stone masonry were used to develop the new house following constructive guidelines that could be associated with the tradition of the place. Bright colors and varied elements were added without embarrassment. A large sofa ran along the generous window facing the street and then folded ninety degrees on itself.

This piece of furniture divided the area into two spaces, it consisted of a grill of wooden reeds on which 75x75 centimeter cushions were placed. The cushions were removable[10] so that, on summer days, they could be taken out into the garden.[11] Behind the sofa, there was a simple work area, consisting mainly of a large table supported by a continuous shelf that covered the entire wall: an integration of the workspace in the living area that was perhaps motivated, to a greater extent, by its value as a visual element [FIGURE 03].

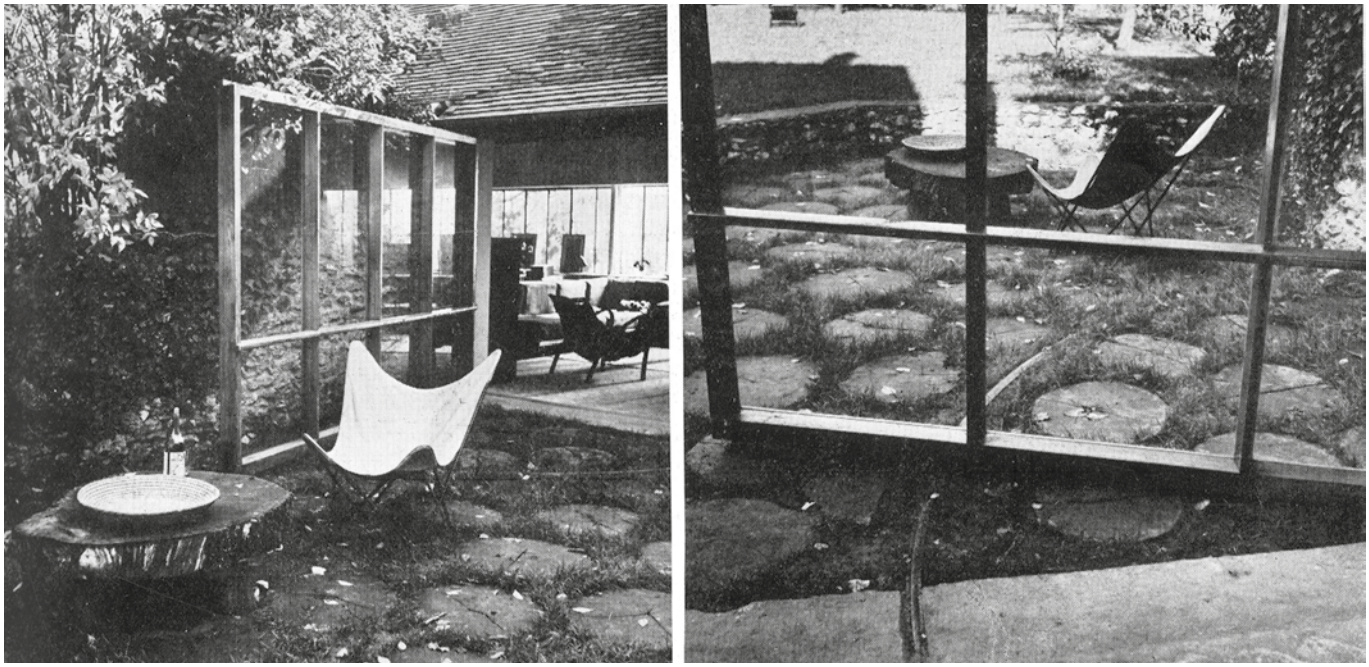
The fireplace presides over the space (Chimneys, 1954, pp. 436-440). Like a huge black metal sculpture, it is independent of the wall. It acquires such dimensions as it is designed to function as an enormous metal radiator.[12] The fireplace plays a very important symbolic role in creating a home from the American perspective. The presence of the fireplace is further underlined by the position in which it is placed, just where the space acquires double transparency both towards the street and the garden.

Although the window facing the street is translucent to preserve privacy, there is a large transparent opening facing the garden, which takes the form of a large swinging door. It consists of four sheets of glass mounted on a wooden frame that slides on a rail running in a quarter circle along the terrace [FIGURE 04]. A horizontal bar can be used to turn the door. As explained by the architect, this element blurs the interior-exterior boundaries, a strategy not unlike the theoretical project designed for *Arts & Architecture* magazine years ago with the use of a large sliding glass sheet (Harnden, 1942).

However, in the case of the Orgeval, the technology needed to shape a thin and sophisticated sliding glass sheet was not available in the 1950s. Nonetheless, this contingency is taken as a compositional opportunity. Given that the result was a heavy object, the door marks a groove in the terrain that, in turn, describes an arc of circumference that makes it impossible to place a set of regular, right-angled



03 Snapshots of the living room featuring the work area and the sheet metal fireplace. The fusion of tradition and modernity is highlighted by the combination of American and European furniture © Domus, 1952, page 27.



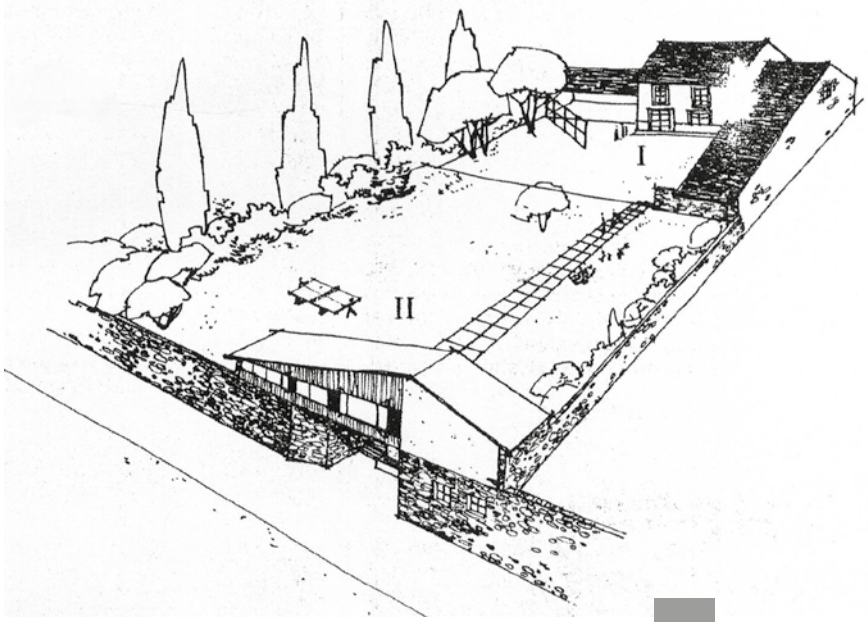
04 Different images of the garden showing the rotating mechanism of the large gate-lock that gives access to the garden. © Sabine Weiss, L'Architecture d'Aujourd'hui, 1952, page 40.

tiles. Harnden improvised an ingenious paving composed of disc-shaped log cuts, which turned the problem into a license to investigate new ways of flooring a terrace and colonizing a transitional space between indoors and outdoors. Following this plastic guideline, Harnden designed the side table with an oversized log section on four legs.

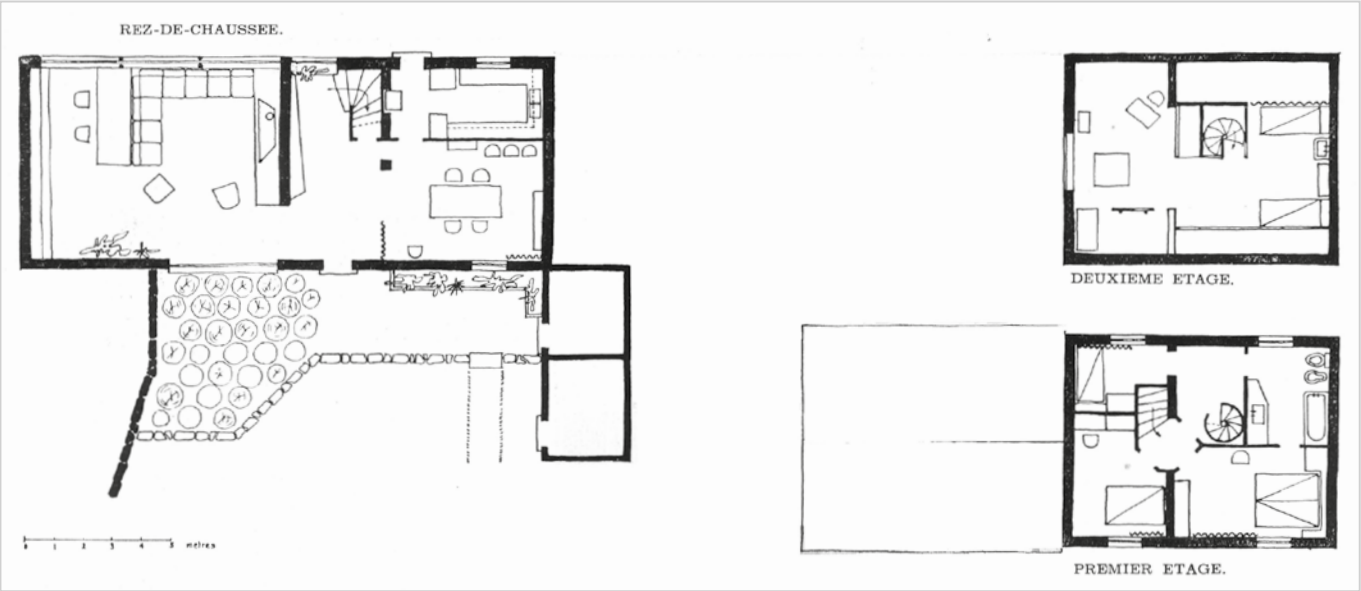
This way of dealing with the scarcity of resources resulting from the war, as if it were an opportunity for experimentation, is not too far from the principles that guided the Case Study House Program, sponsored in part by the shortage of materials.[13] In both situations, arising problems were addressed with the pragmatism and resolution of those who simplify the basic question and face a difficulty from the possible without renouncing the fundamental. Yet, the change of location gives greater relevance and significance to the architect's work. The architect demonstrates a sensibility of a pact between tradition and modernity that will be celebrated by the magazine La *Maison Française* in 1960: "It is quite moving to note that respect for a site in Ile-de-France and the freedom of a modern composition are reconciled here in the work of P. G. Harnden, an 'architectural designer' of American origin, based in our country (Febvre-Desportes, 1961)."[14]

A FRENCH HOUSE TURNED INTO A STAGE FOR THE AMERICAN WAY OF LIFE

Comparable to the stereotypical American suburban home which is inevitably linked to a garden, the small terrace in Harnden's house is located at the same level as the ground floor and is delimited by a low masonry wall. This bridges the small unevenness of barely thirty centimeters with the garden. Surrounded by other rustic constructions, a green courtyard presents itself resulting from the demolition of four other houses, which also explains the irregular geometry of the small wall that delimits the terrace and the garden. After this operation, Harnden uses vegetation in an ornamental way to attenuate the direct impact of the bare walls, surrounding the walls with fruit trees.[15] [FIGURE 05]



05 Harnden's drawing of his place, also refering to the guest's pavilion built years after at the end of the garden. © Peter G. Harnden, 1952.



06 Floor plans of the house. © Peter G. Harnden, 1952.

07 Views of the dining room with four Safari chairs by Wilhelm Kienzle (1950s). In the background, two B.K.F. chairs by Antonio Bonet, Juan Kurchan and Jorge Ferrari-Hardoy (1938) furnish the living room. © Sabine Weiss, 1952.

Upon entering the house, a heavy linen curtain separates the large dining room from the entrance and the living room. This space was obtained by joining several rooms together [FIGURE 06]. It features a table designed by Harnden himself, a set of bookshelves anchored to the wall, and a set of chairs of Spanish provenance, probably chosen for their affordability, as the *New York Times* assumed. This is how the newspaper would describe the dining room: "Dining room in the Harnden's house was enlarged by removing the partitions between the smaller rooms. It is furnished with Spanish chairs, a table of Mr. Harnden's design and, in a space-saving manner, suspended storage cabinets" (Kellog, 1957, p. 49) [FIGURE 07].

On the opposite side, the staircase leads to the second floor, where there are three small bedrooms and a bathroom. Each of the rooms is served by identical symmetrically placed windows. From here, the staircase continues upwards, now in the form of a spiral. The light oak steps and leather handrail invite one to climb up and discover the top floor entirely dedicated to children. A bathroom is added, separated from the rest of the room by a suspended frame. The attic is illuminated by a solitary window of large proportions, the only one in the whole house facing east, which rises above the living area, offering an exceptional view over the roofs of the buildings of the village [FIGURE 06].

The photos in the articles are selected with fine-tuned precision, as they present the furniture and people in a composition that boasts numerous objects and toys: construction sets, Japanese kites, stuffed animals, and dolls share the limelight in the snapshots with Harnden's daughter [FIGURE 08]. The two-seater school desk by Jean Prouvé (1935)—in its most unusual individual version—is placed in the center of one of the images taken from the attic. This element is accompanied by a tilted floor lamp typical of the Viennese school. The architect's interest in objects of everyday life, including children's, and at the same time authoritative design pieces—as a reminiscence of past times when he collected works of art[16]— extends through all the spaces of the house.

The interior was equipped with a measured combination of pieces of modern design with others of vernacular tradition in a situation of contrast and dependence that was enhanced by the built framework itself. Real furniture delicacies are intermingled without blushing with the Spanish chairs and stools, wicker tablecloths or typical French berets that hang on the walls. The photographs in these articles—and in later publications—show two B.K.F. chairs (1938) by Antonio Bonet, Juan Kurchan and Jorge Ferrari-Hardoy in the living room and garden and four Safari chairs (1950s) by Wilhelm Kienzle in the dining room. Later, with the expansion of the house through the

08 Harden's daughter entertains herself surrounded by toys and in front of the two-seater school desk by Jean Prouvé (1935). © Sabine Weiss, 1952.

construction of a guest pavilion, Harnden will acquire several Diamond chairs (1952) by Harri Bertoia, a 10A lamp (1951) by Isamu Noguchi, a Disa lamp (1957) by José Antonio Coderch, and a Vintage Lounge Chair 514A by Dirk van Sliedregt (1952). In addition, numerous works of art are scattered throughout the house, including four drawings by Willi Baumeister on the dining room sideboard.[17]

Perhaps it makes sense to contextualize Harnden's domestic architecture—and even more so in his way of presenting it—in the American panorama of the discipline of the 1950s. The motley image of elements and ornaments that allegedly turned the house into a more comfortable, fun, and pleasant experience would be a permanent feature in the architecture launched to the world by the US and exemplified in the figure of the Eames couple. This is how Beatriz Colomina interprets modern architecture in the United States as a lifestyle package rather than a standalone artistic or technical creation. Buildings served as frames for objects of desire, blending into the abundance of items they displayed (Colomina, 2006, p. 7). [FIGURE 09]

In view of the different items that diffuse his house in Orgeval, it could be said that Harnden openly declares himself a supporter of this way of understanding the house. African rugs, mats, wicker plates, German porcelain, and different versions of traditional seats are a constant in all the images.[18] By doing so, Harnden signals his model of life. The carcass of the traditional house and barn of Orgeval becomes the recipient of a domesticity transplanted from Californian coordinates to the specific ones of the French people, both in physical, temporal, and cultural terms. Peter Harnden interweaves architecture and domesticity in an exercise that goes beyond design and in which respect for tradition and a commitment to a genuine lifestyle, marked both by his own personality and his work as an American propagandist, come together to create an unrepeatable family house in postwar Europe.

09 Ray and Charles Eames sitting in their living room. © Julius Shulman, 1958; J. Paul Getty Trust. Getty Research Institute, Los Angeles (2004.R.10).

CONCLUSIONS: HARNDEN'S WAY OF LIFE

The period of world crisis that followed World War II acted as a powerful cultural and technological catalyst. The popular Case Study House Program (CSHP), the precursor of the most visual aspect of the American lifestyle of the 1950s, had as its origin, in part, the material scarcity caused by the war.

The first foray into architecture published by Harnden in 1942 consisted of a theoretical project that appeared in the pages of *Arts & Architecture*[19], the recurring means of dissemination of the well-known CSHP. During the following years, it would become an influence that would transcend the mere formal configuration typical of the photogenic houses that Julius Shulman[20] knew how to fix in the retina of the architectural community of the fifties. Presumably, Peter Harnden could have imbibed the principles of this domestic architecture, paradigmatically synthesized in the historic announcement of the CSHP program, to imbricate them in the reality of a context that, although devastated, is indebted to a tradition that should not be disdained.

It was the magazine *Arts & Architecture* itself that, in 1966, verbalized this characteristic of Harnden's architecture in relation to that which he would later develop in the Spanish fishing village of Cadaqués: "Attempts by outlanders to capture the flavor of local architecture usually end in disaster —assertive sterile hybrids or vulgar, rootless parodies. (unknown, 1966)."[21] Furthermore, the publication highlights how the seven Spanish houses featured here stand out as exceptions, blending grace and

authenticity, while their architects skilfully use materials to create environments that are simple, direct, and deeply connected to their surroundings.

With that same naturalness and pragmatism—so *clichéd* attributed to the American spirit—is how Peter Harnden would deploy his way of making architecture in the small French village in the 1950s, and that would also be the germ of the many other houses that Harnden would design in Spanish territory, echoed in Entenza's magazine. From the monumental disaster caused by the war, an intersection arises where the French popular architectural culture and the global vision promulgated from the American West Coast, personified in Harnden, meet, to result in a house project that constitutes a unique case of triple hybridization that is especially evident in the interiors of the house.

First of all, in this project, there is a conjunction of tradition and modernity, which is substantiated by the popular-modern tension originated by the roots of the pre-existence and the push of international sign of the young architect and is made explicit in the combination of objects that are accumulated in the interiors. Something that gives meaning to the combination of popular furniture with other more sophisticated contemporary design. A condition that, as we have seen, acquires special brilliance in those cases in which the technological limitations of the context of crisis are taken as a compositional virtue, as happens with the large practicable door of the living room or the pavement of the nearby garden.

Secondly, in terms that go beyond the material, Harnden's project would import a filtered American Way of Life, which could be called Harden's Way of Life, to a distressed European continent. The organization of the program with open spaces, the prominence of the living room and garden, the symbolic value of the fireplace, and the accumulation of objects and furniture evoked a type of domesticity indebted to the promulgated American lifestyle of those years. The *New York Times* eloquently summarized this circumstance in 1957:

> *The Harnden House, which he describes as 'primitive', is a 40-year-old farm house. He has kept the exterior in its original state to harmonize with the thirteenth-century architecture in the rest of the drowsy country town. But the interior with its modern furnishings and open floor plan would be at home in America.*
> *(Kellog, 1957, p. 49)*

Thirdly, in the house, the particular identities of the US and Europe meet and merge in the context of the extensive cultural communicating vessels that followed the war. Not surprisingly, this house shows clear similarities with some parallel movements and European precursors, especially in Scandinavia, which often show a comparable combination of vernacular Modernism and use of design and everyday objects. This is the case in the famous Asplund Summer House (1938) but also, for example, Gerrit Rietveld's Verrijn Stuart Summer House (1941) or some of Carlo Molino's interiors in Italy.

Finally, the postwar period, marked by scarcity and crisis, catalyzed a unique blend of American Modernism and European vernacular architecture, as exemplified by Peter Harnden's work in France. Harnden's own house is clearly used for propagandistic purposes. When asked about the exhibition content of the American Pavilion for the Brussels fair of 1958, he replied: "Actually, we aren't so much interested in the exhibit things themselves as in the fact that all kind and classes of Americans can own them" (Kellog, 1957, p. 49). Perhaps this comment can be extended partially to Harnden's house at Orgeval, though the contrast between the house in France from 1952 and the Expo '58 underscores the significant societal and political changes of the era. While the former represents a time of uncertainty and recovery, the latter symbolizes a renewed sense of hope and possibility. The Cold War had begun to cast a shadow, but the Expo sought to highlight the potential of human ingenuity and cooperation. From this point of view, the house acquires a new value as a demonstration that it is possible for the two nationalities, understood as cultural realities, to meet in the domestic sphere beyond its value per se. However, this role of architecture at the service of propaganda, far from diminishing the quality of the house, insofar as it is skilfully integrated into the pre-existing vernacular construction, could multiply its value and thus suggest new paths for the development of domestic architecture in the years that followed.

ACKNOWLEDGEMENTS

This article is part of the results of the DISARQ project, PID2023-153253NA-I00, funded by MCIN/AEI/10.13039/501100011033 (Spain) and by FEDER, (EU).

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ENDNOTES

1 It is of great interest and it is recommended to consult other articles on this subject. Such as that of the magazine *La Maison Française*, which will show on its cover and publish years later a complete article in which this house and its later extension are included. Furthermore, in 1954, another French magazine, *Elle*, would show this house, although this time paying more attention to the plasticity of its chimney. It is also interesting to check the vision that the *New York Times*—in the section *food, fashion, family,* furnishings—published about this house through a brief article in 1957. FEBVRE-DESPORTES, M.A. (1961), Fermes transformées. Un régionalisme bien compris. *La Maison Française*, 148, pp. 73-79 ; CHIMNEYS, T. (1954), Les chimenées des villes. *Elle*, 436; KELLOG, C. (1957), An American Brussels Fair Designer Gives French Home a Modern Look. *The New York Times*, December 4, p. 49.

2 The so-called Exhibition Programme headed by Harnden reported to the ECA's Visual Information Unit, which was the managing body of the campaigns. GARNICA, J. (2019). Peter Harnden. Tra Guerra Fredda e tradizione mediterranea. *FAMagazine. Ricerche E Progetti sull'architettura E La Città*, (47), pp. 12–30. https://doi.org/10.12838/fam/issn2039-0491/n47-2019/233.

3 In 1946, he had married Marie Vassiltchikov, a Russian aristocrat who had taken refuge in Berlin and with whom he would have four children.

4 Under the guise of a study on "what the house should look like after a war," and appearing in the first issue of *Arts & Architecture* magazine's forty-fifth year, a wide-ranging debate on architecture was to be opened, which would delve into the way of living. The program was intended to lay the foundations on which to debate the 'housing of tomorrow'. The advertisement itself stated the transcendence and ambition of the enterprise that was being set in motion: "Because most opinion, both profound and light-headed, in terms of post war housing is nothing but speculation in the form of talk and reams of paper, it occurs to me that it might be a good idea to get down to cases and at least make a beginning in the gathering of that mass of material that must eventually result in what we know as 'house-post war'". ENTENZA, J. (1945). John Entenza, Announcement, the case study house program. *Arts & Architecture*, January, 37. As is well known, Entenza's initiative, which lasted for two decades from the date the announcement was published, involved some of the most relevant architects of the time, such as Neutra, Soriano, Ellwood, Charles and Ray Eames, Koenig or Saarinen. See SMITH (2002) and BUISSON and BILLARD (2004).

5 Harnden would go on to hold more than 300 exhibitions throughout Europe, most notably designing the interior of the U.S. pavilion at the Brussels International Fair of 1958. He claimed in 1957 that more than 3 million people had already visited his traveling exhibits, and he expected tens of millions more to come to the huge pavilion designed for the international show. KELLOG, C. (1957, December 4). An American Brussels Fair Designer Gives French Home a Modern Look. *The New York Times*, pp. 49-50.

6 Orgeval is a small town composed mostly of suburban residential neighborhoods with a population of less than 2000 at the end of the 1950s.

7 HARNDEN, P. (1952, February). L'*Architecture d'Aujourd'hui*, pp. 39-40. Cit. Original text: *"L'architecte s'est attaché à conserver le caractère simplicité en harmonie avec la village".*

8 Idem. Original text: "Elle este formée de deux vieilles maisons rustiques, aujourd'hui réunis, autrefois indépendantes; l'une, vétuste et abandonné, n'avait plus de toit, l'autre n'avait aucun confort, même pas l'eau".

9 Exactly the same operation that he would later have to face in the project, again for his own house in Cadaqués. GARCÍA-DIEGO VILLARÍAS, H., VILLANUEVA FERNÁNDEZ, M. (2020). Living, Creating, Enjoying: Villa Gloria by Harnden and Bombelli in Cadaqués (1959), *VLC, 7*(2), pp. 157-184.

10 He will repeat exactly the same strategy in Villa Gloria, his own house in Cadaqués.

11 HARNDEN (1952), Domus, cit., 26. Original text: "Un lungo, banco ad angolo separa il locate in due parti: cuscini e schienali a motte, in tela blu, componibili a divano letto su lungo banco continuo a listelli di frassino elastici con gambe d'acciaio rimovibili".

12 The same fireplace that would fascinate José Antonio Coderch when, on his return from his visit to Zurich, he was hosted in this same house by Harnden and Bombelli. Lanfranco Bombelli himself, Harnden's partner and friend, recalls this anecdote: "When Coderch visited us in Orgeval, he saw this fireplace and was impressed. He asked why. We told him: well, fire is like life, it has a presence and it also has the function of heating. If you build a fireplace in the stone wall, it doesn't warm you at all, it warms you a little in front of it. A metal chimney acts as a radiator and heats everything up quickly. Coderch asked Peter for permission to introduce the metal chimney in Spain and Peter told him to do whatever he wanted..." See: Entrevista con Lanfranco Bombelli. In MARTÍN, M., NOGUERA, A. (Eds.), 127.

13 Obviously, the American situation had nothing to do with the European one, although the war meant an economic and resource effort for the U.S. that had a certain impact in the 1950s and 1960s.

14 FEBVRE-DESPORTES, M.A. (1961), Fermes transformées. Un régionalisme bien compris. *La Maison Française*, 148, 73. Original: *"Il est assez émouvant de constater que le respect d'un site d'Ile-de-France ct la liberté d'une composition moderne sont conciliés ici dans l'œuvre de P. G. Harnden, un «architectura l designer» d'origine américaine, installé dans notre pays".*

15 HARNDEN, P. (1952, February). L'*Architecture d'Aujourd'hui*, pp. 39-40. *"*Le jardin, très petit, est entouré de murs avec arbres fruitiers en espalier*".*

16 Upon the death of his mother, he inherits a rich family estate with which he manages to gather in these years an important collection of modern art. Once the inheritance was squandered, he was forced to part with many of these works. Garnica, J. (2006). Harnden and Bombelli in Spain. In *La arquitectura norteamericana, motor y espejo de la arquitectura española en el arranque de la modernidad (pp. 133-142)* T6) Ediciones.

17 These works of art will appear in subsequent articles that will echo the construction of the guest pavilion on the other side of the garden.

18 Of all the photographs published about the house in both magazines, only one does not show any person or furniture that refers to the domesticity displayed in it. It will be the one describing the spiral staircase, the only snapshot in which the plastic intentionality predominates over the domestic one.

19 Harnden presented a project for a minimal house. It was the design of a detached house to accompany twenty-five other experimental houses for The Federal Works Agency. HARNDEN, P. (1942). Priorities and a Small House. Cit.

20 Julius Shulman was chosen to document the CSHP for *Arts & Arcitecture* magazine. His photographs went beyond mere records, elevating the structures to global recognition and cementing their place in architectural history.

21 (1966) Harnden and Bombelli, Architects. *Arts & Architecture*, vol. 83, 5, June, 1966, 8. And continues: "Structures on the earth, however, and no of the earth: there is nothing here of the hollowed out tree trunk or cave squirted from a tube. Nor is there anything of the catalog architect. Local materials have been used throughout in a manner that refines but doesn't weaken the local idiom: reeds, rushes, cork, whitewash masonry, tile, stone".

OSCILLATING MODERNISM

Between Openness and Compartmentalization in Post-War São Paulo Apartments

Marta Silveira Peixoto

ABSTRACT: In the second half of the 20th century, significant modern residential buildings were built in several Brazilian cities. However, regarding the middle-class examples, the layout of most of these apartments was very similar to the 19th-century bourgeois houses. Furthermore, despite using a reinforced concrete structure—always hidden—there was no greater spatial or visual integration. This collection of buildings, neglected by the real estate market in the 1980s, was rediscovered in the early 2000s by new buyers. The former owners gave way to people who admired the qualities of modern architecture, even though they knew they would probably face several difficulties arising from significant renovation. The most common adaptations made in the second occupation included modifying layouts and modernizing facilities and finishes. Besides, the internal spaces became more fluid and integrated than the original version, encouraging conviviality. The number of internal partitions decreased, as did the decorative elements and furniture. More recently, it was possible to recognize a third episode in this history. Due to the COVID-19 pandemic, when entire families were locked in their homes in a forced and unprecedented coexistence, there was a need for yet another adaptation process. This time, the actions aimed to recover private environments that better support life in confinement, where different non-domestic activities started to happen inside the homes. A process of 'demodernization' seems to have taken place, rehearsing a return to pre-modern layouts of compartmentalized spaces. Through the observation and analysis of the changes in three study cases in the city of São Paulo, this work aims to reflect more broadly on the transformations in the way of living in modern apartments. In addition to bibliographical research and analysis of the projects' graphic material, this research included reports from residents and access to their personal files.

KEYWORDS: Modernist interiors, modern Brazilian architecture, modern residential buildings, renovation in modernist apartments.

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INTRODUCTION: According to Comas (Comas and Adrià, 2003), the detached house was an essential typology in 20th-century architectural production and a key research area for modern architects. In the first half of the century, financing often came from the architects themselves or an elite clientele, financial or intellectual. In Brazil, modern architecture gained visibility in residential projects only after World War II. Social and economic changes reshaped consumption patterns, particularly among the middle and upper-middle classes. For these groups, it was a time of shifting habits and modernization. Wealthier individuals acquired goods once considered luxuries, like appliances and automobiles, partly fueled by economic policies favoring the domestic market. As a result, modernity and new consumption habits became accessible and quickly integrated into the daily lives of the middle class, fundamentally changing how they lived and interacted with their homes.

The so-called urban-industrial society was then consolidated, supported by a developmental policy deepening throughout the 1950s. It brought a new lifestyle spread through magazines, cinema, and television, as noted by Comas and Peixoto (2019). Regarding construction, industry and agriculture's benefits encouraged the real estate market's expansion as an investment. As Somekh (1997) observed, national laws freezing rents and discouraging investment in popular housing led to greater financial commitment to properties for the wealthiest. The

01 Pedregulho housing neighborhood, Affonso Eduardo Reidy, 1947. © Ruth Verde Zein Archive.

02 Louveira building, Vilanova Artigas and Carlos Cascaldi, 1946. © Biacsantoro, CC BY-SA 4.0.

03 Copan building, Oscar Niemeyer, 1966. © Pablo Trincado, CC BY-SA 2.0.

increase in land prices, while pushing the lower classes to the periphery, stimulated taller constructions. The urban landscape saw notable verticalization, and the construction of many multifamily residential buildings took place, mainly in the large capitals.

Modern architecture extended to residential buildings, popular housing complexes built with state funds like in São Paulo (Sanvitto, 2014) or the Pedregulho housing neighborhood in Rio de Janeiro, and bourgeois buildings from the late 1940s to the 1960s. In São Paulo and Rio de Janeiro, this production included examples of excellent quality designed by prestigious architects such as Affonso Reidy [FIGURE 01], Franz Heep, Lucio Costa, Rino Levi, Vilanova Artigas [FIGURE 02], and Oscar Niemeyer [FIGURE 03]. Many buildings replaced old mansions, exploring an image linked to the luxurious comfort of progress and technological advancement.

On the other hand, there was resistance to assimilating modern architecture into residential works. Serapião (2014) explained that, despite the Avant-garde exterior,

the buildings' individual units resembled the 19th-century bourgeois house, albeit smaller. The interior layout reflected a hierarchical, uneven structure. Typically, the program included separate living and dining rooms, three or four bedrooms, one or two bathrooms, a kitchen, pantry, laundry room, and servants' quarters (bedroom and bathroom), organized into three sectors: social area, bedroom wing, and service rooms. The building had two independent accesses, one for residents and another for servants or service providers, each with specific vertical circulation. The potential of reinforced concrete structures, allowing fluid spaces, was underutilized. Spatial integration between rooms or sectors was rare, except between the living and dining rooms. Otherwise, apartments followed a traditional layout, far from the innovative ideas proposed in the early decades of the 20th century—whether individual, as in Le Corbusier and Pierre Jeanneret's variations of the Citrohan type, or collective, such as the immeubles-villas, for example.[1]

FIRST MOVEMENT – 2000s

According to Lores (2017), the real estate market neglected these buildings in the 1980s and 1990s. However, they were rediscovered by a new clientele at the beginning of the 21st century (Peixoto, 2019). Though not part of the economic elite, this group, often architects or related professionals, recognized the potential of these fifty-year-old apartments despite the challenges of aging. More than the original quality of the construction, they valued the light and views provided by the large openings, the height of the ceilings, and the generous square footage, which outshone more recent constructions. They also understood that the reinforced concrete structure allowed for the necessary changes to meet contemporary operational and programmatic demands.

The most common renovations consisted of the elimination of servants' rooms, the integration of kitchens and social areas, the renovation of bathrooms (often accompanied by the creation of en-suite bathrooms), the installation of air conditioning systems, and the modernization of facilities and finishes. Most of the new residents were smaller families without maids and traditional homemakers. As a result, some of these units have been converted into two- and one-bedroom apartments or even large studios. Service doors became little used, almost restricted to the arrival of purchases, eliminating the original hierarchical system and the logic of enclosed and monofunctional spaces [FIGURE 04].

This phenomenon, occurring in several Brazilian cities financed by private individuals, involves renovation works on apartments in modern buildings of recognized quality,

04 Louveira building, Vilanova Artigas and Carlos Cascaldi, 1946. Floor plan of an original apartment (top); floor plan of a renovation by AR Arquitetos, 2008 (bottom). © Marta Peixoto Archive 2024.

some cataloged by heritage agencies, like the Lausanne building. Driven by clients who value the qualities of the original works and are committed to preserving their authenticity, these second occupation projects align with the ideas of the buildings' authors—as seen in Zein's Ph.D. dissertation (Zein, 2005). The qualities appreciated are well-ventilated and well-lit spaces that "avoid disorder, confusion, dark corners, and intimate spaces," as Benton said (2006, p. 13). Although restricted to the apartments, there is no doubt that the qualification of one of its parts represents an injection of economic and intellectual resources into maintaining the entire building.

SECOND MOVEMENT – 2020s

In 2020, another transformation took place. This time, the cause was not a real estate quirk or some cultural issue but a global health emergency. Life changed radically due to the COVID-19 pandemic. People started working from home, schools were closed, and housekeeping and home repairs were canceled. Suddenly entire families were isolated in their homes, with strict restrictions on social coexistence. After a first moment of paralysis, several daily activities began to be carried out remotely: children's classes, parents' work meetings, and physical exercises. No difference existed between where a person lived, worked, studied, played, or rested. Everything started to happen inside the home, which led to a focus on the interior space.

During the lockdown, many of these apartments performed well in terms of habitability issues. Modern projects are always concerned with lighting and insolation; freeing the building from the lot's physical boundaries and allowing for wide openings to the outside. Regarding the distribution scheme, the original servants' entrances, which used to be next to the laundry —practically eliminated in the 2000s due to their discriminatory nature—, became a good solution for sanitizing purchases and people arriving. The ample square footage and low density also relieved the close-to-house-arrest situation. However, as for privacy, some of the solutions promoted by the renovations of the 2000s worked unsatisfactorily in this new condition. When forcibly transformed into multifunctional spaces, the open and integrated rooms lacked walls and doors that would allow different residents to carry out diverse activities simultaneously while maintaining some degree of privacy.

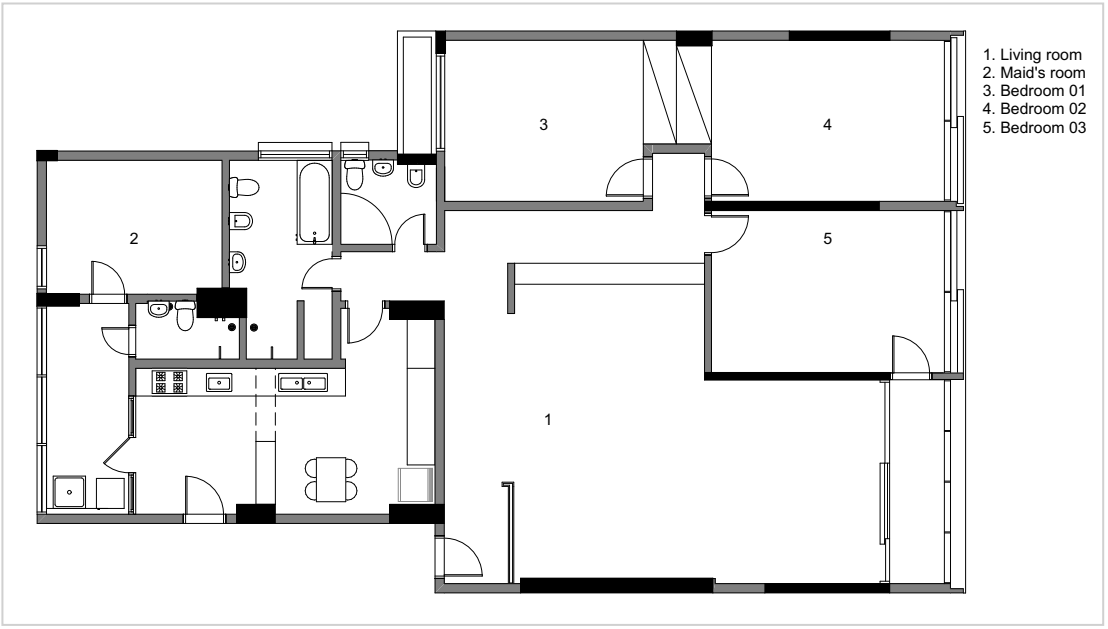
THE CASE STUDIES

This article examines how different residents adapted their homes to the challenges imposed by the pandemic through three case studies, all located in the city of São Paulo. In all cases, the owners are architects. The first two cases are similar and are part of the broader renovation phenomenon discussed earlier in the text. Both involve large apartments in the Lausanne building, located in the upscale neighborhood of Higienópolis. The third case in the neighborhood of Pinheiros is an adaptive reuse of an office building and does not fit within the same trend observed in the previous two cases. However, it is important because it reveals other significant aspects, expanding the scope of the discussion and introducing new considerations on how the pandemic may have influenced spatial dynamics and lifestyle choices in ways not seen in the other examples.

THE LAUSANNE APARTMENTS

The Lausanne building was designed by Franz Hepp in 1953 and was listed as architectural heritage by the city (CONPRESP) and state (CONDEPHAAT) agencies in 1991. It consists of four 180m² apartments per floor, with two units connected to each vertical circulation core. The building is fifteen stories tall, with thirteen typical floors and two distinct ones [FIGURE 05]. The first case was visited on-site, and the resident provided a report of the events, along with the apartment's floor plans. There is less data regarding the second case—only a brief report and a photograph from the Instagram profile *Habitar a Quarentena*.[2] The floor plan shown was drawn based on this information.

05 Lausanne building, Franz Heep, 1953. © both left: Giovanna Renzetti Archive, 2024; both right: Marta Peixoto Archive 2020.



06 Floor plan of an original apartment in the Lausanne building (1953) with three bedrooms. A door separates the social space from the kitchen and service areas. © Marta Peixoto Archive, 2020

07 Floor plan of first case after renovation in 2008 for a couple without children. © Silvio Oksman Archive, 2019.

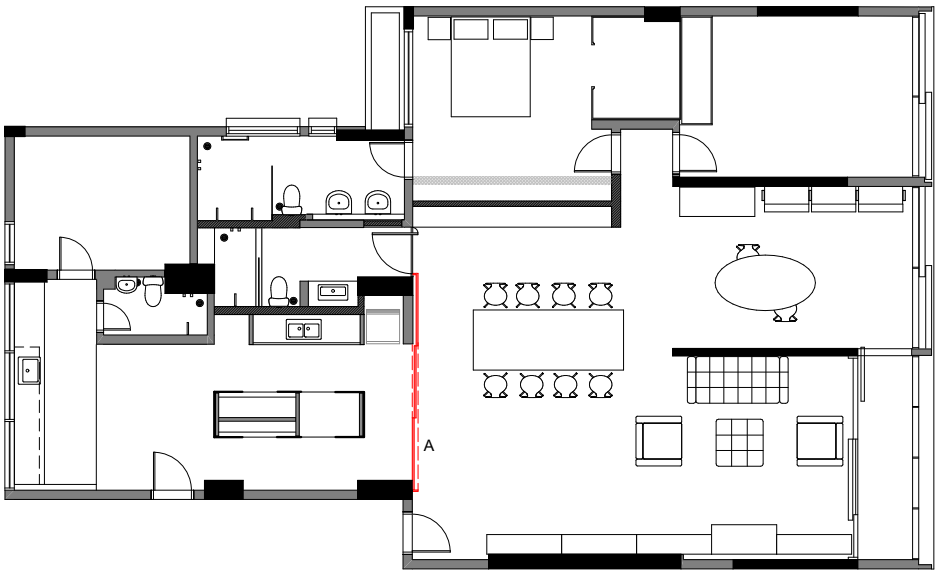
Both apartments are on the typical floors. Each had a large living room visually connected to the street through a balcony. The bedroom wing had three bedrooms and two bathrooms. The kitchen was enclosed, adjacent to the laundry, maid's bedroom, and bathroom. There were two entrances: one for residents and guests, leading to the living room, and another for domestic servants and household services, leading to the kitchen [FIGURE 06].

