100 YEARS BAUHAUS

What interest do we take in Modern Movement today?

16th DOCOMOMO Germany
3rd RMB Conference

1st March 2019 I Berlin

M. Melenhorst, U. Pottgiesser, T. Kellner, F. Jaschke (EDs.)

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Preface

Prof. ir. Michel Melenhorst; Prof. Dr.-Ing. Uta Pottgiesser

The International Conference in Berlin takes the 100th anniversary of the Bauhaus as an opportunity to discuss the significance of modernity in the 21st century: 'What interest do we take in the Modern Movement today? The conference focus lies on the concepts, visions, and impulses emanating from Modern Movement and how they can be related to today's social, economic, cultural and in particular creative issues.

The 2019 DOCOMOMO Germany Conference in Berlin continues the tradition of the Karlsruhe DOCOMOMO Germany Conference and is this year co-organised by the Hochschule Ostwestfalen- Lippe and 'RMB', an initiative to design an educational framework of common definitions on a European level on the reuse of Modernist Buildings. This cooperation resulted in a new conference format: a combination of invited keynote speakers and selected scientific lectures.

The keynote speakers, David Chipperfield, Fernando Romero and Wiel Arets report from their respective professional practices in architecture, research and education on their involvement with Modern Movement architecture and modernism in general.
In the call for papers we posed the following questions:

Are the social, spatial and constructional concepts formulated by modern movement and post-war modernism still sustainable today?

What role do cultural and climatic conditions play in the preservation, renovation, and transformation of spaces, buildings, and modern movement sites?

How can the basic ideas of classical modernism be continued 100 years later and thus contribute to solving current challenges?

What contribution can be expected from academic and professional education, and which learning formats are suitable for this?

The contributions at the conference, both from the keynote speakers as from the papers presented in 9 paper sessions and two poster sessions, show an overwhelming landscape of positions and opinions, from different professional and geographical backgrounds. Originally the sessions were organized according to the different workgroup topics in Docomomo:

Education + Theory (about programs, concepts, and approaches)
Register (about buildings, typologies or architects/planners)
Urbanism + Landscape (about building ensembles, outdoor spaces, and policies)
Technology (via components, materials or techniques)
Interior Design (about interiors, extensions, and atmospheres)

However, themes such as politics, mass housing, and standardization and actually re-use have become increasingly important in the discussion on the documentation and conservation of modern movement. To make clear the shift in the debate and the topics that are brought in at the conference we decided to rename some of the sessions. By this renaming, we already partly reveal some of the answers to the conference question: 'What interest do we take in the Modern Movement today?

In this conference proceedings, you will find the complete program and the papers. For some of the papers, you will only find the abstracts

We selected them for a special Docomomo Germany publication, to be published after the Conference. Also the Keynotes lectures you will not find in the Proceedings. In a special issue of Docomomo International Journal, dedicated to RMB and this Conference theme, we will publish transcripts of the lectures and the podium discussion, as well as interviews with the three Keynote speakers.

Enjoy the conferences and the proceedings

Prof. Dr.-Ing. Uta Pottgiesser, OWL University of Applied Sciences, Vice Chair Docomomo Germany

Prof. ir. Michel Melenhorst, OWL University of Applied Sciences, Coordinator RMB

Conference Program

PROGRAMM | FRIDAY, 01.03.2019

8.30 *Reception / Registration*

9.00 **Welcoming & Introduction | Room: Saal**
Franz Jaschke, Chair Docomomo Deutschland
Michel Melenhorst, OWL University of Applied Sciences, RMB

9.15 **Keynote | Skin and Bones. Restoring Mies van der Rohe's Neue Nationalgalerie | Room: Saal**
David Chipperfield, David Chipperfield Architects, London

09.45 *Coffee break | Room: Foyer*

10.15 **Parallel sessions 1**

1.1 **Theory and Politics**
Moderation: Michel Melenhorst | Room: Saal
The Reconceptualization of Moder- nist Structures in Post-Socialist Rural Regions: Case-studies from Brandenburg, Germany | Christoph Muth
The Afterlife of Fascist Architecture and Town Planning. The Case of Italy's Pontine Plain and Colonial Libya | Vittoria Capresi
Are we Modern in a Liquid World? A Latin American Perspective | João Pedro Otoni Cardoso

1.2 **Register**
Moderation: Ana Tostões | Room: Foyer
Change Management in Conservation of Modern Architectural Heritage in Tehran | Somayeh Fadaei Nezhad Bahramjerdi, Hoda Sadrolashrafi
Freak Architecture: Australia and Classical Modernism | Deborah Ascher Barnstone
Werner March and the Design of the Cairo Stadium | Florian Seidel
Modernization of Dona Leonor Secondary School: Contributes for good practices | Francisco T. Bastos

1.3 **Bildung und Theorie (Deutsch | German)**
Moderation: Alex Dill | Room: S1
Programm wird Bau | Katja Szymczak
Framing Bauhaus – The Reception of the Housing Estate Dessau –Törten | Sophie Stackmann
Das Projekt bau1haus - Vom Bauhaus in die Welt | Kaija Voss

11.15 **Panel discussion**

11.30 *Coffee break | Room: Foyer*

12.00 **Parallel sessions | 2**

2.1 **Education**
Moderation: Gonçalo Canto Moniz | Room: Saal
Cathedrals of Modernity. The legacy of Piero Portaluppi's electric architecture | Sara di Resta, Elena Lemma, Davide Tassera
Architecture of Modern Schools in the 1930's Ankara - Extension to Atatürk High School as a design studio exercise | Haluk Zelef
Exploring the City Through the Eye of the Modernist Photographer | Jülide Akşiyote Görür

2.2 **Technology**
Moderation: Uta Pottgiesser | Room: Foyer
The Conservation Challenge of Architectural Glass in Modernist Churches | Zsuzsanna Böröcz
The Danish Window. Key Element of Modern Architecture, Site of new Themes and Techniques. | Eva Storgaard
'New Architecture' in Use. Mapping Portuguese Modern Secondary Schools. | Patrícia Lourenco, Alexandra Alegre
Technological Value Concept for Modernist Residences in Turkey | Su Kardelen Erdogan

2.3 **Bildung und Register (Deutsch | German)**
Moderation: Monika Markgraf | Room: S1
Visuelle Module Moholy-Nagy – Innovation inspiriert von dem pädagogischen Nachlass ungarischer Meister des Bauhauses | Andrea Kárpáti
Otto Rudolf Salvisberg (1882-1940) – Architekt der Moderne | Thomas Steigenberger
Bauhaus in Berlin? Die Entwicklungsgeschichte der Kantgarage | Thomas Katzke

13.00 **Panel discussion**

13.15 ***Lunch break | Room: Foyer***

14.15 **Keynote | Mexican Modernism | Room: Saal**
Fernando Romero, fr-ee, New York, Miami, Mexico-City

15.00 ***Break***

15.15 **Parallel sessions | 3**

3.1 **Education**
Moderation: Aslihan Ünlü Tavil | Room: Saal
Walter Gropius and Operative History: An Architectural Palimpsest | Jasmine Benyamin
Constituting an Archive: Documentation as a Tool for the Preservation of the METU Faculty of Architecture | Ayşen Savaş
Teaching Modernism – A Study on Architectural Education in Hungary (1945–60) | Rita Karácsony

3.2 **Standardisation and Rationalisation**
Moderation: Els De Vos | Room: Foyer
Bauhaus Worldwide Shift | Ana Tostões
The Minimum Dwelling: New Belgrade Flat and Reflections on the Minimum Today | Anica Dragutinovic
Paulo Mendes da Rocha: Prototype and Housing | Fernando Delgado Páez

3.3 **Diskurs und Detail (Deutsch | German)**
Moderation: Luise Schier | Room: S1
Late modern beyond the icons. Industrialisierte Alltagsarchitektur nach 1960 erforschen und denkmalkundlich inventarisieren | Mark Escherich
The Graves Laura Perls and Albert Mendel in Berlin-Weissensee | Nina Nedeljkov
Die Bauhausküchen – bis heute mehr als nur „Bauhausstil“ | Max Korinsky

16.15 **Panel discussion**

16.30 ***Coffee break | Room: Foyer***

17.00 **Parallel poster presentations | Pecha Kucha | 4**

4.1 **Housing reloaded | Moderation: Ana Nikezic | Room: Saal**
Unforeseen Impulses of Modernism: The case of New Belgrade | Anica Dragutinovic
Unforeseen Impulses of Modernism: The case of New Belgrade_ Block 23 | Anica Dragutinovic
The Vertical Village | Sanne Kunst, Sanne Louwerens
Restore the old Promise of Modernism | Ellen Mollen, Anne Wisse, Pieternel Van Steenbrugge

4.2 **Education and Theory**
Moderation: Thomas Ludwig | Room: S1
Haus am Horn – Its Experimental Spirit | Moe Omiya
A case study on ‘revealing creativitiy through craftsmanship’ | Çiler Buket Tosun
Modern Socialist Landscape? The 1960s planning concept of ‘rural settlement centers’ | Fridtjof Florian Dossin
The Zeitgeist | Zaida Garcia Requejo

17.50 **Documentary movie | Off Season, 2018 | Room: Saal**
Director: Andrea Kalinová

18.30 ***Conference dinner | Room: Foyer***

20.00 **Keynote | Interventions | Room: Saal**
Wiel Arets, Wiel Arets Architects, Amsterdam

20.45 **Podium discussion | Room: Saal**
Moderation: Tim Rieniets

Wiel Arets	Wiel Arets Architects, keynote speaker
Fernando Romero	Office fr-ee, keynote speaker
Ana Tostões	President of Docomomo International
Regina Bittner	Deputy Director of the Stiftung Bauhaus Dessau
Jörg Haspel	President of ICOMOS | Former State Conservator of the Office for Monuments Berlin

The discussion will be moderated by Tim Rieniets (Professor at the Leibniz University Hannover).

21.30 ***Informal Conclusion***

EXCURSIONS | SATURDAY, 02.03.2019

The event will be accompanied by guided excursions to sites of the Modern Movement in Berlin. The group tours will be held in the morning and afternoon of 02.03.2019. You can choose between the following excursions:

Excursion 1 | Siedlungen der Moderne | Berlin – 3,0 h
10:30 – 13:30 – group 1
13:00 – 16:00 – group 2

Excursion 2 | Museum – Neue Nationalgalerie
by Ludwig Mies van der Rohe, design and realisation, 1962-68, refurbishment by David Chipperfield Architects, 2012-2019 – 1,5 h
9:00 – 10:30 – group 3
10:30 – 12:00 – group 4
12:00 – 13:30 – group 5
13:30 – 15:00 – group 6
15:00 – 16:30 – group 7

Keynotes

Photo | © Jan Bitter

Wiel Arets is a Dutch architect, teacher and publicist. From 2012 he was dean of the Illinois Institute of Technology's College of Architecture (IIT CoA) in Chicago. He followed in the footsteps of Mies van der Rohe, who was Bauhaus Director from 1930 to 1933 and, after his exile in the USA in 1938, appointed Dean of the future IIT. Under Arets as dean, the College has revitalized itself and restructured its curriculum, which now culminates in the innovative ‚horizontal studio' - a school-wide educational and research laboratory in which students from all degree programs (B.Arch, M.Arch. and PhD) work together. In his speech, Wiel Arets will comment on the significance of modernity today and will show his work and reflect on interventions in modernist architecture and urban conditions.

Photo | fr-ee.org/team

Fernando Romero is a Mexico city-based architect, recognized as one of the leading architects of his generation. He was named as a Global Leader of Tomorrow at the World Economic Forum in 2002. His several accolades include the Bauhaus Award and the 'Best of the Best' Red Dot Award. His office fr ee are involved in a wide range of educational and cultural activities. One of his projects is ‚Regeneration', which aim it is to restore selected pieces of modern Mexican architecture, preserves the culture and creates awareness about the role of architecture and design in Mexico. Fernando Romero will talk about his works and its relation with modernism and the Mexican context.

Photo | davidchipperfield.com/people

David Chipperfield established David Chipperfield Architects in 1985. He was Professor of Architecture at the Staatliche Akademie der Bildenden Künste, Stuttgart from 1995 to 2001 and Norman R. Foster Visiting Professor of Architectural Design at Yale University in 2011, and has taught and lectured worldwide at schools of architecture in Austria, Italy, Switzerland, the United Kingdom, and the United States. In 2012 David Chipperfield curated the 13th International Architecture Exhibition of the Venice Biennale. David Chipperfield will report on the preservation and transformation of Mies van der Rohes Neue Nationalgalerie in Berlin, a project his office is currently working on. He will talk about the conceptual and constructive challenges that one faces when restoring one of the icons of modernity.

Notes

Michel Melenhorst

Professor Contextual Design
Hochschule Ostwestfalen Lippe

Michel Melenhorst studied architecture at Delft Technical University and worked for Wiel Arets (1991-1995) and OMA (1995-1999) before starting his own office in 1999. In 2005, he became a partner in DAAD Architects. In 2012, he switched to Detmold Germany to hold the chair for Contextual Design at the Hochschule Ostwestfalen Lippe, where he coordinates the Master's in Architecture.

Michel Melenhorst has extensive experience in teaching and lecturing at institutions such as TU Delft, Design Academy Eindhoven, Lasalle University Bogota, HCU Hamburg, Arhus school of Architecture, University of Antwerp and K´Arts Seoul. Michel Melenhorst is a member of Docomomo international and is active in Docomomo Deutschland Workgroup education. At the HS-OWL he is coordinating the Master in Architecture, he is a member of the Researchgroup Urban Lab and co-organises the Universities annual workshop week and Conference ´Detmolder Räume´
Since 2016 he leads ´RMB´, an europewide intiative to start a specialized, two years master studies on reuse of modernist buildings.

Notes

Session 1.1:
Theory and Politics

Prof. ir. Michel Melenhorst

The theme of this conference – the Modern Movement – is a term usually reserved for architecture and design-related fields. But of course, besides the well-known domains of modernism in the cultural disciplines, the movement permeated all layers and niches in society. Modernism reached a wide range of fields, such as politics, technology, medicine, religion and agriculture, to name but a few. Research into cross-links between different sectors in society under the common denominator of modernism is of increasing importance because these relations are of significance in defining the values that we attribute to our modernist heritage. The combination of politics and modernism is perhaps the most obvious but certainly also one of the most volatile relations to be scrutinized. The well-known iconography of modernist architecture communicates entirely different underlying messages depending on the regime that adopted, used and adapted it for its own purposes and goals.

The determination of heritage values, and subsequently the way to use, restore, reuse and present this Modern Movement heritage depends strongly on both the old, historical and the contemporary links between politics, society and the Modern Movement.

In her paper entitled ´The afterlife of Fascist Building´, Vittoria Capresi writes about the rural, colonial settlements built in the Italian Fascist era in Italy and its overseas colonies. They were an important tool, used very deliberately by the fascist regime to spread its ideology and show its power through an intentionally adapted modernist architecture and urban design.

Emily Bereskin and Christoph Muth present the current state of their research into the history and future of the LPG (Landwirtschaftliche Produktionsgenossenschaft), an Agricultural Production Cooperative comprising large, collectivised farms in East Germany that arose under the communist regime in the German Democratic Republic.

Notes

The authors of these two papers are researchers in a collaborative research project called ´MODSCAPES´. The interest of MODSCAPES lies in the ´Modernist rural development schemes, pivotal to Nation- and State-building policies, and to the modernization of the countryside. They provided a testing ground for the ideas of scientists, architects, engineers, planners, landscape architects and artists, who converged around a shared challenge.´ (https://modscapes.eu)

If and how Modernist Movement heritage can continue to exist and function under neoliberalism, populist or (semi)autocratic regimes and under strong attacks by conservative voices is another aspect of the relationship between the Modern Movement and politics.

In the third paper in the session, ´Are we Modern in a Liquid World - A Latin American Perspective´ by João Pedro, Otoni, Fernanda Freitas and Carlos Eduardo Ribeiro Silveirathe, the authors describe and evaluate two case studies within the context of São Paulo and Buenos Aires. They highlight the problematic situation of modernism which, originally characterized by common goals and self-imposed missions of improvement for all, has become highly individualized, devoid of solidarity and lacking in empathy. To illustrate this degeneration of modernism they use terminology and ideas of Sygmunt Baumann: ´solid modernism´ and ´liquid modernism´, clarifying the tremendous effects on Latin American modernist buildings and cities of these societal and political shifts and context changes between the time of realization and the current situation.

The papers in this session show that there can be no politically ´neutral position´ when reviewing and examining Modernist Movement architecture and urban design. Even an attempt at neutrality would place the authors under suspicion of partiality. All three authors, therefore, make it quite clear where they stand, which is the only good basis for an interesting debate!

Notes

Christoph Muth

Researcher and Doctoral Candidate
Habitat Unit of the Technische Universität Berlin

Christoph Muth is a doctoral candidate at Habitat Unit – Technische Universität Berlin where he also works for the EU-HERA funded project MODSCAPES. From 2015–2017 Christoph taught Architecture and Urban Design at the German University in Cairo. He received his Diplom in Architecture and Urban Planning from the University of Stuttgart in 2013.

Emely Bereskin

Senior Researcher
Habitat Unit of the Technische Universität Berlin

Emily Bereskin is a senior researcher at the Habitat Unit of the Technische Universität Berlin, currently working as a researcher for the MODSCAPES project. Prior, Dr. Bereskin was a DFG postdoctoral fellow for the international graduate program “The World in the City: Berlin - New York – Toronto” at the Center for Metropolitan Studies, Technische Universität Berlin. She received her Ph.D. in Art History from Bryn Mawr College in 2012.

The Reconceptualization of Modernist Structures in Post-Socialist Rural Regions: Case-studies from Brandenburg, Germany

Abstract

Through case-study and survey analysis in Brandenburg, Germany, this paper investigates the shifting conditions of modernist planning and architecture in rural regions of the former German Democratic Republic. The guiding political principles of the GDR gave equal priority to the development and settlement of rural areas as it did to urban and town planning, resulting in intense centralized efforts to construct new, modern rural centers. After 1952, and following the Soviet model, agricultural land and production processes were collectivized into agricultural production collectives—Landwirtschaftliche Produktionsgenossenschaften (LPGs), reconfiguring the customary spatial arrangements of rural life. Rather than the traditional regional settlements which often paired single-family homes, gardens, farm buildings, and fields on one plot, agricultural production and processing were scaled up and consolidated into immense industrial structures. Workers were housed in multi-family apartment buildings, and rural centers were outfitted with cultural, educational, and recreational facilities formerly only found in towns.

Following German Reunification and the dissolution of the LPGs, the area has undergone major social, structural, and spatial changes. Regional agricultural production has been consolidated under fewer, larger corporations; rural centers are shrinking and are facing new challenges such as long-term unemployment and aging populations. Based on policy and site-analysis as well as interviews with local actors, this paper considers the fate and reuse of the LPG structures within this new structural transformation, analyzing the legal and economic frameworks dictating their re-use as well as the actors and strategies shaping these new spaces. The paper first considers representative examples of reuse from the categories of housing, production centers, and cultural buildings.

Full paper will be published in a separate publication series of DOCOMOMO Germany after the conference.

Notes

Vittoria Capresi

Senior researcher, Habitat Unit at the Technical University of Berlin
Chair of International Urbanism and Design, Technical University of Berlin

Dr. Vittoria Capresi is a senior researcher at the Habitat Unit at the Technical University of Berlin since October 2016, as PI of the International European Research Project MODSCAPES — Modern Reinvention of the Rural Landscapes, a fully granted HERA project. Vittoria studied architecture at the University of Florence and at the Technical University of Berlin before moving to Vienna at the Vienna University of Technology's Department of History of Architecture (2002-2011). Here, she completed her doctoral dissertation on the Italian rural centers built in colonial Libya. From 2011 until 2014, she was Associate Professor in History of Architecture and Urban Design at the German University in Cairo - GUC.

Fig. 1: The main square of Pontinia, picture taken from the balcony of the municipal tower, former house of the Fascist party

The Afterlife of Fascist Architecture and Town Planning. The Case of Italy's Pontine Plain and Colonial Libya.

Abstract

Which kind of afterlife can we imagine for buildings built as an expression of a political ideology? Is it possible to functionally reuse political architecture without forgetting about its original purpose? The new towns and settlements founded under Mussolini in Italy and in colonial Libya planned for internal colonization purposes, definitively changed the landscape, contributing to the building up of a political and territorial ideology. The main message was that of power: the buildings and town planning created by the Fascist State offered the perfect background to the political propaganda, showing the absolute bond between ideology and its physical representation. What happened after the end of Fascism? Were the buildings related to power, stripped of their political meanings? Is it enough to decolonize the single buildings, or should the overall townscape be involved in the process? The paper will introduce some theoretical thoughts to discuss the topic of the afterlives of fascist architecture. The idea of functional reuse will be questioned, using examples from the Italian fascism, in particular, the new settlements in the Pontine Plain and in colonial Libya.

Fig. 2: The core of the rural settlement D'Annunzio, today al-Bayyada, Cyrenaica, Libya, designed by Florestano di Fausto, 1938. The buildings enclose the space, creating an urban theatre.

Some questions to begin with

What kind of afterlife can we imagine for buildings built as an expression of a political ideology? To what extent should we keep political memories alive while at the same time avoiding stirring up a cult of the past? How is it possible to functionally reuse political architecture?