In the first case, the couple had no children or plans to expand their family. They renovated their apartment in 2008 by converting one bedroom into the wife's office, connected to the living room, and turning the largest bedroom into a master bedroom with an en-suite bathroom. They removed the wall between the kitchen and living room, and the former laundry became a balcony, giving access to a service bathroom and an enclosed laundry, replacing the maid's room [FIGURE 07].

However, an unexpected pregnancy changed their plans and programmatic profile. Three years and a second child later, they installed a sliding door between the kitchen and living room, as the kitchen became heavily used by a maid. They also reconfigured one room for their two daughters to share, accommodating both sleeping and study spaces [FIGURE 08, FIGURE 09].

This new arrangement was necessary in response to natural changes in life, and it went well until 2019. Nevertheless, since the pandemic, the father began to work from home, as the mother did, just as their daughters began to take classes remotely. This time, the solution was an improvisation. The mother remained in her original office but had to share the workspace with the girls. The father held meetings and taught on the balcony—weather permitting—and the eldest daughter used the kitchen to attend her classes, where the door could be closed for more silence.

There was one purposeful difference in the second example compared to the first. The residents already had two children, and the renovation was designed—by the owners' architects—for this existing family of four. They kept the original number of three bedrooms. As a result,



08 Floor plan. © Silvio Oksman Archive, 2019.

09 Photo showing the sliding door added in 2011. © Marta Peixoto Archive, 2020.

the social area is significantly smaller in this case. The leading transformation was to connect the laundry room, kitchen, living room, and balcony [FIGURE 10]. These spaces became contiguous, a generous social area from the front to the back of the building. Reporting to *Habitar a quarentena*, the father said how they adapted to the pandemic.

Made easier by the fact that the couple were also partners in their professional lives, the dining room became a shared office for the couple. Since each of the children already had a bedroom, it was enough to provide them with the appropriate equipment to begin attending school—and almost everything else—from their rooms.

10 Floor plan of second case: Another renovated apartment at Lausanne building. © Marta Peixoto Archive, 2024.

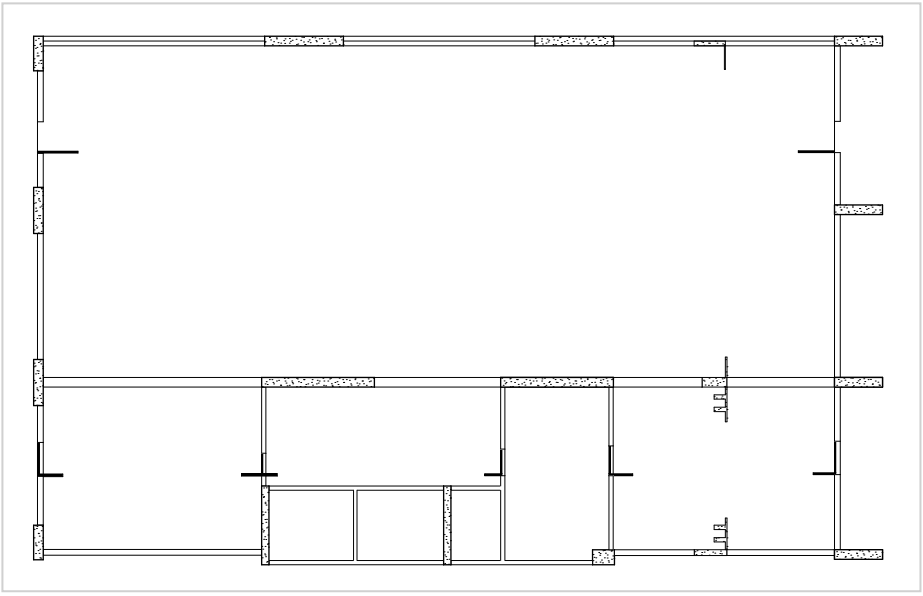
11 Second case: Living room during pandemic. © @habitaraquarentena, 2022.

Meals were now served at the kitchen counter, and the family created a small exercise nook in the living room [FIGURE 11]. The balcony became even more critical, the only space to connect to the exterior. As in the previous case, the service door gained value as an entry point for shopping and for the few exits to the outside, where shoes and coats were stored.

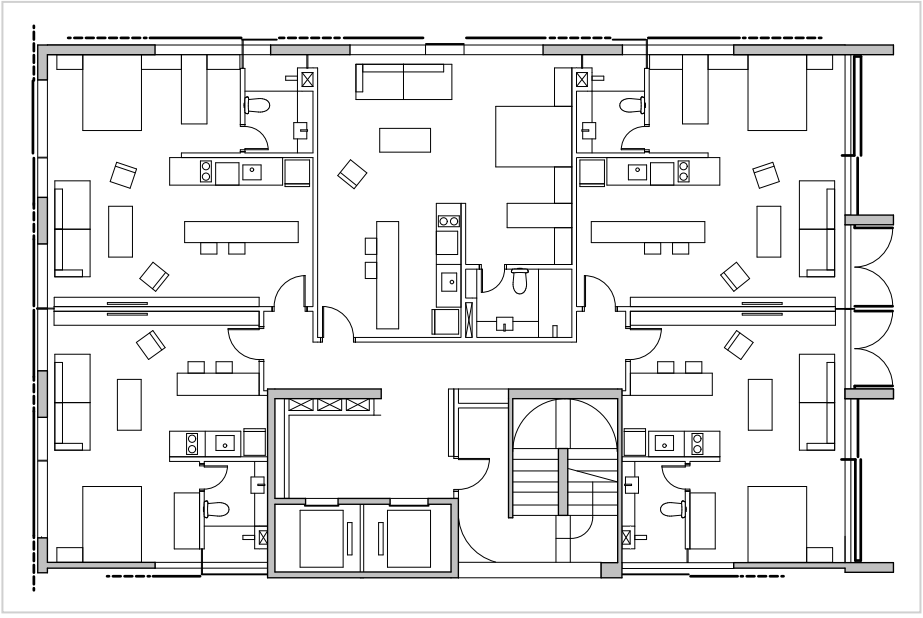
A CASE APART – EXPANDING THE SCOPE

This third case is different and an adaptive reuse of an office building. Located in the Pinheiros neighborhood, another upscale area of the city known for its numerous bars, restaurants, and various businesses, it stands out for its accessibility. The resident, an architect, decided to move into a smaller apartment following a divorce. His firm had recently converted a forty-year-old office building into small residential units. While the original 1980s construction was not architecturally significant, it was part of a notable group of buildings descending from mid-20th-century high-quality designs. These structures, with independent concrete frameworks, are prime candidates for profitable conversions due to the growing demand for micro-apartments [FIGURE 12, FIGURE 13].

These small units easily fit into the compact dimensions of commercial buildings. Contrary to expectations, however, the cost per square meter is high. These projects



12 Third case: Original structural drawing of the typical floor. © Marta Peixoto Archive, 2024.



13 Third case: Adaptive reuse of a commercial building (1980) for residential micro-apartments (2017). © Angelo Bucci Archive, 2019.

14 Third case: Original and renovated façade. © left: Angelo Bucci Archive, 2019; right: Pedro Mascaro Archive, 2019.

capitalize on the trend toward minimalism and low consumption, drawing from international references in cities like Tokyo and New York. They are marketed as the ideal living solution for metropolitan residents seeking proximity to work and cultural attractions.

In this case, the façades of the building were modified to adapt to the new requirements resulting from the change in program and character [FIGURE 14]. The 40 square meters studios were small and functional, ideal for a single person. Furthermore, the building was close to the architect's office. As he spent most of the day outside, the place functioned more like a hotel suite than a residence. During the pandemic, the situation changed drastically, and he was forced to work at home without much space, without daily walks to work or meals with colleagues, restricted to a single, multifunctional space. According to him, it was as if he had begun to live in the office, as an ironic case of 'reconversion.'

MODERN INTERIORS IN TIMES OF CRISES

After the renovation, the Lausanne building's apartments became more aligned with the principles of modern architecture than in their initial configurations. They transformed into more fluid, integrated forms with fewer partitions, the disappearance of decorative elements, and the replacement or removal of many coverings. Their interiors were stripped down, with fewer objects and furniture, liberating the glass façades and enhancing the visual connection with the outside. Similarly, the third example—a standard office building converted into a collection of 'urban cabanons'—saw its units rely on the city as a complement to their function, much like their French iconic predecessors, which required neighboring buildings and landscapes to facilitate proper living.

However, the COVID-19 pandemic imposed a confinement that profoundly changed domestic life. In these three situations experienced by Brazilian upper-middle-class architects, the forced coexistence of living and working in integrated spaces caused discomfort. The need for privacy, isolation, and individual spaces became paramount, highlighting the limitations of open-plan layouts and multifunctional spaces. The ample square footage of the two larger apartments made things more manageable inside. On the other hand, these families began to live in spaces that abruptly served many functions besides residential. In the third case, the viability of living in a small place hinged on a connection with the city, which was practically impossible at that time.

The forced adaptations in these spaces seem to suggest that modern design, especially open-plan layouts, faced difficulties during this crisis. The pre-modern scheme—in which each function occupied a distinct and preferably enclosed room—might have offered greater potential for adaptation to that situation. 'Demodernization' was particularly evident in the Lausanne apartments. Although their interiors once valued open, connected spaces, the pandemic led to a reconsideration of these configurations. The three original bedrooms, along with the living room separated from the kitchen and laundry area, would have provided the much-needed privacy to balance work and leisure. The small apartment, once seen as a smart solution for urban living, turned into confinement. The streamlined design that once made it a practical and efficient place became an obstacle in the face of the imposed multifunctionality, which created the need for more space—even for a single person.

MODERN INTERIORS AND PRESERVATION

One of the main issues when discussing adaptation, renovation, and reuse of modernist interiors is the preservation of architectural heritage. While these interventions address specific conditions and offer alternatives, they also raise concerns about what is being lost or altered in the process. Modernist interiors, especially those from mid-century buildings, are integral to the architectural legacy of the structure as a whole, but they are often overlooked in preservation policies, which tend to focus more on the external appearance.

A particular challenge arises when renovations take place inside private apartments, hidden from public view

and, importantly, from heritage agencies. In the first two cases, the renovations might indeed preserve and even enhance the apartment's functionality while respecting its architectural value, but this happens without any oversight from preservation bodies. On one hand, this independence allows for quicker, cost-effective interventions that do not rely on the complex bureaucracy of public funding. In many cases, the sum of these individual renovations could help conserve the overall building without the need for large-scale public investments.

However, this process also carries risks. Without the involvement of heritage agencies, decisions about what to preserve or alter fall entirely on the shoulders of private owners and the professionals they hire. The quality and sensitivity of these renovations can vary significantly, depending on the expertise shown by the designers. While some residents may opt for careful, historically informed renovations, others might prioritize personal preferences or trends, leading to modifications that compromise the original design ethos. For better or worse, the 'hidden' nature of these renovations means that a key aspect of architectural heritage—interior design—is left unprotected, even though it forms an essential part of the building's identity.

In Brazil, there is no consensus among architects and those involved in architectural heritage preservation on how to approach the renovation of over fifty-year-old modern apartments, particularly regarding their interiors. Some believe it should be prohibited to alter original plans, components, and materials or make any minimal modifications to these apartments. This limitation can be dangerous, even if backed by good intentions to preserve the author's original idea. Today, very few people would buy an apartment over fifty years old, even if it was spacious, bright, adaptable, and located in a prime area since it would not have a single en-suite bathroom, and the resident would be forced to keep a maid's room, as well as being prohibited from upgrades such as air conditioning. Not recognizing the adaptations necessary for contemporary life makes the satisfactory use of these apartments unfeasible.

CONCLUSION

In Brazil, modern architecture took more than five decades to be widely accepted in residential programs and by the average client. Shortly after gaining greater acceptance at the beginning of the 21st century, a change in the way of living imposed by the pandemic made previously content residents yearn for masonry walls—or something with a similar role in visual and acoustic insulation—and the closed doors of pre-modern residences. The pandemic exposed the limits of some modernist beliefs. Despite these challenges, modern domestic interior spaces possess inherent qualities, including an open and bright atmosphere, innovative spatial solutions characterized by forms that convey a sense of order, and abundant connections to the outdoors. Furthermore, their transformative capacity, made possible by reinforced concrete structures, remains essential.

Though the examples presented here are a small sample, they represent trends that were widespread in Brazil in the first decades of the 21st century, prevalent both in the real estate market and in architectural commissions. The first trend is the renovation or adaptive reuse of modernist buildings. These projects cater to a bourgeois and up-to-date clientele. The most common example is the relatively large apartment in upscale or traditional neighborhoods, structured in reinforced concrete. Significant demolition of walls creates larger rooms, integrating social and service areas and connecting as many spaces as possible. The second trend is the micro-apartment in central metropolitan areas, small not as a cost-saving measure but as an alternative for residents who want to enjoy the conveniences of the city. These residents pay more per square meter but save time walking to work, restaurants, or theaters. Although all three cases date from the last twenty years, they incorporate ideas from the early 20th century, aligning contemporary design with the principles of modern architecture. In all the examples presented, there is adaptation, renovation, and reuse of existing buildings.

Even though the WHO continues to describe COVID-19 as a pandemic, the emergency phase has ended, and we still do not have a clear picture of its consequences regarding home interiors. However, in Brazil, where there is a significant collection of high-quality modern buildings, it is crucial that these experiences are not forgotten. Renovating a single apartment can trigger a positive ripple effect. The cumulative impact of multiple renovations within the same building can create an 'immunity' against the ravages of time and the harsh realities of real estate speculation. To do so, it will be necessary to provide owners, architects, authorities and construction companies with more knowledge about the particular values and design elements to plan and document interventions to better ensure a longterm integrity of the buildings as a whole. Each owner's investment in enhancing their property not only attracts like-minded neighbors but also fosters a shared goal of increasing asset value. This process allows for entire buildings to undergo renovation without significant collective investment or fanfare. This approach reflects not only a response to the past, considering architectural heritage and our culture, but also a viable and sustainable solution to the multifaceted problems of contemporary Brazilian cities.

ACKNOWLEDGMENTS

Since 2019, the author of this article has held a CNPq (Brazilian Council for Scientific and Technological Development) productivity grant as a researcher. A thank you also goes to Angelo Bucci, Camila Thiesen, and Silvio Oksman, who gave me access to their files and shared these stories with me.

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ENDNOTES

1 These conclusions are related to years of research on the subject. The photos are part of personal collections and could not appear here. However, some of them can be seen in Marta Peixoto's presentation *Changing to the past* (Peixoto, 2021).

2 @habitaraquarentena (which can be translated as *Living in quarantine*) is an Instagram profile launched by the Brazilian architect Camila Thiesen that brings together photos and reports about the relationship between residents and their homes during the pandemic.

QUESTIONING THE WET SPACE

A Comparative Analysis of Health and Hygiene in Modern Apartment Interiors in Turkey

Burkay Pasin and Selim Sertel Öztürk

ABSTRACT: While the modernist discourses of the 20th century pretended to solve all the problems of daily life through the acts of standardization, unification, and scientific progress, the modernist practice incorporates its advancements and conflicts within the same built environment. One such discourse is on domestic health and hygiene, which proposes to integrate various functions of bathing, cleaning, washing, and defecation within the so-called volume 'wet space', equipped with modern utilities. It is questionable how healthy and hygienic such a spatial model is compared to traditional domestic life, in which most of these functions have been segregated and/or performed according to cultural norms. This neglected problem has become evident with long-term lockdowns due to the COVID-19 pandemic, especially in apartment blocks where all inhabitants have to share a single wet space throughout the day. This paper questions whether the modernist discourses of health and hygiene function properly in modern domestic architecture and how the conflicts of wet space can be read. Accordingly, we concentrate on selected apartments in Turkey that were built between 1950 and 1970 and are still in use today: Ataköy Housing Estate, Phase I-II, and Yeşiltepe Blocks, developed and built by the Emlak Kredi Bank. Through scholars' and architects' discourses and practices on domestic hygiene derived from articles and architectural drawings in national archives, the paper provides a comparative analysis of wet spaces in these apartments in terms of their location within the spatial layout, the utilities and materials applied, as well as their privacy level. The analysis shows that the limitations of the wet space in these modern apartment interiors reveal the possible risks to domestic health and hygiene, particularly in times of pandemic.

KEYWORDS: Modern apartment interiors, wet space, health, hygiene, Emlak Bank, Housing in Turkey

INTRODUCTION: The COVID-19 pandemic, which was first identified in the Chinese city of Wuhan in 2019 and spread to other parts of the world in 2020, affected not only our modes of working and socializing but also our domestic lives, leading to long-term lockdowns at home where users were challenged with the limitations of the wet space. The pandemic has affected many people worldwide; there have been over 770 million confirmed cases of COVID-19, including almost 7 million deaths (WHO Coronavirus Dashboard). The reflections of these quantities on the physical and mental health of residents have led to various domestic challenges ranging from mandatory distancing among family members, keeping family well-being at a certain level, sheltering-in-place without leisure time, domestic violence, financial distress, and disturbed work-life balance (Gayatri and Puspitasari, 2022, p. 3).

It is quite obvious that the most striking effects of COVID-19 have emerged in dense urban environments, which started to be shaped in the 19th century. Since more than half of the world's population lives in modern cities today, the spatial quality of urban housing in terms of health, hygiene, and well-being is now being questioned more than ever. This article initially questions how these concepts are reconstructed as part of modernist discourses and practices. The second section covers the ideological conceptualizations of domestic health and hygiene as merits of civilization by the modernist ideology, both on a global and local scale. Accordingly, it is argued that domestic life in the modern cities of Republican Turkey after the mid-1920s has been shaped and idealized under the influence of European discourses on health and hygiene.

Recent studies on the effects of the COVID-19 pandemic on urban domestic life have revealed various

health-related problems specific to apartment-type houses. In their review of the quality of residential life during and after the COVID-19 crisis, Terri Peters and Anna Halleran (2021, pp. 21-22) assert that apartment housing must be more resilient and passively survivable and suggest providing at least two bathrooms in shared apartments and to design apartments that support physical distancing from others. In a more extensive review that examines the potential impacts of housing design on the spread of COVID-19, Hala Adeeb Fahmy Hanna (2023, p. 499) revealed significant problems with the existing residence design, which negatively affected the life quality of its residents while locked-down at home: inadequate living spaces in terms of size, lack of flexibility, insufficient natural lighting, poor air quality, low thermal and acoustic comfort, the absence of aesthetic elements, isolation places, balconies, guest rooms, as well as dedicated workspaces. In their qualitative research, Yaman et al. (2021, p. 606) applied a questionnaire survey to 400 residents living in single and multi-block apartments to determine the spatial deficiencies of their apartments during the COVID-19 pandemic. They identified that residents need larger balconies, more rooms, more social spaces, and gardens for a healthier and safer domestic life.

Considering the multi-story apartment block as one of the most prominent housing types of modern architecture, this article elaborates on the findings of those studies, providing critical insight into the spatial planning of the apartment, specifically the bathroom as a wet space. This study addresses the modernist discourses of health and hygiene in wet spaces of apartments, aiming to understand how the bathroom space(s) turned into a wet space in modern domestic interiors. Accordingly, we question how the conflicts of domestic health and hygiene embodied in wet spaces could be read, particularly in times of pandemic.

In response, the second section discusses the construction of domestic health and hygiene as a modernist ideology, and the third section presents this construction by concentrating on the evolution of the bathroom as a wet space in the modern Turkish house, particularly in an apartment. Through discourse analysis and graphic analysis of plan layouts derived from an archival survey, the study further elaborates on the transformation of bathroom design from the 1930s to date within 20-year periods. The selected houses in each period have been cross-analyzed in terms of various criteria concerning domestic health and hygiene. The fourth section reads this transformation through a comparative analysis of selected apartments in Turkey that were built between 1950-1970 and are still in use today: Ataköy Housing Estate, Phase I-II (İstanbul, 1957-1962), and Yeşiltepe Blocks (Ankara, 1956-1969). Therefore, we argue that while the wet spaces in these apartments have created potential risks regarding domestic health and hygiene, it has become evident during the COVID-19 pandemic that their spatial and functional variety may be favorable.

DOMESTIC HEALTH AND HYGIENE AS A MODERNIST IDEOLOGY

Since the mid-19th century, the perception and provision of health, hygiene, and cleanliness in modern urban life have addressed a semantic problem that the meanings attributed to these concepts have started to change gradually. This change showed itself not only in the class and gender-based use of urban space but also in the rise of domestic health against public health. In their work that examines the historical development of domestic laundry, Laermans and Meulders (1999, p. 120) mention the emergence of "a new bourgeois discourse about cleanliness highlighting virtues like strength, austerity, simplicity, authenticity, self-control, and productivity" which could be read as norms of individualism, privacy, and domesticity, replacing "highly visible cleanliness and good manners anchored in public display."

According to Hilde Heynen, the need for cleanliness and hygiene is one of the gendered domestic norms prescribed by the modernist ideology (Heynen, 2005, p. 7). Relatedly, Laermans and Meulders (1999, p. 126) highlight that in the mid-19th century, the housewife was assigned a major role in "the medicalization of private life and domestic intimacy" and portrayed "as the guardian of domestic health" by health professionals.

The European modernist discourses of the early 20th century associated domestic health and hygiene with functionalism, daylight, ventilation, and sanitation. The CIAM (Congrès Internationaux d'Architecture Moderne) emphasized the role of architecture and urban planning in improving public health. In the La Sarraz meeting of CIAM, held in Switzerland in 1928, 'hygiene' was one of the key components of the work program, among others, such as standardization and urbanism (Mumford, 2000, p. 14). In the Athens Charter, produced as a resulting document of the 4th CIAM meeting dated 1933, the sufficiency of space, good sanitary conditions, and provision of air and sunlight are highlighted as major requirements of healthy dwellings (Le Corbusier, 1943). The practical reflection of these discourses is evident in open, airy, and sunny spaces as part of mass-housing projects of the early 20th century in Europe, such as Frugès Estate of Pessac in Bordeaux (1927), Hellerhof and Römerstadt Settlements in Frankfurt (1932/1929), and Weissenhof Estate in Stuttgart (1927).

In 1930s Turkey, the modern house symbolized the nation's efforts to align with these discourses. Yet, it

retained a uniquely Turkish character that both adapted and resisted foreign architectural influences. While Kilinç (2012) highlights the communal and flexible nature of the Turkish housing settlements, Baydar (2002) draws attention to women's symbolic and actual confinement within these spaces despite their outward visibility in public life. Within the private sphere, women faced constraints imposed by the spatial organization of the home, which reinforced traditional gender roles and expectations. The design of modern houses positioned women primarily as caretakers and homemakers, limiting their autonomy and reinforcing their association with domestic responsibilities such as child-rearing, household management, and maintaining social order within the family. These works reveal the tensions between modernization, nationalism, and gender roles, illustrating how the housewife's duties were intricately linked to the modern interior. As much as architecture was used as a tool for progress, it also maintained traditional domestic expectations for women.

However, modernist discourses of the early 20th century had idealized the housewife as the user and consumer of the household in providing domestic health. This is partially due to the unhealthy conditions in European public space that had led to the mechanization of households in both bourgeois and working-class family lives. The most paradigmatic example is the Frankfurt kitchen by Margarete Schütte-Lihotzky, proposing a domestic Taylorism, where the housewife is idealized as the efficient user of the household, which further reflects on all domestic activities requiring cleanliness. In other words, functional efficiency started to be considered a precondition for domestic health and hygiene.

As in many nation-state countries that developed in the 20th century, health and hygiene have been the two outstanding concepts that contributed to the shaping of modern domestic life in Republican Turkey, both symbolically and functionally. In one of his speeches, the founder of the Turkish Republic, Mustafa Kemal Atatürk, declares that "Every place that is home and shelter for the Turk will be an example of health, cleanliness, beauty and modern culture" (Ataturk Research Center, 2006, p.402). While this young Republic was often symbolized and embodied with the athletic and healthy youth in various national rituals and representations, the conditions of modern living had been associated with health and hygiene provided by the emerging technologies, furnishings, household appliances, and sanitary ware [FIGURE 01].

Sibel Bozdoğan (2002, pp. 82-83) considers the modernist discourses and representations of health and hygiene in Turkey as a republican obsession in conformity with Western models. Here, the idealized image of the housewife in Western Modernism was directly taken as

01 An advertisement for a gas water heater saying, "I have no time to take a bath. Then, you don't know about the gas equipment ready to work immediately". © Cumhuriyet Newspaper archive, 1937.

a reference model incorporating the following qualities stated by Bozdoğan: "Simplicity, health, youth, unadorned beauty, practicality, most importantly, a scientific worldview" (Bozdoğan, 2002, p. 82). She presents how the modern cubic house, whether as a villa or an apartment, was promoted as practical, economical, and healthy in the popular magazines of the period (Bozdoğan, 2002, p. 203). Moreover, the image of the ideal modern home and family life had been shaped and promoted by "amenities such as hot water, heating systems, proper ventilation, electricity for lighting, and household appliances" which she presents as "prestigious symbols of civilization and contemporariness" (Bozdoğan, 2002, p. 215).

THE EVOLUTION OF BATHROOM IN MODERN TURKISH HOUSE

To comprehend the evolution of the bathroom in a modern Turkish house as a wet space, it is useful to revisit how the provision of health and hygiene has spatially and functionally transformed domestic interiors. The functions that require wet spaces in a traditional Turkish house, such as bathing, cooking, washing, etc., were realized in separate spaces, opening to a courtyard. This not only prevents mixing waste and clean water, air, and smell produced in these functions but also enables the simultaneous use of these spaces by different users. In cases where there is no separate bath structure in the courtyard, the bathing function takes place in hidden closets of the rooms, called *gusülhane*. This is a private one-person volume for instant cleaning, where the washing activity takes place not by running water but by carrying the heated water with a

pitcher or a cauldron and pouring it onto the body with a bath bowl or a pot. The wastewater formed after washing is discharged through a drain hole (Tuluk, 2010, p. 63).

In comparison to the spatial organization of a traditional Turkish house that provides functional variety, flexibility, and privacy in daily activities, health and hygiene in modern domestic interiors of the 20th century have been spatialized through simplicity and multi-functionality. The domestic private activities such as bathing, washing, shaving, and defecating, once conducted in separate spaces, have been integrated within a single wet space, namely a bathroom equipped with modern sanitary ware. This reductionist transformation has been critically argued by various scholars of Turkish modern architecture. Ali Cengizkan (2002), for instance, considers the modern bathroom of the 20th century a stereotypical product of cultural alienation. He argues that "to see how the modern bathroom is impoverished, it would be stimulating to concentrate on how it is flourished and stuffed with furniture and fixtures" (Cengizkan, 2002, p. 147).

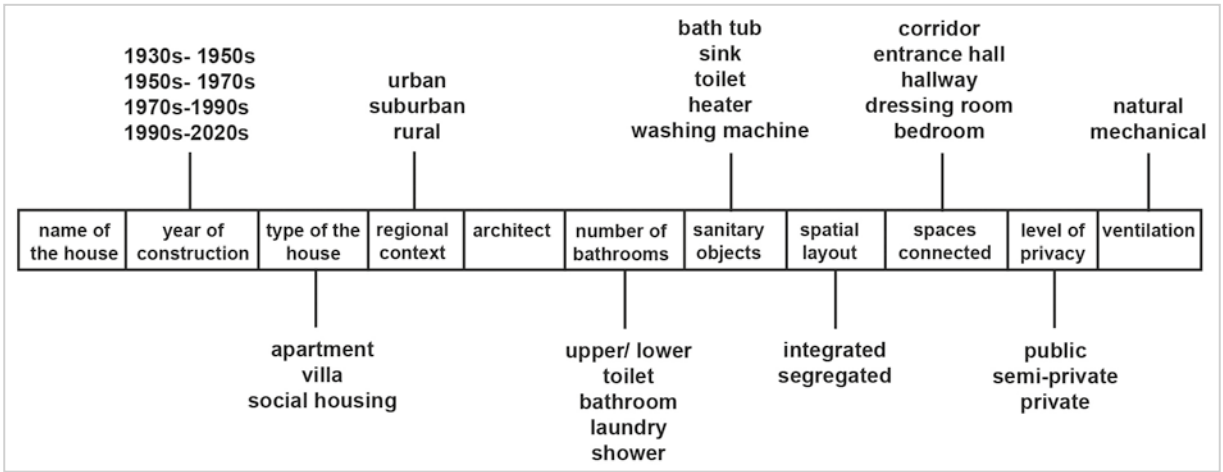
In her article entitled "Bathroom as a Modern Space" (2008), Meltem Gürel discusses how modernization practices in Turkey are shaped through bathroom fittings and sanitary ware. She asserts that "a bathroom that combined a water closet (called an *alla franga* lavatory), a sink and a bath—thus involving the activities of bathing and using the lavatory—was an Occidental product that eventually became the hallmark of the contemporary domestic landscape" (Gürel, 2008, p. 216). She reads the emergence of modern bathrooms in Turkey as a product of global modernity as follows:

> *Bathroom equipment and design became an important aspect of contemporary building culture for providing what came to be considered hygienic, comfortable, and high living standards. Furthermore, they arguably signified social status and class as well as the conceptual formation of the inhabitants, including civic identity, cultural upbringing, and educational background. These embedded meanings of the bathroom's materiality symbolized a sense of belonging to the industrial West.*
> *(Gürel, 2008, p. 216).*

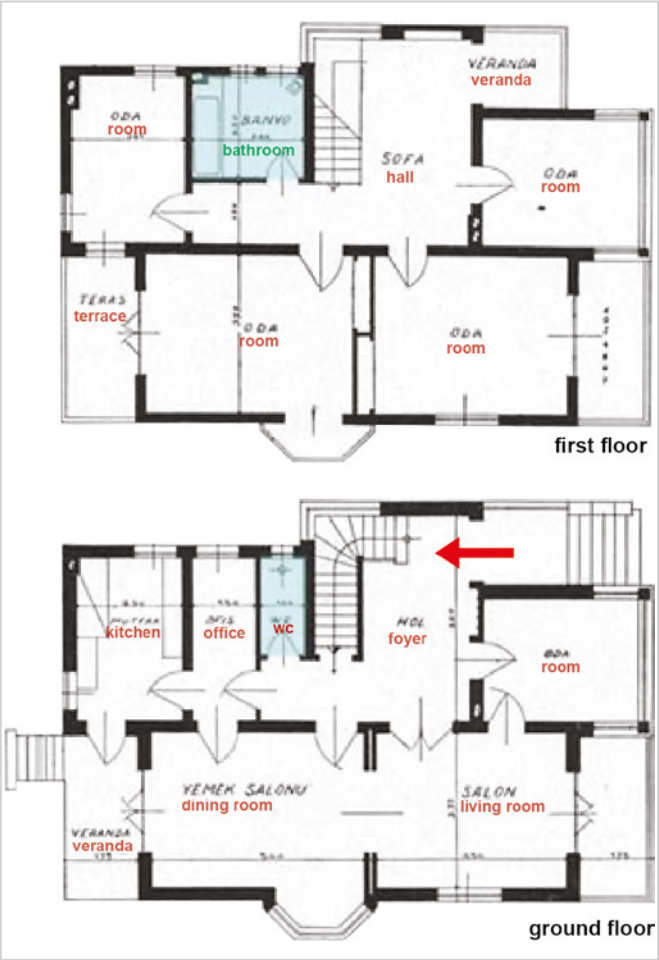
A twofold archival survey we have conducted presents the spatial evolution of the bathroom in a modern Turkish house as a wet space. In the first phase, we browsed the database of the *Arkitekt* Journal using the term *sıhhi* (healthy), which revealed 320 articles presenting Turkish architects' discourses on domestic health and hygiene. These discourses have been analyzed under five categories, treating hygiene as a projection of life, a product of bodily practices, a way of critical thinking, a field of professional practice, and a global issue. It has been found that 35% of the discourses are critical, emphasizing the sufficient provision of health, hygiene, sanitation, and natural ventilation in modern Turkish houses, particularly in the urban environment. Architect Zeki Sayar, who had written numerous articles on this issue, for instance, indicates his expectations from the authorities as follows:

> *We hope that from now on, housing programs and implementation will not be left to chance but will be managed by one hand with scientific and rational methods. Otherwise, it is certain that the housing poverty and unsanitary residential communities in our cities and towns will continue to develop at full speed.*
> *(Sayar, 1958, p. 4).*

In the second phase, based on plan layouts of 143 selected Turkish houses built between the 1930s to date, we have made a comparative analysis of bathrooms in terms of various criteria such as the type of the house, its regional context, the number of bathrooms, the sanitary objects placed in the bathrooms and their spatial layout, the spaces they are directly connected, their level of privacy, and how they are ventilated [FIGURE 02].



02 Analytical framework for evolution of bathroom design in Turkey. © Authors' archive, 2024.



03 Floor plans of a villa designed by Necmeddin Emre in 1937 (legend by the authors). © Arkitekt archive, Emre, 1937, p. 102 (Courtesy of Eren Sayar Kavcı for Arkitekt).

04 Floorplan of Birkan Apartments designed by Haluk Baysal and Melih Birsel in 1959. (Wet spaces are emphasized in green). © Arkitekt archive, Baysal and Birsel, 1959, p. 7 (Courtesy of Eren Sayar Kavcı for Arkitekt).

The initial results of the survey show that only 44 of the analyzed houses have a segregated bathroom, the majority (75%) of which are located in a two-story villa. This is mainly a two-layered segregation in which utilities such as sink, toilet, bathtub, shower, bidet, and washing machine are placed in different volumes within the same space, each located on different floors of the villa. In this way, health and hygiene in domestic activities are provided not only by preventing clean and wastewater and smell from intermingling but also by allowing each inhabitant of the house to realize these activities privately. Considering that nearly 70% of these villas were built between 1930-1950, we can assume that they sustain the traditional spatial layout of the Turkish house, where wet space activities are separated from each other [FIGURE 03].

The apartments analyzed as part of the survey, on the other hand, show different results in terms of the emergence of segregated bathrooms. Almost half of the apartments with segregated bathrooms were built between 1930 and 1950, the other half were built after the 1950s. However, the integrated bathroom has been a prevalent solution in the interior design of apartments since the percentage of segregated bathrooms among all the apartments analyzed is only 15%. In addition, the integrated bathrooms in apartments built after the 1950s have a standard layout consisting of the 'sink-toilet-bathtub' trilogy [Figure 04]. In this layout, there is no fixed washing machine, which is either mobile, to be used when needed, or hidden underneath the 'Hilton style' sink unit, a built-in furniture that has emerged after the 1990s. This unit, which incorporates a sink on a marble surface, a void to install the washing machine, and cupboards to store various items underneath, has strengthened the compactness of the wet space.

Further analysis of the integrated bathrooms shows that over 70% of them function as a shared private space, being connected to a corridor or an entrance hall. Such proximity of the integrated bathroom to the relatively public spaces of the apartment has inevitably created the risk of being exposed to the toxic air, humidity, and bad smell produced during various wet space activities. With the emergence of windowless bathrooms with mechanical ventilation after the 1980s, this risk has increased due to the lack of natural ventilation required to prevent the spread of deadly viruses. Otherwise, they are designated either as part of the dressing room or the private hallway inter-connecting the bedrooms [FIGURE 04].

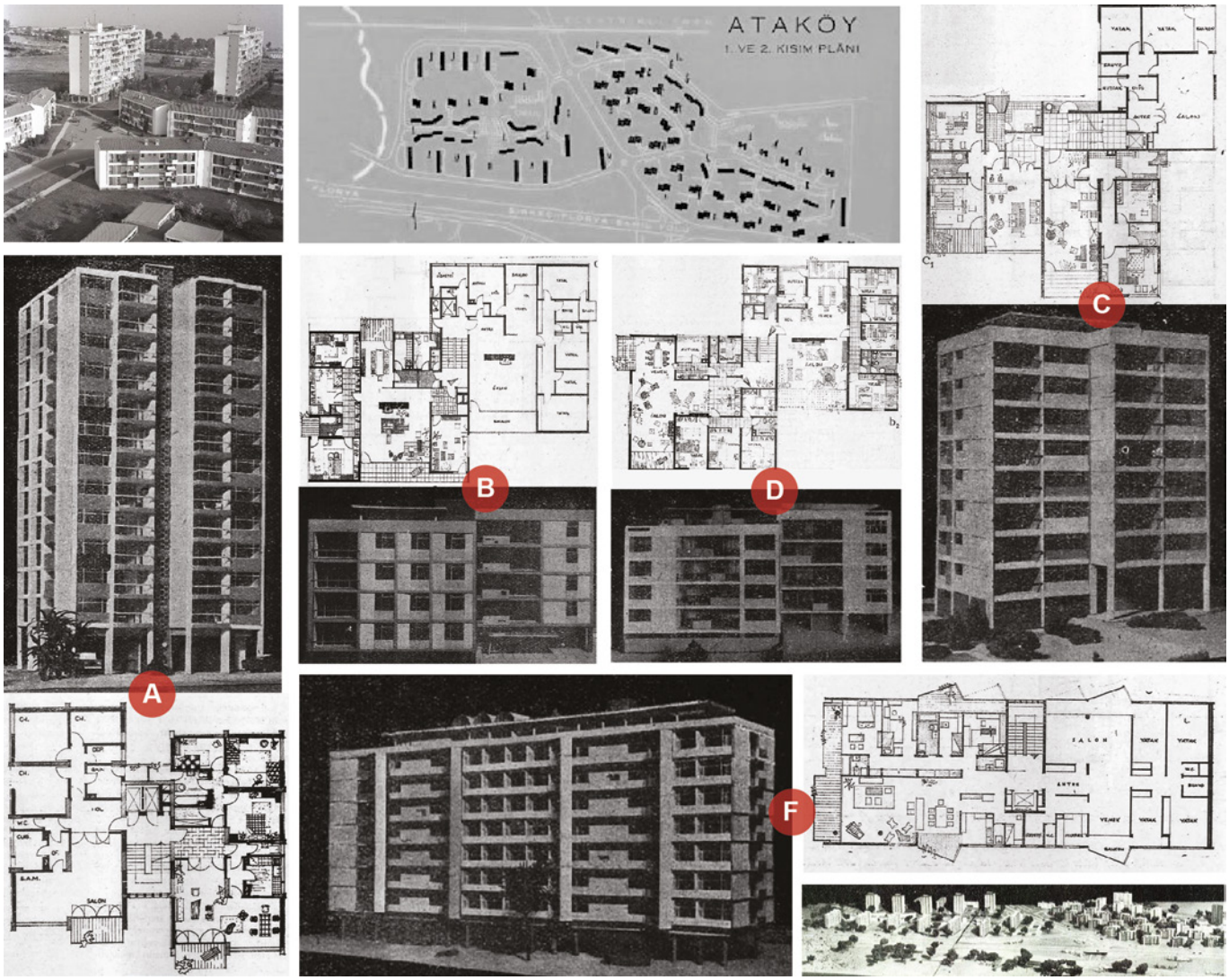
HEALTH AND HYGIENE IN EMLAK KREDI BANK HOUSING

The shift towards Americanization in Turkey in the 1950s changed the source of Western expertise in housing matters (Batur, 2005; Yücel, 1984). During this period, new

housing projects by banks such as Emlak Kredi Bank, Yapı Kredi Bank, and İş Bank became notable. During the 1950s and 1960s, Emlak Kredi Bank provided loans and construction examples for mass housing. Creating capital and setting standards in housing cooperatives in Ankara, Istanbul, and Izmir has played a decisive role in the shaping of apartment architecture in Turkey. The apartment blocks on Atatürk Boulevard (1957), the Fourth Levent Development (1956-60) in Istanbul, and the Emlak Kredi Bank Housing in Ankara (1957-64) are considered pioneers of mass housing in Turkey that used multi-family housing types (Gürel, 2012; Bozdoğan and Akcan, 2012).

Ataköy Housing Development, Phase I-II (İstanbul, 1957-1962), and Yeşiltepe Blocks (Ankara, 1956-1969) were built by Emlak Kredi Bank, previously known as Emlak ve Eytam Bankası (established in 1926), part of their long-term investments on urban housing cooperatives, which was considered a role model in the sector. The bank was brought under legal control in 1947, with one of its primary objectives being to tackle the housing issue by establishing a legal framework for the construction of affordable housing (Güvenç and Işık, 2021).

Ataköy Blocks in Istanbul, designed by Muhteşem Giray, Ertuğrul Menteşe, Ümit Asutay, and Yümnü Tayfun, contributed to an appreciation of International Style in Turkey, with combined retail and social services on the ground floors, point blocks with recessed or protruding repeating balconies and large windows. The buildings built from 1957-1962, with their rectilinear masses, planar surfaces, reinforced concrete structures, large glazed areas, unadorned aesthetics, green spaces, open plans, roof terraces, and *pilotis* for ground-level car parking, clearly reflect the ideals of post-war Modernism. As expressed by Ertuğrul Menteşe (1958, p.79), the project aimed to form a self-contained city consisting of residential clusters organized around educational, recreational, administrative, commercial, and social facilities, as well as to create a network of small cities that are open, airy, and centrally organized [FIGURE 05].



05 Aerial upper left) and exterior views of block types of Ataköy Housing Development (collage by the authors). © Arkitekt archive, Baysal and Birsel, 1959, pp. 62-66 (Courtesy of Eren Sayar Kavcı for Arkitekt).

The project consists of five types of blocks of apartments:

- A-type: twelve-story block with two flats on each floor [FIGURE 06],
- B-type: four-story block with two flats on each floor (the maid has a separate entrance) [FIGURE 07],
- C-type: eight-story block with three flats on each floor [FIGURE 10],
- D-type: four-story block with two flats on each floor - maid has separate entrance [FIGURE 08],
- F-type: seven-story block with two flats on each floor [FIGURE 09].

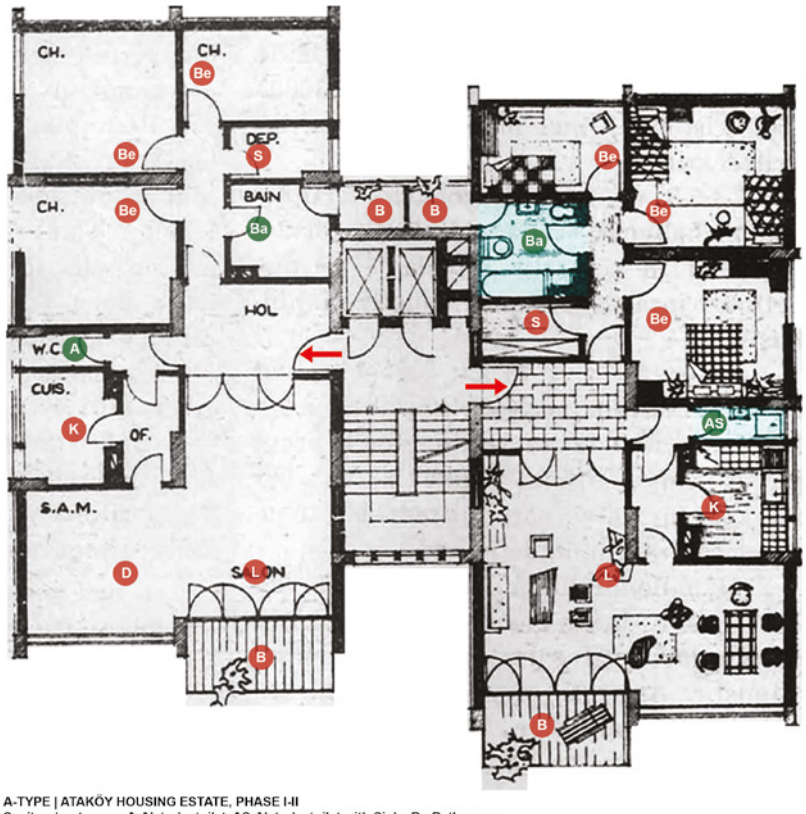
Although the wet spaces in all these apartment types possess the standard layout of the 'sink-toilet-bathtub' trilogy, with exceptional additions of heater and bidet, and open to a corridor connecting the bedrooms, they show variety in terms of quantity, size, and mode of ventilation.

In types A, B, D, and F, in addition to the standard bathroom, there is a small *alla turka* toilet (a type of traditional Turkish toilet used by squatting rather than sitting) which may be used by both the family members and guests. Type A is shown in Figure 06. In types B and D, this separate toilet also has a separate sink. These additional volumes allow for the simultaneous realization of wet space activities, thus privacy and isolation, two highly required factors in cases where a family member is carrying an infectious disease [FIGURE 07, FIGURE 08].

The maid's toilet, featuring a traditional Turkish-style alla turka fixture, contrasts with the family's modern bathroom, highlighting the divide between traditional and contemporary domestic practices. In Block B and D types [FIGURE 07, FIGURE 08], the maid's room and toilet were positioned along a narrow corridor connected to the kitchen, serving as a transitional buffer between the service and living spaces. While spatially separated from the family's modern areas, the maid's room, designed as an independent space with large windows, reflects an effort to provide privacy and a degree of autonomy. However, this arrangement also reinforces social hierarchies, maintaining a clear distinction between the domestic worker and the household while subtly addressing concerns about class stratification (Gürel, 2012).

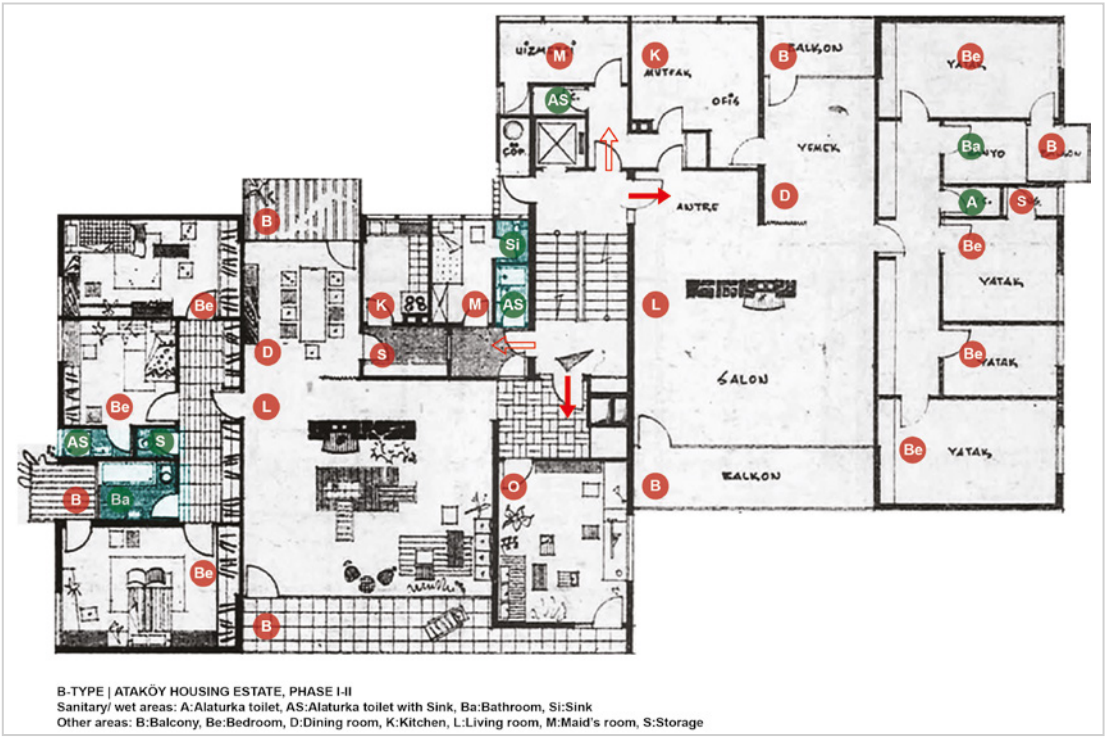
The three-bedroom apartments in type F have two separate bathrooms, each with the 'sink-toilet-bathtub' trilogy: one private bathroom serving the primary bedroom and one shared bathroom opening directly to the corridor and serving the other two bedrooms. In each bathroom, there is a cabinet under which a washing machine can be placed [FIGURE 09].

Significantly, all wet spaces in these apartments are provided with natural ventilation, with a window directly opening outside. Yet, the smallest apartments in type C have only one bathroom that needs to be shared by the inhabitants [FIGURE 10].

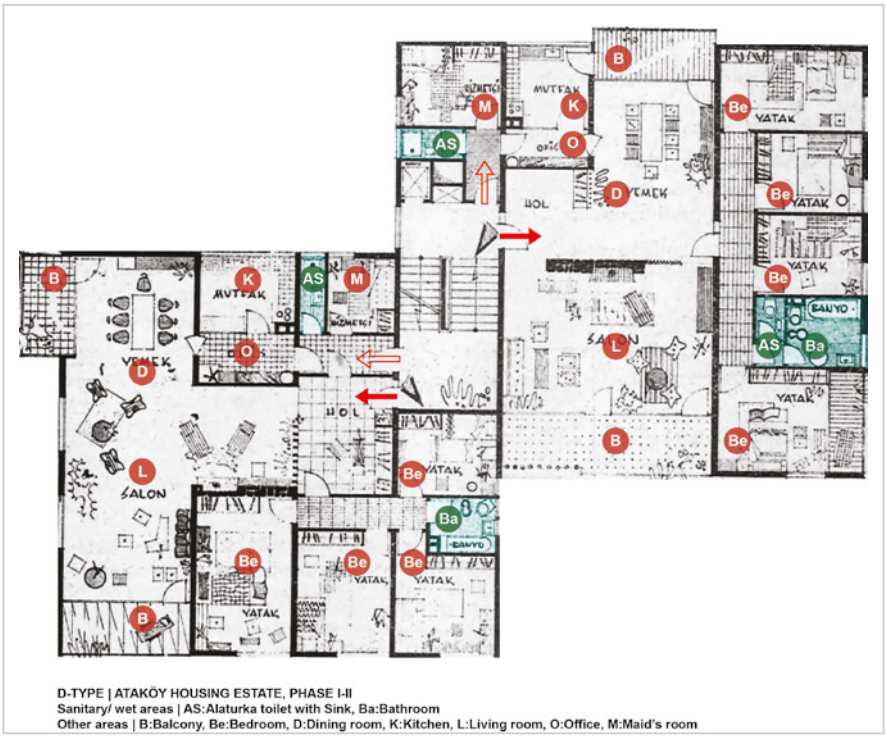


A-TYPE | ATAKÖY HOUSING ESTATE, PHASE I-II
Sanitary/ wet areas: A:Alaturka toilet, AS:Alaturka toilet with Sink, Ba:Bathroom
Other areas: B:Balcony, Be:Bedroom, D:Dining room, K: Kitchen, L:Living room, S:Storage

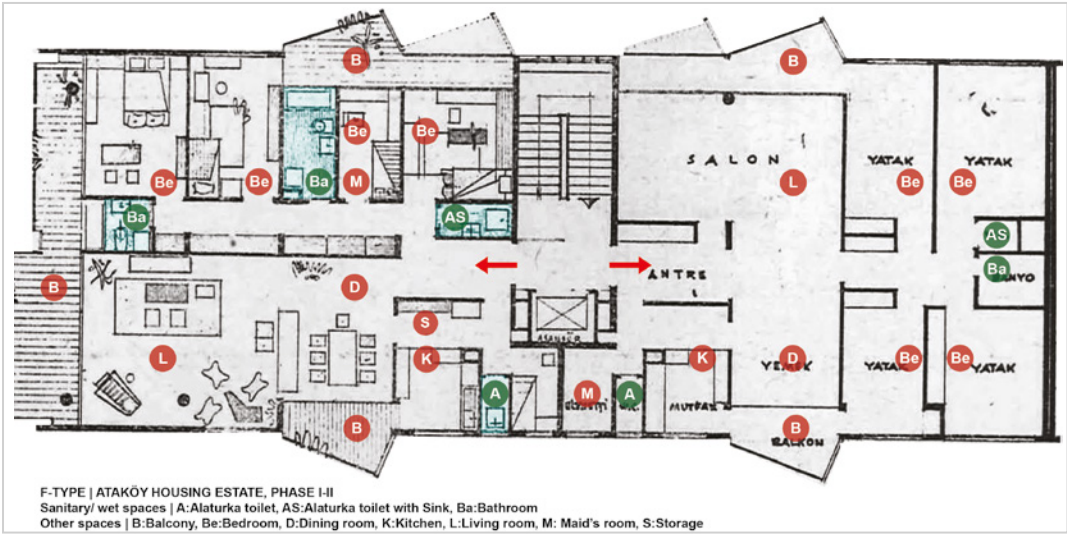
06 Ataköy Housing Estate, Phase I-II A-type: symmetrical three-bedroom apartments with standard bathrooms and separate alla turka toilet (legend pby the authors) © Arkitekt archive, 1958, p. 62 (Courtesy of Eren Sayar Kavcı for Arkitekt).



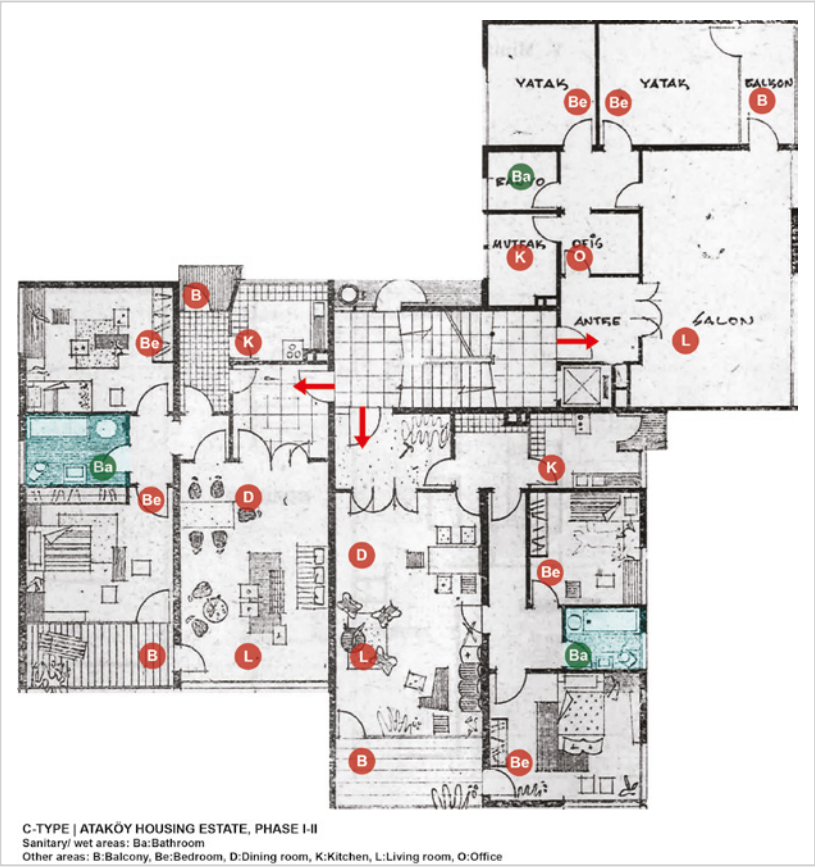
07 Ataköy Blocks B-type: three and four-bedroom apartments with standard bathrooms and separate alla turka toilets and sinks (legend by the authors) © Arkitekt archive, 1958, p. 63 (Courtesy of Eren Sayar Kavcı for Arkitekt)



08 Ataköy Blocks D-type: four-bedroom apartments with standard bathrooms and separate alla turka toilets (legend by the authors). © Arkitekt archive, 1958, p. 65 (Courtesy of Eren Sayar Kavcı for Arkitekt).



09 Ataköy Blocks F-type: four-bedroom apartments with two standard bathrooms and two separate alla turka toilets (legend by the authors). © Arkitekt archive, 1958, p. 66 (Courtesy of Eren Sayar Kavcı for Arkitekt).

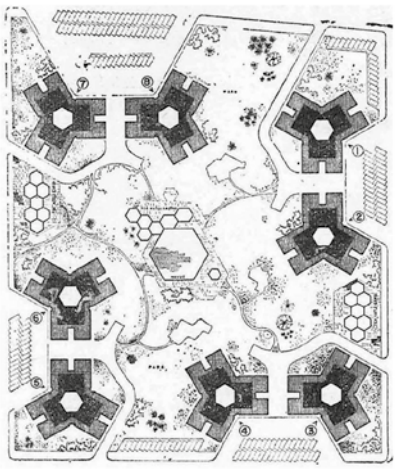


10 Ataköy Blocks C-type: two-bedroom apartments with one standard bathroom (legend by the authors). © Arkitekt archive, 1958, p. 64 (Courtesy of Eren Sayar Kavcı for Arkitekt).

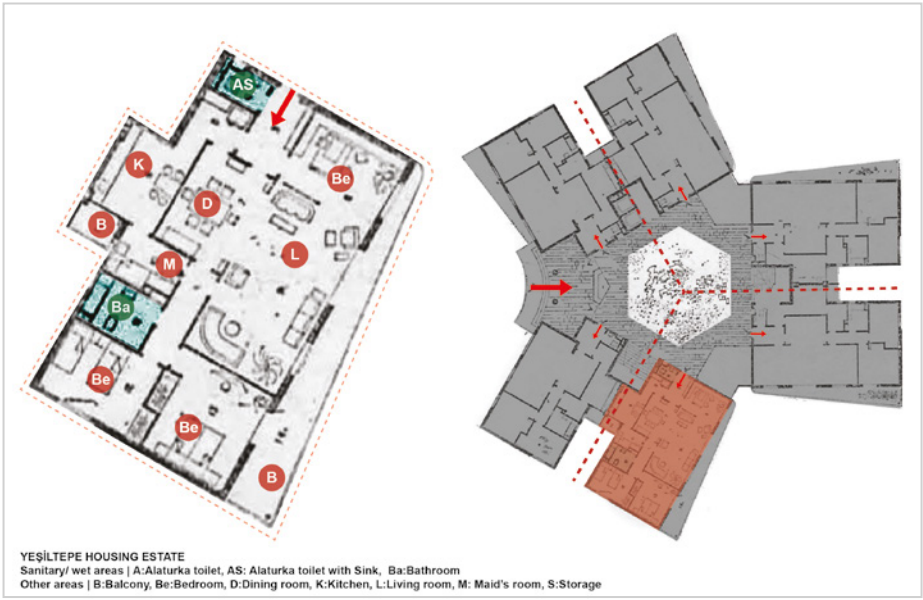
Similar to the Ataköy Blocks, the Yeşiltepe Blocks, built from 1956-1969 in Ankara, designed by Rahmi Bediz and Demirtaş Kamçıl, offer high-rise multi-family blocks with substantial open spaces, creating a different neighborhood for families of different sizes (Gürel, 2012; Tekeli, 2012; Bozdoğan and Akcan, 2012). This project resembles a medium-sized town, featuring amenities such as a casino, a club, sports and playgrounds, a children's park, and a swimming pool (Cengizkan, 2000, p. 251). It comprises three blocks arranged radially around a courtyard, each having two symmetrically placed single-type apartments with three bedrooms. This apartment type has a standard bathroom with the 'sink-toilet-bathtub' trilogy located close to the bedrooms and an alla turka toilet near the entrance hall. Both wet spaces are wide enough to contain additional equipment, such as a washing machine, shower tray, and heater. Since they are located away from each other and provided with natural ventilation, they may be considered hygienic and isolated, allowing private use [FIGURE 11, FIGURE 12].

CONCLUSIONS

Although in the Early Republican Period, the European cubic house was referred to as an ideal model to shape modern Turkish interiors, the transformation of the traditional bathrooms into wet spaces like in this model was not a straightforward process. Our comparative analyses of wet spaces in modern Turkish apartment interiors between the 1950s and the 1960s have revealed that the modernist ideals of the Republic in terms of domestic health and hygiene, namely simplicity, standardization, and technological advancement in sanitaryware, have not been fully



11 Exterior view and layout of Yeşiltepe Apartment Blocks. © Arkitekt archive, 1969, p. 5 (Courtesy of Eren Sayar Kavcı for Arkitekt).



12 Yeşiltepe Blocks: symmetrical three-bedroom apartments with standard bathrooms and separate alla turka toilets (legend by the authors). © Arkitekt archive, 1969, p. 6 (Courtesy of Eren Sayar Kavcı for Arkitekt).

achieved in architectural practice. The plan scheme both challenged and integrated traditional and contemporary elements, creating a transitional space of modernity. The cases analyzed in this article, which are still in use today, possess various bathroom designs ranging from an integrated single volume, namely the sink-toilet-bathtub trilogy, to a traditional layout in which these functions are segregated, according to the size, type, and building period of the apartments in which they are placed. This delay might have resulted from a reaction based on socio-economic and socio-cultural differences that shape domestic preferences and priorities.

Particularly, the apartment architecture of the 1950s and 1960s, observed in the Ataköy and Yeşiltepe Blocks, could be considered a unique milestone in which traditional norms have challenged the modernist concepts of simplicity, standardization, and functional efficiency. The standard layout of wet space (sink-toilet-bathtub), the existence of a secondary toilet (alla turka), and a private bathroom opening to a bedroom, as well as the provision of natural ventilation in these apartments, show that the traditional norms of domestic health and privacy are, though partially, still effective in these two cases. This spatial variety is quite useful for allowing family members a certain level of privacy while bathing, washing, and defecating, as well as isolation in case of an infectious disease. Conflicts of modernization in the 20th century have often eliminated but also reshaped traditional values, customs, practices, and social strata. The wet space is an example in which we may read these conflicts both as risks and advantages. In this article, it has been argued that the spatial and functional varieties of wet spaces observed in these apartment interiors, incorporating modern and traditional norms of bathing, enable more efficient, healthier, and favorable spaces to challenge and minimize the harmful effects of natural crises such as the COVID-19 pandemic. The argument may be further applied to research on health and hygiene problems of post-disaster and post-war interiors.

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INTERIOR HYGIENE

Body, Space, Society, Ideals in the Modernist Turkish Context

Deniz Hasirci

ABSTRACT: The focus of this paper is the significance of the modern bathroom in Turkey, its meaning in the modernization of interiors, in terms of hygiene as a precaution for crises, as well as sanitary ware, and Turkish company *VitrA*'s role in continuously emphasizing the modern bathroom and challenging behavioral habits through design competitions, from the 1940s onwards.

Among one of the most important spaces of hygiene, the bathroom was instrumental in bringing Western habits into the modern Turkish house. Hygiene was a matter of modern national identity emphasized in the Ottoman Empire at the turn of the century, even before the foundation of the Turkish Republic in 1923.

The Western ideals of comfort and hygiene, bodily practices, and lavatory fixtures all contributed to the understanding of the modernization process of Turkish interiors. Moreover, a bathroom that combined the Western and today's internationally accepted *alla franga* lavatory, a sink and a bath, thus combining these activities became a household application and a reflection of modern life. In the 1950s and 1960s, as the average urban Turkish family life moved to apartments that often housed governmental civil servants, the modern bathroom became a standard household space. Meanwhile, the *alla turca* lavatory, a lavatory on which one has to crouch, and that is still used in certain parts of Turkey and Asia, represented the uncivilized and unhygienic.

With the modernization of the domestic interior, a transformation of wet allocation spaces took place, leading to the questioning of the domestic and public. Moreover, new materials and bathroom equipment were introduced, and bathroom equipment competitions were established, leading to inventions that synthesized habits of the East and the West, reaching a new hygienic standard regarding relevant potential crises. Both the company history of *VitrA* Eczacıbaşı and the competing designs are showcased in the paper, aiming to support an understanding of social and spatial change in the modern Turkish domestic interior that has redefined identity with proactive lessons for the future.

KEYWORDS: Hygiene, crisis, modern interiors, bathrooms, modern Turkish interiors, design competitions

INTRODUCTION: Although the first Western sanitary habits and fixtures in bathrooms were introduced to the Ottoman elite through lifestyle journals at the beginning of the 19th century, followed by houses built by Europeans, a more radical and widespread use took place after the foundation of the Republic of Turkey by Mustafa Kemal Atatürk in 1923. The modern aesthetic aroused mixed feelings, with some rejecting modern interiors despite moving into modern homes. During this transformation, some families continued seamlessly with the new spatial language, while others preferred 19th-century decorative interior elements, viewing modern interiors as cold and clinical (Hasirci & Tuna Ultav, 2019; Tuna Ultav et al., 2015).

In the early 1930s and 1940s that followed the foundation of the Republic, interior spaces were cleared of non-functional elements, with less furniture, transmitting an atmosphere of freshness and cleanliness. This approach was aligned with the proactive strategy to prevent disease that had resulted in crises in the past and was prevalent in the domestic bathrooms, signaling a change in sanitary ware. In the early 1940s, pharmacist Dr. Nejat F. Eczacıbaşı realized that ceramics were in short supply and began manufacturing coffee cups and basic kitchenware, leading to the development of the first modern pharmaceutical and first modern ceramic sanitary plant in Kartal, Istanbul (Eczacıbaşı Group, 2021). While this

program had already started influencing sanitary habits, in the 1950s, urbanization and population growth led to the expansion of the plant in Kartal, producing ceramic equipment, sanitary ware, and sanitation infrastructure, as well as other key products for the modern home.

In 1970, the company collaborated with developer OR-AN and opened a competition titled *OR-AN Eczacıbaşı Health Equipment Competition* to create awareness and collect innovative ideas regarding sanitary ware. Several creative products emerged as a result of this competition. One of the winners included Prof. Sadun Ersin's design, which combined the alla franga and alla turca lavatories in Turkey with different uses. Likewise, Mehmet Asatekin's inclusion of *hammam* (Turkish public bath) features like the *kurna* (marble or stone basin under a tap in which water is collected in Turkish baths and traditional bathrooms), brings new issues to discuss as part of the modern Turkish interior. This paper concentrates on the Turkish *VitrA Eczacıbaşı* company, this particular competition, and its role in the approach to hygiene in modern Turkey.

As hygiene was a representation of progress and emphasized by the new republic, the bathroom became one of the most expressive interior spaces and represented modernity in Turkish domestic interiors. This shift had a significant effect on the interior, with the domestic domain now including a space of hygiene. Not only did the location of the bathroom change from the garden to inside the home, and then to a combined space between bedrooms, but the act of washing was now combined with the lavatory, all in the privacy of the home. Moreover, modernization required a behavioral change, due directly to the sanitary ware that was used. The combination of the most private and simultaneously public functions within the modern bathroom functionally and compactly was an adjustment for the modern Turkish citizen, perhaps a greater change than to European counterparts. *VitrA*, established in 1942 as part of the *Eczacıbaşı* company, was influential regarding modernity in Turkish bathrooms. The sanitary ware inside the bathroom was also in a process of continuous change. The means by which the lavatory and the bidet were appropriated into the modern Turkish interior, reflecting on behavior, is intriguing, opening up discussions on a design response to a social need still present today. The lavatory and bidet that were often sold as a set between the 1950s and 1970s could not be included fully in daily life, because a small integral faucet attached to the rim of the lavatory bowl that continues to exist in toilets in Turkey, sufficiently covered the function of the bidet. Today, most Turkish bathrooms do not include them, mainly since the function of the bidet was appropriated into the lavatory in 1980 by the *VitrA Eczabaşı* company by integrating this additional water connection to the lavatories sold in Turkey (Eczacıbaşı Group, 2021; VitrA, 2023). Another interesting aspect of the hygienic interior, the traditional *hammam* and how it fits into modern living, deserves attention. The bathrooms thus became spaces that reflected luxury, comfort, and high standards, signifying higher socio-economic status and shaping national and individual identity. Therefore, the aim of this research is to look into the development of modern Turkish bathrooms towards modernity and the role of the competition in this development.

DENOTATIONS OF MODERN HYGIENE

With a focus on modern living and cleanliness as its extension, a transformation of wet allocation spaces took place, leading to the revisiting of the domestic and the public, and the Westernization of the residential bathroom. Moreover, new materials and bathroom equipment were introduced that were easily cleaned compared to the traditional ones. Bathroom equipment competitions led to inventions that combined the habits of the East and the West. The idea of being modern, rational, and healthy was reflected in the early homes of the Republic: the individual house with a garden and the apartment building. The 'cubic' house was for the single family, with closeness to daylight, nature, and healthy life, all messages of the 1930s modernist approach. Cheap, healthy, and standard wet spaces in the modern interior can be discussed within the rapid urbanization context (Bozdoğan, 2001; Cengizkan, 2002)

During this time, the location and use of the bathroom within the interior plan changed extensively, as well as its meaning. The *gusülhane* (a washing space), a common space in the traditional Turkish home, was connected to the bedrooms, while the lavatories were often reachable from the main hallways. The bathroom first moved from outside of the house to the interior, then to an easily accessible position in a way that combined the lavatory and bath fixtures. With the Turkish culture being quite social, with many visits from family and neighbors, bathrooms became spaces of prestige (Geçili, 2019).

The Florya Atatürk mansion is a noteworthy example of siginifant cases, as bathroom spaces owned by Atatürk were made known and exemplary to the whole nation as a vision to follow. The design and selection of materials, equipment, and fittings in this space are thought to be purchased from abroad. Modern bathrooms were always important for Atatürk's residential and official interiors, as exemplified by Dolmabahçe Palace and his train wagon (Tuna Ultav et al., 2015) [FIGURE 01, FIGURE 02, FIGURE 03].

01 Florya Atatürk marine mansion bathroom in one of the modern iconic buildings in Turkey. Architect Seyfi Arkan and Fazıl Aysu, 1935. © DATUMM archive, datumm.org, 2023.

02 The bathroom included an imported scale, which was replicated in modern bathrooms in Turkey. © DATUMM archive, datumm.org, 2023.

03 Atatürk's modern train wagon bathroom, 1920-38. © Hanri Benazus and DATUMM Archives, datumm.org, 2023.

A DESIGN COMPETITION ON HYGIENE

In the early 1940s, pharmacist Dr. Nejat F. Eczacıbaşı, who was producing insulin, realized the cessation of imports such as coffee cups and basic kitchenware and began manufacturing them, leading to the development of the first modern pharmaceutical and first modern ceramic sanitary plant in Kartal, Istanbul (Eczacıbaşı Group, 2021). Due to urbanization and population growth in the 1950s, what began with kitchenware, led to the expansion of the plant in Kartal producing ceramic equipment, sanitary ware, and sanitation infrastructure, as well as other key products for the modern house. Eczacıbaşı began marketing its products under the *VitrA* brand. Realizing the close connection between health, medicine, ceramic sanitary ware, and sports, the company founded the Eczacıbaşı Sports Club in 1966. Although the Turkish population is fairly young and healthy, the missing element in reaching international competition levels was stated to be the lack of infrastructure and opportunities in sports, influencing sanitary progress (Ulueren, 2005).

Furthermore, drawing a holistic framework on modern hygiene and influencing sanitary behavioral change, in 1970, the company built the first modern tissue paper plant in Karamürsel, Yalova, named *İpek Kağıt* tissue paper (Eczacıbaşı Group, 2021). In 1970, the company collaborated with developers *OR-AN* and opened a competition named *OR-AN Eczacıbaşı Health Equipment Competition* to create awareness and collect innovative ideas regarding sanitary ware. Several creative products emerged as a result of this competition. This competition was followed by the opening of the international standard plant in Bozüyük in 1977, producing *Artema* faucets and fittings and exporting them to Germany in 1983. Today, the company continues to operate at the international level, also supporting several research and development projects and sports and cultural events (Eczacıbaşı Group, 2021).

FIRST MODERN BATHROOMS IN TURKEY

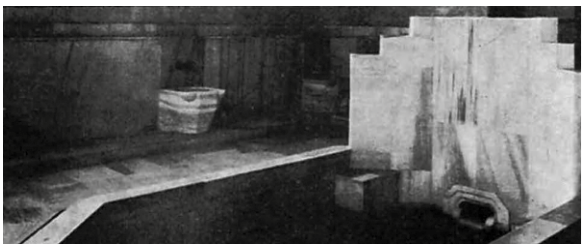
Traditionally, houses did not have a combined space for lavatory and bathing functions: the former was often located outside the house in a courtyard or a garden, and the user crouched over a basin with a hole rather than sitting on a bowl. For the bathing function, Turkish baths, the *hammams*, were being used. Those public spaces not only served for bathing but also for socializing (Aytaç & Öğüt, 2015). The *yunmalık* can be defined as a small unit inside cabinets for ablution or bathing. It may be a zinc or tile-covered washing department in the form of a closet located in traditional Anatolian-Turkish houses, sometimes placed in a corner, next to the fireplace for ready access to hot water (Bektaş, 1996).

Even though water systems were integrated into interiors, for a long time, they were only used for kitchens and *yunmalık* functions in traditional Turkish houses. The reason

behind this is that the type of waste generated was similar, including cleaning products, so these functions were accepted in the interior space. However, lavatory waste was not welcomed inside living interiors. The lavatory function was mostly placed as far as possible from living interiors in order to keep it out of sight, and to prevent disease and contamination. This space was moved to the far corner of the courtyard or garden or to the basement or ground floor, next to the barn. Gürel has highlighted this point as such: "History of modern bathrooms in Turkey is representative of the ambiguity of modernity by giving up what is familiar and traditional: acknowledging the unfamiliar but the new one" (Gürel, 2008).

As a representation of modernization in Turkey, the bathroom plays a significant role, as it affects the daily lifestyle. In the first years of the Turkish Republic, fewer foreign bathrooms were proposed in Turkish homes. Alongside the toilet bowl and bathtub, there were also the alla turca squat toilets. However, in the second half of the 20th century, the alla turca bathrooms became associated with being traditional and underdeveloped (Aytaç & Öğüt, 2015). In the 1950s, sanitary ware became more commonplace with regular advertisements. At the beginning of the 1960s, there were mostly an imported water closet, an alla turca toilet, a faucet for a sink, and a faucet for bathing in Turkish domestic bathroom spaces. The bathing space was not properly defined. The *kurna* defines the bathing space in *hammams* [FIGURE 04], but it was not present in bathrooms (Cengizkan, 2019). During this time, terrazzo tiles were utilized, and ceramic tiles were mostly imported: *Villeroy & Boch* and *HOB* were prevalent brands.

Around the 1960s, bathtubs became quite commonplace in Turkish bathrooms. Cengizkan (2019) argues that even though most people take a shower in a standing position, Turkish people still prefered bathtubs in their bathrooms as an indicator of their wealth, social status, and the level of modernization. Changes in production techniques brought along changes in industrial sanitary ware elements. Besides the size and the layout of the bathroom interiors, there was also a change in the bathroom products. Even though white was the indicator of hygiene, colored sanitary ware began to appear as early as the 1930s. In addition to hygiene, aesthetics and decoration became prominent features in bathroom interiors.



04 Kurna shown on the wall of Yenice Hammam, 1943. In Alâaddin Özaktaş, Sami Arsev, © ARKİTEKT, No: 1943-01-02 (133-134), p. 24.

MODERN BATHROOMS AND SOCIAL BEHAVIORS IN TURKEY: ECZACIBAŞI, A LEADING COMPANY IN TURKEY

Through extensive archival research, including personal archives of the competition entrants, literature, public documents, and advertisements in popular journals, as well as communications with the winners of the *OR-AN Eczacıbaşı Health Equipment Competition*, it was possible to highlight the significance of this interdisciplinary design competition that has shaped modern sanitary ware design, modern bathroom interiors, as well as being an example for several design competitions that followed. Moreover, the interviews with competition entrants gave insight into the thought process behind the designs and emphasized the social factors that shaped the designs.

ARCHIVAL RESEARCH

The *Eczacıbaşı* company originated as a facility producing medicines on a small scale on the one hand, and ,on the other hand, ceramic tableware and decorations in the 1940s. In the years that followed, giving importance to the health sector, the company transformed into a medicine factory in 1952 and into a ceramic factory in 1958, at a much larger scale (Eczacıbaşı, n.d.). In 1966, the ceramic factory was rebranded and registered under the name *VitrA*, and in 1968, the first export of sanitary ware was made to Jordan with trucks filled with straw, as experimental transport material. The advertisements by the *VitrA* and *Eczacıbaşı* company were instrumental in publicizing the bathroom interior that had always been private and hidden.

For the first local ceramic sanitary ware in Turkey, Italian designs were used as the inspiration for the exterior form. In terms of functionality, sample ceramic health products were imported from the German ceramic company *Keramag (Geberit)* and examined. The set included a water closet, a bidet, and a wash basin. It was named the *Akdeniz* (Mediterranean) bathroom set to reference the land of the company's roots. Using Turkish regions and cities as inspiration still continues in *VitrA*. Inspired by international counterparts, the set was unique at the time, providing a complete bathroom instantaneously, becoming the leading product in the market for the next twenty years. *Eczacıbaşı,* with great enthusiasm, joined the Izmir International Fair in 1964, exhibiting their tableware and this first sanitary ware set Akdeniz, and continued to participate every year until the 1980s (Güven & Karakuş, 2016).

OR-AN ECZACIBAŞI HEALTH EQUIPMENT COMPETITION

The *OR-AN Eczacıbaşı Health Equipment Competition,* launched in 1970, is significant in terms of highlighting a vision of modern bathrooms in interiors in Turkey. In a letter written in 2010 to the *Eczacıbaşı* headquarters by the second winning designer, Mehmet Asatekin, conveys a further significance of the competition, stating that this was a first in Turkey's industrial design history and, therefore, plays an important role in the country's industrial design history in general, not only in terms of sanitary facilities (Asatekin, 2021). The number of participants is unknown; however, the winners range from experienced designers to the new generation. While, at one end, there are Selçuk Milar and Sadun Ersin, who represent the experts and experienced generation, the younger generation of artists and designers such as Mehmet Asatekin, Tuncay Çavdar, Erkal Güngören or Önder Küçükerman are well-known educators and practitioners today. After the competition, OR-AN shared the results with the public through the journal *Yapı Endüstrisi Dergisi* (Construction Industry Journal of the *OR-AN* company). Today, there appear to be no other documents, even in the archives of *Eczacıbaşı*. Projects that have received degrees and honorable mentions have not been returned to the owners and have disappeared. Therefore, part of the research involved searching for the participants and their design entries (Mehmet Asatekin personal archive and DATUMM archive, 2023).

The competition was announced in the same journal in 1970. Although it was an industrial publication, the intellectual, theoretical, and design-focused discussions in it were exemplary at a time when there were limited specialized resources. The journal later evolved into the *Yapı* (Construction) journal, which is still active today. The competition was announced as a design competition (*dizayn*) titled "Construction Materials Industry and Ceramics Equipment Design Competition." The jury was composed of well-known artists, designers, and architects Şevki Vanlı (architect), Faruk İşman (ceramics engineer), led by Hakkı İzzet (ceramics artist), director's assistant Doğan Hasol (architect), and the members Nuri İyem (painter), Sadi Diren (ceramics artist), Zühtü Müridoğlu (sculptor), Melike Kurtiç (ceramics artist), Doruk Pamir (architect), and the reporters Barlas Doğu (architect) and Filiz Bilkur (interior architect) (OR-AN Construction Industry Journal, 1970). The interdisciplinary composition of the jury and the competition being open to all designers is indicative of its holistic approach to the design process in terms of being inclusive, interdisciplinary, visionary, and modern. The competition was instrumental in defining sanitary habits and highlighting the challenges of transferring design into the industry and the developments in the Western counterparts. Doruk Pamir expressed that the competition was both an end product and a strong means of communication, communicating how to live with fixed and mobile interior elements (OR-AN Construction Industry Journal, 1970) [FIGURE 05].

Quality, design, and affordability were noted among the features of the popular design competition. Quality was defined as endurance and success in achieving the required form in terms of function and aesthetics. Design was defined in the modernist framework as the synthesis that brings together the best response to the needs defined by the brief, brings freshness and taste to the relationship between human beings and belongings/products, produced with ease, using less material, in harmony with the forms that are characteristic of the culture of the country (OR-AN Construction Industry Journal, 1970).

Well-known architect Şevki Vanlı emphasizes the significance of competitions for *OR-AN* as a company focusing on residential development, therefore considering health devices not as a producer but as an integral part of the home and in defining the home. He states that the significance of these interior spaces comes from the precision of use. The wish to connect these functions to architecture is to search for perfection in health equipment through this competition. İşman states it is critical that bathroom spaces are planned for more than functional needs because the bathroom is a place the user sees the most. These discussions

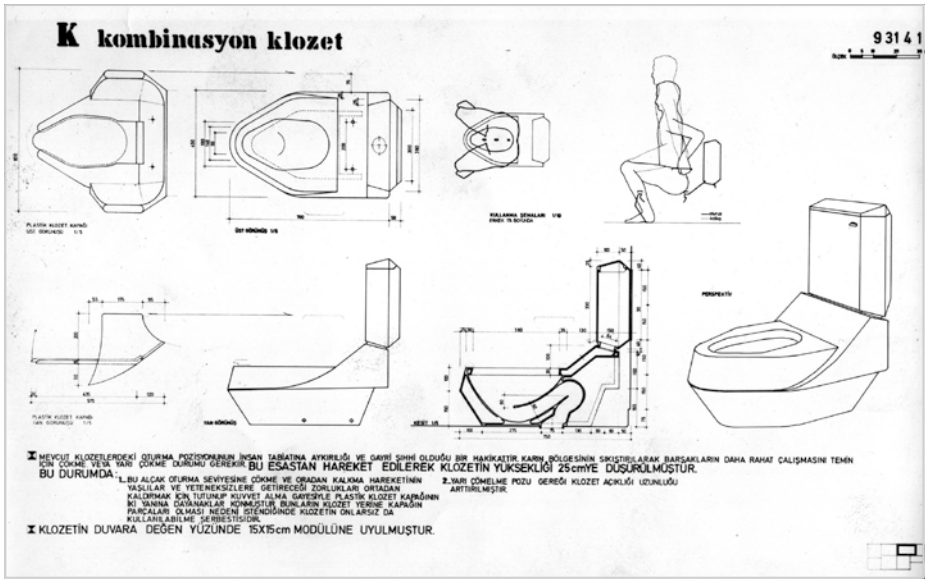
05 The competition announcement featuring an interdisciplinary jury and high prizes (OR-AN Construction Industry Journal, 1970. © DATUMM Archive, datumm.org, 2023.

were widely shared in professional publications after the competition winners were announced. They strengthened the role of the bathroom as a significant actor in the modern interior (OR-AN Construction Industry Journal, 1970).