How far can more or less neutral reuse of these buildings instigate pilgrimage? And is it possible to neutrally reuse buildings built for and by political ideology?

In a debated article in The New Yorker, Ruth Ben-Ghiat asked: "Why are so many Fascist monuments still standing in Italy?"[1] Italy's comfort with living with its many relics of Fascism can be explained by the continuity of the manner in which Italians have lived in the aftermath of Fascism, considering both the multitude of buildings and markers scattered over the landscapes and the long-standing presence of former Fascists in the ruling Christian Democratic bloc [which ruled immediately after the war], who never pleaded for a deep critical revision of the past.

As a matter of fact, buildings and urban interventions realized under the Ventennio fascista are now a prominent part of Italian-built inheritance.

Is it true that Fascist architecture and town planning in Italy have undergone no major critical revisionism? How far can a form of reuse which ignores the past be a solution to overcome the political identity of such buildings and so overcome the initial ideology? Or is there a way to deliberately decolonize[2] that architecture?

The aim of this paper is to question the idea of the "functional reuse" of these "political buildings" as a way to critically overcome the past, using examples from the new settlements built under Fascism in the Pontine Plain and in colonial Libya. My assumption is that in the case of the new settlements it is impossible to consider the buildings as single entities and that the entire urban layout, and its intrinsic political message, should be considered as a whole and consequently decolonized as a whole.

Setting: The Case Study[3]

The new towns and settlements in Italy, in particular in the Pontine Plain, were realized as part of a programme of internal colonization launched by Mussolini to revitalize under-populated areas in the peninsula by bringing families from overpopulated regions where unemployment rates were high.[4] The reclamation of the Pontine Plain, the swampland south of Rome, is probably the best-known example: here Mussolini carried out a gigantic project of drainage and internal colonization, starting in 1927. The project included the subdivision into agrarian parcels of 840 square kilometers of land, the realization of around 3000 farms and 18 villages, and five new towns: Littoria, Sabaudia, Pontinia, Aprilia, and Pomezia.[5]

The project of agrarian colonization in Libya started in 1932. Here the main aim was to politically control the country[6] by distributing Italian families in the most productive coastal areas. Starting from 1932, and then in 1938 and 1939, 22 new settlements for Italian families and six for the Libyan population were built along the coasts of Tripolitania and Cyrenaica for newly-settled families who were required to cultivate their own plots of land.[7]

The circumstances in Libya and Italy were different but the

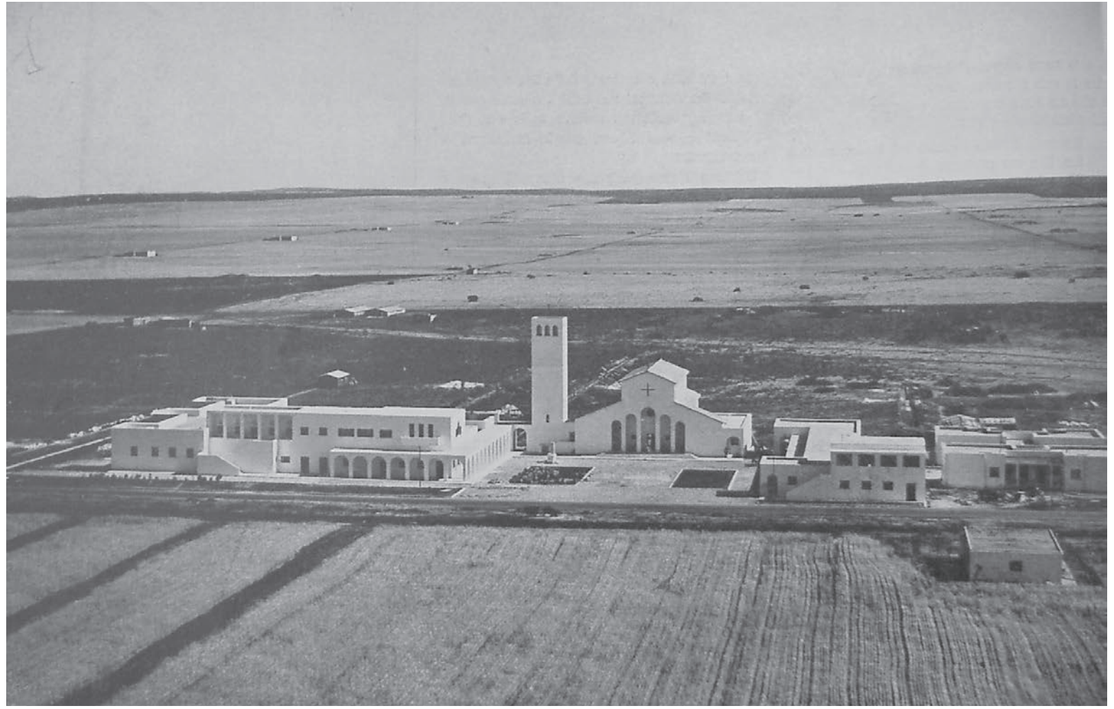

Fig. 3: . Florestano di Fausto, the rural settlement Maddalena, Cyrenaica, Libya, 1938.

mechanisms used by the regime to control the territory and transform it into crop-producing areas were very similar. The families, selected by the Ministry for Internal Colonisation, were allocated to a new house on the plot of land that the family had to cultivate.
Central to these plots were the regime-built settlements, or villages, providing all necessary administrative functions – such as the House of the Fascist party, the municipality, the school, the market. Each family was required to repay the costs of their house and plot within about 30 years, thereby becoming the owner of both within one generation. The settlers usually spent all their time cultivating their crops and taking care of their animals and only visited the village (or settlement) for Sunday Mass, or for special occasions, such as religious or political events.

These new towns and settlements materialized as absolute acts of creation. The imposition of urban design on a territory considered empty can be considered as the ultimate inception of a concept - theoretical, formal, and political - which was planned to definitively change the space and contribute to the building of a political ideology. The main message was that of power: the buildings and town planning created by the Fascist state offered the perfect background for political propaganda, showing the tight bond between ideology and its physical representation.
Both in Libya and in the Pontine Plain an analysis of the urban planning and forms at the settlements' cores clearly reveals the theatrical function of the buildings: the main design of the new towns and settlements is based on a central square, the piazza, considered as a theatre for Fascist propaganda, as a gathering place for the settlers, and as their main source of identity in their new homeland. The buildings seem in fact to totally lose their formal connotations due to their function, becoming a more or less homogeneous coulisse for the central empty space. The square was usually planned as a sort of modern forum, where the main collective institutions were concentrated. While balancing between the Roman past, a certain vernacular authenticity, and idealized visions of the future, "past" and "future" were equally subject to a process of fictionalization, which produced what we can call modernist urban scenes.

The Afterlife

What happened after the end of Fascism? What remains of the original "Fascist play"? Are the new actors so different from the original ones? And, shifting the focus to the single original functions of the buildings, what is the role of the buildings today now that they are no longer used according to their original political functions?
After the fall of the Fascist regime, the Pontine Plain developed economically in a complex equilibrium of agrarian crop production, tourism, and small industries. In many cases, the central village square remained the only space providing a fundamental social role for the inhabitants: hosting weekly markets and providing cafes and sitting areas. In the case of Pontinia, Indian Sikhs now populate the square with a mix of women, children and young boys who seem to repeat the initial epoch of agrarian colonization. Italian colonial rule in Libya ended in 1947, but many Italian families remained until the 1970 coup by Gaddafi when all Italians were forced to leave the country. The colonial design of the territory, however, endured after the end of colonialism: the Italian families who

Fig.4: The rural settlement Maddalena, today Al-'Awilya, Cyrenaica, Libya.

remained in the country until 1970 continued to cultivate the land and live in their single dwellings, which, after they left, were taken over by the Libyan population who moved into the empty buildings, readapting and reusing both the single dwellings and the administrative buildings in the settlements (source: fieldwork 2009).[8]

The Reuse of Architecture and Town Planning

In Pontinia the private dwellings remain private, mainly inhabited by descendants of the initial settlers (second and third generation). Functional changes have been made: animal accommodation has generally been transformed into living space and inside toilets replace the original ones that were built outside, but the original overall shape is still recognizable.

The situation is more controversial when we consider the buildings which form the core of the settlements. Functional buildings such as the post office and the cinema are still in use today, updated but providing the same function as they did originally. The role of some official buildings, however, even if changed, still remain related to political administration and control: the old municipality still functions as the political-administrative seat, the former house of the Fascist party is today a police station, with several administrative offices.

In Pontinia there was no conscious critical re-appropriation of the Fascist architecture. Agamben talks about “profanation”, in the sense of leaving the buildings and spaces to be used in line with their physical shapes, muting the meanings, the symbolism and the messages they originally contained.[9] In this sense, we can affirm that the buildings in Pontinia have not been profaned. Walking around the city center one could still be in the 1930s since many of the old Fascist symbols are still in place: the city's motto is engraved at the top of the municipal tower, and the letter "M" and fasci littori can be spotted around the town.

This is perhaps surprising, but not illogical. The current institutions – the municipality, the police station etc. – took over not only the spaces left empty after Fascism but also the particular connotations of that architecture. Its distinctive flair derives from a subtle combination of the general urban shape, the relations of power in the square, the dominance of those buildings within the urban design, and finally the design of the buildings themselves, thanks to the presence of towers, the use of precious distinctive materials and the studied symmetry or asymmetry of the façades. The reoccupation of these formerly key political buildings synthesizes the supremacy of the state today.[10]

The same type of appropriation also took place in Libya under Gaddafi. Taking Tripoli as a prime example, the buildings realized under Italian occupation for state purposes have been completely and without major modifications taken over by the ruling power: Gaddafi's regime frankly embraced the messages of the colonial buildings, appropriating their charisma and their image of power. The grand scale of some Fascist structures, and the use of precious materials and decorations, perfectly fitted the new absolutist ruling power. In Tripoli, as in the new towns of the Pontine Plain, it is their position in the urban layout which transmits a clear message of control which was easily reused: it is not the individual buildings, but the whole urban scheme, the overall Fascist design, which should be seen as an unassailable demonstration of state supremacy and control. In Tripoli the process of decolonization was not synonymous with democratization;

Fig. 5: The a building of Pontinia.

on the contrary, a new form of authority simply replaced the old one.[11]

Finally, considering that the connotation of power is visible not only in the architecture but also, and much more strongly, in the urban layout, what can be done to decolonize the town planning?

It is surely misleading to describe these types of Fascist town planning as Metafisic – as is happening for several new towns and urban layouts in northern Italy.[12] It is definitely too hasty and too superficial. The metaphysical paintings usually used as a formal reference, such as those by De Chirico, Carra, Sironi etc., make it possible to get in touch with a second or third level of messages and significances, beyond any physical or practical materiality. The buildings built during the Fascist era and embedded in the urban landscapes they generated show exactly the contrary: they communicate power, control and the supremacy of the ruling institutions, as much today as they did during the time of the Fascist dictatorship.

Instead of trying to overcome the problem by attaching apparently innocuous labels, it would be much more useful to reflect on how best to contextualize this architecture, presenting the historical moment as the reason for the urban shape and building design.

So how to reuse, decolonize and contextualize this architecture and – even more importantly – this urban design?

With a group of architecture students from the Politecnico di Milano and the Technical University of Berlin, we reflected on this question during ten days of fieldwork in Pontinia.[13] The students researched and analyzed the landscape of a strip of land including Pontinia between the mountains and the sea, to better understand the hydraulic system of the area and how the morphological situation influenced the planning of the network of dwellings, borghi and villages.[14]
Different topics were mapped, the exercise of mapping (recording, registering and uncovering) being aimed at a better understanding of the area, and qualitative semi-structured interviews with some of the inhabitants were carried out. The main subject of the interviews was the interviewees' personal relationship with the architecture, town planning, and the symbols of Fascism. One elderly gentleman explained his negative opinion: "It was a dictatorship", whereas, one younger woman said: "Mussolini gave us a lot of lands and he was good for the Italian economy and for the country, and we are grateful to him."[15]

"I'm proud of being from Pontinia. In fact, it is a place born out of nothing, it does not matter if he did it or if somebody else did it. In fact our fathers, our grandparents did it. At that time there was that ideology. It's not my job to say whether it was right or wrong. I do not understand anything about politics. My mother did not see it as black like everybody else. Maybe my father, when he heard the news he was angry with everyone, like today, but there was not a clear and precise idea."[16]

"This floor of our theatre [tiled with the geometric shape of the fascio littorio], whether we like it or not, it is part of our history."

Fig. 6: Tripoli, Libya, the two former colonial buildings which mark the entrance to Omar Almukhat Road facing the former Green Square, today Martyr's Square. In 2009 the building on the left side was the national bank and that one on the right side was the main police station. The picture was taken after the end of the celebration for Gaddafi's coup.

"Without Mussolini Agropontino would be a mess. Only he was capable of boosting the area."
In general, people's behavior portrays a sense of being unrelated to the big history of Fascism. People are proud of the Pontine Plain, they consider everything to be the product of their own work, but seem to have no personal relationship with either Fascism or politics in general. As Roberta Pergher documents in her recent book on Fascist settlements: "The settlers at the same time became subjects of the state with little leeway to shape their own course, a fact which later allowed them to detach themselves more easily from responsibility for the regime's injustices and crimes."[17]
I observed the same sort of detachment regarding the architecture: in many cases, people showed a passive attitude towards the architecture and the symbols of the regime and seemed not to care about their meanings. This is not due to ignorance, everyone knows the history of Pontinia, it is more about a general inattention in a wider sense to the intrinsic message contained in these symbols and the values they endorsed, not only in the past but even today.

Some Preliminary Conclusions

In Pontinia the buildings related to power are now being used by the state. Other functional buildings are still in use with the same original function, such as the cinema, the post office, and some shops. Other buildings lost their initial function and relevance after the war and are empty, such as the casa del dopolavoro. No major historical revisionism was carried out when the Fascist era ended and no political and historical contextualization is visible in Pontinia today.[18] Buildings are reused, occupied and changed according to spontaneous needs and no coherent critical awareness of the meanings and symbols of the regime has been created. The activity of the recently opened MAP Museo Agro Pontino is a promising start, but it is probably too elitist and too sporadic to make any real impact.[19]
As discussed in this paper, a process of historical revision should include not only individual buildings but also Fascist town planning, the layout of the town core and probably the design of the landscape of the entire Pontine Plain. In this sense, the questions around decolonizing should address not just the individual symbols and structures, but the whole urban design of the area. Would this be enough to inform, explain, and critically comment on the past?
This question has no precise answer and needs to be just the beginning of a process which should be open, inclusive, and participatory for all the inhabitants of the area: decolonizing, contextualizing and critically thinking about the historical background should be, in the Pontine Plain, in Italy and in its former colonies, of primary importance.[20]

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[2] Decolonisation is used here according to the formulation of Alessandro Petti. See: http://www.decolonizing.ps/site/ [accessed on December 11, 2018].

[3] Both the following case studies are my subject of investigation for the project MODSCAPES Modernist Reinvention of the Rural Landscape, a EU-Hera funded project (2016-2019) modscapes.eu [accessed on December 11, 2018].

[4] The political aim was to avoid mass migration to the cities and obtain mass consensus by proclaiming to fight unemployment. See the researches by Nicola Labanca and Claudio Segrè.

[5] The project of internal colonisation of the Pontine Plain was the object of a massive press campaign, carried out both in the national and international press and on newsreels. For an extensive analysis of the project, see Daniela Spiegel, Die città nuove des agro pontino im Rahmen der faschistischen Staatsarchitektur, Petersberg, Michael Imhof Verlag, 2010.

[6] Roberta Pergher, Mussolini's Nation-Empire Sovereignty and Settlement in Italy's Borderlands, 1922-1943, Cambridge, Cambridge University Press, 2017.

[7] The programme launched by Italo Balbo for the Libyan population will not be further investigated in this paper. For a detailed description of its aims, implementation phases etc. see Vittoria Capresi, L'utopia costruita: i centri rurali di fondazione in Libia (1934-1940). The built utopia: the Italian rural centres founded in colonial Libya (1934-1940), Bologna, Bononia University Press, 2009.

[8] Vittoria Capresi, "Continuité et rupture. Les centres ruraux d'origine fasciste en Libye pendant la période colonial et aujourd'hui", in: E. Godoli, S. Finzi, M. Giacomelli, A. Saadaoui (Hgs.), Proceedings of the conference Architectures et architects Italiens au Maghreb, Polistampa, Florenz 2011, 174-185.

[9] Giorgio Agamben, Profanazioni, Roma, Nottetempo, 2005.

[10] For this reason the fashion house Fendi moved its Rome headquarters in the Palazzo della Civiltà Italiana to EUR. It is all about using the strong iconic power of the building, taking advantage of the architecture and its urban position.

[11] See Vittoria Capresi, "Eredità e permanenze del colonialismo italiano in Libia. Continuità negli interventi urbani / architettura / simbolo", in: V. Capresi, C. Jelidi (Hgs.) Formes territoriales, urbaines et architecturales au Maghreb aux XIX-XXIe siècle. Permanences au ruptures?, Tunis, IRMC, 2012, 207-219.

[12] This is the case for example in Tresigallo: the marketing for the city is investing in a complete removal of its political past https://www.tresigallolacittametafisica.it/ [accessed on December 11, 2018].

[13] The project was fully financed by the DAAD – German Academic Exchange Program, Hochschuldialogue mit Südeuropa, a cooperation between the Habitat Unit at the TUB (Vittoria Capresi and Aine Ryan) with the Politecnico of Milano (Cristina Pallini and Aleksa Korolija) and the Free University of Berlin (Irmgard Zündorf), the Municipality of Pontinia and the Museo Agro Pontino – MAP. It took place between the 27th of April and the 6th of May 2018. The fieldwork was the initial phase of a semester long design studio which the students carried on in their respective faculties. https://modscapes.eu/design-studio-the-pontine-plain-tuberlin/ [accessed on December 11, 2018].

[14] A borgo, or hamlet, is an urban node smaller than a village. It provides only strictly necessary facilities for the neighbouring dwellings.

[15] This information was reported in the research by the group of students composed by Andrej Klußmann, Anna Sadaei, Petar Rajevic and Mona Schmid, TUB.

[16] These last three interviews with inhabitants of Pontinia were carried out by myself during the DAAD workshop in April 2018.

[17] Pergher, 118.

[18] In Sabaudia plaques have been placed on the facades of some meaningful buildings, but these record only simple objective data such as the original function of the building and the name of the architect, with no critical commentary regarding the political message and intrinsic meaning that the building and its urban layout represents.

[19] The MAP opened in December 2011.The museum presents material from the original collection of the Museo della Malaria as well as other items to explain the Pontine Plain from Roman times, with a particular focus on the Fascist era. Of interest are the public activities and cooperation with artists, aimed at focussing on the current problems of the area, such as the situation of the Indian Sikh community.

[20] In 2017 the city of Asmara was included in the UNESCO World Heritage List https://whc.unesco.org/en/list/1550/ [accessed on December 11, 2018]. The colonial planning of the city is described as modern and rationalist and any reference to Fascism is avoided.

Image Credits

Fig. 1: Photography Vittoria Capresi

Fig. 2: Photography Vittoria Capresi

Fig. 3: Libia, n. 6, Juli 1939, 24.

Fig. 4: Photography Vittoria Capresi

Fig. 5: Photography Amine Mashhadireza

Fig. 6: Photography Vittoria Capresi

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Fig. 1: São Paulo

Are we Modern in a Liquid World? A Latin American Perspective

Abstract

The main theme of this work is to question the permanence of the concepts and languages of the Modern Movement in the daily life of cities and, consequently, its uses and perceptions, considering the current modern-liquid world in which we live, from a Latin American perspective. It goes through studies of society and the present cities seeking to understand the liquid complexities we are experiencing, in addition to the multiple layers of cities and urban networks, having as a theoretical reference the work of Zygmunt Bauman. The present work gives a brief overview of the daily permanence of the Modern Movement from Europe to Latin America. It is illustrated by two case studies: one related to the recent collapse of the Wilton Paes de Almeida building in the center of the city of São Paulo; and the other an analytical case study of the film "Medianeras" that exposes the solitude of the individual in present-day Buenos Aires. It is concluded that the Modern Movement still has outstanding characteristics that define how the inhabitants live within the cities. Moreover, in view of the modern-liquid world, certain characteristics such as solitude, non-permanence, and non-recognition of others as individuals have been exposed reinforcing other social and urban facts made by the Modern Movement.

Fig. 2: Buenos Aires

Introduction

The Modern Movement has roots in the transition from the 19th to 20th century, and for some authors, it was surpassed in the second half of the last century. In the context of Latin America, this Movement only appears in the 1930s, adopting European concepts with local adaptations that created a Latin American modernist identity. Considering that the implementation of modernist concepts happened during the surge of urban centers, it is still possible to experience in present times the consequences of the early modernist choices and projects.

The question in the title aims to create a dialogue and connections between the contemporary liquidity inserted in the Latin American cities, and the modernist ideals of the last century placed in their conception. In addition, these two factors of the equation complement each other and help to understand the society and the urban space nowadays.

This dialogue will be illustrated by two case studies that seek to make this transposition of European modernism more realistic and comprehensible within the Latin American scenario, with its adaptations and consequences in the contemporary world. The first example refers to the fire and collapse of the Wilton Paes de Almeida building in the city center of São Paulo. It shows how the urban sprawl and land occupation, that was planned with modernist urban principles, with the desertification of the center, depict part of the liquid experience that nowadays society is witnessing.