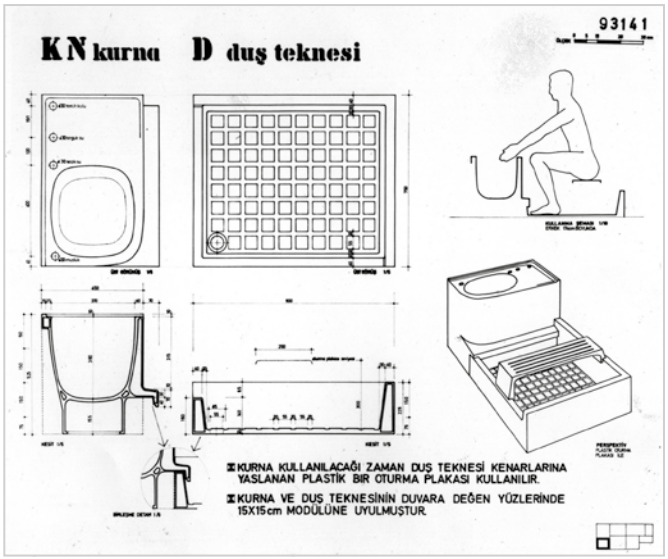
COMPETITION WINNERS AND DISCUSSION

The competition launched by *VitrA Eczacıbaşı* with the partnership of *OR-AN Residences* has been labeled one of the first interdisciplinary design competitions in Turkey, held in 1970. The aim of the competition was to encourage the form and market research in the field of sanitary ware. During the launch of the competition, it was stated that in order to claim a position in foreign markets, producers also needed to conduct business on an international scale. The vision to adopt modern products and standardization brought about a rivalry between the wish for international market share and domestic needs and habits. Obviously, the needs of a North American and a Japanese person could differ significantly (Or-AN Construction-Industry Journal, 1970).

The interdisciplinary competition publicized modern bathrooms and evoked discussions on what it means to own and take comfort in a modern bathroom as a user and client, but also as a modern citizen. Asatekin (1996) states that the global modernization process had brought several changes to the Turkish bathroom. However, several discrepancies continued to exist. For example, the *kurna* did not fit in the modern bathroom, and the bathtub was against Turkish tradition in the sense that the water was still. Thus, the path to reaching the correctly designed, ideal bathroom was through examining user studies in terms of ergonomics, function, and aesthetics, and in terms of adapting from traditional needs to the building of a nation and the role of the bathroom in this process. The designs that resulted from this competition shaped others that followed. The combination water closet project [FIGURE 06], kurna, and shower tray [FIGURE 07], by the first prize winner, industrial designer Mehmet Asatekin, reflected quality design solutions to adjust traditional hygiene habits.



06 Combination water closet by Mehmet Asatekin, 1970,
© Asatekin and DATUMM Archives, datumm.org, 2023.



07 Kurna and shower tray by Mehmet Asatekin, 1970.
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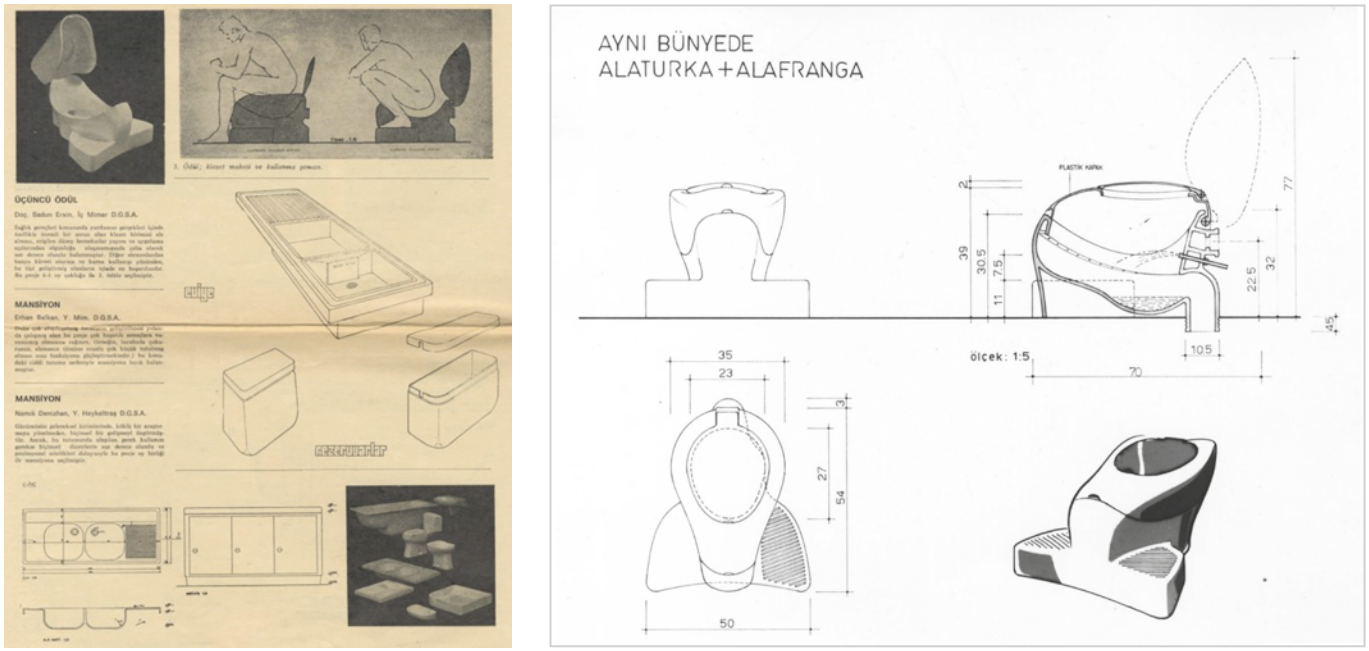
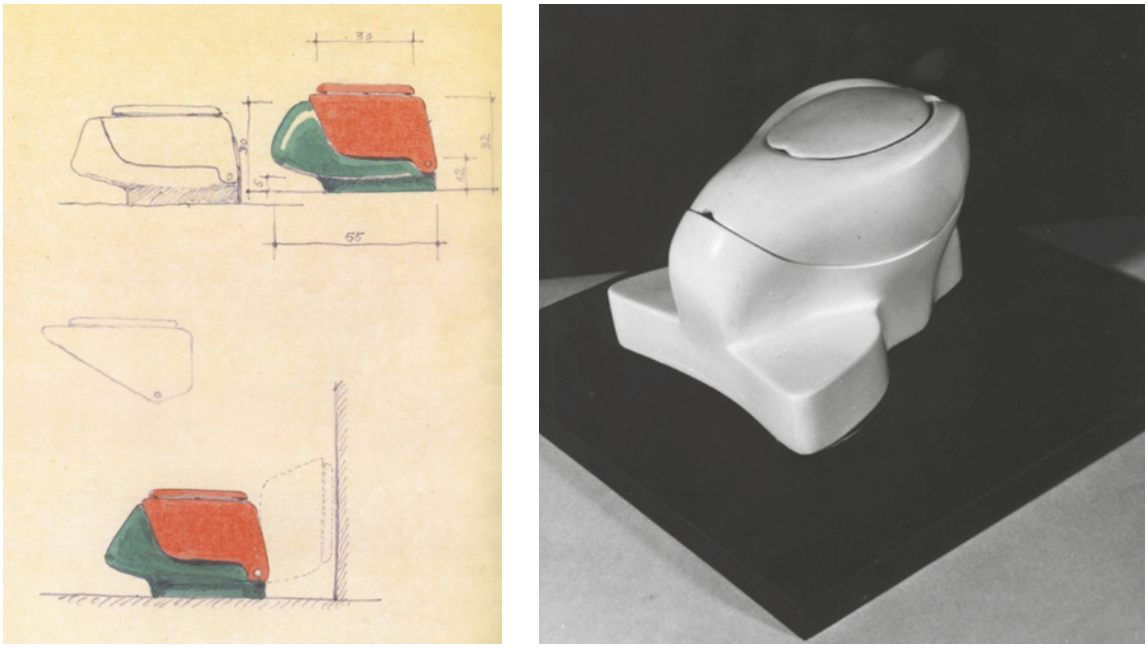


08 Alla turca and alla franga functions combined in the same lavatory by Sadun Ersin, 1970, © DATUMM Archive, datumm.org, 2023.



09 Early sketch (left) and prototype of the alla turca and alla franga functions combined in the same water closet by Sadun Ersin (right), 1970, DATUMM Archive, datumm.org, 2023.

The second prize winner, interior architect Sadun Ersin designed a functional, sustainable, and elegant solution for a lavatory [FIGURE 08], proposing its users practical designs that can be used according to their needs (Ersin, 2017; Hasirci et al., 2022) [FIGURE 09].

CONCLUSIONS

The significance of an intellectual, comprehensive, and inclusive approach that was highlighted in modernity, exemplified through the case of the *OR-AN Eczacıbaşı Health Equipment Competition* and explained in this paper, requires reflection in the fast-paced current environment, as it will help define the closely-knit relationship between how interiors are shaped and how interiors shape their users in return.

Wet interior spaces or bathrooms appear to be a clear reflection of modernity, and the sanitary equipment that helps shape the space provides interpretations of habits and lifestyles. The traditional Turkish bathroom has changed immensely in the passage to modernity, not only in terms of equipment but also the location of the bathroom within the house and other interior design criteria such as color, texture, and form. Visionary competitions like the one described in this paper guided the masses towards a modern lifestyle, suggesting changes to the most common of habits of using a bathroom. The framing of the competition within an almost philosophical analysis was exemplary, and the responses showed Avant-garde design solutions that were user-centered with both behavioral and ecological concerns. An intelligent questioning of daily habits is exactly what we need today for a more respectful approach to the past as well as providing sustainable steps for the future.

Hygiene continues to be a significant and current issue. There is a potential in discussing cleanliness related to both the actual and the collective sense. The issue of hygiene

necessitates interior design to focus on daily life. The modern language of daily life is one that creates new meanings for each community, each nation (Lefebvre, 2014), as in the case of Turkey. The issue of hygiene has always been a reflection of life in modern Turkey (Aslanoğlu, 2003). Hygienic spaces have transformed the understanding of cleanliness and what it represents the every citizen in the modern era. There has always been great power in interior design shaping ideals and influencing change at a large scale. Interiors are the first to be affected by change and hygienic spaces perhaps even more so. Sanitary ware has traditionally not been worthwhile to protect. What distinguishes the recent COVID-19 pandemic from past disasters is that it has proven to be a significant health issue but more so a political issue. Especially for Turkey, other forms of crises like earthquakes have brought similar problems to the fore, so hygiene is still an ongoing issue. Moreover, around the world, the current wars and new policies have brought back diseases that had been eradicated, threatening communities not least because of the lack of hygiene. The components of modern interiors, especially bathrooms, are still seen as easily replaceable, and it is important to have and spread the wisdom to approach inevitable changes in modern interiors with the utmost knowledge-based care. Once again, it is the power of interiors that will shape how we will live and who we are in the future.

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MIGRATING MODERNIST INTERIORS

Reception and Adaptation of Finnish Prefabricated Wooden Houses in Silesia, Poland, in the Postwar decades

Mia Åkerfelt, Anna Wilczynska, Tzafrir Fainholtz and Martti Veldi

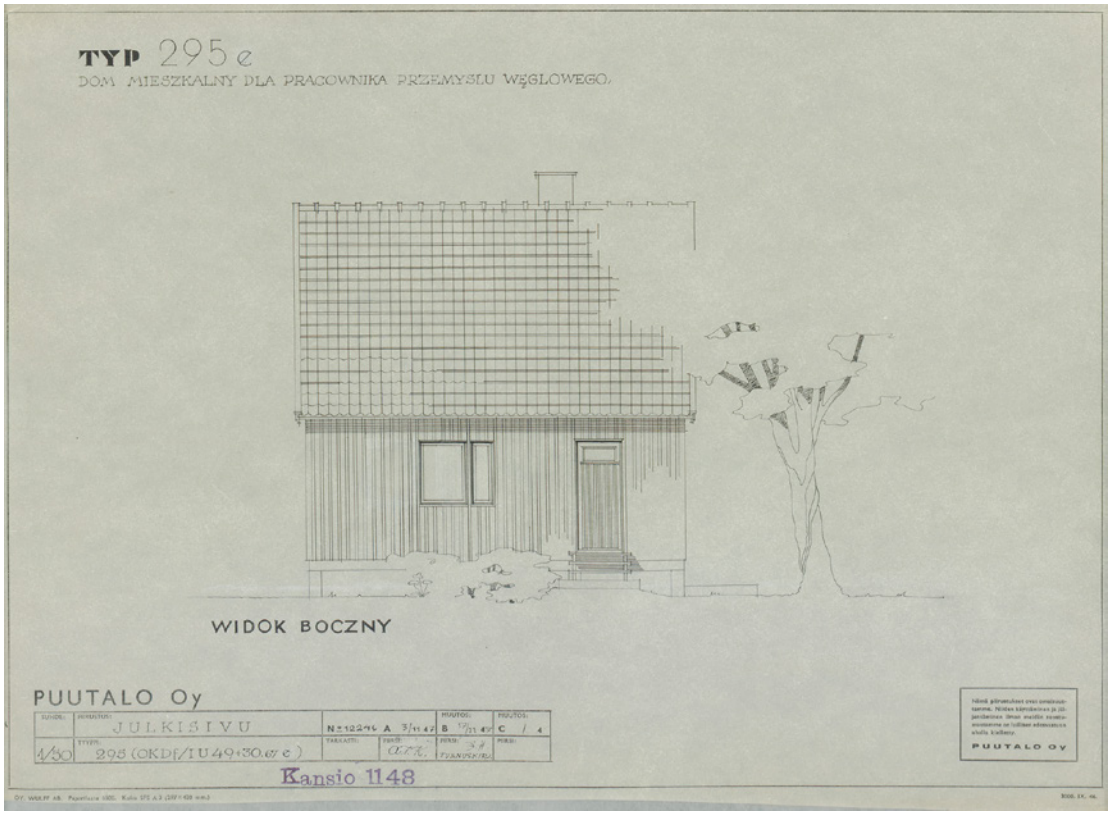
ABSTRACT: After World War II, Finland and Poland needed swift housing reconstruction. In Finland, the solution was prefabricated, wooden detached houses, which soon were exported globally. In 1947-48, Poland imported around 4,000 Finnish houses to the mining areas in Silesia. The architecture was based on domestic Finnish models developed from modernist housing ideals. The division of the interiors focused on rational usage of space, labor, and hygiene. Today, most of the buildings are preserved, and it is possible to track the adaptations of the architecture from foreign temporary structures to local homes and heritage to provide data for developing future reconstruction architecture.

This article analyzes how Finnish modernist ideals on home and housing were circulated internationally by exporting prefabricated wooden housing to reconstruction areas in Upper Silesia. The main questions relate to how the Finnish ideology on modernist housing and interior planning was adapted to the local culture of home and housing in Silesia and what can be learned from the reception and adaption of the interiors when designing housing for reconstruction after crises today. The article is based on archival material from Finland and Poland, such as architectural drawings, maps, and documentation on trade and export. The main methodologies are architectural and design analysis combined with historiographic reading of archival data and literature. The article shows how architecture with interiors planned for Finnish domestic use became integrated into the Silesian home culture, transforming temporary housing into permanent homes.

KEYWORDS: Prefabrication, reconstruction, temporary housing, modern interiors, Finland, Poland

INTRODUCTION: After World War II, Finland and Poland faced large-scale housing reconstruction. In Finland, the solution was type-planned and prefabricated, wooden detached houses, sheltering Karelian refugees and war veterans. The Finnish prefabricated housing industry started in the late 19th century and grew during the interwar decades (Keinänen, 2010; Smeds, 1996). Type-planned housing and prefabrication were developed in dialog with modernist ideas, as described by Leiviskä (2009) and Saarikangas (1993). World War II catalyzed the prefabrication industry, in which the *Puutalo oy* company[1] (hereafter: *Puutalo*) became a leading actor. After the two wars between Finland and the Soviet Union in 1939-1940 and 1941-1944, Finland paid substantial war reparations to the Soviet Union, mainly in products, and between 1944 and 1948, *Puutalo* contributed with prefabricated houses. Additionally, together with other companies, such as *Suomen puurakenteiden myyntiyhdistys* (The Finnish sales organization for wooden structures) and *Pelkkatalojen myyntiyhdistys* (The Pelkkatalo sales organization), they were engaged in substantial export (Puutalo Oy., 1951).

Poland became a part of the Soviet sphere of interest after World War II and faced an acute need for reconstruction of both housing and industry. In 1945, when the reconstruction of Poland's capital Warsaw began, Finnish houses were distributed by the Soviet Union as a gift. Large-scale import began in 1947 when Poland imported 4000 Finnish houses for the mining areas in Upper Silesia. The Soviet communist party considered the industry to be of utmost importance for the national economy and significant in constructing a communist identity. The government aimed to rebuild the area while strengthening Polish national identity in a region that historically belonged to different nations. The houses were planned in



01 The front elevation of the Puutalo type 295 which was sent to Katowice, Poland, in 1948. Drawing signed A.F.K and E.H, 17.11.1947. © Suomen Elinkeinoelämän Keskusarkisto ELKA, Scanned by ELKA 2024.

collaboration between *Puutalo* architects and Polish planners [FIGURE 01]. However, they differed clearly from what the local population was used to. As a result, they were adapted to local needs over time. Today, most of these houses are preserved as homes, having become an integrated part of the local urban landscape and an example of sustainable reconstruction architecture more than 70 years later.

This article analyzes how Finnish modernist ideals on home and housing were circulated internationally by exporting prefabricated wooden housing to reconstruction areas in Upper Silesia. The main questions are how the Finnish ideology on modernist housing and interior design was adapted to the local culture of home and housing in Silesia and what can be learned from the reception and adaptation of the interiors in reconstruction after crises today. The article is produced as part of the HoPE-project (*Housing, Prefabrication and Export: The Architecture of Reconstruction in Times of Crisis 2022-2026*) funded by the Finnish Kone Foundation and based at Åbo Akademi University. The project examines Finnish houses exported to Poland and Israel in the post-war decades. The primary data is archival material from Finland and Poland, such as architectural drawings, maps, and documentation on trade and export. Archives visited included in Finland: Central Archives for Finnish Business Records – ELKA, National Library of Finland digital archives and Finna.fi; and in Poland: Polish Press Agency – Polska Agencja Prasowa PAP; Baltic Digital Library - Bałtycka Biblioteka Cyfrowa; Silesian Digital Library - Śląska Biblioteka Cyfrowa; The Central Archives of Modern Records - Archiwum Akt Nowych, State Archives in Katowice. The methodologies used in the study are architectural and design analysis combined with historiographic reading of archival data and contemporary literature. The results are explored in terms of reconstruction, identity, and ideology in modernist housing ideals.

Previous research on Finnish houses in Poland was focused on the Jazdów neighborhood in Warsaw. Here, local projects examined the area from different perspectives: historical, environmental, architectural, social, and cultural (Koźluk et al., 2019). The same area is generally mentioned in Finnish literature on housing export (Vesikansa et al., 2021). The history of the Finnish houses in Silesia has mainly been examined within projects on architectural documentation of built environments (Chmielewska, 2009) or in research on local housing history (Nakonieczny, 2014). Both areas have been examined within the HoPE-project (Åkerfelt et al., 2023). This article uses data from a pilot study in Katowice, Poland, in June 2023, where the architecture, building types, and prevalence of changes to the buildings in two areas of Finnish houses were documented on-site.

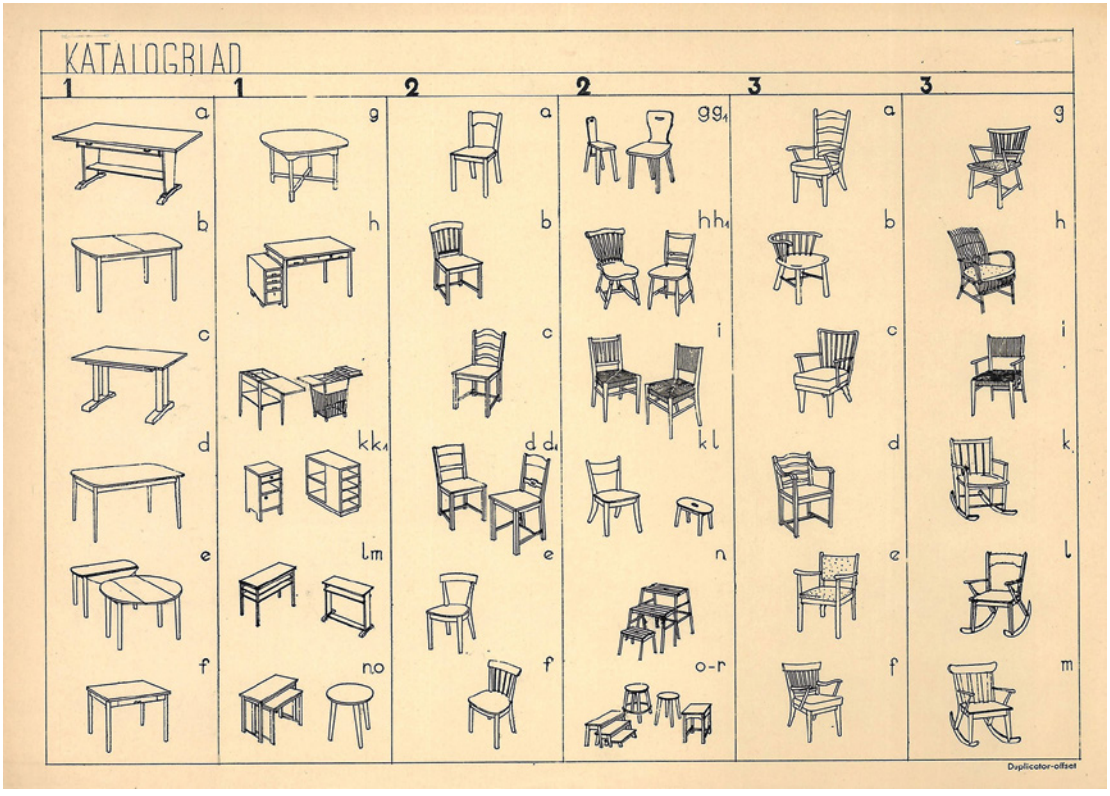
Within housing research, 'temporary housing` and the meaning of 'home' have gained interest due to mass migration, pandemics, climate change, and natural disasters (Félix et al., 2013; Stocker et al., 2021). Finding shelters is prioritized in the aftermath of a disaster (Félix et al., 2013). But when the reconstruction phase is prolonged (Johnson, 2007; Perrucci et al., 2016), it is crucial for health and well-being to create conditions that enable an experience of the lost home and daily routines since losing a home often equals losing privacy and dignity and can negatively affect both physical and mental health

(Barakat et al., 2003, Fussell & Lowe, 2014; Murakami et al., 2017). As Stocker et al. (2021) after Johnson (2010) suggested, temporary housing is the best solution to bridge the gap between crisis and reconstruction since it can provide an organized daily life as well as bring hope for the future. Research generally mentions two types of housing: ready-made and prefabricated (Perrucci et al., 2016). They are discussed both from the perspective of quality and social and environmental sustainability. The latter discussion focuses on practical problems with standardized designs, which do not sustain local climate conditions or fit the local cultural landscape or user's needs (Félix et al. 2013). Research shows that, in reality, temporary housing is often turned into permanent dwellings, causing challenges for the inhabitants due to impractical design. Therefore, inhabitants change their homes according to their needs and preferences, and adaptability becomes an important factor in designing qualitative reconstruction architecture (Wagemann, 2017). However, interiors and their functionality are rarely mentioned in the literature.

FINNISH MODERNIST HOUSING IDEOLOGY

In Finland, the interest in housing grew after the country gained independence in 1917. Due to the bourgeois governments' fear of socialism, one main idea was that workers should own a detached home instead of renting a room in a tenement since ownership was thought to make them less inclined towards socialism. As previously described by Åkerfelt (2019), type-planning and prefabrication became the solution for teaching the new homeowners how to build and furnish the small, modest houses that were to reflect their social status in society. Furthermore, Finland saw a housing crisis during the 1920s and 1930s, where both urban and rural housing was inadequate and often lacked modern comforts (Juntto, 1990; Saarikangas, 1993). The interwar housing reform movement based on functionalist ideals combined with national, romanticist aesthetics was generally advocated for by architects or associations as well as government bodies in the Nordic countries as a softer take on Modernism. In the Scandinavian modernist manifesto *acceptera*, some of the core values to be expressed in architecture were "work, rest and unity" (Asplund et al., 1931). The ideas on ideal interiors were circulated to the public through exhibitions and articles. The ultimate home for the working or middle classes was a simple wooden house with no unnecessary ornamentation, surrounded by a utility garden. The interiors were designed to solve problems through rational housekeeping and proper care of health and hygiene while strengthening the identity of both the nuclear family and the nation (Saarikangas, 1993).

The aspect of 'work' was represented by rational kitchens with standardized cabinetry, designed according to American, German, and Swedish ideas on domestic work hygiene. The simple, modernist furniture should be either homemade using standardized drawings or purchased from select retailers [FIGURE 02]. Textiles should be kept to a minimum for easy cleaning, made by the mother, or be inherited handicrafts. Plumbing and facilities for hygiene were important to upkeep the general health of



02 A page from a catalog published by Bostadsföreningen för Svenska Finland (The housing association for the Swedish-speaking regions in Finland) in the early 1940s, including type-designs for furniture for modern homes. © Museum of Finnish Architecture, collection Eva Kuhlefelt, scanned drawings, date unknown.

03 Re-created interior in the permanent exhibition U nos w doma na Nikiszu (Our home in Nikiszowiec) showing the traditional kitchen furnishings in a familok apartment. © Museum of Katowice History, 2023.

the population and make chores easier (Åkerfelt, 2019). The idea of physical rest was connected to bodily and sexual hygiene through separate bedrooms for parents and children of different sexes. Furthermore, no beds in the kitchen were an absolute requirement (Saarikangas 1993). Rest also included the idea of space for mental rest and reflection. The house should not be too small since the negative effects of cramped living were seen as harmful to the population's mental health (Wickström, 1940). Unity was promoted through the large kitchen, which had room for the family to gather for meals and chores. Here, the mother should teach the children about being proper members of the nation. Therefore, she should not be closed off in a separate kitchen but integrated into family life (Åkerfelt 2019). The garden was an extension of the home, a place for practicing healthy living and the cultivation of character through work and food production. These ideologies were the foundation for creating standardized housing in Finland in the post-war years, resulting in the type of housing called *rintamamiestalo* (war veterans' house), a one-and-a-half storied square modernist wooden detached house. This type later became the core of the large-scale prefabrication and export (Saarikangas, 1993).

THE SILESIAN MINERS' HOME IN THE EARLY 20TH CENTURY

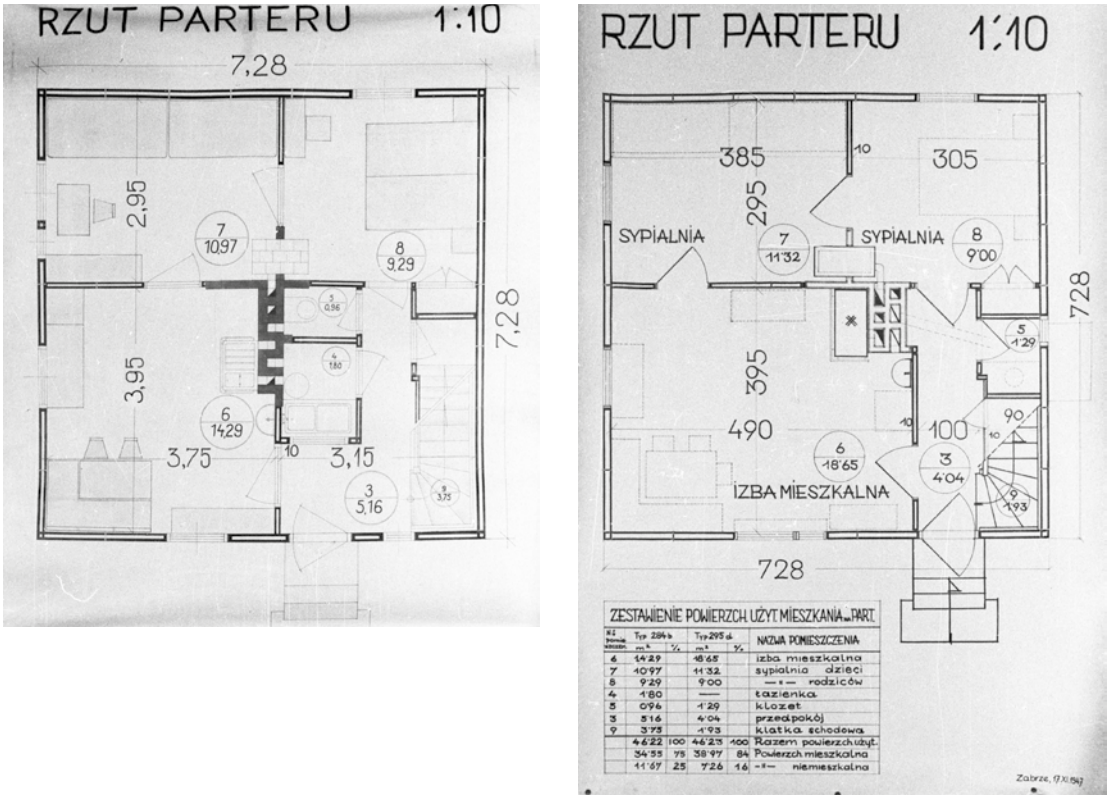
In the early 20th century, common miners housing in Silesia were *familoks*—multi-storied red-brick tenement buildings. The *familoks* formed closed blocks around a central garden in large housing areas with access to stores, churches, and schools. The apartments generally had one room and a small kitchen, which was the center of daily life. The room was used for sleeping and entertaining guests. The apartments were around 35 m^2, and especially in summer, the common spaces inside the perimeter of the housing blocks became a second living room (Piegza, 2021). The central pieces of furnishing were the *byfyj*, a large sideboard placed in the kitchen and a large table with chairs—all painted white [FIGURE 03].

After the third Silesian uprising in 1921, the six counties of Upper Silesia, which were joined with Poland as voivodeship with substantial autonomy, strove to create a unifying identity. Here, architecture played an important role. In the 1920s, the architectural characteristics mostly adhered to a mix of modernist forms with classicist details. Soon, this style became more inclined towards functionalism as a blank canvas for creating a new identity (Cymer, 2019). In the 1930s, Poland, like many other European countries, experienced a national housing crisis. Therefore, the government decided to establish the Association of Workers Settlements in 1934. A set of rules was established to make the housing areas comfortable. For instance, the dwelling could not be further than 3 km from the inhabitants' workplace. Furthermore, they should be planned according to modernist ideals–with sufficient light, air, and access to greenery (Jastrzębska, 2003). The discourse on interiors and housing had a strong nationalist connotation, aiming to create new homes reflecting the Polish identity, breaking with historicism and its associations with German rule, replacing it with Modernism in both architecture and interior design (Korduba, 2020, pp. 347-348). In Katowice, the *House Interior Design Exhibition* in 1928 promoted Polish tastes in furniture. Stylistically, this approach sought inspiration from folk crafts, producing furniture and textiles with traditional décor in local materials. However, towards the late 1930s, modernist German furniture became a source of inspiration for Polish architects and designers, focusing more on their transmitted modernity rather than nationality (Korduba, 2020, pp. 350-358).

TRANSFORMING MODERNIST IDEALS

After World War II, the Soviet Union (USSR) circulated Finnish prefabricated wooden houses obtained as war reparations; the first ones sent to Poland went to Warsaw in 1945. This housing type was seen as a cheap and functional solution to the overwhelming lack of housing, so in 1947-1948, around 4000 additional Finnish houses were imported in exchange for coal and placed in areas around Katowice in Upper Silesia, as well as a unit of 85 houses in Gdansk. These houses formed communities for mining workers and their families. The lightweight houses functioned well in the mining areas where the ground was unstable due to mining shafts, and the authorities requested houses that could be moved if needed.

The *Puutalo* types 284 and 295 were sent to Katowice in 1947 and 1948 [FIGURE 04]. Both were prefabricated wooden houses with one main floor and an attic; many also constructed with a basement. The exterior had a simplistic wainscoting and no ornamentation. The division of rooms followed the Finnish ideals: a mid-size kitchen, two rooms, and an entrance with an adjacent bathroom.



04 Floor plans of the main floor in housing types 284 (left) and 295 (right). The drawings often had suggestions for how to place the furniture efficiently. © Polish press archives, picture archives, pictures pap_19480201_00Q and pap_19480201_000, unknown, 1948.

The attic had two bedrooms and two storage rooms. According to a report on the Activities of the Polish Coal Industry, these types should be comfortable for a family of 4-6 people (Sprawozdanie z działalności Polskiego Przemysłu Węglowego, 1947). Type 284 could be provided with running water, an indoor bathroom, and a toilet. However, plumbing was not always possible. If not, a shed in the garden was planned with an outdoor toilet and space for keeping animals and tools. For the shipments in 1948, type 295 was developed to include an indoor dry toilet (Centralny Urząd Planowania, 1948).

When the housing areas were completed, the inhabitants saw the architecture as something unconventional, especially since it was made of wood [FIGURE 05]. Since the 19th century, stone houses were most common in Silesia, and wooden houses were generally associated with poverty. To mitigate these opinions, the authorities advocated for the quality of the houses. The *Biuro Budowlane Przemysłu Węglowego (BBPW)* (Construction Office of the Coal Industry) report from 1947 stressed that the public should regularly be informed about how the construction of the housing areas was proceeding (Centralny Urząd Planowania, 1948, p. 27). In early documents, skepticism of wooden houses was raised, referring to the Polish saying "Domy drewniane – pluskwy murowane" ("One can be sure there are bugs in a wooden house"). This needed to be contradicted, which is why the document's author stated that the reason for bug-infested wooden houses could be found in sloppy housewives managing them [sic!], not in the construction material itself. In addition, the reader was also reminded that bugs were a common problem in urban housing (Centralny Zarząd Przemysłu Węglowego Katowice, 1947).

05 The uniformity of the housing areas was striking in their modernity. © Unknown. Polish press archives, picture archives, picture pap_19480201_002.1948.

06 At first, the houses included pre-installed kitchen cabinets. Here, a woman shows how she uses the cabinet instead of the byfyj. © Polish press archives, picture archives, picture pap_19480201_010, unknown, 1948.

07 The kitchen on the left in one of the exhibition houses in Katowice, 1948, shows two chairs almost identical to the Finnish Asko company's chair nr 42. The bedroom on the right shows a sumptuous divan-type bed and decorative but light wooden furniture. The wall tapestries connect to local crafts while bringing warmth to the interior. © Polish press archives, picture archives, picture pap_19480201_01L, 1948 andpap_19480201_01C, unknown, 1948.

Besides the skepticism towards wood, another problem was that the interiors did not accommodate furnishings that the workers owned. The kitchen had pre-installed cabinetry and no room for the traditional large sideboard: *byfyj* [FIGURE 03, FIGURE 06]. However, the authorities saw this as a positive matter. In their directions for furnishing the houses, they stated that there was no place for "large cupboards or wardrobes, round tables, or excessively large beds" which were the typical furniture of a Silesian miner family (Centralny Zarząd Przemysłu Węglowego Katowice, 1947). To solve the problem, the BBPW decided to pay for furnishings imported from Finland. However, they quickly realized that this was too expensive. Together with the *Towarzystwo Reformy Mieszkaniowej* (Housing Reformation Association), the authorities created an exposition of six fully furnished houses in the Bogucice neighborhood in Katowice to show how to furnish the homes with Polish furniture, following the spirit of the Finnish design (Centralny Urząd Planowania, 1948). The ideas for furnishings could also be seen in some of the drawings, but it is not known if it was the Finnish or Polish architects who developed the details [FIGURE 04].

The exhibition was documented in photographs, showing the intended standard of living. The photographs show sparsely decorated but quite comfortable interiors with light wooden furniture and select textiles. The kitchen had wall-mounted cabinetry, which was promoted in Finnish interior design education. The table was small, and the chairs were almost identical to one of the Finnish bestseller chairs of *Asko* company at the time [FIGURE 07]. In 1948, the Ministry of Reconstruction ordered a set of bare minimum furniture for all 1000 housing units already constructed. The pieces were delivered by *Centrala Zaopatrzenia Przemysłu Węglowego* (Supply unit of the coal industry). For the living room, every unit received one extendable table, chest benches, and two Thonet-type chairs. For the parents' bedroom, they received two 80 cm x 192 cm metal beds and, for the other room, one bed of the same type and two chairs (Centralny Zarząd Przemysłu Węglowego Katowice, 1948). Shortly after, the need to cut costs led to replacing the orders to Puutalo oy for the kitchen cabinetry with Polish versions. In 1948, the kitchen furnishings were discontinued altogether.

When the workers moved in, it was seen as an important political event, and local news covered the inauguration ceremonies and wrote positive reports of life in the Finnish houses (Dziennik Bałtycki, 1948). Since the funding for furniture ended, the inhabitants had to furnish the houses themselves. The houses gradually adapted to the local needs and culture through additions or changes.

08 Houses in Katowice that feature some of the most common changes, such as stone cladding and built-in porches. © Tzafrir Fainholtz, 2023.

According to a pilot study in the HoPE-project, conducted on-site in Silesia in June 2023, the most common exterior change was adding stone cladding to the outer walls to make the house look like it was made from stone. Another common change was adding a built-in porch since both types, 284 and 295, had a small entry with insufficient room for storing heavily dusty work gear. In the interiors, the main changes were related to plumbing when indoor bathrooms were installed. Today, most of the houses in the Katowice area are still in use in their primary function—as homes. Popular commentary on the houses on social media, as well as free-form interviews with residents, show that the houses became popular dwellings and have become sought-after objects on the housing market. The general opinion is that they are comfortably designed, warm, and easy to adapt when needed [FIGURE 08].

CONCLUSIONS

The history of the Finnish houses holds a wide range of useful information for planning sustainable reconstruction architecture today. Planning and involvement from national and local governments contributed to coordinating the (re)construction of the area. The organizations had a clear idea of what they wanted to achieve on a practical note, following modern ideas on functional workers' housing. The urban planning aimed at supporting these ideas through facilitating infrastructure and implementing ideas on workers' residential areas prevalent from the prewar decades; however, it was not always successful due to funding issues or planning decisions. Building types 284 and 295 were planned during several meetings between Finnish and Polish architects to make them work for both the producer and the local culture. It can be argued that the houses were not fully adapted to the local needs, not from neglect but from ideological reasons. There was a clear understanding from the officials' side that this was not what the local population was used to. Therefore, they needed to educate the miners on how to use the houses through exhibitions and propaganda in local media.

Ideologically, the Polish government intended to use the modern and progressive houses to underline the political significance of the mining industry while simultaneously cutting ties to the German heritage of the area. By giving the miners access to modern housing, they were thought to quickly earn back the value of their investment. The houses were seen as the ideal prerequisites for efficient work in an industry that Poland depended on for the nation's reconstruction. The interiors of the houses, as well as their exteriors, gardens, and neighborhoods, were designed to keep the miners healthy and loyal to their workplaces. By planning houses in which the 'bourgeois' furniture based on late-19th-century German ideals could not fit, the inhabitants were forced to change their dwelling culture towards the ideals of work, rest, and unity as embodied by the Finnish houses. The *byfyj* and the decorative furniture, which were the pride of the Silesian housewife, had to be replaced by standardized kitchen cabinets and light wooden furniture. These furnishings were branded 'Finnish' to connotate something qualitative and more neutral than German Modernism. It was neglected, however, that Finnish Modernism was to some extent built on circulating German ideas similar to those promoted by the Bauhaus Movement or in the large housing exhibitions during the interwar decades. This was most likely a calculated risk taken by the government, which had to curb the public's skepticism by venturing into a large-scale and costly project to provide suitable furniture for the inhabitants. This shows that both the local ideas of changing the housing ideology and the design of the type of buildings sent to reconstruction areas should be critically

considered. As pointed out by Fussell & Lowe (2014) and Murakami et al. (2017): If the housing does not function for the inhabitants over a long-term perspective, it can lead to health issues and the abandonment of the buildings, which does not contribute to sustainability.