The second example deals with the Argentinian film Medianeras[1], by Gustavo Taretto, which adds the representation of a closer look of the individual living in the liquid contemporary city and creating interpersonal relations that receive influences from technology, consumer systems, modernist urbanism and the very shape of contemporary society. The objective of this work is to examine the dynamics and experience of the contemporary cities formed at the peak of the Modern Movement contextualized in Latin America.

Modern movement in Latin America

The Modern Movement in architecture emerged in Europe in the late 19th century as a consequence of various social and political transformations. With these events, an atmosphere of innovation and transformation was created in society, whether in living conditions, in social extracts or in the urban environment. Its principles had strong functionalist and technicist influences based on looking to the future to provide quality in the present and, for that reason, the rupture with the past and its traditions mark the movement[2].

Modernist ideas - their proposals of rupture, ideals of design, and visions of a city - only reached Latin America with greater strength and presence in the 20th century. At that time, South America lived in a social, economic and political context that was still highly agriculture-based, far away from the smog of the large European industries.

In this context, the modernist landmark takes place at the Modern Art Week of 1922, in São Paulo, headed by intellectuals such as Tarsila do Amaral and Oswald de Andrade. This moment is marked by anthropophagy[3], that is, deep studies and consumption of the Brazilian cultural roots, especially indigenous and tropical, mixed with the international modernist currents.

Latin American modernity gained international attention with the 1943 exhibition by Brazil's New and Old Architecture, built by MoMa (Museum of Modern Art) in New York, which was already reaping modernist fruits of post-war European migratory processes.

In Latin America, the interest and diffusion of Modern Architecture, according to Hitchcock (apud Lino, 2013), was due to the interest of the intellectual classes to know the developments of the international scene, especially in the USA and Europe. From this interest came the first schools of architecture and fine arts in Argentina and Brazil.

In addition to international influences, Latin American Modernism gained momentum because of its identity and nationalist bias. At that moment, in the 1920s, the South American countries, completing their first century of independence, sought to free themselves completely from the colonial moorings, promoting artistic and linguistic revolutions.[4] As Montaner (2012) points out, it was in a peripheral context, as in Latin America, that the Modern Movement has overcome one of its main characteristics: the ambition of universality.

In general, it is possible to list some periods of integration, diffusion, consolidation, questioning and attempts to break with the Modern Movement in Latin America. According to Manuela Catafesta (2015), the 1920s and 1930s are characterized by the insertion of the Modern Movement in Latin America. As discussed, a gradual process headed by an intellectual elite. Then, between 1940 and 1970, the Movement began to strengthen in the Latin American context because it related to the developmental programs - in most cases financed by the United States of America - of the leading governments of these countries. In these decades dictatorial and populist governments ruled the Latin American nations.

Between 1970 and 1980, Latin American cities rapidly transformed, which caused an accelerated growth, making the sense of permanence and traditional urban references no longer exist.

And then, at the end of the 1980s, with the political opening of Latin American countries, a moment of cultural ferment and search for identity was established. At this point, intellectuals understood that Latin American architecture was the heir of European modernity, especially under the Corbusierian bias. However, it was sustained on a hybrid basis of miscegenation and symbiosis between European thought and Latin American culture.

The Liquid Modernity

From the acquaintance of a late and contextualized modernity, which took place in Latin America, it is discussed in this section the liquid modernity, with the aim to assimilate contemporary relations in the modern city.

To comprehend the liquification of modernity, it is necessary to understand the term modernity. According to Zygmunt Bauman (2001), modernity is based on the melting of solids - social and economic structures and life forms - and restructuring them in different ways. The author divides modernity into two moments: "solid modernity" and "liquid modernity". "Solid modernity" is the initial moment, coming from two crucial marks - the Industrial Revolution and the French Revolution, both in the 18th century. At that time, new solids based on reason - in contrast to those in the Old Regime - were founded as a new state and power structures, a new economy, and a new model of society. In the middle of the 20th century, dissatisfaction with the newly created solids occurs, exemplified by the author through the crisis of representative democracy of the nation-state and the inability of the market to deal with inequalities. In addition to this discontent, new social phenomena occur, such as globalization, individualization and the great advance of communication technologies. This is what Bauman (2001) calls "liquid modernity".

In these politic and economic matters, the Thatcher (1979 to 1990 – United Kingdom) and Reagan (1981 to 1989 - United States) governments are considered to be of major influence on the transformations that would bring about the liquidity of modernity. During the leadership of these two politicians throughout the Cold War, and in conjunction with the advancement of production and communication technologies, there was a process of reduction of the state power over the course of nations. The aforementioned rulers began a process of deregulation of the economy, which gave the big corporations stronger negotiating powers with both the states and society.[5]

With this scenario of state power reduction, Bauman (2005) makes a punctual remark about the formative individuals of our society that helps us to understand the liquid way in which we are dealing with our peers and our environment. According to the author, our ancestors lived in a society in which individuals presented themselves as, above all, producing beings, and together brought with it characteristics of this producer being: "(...) acquisition and retention of habits, loyalty to customs established, tolerance to routine and repetitive patterns of behaviour, willingness to postpone satisfaction, rigidity of needs (...) "(Bauman, 2005, p.72). We are inserted, at this moment, in a society in which the subjects are molded and trained as consumers and no longer as producers, and attached to this attribute of consumer comes the "most appalling vices" (Bauman, 2005, p.72), often opposed to those who form the producer, such as: competition, pride, accumulation, instant satisfaction.

Several other theoreticians chose to call this period "post-modernity" because they believe that the transformations were so intense that "modernity" had been overcome. However, the reading of Bauman (2001) is not the same. For the author the core of "modernity" is still present, with an intensification of the solids melting process, defining the period as "liquid modernity".

Case Study

With the purpose of expressing the relation between the late modernity implanted in Latin American territory and the context of the sociological liquidity experienced around the globe, two case studies are presented.

These specific case studies seek to express two poignant issues in the context of modern and liquid cities in Latin America. The first one, having the city as a marketable space with imposed dynamics and not appropriated by its users, is expressed by the case of the fire and collapse of the Wilton Paes de Almeida building in the city center of São Paulo. This will be the main case study because, through it, it will be also possible to identify the negligent way in which the state treats its heritage, including in these modernist buildings. Then the perception is deepened with the help of the film Medianeras, set in Buenos Aires, which captures the feeling of individualization and solitude perceived in the inhabitants of the Latin American metropolis.

The first case study is focused on urban dynamics, exemplified in the city of São Paulo (Brazil). As stated in the previous section, the 1980s were marked by a dizzying growth of large Latin American cities. With that, the demarcated centers of the city - historical regions, which contained characteristics of the various times of the city - are beginning to be weakened due to the appearance of other commercial and economic poles spread throughout the municipal territory. In São Paulo, the old center began to divide the attention and demands with the new concentration of activities

that took place due to the opening of Avenida Paulista, located between the districts of Bela Vista, Consolação and Paraíso. There are several reasons that led to the emptying of São Paulo's old city center. Among them the following can be highlighted: the public investments in infrastructures of other districts; the presence of land with lower values and urban legislation favourable to the verticalization of other areas of the city; public and private financing for real estate construction and commercialization; and, on one hand, the new technological demands by companies and users in real estate structures, and, on the other hand, the lack of response of the already builded real estate [6].

In this old city center, now emptied, was inserted the building Wilton Paes de Almeida, by the architect Roger Zmekhol (1928-1976). The building was built between 1961 and 1966 and was inspired by modern precepts, specifically by Mies van der Rohe. The building was listed as municipal heritage in 1992, due to its relevance as a modernist icon in the center of São Paulo[7]. This building, considered to be luxurious, housed corporate headquarters, it was, for 23 years, the seat of the Federal Police in São Paulo and, until 2009, had an INSS (National Social Security Institute) office. However, this building goes through a process of abandonment, a process that includes not only the Wilton Paes de Almeida building but also several others. One of the main reasons given for the significant abandonment of these buildings is the lack of investment policies and financing for reforms and the high supply of financed capital for the production of new buildings. The impetus for the ever new makes everything a constant ruin. At the end of the 20th century, with the emptying of São Paulo's city center and with the increase in the demand for housing, the phenomenon of occupations of empty buildings is organized. This movement exposes the social and economic contradictions present in the city of liquid modernity, constituted by a population exploited in the search for survival and visibility. So, in 2010, the Wilton Paes de Almeida building was occupied by the “Movimento Social de Luta por Moradia” (MSLM), with about 140 families living in its interior.

On May 1, 2018, the 24 floors of this landmark of modern architecture collapsed after a fire. It is pointed out as reasons that led to the collapse of the fact that, for 17 years, the building was not inspected and also that the occupants of the building were not in a position to promote proper maintenance and repairs [8].

This case illustrates one point of liquidity in Latin American cities caused by the ephemerality of uses and influenced by poor urban planning. Added to a rapid and disorderly urban growth that did not include the working classes and the poor in their design, the power over the use of the soil and its buildings was given to the real estate market and the economy. With this, some buildings have expiration dates and are discarded when they are no longer useful. This example elucidates a fact that is present in a Latin American context: the challenge of dealing with modernization beyond its cities and buildings. Throughout the 20th century, Latin America has seen the paths of modernization of its cities, but the challenge exposed with the collapse of Wilton Paes de Almeida building is the modernization of other areas such as the economy, state conception, education, justice, among others (Catafesta, 2015).

After this description and analysis, looking at the scale of the city and the building, of the contradictions of modernism that have been exacerbated by the liquidity of our times and neoliberalism, we will briefly seek to illustrate the experience of the inhabitants of these contradictory cities. The second example lies in the context of isolation and ephemeral social relations placed in the contemporary city, reflected in the scenarios and stories of the film Medianeras (Taretto, 2011). The film tells the story of Martin (Javier Drolas) and Mariana (Pilar de Ayala), young Argentinians who live in the same block in Buenos Aires. There are several encounters between the two characters during the plot, but the urban environment seems to be too chaotic to notice or enjoy these moments. This example illustrates a fact seen globally, but it is highlighted in Latin American territory: how the city inhabitants are characterized as "consumers" and no longer as "producers" (Bauman, 2005). This characteristic generates a dissociation with the modern environment in which they live, only making use of it, not even being in contact with their neighbors. A thought that comes from the deepening of capitalism, being physically transported to how cities were designed and built, generating impact in the experiences - enhanced by the liquid mode of the current relations.

Considerations

Considering the actual context, with the concepts from Bauman, it is possible to comprehend that Western society suffered in the 18th century a rupture with its way of thinking. Since then, it has been valorized a technical articulated and structured thought. As the Modern Movement in Architecture gains force, the functionalist bias becomes exacerbated. The movement of people and goods planed the cities, organizing them by sectors of use and function, which is also reflected in the architectures of buildings. With the new millennium and the contemporaneity, the technology arises and, consequently, the liquidity concept appears, seeking to explain the interpersonal

relations inserted in the urban environment.
The Modern Movement, in a Latin American context, goes through a process of anthropophagy, in which it is absorbed, understood, and later expressed through the nuances present in each territory. As stated above, there is a discrepancy between the modern precepts expressed in architecture, in the cities, and in the experience of modernity as a social context. The simple import of modern concepts into a society not yet modernized, as was Latin America, leads to schizophrenia causing us to question whether society has really understood our modernization. With the galloping transformations of the mid-twentieth century, considering the modernity that was imposed on Latin American territory, added by the dissolutions of liquid modernity, stirred up, even more, some perceptions and experiences of its inhabitants, such as individualization, functionalism and the city for consumption. This fact had us reflecting on how our constructions (social, political, economic and even architectural) are as functional and technical as the ideas proposed in the last century. Even though we are melting some modernists solids, the contemporary situation presented in this paper evidence that is still maintained several modernist precepts in everyday life.

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[2]: https://www.flickr.com/photos/hernanpc/7822796058/

Notes

Ana Tostões

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Ana Tostões, PhD is an architect, architecture critic and historian, and is president of Docomomo International and Editor of the Docomomo Journal. She is a Full Professor at Técnico, University of Lisbon, where she teaches Theory of Architecture and Critical History, and coordinates the Architectonic Culture research group. Since 2012, she has been in charge of the Architectural PhD program. She has been invited professor at FAUP, EPFL, ETHZ, UTSOA, RSA, ETSAB, ETSAUN. universities worldwide. Her research field is the Critical History and Theory of Contemporary Architecture, focusing on the relationship between European, Asian, African and American cultures. On this topic, she has published 13 books and 95 essays, curated 9 exhibitions, participated in 47 juries, 40 scientific committees and gave lectures in 72 universities worldwide. She has acted as peer referee for scientific journals. She coordinated the research projects "Exchanging World Visions (1943-1974)" and "Cure and Care the rehabilitation".

Notes

Session 1.2: Register

Ana Tostões

The conservation and transmission of modern heritage is a complex task developed in accordance with the extent to which society as a whole reaches an understanding and appreciation of the value of modern movement architecture. Modern Movement Architecture has to do with a social, spatial and technological innovative project committed to the community and the challenge of architectural role to fulfill a better world. The mission is to stress the vitality of Modern legacy and to preserve and value its authenticity for generations to come.

When Docomomo International was founded, in 1988, an International Specialist Committee on Registers (ISCR) was created comprising specialists in modern architecture, theory, construction technology, landscape and interior design. The aim of such committees has since been to engage national and regional Docomomo chapters in the documentation of modern buildings and sites, developing an inventory of modern architecture, including both outstanding individual buildings and 'everyday' examples.

In this session, devoted to "Registers", through four different approaches, each author brought light into the meaning and the significance of Modern heritage in different parts of the world. These contributions range from insightful documentation of specific infrastructures that became urban anchors, to identifying the factors that led to the awakening of society towards the value of Modern thinking and design; concluding in a search of a methodological approach to refurbish and reintegrate modern buildings in today's society.
Respectively, Florian Seidel's paper about Werner March's design of Cairo Stadium and the impact it had on the urban development of the city. Deborah Barnstone aims with her investigation to determine the reasons for the change of attitude among Australian architects during the twentieth century towards Modern Architecture. Somayeh Fadaei, Hoda Sadrolashrafi, Hadi Naderi and Pirouz Hanach through their studies on the Honarmandan Forum in Tehran seek to understand the impact of ownership constraints to best preserve and reuse architectural and urban heritage. While Francisco Teixeira Bastos and Ana Fernandes' essay about the Modernization of a Secondary School in Lisbon analyses a possible methodological approach to intervening in Modern heritage based on articulation and critical reading into the preexisting building.

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Pirouz Hanachi is working as an academic member and professor of Architectural and Urban Heritage Conservation Group, School of Architecture, University of Tehran, Iran. He has written his PhD thesis at the University of Tehran, about conservation in historic cities. He is Chair of DOCOMOMO_Iran and Mayor of Tehran.

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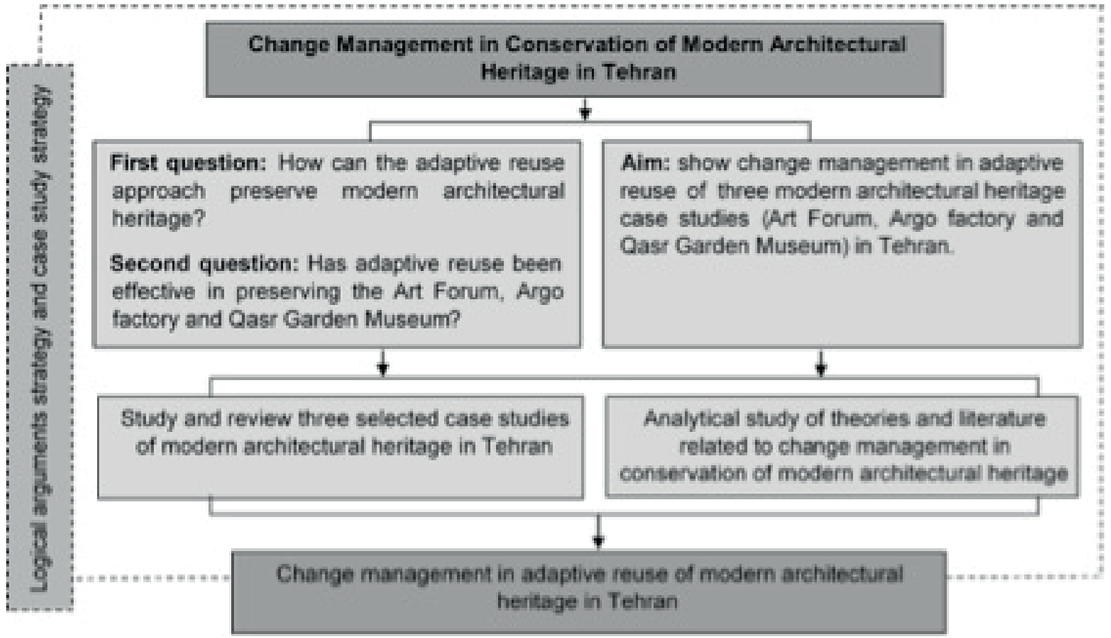

Fig. 1: The research design introduces the main stage of the study, its contents, the relationship and hierarchy of the subject.

Change Management in Conservation of Modern Architectural Heritage in Tehran

Abstract

Change management has been recognized as a dynamic concept in the conservation of architectural and urban heritage. The purpose of this paper is to identify which aspects of heritage building should be preserved and which ones can be changed in the adaptive reusable process of changing in the context of Tehran. The first step is to recognize its palimpsest. These places have witnessed Tehran's transformation throughout the last two centuries, from the private gardens of the Qajar dynasty, causing the formation period of Tehran to become the capital of Iran, to converting to public and industrial buildings during the Pahlavi dynasty (Reza Shah) during the industrialization period. Henceforth, it investigates these aspects in three case studies; Qasr Garden Palace, Art Forum and Argo factory which are located in Tehran. In order to achieve this goal, the review of related literature by using qualitative methods have to be utilized. The second step claims this paper is addressing each case-study and the data for this research were collected through architectural and historical documents, Semi-structured interviews, observations and photography and they were analyzed qualitatively to prove that it is essential for the conservation of architectural and urban heritage to understand the necessity of recognizing changing management.

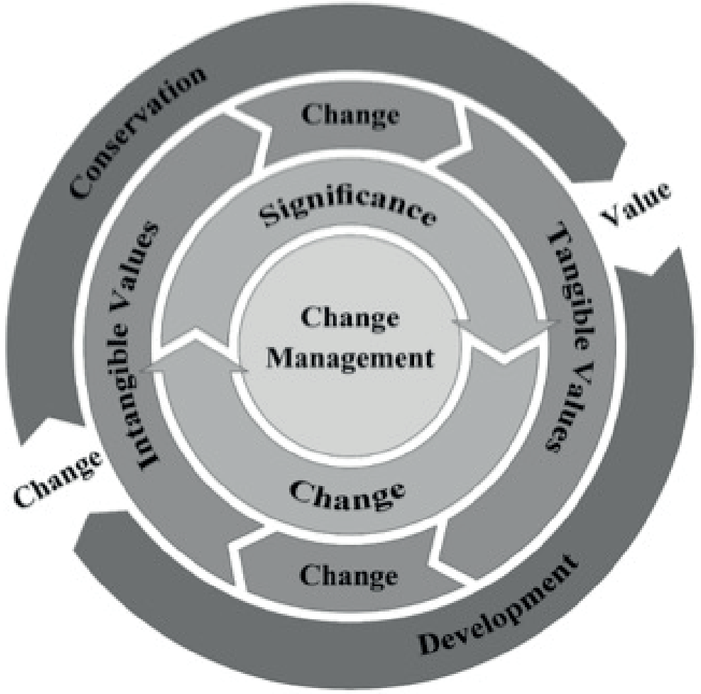

Fig. 2: The conceptual framework of Change Management in Conservation of Architectural Heritage.

Introduction

This paper provides an overview of the concept of "change management" in the context of modern architectural heritage in Tehran. It discusses how cultural heritage buildings as an engine works for city development and its management to achieve this purpose. It ends with outcomes and recommendations for facilities managers involved with change management in the context of cultural heritage. The main questions and aim of this research are presented in the form of research design as below.(Fig. 1)

Role of Change Management in Conservation of Architectural Heritage

Reviewing the related documents and theories, especially to indicate the last two decades have shown the issue of providing a balance between conservation and development approaches in order to change management is the most important topic that should be considered. Hence, conservation is not passive and development is not extreme due to taking into account the significance of heritage. According to this paper, the concept of conservation, which was initially defined as the maintenance and upgrading of historical structures, has been scrutinized with the concept of change management in historical environments in recent decades. Conservation is the "process to manage changes in historical environments that best preserves the heritage values of a place through maintaining significance and integrity in their place while protecting opportunities to reveal or enhance values for present and future generations".[1] In recent years, the new attitude towards conservation in the form of "change management" and the management of developmental measures has gained great importance utilizing full recognition and understanding of the concept of "significance" of heritage and has been emphasized in numerous contemporary documents. Besides, Bandarin and Van Oers[2] have considered the issue of transferring traditional approaches of conservation to "change management" as the sign of extent endeavors being made in the context of determining the new patterns and processes. In this regard, the Burra Charter (1999) denotes the concept of "change management" and the control of new developments based on the place significance.[3] In the following, the Declaration of Xi'an (2005) introduces principles for "change management" and tourism in Asian countries.[4] In addition, the English Heritage (2008) has described the "concept of conservation as the process of change management of a valuable and important place in the urban context in such a way that its heritage values remain in the best possible form, while opportunities are presented with the aim of identifying and enriching values for present and future generations".[5] "Change management" means considering the degrees of change and renovation of historical environments. This approach allows for the modification and adaptation with the contemporary functions to valuable historical monuments in circumstances where their heritage and significance values are preserved. Balancing cultural significance and economic viability is one of the major challenges in the reuse of historic buildings".[6] In this regard, the historical grade of the work and its significance, determine the type of intervention. "When preserving historical buildings comes into practice, the best way to preserve their originality with all their features, is to preserve them with their original uses. The conversion of old buildings to museums is another method if the purpose is to preserve all the originality of the old buildings".[7] The concept of management of changes in the heritage is a view introduced in the Paris Declaration as "Heritage as a Driving Force of

Fig. 3: Art Forum in Tehran.

Development".[8] The collection of these concepts in conjunction with each other forms the scientific basis for the issue of "adaptive reuse" and leads to the forward movement.
The "adaptive reuse" follows the long-term development plans in order to protect not only the monuments with heritage values but also the urban environment that reflects the history of society. In fact, the main objective of this strategy is to preserve the significance of heritage, while upgrading and meeting the standards of everyday living. All processes related to the concept of "adaptive reuse" always consider "change management" as a vital concept. This concept acts as an interface loop in the whole process and links the related concepts conceptually and practically. "Change management" is the theoretical support of the issue and one of the latest concepts in the field of conservation. (Fig. 2)

Conservation of Modern Architectural Heritage in Tehran

Agha Muhammad Khan, the founder of the Qajar dynasty, chose Tehran as the seat of his throne and made it the capital of Iran. Qajar Gardens In the late 18th century had important roles. These places with their cultural and architectural aspects especially with their dimensions were important during modernization changes to become public buildings or prisons, caserns and industrial factories. By creating and constructing new palace-gardens, streets and alleys, this city faced a new phase and form. During Fathali-Shah's reign, the development of the city accelerated and became well shaped and with more order. The city earned considerable importance. Without any doubt, Fathali-Shah was the founder of Tehran. During this time the western culture affected all aspects of life in the royal court. It impacted not only the architecture and urban designing but also in garden designing, which could be observed in the form of constructing and creating vast and extensive palace-gardens in a suburb and the foothills of Alborz mountain range.[9]

The modern history of Tehran has begun since the beginning of the nineteenth century. Therefore, it can be seen as a response to political, economic, and cultural consequences. New developments and changes in Iranian architecture can be considered in different periods. By the onset of the Pahlavi dynasty in the 1920s, modernity rapidly expanded across the country especially Tehran. Relations with the West, accepting western forms of living and entry of foreign experts in different fields brought up changes in different aspects of Iranian society.[10] In the field of architecture, new technologies, materials, and new functions caused to new forms and buildings which were completely different from the traditional ones. Tehran and other large cities in Iran (such as Shiraz, Isfahan, Tabriz, Mashhad,) and especially oil-rich southern cities, have various works of modern architecture within themselves. Most of this new designing are public properties. For example, the most significant works of modern public properties are Tehran railway station, banks, Tehran University, high schools, caserns, prison and many factories.
Today, many of these places are among Tehran's urban and architectural heritage, but unfortunately, they are rather neglected. Perhaps some indicative buildings and monuments are in a better state as a result of the 1973 Act, which allows the monuments to be registered on the national heritage list regardless of their age value.[11] However, the majority of modern architectural heritage is not on the national list and they are not subject to conservation and supervision laws of the

Fig. 4: Argo factory.

Cultural Heritage, Handicrafts and Tourism Organization.

Change management in adaptive reuse of Art Forum, Argo factory and Qasr Garden Museum in Tehran

This section of the paper introduces the Art Forum, the Argo factory and the Qasr Garden Museum as three case studies that have been relatively successful in managing the changes in the process of conservation and adaptive reuse of modern architectural heritage in the city of Tehran.

Art Forum

The Art Forum in Tehran can be considered as a successful project in the field of modern architectural heritage and reuse of historical monuments in Iran in recent years. The former casern in 1328 at the site of the "Fisher Abad Garden" from the famous gardens of the Qajar era with the Neoclassical Plan of the Nineteenth Century has become a place for gathering of artists in various fields as well as exhibiting their work. Reuse of the Art Forum, which was held in May 1998 by the Municipality of Tehran and in cooperation with the Ministry of Culture and Islamic Guidance. After ten years of the development plan of four multi-purpose rooms, each with a capacity of 100 people, was designed and joined on the northern side as two-symmetrical volumes. The lively atmosphere of the lobby is created alongside this collection and is used by the people of that neighborhood. Nowadays, this place has been transformed into a theme park for diverse artistic activities, and it can be seen and displayed in the exquisite and new artifacts and works of art. This place has become one of the most influential collections in the arts of the country. In addition, after the completion of the project, the value of the land around the building has also been increased and demand for construction of utility-service buildings such as cafes, restaurants, art galleries and more.[12] (Fig. 3)

Argo Factory

Argo has had an exclusive transformation in industrial architectural in Tehran not only by its outstanding designing but also with its existing artistic and cultural activities to satisfy its audience. In other words, the conservation experience in Argo is distinguished from other buildings, because the role and its influence seem very strong and is still tangible. Reconstruction and restoration of architectural and urban work are one of the best tools for strengthening and defining collective identity. In fact, a material resource is used to achieve immaterial goals. Reconstruction and revival of work with a physical purpose is not an intangible purpose but also in preserving or creating a common and collective memory. In this project, the designer used the old materials and construction waste on the workshop site to repair the building. For example, since the gallery space needed artificial light, all windows and openings were closed with iron sheets, some of which were fragmented from project waste selected and arranged side by side. Another example of this approach can be found in the guard structure of the southern wall, which was built from old bricks collected by the project. The Argo project has a second phase, which includes adding spaces to the building. In the case of historical buildings such as Argo, designing and adding modern and minimalist spaces along with the old part of the building has been preferred by the designer. For this reason, columns join the extensions to the built one.[13] (Fig. 4)

Fig. 5: Outside of Qasr Garden Museum.

Qasr Garden Museum

Qasr (Palace) was originally built as a royal garden in 1795. Then its function changed into a military base and by 1925 it became the first modern prison in Iran designed by Nikolai Markov and remained so until 1978. From 1978 to 2008 it was mostly discarded and Tehran's municipality started to both reuse and to conserve the buildings and part of the garden in 2008. The project started for the façade and interior spaces of this historical complex considered from 3 aspects listed like;

- Restoration of the Markov prison with its unique architecture of 8 wings to become museums in the future.
-The political prison building from the second Pahlavi era, plus further changes of Markov building.
- The conservation of landscape by recovering the main axial lines of the royal garden period was done in order to transfer this complex into a museum accessible to the public. Besides the historic value of the building, this garden is a valuable and wonderful sample of Persian gardening which duplicates the necessity of Adding a veiled part and entering prohibited land of the city to the public spaces for public use was the most important attitude in this project. Finally, in 2012 the opening of the museum to the public with its galleries, libraries, amphitheater, cafes and restaurants had encountered a stunning reception by the people. Qasr Garden Museum was chosen as the most creative museum in Iran in the year 2014.[14]

(Fig. 5 and 6)

Conclusion

The results of this paper show that the concept of change management based on the preservation of values and significance of the heritage will establish sustainable and balanced development in the historic and contemporary cities through the reflection in the strategy of the adaptive reuse of architectural heritage. Art Forum, Argo factory and Qasr Garden Museum as three case studies in Tehran are among the most informative adaptive reusable projects which are important today on the city scale. These places are probably among the best places to see the continuity of change and what is happening with Iranian artists today. These are well laid out with a different function such as exhibitions, amphitheaters and cafes. The decoration of spaces is one of the remarkable points in the restoration of them. Today, they have become a place for various artistic activities, and a place to display new and innovative artwork. The same time these places have become one of the most influential art complexes in the country. Another important issue that has happened after the reuse of the buildings is the lively atmosphere that has been created alongside these complexes. Now the sideways spaces are used not only by the people of that neighborhood but also by people from various parts of the city caused by the greatest strategies from experts such

Fig. 6: Inside of Qasr Garden Museum.

Notes

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Fig. 1: Authors
Fig. 2: Authors
Fig. 3: Somayeh Fadaei Nezhad, 2018
Fig. 4: Hoda Sadrolashrafi, 2017
Fig. 5: Ali Daghighi ([EBA] Archive), 2013
Fig. 6: Ali Daghighi ([EBA] Archive), 2013

Notes

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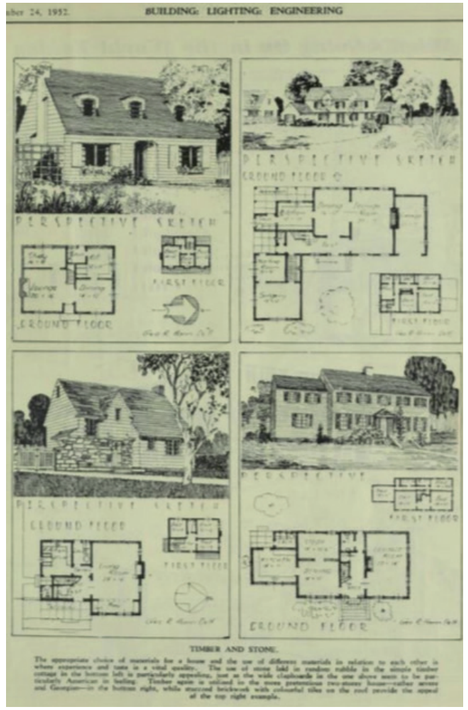

Fig. 1: Typical Australian project from the 1920s. Building, Lighting, Engineering.

Freak Architecture: Australia and Classical Modernism

Abstract

One hundred years ago, Australia was hostile territory for the nascent modern movement -- Australian architects and their clients had notoriously conservative taste and disparaged the new aesthetics emerging in Europe. Yet today, Australia is a bastion of modernism; modern aesthetics are not only the purview of trained architects but also commercial developers. Today, the "in" aesthetic for every building type is modern. Between 1918 and the mid-1920s successful Australian architects like Robert Haddon (1866-1929), Walter Butler (1864-1949), and Harold Desbrowe-Annear (1865-1933) favored a British-inspired Arts and Crafts style, or an Empire style. Australia's first licensed woman architect, Florence Taylor (1879-1969), epitomized Australian sentiment in the 1920s when she denounced what she termed "freak architecture" warning her countrymen against modernism. Yet now, Australian architects like Peter Stutchbury (1954- present); and firms like Denton, Corker, Marshall are world renowned for their elegant neo-modernism while commercial developers of every size construct highly sought after open plan flats and houses in a streamlined, unadorned style clearly influenced by classical modernism. How did this transformation occur? Some scholars credit Walter Burley Griffin (1876-1937) and Harry Seidler (1923-2006) with altering Australian architects' attitudes to modernism while others only address reception until the 1960s. The reasons for the transformation are many: postwar migration of practitioners educated at the most progressive schools abroad; trips and apprenticeships overseas made by Australian architects; changing pedagogy in Australian architecture schools because of the new emigrés but also the new desire to be leading players on the world stage; a postwar construction boom; and a developing sense of independence from British influence.

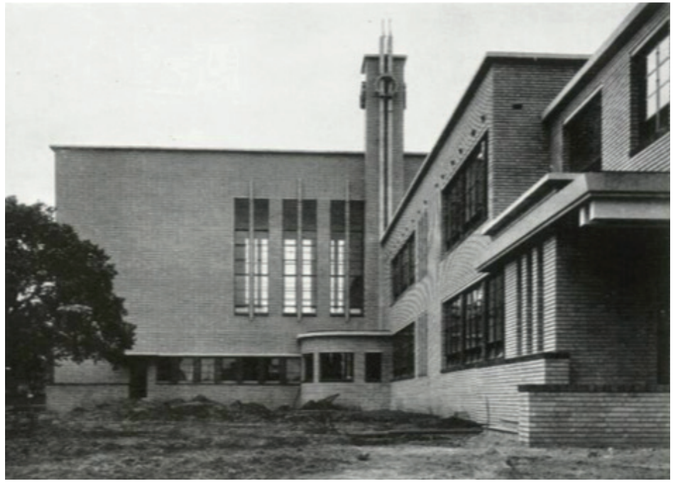

Fig. 2: Norman Seabrook, MacRobertson Girls School in Melbourne, 1935, Dudok's influence.

Introduction

One hundred years ago, at the end of the First World War, Australia was extremely hostile territory for the nascent modern movement -- Australian architects and their clients had notoriously conservative taste and disparaged the new aesthetics emerging in Europe.[1] (Fig. 1) This was true for all building types but particularly so for domestic architecture; it was also true for all parts of the country, rural and urban. Yet today, Australia is a bastion of modernism in its urban centers; modern aesthetics are not only the purview of trained architects but also many commercial developers.[2] The "in" aesthetic for every architect-designed building type has the hallmarks of classical modernism: sleek simple volumes, open spaces, clean lines, inside/outside living, totally free of ornament. Between 1918 and the mid-1920s successful Australian architects like Robert Haddon (1866-1929), Walter Butler (1864-1949), and Harold Desbrowe-Annear (1865-1933) favored a British-inspired Arts and Crafts style, or the Empire style of Edward Lutyens (1869-1944) and Charles Francis Annesley Voysey (1857-1941). Yet now, Australian architects like Peter Stutchbury (1954-present) and Glen Murcutt (1936-present); and firms like Denton, Corker, Marshall and Durbach Bloch are world renowned for their elegant neo-modernism while commercial developers from the best-known giants like LendLease to small local companies and independent contractors construct highly sought after open plan flats and houses in a streamlined, unadorned style clearly influenced by classical modernism.[3] (Fig. 4) How did this transformation occur? Some scholars credit Walter Burley Griffin (1876-1937), Marion Mahony Griffin (1871-1961), and Harry Seidler (1923-2006) with altering Australian architects' attitudes to modernism, which is too simplistic, while others only address reception until the 1960s, which does not consider the full conversion to a modern idiom.[4] The reasons for the transformation are indeed many and include: postwar migration of practitioners educated at the most progressive schools in Europe and the United States; trips and apprenticeships overseas made by Australian architects before and after the Second World War; changing pedagogy in Australian architecture schools; the evolving desire to be leading players on the world stage rather than denizens of a remote outpost; a postwar construction boom that has continued almost unabated; and a developing sense of independence that came with the slow detachment from British influence.

Australian federation only dates to 1901, when the British parliament passed articles permitting the six Australian colonies, to self-govern. Until 1901, the colonies were tethered to Britain politically and culturally. As John Rickard asserts, federation did not abolish the old relationships with Britain, "but merely provided new structures within which they could compete."[5] The sense of racial unity that bound Australians to the UK, and a lingering concept of England as "Home," meant that Australia continued to look to the UK for cultural cues – In what style should its architects design and construct?

The Interwar Period

If disillusion with the First World War experience caused a rejection of traditional artistic approaches in favor of radical experimentation in much of Europe, it elicited a very different response from many Australians who saw the devastating war as proof of Europe's decadence rather than a liberating event.[6] It seemed far more reasonable to build the new suburbs that were springing up around the country in the conservative Federation Style, a combination of

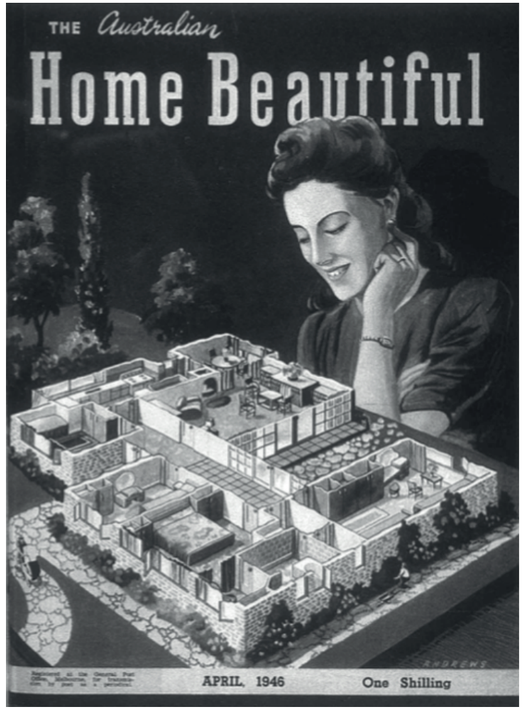

Fig. 3: Page from the Australian Home Beautiful showing a housewife admiring the model for a typical postwar modern home complete with all the latest appliances and contemporary furnishings.

American Bungalow and British Arts and Crafts than in some untested modern European style.[7] Australia's first licensed woman architect, Florence Taylor (1879-1969), epitomized Australian sentiment when she denounced what she termed "freak architecture" in several articles for the Sydney-based Building journal. Taylor was democratic in her dislikes: she disdained equally the American architect Lloyd Wrigh9t (1867-1959), Dutch Michel de Klerk (1884-1923), French August Perret (1874-1954), and Belgian/French Robert Mallet-Stevens (,1886-1945) to name a few pioneers of modernism whom she disparaged. "Like many post-impressionist, cubist and futurist artists," she complained, "they interpret merely what their distorted brains visualize."[8]Taylor used words like "weird," "bizarre," "curious," and "eccentric," to describe the new architecture appearing in Europe and, to a lesser degree, in the United States. Much of Taylor's highly entertaining prose was devoted to warning her countrymen against what she saw as the obvious evils of modernism.[9] And Taylor was not alone – many other critics writing at the time held similar beliefs. Australian cultural conservatism in the 1920s was linked to its distance from Europe and America. Few had seen the latest art and architecture because visiting the sites of innovation was expensive and therefore prohibitive for many so they knew only what was published. Of course, some Australians did travel to see the new art and architecture and attempted to change their countrymen's views upon their return. There were also European and American emigres who brought the latest artistic ideas with them – the architects Walter Burley Griffin and his wife Marion Mahony Griffin were the most successful. Both Griffins had worked for Wright before coming out in 1913 after winning the international competition to design the new capital in Canberra. Even in this period, some critics, like Hardy Wilson (1881-1955) realized that there were better models for Australian architecture than British design. Wilson argued that because of the climatic differences between the UK and Australia it did not make sense to use British design models. He suggested instead Italian and Asian design approaches. He also maintained that in order to develop its own identity, Australian architecture would need a combined response to the continent's climate and landscape that also considered the Australian way of life.[10]

In spite of their successes in Australia between the wars, the Griffins' work had a limited audience. Flipping through issues of the Sydney architecture journal, Building, it is clear that the preferred aesthetic in the interwar housing boom was the Federation bungalow.[11] Advertising images for the "modern home" reinforce the appeals of this reactionary aesthetic. Attitudes were fairly consistent during the 1920s -- the first Australian Exhibition of International Architecture in 1927 ignored the leading figures of European and American avant-garde like Walter Gropius (1883-1969), Mies van der Rohe (1886-1969), and Frank Lloyd Wright.[12]

Australians' first enthusiastic embrace of modernism occurred in two areas during the 1930s: hospital and school design. (Fig. 2) Considering the association of modernism's aesthetics with health and hygiene, this was not surprising. British enthusiasm for the Dutch master of school design Willem Marinus Dudok (1884-1974), who was awarded the RIBA Gold Medal in 1935, might partially explain the enthusiasm for modern aesthetics in school design. Dudok's work was widely published in British architecture journals during the 1920s and 1930s, that were circulated in Australia.[13] In fact, until the 1940s, Australians subscribed to English-language architectural

Fig. 4: Typical contemporary development.

journals only![14] The influence of published design coupled with the knowledge that Australian architects who traveled abroad brought back with them and disseminated in journal articles, public, university, and professionally- sponsored lectures.[15] Australian domestic design enjoyed isolated projects in the modern idiom, of course, like the 1937 Prevost House by Sydney Ancher (1904-1979), but these remained the exceptions.