After the centralized funding ended, the adaptability of the houses became an important asset despite not being initially discussed during the planning process. This observation follows the conclusions by Wagemann (2017) and can be understood as a central trait when planning contemporary crisis housing. The initial idea was to produce lightweight and movable houses. Since the floor plans were already divided in preparation for modern sanitary facilities, the inhabitants could easily modernize them when funding permitted. They could then be furnished according to contemporary ideals, and when the families grew, another room could be added. The basic structure was also easy to replicate, and since the need for houses was larger than the budget for importing them, Polish factories started to produce houses of a 'Finnish type' similar to the original houses and placed them next to the original settlements. The replicability of the housing is also an aspect to consider in today's crisis housing. If the types are flexible and easily replicable, local production can continue according to the same standards after the initial reconstruction phase. The same goes for furnishings, which in Silesia were based on the Finnish drawings but produced by local industries. However, the ideological wish to shape the Silesians' dwelling habits led to problems when the new housing could not fit people's existing furniture. This aspect of planning for the existing local dwelling traditions would also be relevant to incorporate further in today's crisis housing. In the end, the possibility for the inhabitants to start with a basic shelter, which allows for additions, modernization, and the chance to make the foreign structure into a home, was, in the Silesian case, a central aspect that contributed to the houses becoming a valued part of the local culture.

ACKNOWLEDGMENTS

The article is based on results from the *HoPE - Housing, Prefabrication and Export: The Architecture of Reconstruction in Times of Crisis*-project, funded by the Finnish Kone foundation, based at *Åbo* Akademi University, Finland. The project examines the role of prefabricated housing architecture in the aftermath of crises, learning from the experiences of the Finnish export of prefabricated wooden houses to Poland and Israel between 1940 and 1980.

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ENDNOTES

1 The Finnish companies often had versions of their names in several languages, such as Finnish and Swedish for the domestic market, as well as English or other local languages for international trade. However, the records from Poland and Israel show that the international name versions were hardly ever used in communication with customers abroad. For traceability of the research data, we use the Finnish name as the companies themselves did. Where no original English translations were available, the names have been translated by the authors.

BODY AND DISTANCE

Learning Connectedness and Belonging from Modern Movement – Case Study New Belgrade

Milena Kordić, Ana Zorić, Dejan Todorović and Rade Mrlješ

ABSTRACT: The boundaries between the private, shared, and public spheres are challenged in completely new ways in times of pandemics, and we need new strategies to redefine them. During pandemics, prevailing requests for physical distancing in the urban space eliminated the programs from everyday lives that all have included social interaction, exchange, and connectedness. So, the request for physical distance caused actual social distance, which further brought new problems of solitude and isolation to the individual in the urban environment. How can architecture and design help to provide physical distance while maintaining social closeness, empathy, and solidarity in cities?

Modern Movement heritage, especially in the countries that were under socialist political regimes, teaches us that shared spaces, collective spaces as part of public spaces, are places in which community is being formed and strengthened, where new forms of affiliation and belonging arise. The socialist paradigm emphasizes the importance of open public spaces within the residential zone as places for maintaining physical activity and health, as well as social interaction. By examining the modernist development of New Belgrade through a comparative analysis of two case studies focusing on the same area—specifically, the blocks known as Blok 22—we can reinvigorate the concept of the connection between the interior and shared spaces.

The specific values of open spaces within the residential modernist block have proven to be particularly important during times of crisis, such as the COVID-19 pandemic, especially regarding the degree of connectedness or separation between private and public spaces. During the pandemic, a student workshop was organized, resulting in projects that offered new architectural scenarios and models for using shared spaces in a residential block. These models allowed for the preservation of physical distance among individuals while enabling social interactions and even the emergence of new programs as an extension of housing. The workshop highlighted the importance of this concept not only during crises but also in contemporary living conditions in large cities, which struggle with issues of alienation and loneliness.

KEYWORDS: Times of pandemic, shared space, solitude, solidarity, social connectedness, modern interiors

INTRODUCTION: The architecture of Yugoslav Modernism emerged and evolved during a period of economic prosperity following the crisis caused by World War II and the crises resulting from Yugoslavia's expulsion from the Informbiro in 1948. The years after World War II marked paradigmatic changes in Yugoslav society, accompanied by changes in both architecture and urban development, effecting changes in everyday life and its framework, the modern interior (Mrlješ, 2022).

The period from 1948 to 1950 is recognized chronologically as a turning point in social development and is characterized by the transformation of the country from agrarian and rural to industrial and urban. In line with this, the role of the architect was established as a socially responsible task. The profession was consolidated in state institutions, urban planning institutes, and ministries. During this period, generations of architects operated and matured, contributing to the development of the so-called Belgrade School of Modern Architecture (Kulić, 2009).

To understand the modernistic urban development and the transformation of the dwelling conditions of former Yugoslav cities, especially Belgrade in the 20th century, it is essential to comprehend the significance of its specific geostrategic and geopolitical position between the East and the West, whose influence has been decisive on all levels from urban and architectural development to the

modern interiors design. The political and cultural influences of the East and the West, alternating throughout the history of former territories of Yugoslavia until the end of the 20th century, are fundamental elements of its modern identity. This identity is significantly expressed in the constant struggle between Traditionalism and Modernism, Conservatism and Progressivism. Within this dialectical range, a heterogeneous structure of former Yugoslav cities developed and emerged (Mrlješ, 2022, p. 34).

The first Congress of Yugoslav Architects, held in Dubrovnik from November 23 to 25, 1950, represents a pivotal moment in rethinking architecture and shifting the focus of interest towards Western architectural models and higher construction standards that affected everyday life and modern interior design.

CONCEPT OF NEW BELGRADE DEVELOPMENT

After the liberation of the country, the 1950 General Urban Plan of Belgrade returned to the idea of expanding Belgrade across the Sava River. The regulation of the swampy soil of the Sava river bank was the first major challenge for Yugoslav architects and the then-country government headed by Josip Broz Tito, who saw the New Belgrade terrain, which had no inherited urban layers, as an ideal space for the formation of a new state and administrative center of Belgrade.

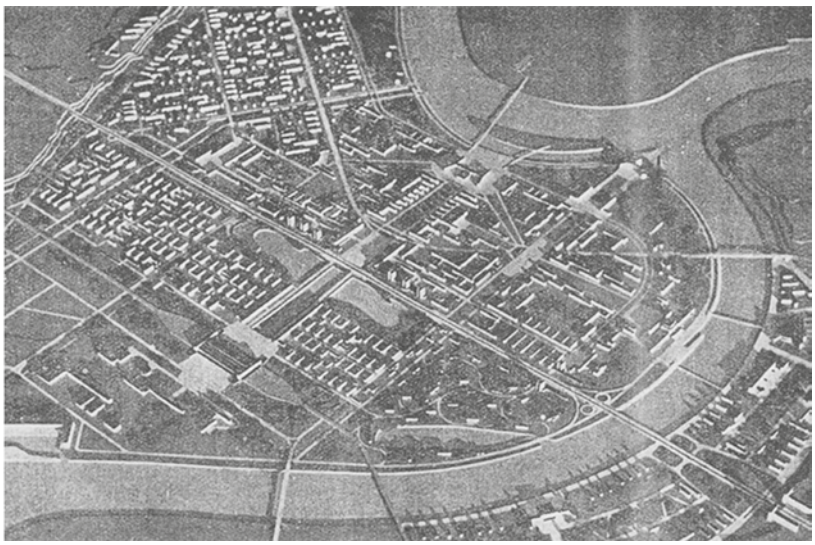
From today's perspective, after World War II, the area of New Belgrade became a training ground for experimental architecture and construction as "the city of sun, space and greenery" in terms of CIAM ideology and Le Corbusier's 1943 Athens Charter. From an ideological point of view, it was the largest state project of that time, created as the result of long-term systemic planning, institutionally, procedurally, and economically supported by the state (Blagojević, 2007). The enduring legacy of CIAM's modernist vision highlights how coherent urban and architectural design, coupled with social integration, contributes to long-term success. Representation of CIAM's principles was practiced through minimum apartments, scientifically grounded urban planning, adequate sunlight and ventilation in every unit, walkable neighborhoods, and the four essential functions of the city (Vais, 2023).

The urban concept of the newly planned city on the left bank of the river Sava was based on the New Belgrade Central Zone Plan, prepared by the working group of the Urban Planning Institute of Belgrade (Đorđević, 1960; Mišković, 1969). The area was conceived as a rectangular space. This plan envisions a central zone containing public spaces for gathering flanked by stately public buildings (ministries, courts, theatres, cinemas, culture centers, etc.). However, the post-war economic crisis, the unstable economic situation, and international political circumstances brought to the fore the need for rapid construction and rational construction solutions. The central zone was turned into a predominantly residential area (Vesković and Jovanović, 2018) [FIGURE 01, FIGURE 02].

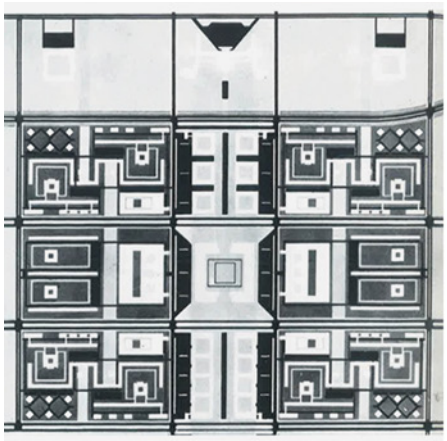
Urban plans for the residential blocks in the New Belgrade Central Zone were developed between 1961 and 1979, with architectural solutions chosen from various Yugoslav competitions, all aiming to create a new residential environment that would ensure quality of life through mass housing construction in line with the modernist paradigm of sunlight, greenery, and air. The blocks were organized in an orthogonal grid and designated by numbers. Each block was designed as an authorial interpretation of this modernist ideology, selected through open Yugoslav competitions.

The New Belgrade Central Zone is a representative example of post-war Yugoslav architecture [FIGURE 03, FIGURE 04, FIGURE 05]. Thanks to the specific prefabricated systems

01 New Belgrade viewed from the Genex Tower © Dejan Todorović, 2013.



02 Axonometric drawing from the Competition for Urban Conceptual Design of New Belgrade 1948, by Nikola Dobrović and Milorad Macura © Urban Planning Institute of Belgrade.



03 The New Belgrade Central Zone plan from 1960, by Uroš Martinović, Leonid Lenarcić, Milutin Glavički, Milosav Matić, Dušan Milenković © Arhitektura Urbanizam, no. 2, 1960, p. 4.

04 The New Belgrade Central Zone area protected as a spatial, cultural, historical site. © Belgrade City Institute for the Protection of Cultural Monuments, 2021.

05 The New Belgrade Central Zone satellite view. © Google Earth, 2023.

regarded as prototypes, these buildings are still recognizable as the original work, even taken out of their surroundings and context.

The architectural and spatial value of the New Belgrade Central Zone lies in its urban settings based on standards of international architecture, as well as in the aforementioned consistency of the realization of buildings according to the original solutions that won the competitions. Innovations in civil engineering opened up tremendous opportunities. New construction systems, such as prefabricated concrete slabs and new materials, led to modern housing concepts grounded in the modernist paradigm. These advancements prompted changes in the organization of interior spaces within residential units, aiming for maximum rationalization and minimal dimensions for infrastructural nodes. This compact organization minimized the sizes of service areas, such as kitchens, bathrooms, toilets, and built-in wardrobes/storage spaces. These elements show how architectural composition and interior design evolved simultaneously, with equal importance given to the organization and design of both interior and exterior spaces within the residential block. Daily family life unfolded between these spaces, encompassing them both equally.

SHARED SPACES AS A PRIMARY VALUE OF NEW BELGRADE BLOCKS

This paper aims to draw attention to a particular resource of the Modern Movement legacy that can be valuable today—the space between outside and inside, the transitional space between the interior of the housing unit and the public space of the city. This space simultaneously represents the interior of the large modernistic open housing block and the exterior of the apartment but is a direct extension of both: the private and the public sphere. We are examining two case studies; two projects for the same area—specifically, the block known as Block 22. The first is the original project for Housing Block 22, by Božidar Janković, Branislav Karadžić, Aleksandar Stjepanović, and Milutin Glavički that was developed at IMS Institute and Osnova Atelier in 1968. We focus on the values of establishing a connection between the modernist interior and the open shared space of the subject block.

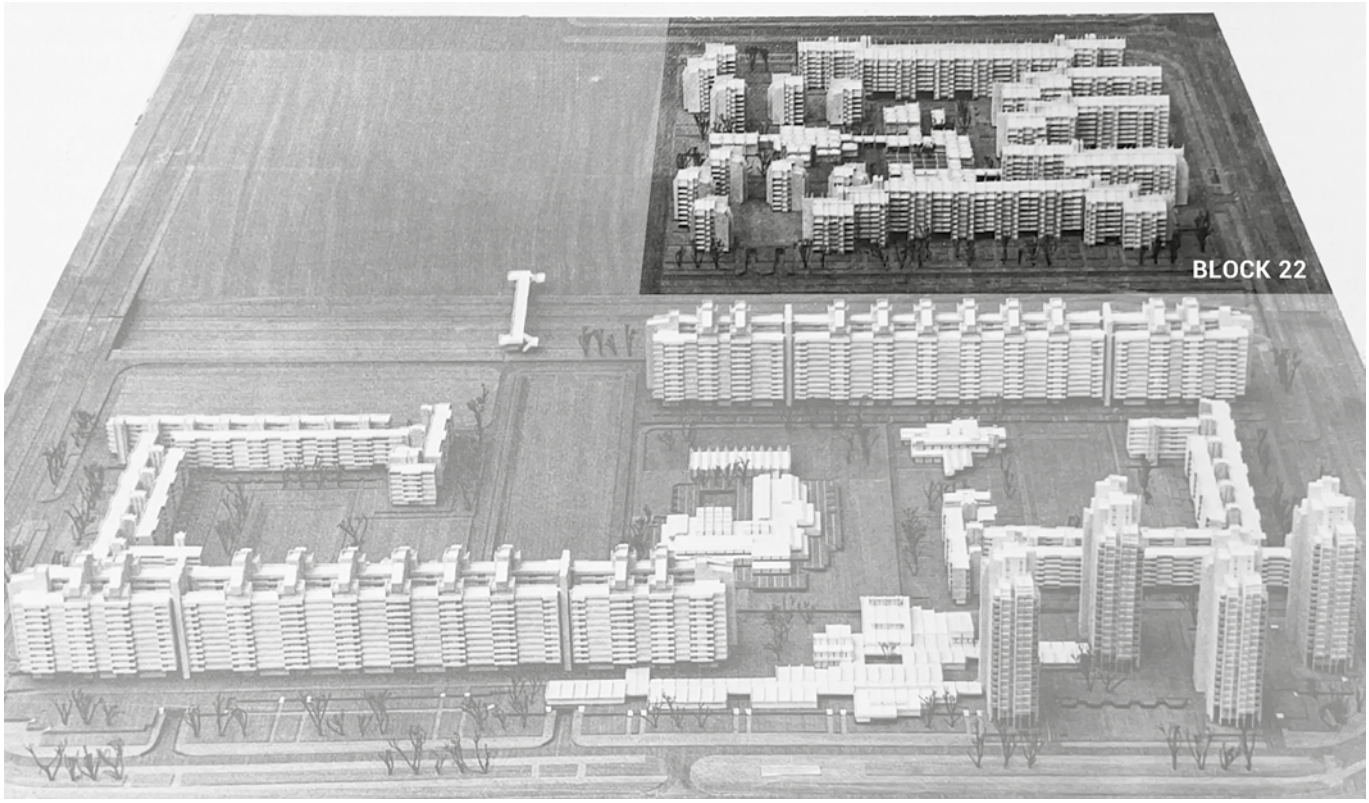
During the second half of the 20th century, Yugoslavia had a highly productive tradition of organizing architectural competitions, led by state institutions, to design housing complexes funded by the state. The highest intensity of residential construction was perceived in large cities, especially in the country's capital, where innovative architectural and urban design of spatial organization contributed to the improvement of housing comfort and quality of life of their residents.

The architectural designs for residential blocks in the central zone of Belgrade's borough of Novi Beograd stand out as examples of excellent organization of semi-private and private living spaces. They have grown to become a significant heritage of the modern period in Serbia. These common areas (indoor and outdoor) offered the potential for expanding collective functions outside the apartments and provided additional space for the activities of residents (Brankov and Manić, 2021, p. 96; Hirt, 2012) [FIGURE 06].

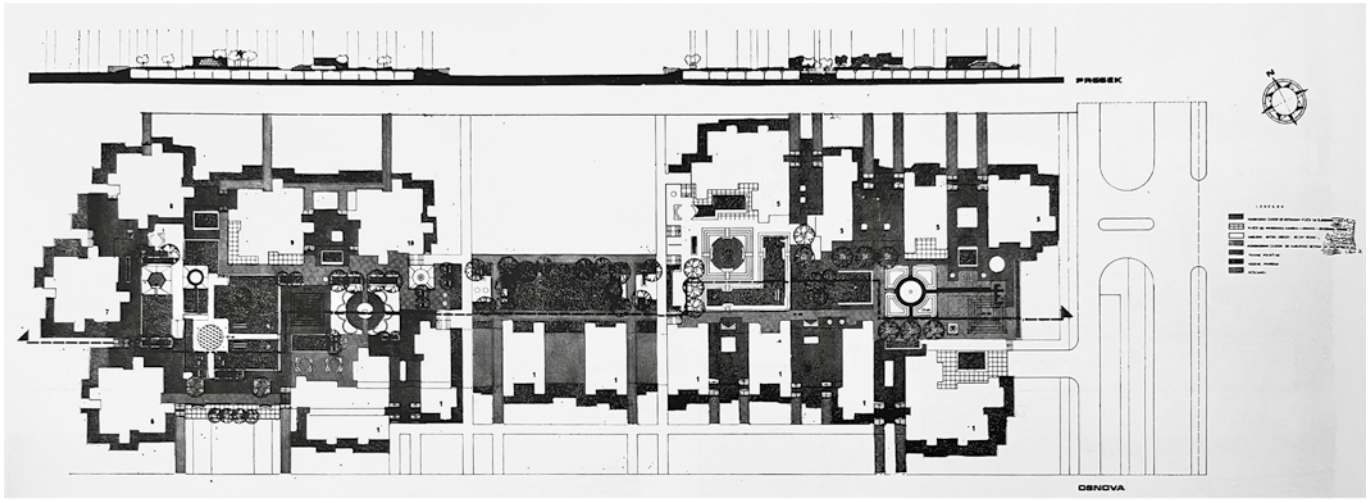
For the apartment's interior, openness to fresh air and light became an almost mandatory requirement. Walter Benjamin wrote in The Arcades Project about the nineteenth-century domestic interior mood, noting that "this mood involves, furthermore, an aversion to the open air" (Benjamin, 2002). Based on this, Ljiljana Blagojević raises the question:

> *Could this relation to the plein air be an essential parameter for distinguishing the mood of the century, or the mood of an architecture? Or was it the light, pouring into the mood of the twentieth century, that changed its identity completely? (Blagojević, 2007, p. 144)*

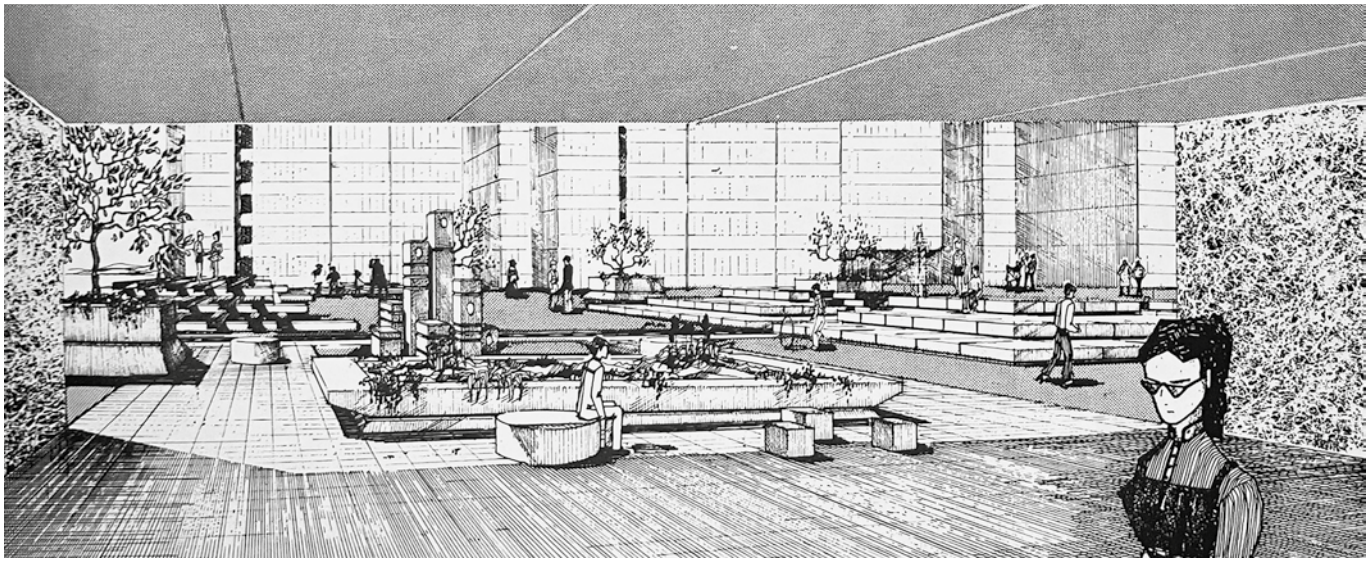
Blagojević further reminds us that: "Benjamin finds the 'threshold magic' as if, looked at from within, the outside becomes clearer" (Blagojević, 2007, p. 144). The



06 Photograph of a physical model of Housing Blocks 22 and 23, by Božidar Janković, Branislav Karadžić, Aleksandar Stjepanović, and Milutin Glavički for IMS Institute and Osnova Atelier. © Personal archive of Aleksandar Stjepanović, 1968 (published in Toward a Concrete Utopia: Architecture in Yugoslavia 1948-1980, MoMA 2018.)



07 Urban design masterplan of Housing Block 22. © Arhitektura Urbanizam, no. 56-57, 1969, p. 112.



08 Perspective drawing of Housing Block 22 shared space. © Arhitektura Urbanizam, no. 56-57, 1969, p. 112.

relationship of interior and exterior, by this threshold potential, would be flowing and dynamic. The interior reaches toward the outside—the exterior—freeing the space of division so that light and air can flow through the interior space. While the exterior space of the block is organized and designed as an extension of the living area of the apartment, in which materials, colors, and forms reference the elements of the interior and architecture of the residential unit, the aim was to invite the residents to go outside and spend their free time in nature, making relations and connections with other residents. In this way, both programmatic and spatial perspectives can enable us to see the designed interconnectedness and continuity [FIGURE 07, FIGURE 08].

Modern Movement legacy, especially in the countries that were under socialist political regimes, showed that shared spaces, as part of public spaces, are places in which community is being formed and strengthened, where new forms of affiliation and belonging were arising. The socialist paradigm emphasizes the importance of open public spaces within the residential zones as places for maintaining physical activity and health, as well as social interaction (Hirt, 2012).

Given that the apartments were small and designed nearly to the standards of existence minimum, extending the interior to the open space within the block became essential for fulfilling the functions of the living area. This architectural approach fostered community, unity, and equality. By creating new spaces and relationships, society established its own unique identity.

Accordingly, the architectural language of the inside and outside spaces was unison. The treatment of the facades with divisions into bay windows, parapets, and terraces, which were rhythmically repeated, and elements (handrails, shutters, window frames) that were painted in vivid Mondrian colors resonated in the urban design and landscape treatment of the block's open spaces (Vesković und Jovnanović, 2018).

The strong expression of form that characterizes the open space, along with the abundant use of concrete in the design of elements such as seating areas, planters, and playgrounds, as well as the orthogonal arrangement of surfaces alternating between grass and concrete, contributes to a cohesive connection with the building facades, which together function as a scenography. This combination characterizes the open space within the block as an

09 Housing Block 22 shared spaces. © Dejan Todorović, 2022.

outside interior. [FIGURE 09]. All the principles of architectural structure design have been applied consistently to the organization and design of outdoor space and its equipment–from composition through prefabricated production to the details of materialization–color and texture. This free (open) space of the modern housing block can be seen as a polygon for the reinvention of models of connectedness between the private and the public or between the built and the natural environment.

The models of connectedness between private and public can be traced through three aspects: structure, program, and design. The structure refers to the plan of organization of the relationship between the elements of the open plan (garden, communications, infrastructure elements), the program refers to gathering programs both within the modern interior and the open space within the block, and the design refers to the matching of interior and facade elements and elements in the open space (rhythm of openings, terraces, materials, colors, and details).

LEARNING FROM MODERNISM IN TIMES OF PANDEMIC–CASE STUDY NEW BELGRADE

The open space of the block that has marked the Yugoslav modern concept has become an integral part of the residential architecture through its design and function, representing a training ground for daily outdoor activities, which fulfills the daily need for an organized free space of nature in an urban environment (Maksimović, 1969). Conceived as a space that belongs to everyone, it becomes significant for the life routines of modern inhabitants. The shared space of the block's open space encouraged the daily socialization of the block's residents through leisure activities, providing the opportunity to spend time outdoors, spaces for various recreational activities, communication, entertainment, and ultimately, the community's responsibility for maintaining those spaces. "Free space near the apartment can become a functional, vital supplement to living in the natural environment." (Maksimović, 1969, p. ?).

Based on the prototype of the ideal socialist individual, as a strong, physically active, healthy individual who selflessly contributes to the community, the New Belgrade concept of housing in blocks advocated sun, nature (green), and air for each individual in the city. Maksimović mentions the physiological, psychological, and pedagogical aspects in which the functional values of the open space within the block can provide benefits for all genders, ages, and social groups. Ljiljana Blagojevic notes in her book Modernism in Serbia the influence of air and light on stimulating the good mood of the inhabitants, but also the contribution of cheerfulness and transparency to the character of the interior, which establishes the health-conscious atmosphere. In this way, appropriating the open becomes the embodiment of hygienic interiors as a modern housing concept, and sharing the open space the embodiment of a healthy community.

Following the above, in addition to the merits of the formation of a model of community and belonging, the concept of occupying and appropriating the open space as a polygon for connecting daily activities and needs highlights the importance of airiness, sunlight, and nature as the embodiment of healthy shared spaces through outdoor socialization activities: playgrounds for children, parks and paths for walking, sitting, resting, and talking, greenery for the effect of relaxation, training grounds for sports and recreation, etc. In addition to the above, connectedness was also stimulated through activities necessary for everyday coexistence—maintaining greenery, cooking preserves, cleaning the sidewalks, all the way to organizating joint actions and gatherings. Even after many decades of changing generations, political systems, and changes in the users' daily needs and expectations, this principle has remained a phenomenon today, which testifies to the quality of the housing model established during modernism. The importance of this concept was also recognized in the changed living conditions caused by the COVID-19 pandemic. The inevitability of maintaining physical distances to prevent the spread of the virus had a significant impact on the quality of life during the pandemic period and resulted in a reduction in communication and socialization for the sake of protection and a passive lifestyle due to confinement inside the living space. These living conditions have triggered a review of healthy spatial distances and adequate dimensioning of space to meet daily life needs, which is, first and foremost, an architectural issue. Accordingly, the possibility of staying outdoors is recognized as very important for general well-being.

The importance of preserving social interactions during a time when physical distance was required has been recognized as a valid point of discussion at the University of Belgrade - Faculty of Architecture during the COVID-19 pandemic. It was explored within the framework of the student workshop titled COVID-19 Challenges: Architecture of Pandemics. The workshop comprised four phases conducted via the Microsoft Teams platform as a digital communication forum for students, tutors, and critics. This action resulted in the development of 29 conceptual solutions and studies within six thematic frameworks: (1) Enhancing the functional performance of spaces, (2) Alternative space use patterns, (3) Urban furniture and public spaces, (4) Protective equipment design - prototypes, (5) Altered daily life, and (6) Models for accommodating the most vulnerable groups. The COVID-19 pandemic has

refocused research on transforming cities and adapting to the pandemic's reality, with a primary focus on public health and alternative scenarios for accommodating the sick while maintaining normal urban life for other residents. In the architectural discourse, the central research question revolved around reevaluating spatial distancing and its relationship to social solidarity, aligning spatial and sociological dimensions. Students' research on the workshop highlighted the great importance of the organization and design of interior living spaces, treated as multifunctional zones that connect both work and free time in new living conditions, where people spend most of their time. Recognizing the importance of available free open space for physical and mental health in newly created living conditions through the unification of the external common space of the residential block and the interior space of the residence, the concept of New Belgrade's block can be considered an exceptional contribution of the idea of the modernistic architecture of interior space.

Following the quest for spatial, but not social distancing, students proposed a reevaluation of open-air work and living spaces, mapping and adapting unused spaces for improved leisure, play spaces in public areas, and interventions in public spaces to ensure physical distancing, but also emphasized the importance of the open spaces of the residential block, primarily recognized in the concept of the New Belgrade's block as a shared space. The paper focuses on a comparative analysis of two case studies—two projects for the same area: the open space within residential Block 22 in New Belgrade. The first case study was presented above (competition entry and realization of Block 22), while the second case study represents a student project developed during the COVID-19 workshop. The students recognized the relevance and potential of integrating interior and exterior spaces in the residential block, which became essential in response to the changed living conditions brought about by the pandemic. This approach is also highly applicable in the broader context of solitude and isolation in today's residential routines. The remodeling of the modernist concept of connectedness proves to be innovative even in contemporary settings. The student case study—named Party, playroom, and sitting room–that examined the degree of connection or separation between private and public spaces during the pandemic offered new architectural scenarios and models for using shared spaces in New Belgrade's Block 22, where it is possible to maintain physical distancing while enabling social interactions and even the emergence of new programs as supplements to residential functions.

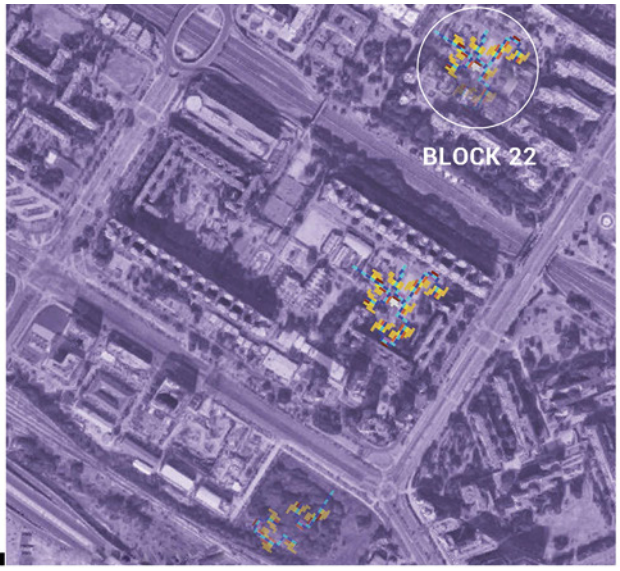
The Party, playroom, and sitting room project interprets the implementation of recognized values of the New Belgrade block concept, which views open space as an extension of interior space and program. The spatial-programmatic concept of the existing state was recognized as a model for further integrating outdoor spaces into residential living through recreational programs for all age groups.

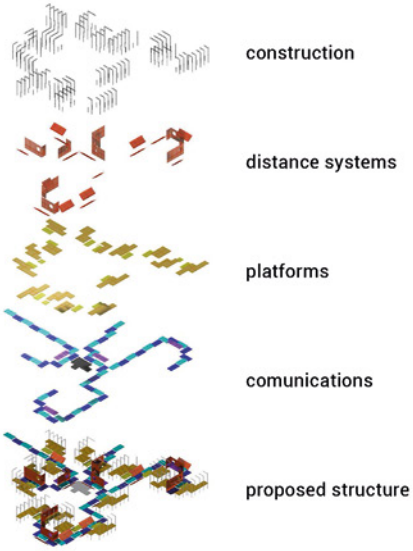
The project was inspired by the successful socialization of all user age groups within the neighborhood during the pandemic. Concerns about the absence of essential gathering activities such as parties for young people, markets for older persons, and playgrounds for children motivated the concept of utilizing large areas within urban blocks through a system that safely organizes the rotation of these activities. Specifically, the structure of platforms and barriers at established safe distances, occupying space both horizontally and vertically, articulates the scheduling of various gathering activities: nightclubs in the evening, markets, and playgrounds during the day. Differently colored vertical barriers indicate the intended use and a woven mesh structure covering certain areas prevents access to places that have reached the maximum number of users who can occupy a single space (separate areas for larger groups in nightclubs).

Inspired by the orthogonal structure of the urban composition of New Belgrade Blocks and the extensive outdoor spaces they encompass, the concept of the space is based on the articulation of an orthogonal network of open platforms. These elements clearly define the safe boundaries for different uses in various contexts. Based on 1x2 m flat elements, space is claimed by establishing horizontal communication and rest areas and vertical positioning of structures and distancing systems. Adding playfulness to the elements, not only horizontally but also vertically, activities can take place at multiple height levels, contributing to increased usable spatial capacity and enhanced safety. Furthermore, the playful structure, along with colors and materials that primarily indicate different space uses, stimulates recreational behavior and makes the outdoor space more attractive.

The analyzed project identifies the potential of the existing urban block structure as a model for designing outdoor recreational activities and socialization through three recognized aspects of the extension of the inner to the outer space of the block [FIGURE 10]. At the level of structure, students recognize the orthogonal matrix as a principle of handling and organizing space that is easier to control. At the program level, they are renewing the existing program of staying outdoors, movement, recreation, and playgrounds, supplementing it with new content that stimulates socialization and restores optimism during a pandemic. This enables a modular grid that clearly defines the fields of possible activities. At the design level, the use of modules recognized in the architecture of

structure





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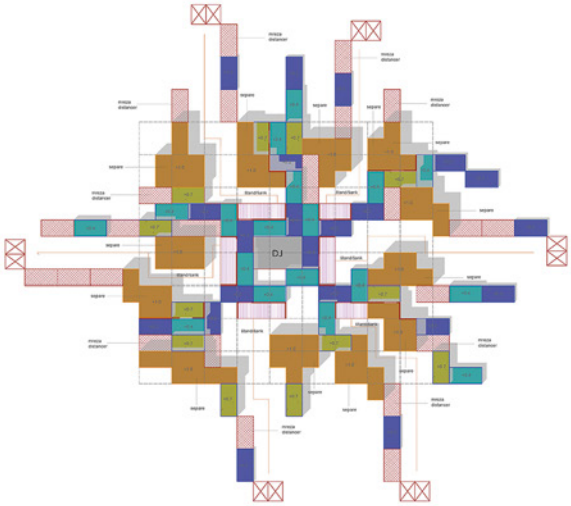

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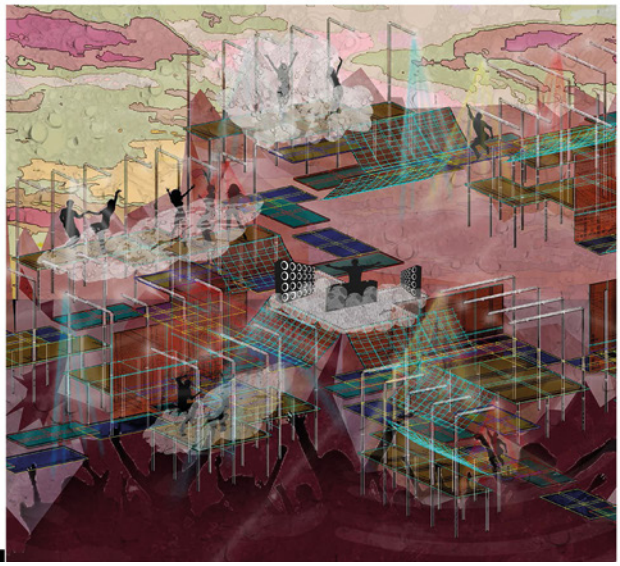

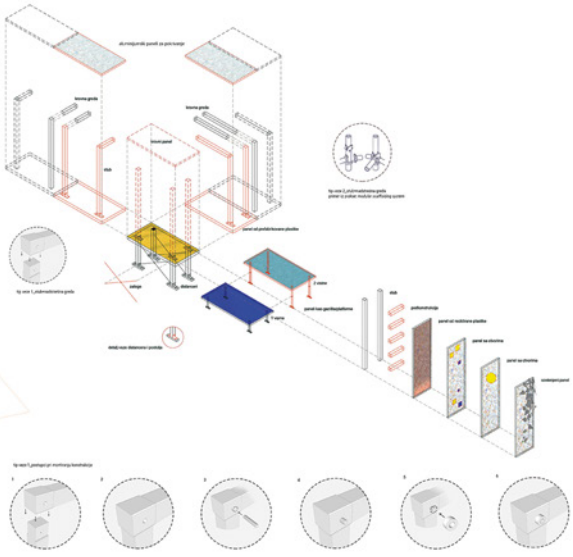

10 Case study—a student project for the workshop Covid-19 Challenges: Architecture of Pandemics © Emilija Petrinjac, Katarina Dankov, Mirjana Novaković, Nevena Nikolić, Đorđe Petković (Published in Izazovi Covid 19: Arhitektura pandemije, Publikacija rezultata online studenstske radionice, Univerzitet u Beogradu – Arhitektonski fakultet, 2020).

the block represents a way to interpret the idea of shaping the external space as an integral part of the existing architecture, while the use of different materials and colors achieves the recognition of different roles in the space, but also the attractiveness and playfulness of the whole in a modern way.

On one hand, the idea is to adapt spaces for outdoor gatherings, socialization, and relaxation. On the other hand, by introducing attractive activities, it revives degraded urban spaces, stimulating the psycho-physical rejuvenation of users. This work explores the adaptability of the existing urban structure.

CONCLUSION

Restricting movement and physical activities during pandemic conditions of general isolation have a detrimental impact on the physical and mental well-being of individuals residing in urban settings. Such circumstances have prompted significant concern and a decisive shift towards genuine humanization of interior and urban spaces to facilitate and ensure recreation and connection to natural environments.

The connection between the interior and open shared spaces within the residential block can be established through shared functional, aesthetic, and ecological requirements. These principles can be applied across all levels, from interior design through the architectural framework and extending to morphology and urban planning, all while considering the same sociological, psychological, and ecological factors. In interior design, these requirements manifest through the careful selection of materials, spatial organization, and the integration of natural elements, ensuring a seamless transition between indoor and outdoor environments. By aligning interior layouts with the broader architectural and urban context, the design fosters a sense of continuity and cohesion, enhancing both functionality and the well-being of residents. The psychological impact of the interior space, such as the feeling of openness or intimacy, is directly influenced by its relationship with the shared outdoor areas, contributing to a balanced living experience.

The openness of modern interiors toward the exterior and modernist concepts emphasizing the connection between inside and outside, particularly in shared spaces within residential blocks, have proven to be highly beneficial and sustainable during the health crisis. The Modern Movement's thought and practice provide a foundation for developing more virus-resistant typologies that can flexibly adapt the boundaries between private, shared, and public spheres. This adaptability helps to mitigate issues of isolation and solitude while enhancing solidarity. Given the prevalence of spending both work and leisure time in indoor environments, improving quality of life today requires a focus on interior designs that facilitate connections to the outside, both programmatically and aesthetically. Modern interiors remain a fertile ground for innovative approaches to creating new links between indoor and outdoor spaces.

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EMIGRATION POINT IN GDYNIA, POLAND

A 1928 Modern Passenger Terminal with Top-Tier Hygiene Standards

Anna Orchowska

ABSTRACT: Traveling during an epidemic can be challenging both for people and for the design of suitable infrastructures. In the late 19th century, as knowledge about infectious diseases spread, hygienic conditions and inspections became mandatory, especially in places of passenger traffic. This led to the need for specific adaptations in the existing infrastructure of such places. However, the port of Gdynia, which the Republic of Poland decided to build in 1922 on the southern coast of the Baltic Sea shortly after the country regained independence, was an entirely different case. During the 1920s and 1930s, Gdynia served as a significant travel hub for passengers traveling between Central Europe and America. This period also witnessed the rise of modern design methods in the development of the city and its port. The entire port infrastructure was built from the ground up, allowing for the implementation of the latest and most advanced solutions. The article presents research on a building complex in Gdynia called the Emigration Point. The study aims to analyze the design guidelines for the modern interior and the design itself to recreate the path a guest of the Emigration Point would take, from arrival to leaving the complex. The complex was designed to minimize the risk of infection and the development of potential diseases among emigrants. The research involved detailed historical analyses using primary source studies, such as project drawings and original documentation. This method was complemented with digital tools to reconstruct buildings or architectural spaces that have been significantly altered or no longer exist. The study also investigates the impact of the Modern Movement's assumptions on the project's conditions, including the complex layout, pavilion designs, functional and spatial principles, materials, the interior, and equipment. Additionally, it raises questions about the validity of the solutions proposed at the time, how they relate to current threats, and what we can learn from them.

KEYWORDS: Architecture history, modern interiors, hotel-sanitary complex, disinfection infrastructure, Emigration Point, Gdynia

INTRODUCTION: The 19th century brought forth the innovations of railway transport and trans-oceanic passenger shipping, which allowed to relieve, through migration, the overpopulation in certain regions of the world, but at the same time, significantly increased the spread of infectious diseases (Stern & Markel, 2004). These, in turn, were influenced by lower resistance to infections due to predominantly poor living conditions, low levels of hygiene, and insufficient medical care. This condition affected a significant part of the population living in Europe (Berner, 2000). Given that tuberculosis, cholera, smallpox, pneumonia, diphtheria, and even typhus, plague, and yellow fever were still taking a heavy toll at the beginning of the 20th century, transit cities and means of transport associated with collective migration were particularly at risk of epidemic outbreaks. It was feared by the authorities of emigration destination countries, such as the United States, Canada, and others in South America, as well as cities on the main migration routes.

The health status of migrants was considered an important aspect at a time when migration movements in Europe increased rapidly, mainly due to fear of epidemics spreading to permanent residents. It was only in the mid-19th century that health and hygiene inspections began to be carried out on the main European mass migration routes and communication hubs. After the end of the 19th century,

01 Emigrants waiting beside the so-called Blaszak in Port of Gdynia, 1928 — a makeshift corrugated metal warehouse temporarily serving as a passenger terminal. The scene reflects the inadequate infrastructure and harsh conditions faced by travelers during the early stages of the port's construction. © The National Digital Archives, 2023.

individual organizers and migration agents also began to care about the health and safety of people embarking on a journey, taking into account their well-being and not only their economic considerations. The largest ports in Great Britain (Hull, Bristol, London, Liverpool) and continental Europe (Le Havre, Antwerp, Rotterdam, Bremen, Hamburg, Genoa, Naples) began to organize specialized infrastructure to handle migrants. The German ports of Bremen and later Bremerhaven were best prepared to provide these services (Walaszek, 2018), an example of which was the German Emigration Center [Deutsches Auswandererhaus] opened in 1849 on the site of the former Karlsburg fortress. It was designed in the spirit of neo-gothic style by renowned Bremen architect Heinrich Müller (1819-1890). There was accommodation in dormitories and single rooms for 2,000 migrants who, while waiting for embarkation, could have meals (the kitchen served 3,500 a day) and undergo hygiene treatments and medical examinations. While meeting higher standards than the average emigrant lodging house at the time, the lodging house did not adhere to later rules of separating traffic inside the facility and dividing the 'clean' side from the 'dirty.' Still, the importance of sanitary considerations was continuously downplayed, which led to serious epidemiological crises in the cities of migrants' transit and ports where they boarded the ships. Adam Walczak, a specialist in the field of migration in the modern era, states that it was only during the outbreak of the dramatic cholera epidemic in the hot summer of 1892 in Hamburg that authorities began to tighten controls on emigrants from Europe heading towards the United States and Canada (Walaszek, 2018). After the disease was brought in by emigrants from distant Russia, over 8,500 people died in the city, and a total of nearly 20,000 became ill.

With the development of medical science and, as Stern and Markel (2004) note, the increasingly widespread acceptance of the germ theory of infectious diseases, new regulations began to be introduced. The first convention of the International Sanitary Conference, which introduced mandatory sanitary inspections and quarantine for ships arriving from affected areas, as well as established procedures for the international exchange of epidemiological information, was held in Venice in 1892. It was a breakthrough in changing the way we think about the sanitary conditions of port infrastructure and buildings. Its resolutions linked port conditions with measures to prevent the spread of infectious diseases. The same year, Ellis Island's immigrant inspection station was opened in New York Harbor, requiring strict verification and control for immigrants. Reasons for refusal included the diagnosis of infectious diseases and improper journey preparation.

In the lands of the Republic of Poland, the most spontaneous migration movements that affected the Polish population occurred during the partitions (1795-1918). However, phenomena such as overpopulation of rural areas, urban unemployment, and an insufficiently developed industry occurred during the Second Polish Republic (1918-1939) just after it regained independence. This meant that emigration was still very popular, and ultimately, 1.3 million citizens decided to emigrate. (Kołodziej, 1982; Kicinger, 2005) [FIGURE 01]. The criteria for emigration centers and the rules for the conditions that

02 The completed part of the Emigration Point in Gdynia-Grabówek, consisting of three of the twenty pavilions planned to be built, ca. 1935. © Henryk Poddębski, The National Library, 2023.

needed to be provided in them became more precise at the end of the 19th century. However, a noticeable change occurred in the perception of medicine in the first decades of the 20th century, leading to its establishment as a fully-fledged scientific field. The individual's right to health and the obligation to provide everyone with health care reached broader recognition (Więckowska, 2000). This was closely related to the healthcare policy implemented by the Republic of Poland. The Polish Emigration Society and the Emigration Syndicate, operating under the Ministry of Labor and Health Care, established the conditions for Polish emigration in the 1920s (Posłuszna, 2018). Finally, the demands of modern architecture came to the forefront, thanks to which the projects paid more attention than ever to the needs of its users, which was particularly reflected in the interiors of the buildings designed at that time. Delivered among others by Le Corbusier or Gerrit Rietveld, the slogans of a rational, clean, and healthy way of life and the need to provide everyone with access to sun, space, and greenery became determinants of a new approach to design (Overy, 2008). "I know that neither society nor the people are ready, but we have to build for a future we believe will give people happiness and dignity," Rietveld argued, referring to the thousands or even tens of thousands of people who should be encouraged "to live a happy life" (Zijl, 2018, p. 34). Interesting postulates were also put forward by Belgian architect Victor Bourgeois during the 2nd International Congress of Modern Architecture in Frankfurt am Main (CIAM II, October 24-26, 1929). Although the congress focused on the hygienic and economic-social basis of minimal housing, most of the demands presented at that time perfectly reflected the rules for the construction of collective accommodation prevailing in that period. Bourgeois emphasized the importance of ensuring sufficient air supply, maintaining constant ventilation, enlarging windows for natural light, implementing central heating, and using hot water sources (Bourgeois, 1930). By the end of the 1920s, architects stressed the importance of hygiene and health in building interior design, a mandatory requirement in modern architecture, especially for health-related facilities.

This paper discusses the changes that occurred in ways of understanding hygiene and health and, consequently, in the design of centers for emigration from Poland in the 1920s and 1930s. The first and only facility of this type in Poland[1], which was to meet the most stringent hygiene standards, was the so-called *Emigration Point* [FIGURE 02]. In 1928, a decision was made to build this comprehensive project around the newly built port in Gdynia. The author's research aimed to analyze how the principles of the Modern Movement influenced the layout of projects, pavilion designs, and functional and spatial principles. In particular, the research focused on analyzing solutions related to interior design, including layout, materials used, and furnishings. The study involved analyzing architectural design documentation to recreate the path of the 'guests' at *Emigration Point* from arrival to departure, with the goal of minimizing the risk of infection and the development of potential diseases among emigrants. This was done to protect against the spread of epidemics in the surrounding area.

03 The Marine Station in the port of Gdynia opened in 1933, and thanks to the Emigration Point in nearby Gdynia-Grabówek, it offered a complex and efficient service to all the passengers. © Henryk Poddębski, The National Library, 2023.

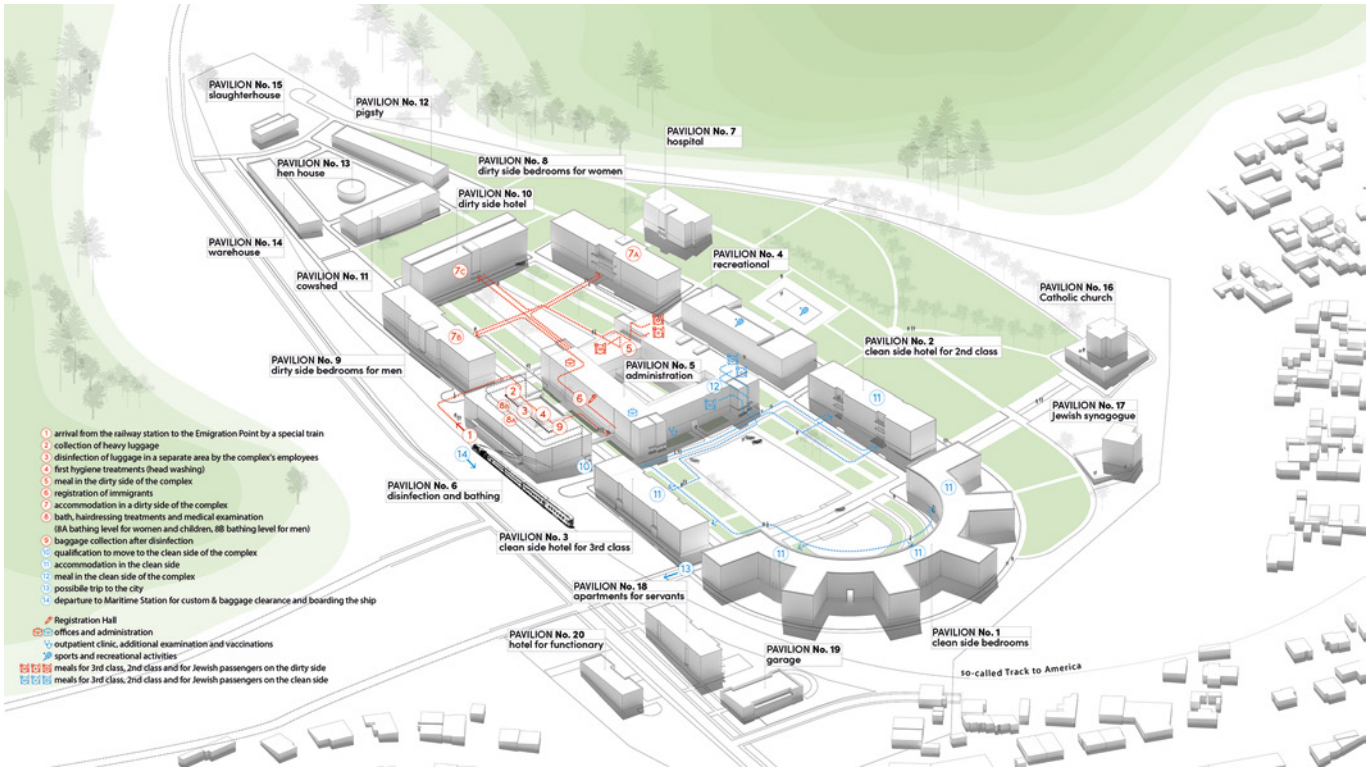
MODERN IDEA OF AN EMIGRANT'S HOME - CONCEPTUAL APPROACH

With the rapid construction of the modern port and city of Gdynia (1923-1939) in the mid-1920s, it was one of the largest national investments of the Second Polish Republic (Orchowska, 2023). It was decided to create a professional maritime passenger transport service center, the Marine Station (1933) (Sołtysik, 1993; Orchowska, 2023) [FIGURE 03]. Much earlier, in 1928, the Ministry of Public Works commissioned the design of another important complex related to the migrant expedition, the *Emigration Point*. Until the opening of a new facility on the outskirts of Gdynia-Grabówek in the early 1930s, the Transitional Emigration Camp, founded in 1923 near Wejherowo, remained in operation. It was located in the buildings of a former psychiatric hospital (Szerle, 2004; Posłuszna, 2018), but it was a considerable distance from the port of Gdynia, as far as 47 kilometers.

Two designers specializing in architecture and urban planning, Adam Kuncewicz (1893-1945) and Adam Paprocki (1891-1940), were responsible for the design, both from the planning and architectural perspective. In 1929, they developed the innovative design of a completely new emigration complex and land development. For economic reasons, it was decided to divide the task into stages. The first phase of construction, which included three buildings, was completed and put into operation in 1932. However, due to changes in the emigration policy of the United States, emigration from Central and Eastern Europe decreased. As a result, the implementation of this innovative project was unfortunately discontinued.

04 Emigrants getting ready for their journey at the Emigration Point had access to spacious interiors, well-lit with both artificial and natural light, along with other modern amenities in the 'clean' zone. These facilities ensured epidemiological safety and, most importantly, highly humane conditions, photo undated. © The National Digital Archives, 2023.

The emigration complex was designed to prepare emigrants for their journey following global standards set forth by the Emigration Office [FIGURE 04]. The complex was constructed on the outskirts of the city, away from residential areas, for sanitation purposes. The project design included twenty independent pavilions arranged in a small valley on a forested moraine plateau, even though, as mentioned above, only three were ultimately built. The areas surrounding the pavilions were designed as open, park-like spaces for residents to walk during their stay. The complex's location provided a healing environment, allowing residents to connect with nature and enjoy views of the port to the north and the Bay of Gdańsk. The pavilions were arranged in the shape of a water droplet,



05 Axonometric view of the Emigration Point complex according to the design documentation of the architects A. Kuncewicz & A. Paprocki from 1929 (only partially implemented), along with the guests' original 'hygienic route.' © Author, 2023.

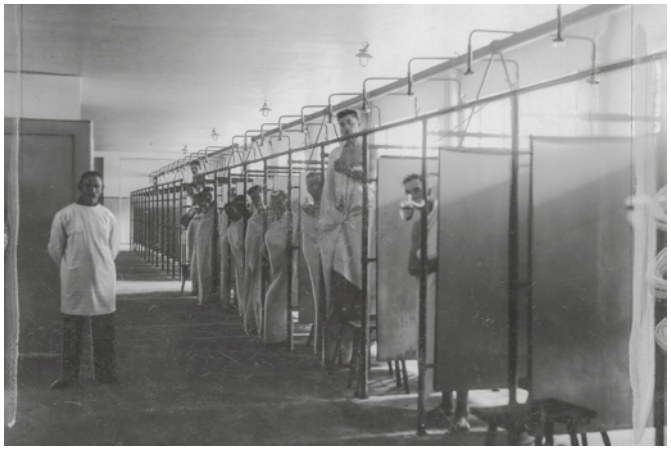
06 One of the collective bedrooms in Pavilion No. 9. The design took into account important hygienic aspects of the interior of the then-emigrant's house, such as access to natural light through large horizontal windows and the supply of fresh air through efficient ventilation installations, 1930. © The Emigration Museum, 2023.

reflecting the design's ideology and relationship with nature (Posłuszna, 2018). Here, this symbolism had its justification, as it represented cleanliness and purity, as well as renewal. Pavilion Nº 5 was located in the central part of the complex and was used for administration and catering. The *Emigration Point* project aimed to prevent the spread of infections by separating two zones: a 'dirty' zone, where people stayed until they underwent hygiene treatments and disinfection, and a 'clean' zone. The emigration authorities strictly defined the rules, stating that guests from the 'clean' side were not allowed to come into contact with those from the 'dirty' side. The complex had special divisions between the pavilions to separate each side.

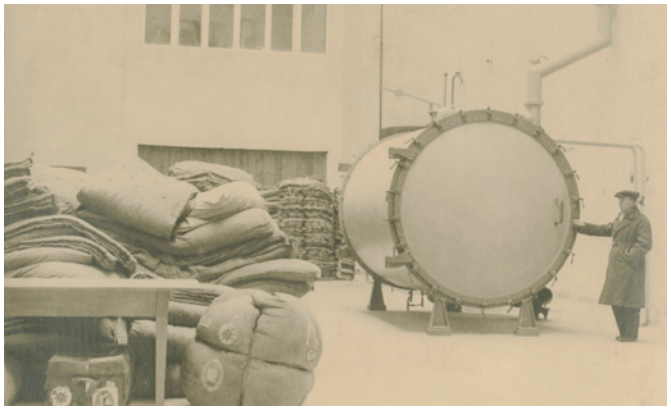
"HYGIENIC ROUTE" IN THE *EMIGRATION POINT* – SPATIAL LAYOUT

To better understand the emigrant's 'route' within the complex, their movement between individual parts was divided into stages and activities [FIGURE 05]. Travelers arrived at the *Emigration Point* by train from the Gdynia railway station, using the 'Track to America' railway siding. Upon arrival, they dropped off their luggage at Pavilion Nº 6 [2], where the staff disinfected it [3]. After that, the travelers underwent hygienic procedures [4]. Following this, they had their first meal in the dining room on the 'dirty side' [5] (3rd class, 2nd class, and Jewish passengers had separate dining areas). They then proceeded to the Registration Hall [6] to complete emigration formalities. On the 'dirty side,' the passengers were accommodated in three separate buildings [7A, 7B, 7C], with a capacity of 700 guests in total [FIGURE 06]. Additionally, a relaxation room with a reading area and library (Pavilion Nº 5) was available for guest use.

To gain access to the clean side of the complex, all guests were required to undergo extensive medical examinations and a thorough bath [8], which included shaving of their genitals, in Pavilion Nº 6. The women and children's baths [8A] were located on the first floor, while the men's baths [8B] were on the second floor [FIGURE 07]. Both areas were equipped with showers and rooms with bathtubs, as well as waiting rooms and locker rooms for undressing and handing over clothes for disinfection. After bathing and medical examinations, guests collected their disinfected and sanitized clothes in the dressing room [9]. They would then proceed to the clean side of the complex



07 Sanitary room with showers for men located on one of the bathing levels in Pavilion No. 6, which was designed within the Emigration Point complex as an independent facility dedicated to hygiene and disinfection treatments, undated. © The National Digital Archives, 2023.



08 Steam chamber used to disinfect luggage as well as various bedding items provided by Emigration Point, such as mattresses, duvets, bed linen, etc., 1930. © The Emigration Museum, 2023.

through a dedicated exit [10]. If any sudden illnesses were detected, those individuals would be directed to Pavilion Nº 7, which served as a hospital located on the outskirts of the complex.

The bathhouse could accommodate 600 people over a nine-hour working day in three three-hour rounds. It offered full hygiene treatments, including washing clothes and disinfecting luggage. The facility featured a state-of-the-art bathhouse, the largest in the country at the time, with modern sanitary and hygienic features. Additionally, a professional mechanical laundry was installed to meet the requirements of a modern emigration center [FIGURE 08]. After the washing cycle was completed, the clean underwear was returned via the second elevator and handed out to the owners. Additionally, there were rooms where detailed disinfection was possible using hydrocyanic acid. The chemical compound *prussic acid*, prepared from Prussian blue by Carl Scheele in 1780 and used in dilution by qualified workers, was undeniably the best method for effective disinfection in the 1930s (Koskowski, 1934).

After completing the cleaning and disinfection process on the dirty side, the guests would be accommodated in one of three buildings on the clean side [11]. There was a total of 1,300 places available for them. After settling in, emigrants could have a meal in the dining rooms on the clean side [12], which were accessible only through special entrances on the north side of Pavilion Nº 5. Using other entrances, they could undergo additional medical examinations, mandatory vaccinations, and complete the rest of the travel formalities. While staying on the clean side, guests could also take advantage of the *Emigration Point's* amenities. Pavilion Nº 4 was to include recreation rooms and a sports field in its backyard. Additionally, the design included a recreation room for 800 users and two reading rooms for 300-400 people each (a cinema, a lecture hall, or a stage). A Christian chapel (Pavilion Nº 16) and a Jewish synagogue (Pavilion Nº 17) were to be located on a gentle hill among the greenery on the western side of the complex. After entering the clean side, while waiting for their ship to arrive at the port, guests were permitted to go sightseeing [13] in Gdynia, which was being built at that time as it was called the "pride of Poles." On the day of the announced arrival of the ship that was to take the emigrants on board, they went to the port by a special train [14] and thus left the *Emigration Point*.

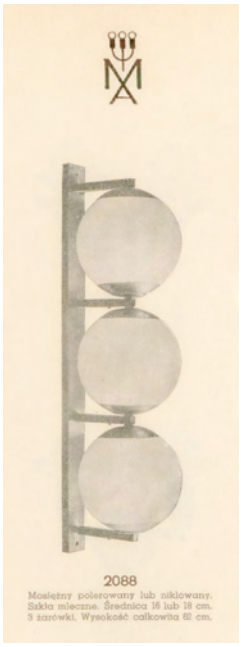
The idea for the *Emigration Point* to be a self-sufficient complex required that it fulfill all necessary and accompanying functions and be equipped with all necessary devices. Staff facilities were near the entrance, and farm facilities were by the forest. Pavilions, including a cowshed, pigsty, warehouse, slaughterhouse, and hen house, surrounded the trapezoidal courtyard.

MILLION BRICKS: INTERIORS AND ARCHITECTURE OF THE *EMIGRATION POINT* - MATERIAL QUALITIES

The interior of the *Emigration Point* required the use of hygienic and easy-to-clean materials for sanitary reasons. As a result, Portland cement-based terrazzo floors were used in the sanitary rooms, halls, and corridors. This type of finish was commonly used in public buildings that experience heavy foot traffic. Its advantages are well-known to architects who seek to provide long-lasting protection and a durable finish to the floors of the buildings they design (Walker, 2014). Different materials were chosen for different areas of the building. Black terrazzo was used for the entrances, staircases, and sanitary rooms, terracotta floors were used in the halls and bathrooms, while oak planks were used in representative rooms and upper floors.

The design of the *Emigration Point* was influenced not only by cleanliness and hygiene but also by modern and elegant architectural solutions. The Registration Hall, in particular, was designed with two-story-high windows that allowed natural light to fill the space. The interior featured bright plastered walls, coffered reinforced concrete ceilings, as well as simple wooden service counters and wooden facings of walls and columns, creating a

09 The most representative interior at the Emigration Point was the Registration Hall in Pavilion No. 5, ca 1935. © "Mare Nostrum" Gdynia, The Emigration Museum, 2023.



10 Lighting fixture used in the design of the Reception Hall. Polished or nickel-plated brass base, total height 62 cm, with three glass lampshades, designed by A. Marciniak, 1930. © Electric Chandelier Factory A. Marciniak Warsaw (catalog), author's archive.

striking contrast [FIGURE 09]. The interior was accentuated by impressive modernist light fixtures in the form of wall lamps consisting of three illuminated spherical lampshades [FIGURE 10].

According to the architects' intention, all of the pavilions of the complex were to be faced with cement bricks, then referred to as 'cementówka' (Manduk, 1930). The architecture of buildings finished this way was supposed to give the impression of cleanliness and sterility. However, the brick's basic feature was its durability (Nechay, 1939). In the 1930s, many press articles and guide publications promoted the use of 'gray brick' for facing building façades due to its favorable price. According to practitioners and designers from Poland, positive examples of architectural solutions based on cement bricks from Holland, England, and Germany have encouraged the use of this method. They agreed that facing buildings with ordinary and cement bricks required a specific design and a special type of architecture. This type of architecture was unrelated to classicism but was not devoid of detail, thanks to the diversified structure of the elevation. (Adamski, 1939, pp. 295-296).

The *Emigration Point* was constructed using light gray bricks of quality class I, with dimensions of 270 x 130 x 60 mm, which were supplied by the Saturn Brickyard located in Chełmno in Pomerania, under the supervision of Eng. Alfred Dziedziul i S-ka. The construction required a total of 1,000 deliveries, each containing 1,000 bricks. The unique architecture of *Emigration Point* was determined by the bricklaying method. The façade consists of two types of finishing. The ground floor parts and entrances and the avant-corps containing staircases with characteristic, vertical, thermometer-type windows were finished with bricks in a textural arrangement. These surfaces were diversified by the protrusion of every second layer of bricks [FIGURE 11] (Hirsch, 2016), which gave the architecture an expressive effect [FIGURE 12]. The remaining surfaces consisted of a smooth brick wall arranged in a cross bond, characterized by an alternating arrangement of one stretching course per heading course. Typically, this type of façade finishing is referenced with the so-called "Warsaw School" and the works of, among others, architects Franciszek Lilpop, Romuald Gutt, Karol Jankowski, and Czesław Przybylski (Dybczyńska-Bułyszko, 2010). Although the architects of *Emigration Point* were from Warsaw, Gdynia was referred to as the 'maritime capital of the country' during the interwar period. The façades of many modernist buildings were adorned with gray cement bricks.

CONCLUSIONS

Architects Adam Kuncewicz and Adam Paprocki designed *Emigration Point* in 1929 in line with the Modern Movement. The complex was created to meet high standards of sanitary and hygienic conditions, ensuring epidemiological safety while approaching people with humanity. The design was health-conscious and aimed to ensure the mental well-being of its users. It provided solutions to respond to cultural needs, promote physical activity, and offer emotional fulfillment for people emigrating from this last stop on the European continent. The complex included various social functions and pavilions on the premises. Guests were accommodated in isolation from the city and underwent careful health checks. The self-sufficient complex was surrounded by nature and designed to ensure the safety of the emigrants and their loved ones

11 A portrait of students from the Department of Road and Water Engineering and State Communication at the School of Construction in Poznań, gathered in front of one of the entrances to the newly built Emigration Point. In later years, the facility also served as a tourist hostel. The building's distinctive façade, featuring brick detailing, is clearly visible, circa 1932. © Private collection of Elżbieta Wykrzykowska, 2025.

12 The former disinfection and bathing pavilion (No. 6) adapted to military function in the post-war years (nowadays, the 33rd Air Defense Missile Squadron). View from the railway ramp. © Robert Hirsch, 2014.

during their journey while also guaranteeing entry to their country of destination without the risk of rejection.

The designers carefully planned the building complex. Considering the general layout idea in the shape of a water droplet, we can imagine how the symbolism resonated here, embodying the ideals of cleanliness, purity, and renewal. In the design, they paid close attention to every detail, especially focusing on spatial and functional interior solutions. They used modern finishing materials in the design (e.g., glass and metal, terrazzo and terracotta floors, smooth wooden paneling) with hygienic surfaces. This was not only to reflect the trends of the 1920s and 1930s but also to make cleanliness easier to maintain in *Emigration Point*. A complex of this size would require professional, mechanized equipment for cleaning clothes and disinfecting luggage at a large scale, as well as extensive catering facilities.

The unfinished complex included three main facilities: a disinfection and bathing pavilion (no. 6), an administration pavilion (no. 5), and a hotel pavilion (no. 9). Until the late 1930s, they met the limited needs of emigration services and also served as a tourist base for the city of Gdynia. However, after World War II, the complex stopped serving its original purpose and was repurposed as a military base. The former *Emigration Point* no longer appears on the city map, and its significance has been forgotten by the residents despite its cultural importance in Gdynia's history.

The ambitious design and careful approach to sanitation in the *Emigration Point* project offer valuable lessons, especially since it was developed during a time of significant health threats. The COVID-19 pandemic has prompted medical industry specialists and facility designers to rethink how to meet sanitary and hygienic requirements to address increased health risks. The concepts in the Gdynia *Emigration Point* project remain relevant, providing important insights into disease prevention, isolation, and user accommodation. One of the most significant takeaways is the project's ethical and comprehensive approach, focusing not only on public health but also on social and emotional aspects for the guests of the

facility. Despite being subject to strict hygiene procedures, they are offered a comprehensive program to enhance their stay in isolation. In conclusion, isolation of potentially ill people is a tool that should be used with caution and as a last resort. The *Emigration Point* project, proposed in 1928, is proof of how solutions can be sought that allow for the protection of public health while respecting the rights and dignity of ill people.

ACKNOWLEDGMENTS

The author would like to thank the Municipal Conservator of Monuments of the city of Gdynia, Robert Hirsch, for advice on the research carried out, as well as for providing illustrations of the existing state of the preserved objects.

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ENDNOTES

1 The Second Polish Republic repurposed existing buildings in Warsaw, Gdańsk, and Wejherowo to handle emigration traffic before Emigration Point was established, but these facilities lacked proper hygienic and medical services.

LEARNING FROM THE TUBERCULOSIS CRISIS IN TURKEY

Spatiality and Modern Interiors in Yasamak Yolu Journal (1929-1950)

Deniz Avci

ABSTRACT: Yaamak Yolu [A Way of Living], the journal of the Istanbul Tuberculosis Association, played a pedagogical and propagandistic role in building a healthy nation after the establishment of the Turkish state. The journal is a valuable archive incorporating the spaces of tuberculosis combat during the 20th century, encompassing social, cultural, and political information. It reveals how tuberculosis was a crisis that influenced Turkey's Modern Movement in architecture and modern interiors. The discourse on the contagious nature of tuberculosis and the healthy way of living in Yaşamak Yolu impacted ideas about modern interior design in different building typologies. After scanning the 1929-1972 Yaşamak Yolu issues from the Izmir National Library's archives, this study categorized, analyzed, and evaluated the data at the intersection of tuberculosis and modern interiors, focusing on national and international sanatoria, housing, alternative interiors, and everyday items. Despite the journal's broad coverage of architectural typologies, this study, among others, focused on the 20th-century Turkish sanatoria as conventional interiors. The notion that the sanatorium movement shaped the Modern Movement in architecture served as the foundation for this study. To reveal the journal's vast breadth from urban to industrial scale, portable structures, everyday objects, and/or tuberculosis paraphernalia covered in the journal were evaluated as alternate treatment interiors, furniture, and objects. The extensive content and contextual information, along with the publication's span from 1929 to 1972, made the analysis challenging. Therefore, and to overcome the constraints in selecting specific built environment typologies, this study set the framework to include the timeframe from the journal's inaugural issue to the point at which the journal's published doctors/authors recognized the effectiveness of Streptomycin. This marked a turning point in the spatiality of tuberculosis and thus limited the scope of this study to the years 1929-1950. Due to its focus on the interiors of tuberculosis combat facilities, this study revealed that the journal proved to be a significant archive for the field of architectural historiography and design.

KEYWORDS: Tuberculosis, healthcare interiors, modern Turkish interiors, health advice periodicals, Yaşamak Yolu

INTRODUCTION: The treatment approaches for tuberculosis coincided with the emergence of Modernism, which sought to provide a hygienic lifestyle within a socialist framework (Sontag, 1978; Campbell, 2005, p. 463). Following the First World War and the ensuing turmoil, the spread of tuberculosis posed a significant problem during the transition from the Ottoman Empire to the Republic of Turkey (Yıldırım & Gürgan, 2012, pp. 35-36). The tuberculosis campaign was among the numerous fights undertaken by the young Turkish state following its establishment in 1923. The first organization dedicated to the prevention and control of tuberculosis during the republican period was the Izmir Tuberculosis Association (hereafter: TB Association), established in 1923 (Anon., 1950b). The establishment of the Istanbul TB Association followed in 1927.

Both associations published journals as propaganda[1] tools (Saracoğlu, 1950; Yücer, 1937): Izmir's *Savaş* [*Fight/War*] (Anon., 1950b), and Istanbul's *Yaşamak Yolu* [*A Way of Living*]. These journals took it upon themselves to intervene before the onset of the disease, offer

treatment strategies for patients at early stages, and promote convalescing facilities to lure the patients with advanced tuberculosis (Carr, 2023, p. 33). This battle was a significant undertaking that necessitated a multifaceted approach encompassing sanitation, social measures, administrative efforts, and propaganda. The associations identified and assisted individuals afflicted with tuberculosis, directing them to appropriate healthcare facilities such as preventoriums, sanatoriums, or tuberculosis hospitals based on their specific medical requirements. The Turkish TB associations, established per city, began disseminating the preventive B.C.G. (Bacillus Calmette-Guérin) vaccination for infants and elementary school children. Journals facilitated the dissemination of knowledge on disease transmission and prevention.

The *Yaşamak Yolu* journal serves as an important archive, including extensive social, cultural, and political data from its contemporary publishing era, while also offering medico-social insights into everyday life and detailing the state's healthcare reforms. From the perspective of architectural historiography, the journal offered a scope of spatiality of tuberculosis, as it informed the public about the transmission, contagion, prevention, and elimination of tuberculosis bacteria in the built environment, especially in modern interiors. The journal comprised sanitation propaganda[2], including causes of tuberculosis from different scales of spatiality, from urban environments[3] to domestic interiors.[4] A collection of graphics supporting guidelines on appropriate conduct in public and private settings also integrated propagandistic messages (Anon., 1929; Saracoğlu, 1950; Yücer, 1937). Importantly, the journal[5] prioritized the inclusion of children in political discourse, viewing them as the nation's future, by incorporating a selection of content under "Pages for Children" [FIGURE 01]

AIM, SCOPE, AND METHODOLOGY OF YAŞAMAK YOLU: MODERN INTERIORS AND TUBERCULOSIS

Yaşamak Yolu maintained its publication from 1929 to 1972 (İlikan Rasimoğlu, 2014, p. 300).[6] The abundant content published during this lengthy period was quite a challenge to the process. One approach to setting a framework was to focus on one building typology (sanatoria)

01 How to teach hygiene to children in Japan? © Yaşamak Yolu, 1929, No.3, pp. 2-3.

and then jump to a smaller scale of portable structures, furniture, and objects. Another was to set a period limit. Dr. Tevfik İsmail Gökçe's article Streptomaycin [sic.] (Gökçe, 1950) on the effectiveness of the drug developed by Dr. Selman Waksman's team in the 1940s was a significant occasion. The discussions on antibiotics lessened the journal's spatial arguments. This date, therefore, signaled the end of the assessment for this study. As a result, the focus period spans from 1929 to 1950, beginning with the first issue in 1929 and concluding with the 170th issue in November 1950.

The Izmir National Library archived the issues of the *Yaşamak Yolu* journal. They were digitalized for the research project "Architecture of Convalescence: Mapping the Sanatorium Heritage of Turkey" (Avci et al., 2022). The author categorized the scanned data, concentrating on modern interiors. The journal offered comprehensive information on examples of national and international sanatoria, housing, alternative interiors, and everyday objects. Therefore, this article restricts its analysis to the interiors of designated sanatoria, eliminating other building typologies and concentrating on alternative interiors, furniture, and objects.

Sanatoria, pioneers of the Modern Movement in architecture, significantly influenced the approach to modern interiors (Campbell, 2005; Colomina, 2019; Overy, 2007). During the transition from historicism to modernity (Del Curto, 2013, p. 140), designers experimented with the design of these institutions, incorporating customized and tailored architecture to enhance isolation, care, fresh air, sunlight, and hygiene. The design principles to fight tuberculosis were a major factor in the adoption of Modern Movement architecture and interiors in Turkey, as well as in the west. Accordingly, the initial section, titled "Spatiality of Tuberculosis in Sanatorium Interiors," focuses on how the journal portrays the interiors of Turkish sanatoria as local translations of canonic sanatoria models, on the spatiality of their public spaces, patient rooms, and cure balconies.

Not everyone could afford to stay in a private sanatorium, and public sanatoria had immense waiting lists. Hence, the 'prescribed' sanatoria were unable to accommodate all patients. The socialist objective of the young Turkish state led to the application of modernist sanatoria-inspired architectural elements to housing, furniture, and everyday objects as alternative precautions. Through journals, the state infiltrated households and began regulating the use of even basic goods, like kitchen utensils and handkerchiefs, to combat tuberculosis. The next section, "Alternative Interiors of Convalescence and Management of Furniture and Objects," demonstrates the great variety of items discussed in the journal, ranging from the building scale to portable and temporal structures to objects.

This article makes four primary contributions to the field. It argues that *Yaşamak Yolu* presented a complete analysis of the spatiality of tuberculosis in Turkey in the early to mid-20th century, covering different scales of the built environment by utilizing national and international examples. It argues that the state used the journal as a tool to impose westernization and modernization, thereby regulating the nation's health. It highlights that the connection between architecture and tuberculosis was addressed in a health advice journal in Turkey at the onset of the 20th century. The bibliography meticulously selects modern interiors and the spatiality of tuberculosis from the journal's extensive content.

SPATIALITY OF TUBERCULOSIS IN SANATORIUM INTERIORS

The *Yaşamak Yolu* journal showcased Turkish sanatoria that mirrored their famous canonic counterparts. Standard sanatoria also had "a high level of design and construction quality" (Del Curto, 2013, p. 143). This was particularly applicable in Turkey, where war-torn conditions prevailed. The Turkish sanatoria stood out with their advanced features, including modern construction techniques, implementation of innovative easy-to-clean materials, retrofitting, and furnishings, as well as surgical rooms and equipment modeled after European standards.

The patients adhered to the treatment protocol established within the culture of sanatorium facilities. A sanatorium facility was promoted in the journal with the following words: "The sanatorium is fully equipped to facilitate healing: rest, nutritious food, fresh air, and sunlight. All conveniences for patient comfort have been considered, and all safety measures included to ensure that a patient poses no harm to others" (Anon., 1950c).

The Erenköy Sanatorium, inaugurated by the Istanbul TB Association in 1932—who established *Yaşamak Yolu*—was widely covered with photographs, articles, statistical reports on patients, and promotion pieces of the medical facilities and equipment. Another institution that received significant promotion was the Heybeliada Sanatorium, Turkey's first state sanatorium, inaugurated in 1924 (Avci-Hosanli & Degirmencioglu, 2024). This promotion pertains to the fact that the institution's chief physician, Dr. Tevfik İsmail Gökçe, served as the journal's editor.

In addition, the publication presented worldwide examples to its Turkish readership. The promotion of architecture in a publication not dedicated to architecture but rather to health advice is significant. References to the European sanatoria included late 19th century establishments in Leysin and Bern, Switzerland (Sabar, 1932); the Papworth village settlement in Cambridge, UK (Kudsi, 1932a); the Institute Benito Mussolini, a tuberculosis village in

Sondalo, Italy (O. Ş. U., 1935); Dr. Turban's Sanatorium in Davos, Switzerland (Öktem, 1935a); and the Planegg Sanatorium in Munich (Gökay, 1947).

The journal also compared the new Turkish sanatorium examples with their western counterparts. The journal promoted various sanatoria in Turkey, including Haydarpaşa Tuberculosis Pavilion (A.Z., 1948) and Cerrahpaşa Tuberculosis Pavilion (Anon., 1930), both established in Istanbul during the early years of the republic. The deliberate comparison of the new, republican-era tuberculosis pavilion of the Cerrahpaşa Hospital (1928-1930) complex built of concrete and stone with that of the old, deteriorated timber structures erected in the Ottoman era was a contemporary discourse that served as a means of nationalist propaganda, glorifying the republican-era achievements. The comparison served to highlight the advancements in construction [FIGURE 02].

Other featured sanatoria were: Buca Sanatorium [FIGURE 03] and Yamanlar Camp in Izmir (Anon., 1950b), mid-century Süreyyapaşa Sanatorium in Istanbul (Kayacıoğlu, 1950), and a small sanatorium in Hatay, which was exemplary of remote Anatolian cases (Anon., 1948a).

The journal even incorporated further information on sanatorium interiors, employing doctors' reports, visitors' observations, and patients' recollections.[7] Medical professionals attended the inauguration of the Erenköy Sanatorium's new pavilion in 1932. Inspections revealed that the patient rooms, cure balconies, dining halls, X-ray rooms, laboratories, kitchen, and other pertinent spaces satisfied the essential requirements (Kemal Cenap, 1932). The following year, Dr. Ihsan Rifat, the institution's chief physician, published an article titled *Personal hygiene in prevention of tuberculosis* with concomitant images of the private rooms and public halls of the sanatorium (Sabar, 1933). In 1940, a journalist visited the sanatorium and noted its amenities and infrastructure, describing a laboratory characterized by cleanliness and organization (Anon., 1940). Noting that sanatoria did not solely operate on discipline and hygiene, the journal covered entertainment spaces such as dining and theater halls (Anon., 1940) [FIGURE 04, FIGURE 05, FIGURE 06].

Journalists often described Heybeliada Sanatorium's curious patchwork arrangement of the pavilions and

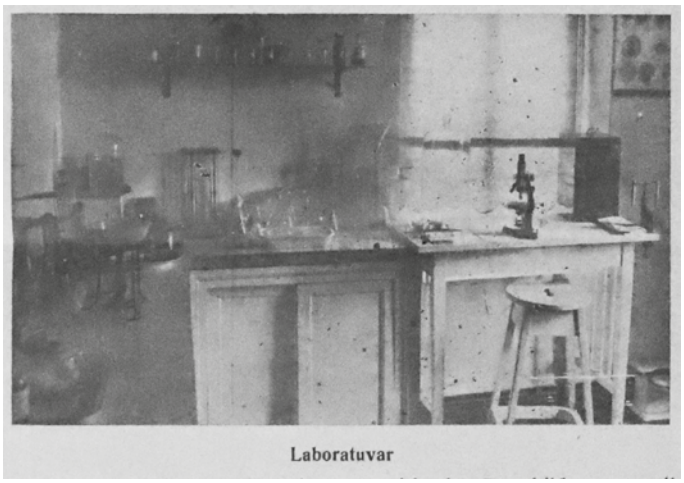

Cerrahpaşa Hastanesinin yeni paviyonu ve köhne barakalar.
[× işaretli kısım 75 yataklı verem paviyonudur. ×× işaretli eski barakalarda ise şimdiye kadar veremliler tedavi olunuyordu]

02 The new pavilions of the Cerrahpaşa Hospital (Istanbul), 1930. Text reads: [The section (marked with an x) is a 75-bed tuberculosis pavilion. Tuberculosis was treated in the old, dilapidated structures (marked xx) until now]. © Yaşamak Yolu, 1930, No.20, p. 2.