Slow Changes in Attitude

The immediate postwar period witnessed several cultural changes that affected the reception of modern architecture in Australia: Australia's realignment in foreign policy with the United States during the war; new migrants from Europe who brought their educational and professional experience with them, the gradual dismantling of the White Australia policy that transitioned Australia to a multicultural society, a change in journalistic attitudes towards modern design that spread from the specialized architecture press to the popular press, and Australia's developing sense of national identity and increasing independence from the UK.[16]

Between 1947 and 1969 over 2 million migrants came to Australia adding increasing the population by 30%; then another 2 million migrated between 1970 and 1995; and well over 3 million between 1995 and 2015.[17] The government gradually relaxed immigration controls during the postwar period permitting migrants from all over Europe, not just Great Britain, and eventually all over the world. These continuing migration waves have transformed Australian society into a multicultural one whose composition has had an impact on every aspect of life from coffee and food to architecture.[18]

The influx of European emigres included figures who subsequently became well-known such as the architect Harry Seidler, educated by Walter Gropius and Marcel Breuer (1902-1981) at Harvard University; and the artist Ludwig Hirschfeld-Mack (1893-1965), schooled at the Dessau Bauhaus where he also taught for a number of years. The ranks of emigres also included less well-known figures like Eva Buhrich (1915-1976) and Hugh Buhrich (1911-2004), former pupils of German architect Hans Poelzig (1869-1936); and Henry Epstein (1909-1968), a graduate of the TU Vienna.[19] Many of these newly arrived practitioners designed for emigre patrons, who shared their aesthetic interests. The work they produced, coupled with their influence on design pedagogy at Australian architecture and design programs, where many took teaching positions, gradually helped affect a shift in Australian aesthetics.[20]

At the same time, Australian architects who were interested in modern design mounted action on several fronts: publications, public lectures, and constructed works. Beginning in the late 1930s, a series of journals appeared touting modernism, like Robin Boyd (1919-1971) and Roy Simpson's (1914-1997) Melbourne student publication Smudges and the Sydney MARS Group's Angle. Articles extolling modern architecture even began to appear in the popular press. "New Ideas in Architecture," reviewing the 1953 Museum of Modern Art exhibition Built in USA Postwar Architecture features Mies van der Rohe's Farnsworth House, the Eames House, and Richard Neutra's Warren Tremaine House.[21] Unlike the ridicule and disdain that modern domestic designs attracted in the interwar period, these houses are presented as exemplars for contemporary living and, more importantly, for their potential to inform Australian architectural solutions.

Australian Modernism comes into its own

A growing reverence for American modernism was part of the 'new nationalism' of the postwar era.[22] The cultural turn affected all aspects of Australian politics and culture.[23] The American California bungalow had already infiltrated the Australian design psyche in the latter half of the 19th and beginning of the 20th centuries; some architectural historians believe that California modernism was a more critical influence than European design in the 1940s and 1950s.[24] Given the climatic similarities between parts of California and much of Australia, the argument has merit, at least for some architects.

Australian attention to climate had always been a part of its design ethos but, from the mid-1940s response to climate, geography and landscape, was used to defend modern aesthetics rather than as the basis for formal adjustments to the conservative design.[25] The shift was part of the architectural answer to new nationalism expressed by many architects like Karl Langer and Walter Bunning in the 1940s, Eric Leach in the 1950s, Gabriel Poole (1934-) in the 1960s and 1970s, Glen Murcutt since the 1970s, and Richard Leplastrier (1939-), Lindsay and Kerry Clare ,(1957-) and Troppo today. In this work, acknowledgment of what is uniquely Australian includes the embrace of indoor/outdoor living, that can be exploited in ways not possible in northern climes. The new spatial approach is part of what came to be referred to as "The Australian way of life."[26]

Recognition that there was a unique "Australian way of life" burst into the national consciousness in the postwar period, characterized by "egalitarianism, classlessness, the 'fair go,' stoicism, and mateship."[27] Beginning in the 1950s, the phrase "the Australian way of life" permeated publications on Australia like George Caiger's The Australian Way of Life and George Johnston's "Their way of life" in Ian Bevan's The Sunburnt Country both from 1953. By defining a "way of life" as opposed to "national identity," it was possible to change the terms of reference from character to behavior, habits, local geography and climate, economic opportunity, culture and society. In architectural terms, the "Australian way of life" meant home ownership. Aesthetically, this translated into projects for either beach or bush, yet this did not reflect the realities of 20th-century Australian settlement.[28]

Between 1911 and 2006, Australia went from predominantly rural with almost 60% of the population in rural towns or in the countryside to predominantly urban with 60% in the cities.[29] Today, in 2018, 90% of the population lives in an urban center, making it one of the most urbanized nations in the world.

Australia's urban nature meant that at least to some degree, it was a site of modernity, if not of modern design aesthetics. Certainly, by the 1960s, it had become a site of modern aesthetics as well as architects used the postwar urban construction boom as an opportunity to test new design ideas.[30] As in many Western countries, the postwar period was one of explosive growth (real wealth per capita doubled between 1960 and 1996, then doubled again between 1996 and 2005). Residential suburbs and high-rise building development (mostly commercial) in the cities boomed, where old neighborhoods and urban fabric were torn down and replaced by new construction. Architects were acutely aware of the changing nature of Australia at this time as an issue of Architecture in Australia from 1962 illustrates with articles ranging from the history of Australian population growth to federal immigration policy to design challenges of urban housing.[32]

Articles on design from the 1960s and 1970s typify the postwar attitude: designs are up-to-date examples that could be almost anywhere – with open plans, large surfaces of glass on the facades, and simple volumes and lines. At the same time, Australian architects declared sensitivity to place – to climate, landscape, and lifestyle – and increasingly developed approaches with subtle differences to modern architecture elsewhere. Australian projects receiving international notice tended to be bush and beach houses – that is, ones in a typically Australian landscape. While there are critical reviews of the work, they are critical of particular design decisions but not of the overall aesthetics – a sea change from the 1920s. Historicism is nowhere to be seen.

Although the Labor government of the early 1970s attempted to correct some of the issues caused by rampant postwar development, the reversal from unbridled outward expansion only began in the 1980s with a series of government policy shifts aimed at renewing the middle and inner city that altered the main locus of housing design and construction from the outer suburbs back to the city center.[33] New development pushed prices ever higher making the city centers expensive enclaves for the well-heeled. By this time, architects in public and private practice had long since embraced the basic tenets of modernism, as an issue of Architecture Australia attests, and the well-educated upper middle classes, who were the primary clients for inner city development, shared their inclinations. The fact that this so did not mean that Australian architecture is all the same only that traditional and historically-based design for new construction was out of fashion -- even postmodernism had little effect on this attitude.

How can this transformation be explained? The confluent changes to Australia after the Second World War -- becoming a multicultural society, asserting independence from Britain, developing a sense of national identity, and growing economic prosperity and the construction boom – together with a belief that the postwar period ushered in a new era, were probably not enough to push Australia towards modern aesthetics without a helpful nudge. Robert Crawford suggests that that nudge came from the Australian advertising industry, which pushed modern technology and design more and more aggressively after the war.[34] As Crawford points out, the advertising campaigns of the 40s and 50s coincided with Australians' newfound prosperity and the new culture of consumerism. In this environment, people were encouraged to buy the latest gadgets, including the now affordable automobile, with their elegant streamlined design, in order to fulfill the image of "the Australian way of life."

As Justine Lloyd and Lesley Johnson point out, as part of this same consumer push between 1940 and 1960, Australia marketed the modern home to housewives as one of the new possessions they all needed.[35] Images in contemporary home journals like a typical one from 1946 in The Australian Home Beautiful show women leaning over models of thoroughly modern homes kitted out with contemporary furniture and appliances.[36] (Fig. 3) Modern design was presented as a desirable commodity and a mark of the new postwar Australian society. While the totally modern beach and bush houses were the first unique architectural emblems of this new Australia, it was the image of modernity they projected that was their enduring contribution and that easily transferred to the booming Australian cities where postwar construction of houses and housing created plenty of oppor-

tunities to build in a modern style. (Fig. 4) Over time, modern architecture became the inhabitable correlative to those streamlined new commodities on the Australian market; functional, rational, practical and elegant.

Notes

[1] John F. Williams, The Quarantined Culture: Australian Reactions to Modernism 1913 -1939 (Cambridge: Cambridge Univ. Press, 1995); and Donald Leslie Johnson, Australian Architecture: 1901 – 1951 (Sydney: Univ. of Sydney Press, 1980).
[2] Noticeable exceptions are housing developments constructed in the outer suburbs by government agencies and private developers.
[3] Australian real estate websites are excellent sources. See: domain.com.au and realestate.com.au for typical examples.
[4] Johnson, Australian Architecture; Andrew McNamara, Ann Stephen, Philip Goad, Modern Times: The untold Story of Modernism in Australia (Sydney: Miegunyah Press, 2008).
[5] John Rickard, Australia: A Cultural History (Melbourne: Monash University Press, 2017), 106-107.
[6] Rickard, 119.
[7] Peter Cuffley, Houses of the 20s and 30s (Fitzroy: Five Mile Press, 1989).
[8] Taylor, 1925.
[9] Taylor, 1923; and 1925.
[10] Hardy Wilson, "Architecture in Australia," Art in Australia, (Sydney) No. 4, 1923; Hardy Wilson, Domestic Architecture in Australia (1910; Stanislaus Fung and Mark Jackson, "Yellow of the East and White from the West: Hardy Wilson's Grecian and Chinese Architecture (1937)," Architecture Theory Review, 1/1, 63 -68.
[11] Building, September 11, 1920 on designing and constructing affordable homes for soldiers. See pages 63-66.
[12] Brochure & Catalogue of the First International Architectural Exhibition (Sydney: Institute of Architects, NSW, June 1927).
[13] Carole Hardwick, The Dissemination and influence of Willem Marinus Dudok's work in the climate of modernism in architecture in Australia, 1930 – 1955, dissertation at the University of Sydney, 1998.
[14] Johnson, Australian Architecture, 86.
[15] Johnson, Australian Architecture:, 88-94.
[16] "New Ideas in Architecture," Sydney Morning Herald, February 22, 1953, 19.
[17] Parliament of Australia, https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliament ary_Library/pubs/rp/rp1617/Quick_Guides/MigrationStatistics.
[18] Geoffrey Brahm Levey, "Multiculturalism and Australian National Identity," Political Theory and Australian Multiculturalism, ed. Geoffrey Brahm Levey (New York: Berghahn, 2008) 254 - 277.
[19] Rebecca Hawcroft, The Other Moderns: Sydney's Forgotten European Design Legacy (Sydney: UNSW Press, 2017); House: Hugh Burich 1972, exhibition curated by Neil Durbach and Cath Lassen, Garry Anderson Gallery, Sydney, 10 September – 5 October, 1991: Jennifer Tayler, Australian Architecture since 1960 (Melbourne: RAIA, 1980).
[20] For an overview of shifts in Australian design and architecture education after the war, see the forthcoming book Bauhaus Diaspora, eds. Anne Stephen, Philip Goad, and Andrew McNamara (Sydney: Power Institute).
[21] Built in USA: Post-war Architecture, ed. Henry Russell Hitchcock and Arthur Drexler (New York: Simon and Schuster, 1953).
[22] Richard White, Inventing Australia (Sydney: 1981).
[23] Rickard, Australia: A Cultural History; Jack Doig, "New Nationalism and Australia and New Zealand: The Construction of national Identities by Two Labour Governments in the Early 1970s," Australian Journal of Politics and History, 59/4, 18 Dec 2013; Richard White, Inventing Australia (Sydney: 1981).
[24] Op cit, 154-155.
[25] Modernism & Australia, 567.
[26] Richard White, "The Australian Way of Life,' Journal of Historical Studies, 18/73 (1979), 528 – 545.
[27] Sara Cousins, "Contemporary Australia" (Melbourne: National Centre for Australian Studies, 2005), 1.
[28] Desley Luscombe, An Analysis of Narrative Histories of Architecture: A Reading of J. M. Freeland's Architecture in Australia: A History, Master's thesis (Sydney: UNSW, 1988), 6 – 60.
[29] BITRE, The Evolution of Australian Towns (2014), 58.
[30] Taylor, Australian Architecture since 1960, charts the transformations until the late 1980s.
[31] BITRE, The Evolution of Australian Towns (2014), 172.
[32] Architecture in Australia, (Sydney: Royal Australian Institute of Architects) 57/1, January 1962, 1 – 88.
[33] Neil Coffee, Emma Baker, and Jarrod Lange, "Density, sprawl, growth: how Australian cities have grown in the last 30 years," The Conversation, 3 Oct. 2016; https://theconversation.com/density-sprawl-growth-how-australian-cities-have-changed-in-the-last-30-years-65870. Australian cities were called "doughnuts" because of their empty inner precincts
[34] Robert Crawford, "Selling Modernity: Advertising and the Construction of the Culture of Consumption in Australia, 1900 – 1950," Antipodean Modern: ACH 25 (2006) 114- 143, 137.
[35] Justine Lloyd and Lesley Johnson, "Dream stuff: the postwar home and the Australian housewife, 1940-1960" Environment and Planning D: Society and Space, 2004, vol 22, 251.
[36] Op cit, 253.

Notes

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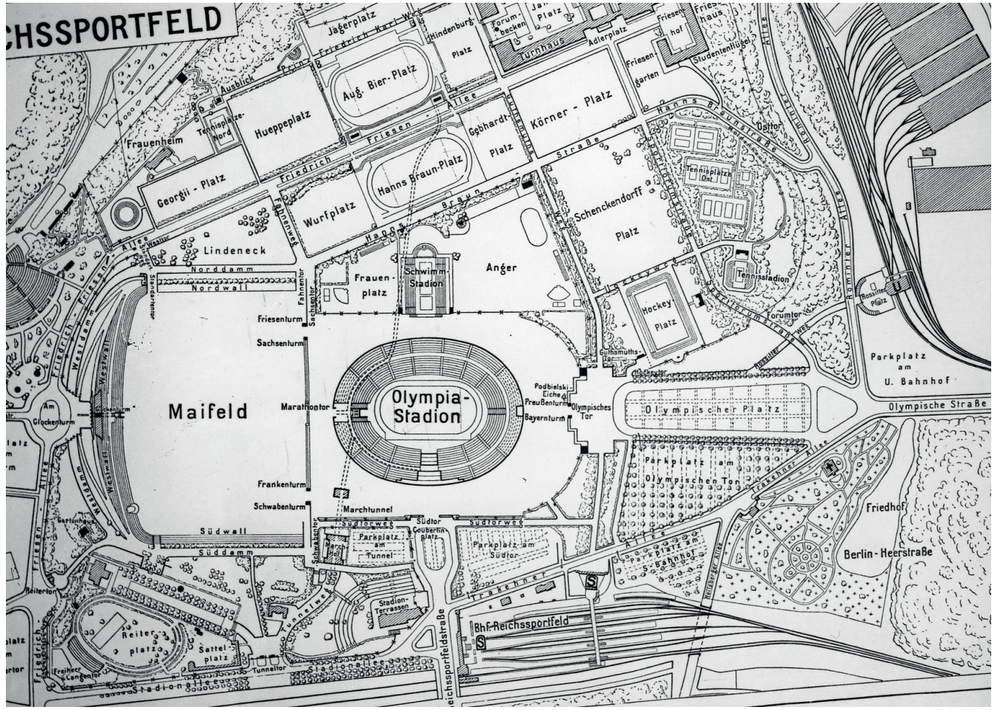

Fig. 1: Berlin Olympic Stadium (1934-1936), Urban Plan.

Werner March and the Design of the Cairo Stadium

Abstract

The paper deals with architect Werner March´s (1894-1976) design for the Cairo Stadium (built 1956-1960) and its relation to his famous Berlin Olympic Stadium (built 1934-1936), with which it shares numerous similarities. These range from the urban plan layout to architectural features.

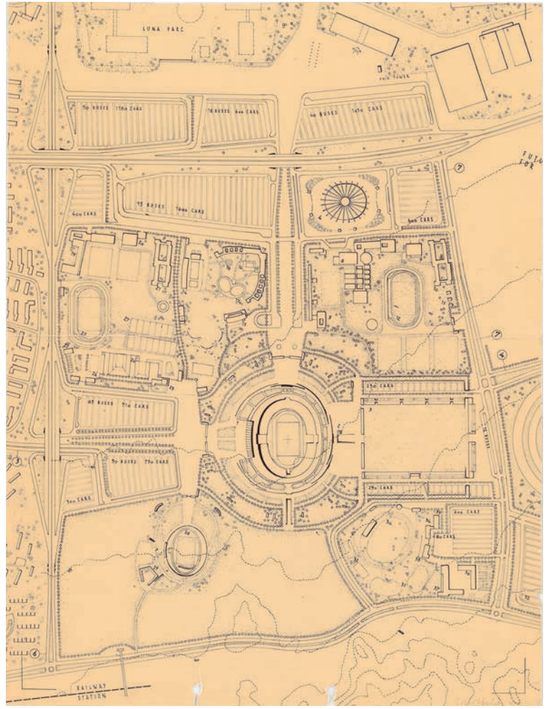

Fig. 2: Cairo Stadium (1956-1960), Urban Plan (north is above) .

Introduction

In 1936, the German architect Werner March, who had gathered worldwide fame for his plans for the 1936 Berlin Olympic Stadium and its surroundings, was invited to several countries to hold lectures about the Berlin Olympic venues and German architecture. In a journey that took several months, he traveled to Austria, Hungary, Greece, Turkey, Iraq, and Egypt. In the latter three countries, he was immediately invited to design projects. While Turkey wanted to award to March an advisory role in the planning of sports venues, Iraq awarded him the commission for the design of the new National Museum of Antiquities. In Cairo, the National Olympic Committee asked him to select the site for a large sports field that should also include sports schools, similar to the Berlin Olympic Stadium complex and the Berlin Sports Forum, and he was awarded the commission for a preliminary design project.[1] There is no proof that March, in fact, developed plans for the Cairo Stadium in the time immediately after this commission, and the start of World War II, in 1939, rendered these plans obsolete.

The Urban Plan Design

In the year 1953, Werner March was again asked to draw up a design for an Olympic Stadium in Cairo. In addition, he should now design a city quarter around it for about 60,000 inhabitants. Until the year 1968, the whole concept should be implemented in order to be able to present a stadium that was fit for the 1968 Olympic Games, for which Egypt was planning to bid.[2] The commission is one of several in the MENA region that were awarded to March around that time.[3]
Thomas Schmidt (1992) purports that it was March himself who suggested an area between downtown Cairo and the northeastern suburb of Heliopolis for this new stadium, which had formerly been used by the Military.[4] The site was well suited for the program, due to its relative proximity to Downtown Cairo and Heliopolis, and its favorable infrastructure, consisting of several important traffic arteries, a metro line, a train line, and vast open areas with little topographic restrictions. By their size and accessibility alone, these areas seemed to be well suited for not only the stadium itself and the ancillary sports facilities but also a possible new trade fair zone or housing areas.
Around the same time, the area next to the future stadium site had been chosen as the site for a new city extension, which was to be called Madinat Nasr, or Nasr City. Thomas Meyer-Wieser (2014) states that Nasr City itself was originally planned as an Olympic village, in close relation to the planned Olympic Stadium.[5] However, according to various sources, the plans for Nasr City were not drawn up before 1958, at a time when March´s Cairo Stadium was already under construction.[6] In addition, the center of what today is called Nasr City is several kilometers away from the stadium, so the idea of a direct conceptual link between the two schemes is certainly not obvious.
Apart from question of the conceptual link between the stadium and the Nasr City neighborhood, there is no proof other than the information offered by Schmidt (1992) that Werner March himself chose the location of the stadium, but it may be assumed that he deemed the location very suitable for his plans, due to the factors mentioned before.
At the beginning of the design process, Werner March conducted intensive research about the access situation around the stadium and the precise program. According to an overview dated 13 Nov 1954, the main stadium was initially planned for 100,000 spectators of

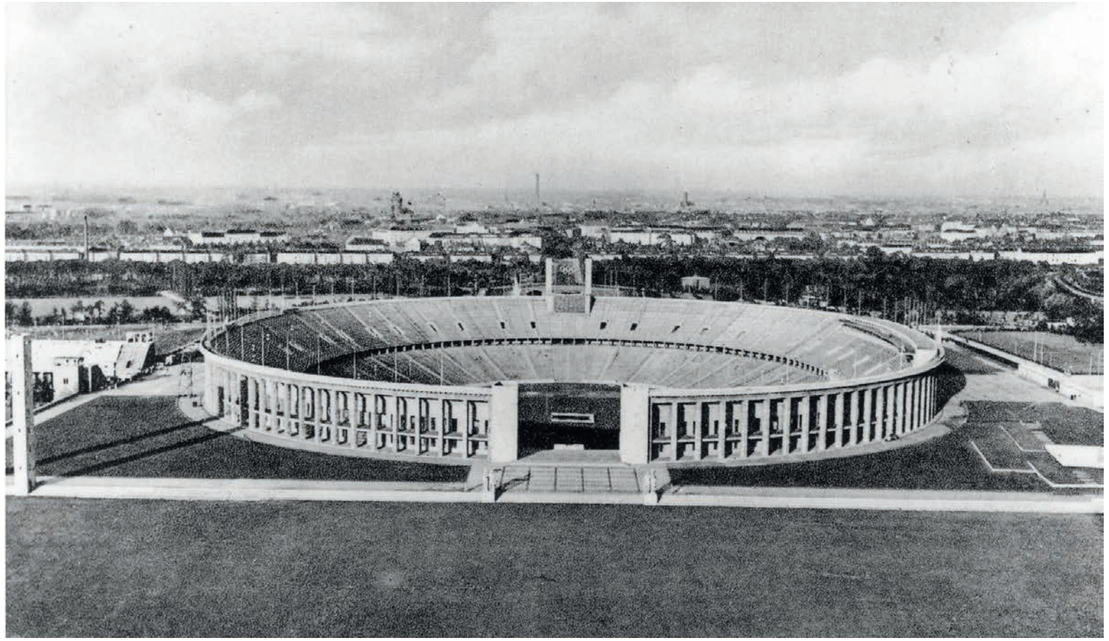

Fig. 3: Berlin Olympic Stadium (1934-1936), View from West.