Buca Sanatoryomunun yeni pavyonu

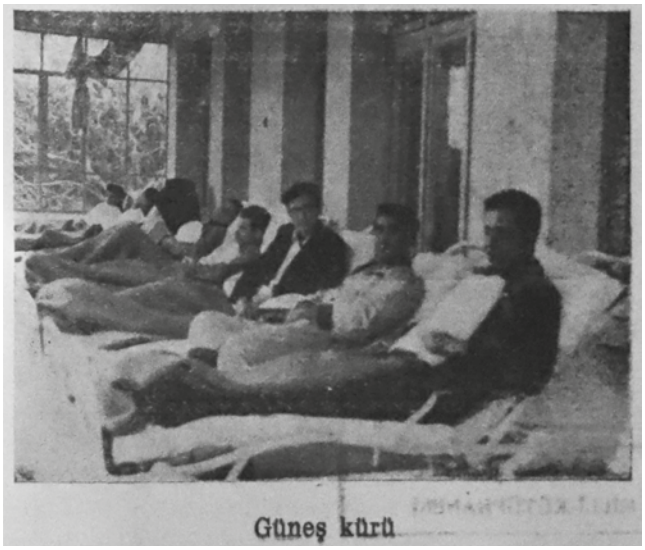
03 Buca Sanatorium (Izmir), 1950. © Yaşamak Yolu, 1950, No.162, p. 5.


Yemek Salonu


Laboratuvar

04 Dining hall and laboratory of Erenköy Sanatorium, 1933. © Yaşamak Yolu, 1933, No.53-54, pp. 7-8.

05 Theater hall of Heybeliada Sanatorium, 1940. © Yaşamak Yolu, 1940, No.92, p. 4.



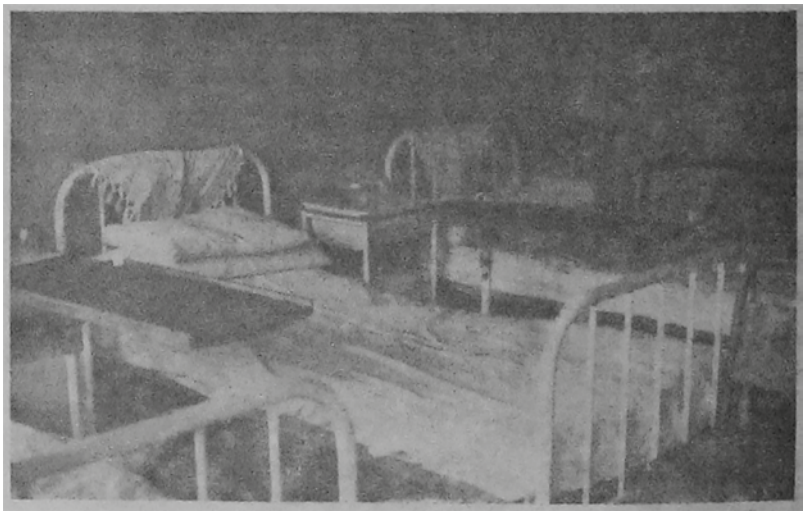
06 Cure balconies of Erenköy Sanatorium, 1940. © Yaşamak Yolu, 1940, No.90, p. 15.

the spatial relationships between them (Avci-Hosanli & Degirmencioglu, 2024). The hall of the first pavilion was uniformly white, centralizing the bust of Mustafa Kemal Atatürk, the founding leader of the Republic of Turkey, representing the sanatoria as part of his legacy and health reforms (Öktem, 1935b). Tables draped in white tablecloths adorned a spacious dining area, complemented by floral arrangements and a centralized radio system (Öktem, 1935b). The high-tech operating room in the latest pavilion was characterized by furnishings and fittings in a serene blue hue, as well as cleanliness to the point that "one was afraid to tread" (Öksüzcü, 1940). The theater hall's significance was evident in the aesthetics of its parquet flooring (Öksüzcü, 1940) [FIGURE 05]. The descriptions of the premises resembled those of a high-quality hotel rather than a typical hospital setting.

The journal showcased the patient rooms in sanatoria to highlight their advanced quality in terms of hygienic features. The Erenköy Sanatorium equipped its patient rooms with well-maintained beds and heating systems, as well as expansive windows [FIGURE 07] that allowed sunlight to infiltrate indoors (Anon., 1940). Burhaneddin Âli Moral (B.Â.M.) (1941a) described his room there as a hotel room of second-class quality, featuring three white-hued beds, undisturbed bedside tables, and a built-in closet. In the Heybeliada Sanatorium, the rooms had "pristine-white beds" and nightstands that "exuded a fragrance of cleanliness" (Öktem, 1935b). The narratives highlighted the inclusion of cure balconies as a spatial extension of the rooms [FIGURE 09].

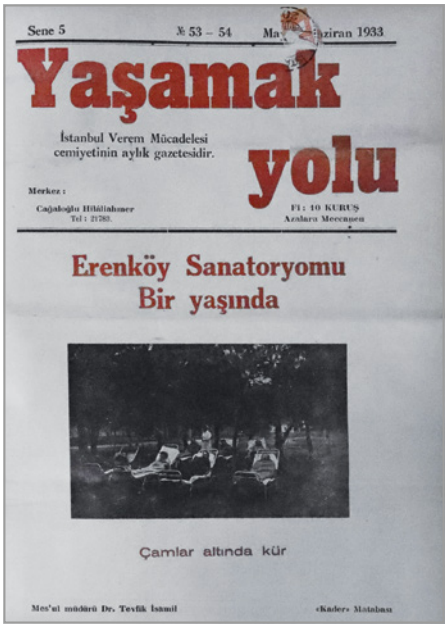
The low-tech characteristics of architecture, such as deep terraces, balconies, and/or garden pavilions, eased the cure sessions—the act of resting on a recliner in the open air for prolonged periods. The environmental and architectural design of sanatoria was developed in response to this primary demand [FIGURE 09]. The balcony recliners were arranged to ensure an appropriate distance between the patients. The recollections of a patient from the Erenköy Sanatorium informed the readers about the positioning of 18 recliners lined along the extensive balcony [FIGURE 06], patients' ability to wrap themselves up, and instances of rule-breaking during the cure hours (Burhaneddin Âli Moral (B.Â.M.), 1941b).

07 A bedroom in Erenköy Sanatorium, 1933. © Yaşamak Yolu, 1933, No.53-54, p. 9.



08 A bedroom in Hatay dispensary, 1948. © Yaşamak Yolu, 1948, No.147, p. 12.

a



b

c

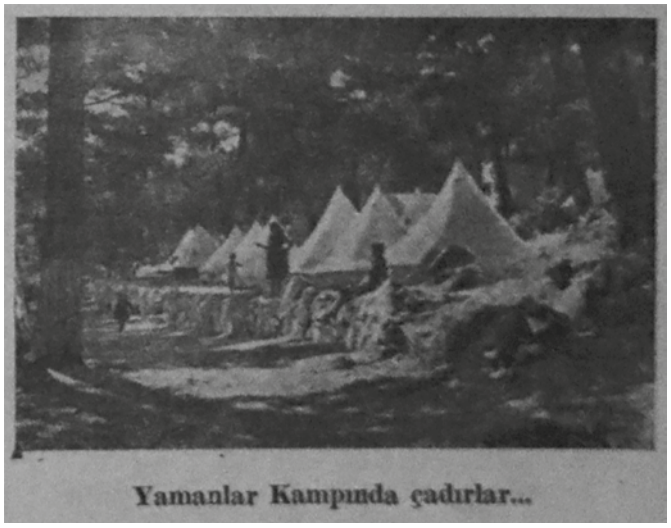
d

09 Covers and headlines of Yaşamak Yolu, which promoted the spatiality of the cure treatment from 1929-1946.
a: Validebağ Sanatorium complex, text reads: [The sun is the most important factor in protection against diseases. Children taking sun baths at the Validebağ Prevantorium of the Ministry of Education]. © Yaşamak Yolu cover, 1929, No.3;
b & c: Erenköy Sanatorium, texts read: [Erenköy Sanatorium is one year old. Cure under the pine trees] and [A view from the new pavilion of Erenköy Sanatorium]; © Yaşamak Yolu covers, 1933, No.53-54; 1939, No.89.
d: Heybeliada Sanatorium, text reads: [This time, a 250-bed pavilion built in Heybeliada]. © Yaşamak Yolu cover, 1946, No.131-133.

A close inspection of these articles reveals that the journal conveyed certain messages. The spaces of dust and darkness, without sunlight and fresh air, were environments where the tuberculosis bacteria could thrive. Therefore, through its focus on sanatoria, the journal informed the public about the necessary spatial arrangements to prevent bacterial propagation. Only the health reforms of the Turkish state and the legacy of the republican regime made it possible for tuberculosis patients to receive state-of-the-art and hygienic care in public healthcare institutions comparable to their Western and European counterparts. However, the challenging working and living conditions faced by the proletariat necessitated innovative approaches to combat tuberculosis. Patients who could not afford to stay in sanatoria pursued alternative measures.

ALTERNATIVE INTERIORS OF CONVALESCENCE AND MANAGEMENT OF FURNITURE AND OBJECTS

The journal recommended implementing the sanatoria's treatment regimen in everyday spaces. From this perspective, *Yaşamak Yolu* assumed responsibility for defining the regulations of sanitary modern housing and subsequently published guidelines for housing development. The guidelines included the selection of the site, the orientation of the structures, the plan layouts to offer the best possible usage schemes for the health of their residents, and the fittings and furnishings of the interior spaces to prevent the spread of the tuberculosis bacteria. The sanitary regulations for houses outlined in Le Corbusier's famous *Towards a New Architecture* were incorporated into an article titled *Sıhhi ve Rahat Ev [Hygienic and Comfortable House]* (Le Corbusier, 1931; Uysal, 1943). Despite its



10 Tents in Yamanlar Camp… in Izmir. © Yaşamak Yolu, 1950, No.162, p. 5.

11 A comparison of a 'surgical' modern furniture and a medical instrument captioned as "Legged, a modern spittoon." The visual on the left gives multiple messages about the new national identity: Health and hygiene, together with the modern Turkish woman happily reclining on a rest bed. © Yaşamak Yolu cover, 1949, No.156; Yaşamak Yolu, 1948, No.140, p. 8.

appeal, rendering it more fitting for a specialized architectural publication, an exemplary modern house tailored for a nuclear family was showcased with its plan on one cover concomitant to an article (Sağlam, 1949). However, the assessment of the content on housing covered in the journal would far surpass the limitations of this article.[8]

As a buffer zone between houses and objects, the journal introduced alternative interiors of convalescence in portable and temporal structures, i.e., tents. Countries that were unable to promptly establish sanatoria due to the economic crisis were advised to explore other practical approaches. Consequently, an alternative space for the treatment of tuberculosis was deliberated. Dr. Kudsi, the director of the Hygiene Museum in Istanbul, posited in 1932 that establishing tents may serve as a cost-effective and uncomplicated means of isolation. This intervention would benefit poor or newly developing countries, such as Turkey, where the number of beds available in sanatoria "did not surpass a mere two hundred" (Kudsi, 1932b). Moreover, the use of tents provided the advantages of sunshine exposure and open-air treatment with the families of the patients in proximity, which could positively affect the patients' morale. Unsurprisingly, the utilization of tents was advertised coinciding with the yearly inauguration of the Yamanlar Camp in Izmir, a complex established by the Izmir TB Association (Anon., 1935) [FIGURE 10].

Sanatoria had a major influence on the modernist furniture designs of the early 20th century (Campbell, 1999). When modern recliners (*chaises-longues*) were designed with anthropometric data and new production techniques, a new type of chair became an icon of Modernism. This solely functional furniture to heal tuberculosis patients soon spread to the new housing, so much so that the modern interiors were ridiculed as "surgical, clinical, and hospital-like" (Overy, 2007, p. 29). The tubular steel chairs and recliners were also showcased on occasional covers of *Yaşamak Yolu*. A photograph on the cover of an issue also conveys information about the new Turkish identity: A youthful, healthy, and modern Turkish woman is reclining on a modern piece of furniture, sunbathing, and enjoying a book [FIGURE 11].

It was imperative for the tubercular patient to employ physical barriers, practice correct coughing and expectoration etiquette, and diligently sanitize surfaces. The *Yaşamak Yolu* journal conveyed this etiquette, especially in private interiors, which the state could not surveil. The articles specifically highlighted the difficulty that emerged in the absence of sputum cups. Dr. Gökçe emphasized the importance of using sputum cups: "It was a civic duty towards one's own nation." One advertised example of a modern spittoon had tubular legs and was elevated from the ground for the patient in bed (Gökçe, 1948; Anon., 1948b). This design indeed aligned with the aesthetic principles of the Modern Movement furniture [FIGURE 11].[9]

CONCLUSIONS

Yaşamak Yolu, the journal of the Istanbul TB Association, aimed to disseminate propaganda and instructional content to foster societal consciousness regarding hygienic measures to avoid the spread of tuberculosis in urban settings, public buildings, medical facilities, and houses. From interiors to furniture to objects, the design principles and characteristics published in the journal demonstrated the characteristics of the Modern Movement design brought about by the tuberculosis crisis.

In a war-torn country in the early 20th century, the Istanbul TB Association's health advice journal established a correlation between modern interiors and tuberculosis. In the Western context, architects and designers actively promoted health through their hygienic designs and lifestyle choices, such as Jan Duiker jumping into a pond to promote exercise and Aino Aalto resting on her recliner (Colomina,

2019, pp. 108-109). The *Yaşamak Yolu* journal adopted a similar discourse, albeit with a different content. The architect, as a user, was the first to promote health in the Western context. In Turkey, doctors and patients—the latter perhaps involuntarily yet directly—became the promoters [FIGURE 05, FIGURE 06, FIGURE 09, FIGURE 10, FIGURE 11].

Acknowledging the challenge to fully capture the rich content within a single research article, this study jumped from the conventional modern public healthcare facility or building scale to a focus on alternate interiors, followed by objects and utensils. Aiming to set the groundwork for future research on tuberculosis' spatiality in *Yaşamak Yolu* via other architectural typologies and the subsequent decades (1950-1972), the extensive scope of the journal was revealed, including temporal and portable spaces of convalescence, everyday objects in domestic environs, and the management of tuberculosis paraphernalia.

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ENDNOTES

1 In early republican Turkey, the term 'propaganda' had a positive connotation: the spread of the principles of the new state's nation-building objective, including instructional material aimed at promoting social awareness. See note 2.

2 For more on early republican visual propaganda to fight diseases, see (Berberoğlu & Değirmencioğlu, 2023, pp. 228–229, 234).

3 For an analysis of Zeytinburnu, the largest squatter-neighborhood (*gecekondu*) in Istanbul as the tuberculosis-control pilot zone in 1961-1963, also covered in *Yaşamak Yolu*, see (Delmaire, 2023, p. 163). For a typological and urban analysis of Istanbul sanatoria, see (Avcı & Değirmencioğlu, 2024).

4 For the dissemination of late Ottoman and early republican era socio-political ideologies prescribed for Turkish homes, womanhood, and motherhood contextualizing tuberculosis, see (Evered & Evered, 2020). For tuberculosis, early republican housing and traditional houses, see (Değirmencioğlu, 2022).

5 *Yaşamak Yolu* comprised discussions on hygiene and dietary recommendations with translations of physicians' writings from *La Vie Saine* [*Healthy Life*] and *l'Esprit Médicale* [*The Medical Spirit*]. The journal also featured a selection of literary works, poems by patients, stories about sufferers, and plays centered around tuberculosis (İlikan Rasimoğlu, 2014, pp. 303–305, 307).

6 A modestly illustrated booklet designed to cater to the literacy level of its readers during the challenging process of transitioning from the Arabic to the Latin alphabet, *Yaşamak Yolu* experienced a shift towards a more scientific approach after 1940 (İlikan Rasimoğlu, 2014, p. 300).

7 For more on healthcare architecture, emotions, and senses, which focus on Turkish sanatoria interiors, see (Degirmencioglu & Avci Hosanli, 2023).

8 See note 4.

9 Other everyday objects and/or medical paraphernalia were also featured, such as lamps that provided artificial ultraviolet light to the interiors and wrapping kits (blankets, furs, etc.).

THE MODERN AESTHETICS OF PAVILIONS

An Investigation of the International Izmir Fair Pavilions

Nağme Ebru Karabağ and Gülnur Ballice

ABSTRACT: The Great Fire of Izmir in 1922 caused a great loss of life and property, and the historic city center was destroyed in a few days. However, this tragedy led to the realization of one of the most important modernization projects of the Early Republican Period in Turkey. The modern city plan for the burned area was prepared between 1924 and 1925 by Réné and Raymond Dangér under the consultancy of Henri Prost. It was as a typical example of the French urbanism school and, together with the buildings designed in the style of the modern Turkish architecture movement, ensured the production of spaces that would support the new lifestyle of modern society. One of the achievements of this plan was that Izmir Culturepark strengthened the image of the contemporary city with the green areas in the city center. Moreover, the International Izmir Fair, held in Culturepark every year starting in 1936, was also an important event in the socio-cultural and economic life of the city.

Some of the most attractive structures of the International Izmir Fair were pavilions built for the new institutions and provinces of the Republic of Turkey, foreign countries, and local and foreign companies. They have become exhibition objects as well as the promotion of commercial products, provinces, or countries. The pavilions carried symbolic significance for various reasons, including the presentation of innovations and advancements in building materials and technologies and the reflection of evolving architectural paradigms over time. They have also contributed to the development of the interior architecture profession as well as collaborations between other art disciplines.

This paper focuses on the interior designs of the pavilions designed and built for the International Izmir Fair between 1936 and 1970, despite the constraints faced by both the country and the city of Izmir following the 1922 fire. The scope of the study documents the existing data about the pavilions and evaluates them in terms of modern interior design history in Turkey.

KEYWORDS: Turkish modern interiors, modern pavilions, modern aesthetic, interior design history, Izmir Fair pavilions

WORLD'S FAIRS AND INTERNATIONAL IZMIR FAIR

The tradition of world fairs, beginning with London's 1851 "Great Exhibition of the Works of Industry of All Nations," significantly shaped the modern world and attracted scholarly attention. Many academic studies have focused on the connection between international exhibitions and emerging societal values (Rydell, 1993, p. 15). Exhibition structures, which have significantly shaped architecture and design, have been influenced by developments in architectural design around the world and have evolved over time. Initially organized within a single building, independent pavilion structures emerged due to international competition and the diversity of objects. The most important features of pavilions are their innovative and temporary nature. Most of these structures, except for the Eiffel Tower (Paris, 1889) and Unisphere (New York, 1964), have not survived, while some have been reconstructed, such as Le Corbusier's l'Esprit Nouveau in Bologna (Paris, 1925) and Ludwig Mies van der Rohe's German Pavilion (Barcelona, 1929) (Mattie, 1998). For this reason, scientific studies on missing pavilions are of great importance in terms of design history.

In addition to promoting commercial goods or nations, pavilions at fairs became exhibition objects themselves, shaping the future of architecture by presenting architectural trends, developments, and innovations in building materials and technology. Pavilions were simple structures both architecturally and functionally, despite being

ephemeral (Greenhalgh, 1988). Pavilions, known for their flexibility, quick construction, and standardization of architectural elements (Tunçbilek, 2013, p. 2), have become iconic structures designed to convey various messages. This building typology has become an important field of research, discussion, and application in architectural practice over time.

The first international fair of the young Republic of Turkey was held in Izmir, a port city that has hosted commercial activities throughout history. The Great Fire of Izmir, which occurred on September 13, 1922, caused a great crisis by destroying an area of 360,000 square meters in the city. However, the buildings built during the replanning according to French urban planning principles created an opportunity to produce modern interiors. One of the biggest achievements in the planning of the fire area was the construction of *Culturepark*, one of the most important modernization projects of the period. The International Izmir Fair, whose foundations were laid with the exhibition opening at the First Izmir Economic Congress, opened by Mustafa Kemal Atatürk in 1923, was held in *Culturepark* starting in 1936.

The International Izmir Fair, a significant promotional event for Turkey, showcased cultural, entertainment, consumption, recreation, and educational activities to attract visitors. It also featured pavilion structures showcasing economic, technological, and industrial developments (Gürel, 2015, pp. 213-243). Pavilions at the Izmir Fair are crucial structures for promoting state institutions, provinces, foreign countries, and local and foreign companies. They represent a strong design language and convey a symbolic message about the changing architectural trends. Despite reflecting the Early Republican Period state policies and nation dynamics, pavilion designs incorporated modern aesthetics and local and historical references from the National Architecture Movement in the second half of the 1930s. In this period, foreign country pavilions, mostly European, were shaped with neo-classical aesthetics due to nationalist policies (Pöğün-Zander, 2015). Örel and Çeçen (1939) stated that foreign country pavilions were designed by avoiding excessive construction in both their interior and exterior designs.

The pavilions of this period featured large-sized inscriptions indicating the use of the Latin alphabet and Turkish language, enhancing their ideological and symbolic quality of Turkey. Light was also used as an architectural element, emphasizing the Republic's development and industrialization breakthroughs through lighting designs (Yürekli, 1995, pp. 116-119). The Izmir Fair's pavilions significantly influenced the recognition of interior architecture in the public sphere and the development of the interior architects' identity after WW II in Turkey. The pavilions, which were redesigned every year, attracted global attention, allowed experimentation with changing design trends and new building materials, and increased the visibility of the interior architecture profession in society. Competitions for architectural and interior designs of pavilions and job advertisements for various professional groups have increased the visibility of the interior architect profession. The design and implementation of pavilions allowed interior architects to collaborate with various actors, including architects, graphic designers, painters, sculptors, and engineers. The details of the pavilions, such as display elements, visitor circulation, corporate identity representation, natural ventilation, and lighting, have created simple yet effective atmospheres (Gülmez and Görgül, 2015). In other words, pavilions as an architectural typology in the process of reconstructing the city after the fire enabled the development of the profession of interior architecture as a scientific discipline.

The Izmir Fair pavilions significantly influenced interior architecture education, with numerous interior designs created by painters and decorators from Mimar Sinan University Fine Arts Academy (Tansu, 1936). Instructors such as Ismail Hakkı Oygar, Vedat Ar, and Hayati Görkey, who initiated the interior architecture education at the academy, designed and implemented pavilions and exhibitions together with their students, and teachers and students from other applied art departments also contributed. The pavilion designs provided prestigious job opportunities for the first graduates of the Fine Arts Academy—the country's first higher education institution with an interior architecture department—and also offered practical training opportunities for their students, the second generation of graduates of the academy. Giving pavilion designs as a subject to students in studio courses at the academy has also been a factor that increases the quality of the designs made for the Izmir Fair (Gülmez and Görgül, 2015). To summarize, the exhibitions, pavilions, and fair stands at the Izmir Fair were one of the most common application areas of the interior architecture profession in the first years of the Republic. These venues facilitated the creation of refined interior spaces that embodied the modern identity of the newly established Turkish state. Moreover, *Culturepark* catalyzed the experience of the modern interior in times of crisis in the Early Republican Period.

THE CHANGING MODERN AESTHETICS OF INTERNATIONAL IZMIR FAIR PAVILIONS DESIGNED BETWEEN 1936 AND 1970

In this section, data on pavilion structures built between 1936 and 1970 are documented and evaluated. Although there is visual material about the exterior of many pavilions, photographs and/or documents of the

interiors are very limited. In the scope of this paper, eleven pavilions were selected for a detailed analysis of architectural features of different periods: *İnhisarlar* (State Monopoly Administration) Pavilion, 1936; *İzmir Vilayeti* (İzmir Provincial) Pavilion, 1939; *Sümerbank*, 1948; *İnhisarlar* (State Monopoly Administration) Pavilion, 1945; American Pavilion, 1957; Good Year Pavilion, 1964; Petrol Office Pavilion, 1966; Mobil Pavilion, 1970; Eczacıbaşı, Pirelli and Renault Pavilions, 1970.

The case study examples showcase the modernist movement and the propaganda mission of the Turkish Revolution, which started with the establishment of the Turkish Republic on October 29, 1923. These buildings were designed by Turkish architects, interior architects, and decorators, with contributions from sculptors, graphic, product, and furniture designers, and civil engineers. Most were constructed to represent Turkish governmental institutions, adhering to International Style aesthetic principles. Most of the buildings have an asymmetrical organization of primary geometric forms, resembling a new orthogonal and prismatic language (Hitchcock and Johnson, 1995, cited by Pöğün, 2000). Reinforced concrete skeleton construction was widespread in the 1960s, but after the 1960s, steel construction became the preferred system due to technological advancements. The exterior façades were usually composed of blind walls, allowing planning flexibility. Some semi-open pavilions with steel-frame construction systems had intricate details, representing modularity and temporality.

In 1936, materials such as wood and plywood were used to construct temporary pavilions, while permanent ones were built of masonry and reinforced concrete (Tansu, 1936, p. 284). Temporary pavilions had a short life span; only used for one month during the fair. However, since some of these pavilions were produced in a modular manner using prefabricated materials, the same structure was used in the following years, and a new interior design was integrated into the existing structure. In 1936, when *Culturepark* was opened, the construction of a total of 14 pavilions designed for local and foreign organizations was carried out by Necmettin Emre and Vedat Ar (Aksoy and Özgünel, 2001).

The *İnhisarlar-Tekel* [State Monopoly Administration] Pavilion, designed by Architect Emin Necib Uzman in 1936, is a corner plot pavilion consisting of two parts: one permanent and one temporary [FIGURE 01]. Permanent part: Reinforced concrete skeleton supported by individual bases and connected by a beam at ground level, brick filling, toilet installation. Temporary part: Colonnade constructed of plywood and framing the two front façades, sales exit, exit eave, glass tower with an elevation of 13.00 m from the ground and manufactured with

01 1936 İnhisarlar (State Monopoly Administration) Pavilion, exterior view. © Türkmenoğlu Archives, 2021.

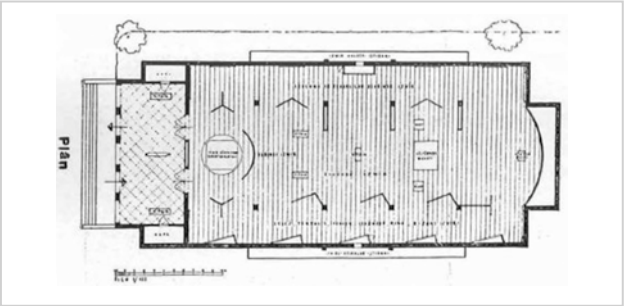
0.40/0.80 m pieces per division. It has an L-shaped plan; all three halls receive day and night light from a glazed ceiling. The air entering through the façade windows opening to the space between this ceiling and the roof deck provides a horizontal air current, and the air rising and warming up in the halls mixes with the current through the holes left in the glazed ceiling, which also form a ceiling motif. With this system, a constant airflow is provided inside the pavilion. The pavilion also features a vending machine, cinema, and cigarette manufacturing machines. The interior of the colonnade and glass tower is illuminated at night. The pavilion's design aims to introduce exhibited products without overshadowing them, create a desire to buy, attract attention, arouse curiosity, have aesthetic value, and gain appreciation from all segments of society [FIGURE 02, FIGURE 03] (Uzman, 1936, pp. 284-288). It reflects the modernist architectural and interior features of the Early Republican Period, such as modern and new, secular, hygienic (natural ventilation and maximum daylight), functional plan layout, with minimal details and simplicity, which are the aesthetic values of Modernism. Thus, it presents the contemporary face of the country in the essence of the revolution (Sayar, 1998, p. 129).

The Izmir Provincial Pavilion, designed by architect Halit Femir in 1939, showcased the city through an exhibition format. Izmir's Mayor Behçet Uz declared the opening of the pavilion called *Three Izmirs: Izmir's past, present, and future*. The goal of the pavilion was to showcase the historical evolution of the city from prehistoric times to the present. It begins with the oldest Izmir and gathers old blueprints, images, tables, and documents to show the urbanism features of the city. This will allow for a comparison between old Izmir and the lives of Izmir people from various periods (Ulus, May 13, 1939, as cited in İnan, 2020).

Femir experimented with materials and forms in his projects, particularly within *Culturepark,* due to its significance as a public space. He created original productions with contemporary design language, which influenced the pavilion's architecture, showcasing his unique approach

02 1936 İnhisarla (State Monopoly Administration) Pavilion, metal-glass cabinets. © Emin Necib Uzman, Arkitekt, 1936, pp. 284-288.

03 1936 İnhisarla (State Monopoly Administration) Pavilion, sales units. © Emin Necib Uzman, Arkitekt, 1936, pp. 284-288.



04 1939 İzmir Provincial Pavilion, plan layout, 1939. © Halit Femir, Arkitekt, 1939, pp. 208-211.

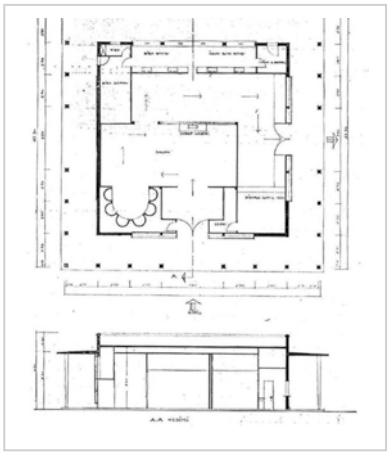
05 1939 İzmir Provincial Pavilion, exterior; a relief was added to the front façade after 1939. © Mehmet Server, February 27, 2022_Izmir Fair Facebook group.

06 1939 İzmir Provincial Pavilion, bicep panels designed at an angle for easy perception. © APİKAM Archives, 2024.

07 1939 İzmir Provincial Pavilion, Atatürk's aphorisms, photographs of the Izmir Fair, historical layers, and past periods. © APİKAM Archives, 2024.

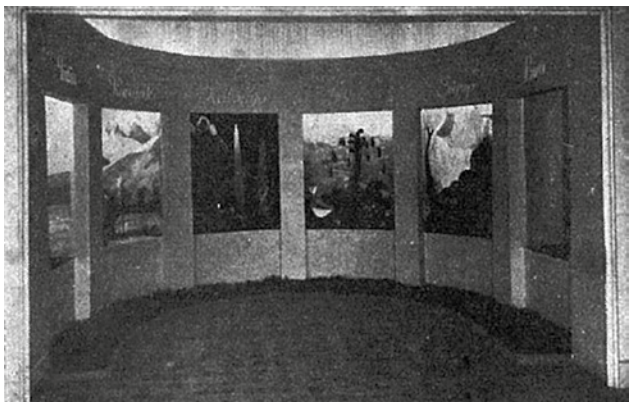
to design (İnan, 2020). In the architectural design of the pavilion, prismatic elements were brought together in a balanced manner, the cylindrical mass was raised and covered with transparent elements to emphasize the role of the monopoly administration in the country's economic development, and this mass was illuminated at night to increase its emphasis.

The building features a semi-open space with entrance and exit doors on both sides of the symmetry axis [FIGURE 04, FIGURE 05]. The interior is divided into three sections, with pastel colors achieving harmony (Femir, 1939, pp. 208-211). Halit Femir designed different exhibition layouts by using original showcasing details with contemporary materials. He organized the exhibition space using planar and prismatic display panels and glass cabinets. There were panels, exhibition tables, and metal-glass cabinets in the light colors. Interrelated images and city maps were displayed together [FIGURE 06]. Permeable exhibition panels consisting of horizontally spaced strips contributed to the perception of spatial depth. The space features Atatürk's aphorisms, photographs of the Izmir Fair, historical layers, and past periods. The city maps were placed at an angle for visibility, and information about the period related to the city maps was provided on the adjacent panel. They indicated the developments in the city in terms of urbanization and newly emerged neighborhoods after the Izmir Fire [FIGURE 07] (Femir, 1939).



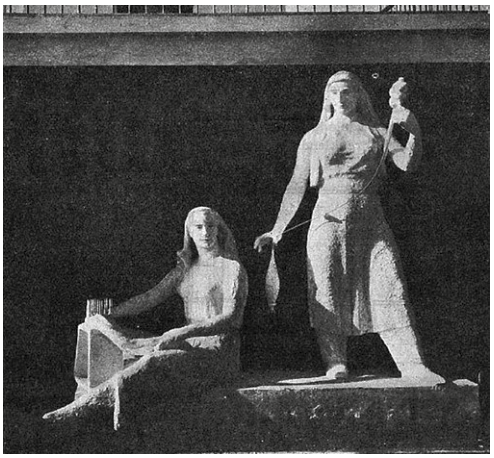
08 1945 İnhisarla (State Monopoly Administration) Pavilion, plan and section, 1945. © Selman Yönder, Arkitekt, 1945, p. 01.

09 1945 İnhisarla (State Monopoly Administration) Pavilion, simple cubic square-shaped mass surrounded by columns and wide eaves. © Selman Yönder, Arkitekt, 1945, p. 157.



10 Interior exhibition panels, 1945. © Selman Yönder, Arkitekt, 1945, p. 9.

11 Sümerbank Pavilion, exterior view, 1948. © Affan Kırımlı, Muhlis Türkmen and Muhteşem Giray, Mimarlık, 1948, p. 155.

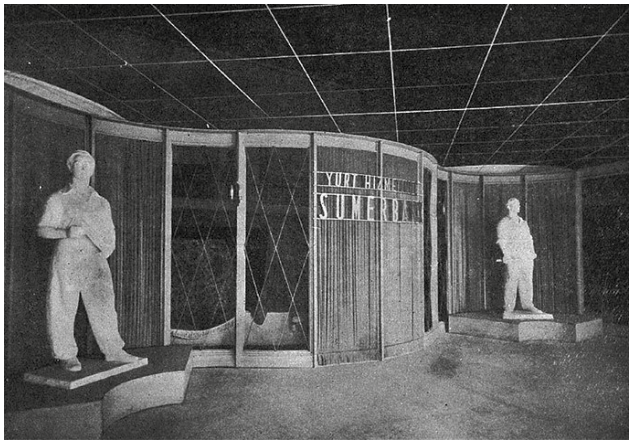


12 Sümerbank Pavilion, sculptures on the terrace, 1948. © Affan Kırımlı, Muhlis Türkmen and Muhteşem Giray, Mimarlık, 1948, p.156.

The other province pavilions, despite not being visible at the World Fairs, promoted their regional products and participated in the Izmir Fair due to agricultural and economic policies, sometimes housing sales units (Pöğün-Zander, 2015, p. 207).

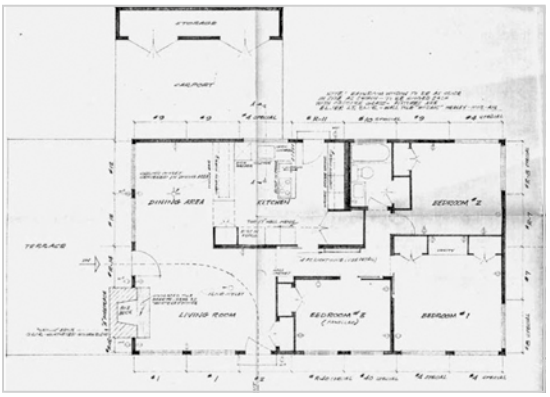
Innovations in the field of design, such as creative, experimental, and innovative approaches, and increased collaborations between different disciplines and diversity, which were seen all over the world after WW II, showed their impact in Turkey, and different designs emerged in the pavilion structures of the Izmir Fair. As an example of this, in 1945, Selman Yönder won the *İnhisarlar* (State Monopoly Administration) Pavilion architectural project competition, with Hayati Görkey and Mazhar Nazım Resmor designing the interior [FIGURE 08]. The pavilion features a simple cubic square shape with columns and wide eaves while maintaining a harmonious design with wall surfaces and light pools [FIGURE 09] (Yönder, 1945; Gülmez and Görgül, 2015). Mazhar Nazım Resmor, a graduate of Paris Applied Arts School in 1932 and a renowned caricaturist, stained glass artist, and exhibition designer, designed the interiors of the *İnhisarlar* [State Monopoly Administration] Pavilion [FIGURE 10] and the entrance façade wall relief which was added after 1939 (İnan, 2023). The pavilion is a good example of three different designers working in harmony on architectural and interior design.

The 1948 İzmir Fair *Sümerbank* Pavilion project, designed by Affan Kırımlı, Muhlis Türkmen, and Muhteşem Giray, was a competition-winning project [FIGURE 11]. The competition specifications requested to protect the reinforced concrete skeleton system of the pavilion built for the Izmir Fair in previous years and to make some innovations with a low budget. In this direction, the architects added an open terrace in front of the entrance façade, creating a semi-open, human-sized entrance courtyard in front of the building [FIGURE 12]. This terrace system connected the gallery floor with the exterior, creating transition spaces and strengthening the indoor-outdoor relationship (Kirimli et



13 Figure 13: Sümerbank Pavilion, interior showcases, 1948. © Affan Kırımlı, Muhlis Türkmen and Muhteşem Giray, Mimarlık, 1948, p. 157.

14 Model American House and the American Pavilion in the background, 1957. © US National Archives, March 1957–August 1957 RG 489, Box 19, Folder: Izmir (L.W. Court Files), from Gönlügür, 2018, p. 121.



15 Plan of the Model American House, 1957. © US National Archives, March 1957–August 1957 RG 489, Box 19, Folder: Izmir (L.W. Court Files), from Gönlügür, 2018, p. 122.

16 Model American House interior view, 1957. © US National Archives, March 1957–August 1957 RG 489, Box 19, Folder: Izmir (L.W. Court Files), from Gönlügür, 2018, p. 123.

al., 1948). The sculptures and plastic works on the façade and terrace section were made by Sculptor Hüseyin Anka while the interiors were designed by Abidin Zafir [FIGURE 13]. Such collaborations can be interpreted as an indicator of a trend that became widespread, especially after WW II. The project showcased the cooperation between architects, interior architects, and sculptors in 1950s Modernism.

Turkish-American relations, which began with the Marshall Aid in the 1950s, led to American influence in different areas in the following years. The 1957 American Pavilion at the Izmir International Fair, designed by Peter Muller-Munk, can be seen as one of the examples of this approach [FIGURE 14]. This pavilion featured a Model American House and several other buildings (Gönlügür, 2018, p. 120). The model house, consisting of a living room, dining room, and open kitchen, introduced visitors to a new lifestyle in daily life [FIGURE 15]. The study, bedroom, and children's rooms featured Casablanca sofas, Herman Miller brand Formica game tables, modular shelves, and Eames chairs [FIGURE 16]. The bathroom featured blue tiles and ceramic products, and the open kitchen featured fitted kitchen cabinets, a Formica counter, a Westinghouse brand refrigerator, a wall oven, and a dishwasher. The American Pavilion amazed visitors with an unconventional Modernism that was not part of everyday life for the local people of Izmir and its environs. The Model American House introduced local citizens to modern interiors and furniture, introducing new ideals, pedagogical approaches, hygiene standards, and contemporary food preparation (Gönlügür, 2015). In terms of kitchen and bathroom equipment, it was a great novelty for Turkish people living in rural areas, in particular, to see the equipment and specially designed furniture in the model house up close.

Between 1960-1970, the Izmir International Fair was very important, especially for the students of the Mimar Sinan University Fine Arts Academy. There was a big race among the teachers and their students to make these projects bigger and more effective every year. In 1964,

17 1964 Good Year Pavilion. © Küçükerman Archives, 1964.

18 1966 Petrol Office Pavilion. © Küçükerman Archives, 1966.

19 1970 Mobil Pavilion, exterior view. © Yusuf Pakman, SALT Archives, 1970.

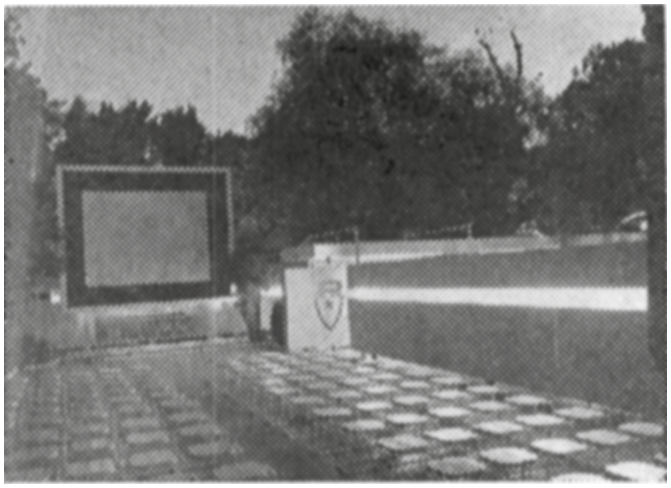
20 1970 Mobil Pavilion, interior view of dome structure. © Yusuf Pakman, SALT Archives, 1970.