manifestations, athletics, football, and hockey. An amphitheater was to hold 10-20,000 spectators of gymnastics, weightlifting, wrestling, boxing, and tennis. An indoor hall for basketball, volleyball, gymnastics, weightlifting, wrestling, boxing, and tennis, and a swimming pool were both to hold some 10,000 spectators, a velodrome that was also intended for equestrian sports was intended for 20,000 visitors, and a shooting range for 2,000. In addition, training centers for football, basketball, athletics, wrestling, boxing, tennis and other sports were to be designed.[7] A training center complex was to consist of a boarding house, a dining hall, a gymnasium, the training center itself, and administration offices.[8]

In order to be able to determine the design parameters for the stadium complex, March initially inquired on the precise angles of the sun during the seasons of the year and the times of the day. On 23 Mar. 1955, March directed a comprehensive and very detailed set of questions to the Egyptian Government, about the seasons for various types of sports, average temperatures, main directions of the wind, information about the ground the stadium was to be built on, the exact nature of the water and irrigation facilities in the area, and electrical supply. Other questions of March focused on the cost of building, garden work, the layout of streets, the traffic volumes, and future uses of the surrounding areas.[9]

Immediately after, the architect´s contract between March and the Minister of Municipal and Rural Affairs, Wing-Commander Abdel Latif Boghdadi, was negotiated. March obliged himself to design the layout of all buildings and surroundings to scale 1:5000 and 1:1000, to draw up a preliminary design of the stadium and all other buildings to scale 1:200, and the final project of the stadium to scale 1:100. In addition, the architect was to carry out the artistic supervision of the construction of the stadium during a number of visits to Cairo. The technical and economical execution of the work, however, was to be carried out by a Technical Office, which was to be installed by the Government. The cost of the buildings and the site was calculated as 2,550,000 Egyptian Pounds, the fee of its architect, Werner March, as 30,000 Egyptian Pounds, “free from any tax in Egypt”.[10]

The final contract also included a schedule that specified the time between the signing of the contract, the start of the design, and the last examination of the working drawings by the architect to be between 44 and 56 weeks, which is an extraordinarily short time. Apparently, at that time, legal concerns, like the establishment of land use plans, the participation of legal bodies, or the funding, played no significant role in the implementation of the Cairo Stadium. During the design and implementation phase, some of March´s Egyptian partners, contributors, and counterparts were Col. Salah Ghaleb, Ahmed Moharram, Dr. Michel Bachoum, Galal Hussein Kamel, Dr. Mohamed Sayed Youssef, Mustafa Showki, and Thabet Barsoum.[11] [12]

The Structural Engineering contract was awarded to the Cairo firm of ACE Moharram Bakhoum.[13]

In his design, March placed the main stadium itself in the center of the roughly square-shaped site, measuring about 1,500 by 1,350 meters, or 2 sqkm. The main axis was directed in the direction of north by northwest, the main stand thus facing in the direction of the east by northeast. Three orthogonal axes led towards the stadium. One main axis was directed towards the thoroughfare which today is called Salah Salem Street. Another main axis connected the main stands and its entrance with a road which is today called Ismail El Fangary Street. Both of these axes were again well connected to major streets and the metro station at Kobri El Kubba. A third axis

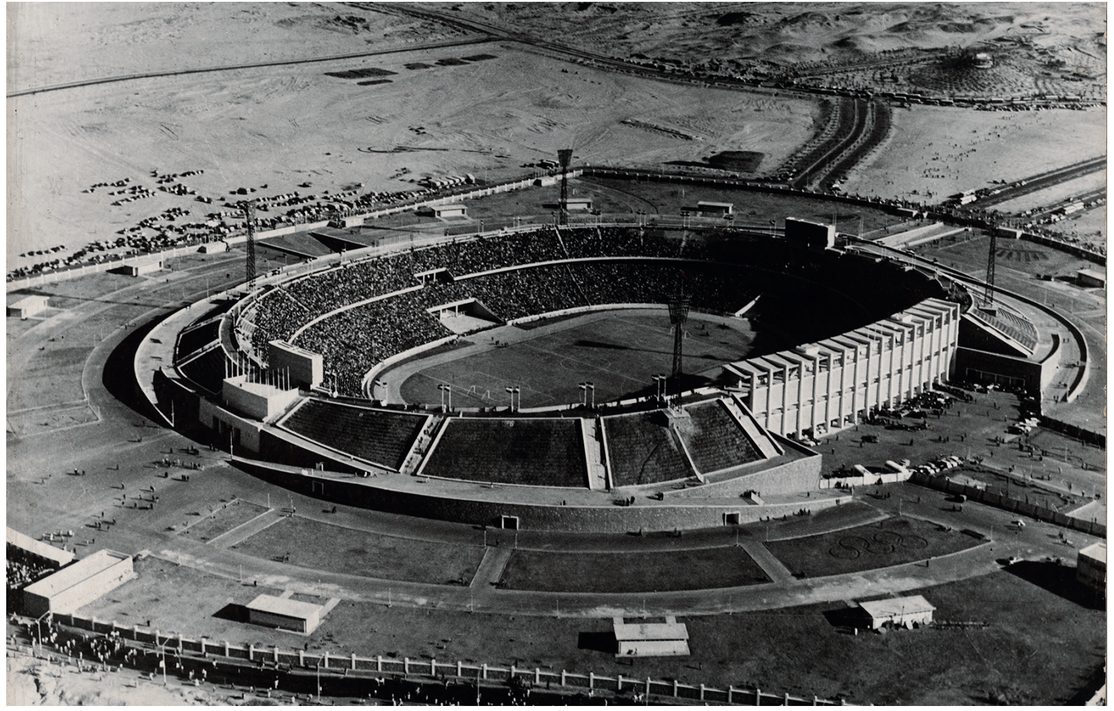

Fig. 4: Cairo Stadium (1956-1960), Aerial view from north-east, shortly after completion.

was directed to the east, rather resembling a wide parade ground than public access to the stadium. A fourth connection of the stadium towards today`s Al Nasr Road was inferior to the others, with a slight bend to the east. These main features were never changed during the design process and the subsequent implementation of the scheme. The idea of the stadium at the center of a cross-shaped spatial layout is very similar to the Berlin scheme.

As in Berlin, the ancillary functions were grouped in the sectors around the main stadium, switching places several times during the design process. The plans kept in the Archive of the TU Berlin Architecture Museum show golf courses, sporting schools for boys and girls, swimming pools, a horseback riding course, and an indoor stadium, which was to be built roughly in the area of today´s 6th of October War Panorama on Salah Salem Road. Vast parking lots were planned for the cars of the spectators. None of these ancillary features, which clearly aimed at a nation preparing to become a sports superpower of a future Olympic Games, were ever built in the way that March designed them.

The Cairo Stadium

The main stadium, however, was built precisely according to the design of Werner March, and it has to a great extent remained in this condition until today. It has the shape of a bowl stadium holding some 80,000 spectators, with the sports field lying 13,25 m lower than the surroundings. The upper rim of the stadium has a height of 9,0 m. The western part of the grandstand gently rises to a height of 19,0 m, and the roof above the grandstand reaches a total height of 23,0 m. By this feature, a large part of excavated soil could be used to construct the grandstands, the stadium blended into its surroundings, and only a relatively small portion of the stadium needed a concrete supporting structure.

The outside of the stadium is characterized by the inclined slopes, ramps, and massive retaining walls clad in local red natural stone. By this design feature, the stadium has a massive, horizontal, almost archaic expression. The idea of timelessness and the dominant absence of architectural details in this monumental structure seem to allude to the pharaonic architecture of the Old Kingdom, which may have been an inspiration for the design. Apart from the ramps, slopes and retaining walls, two parts of the stadium deserve special attention: The gently bent grandstand with its concrete grid main entrance façade, that has a monumental, yet late modern appearance, that clearly contrasts the general monolithic and archaic appearance of the stadium. The concrete grid façade that forms the main architectural feature of the stadium, is an interesting element, combining the large scale of the building with natural ventilation, sun shading, and light modulation.[14] This access leads directly to the intermediate level of the stadium, with reception rooms for high officials and delegations. The upper edge of this entrance building is defined by the sweeping row of press booths, that seems to float above the heads of the spectators.[15] Several formal elements of this part of the stadium are related to the Berlin Olympic Stadium, and especially its Langemarckhalle entrance.

The other very important architectural element is the main access gate of the stadium, which is placed in its longitudinal axis, forming a very balanced composition of simple, cubic elements, culminating in the main scoreboard. Also, this access with its impressive hall-like interior offers a direct way to the intermediate level.

The two other main accesses offer a direct connection from the

outside via ramps to the lower level of the playing field, that could be used for eg. the marathon final or for mass gatherings. One of the specifications of the client regarding this access was that its height should not be lower than 6,0 meters, so it could be passed by parading flag-bearers.[16]
The majority of spectators, however, would access the stadium via the wide, gently sloping ramps which offer an easy way of getting into the stadium and, even more importantly, serve very well to evacuate the entire stadium within seven minutes, which is an extraordinary feature.[17]
The stadium does not offer a roof for the grandstands of the stadium, which may seem odd in a desert city like Cairo, with hot sunny weather for large parts of the year. Two features, however, do offer shade to a part of the spectators: The upper part of the stands is cantilevered a bit above the lower one, and the superelevation of the western part of the stands provides shade for a large part of the stadium during the afternoons and early evenings, which would generally be the preferred times for most events.
It is very interesting to which level of detail March designed the stadium, specifying the very detailing of the seating[18], or selecting the materials and the precise treatment of materials, like natural stone, concrete, and stucco. March paid special attention to the selection of the stone of the retaining walls. He deemed the rough natural red stone of the nearby red mountains, in an irregular shape, as best choice, as it corresponded best to the plantation above and on the slopes, to the surrounding landscape of the mountains, he thought it to be durable and cheap to replace in the event of damages or wear. In addition, this material was easy to work with for unskilled laborers, he calculated that 60 workmen would be able to lay 10,000 sqm within 83 days, which certainly was an important argument as deadlines drew near.[19]
The stadium was inaugurated by President Nasser on 23 July 1960, commemorating the 8th anniversary of the 1952 revolution.[20]
Early images of the stadium show that at this time, the surroundings of the stadium were almost entirely empty, and the many other structures that were to complement the stadium in order to create a sports city comparable to the Berlin Olympic Stadium, and which had already been designed by March, were not yet started.[21] In fact, none of the other buildings that March designed for the Cairo Stadium project, with the exception of a pair of small administration buildings, were ever built.
The indoor stadium, that, with its ribbed concrete dome, seems to pay homage to the circular dome of March's own hall of German Sports in Berlin, or to works of Pier Luigi Nervi, would have been a great addition to the main stadium, as would have been the swimming stadium, the velodrome, the sporting schools, or a so-called amphitheatre, which would have referred to March´s own Waldbuehne in Berlin. In Cairo, March did not manage to create a total work of art, like in Berlin some 20 years before. Still, his urban plan formed the grid for later additions, that would eventually turn the Cairo Stadium complex into a sports and event quarter, that today contains the famous October War Panorama, a convention hall, the National Olympic Committee, various sports venues, like a swimming stadium, an indoor sports hall, gyms and other related facilities. The Olympic Games were eventually never organized

Conclusion

The Berlin Olympic area never only was a place for sports but served to represent the national socialist state from the beginning. It offered a backdrop not only for sports but for military and political mass rallies. Very close to the stadium, the construction of a new military academy was begun, yet never completed. The so-called Maifeld parade ground, offering space for tens of thousands of participants, is an organic part of the stadium area, being located in the main axis of the stadium. The end of the axis of the Berlin Olympic Stadium is marked by a grandstand with a bell tower and a hall at its base meant to commemorate the heroes of World War I.
Also, the initial designs of March for the Cairo stadium always incorporated the idea of creating a space where the emerging nation and especially its military could present themselves to the masses and the world. For this reason, a parade ground had been planned in the direct vicinity of the stadium. However, the decisive steps that finally turned Cairo Stadium and its surrounding into a truly symbolic place for the nation were taken without March´s direct contribution, and in a seemingly unplanned way. Nasr Street, which passes by the back of the stadium, and that is only linked to it by this odd, bent side road, is the place of the traditional military parades. Directly in the axis of the stadium, a grandstand was built to review the parades, and in the same axis, yet opposite of it, a pyramid-shaped monument to the Unknown Soldier, and the heroes of the October War of 1973. On 6 October 1981, Nasser´s successor, President Anwar Al Sadat, was assassinated on this grandstand, turning the site into an even more symbolic place of heroism and martyrdom in the historical narrative of Egypt. The October War Panorama, built in the 1970´s close to the stadium, to celebrate the war between Egypt and Israel in 1973, has

been mentioned before. The dominant authoritarian, military aspect, and the homage paid to martyrdom and sacrifice for the nation, shape uncanny parallels between the Berlin Olympic Stadium and Cairo Stadium, that may detract one´s attention from great works of architecture that were both originally designed to organically blend into the surrounding landscape and offer ideal large-scale sports venues until today.

As demonstrated above, March not only designed the stadium complex itself, but also planned the site of an Olympic village, a fairground, an administration area, and residential areas around it. During the time of the construction of the stadium, its implementation and the design of the sports-related venues were clearly at the center of March´s attention, and of his clients, and the design of the surrounding areas was not pursued with the same attention. March drew up several plans featuring garden-city like neighborhoods, a luna park, and exhibition grounds around the stadium.[22] The buildings loosely spread out into their surrounding, resemble European urban neighborhood, or garden city-like cluster typologies of the same time, and they seem not well suited for a desert city like Cairo. Still, March, in a report pleaded for this type of urban design, yet it is obvious that it was not pursued and that Werner March eventually never made any further contribution to what today is the Cairo area of Nasr City.[23]

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Notes

[1] Cf. SCHMIDT 1992, p. 96.
[2] Cf. SCHMIDT 1992, p. 129.
[3] Cf. SCHMIDT 1992, p. 132
[4] Cf. SCHMIDT 1992, p. 129.
[5] Cf. MEYER-WIESER 2014, p. 269
[6] Cf. ABU-LUGHOD 1971, p. 233, and SIMS 2010, p. 52.
[7] ARCHITEKTURMUSEUM TU BERLIN, Werner March Collection, overview dated 13.11.1954
[8] ARCHITEKTURMUSEUM TU BERLIN, Werner March Collection, overview dated 01.01.1955
[9] ARCHITEKTURMUSEUM TU BERLIN, Werner March Collection, overview dated 23.03.1955
[10] ARCHITEKTURMUSEUM TU BERLIN, Werner March Collection, Letter dated 08.04.1954
[11] AL AHRAM NEWSPAPER, 01.08.1960.
[12] ARCHITEKTURMUSEUM TU BERLIN, Werner March Collection, certificate dated 12.12.1960
[13] www.arab-architecture.org/db/building/cairo-international-stadium, accessed 27.01.2019.
[14] Cf. ARCHITEKTURMUSEUM TU BERLIN, Inv. No. F 5417.
[15] ARCHITEKTURMUSEUM TU BERLIN, Inv. No. F 5366.
[16] ARCHITEKTURMUSEUM TU BERLIN, Werner March Collection, Report dated 24.01.1956
[17] Cf. SCHMIDT 1992, p. 132.
[18] ARCHITEKTURMUSEUM TU BERLIN, Inv. No. 39460.
[19] ARCHITEKTURMUSEUM TU BERLIN, Werner March Collection, Report dated 12.05.1959
[20] Cf. MEYER-WIESER 2014, p. 273.
[21] ARCHITEKTURMUSEUM TU BERLIN, Inv. No. F 5364.
[22] ARCHITEKTURMUSEUM TU BERLIN, Inv. No. 39380.
[23] ARCHITEKTURMUSEUM TU BERLIN, Werner March Collection, Report titled "Main Points of View of the First Preliminary Layout of a Garden-City around the Stadium District compared with the New Place of Nasser City", dated 21.01.1960.

Image Credits

Fig. 1: Berlin Olympic Stadium (1934-1936), Urban Plan (rotated by author, north is left) (Landesarchiv Berlin 4 RBau-228831)
Fig. 2: Cairo Stadium (1956-1960), Urban Plan (north is above) (TU Berlin AM 39383)
Fig. 3: Berlin Olympic Stadium (1934-1936), View from West (Landesarchiv Berlin 4 RBau-244693)
Fig. 4: Cairo Stadium (1956-1960), Aerial view from north-east shortly after completion (TU Berlin AM F5364)

Notes

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Ana Fernandes is an architect and researcher in Architecture. Master in Architecture concluded in 2013, with a thesis entitled "BNU Headquarters Building. Adaptive reuse in the context of Baixa Pombalina: from Bank to Museum". Ana started working as an architect in 2013, collaborating in architectural competitions, editorial projects and other works. In 2016, initiated her research activity, in the multidisciplinary team of the Atlas of School Architecture in Portugal_ Education, Heritage and Challenges.

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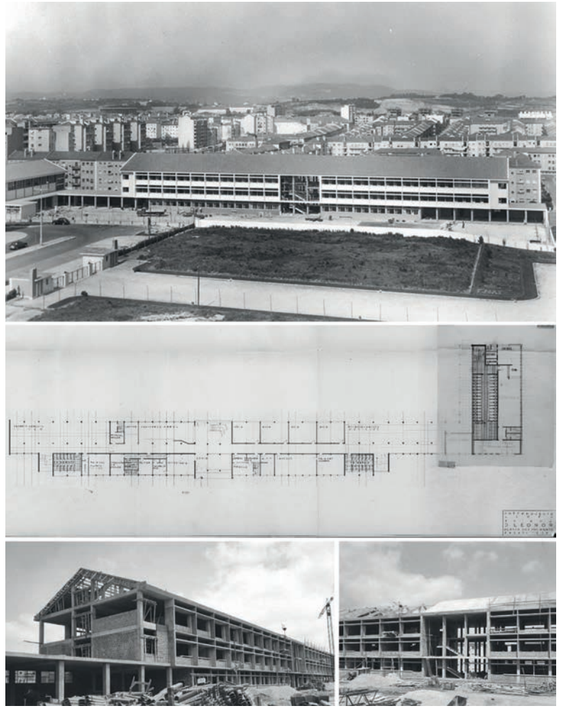

Fig. 1: RDLSS, Lisbon, Portugal. Original school building, 1961. Ground floor plan, 1956. During construction, 1960-1961.

Modernization of Dona Leonor Secondary School: Contributes for good practices

Abstract

This paper seeks to discuss the methodological approach used in the refurbishment of Modern Heritage buildings. By understanding and analyzing the existing conditions of modern buildings – urban, social, cultural, physical, functional and technical – towards their reuse, the design project should be developed with the aim of attaining an informed and coherent building, adapted to new contemporary demands of use and social meaning.

In 2007, the Portuguese state approved the Secondary School Modernization Program with the objective of renovating and modernizing elementary and secondary school buildings throughout the country.

On presenting the experience and result of the refurbishment of Rainha Dona Leonor Secondary School, recognized by the city council of Lisbon and OECD as an example of a good practice intervention in an educational building, it is shown the role of the architect in coordinating all of the project implications.

The first section of this paper presents a description of the existing school conditions and the Portuguese State program for modernization. The second section discusses the proposed methodology of the intervention, the technical and technologic choices taken for preservation and reinterpretation of the existing, and the dialogue created between old and new. The third section is centered on the critical evaluation and conclusions, ending with insights on how critical thinking resulting from this action of design and building could be integrated and improve new interventions, thus achieving professional and societal awareness regarding the reuse of modernist buildings.

Full paper will be published in a separate publication series of DOCOMOMO Germany after the conference.

Notes

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1989	eigenes Architekturbüro in Darmstadt
1992	Akad. Rat, Institut für Baugestal., Universität Karlsruhe Lehrstuhl Prof. Rüdiger Kramm / Forschung, Sympsosien + Ausstellungenzur zeitgenössischen deutschen und französischen Architektur
1996	Mitglied des Ateliér Europeen - Tech. de L'Architecture
2002	Forschungsinitiative - „Das arch.Erbe des 20. Jhdts." Ausstellungen + Symposien, Forschungsreisen, Beiträge zur akt. Bauforschung und Sanierungspraxis der Bauten der Moderne in Ost- und Westeuropa
2002	Gastprofessor an der Universität Bologna
2004	Gastprofessur in Moskau / MARCHI
2004	Mitglied in docomomo-INTERNATIONAL
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2007	Leitung des Lehrgebiets Architektur + Mobiliar, Institut für Entwerfen, Kunst und Theorie - KIT
2008 - 2010	Gastprof. in St. Petersburg / St. P. State University
2010 - 2012	Mitglied im Deu. Werkbund / Baden Württemberg
	Mitglied von THICOM – „Int. Commission of Experts for the Tugendhat House, BRNO"
2010 - 2014	Vorsitzender docomomo Deutschland e.V.
2018	Gastprofessur in Santiago de Chile und in Shanghai TONGJI

Notes

Session 1.3:
Bildung und Theorie

Akad. Oberrat Dipl. -Ing. Alex Dill

Jede Zeit schreibt ihre Analyse und Interpretation der Geschichte neu und zwar jeweils auf der Grundlage veränderter Bedingungen und einer neuen Perspektive.

DIE MODERNE war weit mehr als ein ästhetisches oder technologisches Programm.
Im Einklang mit Literatur, politischen Theorien und den Künsten war sie eine Bewegung vieler Architekten, Ingenieure und Künstler, Männer wie Frauen an sehr unterschiedlichen Orten, gleichzeitig und auch zu unterschiedlichen Zeiten.
DIE MODERNE definierte ihre Ziele als stetiger Aufbruch zu Menschen- und Lebens-würdigem Dasein und für zeit- und sachgerechtes Denken und Handeln.
Die dazu auch heute noch selbstverständliche Herausforderung war INTELLEKTUALITÄT + PROFESSIONALITÄT.

„Die Aufgabe des Architekten ist es, sich in Übereinstimmung zu bringen mit den großen Tatsachen der Zeit und den Zielen der Gesellschaft, der sie angehören, und ihre Werke danach zu gestalten."

Auszug aus der CIAM-Erklärung von La Sarraz (Schweiz),1928
Congrès Internationaux d'Architecture Moderne (CIAM)

ARCHITEKTUR ist demnach das Ergebnis des intellektuellen und professionellen Interagierens. Mainstream und Trends in Design, Technologie und Architektur zeigen das Gegenteil. Design und Technologie wurden Marketing, knallhartes Geschäft. Aufgrund dieser Bedingungen ist Architektur-Lehre und Architektur-Theorie als permanente Kritik und Aufklärung des Zeitgeschehens wichtig und unverzichtbar.
Katja Szymczak analysiert in ihrem Beitrag „Programm wird Bau"sehr interessant und konzentriert die rasanten Veränderungen in Lehrprogrammen und Architekturen für Wissenschaft und Lehre bis hin zu einem Ausblick.
Kaija Voss und Jean Molitor können anhand ihrer herausragenden Fotodokumentation „bau1haus" sehr präzise die internationalen Wirkungen ausgehend vom Bauhaus und die internationale Zusammenarbeit der modernen Bewegung belegen und diskutieren.
Sophie Stackmann erschließt in „Framing Bauhaus" die besondere Bedeutung und Rezeption des Forschungprojektes und Modells der Wohnsiedlung Dessau Törten.

Wie sich Architektur-Theorie und –Lehre in Zukunft entwickeln können ist eine der spannenden Fragen dieser Session.

Notes

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Katja Szymczak (Dr. phil.) Studierte Politikwissenschaft, Kunstgeschichte und Denkmalpflege an der Universität Wien und der Technischen Universität Berlin. Von 2005 bis 2009 arbeitete sie freischaffend bei verschiedenen internationalen Projekten von raumlaborberlin oder auch größeren Ausstellungsprojekten wie „Modell Bauhaus“ zum 90jährigen Jubiläum des Bauhaus mit. Seit 2010 ist sie an verschiedenen Institutionen tätig, u.a. Martin-Gropius-Bau Berlin und der Stiftung Bauhaus Dessau, wo sie zuletzt an der Akademie das Bauhaus Lab und große Ausstellungen des Hauses betreute. Seit 2018 ist sie wieder freiberuflich tätig und arbeitet für projekt bauhaus, die Zeitschrift ARCH+ und die Studienstiftung Horst Antes.

Programm wird Bau

Abstract

Das National Institute of Design/Ahmedabad wird hinlänglich als Nachfolgeinsitution des Bauhaus und der hfg ulm bezeichnet. Doch nicht nur in der Struktur und dem Aufbau der Lehre bestehen Wahlverwandschaften. Alle drei Schulen sind bauliche Manifeste, in deren Architekturen das Programm und die Inhalte gleich eines Curriculums eingeschrieben sind. Alle drei Gebäude gleichen Solitären, die sich erst bei der Begehung erschließen. Sie folgen einer inneren Logik und es eröffnen sich immer neue Einblicke, Durchblicke und Verschränkungen der Gebäudeteile. Der Lehrplan findet seine Entsprechung in der Architektursprache. Die Werkstätten, die Klassenräume, ein Ausstellungsort, die Verwaltung, die Mensa - alles findet einen geeigneten Platz, in der eigens dafür entworfenen Architetkur. Alles scheint organisch und sinnvoll nach dem Prinzip des form follows function geordnet. Doch sind solcherart Schulbauten im digitalen Zeitalter nicht überkommen? Sind Werkstätten und das Handwerk - einst das Herzstück der Schulen - heute in einer Zeit, in der alles mit dem Computer von allen möglichen Standorten aus entworfen und kommuniziert werden kann, überhaupt noch aktuell? Welche Architektursprache wäre heute angemessen?

Einleitung

Das aus dem Auto zu öffnende Garagentor als elektronische Innovation ist lange überholt, heute schließt unsere Smartwatch die Haustüre für uns auf und Alexa wählt die passende Stimmungsmusik. Das konsumtive Smarthome begleitet unseren innovativen Alltag – doch wer gestaltet ihn?

Gestaltung ist ein Spiegel der Gesellschaft. Sie kann visueller Ausdruck sozialer Systeme und des alltäglichen Gebrauchs sein. Sie ist untrennbar mit dem menschlichen Handeln verknüpft. Gelehrt wird sie an Schulen für Gestaltung, an Akademien und Universitäten. Das Zeitalter der Informationstechnologie und der Digitalisierung verändert Gestaltung und Architektur. Wo liegen heute die gesellschaftlichen Potenziale der durch Digitalisierung und Medialisierung veränderten Wahrnehmung des gestalteten Raumes? Welche Architektur benötigt die Gesellschaft in einer Epoche, in der jeder ständig und überall online und erreichbar ist?

Das digitale Zeitalter verändert unsere ästhetische Gestaltungspraxis. Wertsysteme des Besondern und Singulären[1] gewinnen immer mehr an Bedeutung. Sie verändern unsere Wahrnehmung. Das Internet und die virtuelle Praxis bringen die reale Welt scheinbar zum Verschwinden. Zeitgleich versucht der Mensch weiterhin das Virtuelle in einer spezifischen Art der Gestaltung fassbar zu machen. Doch wie kann eine zeitgemäße Gestaltung aussehen? Und ist das Bauhaus als oft zitiertes und paraphrasiertes Leitbild nicht überkommen?

Das gebaute Curriculum

Die Digitalisierung ist nicht der erste eruptive Schlag auf den die Gestaltung reagieren muss. Die vorangegangene Generation, die Moderne, reagierte auf die Industrialisierung und das Zeitalter der technischen Reproduzierbarkeit mit einer Formensprache, die heute mit dem 100- jährigen Geburtstag des Bauhaus als vorbildlich gilt.

Das Bauhausgebäude Dessau

In der Architektur können die Bestrebungen der Moderne wie die vom Bauhaus einberufene Einheit von Kunst und Technik am ehesten als reproduzierbar begriffen werden. Die Siedlung Dessau-Törten in Dessau ist ein Paradebeispiel für eine fließbandartige Fertigung von Wohnbauten, gleich der Weiterentwickelung der Produktionsprinzipien der Automobilindustrie. Die 314 Reihenhäuser, mit einer Bauzeit von zwei Jahren, folgten dem Anspruch auf günstiges Wohneigentum für die stark wachsende untere und mittlere Bevölkerungsschicht.

Dass Gestaltung Gesellschaft verändern kann, war eine These, die am Bauhaus, als Schule für Gestaltung, erstmals seine konsequente Umsetzung fand. Die in den Werkstätten produzierten Gebrauchsgegenständen sollten eine neue Ära einleiten. Modernisierungs- und Reformdenken waren die treibenden Kräfte direkt in das Leben hineinzuwirken. Klarheit und Sachlichkeit, Vereinfachung und Zweckmäßigkeit dienten der Erziehung des neuen Menschen. Die Architektur als übergeordnete Disziplin, in der alle anderen Künste aufgehen, sollte sich mit der Ganzheit des Lebens auseinandersetzen.

Dabei wurde das Bauhaus selbst zu einer Ikone der Moderne und zählt heute zu den bedeutendsten Werken der Architektur im 20. Jahrhundert. Als Schule für Gestaltung gleicht der von Walter Gropius entworfene Bau einer Narration und folgt einer spezifischen Dramaturgie. Das Gebäude ist aus mehreren Gebäudekomplexen zusammengefügt. Der Werkstattflügel, die Aula, die Brücke, die Technischen Lehranstalten und das Atelierhaus. Leben und Arbeiten an einem Ort.

Im Vestibül wird der Besucher mittels der Farbgestaltung und der richtungsweisenden Deckenbeleuchtung in die Aula und den Bühnenraum geleitet.

Gegenüberliegend, farblich und gestalterisch weit weniger ausformuliert, da interner, führt der Weg über einen Ausstellungsraum mit Bauhausprodukten in den Werkstattflügel mit der Tischlerei, Weberei, Metallwerkstatt und jeweils angegliederten Lagerräumen sowie kleineren Werkräumen, wie bspw. der Furnierwerkstatt oder der Färberei.

Klarheit und Transparenz, die großen Schlagworte der Moderne, finden ihre Erfüllung in dem großen Panoramafenster, welches in identischer Größe ein zweites Mal im ersten Obergeschoss eingebaut wurde. Die großen Fenster zeugten von Innovation und den neuesten Technologien, waren sie doch erstmals in einer solchen Größe aus einem einzigen Glas hergestellt worden. Zudem geben sie, auf dem Weg ins das Direktorenzimmer, beim Emporsteigen der Treppe, den Blick in den Himmel frei – gleich eines „stairways to heaven".

Das Direktorenzimmer selbst, liegt mittig auf der Brücke, die beide Schulgebäude miteinander verbindet, und schwebt zugleich über der Straße. Folgt man dem Weg in das zweite Geschoss, gelangt man zur Bauabteilung, die zuoberst auf der Brücke, noch über dem Direktorenzimmer, untergebracht war. Analogien mit Feiningers Holzschnitt der Dombauhütte zum Bauhausmanifest stellen sich ein, in dem die Baukunst als höchste Disziplin gefeiert wird und alle Künste in der Baukunst zusammenwirken sollen.

Ebenso programmatisch ist der - von nahezu allen Standpunkt aus - in den Blick tretende Werkstattflügel, der mit seiner gläsernen Vorhangfassade als Ikone der modernen Baukunst gefeiert wird. Seine Inszenierung ist augenfällig und beinhaltet er doch die Werkstätten, die Laboratorien, die das Herzstück des Bauhaus waren.

hfg ulm

1953 gründeten Inge Aicher-Scholl, Max Bill und Otl Aicher die hochschule für gestaltung (hfg) in ulm. Schon in der Namensgebung steckt der Verweis auf die Vorgängerinstitution das Bauhaus, die ebenfalls als Schule für Gestaltung gegründet worden war.[2] Beiden Schulen gemein war ein zeitgemäßes Verständnis von Gestaltung und einer Ausweitung der „Kunst in die Alltäglichkeit, in die Anwendung"[3]. Im Fokus stand eine Produktgestaltung, frei von künstlerischen Ansprüchen, aber mit sozialer und kultureller Verantwortung. Die Produkte sollten eine Einheit von Technologie, Funktionalität und Ästhetik zeigen.

Die Leitidee von „Kunst und Technik – eine Einheit", die Gropius schon 1923 für das Bauhaus ausgerufen hatte, standen selbstverständlich Pate bei der Neugründung der hfg, wenngleich die soziale Dimension der Gestaltung noch stärker in den Vordergrund gebracht wurde. In Ulm ging es um das Produkt als Ganzes, nicht um künstlerische Einzelaspekte.[4]

1955 wurde die hfg eingeweiht. Das Gebäude, von Max Bill entworfen, ist ein aus fünf Trakten bestehender Bau, welcher sich terrassenartig in die hügelige Topographie des Kuhbergs einfügt. Die einzelnen Baukörper liegen locker verstreut in der Topographie und treffen fast zufällig aufeinander. Außer des Studentenwohnheims ist keines der Gebäude höher als zwei Geschosse.

Die konzeptionelle Gesamtanlage weist deutliche Bezüge zu der ADGB (Bundesschule des Allgemeinen Deutschen Gewerkschafts-

bundes) in Bernau bei Berlin von Hannes Meyer auf. Wie in Ulm fließen die einzelnen Bauteile nahezu den Hang herab und betten sich in die Natur ein. MAx Bill musste die ADGB gekannt haben, studierte er doch zu jener Zeit am Bauhaus. Zu Hannes Meyer als Vorbild hat er sich aber nie bekannt.[5] Neben der ADGB, bleiben einige nicht von der Hand zu weisende Gestaltungsansätze zum Dessauer Bauhausgebäude bestehen. Wie das Bauhaus, ist es ratsam die hfg zu umrunden, um den Bau in seiner Gänze zu erfassen. Beide Bauten überzeugen durch eine Gleichzeitigkeit ohne die explizite Voranstellung eines zentralen Hauptgebäudes. Beide sind in einzelne, aber miteinander verbundene Bauteile aufgegliedert, die verschiedene Aufgaben und Bereiche beinhalten. Gänge und Flure mit transparenter Durchfensterung, verbinden das Innere mit der es umgebenden Landschaft.
Die hfg ist in ein Raster von 3,0 x 6,0 m hineinkomponiert. Die serielle Zellenstruktur setzt sich im Gebäudeinneren fort. Eine strenge, rationale Anlage mit einer kontinuierlich auf dem rechten Winkel aufbauenden Ordnung, die nur von der Verbindungshalle, der „Säge“ unterbrochen wird.
Die hfg verstand sich als eine kreative Insel.[6] Mit der Wahl des Baulandes auf dem Kuhberg, unweit der Stadt Ulm, sicherte man sich einen gewissen Abstand von der „Enge des Milieus mitsamt den lokalen Vorbehalten und Animositäten“.[7] Topographisch schien der Berg Unabhängigkeit von der konservativen Kulturpolitik zu garantieren.
Das Curriculum der Ausbildung an der hfg bildet sich in der architektonischen Formensprache genauestens ab.
Die Ausbildung war als Trisemester angelegt. Vor das Fachstudium war – gleich dem Vorkurs am Bauhaus - die einjährige Grundlehre geschaltet.
Da sich die Schule bewusst von der Kunst als Disziplin distanzierte und Bewerbungen von bildenden Künstlern kompromisslos aussortiert wurden[8], existierten keine Ateliers für Künstler.
Den Kern der Lehre bildete die praktische Gestaltung. Die Werkstätten für Gips-, Holz-, Kunststoff und Metall sind im größten Baukörper untergebracht und liegen auf dem höchsten Punkt des Kuhbergs, ebenso das Fotolabor und die Abteilung für Typographie. Es folgten die Werkstätten für Visuelle Kommunikation, geleitet von Olt Aicher, rechts, und die Räume für Produktgestaltung links, geleitet von Max Bill. Sie befinden sich gegenüberliegend und teilen sich die größte Fläche des gesamten Gebäudes.
In dem angegliederten, blockhaften, zweigeschossigen Gebäude, befanden sich die Klassenräume für die Grundlehre, die Abteilungen Bau und Informationen und die zeitlich etwas später gegründete Klasse für Film.
Es folgte, geteilt durch die „Säge“, den Hang hinabsteigend, das Rektorat und die Verwaltung und die Bibliothek. In diesem Teil iegt auch der Haupteingang, nach rechts der Trakt mit der Mensa, Terrasse und der wellenförmigen Bar. Daran anschließend der eingeschossige Bau des Pförtnerhauses und den Schlusspunkt bildete das mehrgeschossige Studentenwohnheim.
Wie am Bauhaus gab es die Verschränkung von Leben und Arbeiten an einem Ort. Da dieser am Beispiel der hfg auch noch außerhalb der Stadt lag, musste der Nutzungsplan einiges leisten. Bills Idee war es, eine an einem Dorf orientierte Architektur zu verwirklichen, die mit der Mensa und der Terrasse einen Mittelpunkt für die Gemeinschaft bildete. Die Aula bot Platz für Vorträge, aber auch für Konzerte und Kinoveranstaltungen. Unweit der Schule gab es die Dozentenhäuser, in denen Max Bill und Hans Gugelot wohnten.
Insgesamt orientierte sich das Leben auf dem Kuhberg sehr eng an dem amerikanischen Campusprinzip, das auch dem Bauhaus schon Modell gestanden hatte und bei der nächsten Betrachtung, dem NID in Ahmedabad Vorbild sein wird.

National Institute of Design in Ahmedabad

Das National Institute of Design war eine von drei Institutionen, die von Jawakarlal Nehru, dem ersten Ministerpräsidenten und Außenminister Indiens gegründet und als Ressort ihm unmittelbar unterstellt war. In Design, Technologie und Management sah Nehru die Möglichkeit das überkommene, traditionelle Indien hinter sich zu lassen und es als unabhängiges, demokratisches Land ökonomisch aufzubauen und konkurrenzfähig zu machen. Auf Empfehlung der Kuratorin Pupul Jayaker, die 1955, die im MoMA gezeigte Ausstellung „The textiles and ornamental art of India“ betreute, lernte Nehru die beiden amerikanischen Designer Ray and Charles Eames kennen. Sie um Unterstützen und Expertenrat bittend, lud er sie 1957, finanziert durch die Ford Foundation zu einer Forschungsreise durch Indien ein, um Empfehlungen für die Ausrichtung seiner Idee.[9] Das Resultat der Forschungsreise, war der 1958 veröffentlichte Indien Report und Gründung des NID, in dem Interdisziplinarität, Handwerk, Technik und die Einbeziehung traditionellen Wissens von art und craft, dem Handwerk gelehrt wird.
Ausgehend von seiner Struktur, der Ausrichtung und dem Unterricht sieht sich das NID in der direkten Nachfolge des Bauhaus und der hfg Ulm. In den sechziger und siebziger Jahren gab es sogar unmittelbaren Austausch zwischen Ulm und dem NID zu den bekanntesten Ulmer Lehrenden in Ahmedabad zählen Hans Gugelot, und Herbert Lindinger.[10] Auch die Lehre orientiert sich an der Ausbildung wie sie an der hfg etabliert worden war Sie ist eine Mischung aus Theorie und Praxis, Grundkurs und Spezialisierung.
In der Gebäudetypologie beider Schulen gibt es aber sichtliche Abweichungen. R.J. Vasavada Doshi wählte für den Neubau in Ahmedabad eine dem Brutalismus entstammende, geschlossene Formensprache. Wie ein Bock liegt das Schulgebäude in einem größeren, dicht bewachsenen Campus mit Freiflächen, einem Amphitheater und einer Wohnanlage, die durch Pflanzen von dem Hauptgebäude separiert ist. Das Schul- und Hauptgebäude ist wegen Hochwassergefahr des nahen Flusses aufgeständert. Das Hauptgeschoss liegt 3,20m über dem Bodenniveau, so dass gleichzeitig - außerhalb der Regenzeit - viele verschattete, ebenerdige Aufenthaltsflächen unter dem Gebäude entstehen.
Im Hauptgeschoss liegen die Werkstätten, Laboratorien, Klassenräume, die Verwaltung und ein Ausstellungsraum mit einer Sammlung an Designermöbeln und -objekten verschiedener Epochen. Die Ausstellung ist für jeden Schüler zugänglich und die als Anschauungs- und Studiensaal. Wie in Ulm hat jede Werkstatt ihren eigenen Bereich, ist aber zugleich mit den anderen auf der Geschossebene verbunden. Die Einteilung fördert den Austausch der verschiedenen Disziplinen. Die Zwischenräume und der Hof können für Montage größerer Arbeiten genutzt werden. Terrassen zwischen den Werkstätten ermöglichen es, auch draußen zu arbeiten.
Im Mezzaningeschoss befinden sich die Zeichenräume, die Klassenzimmer und die Bibliothek. Die Lage ist so gewählt, so dass der Unterricht und der Bibliotheksbesuch nicht durch den Lärm der Werkstätten gestört werden. Alle Werkstätten und die Zeichenräume haben eine nördliche Ausrichtung, was klimatische Vorteile hat und einer optimalen Lichtversorgung dient.

Die Büros der Lehrenden und Assistenten sind in ihrer Größe hierarchisch. Sie sind parzellenartig angeordnet. Es gibt jeweils ein Fenster zum Flur und eines in die Landschaft.
Anders als die hfg oder das Bauhaus ist das NID ein sehr kompakter und verdichteter Bau, was sicherlich seiner innerstädtischen Lage und Umgebung geschuldet ist.[11] Alle Räume und Funktionen sind konzentriert auf einer Ebene untergebracht. Wenn Bills Gebäude in Ulm als „konkrete Architektur" bezeichnet wird, handelt es sich hier noch um eine Steigerung. Der Bau dient mehrheitlich der Organisation der Räume und reagiert auf das tropische Klima. Er selbst tritt nahezu vollständig in den Hintergrund. Er gleicht einer Plattform, mit kurzen Wegen, zum internen Austausch, in der nichts Äußerliches, von der Stadt hineindrängendes, abzulenken vermag. Somit entspricht er der Forderung Nehrus nach einer unabhängigen, demokratischen und fortschrittlichen Institution, die auf die Zukunft ausgerichtet ist.