21 1970 Eczacıbaşı Pavilion. @ Mimarlık, 1970-10 (84), p. 46.

Önder Küçükerman and his classmates designed pavilion interiors and furniture at the İzmir Fair. Their most significant projects were "Petrol Office" and "Good Year," both pavilions for the respective companies. The projects were completely prefabricated, with every detail meticulously planned and assembled within a day or two. These works are personal favorites of Küçükerman [FIGURE 17, FIGURE 18] (Ö. Küçükerman, personal communication, September 19, 2023).

Architect Bedri Kökten and decorator Selçuk Akbaşlı designed the Mobil Pavilion in 1970, integrating nature with stands in the form of a dome [FIGURE 19, FIGURE 20]. By using semi-open dome structures, the background with its green texture could be seen. These structures also enhanced the public interior with their curvilinear forms. The dome at the entrance was raised, and functions like display panels, traffic models, driver test areas, resting areas, and cinema were placed along the circulation axis. The green texture in the background was increased by using a single color in new masses built in addition to the existing pavilion (Kökten, 1970, p.49)

In 1970, AFA-Architecture and Engineering (Faruk San, Kayan Özgiller, Nizamettin Coşkun, Ürün Güray, and Sina Serinken) designed the *Eczacıbaşı*, Pirelli, and Renault Pavilions ("*Renault Pavyonu*", "*Eczacıbaşı Pavyonu*", "*Pirelli Pavyonu*", 1970). The *Eczacıbaşı* Pavilion, located on Cascaded Pool Square, featured indoor and outdoor spaces [FIGURE 21]. It featured fluorescent light display showcases, ceramic productions, dark-colored mosaic tiles *(Famerit)*, and Palladian flooring. The pavilion was a symbol of the fair and showcased *Eczacıbaşı's* ceramic productions. The Pirelli Pavilion featured a polished wood promotional and exhibition platform with integrated entrance and exit ramps. The platform incorporated four graphic panels that illustrated sequential stages of the exhibition narrative for visitors. Tires are displayed on a carrier hexagonal structure, and a welcome counter and seating groups are arranged. The platform also serves as a foyer for viewing the exhibition and cinema. A rounded panel on the floor between the promotional section and



22 1970 Pirelli Pavilion. @ Mimarlık, 1970-10 (84), p. 47.

23 1970 Renault Pavilion. @ Mimarlık, 1970-10 (84), p. 45.

the cinema area explains the development of automobile types throughout history. The exhibition platform on the cinema floor has a capacity of 150 people [FIGURE 22]. The Renault Pavilion showcases innovations such as a rotating automobile display, an open cinema with a capacity of 40 people and a foyer, as well as exhibits highlighting Renault's global operations and technological advancements. Photographs, graphics, and texts promoting the company are exhibited on a second surface that allows the space created in front of the existing wall surfaces to be perceived in human size. The company's name and logo can be found on the outer wall of the circular suspended ceiling structure located on the rotating platform where the vehicle is displayed [FIGURE 23].

While the Izmir Fair between 1936-1940 was an important indicator reflecting the state policies and the internal dynamics of the entire nation in the early years of the Republic of Turkey, the pavilions were also influenced by the developments and policies in the field of architecture and design in the world, reflecting the trends of the periods in which they were built. The pavilions, the majority of which were designed by Turkish architects and designers, were shaped with different scales, structural features, and architectural aesthetics due to their symbolic functions. The large Turkish words on the exteriors and interiors of the structures were used to emphasize the Latin alphabet, which began to be used with the alphabet revolution. The importance given to lighting in the structures refers to the industrialization initiatives of the new Republic. Economical construction techniques and the use of plywood and plastic materials can be considered the characteristic features of the exhibition structures in the early Republic period. The Izmir Fair also undertook an important task in terms of interior architecture education, and many professors who taught in the interior architecture and other applied arts departments at the Mimar Sinan University Fine Arts Academy designed pavilions and exhibitions together with their students. In this sense, the Izmir Fair has become a platform that contributes to the increase in the visibility of professions such as interior architecture and graphic design. From the Early Republican Period to the first half of the 1970s, the exhibitions and pavilions at the Izmir Fair brought the profession of interior design to the public sphere and ensured that it was freed from the dominance of the elitist wealthy class. Competitions opened for the architectural and interior design of the Izmir Fair pavilions, and advertisements given in newspapers for different professional groups, such as decorators (interior architects), architects, and engineers, reinforced the fact that the profession of interior design was a different branch of design. Pavilion structures, which were generally built temporarily for a certain period of time at the Izmir Fair, in addition to their promotional function for the products they exhibited, became iconic structures that represented innovations in the field of architecture and interior design and reflected modern aesthetics with their designs.

CONCLUSION

One of the innovations that started in every field with the establishment of the Republic of Turkey was the construction of public spaces needed by the new state, and city parks designed to reflect the Republican ideology played an important role in this process (Bozdoğan, 2002, pp. 75-79). In this respect, *Culturepark*, which hosted the International Izmir Fair, became one of the most important modernization projects of the Early Republican Period. Although the fire in 1922 caused great destruction in the city and the memory of the citizens, *Culturepark*, which was built during the reconstruction works of the fire area in 1936, and the International Izmir Fair held there annually attracted worldwide attention. It was an important socio-cultural and economic event for the whole of Turkey on the one hand, and on the other hand, it represented the modern architecture of the Early Republican Period with its pavilions, exhibition halls, parachute tower, gates and landscapes (Gürel, 2015, pp. 213-243).

The most important architectural typology of the Izmir Fair were the pavilions, which were redesigned annually. Turkish architects and designers who designed the

majority of these buildings followed the changes in the field of architecture and design in the world and the developments in the field of building materials and technology. The pavilion interiors designed at the Izmir Fair have become a part of interior architecture education in Turkey and expanded the horizons of the interior architecture profession. The achievement of many pavilion projects through competitions has enabled the interior architecture profession to collaborate with other disciplines and increase productivity and the quality of designs by creating a competitive environment[1].

While straight lines and simple geometric forms were preferred in pavilion designs in the early periods of the fair, in parallel with the development of building materials and technology, angled lines and circular forms began to be used. With the development of steel construction materials and systems, the use of wood, plywood, and reinforced concrete frames has decreased, and larger spans with more flexible free plans were designed. Natural ventilation was provided in the pavilions due to the hot climate of Izmir; several solutions were developed, such as providing air circulation in interior spaces with raised ceilings, establishing a relationship between indoor spaces and open/semi-open spaces by using traditional courtyard plan schemes, ensuring integrity and continuity between indoor and outdoor spaces. Special attention was given to the interior and exterior lighting designs of the pavilions, and simple but effective interior lighting was designed to symbolize the enlightenment ideology of the Republic. In this period, when corporate identity began to develop conceptually in interior design, state institutions and organization pavilions became a means of reflecting the modernization ideology of the young Republic and its development in every field, in addition to promotion, exhibition, and sales purposes. Architectural and spatial innovations and suggestions have been developed for the proper understanding of the corporate identity in the pavilions of foreign countries and provinces, local and foreign companies, and the placement of exhibitions and stands and planning of visitors' circulation have been made accordingly. Pavilions, generally designed as temporary, sometimes consisted of permanent and temporary parts to allow changes and were renewed the following year at lower costs.

To summarize, pavilion designs and applications have played an important role in the development of the interior architecture profession, the formation of the interior architect identity, and the training of many interior architects. Although these modern buildings, which are generally small in size, are structurally and functionally simple, they convey strong symbolic messages and have become a means of expression of the modernization efforts of the Republic of Turkey in every field. Although the pavilion structures designed and built for the Izmir Fair between 1936 and 1970 have mostly not survived to the present day, there is information and documentation about their original designs in the archives. Studies in which these data are documented and evaluated will contribute to the deepening of studies on the history of interior design, together with new data obtained in the future.

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ENDNOTES

1 Artist and architect/interior architect collaboration was developed in Turkey and the world especially between 1950-1970 following the global scale developments after WWII. Painter Bedri Rahmi Eyüpoğlu produced the mosaic wall for the Turkish Pavilion at the Brussels Exhibition in 1958. Ceramic artists Gençay Kasapçı, Sadi Diren, and Jale Yılmabaşar designed mosaic panels for the METU Faculty of Architecture, the AKM building, and the Istanbul Governorship Hall respectively. Yavuz (2019) mentions other examples of the collaborations in the İstanbul Complex of Retail Shops (1963): ceramic panels by Sadi Diren (Abstract Composition, 1965) and Füreya Koral (Abstract Composition, 1965); mosaic panels by Eren Eyüpoğlu (Composition: Impressions from Anatolia journeys, 1965), Bedri Rahmi Eyüpoğlu (Abstract Composition, 1965 and Istanbul, 1965) and Nedim Günsür (Horses, 1967); a sculpture by Yavuz Görey; a metal relief by Kuzgun Acar (Birds); and another relief by Ali Teoman Germaner (Abstract Composition, 1965).

RETROTOPIA. DESIGN FOR SOCIALIST INTERIOR SPACES

Claudia Banz and Helena Huber-Doudová

ABSTRACT: This exhibition review, in the format of a visual essay, presents a selection of projects shown in the exhibition Retrotopia. Design for Socialist Spaces. Initiated and organized by the Berlin Kunstgewerbemuseum in 2023, Retrotopia was a comprehensive, cooperative project focusing on the role and impact of design in the countries belonging to the former Eastern Bloc and ex-Yugoslavia. Never before have these countries been represented together in one exhibition with their attendant material that helps to outline and raise awareness and understanding of the region's design activities between the 1950s and the 1980s. Eleven design capsules were created, each highlighting two projects: one representing the public space and one the private sphere and the interior. The spectrum of interior projects and objects on display ranged from experimental housing exhibitions and cybernetic living machines to new furniture concepts, modular kitchen furniture, tableware, household tools, and toys for children.

KEYWORDS: Socialist interior, Retrotopia, dwelling, standardization, housing exhibition, kitchen design, open form

INTRODUCTION: The rationalization movements are among the striking signatures of the 20th century, as is the vision associated with Fordism. Both proposed to regulate social conflicts of interest through social engineering. Economies, societies, cities, and people were to be rationalized in analogy to the machine-controlled processes in factories in order to achieve the greatest possible efficiency.

Standardization, rationalization, and normalization were to shape everyday life in the home and contribute to the development of a new human being in the interwar period. In 1929, Sigfried Giedion, journalistic pioneer and leading theorist of *Neues Bauen* and secretary of CIAM, published the book *Befreites Wohnen* (*Liberated Living*), in which he wrote off the old, gloomy, and musty tenement architecture and instead propagated a white, light and airy, translucent, mobile architecture and interior that was to follow the sporting and socio-hygienic imperative of "light, air and openness."

Attempts were made to overcome the housing shortage crisis after World War II by resorting to industrialized construction, also euphemistically referred to by Giedion as 'Wohnford'. On both sides of the Iron Curtain, the model of the functional city prevailed. The housing policy objective was to give broad sections of the population access to affordable housing with a higher standard of living.

'Housing for all' was the slogan in the former socialist countries from the Baltic states to ex-Yugoslavia. Housing policy was seen as a means of promoting social justice and the common good, and comprehensive state programs to create housing were implemented accordingly. The construction site symbolized progress towards a better and socialist future. In everyday life, rationalized construction with prefabricated slabs meant a leap in comfort from poorly renovated old buildings to centrally heated modern apartments with their own bathroom and fitted kitchen. The new housing estates were provided with generous green open spaces for recreation and a tiered infrastructure that included playgrounds, kindergartens, and schools, as well as the provision of everyday necessities such as supermarkets, pharmacies, and doctors.

EXHIBITION RETROTOPIA LIFTING THE CURTAIN

During the Cold War, design and architecture mutuated into a mirror of the geopolitical showdown between the two superpowers; yet beyond political appropriation, there was a sameness in the difference. Designers and architects in both systems were confronted with the same social challenges, worked on similar design questions

and sustainable solutions for the environment, developed comparable ideas, and designed visionary projects that often failed to progress beyond the status of experiment or prototype.

Retrotopia exhibition is thus a search for the traces of this parallel revolution, turning the spotlight on the countries of the former Eastern Bloc and ex-Yugoslavia. The Kunstgewerbemuseum (Museum of Decorative Arts) Berlin initiated a co-creation and co-curation process, together with eleven teams based in Tallinn, Vilnius, Warsaw, Budapest, Prague, Brno, Bratislava, Kyiv, Ljubljana, Zagreb, and Eisenhüttenstadt. The research process included workshops, conferences, and an exhibition catalog and became a unique experiment connecting the curators to one another. The results of the collaborative research will be published in a digital archive.

VISUAL ESSAY

This visual essay presents a selection of the projects and objects shown in the eleven Retrotopia capsules. The descriptive project texts are taken from the accompanying booklet and from the exhibition catalog; they were written by the respective co-curators of the individual 'design capsules'. These texts have been condensed and revised for this review by Claudia Banz and Helena Huber-Doudová for the DJ Interiors issue *Modern movement interiors in the times of crisis*. The four sub-sections address the following topics: Housing exhibitions as models for living and dream homes; The kitchen as laboratory for a better society; Standardization versus Experiment; and New Utopias.

HOUSING EXHIBITIONS AS MODELS FOR LIVING AND DREAM HOMES

Housing is one of the most basic human needs, and the achievements of both capitalism and socialism were measured first of all in terms of the level of reconstruction and the provision of homes. The development of new settlements and urban districts was promoted by exhibitions that showcased model dream homes, new kinds of furniture, and new household technologies in the tradition of the housing exhibitions from the 1920s. The postwar period promoted the International Style as a model for future dream interiors.

EXHIBITION HOUSING FOR OUR CONDITIONS, LJUBLJANA 1956

Housing for Our Conditions was Yugoslavia's first postwar exhibition promoting new lifestyle concepts. Three competitions were launched for a terraced house, an economical sanitary node, and rational mass-produced residential furniture. The winning proposals for a terraced house were presented as full-scale models, all fully equipped with the latest furniture and fittings, including a laboratory kitchen designed by Branka Tancig. First prize went to the Trata terraced house, designed as a two-story structure of 100 square meters with an external atrium. However, the Trata terraced house was never built [FIGURE 01].

01 Exhibition Housing for Our Conditions — Trata apartment by Janez Lajovic, Vladimir Mušič, Anton Pibernik, Savin Sever, Slovenia, Yugoslavia, 1956. © Janez Kališnik, Museum of Architecture and Design, Ljubljana, 2023.

EXHIBITION FAMILY AND HOUSEHOLD, ZAGREB 1957–1960

Between 1957 and 1960, the *Family and Household* exhibition was held three times on the grounds of the Zagreb Fair. The exhibitions were extremely popular, with the second edition in 1958 attracting more than a million visitors. This edition included a pavilion featuring an 'ideal apartment' presented by architect and designer Bernardo Bernardi [FIGURE 02]. He paid great attention to the functional furnishings of these small living spaces, a two-bedroom apartment of 43.7 square meters for 3-4 people and a three-bedroom apartment of 56 square meters for 4-5 people. The living room featured furniture by Boris Babić and Mario Antonini as well as pieces by Bernardo

02 Exhibition Family and Household — the Ideal Apartment by Bernardo Bernardi, Croatia, Yugoslavia, 1958. © unknown, Croatian History Museum, Zagreb, 2023.

03 Exhibition neues leben – neues wohnen: model apartment – dining area by Rudolf Horn, Eberhard Wüstner, Berlin-Pfennpfuhl, Germany, 1962. © Deutsche Photothek / Friedrich Weimer, 2023.

04 Laboratory Kitchen by Branka Tancig, Slovenia, Yugoslavia, 1953/1954. © Kunstgewerbemuseum Berlin, 2023.

Bernardi and Ferdo Rosić (a newspaper holder and a floor lamp), while the living room of the latter mostly featured items presented at the 1957 Milan Triennial (including furniture, textiles, glass, and porcelain objects), where they won a silver medal.

EXHIBITION NEUES LEBEN – NEUES WOHNEN, EAST BERLIN 1962

Neues leben – neues wohnen (*new life – new dwelling*), an exhibition of fifteen furnished flats opened inside the prominent prototype of the building project Wohn- und Erholungsgebiet Umgebung Fennpfuhl (Fennpfuhl Residential and Recreational Area) in East Berlin [FIGURE 03]. The main innovations on the ground floor were the arrangement of the kitchen and bathroom on the inside and a large multifunctional living room alongside the windows. To satisfy the demand for spaciousness, the designers Rudolf Horn, Rudolf Schierz, and Eberhard Wüstner eliminated conventional storage furniture. Instead, the furniture was used as room dividers to define the space. In response to the scarcity of resources, the collective also devised alternatives to the classical use of veneer and covered the furniture with decorative laminate. The designs presented in the exhibition, however, had little direct impact on production.

THE KITCHEN AS LABORATORY FOR A BETTER SOCIETY

Avantgarde architects made the kitchen the starting point for rationalizing domestic design and production, combining the social promise of a better quality of life with a focus on women's interests. The famous *Frankfurt Kitchen* (1926-1927), designed by Grete Schütte Lihotzsky on a 2 x 3 m floor space based on a scientific analysis of housework, became a worldwide influential model after World War II that enabled minimum movement but maximum hygiene. In the postwar period, the famous Kitchen Debate between Richard Nixon and Nikita Khrushchev (1959) led, among other things, to a reform of the consumer goods industry in the countries of the former Soviet Union, which also included products of mechanical engineering for the household.

BRANKA TANCIG: LABORATORY KITCHEN, 1953/1954 (SLOVENIA)

In former Yugoslavia, Slovenian architect Branka Tancig designed functional and hygienic kitchen furniture during her studies in 1953 [FIGURE 04]. It was commissioned by the Center for the Advancement of Households [Center za napredek gospodinjstva, CZNG] and manufactured by the Maribor Furniture Factory in 1954. The kitchen

consisted of eighteen different modules, which could be freely selected and assembled into a suitable whole. The idea was to have all the pieces of furniture and necessary appliances connected into a continuous line in as small a space as possible to streamline the user's movements. This first Yugoslavian/Slovenian Laboratory Kitchen was exhibited at the Housing for Our Conditions exhibition (1956) in Ljubljana and the Family and Household exhibition (1958) in Zagreb, where its use was demonstrated in an auditorium.

STANDARDIZED KITCHEN PROJECT, 1975 (HUNGARY)

In 1972, a group of eight young Hungarian designers launched the Standardized Kitchen Project in order to attain a shift in living quality through the development of kitchenware and furnishings [FIGURE 05]. The design process, in which representatives from industry and commerce were involved from the outset, was divided into three larger phases: 1) thorough exploration of needs, 2) elaboration of design tasks, and 3) organization of production and distribution. The Standardized Kitchen Project was not to be realized in its entirety. The majority of products would remain prototypes. Among the pieces that went into production are the pressed soda glass, an apple grater, and a lemon juicer, designed by Júlia Kovács, and the enameled pans by designers Csaba Asztai and György Soltész.

SATURNAS VACUUM CLEANER, 1962–1975 (LITHUANIA)

The iconic Saturnas vacuum cleaner was created by Lithuanian designers and engineers inspired by space-age aesthetics [FIGURE 06]. The production began in 1962 at the Vilnius Electric Welding Equipment Factory. It weighed almost seven kilograms but had three small wheels to make everyday housework easier, aiming to realize Khrushchev's promise in the famous 1959 Kitchen Debate to overtake and surpass America. Alas, in Soviet reality, the design found in private spaces was more depressing than promising, and the acquisition of new, well-functioning, appealing, and useful products like this was a utopian dream.

STANDARDIZATION VERSUS EXPERIMENT

The tendency toward housing standardization and typification was applied on multiple levels and to elements: to concrete panels and housing cores, interior fittings, and furniture. This influenced the emergence of a specific phenomenon known as 'prefab-block culture.' However, the monotony and mass production of limited series were its main drawbacks. Even under socialism, there were numerous endeavors to overcome the monotony of living standards and lifestyle: in exhibitions as fields of experimentation, projects officially tendered by state institutions; however, most of them never went beyond the prototype stage.

05 Standardized Kitchen Project: Dish set by Csaba Ásztai, György Soltész; Lemon juicer and apple grater by Júlia Kovács, Budapest, Hungary, 1975; Schematic drawings for a basic series of ceramic tools, Hungary, 1974; Photorepro: Művészet [Art], 8, 1977, p. 5. © Kunstgewerbemuseum Berlin, 2023.

06 Saturnas vacuum cleaner by Vytautas Didžiulis, Almantas Laužadis, and Arkadijus Šapiro, Lithuania, 1962-1975. © Algimantas Aleksandras Brazaitis, Central State Archives, Vilnius, 2023.

GERALD NEUSSER: RADIKÁL WALL UNIT, 1971 (CZECHOSLOVAKIA)

The living room became the space receiving the most aesthetic care in the prefab home, not least because of its social function and its representation of proud owners. At its heart was the TV set, an item owned by 98% of Czechoslovak households in 1976. Apart from the television and the car, the wall unit, which dominated the living room, was an equally important status symbol and proof of social respectability. In the design of the Radikál wall unit, architect Gerald Neusser based the aesthetic effect of the unit on the contrast of the veneer frame and the clean white surfaces of laminated panels [FIGURE 07].

07 Radikál wall unit by Gerald Neusser, Czechoslovakia, 1971. © Kunstgewerbemuseum Berlin, 2023.

EXHIBITION RUUM JA VORM, 1969 (ESTONIA)

Ruum ja Vorm (space and form) was an exhibition of experimental work first held at the Tallinn Art Hall in 1969, with subsequent editions in later years [FIGURE 08]. The first edition's keywords were experimentation, standardization, and the combination of these towards a sense of individuality. As its initiators, i.a. Bruno Tomberg, wrote: "The aim of this exhibition is to offer new analyses of spatial organization and the material-spatial environment that transcend the boundaries of everyday practical tasks" (Vello Asi and Väino Tamm, "Näitus Ruum ja Vorm", in: *Sirp ja Vasar*, 1969, 4 April, p. 1). The concept of using standard elements to create non-standard solutions was presented as an open-ended invitation to both designers and exhibition visitors, showcasing the designer's research process and highlighting new ideas in form, materials, and colors, along with the potential for individuality within the standard toolbox.

POLYFORM, 1970 (EAST GERMANY)

In 1967, the Central Institute of Design in East Berlin commissioned the development of a "modular furniture system for the formation of a wide range of space-defining structures for dwelling". According to interior designer Karl-Heinz Burmeister, "Polyform was the order of the day. In the building industry, it was all about dwelling with no interior walls" (Karl-Heinz Burmeister, conversation with Silke Ihden-Rothkirch, 22 June 2022). Polyform combined structural forms ranging from small, free-standing pieces of furniture to space-defining, space-delimiting case goods usable from all four sides [FIGURE 09]. All body elements were interchangeable. The innovative modular furniture system consisted of panels and so-called profile nodes: square tracks into which the panels could be inserted on the four long sides. Polyform was presented in the important GDR design magazine *form+zweck* in 1970. The magazine illustrations suggest the successful development of a product for contemporary residential needs. However, Polyform remained just a prototype that never went into production.

TERESA KRUSZEWSKA: CHILDREN'S TOYS, 1975 (POLAND)

The designs by Polish architect Teresa Kruszewska aimed to enable the child to learn about space using basic solids through an open and variable arrangement of elements.

08 Ruum ja Vorm, concept and design by Eha Reitel, Maia Laul, Kärt Voogre, and Saima Veidenberg; Elements designed by Bruno Tomberg, Estonian Socialist Soviet Republic, 1969. © Boris Mäemets, Estonian Museum of Applied Art and Design, Tallinn, 2023.

09 Polyform by designers' collective Karl-Heinz Burmeister, Hans Frohberg, Klaus-Dieter Mädzulat, Herbert Pohl, Lothar Walk, East Germany, 1968-70. © Maria Steinfeldt, Zentralinstitut für Gestaltung des DAMW, Stiftung Haus der Geschichte, Berlin, 2024.

10 Nesting dolls system (left) and the multifunctional ball (right, reproduction from 2011); both by Teresa Kruszewska, Poland, 1975. © Kunstgewerbemuseum Berlin, 2023.

11 Domestic Information Machine (DIM) project, VNIITE design team — Evgeny Bogdanov, Vladimir Paperny, Vladimir Rezvin, Alexander Ryabushin, A. Sergeev, and POZITRON Leningrad Research and Development Association, GIRIKOND Research Institute, Soviet Union, 1969–1972. © Kunstgewerbemuseum Berlin, 2023.

The nesting dolls system was used as equipment for day rooms at the Children's Health Institute in Warsaw [FIGURE 10]. The system could be used by young children as seats, tables, mazes, walls, game boards, etc. The 'multifunctional ball' consisted of three elements: if assembled, it forms a ball that the child can play with, but if disassembled, the separate parts can serve as seats, barricades, etc. Neither the furniture-toys nor the ball have a permanently defined function; Kruszewska was interested in shaping the human imagination through actions that used simple solids in space. She employed an open form that left children free to decide their own surroundings.

NEW UTOPIAS

The vision of a better future as a solution to the present crisis condition is inscribed in the DNA of Modernism. The Scientific and Technological Revolution in the Socialist Bloc states was to solve the problems of humankind. Particular scenarios of the societal impact of the technological revolution were outlined by Radovan Richta in the research paper Civilisation at the crossroads (1967) or in the House of the future (1976) by Alexander Ryabushin. Ryabushin, a co-author of the Domestic Information Machine project, considered the 'smart home' amenities crucial and proposed a model of the house-cinema and house-stage, an immersive environment, which changed depending on the inhabitant's moods and preferences. At the other end of the spectrum, with the growing damage to the natural environment through the ruthless extractivism of natural resources, the bio-utopia by Iosif Karakis presented an exceptional approach.

VNIITE: DOMESTIC INFORMATION MACHINE (DIM), 1969–1972 (UDSSR)

The Domestic Information Machine (DIM) project by the All-Union Scientific Research Institute for Technical Aesthetics (VNIITE) sought to assess how technological progress might alter the relationship of the socialist citizen to their home and the objects within it [FIGURE 11]. By emphasizing the role of information exchange and the social agency of objects of communication, the machine's designers imagined a restructuring of the Soviet domestic interior linked to the wider world facilitated by an electronic infrastructure of machines. According to the proposal, the bulky computer systems were supposed to be concealed inside modular containers resembling furniture items or cabinets. With their various designs for the DIM, VNIITE aimed at imagining a socialist information age and questioning preconceived notions of the collective as well as the nature of consumption in the Soviet Union.

JOSIF KARAKIS: HOUSING OF THE NEAR FUTURE, 1977 (UKRAINE)

In 1977, Ukrainian architect Josif Karakis started working on his visionary Housing of the Near Future project for Kyiv. His philosophy was based on the idea that the human, as a biological being, should not just live alongside nature, exploiting it, but be embedded in the environment. During the last years of his life, Karakis lived at his country house and spent most of his time in close

12 Housing of the Near Future, Iosif Karakis. Model produced in cooperation with Alex Bykov, Rostyslav Bakhtiiarov, and the Museum of Contemporary Art NGO, Kyiv, Ukraine. © David von Becker, Kunstgewerbemuseum Berlin, 2023.

13 Balcony Dreams by Lutz Brandt, Das Magazin, 3/1983, Archive of Lutz Brandt, Germany. © Kunstgewerbemuseum Berlin, 2023.

contact with nature. That was where he developed his projects and photographed the resulting models amidst grass, stones, flowers, and trees [FIGURE 12].

LUTZ BRANDT: BALCONY DREAMS, 1983 (EAST GERMANY)

The humorous drawings by wall painter Lutz Brandt, which he published under the title Balcony Dreams [FIGURE 13] in the popular monthly magazines *Neue Berliner Illustrierte* and *Das Magazin* (East Germany between the 1970s and 1983), are symptomatic of the attempt to mitigate the inhospitality of functionally planned cities. They also reflect the postmodern spirit and the longing for the playful and non-rational. In these drawings, Brandt presented fictitious DIY ideas for design, greenery, and energy production, all on the balconies of the prefab housing block.

ACKNOWLEDGMENTS

Retrotopia. Design for Socialist Spaces was on view at the Kunstgewerbemuseum Berlin from March 24 until July 16, 2023. An exhibition catalog was also published: Claudia Banz (Ed.): *Retrotopia. Design for Socialist Spaces*. Kettler Verlag: Dortmund, 2023. The digital archive of Retrotopia is online: https://retrotopia.eu.

Exhibition idea, concept, and chief curator:
Claudia Banz

Co-curators and co-authors:
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Claudia Banz *is a curator, author, art and design historian. Since 2025, she is the director of the Weltmuseum in Vienna. Since 2023, she is an associate member of the cluster of excellence Matters of Activity at Humboldt-University Berlin. From 2017 to 2024, she was curator for design and outreach at the Kunstgewerbemuseum, Berlin. Previously, she headed the Art and Design Department at Museum für Kunst & Gewerbe Hamburg from 2011 to 2017. Banz has realized many international exhibitions, outreach formats, and fairs at the intersection of design, fashion, craft, and art, including Fast Fashion. The Dark Side of Fashion (2014-1018), Food Revolution 5.0. Design for Tomorrow's Society (2017-2019), Connecting Afro Futures. Fashion x Hair x Design (2018-2019), the Design Lab series (2019-2023), Retrotopia. Design for Socialist Spaces (2022-2023) or the interdisciplinary platform More than human. Design after the Anthropocene (since 2024). Banz is a member of numerous juries and publishes on social design and material culture.*

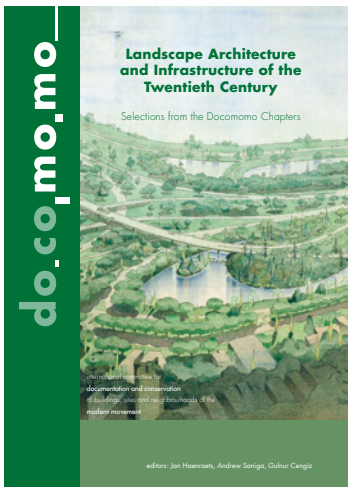
Helena Huber-Doudová *is the curator of the Architecture Collection of the National Gallery Prague (NGP). She completed her PhD studies in art history at the University of Zurich. She is a principal investigator for NGP of the research project Women in Architecture after 1945 in the Czech Republic (2021-2024). She was the commissioner of the Czech representation at the 18th International Architecture Exhibition, La Biennale di Venezia. Among the exhibitions she curated are No Demolitions! Forms of Brutalism in Prague (NGP, 2020) and permanent collection exhibition 1956-1989: Architecture for All. Lifestyle–Everyday–Media (NGP, 2022). She authored Rem Koolhaas as Scriptwriter. OMA Script for West Berlin (New York: Routledge, 2024).*

DOCOMOMO INTERNATIONAL BOOK SERIES

In the plan of action, presented in 2020, for hosting the Docomomo International secretariat, Chair and Secretary General at Delft University of Technology, emphasis was put on open access publishing. One of the concrete actions within this ambition, materialized in 2024 with the introduction of the Docomomo International Book Series. This series offers the opportunity to all Working Parties, International Specialist Committees (ISC), individual Docomomo members and affiliated members to publish under the CC BY 4.0 license. Docomomo International offers the workflow, a standardized lay-out, ISBN and DOI (including hosting) to publish digitally (pdf) and via Printing on Demand. Currently work is ongoing to publish the Docomomo Homework of 2023/2024 – a selection from the registers from the Docomomo Working Parties.

The first book, published in 2024 by Docomomo International in this series is based on an initiative by the Docomomo International Specialist Committee on Urbanism and Landscape (ISC/U+L) and edited by Jan Haenraets, Andrew Saniga and Gulnur Cengiz. The book presents a wide range of landscapes that have been integral to the Modern Movement era. It aims to raise awareness of their design significance and to broaden understanding of their diversity. It demonstrates the breadth of roles that landscape architects and affiliated designers have played in response to the demands wrought by social, political and environmental change, particularly in the post-World War II years. In this sense it draws attention to people and places that previously may have been marginally understood—'invisible' or 'dislocated'—thus enabling them to be appreciated in new ways and to be considered more carefully in comparative analyses into the future.

The second book was published in 2025 as a co-production within CONCRETO Academy, a European Union co-funded Erasmus+ project (101140028). This book serves as the foundation upon which all teaching and learning activities within the Academy are structured. While primarily focused on the European context, its reach extends globally, leveraging insights from the extensive CONCRETO Network of partners and experts. Through rigorous literature review, open questionnaires, and strategic interviews, the book defines the current state of concrete conservation, identifying key challenges and opportunities within the field.

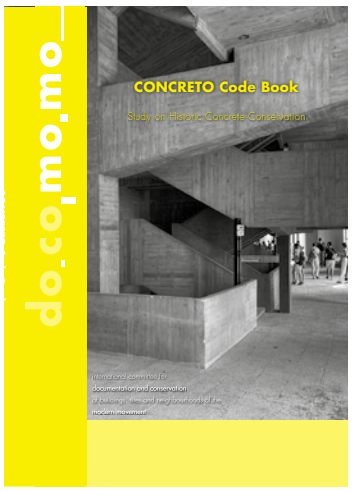


LANDSCAPE ARCHITECTURE AND INFRASTRUCTURE OF THE TWENTIETH CENTURY

SELECTIONS FROM THE DOCOMOMO CHAPTERS

JAN HAENRAETS, ANDREW SANIGA, GULNUR CENGIZ (EDS.)
DOCOMOMO INTERNATIONAL, 2024 – CC BY 4.0

ISBN/EAN: 978-90-833867-0-6
280 pages
DOI: https://doi.org/10.52200/docomomo.books.01



CONCRETO CODE BOOK

STUDY ON HISTORIC CONCRETE CONSERVATION

ANDREA CANZIANI & WIDO QUIST
DOCOMOMO INTERNATIONAL, 2025 – CC BY 4.0

ISBN/EAN: 978-9-08338-671-3
112 pages
DOI: https://doi.org/10.52200/docomomo.books.02

Bernard Bauchet
1955-2025

In February, Bernard Bauchet, a pioneer restoration architect of French Modern Movement buildings, passed away. In him we lose a knowledgeable and amiable person. He was involved, in one or another way, in all important projects of the rich French Moden Movement legacy.

He restored la Maison de Verre by Chareau and Bijvoet, and published the book "la Maison de Verre" (GA publishers). He was responsible for the restoration and renovation of la Maison du Brésil by le Corbusier, Lucio Costa's work in the Cité Universitaire in Paris, the Unité d'Habitation (first tranche) by le Corbusier in Brieu en Foret, and several other buildings by le Corbusier, Robert Mallet Stevens, Jean Lurçat and Auguste Peret.

For the haute couture house of Azzedine Alaïa he did the transformation and renovation of the old warehouses by Victor Baltard in Paris 4th.

I had the pleasure to cooperate with Bernard on the restoration of la Maison de Theo van Doesburg in Meudon, and together we participated in the scientific committee of the restoration and renovation of le Collège Néerlandais by Willem Dudok in the Cité Universitaire in Paris.

Bernard was a member of other commitees as well, such as the Commission Nationale des Monuments Historiques (collège Mouvement Moderne), the expert committee of the Fondation le Corbusier, the scientific committee of la Maison E1027 by Eileen Gray in Roquebrune, and la Maison du Peuple by Beaudouin-Lods and Jean Prouvé in Clichy.

He published various articles and participated in the international Docomomo conferences in New York and Ankara. Bernard's curiosity and enthusiasm to learn and understand the motivation of the original architect he was dealing with, together with his knowledge of materials and implementation techniques made him extraordinary in the orbit of the Modern Movement.

01 Bernard Bauchet © Hélène Bauchet, 2024.

As the representative of la Maison Azzedine Alaïa wrote: "Bernard Bauchet était un architect exceptional, un homme d'un talent et d'une humaité rare."

Hubert-Jan Henket

Berthold Burkhardt
1941-2025

In June, Berthold Burkhardt, one of the supporters of the first hours of Docomomo, passed away. He was involved in the organization of the International Docomomo Conference at Bauhaus Dessau (1992), and actively participating in the "restart" of Docomomo Germany in 2006.

He studied architecture and civil engineering in Stuttgart (1960-1965). As an architect and engineer in Frei Otto's office, he was involved in iconic buildings such as the German Pavilion at Expo 67 in Montreal and the roof structures for the 1972 Olympic Games in Munich. As a staff member of Institute for Lightweight Structures at the University (ILEK) in Stuttgart and in research projects, he devoted himself scientifically to the topic that occupied him throughout his entire professional life: lightweight structures.

In 1984 he was appointed as professor and Head of the Institute for Structural Design at TU Braunschweig. He was able to combine his research with architectural teaching and his work as an independent architect, from 1993 together with Martin Schumacher in the Burkhardt + Schumacher office. Conservation and renovation projects became increasingly important, e.g. the employment agengy in Dessau by Walter Gropius and the Chancellor's Bungalow in Bonn by Sep Ruf.

Next to his active involvement in Docomomo, he was a member of ICOMOS, Europa Nostra, the Alvar Aalto Society, the Koldewey Society for Historical Building Research and the Society for the History of Building Technology, and served several years as head of the monitoring group for the German World Heritage Sites. As an expert and advisor, he supported the Wüstenrot Foundation and the Bauhaus Dessau Foundation, and played a key role in setting the course for the general refurbishment of the Bauhaus building from 1996 onwards.

We will miss him as an architect, engineer, scientist, mentor and friend.

The Executive Board of Docomomo Deutschland e.V.

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INTERNATIONAL SPECIALIST COMMITTEES

Docomomo International has six International Specialist Committees (ISC) comprised of experts on Registers, Technology, Urbanism+Landscape, Education+Training, Interior Design, Publications working under Docomomo International's supervision. An ISC will consist of approximately five specialists of different countries as well as a chairperson appointed by the Council.
https://docomomo.com/iscs/

ISC/REGISTERS

The docomomo ISC/Registers was created to engage national/regional chapters in the documentation of modern buildings and sites. Its mission is the development of an inventory of modern architecture, including both outstanding individual buildings and 'everyday' examples.

- Louise Noelle (co-chair, docomomo Mexico), louisenoelle@gmail.com
- Horacio Torrent (co-chair, docomomo Chile)

ISC/TECHNOLOGY

The mission of the docomomo ISC/Technology is to promote documentation and conservation through studies of, and research into, technology, and into the material qualities of modern architecture. The committee organizes seminars; it also supports and participates in workshops related to the technology of modern buildings.

- Rui Humberto Costa de Fernandes Póvoas (co-chair, docomomo Iberia/Portugal), rpovoas@arq.up.pt

ISC/URBANISM & LANDSCAPE

The mission of the docomomo ISC/ Urbanism+Landscape is to promote research, documentation and protection of modern ensembles and environments, as opposed to individual 'setpiece' monuments. In practice, our current work focuses almost exclusively on research and documentation.

- Ola Uduku (chair, docomomo Ghana), o.uduku@liverpool.ac.uk
- Miles Glendinning (vice-chair, docomomo Scotland), m.glendinning@ed.ac.uk

ISC/EDUCATION & TRAINING

The docomomo ISC/Education+Training has the mission of educating to protect "by prevention". This means to preserve not by action-reaction to specific threats, but by creating a general awareness and appreciation of modern buildings in the younger generation, general public and the society at large. The workshops in the framework of the Docomomo International Conferences are increasingly successful and prove that young people like to be involved in assignments concerning modern heritage. The ISC on Education and Training would like to provide these young people the possibility to excel in the Documentation and Conservation of modern heritage.

- Andrea Canziani (co-chair, docomomo Italy), andrea.canziani@polimi.it
- Daniela Arnaut (secretary, docomomo Iberia/Portugal), daniela.arnaut@ist.utl.pt

ISC/INTERIOR DESIGN

The docomomo ISC/Interior Design focus on Interior Design, an issue of major relevance for the Modern Movement and Modern Living. Interior Design gives us important spatial, ideological and aesthetic information necessary for a full awareness and experiencing of Modernity. The Modern Movement considered Interior Design as being in close relation with architecture and the other arts. This implied the demand for a new aesthetics in response to new technology and a need for a total work that embraces all the expressions into a unitary (and also utopian) environment for humanity. The Modern Interiors' identity is characterized by a strong and coherent style which results from a unity between architecture, furniture, design, decorative arts, utilitarian objects, equipment, textiles and light.

- Bárbara Coutinho (co-chair, docomomo International), barbara.coutinho@tecnico.ulisboa.pt
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- Marta Peixoto (secretary, docomomo Brasil), marta@martapeixoto.com.br

ISC/PUBLICATIONS

In order to have more coordination between the ISC's and other docomomo bodies regarding publications, the Advisory Board unanimously agreed on the creation of a Docomomo International ISC/Publications, integrating all the ISC chairs and the Docomomo International Chair. This may concern their content and editing status (indexed) but also the use of funding and external resources and the contacts with publishing houses.

- Ana Tostões (chair, docomomo Iberia/ Portugal)

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