Designing Design Schools for today

Mit der Digitalisierung, die weit in alle Lebensbereiche vordringt, ist es an der Zeit Gestaltung neu zu denken. Die vorangegangenen Beispiele von Designschulen sind jeweils unmittelbare Reaktionen auf geschichtliche Epoche, in der sie entstanden sind. Es sind jeweils Umbruchszeiten, die Weimarer Republik, die Neugründung der Bundesrepublik und die Unabhängigkeit Indiens. Das 21. Jahrhundert markiert wieder eine Zeit des Übergangs und der Neuorientierung. Wie sieht die zeitgenössische Schule für Gestaltung heute aus?
Im digitalen Zeitalter, so Beatriz Colomina, arbeiten ca. 80% der jungen Leute vom Bett aus.[12] Die Unterscheidung von Ausbildungsort und Wohnung diffundiert immer mehr, Die Regelung von Arbeitszeit und Freizeit/Schlaf greift kaum mehr. In der Zeit der globalen Vernetzung, in der es möglich ist, rund um die Uhr zu verhandeln, muss das Individuum auch rund um die Uhr präsent sein, um konkurrenzfähig zu bleiben. Die Spätmoderne, um mit Andreas Reckwitz zu sprechen,[13] und die Folgen des Neoliberalismus fordern eine neue Architektur- und Designsprache. Wie kann Gesellschaft heute gestaltet werden, wo doch viele Entwurfspraktiken ebenfalls vom Computer aus möglich sind und ins Bett verlagert werden können?
Rem Kolhaas und OMA versuchen sich am Beispiel des Axel Springer Campus diesem Thema anzunähern. Zwar entsteht hier keine Schule, auch wenn die Namensgebung dies impliziert, aber es wird dieser durchaus Frage begegnet. OMAs Antwort ist eine offene Terrassenlandschaft, ermöglicht durch ein Transfertragwerk, aus dem sich das sogenannte Valley – in begrifflicher Anleihe an das Silicon Valley - formt. Mit Terrassengeschossen auf allen Ebenen, die teils offen und teils geschlossen sind, sollen neue Kommunikations- und Interaktionsspielräume eröffnet werden.[14] Die Räume sind licht und offen, gleich als würde das Stoffliche im Immateriellen werden. Treppen und Innenbrücken stellen Verbindungen zwischen ihnen her.[15]
Ähnlich offen und variabel könnte auch eine Schule für Gestaltung in der heutigen Zeit aussehen. Erste Anregungen kommen von raumlaborberlin mit der Floating University zum 100. Geburtstag des Bauhaus. Im Regenwasserrücklaufbecken des Tempelhofer Feldes, umgeben von einer Kleingartensiedlung, entstand 2018 ein temporärer offshore campus. An diesem Off, einem Nicht-Ort, um mit Marc Augé zu sprechen[16], sind leichte Gebäudestrukturen aus Gerüststangen eingestellt. Hier gab es die Verwaltung, die Aula mit Wasserbecken, ein Theater, eine Bar, eine Küche, ein Toilettenkomplex, eine Terrasse und eine Werkstatt. Die vielen unterschiedlichen Baukörper, die durch Stege miteinander verbunden waren, boten Platz für Experimente, kreative Versuche, Rückzugsorte oder aber gemeinschaftlichen Austausch.
raumlaborberlin hatte über zwanzig Universitäten eingeladen sich den Ort anzueignen und ihren Campus selbst zu gestalten. Die Gerüstbauweise gab im wortwörtlichen Sinne eine modularartige Struktur vor, war aber flexibel genug, um jedem Bedürfnis zu entsprechen. Der Ort war permeable im doppeldeutigen Sinn, er hatte keine Wände, die Dächer waren aufblasbare Strukturen, gleich Denkblasen. Wind, Luft, Sonne durchfloss den Raum - ideal, um neue Unterrichtsformen auszuprobieren.
Das Prinzip der Aneignung fand seine Anwendung, auch in dem Sinne, dass Theorie und Praxis zusammengeführt wurden. Dieses kurze Experiment kann als weiterer Vorschlag einer Schule für Gestaltung heute verstanden werden. Hier haben individuelle Bedürfnisse und Aneignungsstrategien ebenso Platz, wie der Ort auch auf der Umwelt und Fragen der heutigen Zeit reagiert.[17]

Notes

[1] Reckwitz, Andreas: Die Gesellschaft der Singularitäten. Zum Strukturwandel der Moderne, Frankfurt/M., 2017.
[2] https://renespitz.de/2018/10/27/faz-hfg-ulm/18.1.19
[3] Aicher, Otl: Die Welt als Entwurf, Berlin, 2015, S. 9.
[4] Immer wieder gab es Diskussionen zwischen den Theoretikern und Praktikern, wie jene Entscheidung, dass Kunst in den Lehrplan aufgenommen werden sollte, was 1957 den Weggang von Max Bill zur Folge hatte.
[5] Bill erwähnt zu dieser Zeit den Namen Hannes Meyers bewusst nicht, da er noch immer auf Grund seiner politischen Ausrichtung problematisiert wurde. Siehe dazu auch Hilpert, Thilo: Century of Modernity: Architektur und Städte. Essays und Texte, Berlin, 2015 S. 243.
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[9] http://www.nid.edu/institute/history-background.html
[10] Aus den Untersuchungen des Bauhaus Lab 2017, unter der Leitung von Dr. Regina Bittner, Akademie der Stiftung Bauhaus Dessau. Dazu gehören aber auch Kumar Vyar, der 1966 das Produktdesign von der hfg Ulm an das NID brachte und viele weitere Personen.
[11] Die Tagore Hall und das Sanskar Kendra Museum (1957) von Le Corbusier liegen dem NID direkt gegenüber. Vor allem auf letztgenanntes scheint das NID architektonisch Bezug zu nehmen. Beide haben eine Betonrahmenkonstruktion, die mit Ziegelausfachungen gefertigt ist. Der Baukörper ist auf Sichtbetonstützen aufgestelzt, darüber „schwebt" der niedere und dennoch monumentale Quader quasi als Vierkanthof um seinen quadratischen Innenhof. Leider befindet sich das Le Corbusier Gebäude derzeit in einem äußerst bedenklichen Zustand und ist nicht in Betrieb.
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[15] https://www.dbz.de/artikel/dbz_Axel_Springer_Campus._Ein_Baustellenbesuch_3222326. html
[16] Augé, Marc: Nicht-Orte, München, 2014.
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Notes

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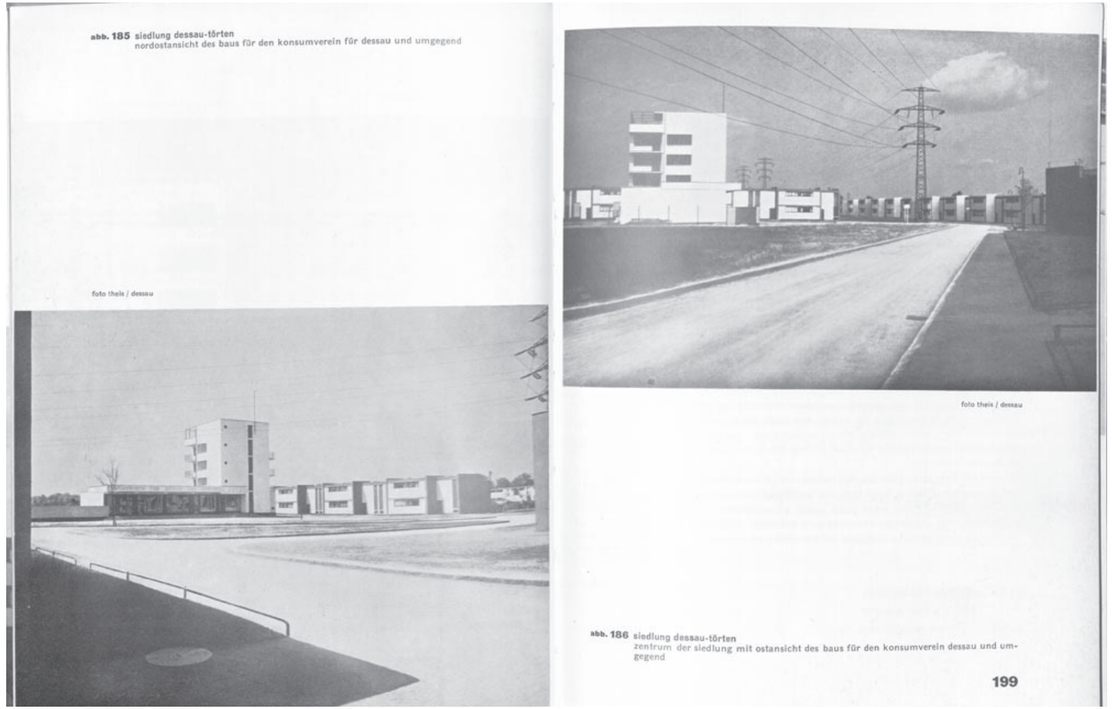

Fig. 1: Page from Walter Gropius' book Bauhausbauten Dessau published in 1930.

Framing Bauhaus – The Reception of the Housing Estate Dessau–Törten

Abstract

The paper retraces the history and reception of the housing estate Dessau-Törten and its medial framing. One major aspect the paper addresses is the role the architect Walter Gropius played in the reception by framing the estate. Another phenomenon which is highlighted is the constant architectural changes the settlement underwent since they caused various strategies of framing throughout the reception of the housing estate. In addition, the paper explores in what ways the media framing of the housing estate produces different focal points that may dominate perspectives even today. Finally, it is asked in what way general opinions and expectations of the Bauhaus are possibly impacted by such an intense reception.

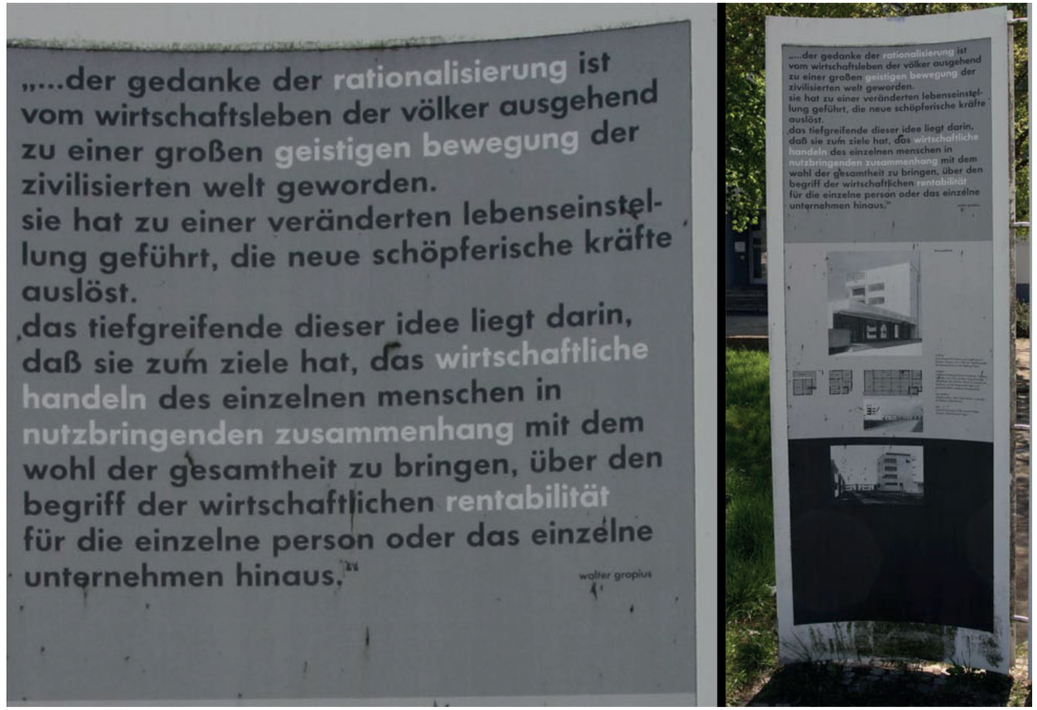

Fig. 2: Dessau-Roßlau, Germany, explanatory panel describing the housing estate Törten.

Dessau-Törten and the legacy of the Bauhaus

Today the “Bauhaus and its sites” are part of the UNESCO world heritage network.[1] On UNESCO website it is stated that "between 1919 and 1933 the Bauhaus movement revolutionized architectural and aesthetic thinking and practice in the 20th century."[2] As the quote implies, the Bauhaus movement is regarded as embodying unique ideas that changed the history of architecture and design. Therefore, each year many tourists travel to the surviving sites of the Bauhaus School in Weimar, Dessau-Roßlau and Berlin.[3] Reflecting on the information they learn on site, one could ask: Which meaning does the Bauhaus have for visitors today? And what do the sites of the movement represent to them?

As one tries to answer these questions one is quickly confronted with a vivid reception which inevitably suggests certain images of the Bauhaus as the recipient is influenced by a powerful media framing of the Bauhaus movement. Hence, the following article aims at reflecting on the dense framing of the Bauhaus as well as at revealing different patterns that can be found within the historical reception of its associations. The introduced topic is examined by reframing the history of the housing estate Dessau-Törten which was built by Walter Gropius during his time as Master of the Bauhaus School.

Framing Architecture

According to Jörg Matthes, the term ‘framing’ can be used to describe in what ways media impact opinions on a topic by conveying information in a certain way.[4] ‘Reception’ on the other hand encompasses the communicative appropriation of an object or topic after its emergence.[5] Therefore, it could be argued that framing and reception are closely linked, as they both address the influence of different stakeholders or language patterns that evolve throughout the history of a topic or an object. In the following passage, I will outline how the reception of Törten continuously refers to the media framing of Walter Gropius. His arguments can be found in different contexts of the reception ranging from political propaganda in the 1930s to the current media presentation.

Walter Gropius’ design and description of Dessau-Törten

Walter Gropius and his architectural office were awarded the task of designing a new settlement in Dessau in 1926. The planning began in the same year and a total of 316 houses, called the Törten housing estate, were built until 1928.[6] In the original plan, the settlement was composed of individual home units, each of which was assigned a garden.[7] Gropius organized the houses around the spatial and social center of the project: the so-called Konsum.[8] The actual rows of houses of the residential area were built along streets surrounding the Konsum. All of the houses had a flat roof and the neighboring houses were mirror images of each other. The mirroring had the effect that two adjacent façades merged.

The structure of the residential area was characterized by clear axes and geometrical linearity. In addition, the confrontation of opposites was a formative aesthetic feature of the architecture. This involved contrasting bright façade surfaces and dark ribbon windows or empty and developed space. Equally characteristic, the rows of houses seemed to continue serially as the visually similar façades of the home units merged into one another.

Gropius was a proponent of the ‘Neues Bauen’ which he exemplified in the Törten project using ribbon windows and flat roofs. Both were

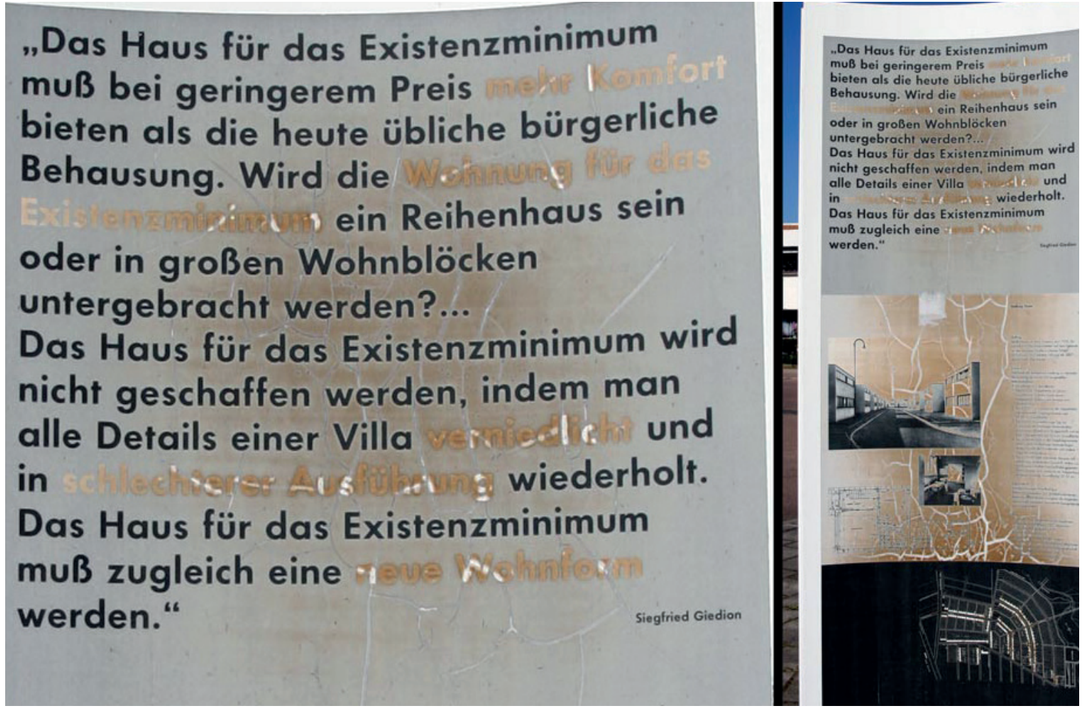

Fig. 3: Dessau-Roßlau, Germany, explanatory panel describing the housing estate Törten.

emblems of this architectural movement. Overall, Gropius was not only concerned with purely functional considerations but created a recognizable aesthetic brand.[9]

Gropius himself used the striking appearance of the Törten estate in his favor because he spread the superiority of his architecture in the media by referring to it strategically. He even staged the organization of the building site. In addition, he stylised the Törten estate as an example of an ideal Bauhaus architecture.[10]

In 1930, Walter Gropius emphasized the functionality, rationality and economic viability of his methods in the construction of the Törten housing estate in a self-authored book on his architecture.[11] As for example, he talks about the economic organization of the living space and argues in favor of the standardization of housing.[12] His chief aim is the "rationalization" of construction.[13] However, the Törten estate was modified shortly after the construction because Gropius' plans were not always regarded as practical by the residents and the building authority.[14]

The photos pictured in the book support the image of a functional and progressive architectural endeavor.[15] The houses are staged in deserted scenes in contrasting black and white photography (Fig. 1). By doing so, the minimalist aesthetic of the modernist buildings is emphasized to an extreme. With such overexaggerated photography, Gropius produced an idealized image of Törten.

Finally, Gropius writes that the creation of a certain style was not the goal of the Bauhaus School emphasizing the spirituality of the Bauhaus philosophy. He calls all the buildings he designed in Dessau "Bauhaus buildings" although they were built under his direction and not by the Bauhaus School. Gropius justifies the use of the term by citing the public opinion that his architecture is regarded as the "fruit" of the intellectual exchange at the Bauhaus School. Furthermore, the pupils and workshops of the Bauhaus School contributed to the furnishing of the buildings.[16] In his book, Gropius basically stylises himself as the person who let the Bauhaus idea become reality. Thus, he implicitly equates his own work with the Bauhaus School.

Economy, Functionality and Normativity

Shortly after the construction of the housing estate, the building-costs and numerous construction defects evoked harsh criticism. The architecture was also attacked in the national press.[17] Later, the National Socialist regime adopted the criticism to dramatize the defects of the architecture and to present its own buildings as superior. As a result, the National Socialists began to systematically alter the houses in the Dessau-Törten settlement by replacing the steel ribbon window with small wooden windows in the 1930s. According to the fascist ideology, only wooden windows belonged to 'German' architecture.[18]

In the GDR, the residents themselves changed the settlement gradually from the 1970s onwards, as they wanted to raise the standard of housing.[19] Yet the government changed Törten not physically but ideologically: it was claimed that the historical circumstances led to the deficiencies in the settlement and that only the new economic conditions of socialism could realize the perfection of mass construction.[20]

In the early years after the reunification of Germany, the settlement was once again modified. In contrast to the GDR, residents could now buy building materials in large quantities. Consequently, many seized the opportunity to individualize their house units. For example, decorative patterns appeared on façades and hence covered the original design completely.[21] Finally, in 1994, a so-called design

statute was passed by the city which aimed to limit the changes to the houses and to restore the architecture to its original appearance in the long run. In 1998, the first reconstruction of an original housing unit was completed.[22] The reason for this was that the continuous loss of original constructional elements after the building of the settlement had created a need to preserve the remaining architecture. Furthermore, this need also incited a wish to reconstruct what had been lost.

As lack of resources prevailed in the GDR, the time until 1990 is regarded by Andreas Schwarting as a stagnant conservational period for Törten. He argues that after the fall of the Berlin wall the lack of economic resources in the former GDR was replaced by the availability of consumer goods and the abundance of the FRG. Thus, according to him, many residents reacted to this change and invested in building materials converting many houses.[23] Therefore, Schwarting highlights that the turnaround of Germany denoted a literal turning point not only for Germany but for Törten as well.

In the historical description of the GDR, the centrally controlled planned economy in which lack prevailed is often contrasted by the social market economy of the FRG which generated abundance and consumption. Especially in the period after reunification, a framing developed that dialectically compared the two systems.[24] In this way, the thematizing of economic efficiency and functionality of the housing estate was blended with general phenomena in the reception of the GDR which addressed the economic situation.

Notably, after reunification, the normativity of the settlement concept is opposed to the rapidly occurring individual changes undertaken by the residents.[25] The developments since the reunification make the difference between normativity and individualism particularly evident: the collective planned economy is replaced with the pluralistic market economy. However, one could ask whether the consumption of prefabricated components does not only suggest individuality:

„Es waren die Bewohner, die mit ihren individuellen, gleichwohl mit industriell gefertigten und normierten Bauteilen erstellten Veränderungen der Häuser nachträglich die Idee des Baukastens im Großen umsetzten, […].“[26]

Here Schwarting explains all the modifications as a subsequent fulfillment of Walter Gropius' idea of the Baukasten im Großen. Thus, the intention of the architect becomes the measure for a ‘successful’ history. In recent research on Törten, attempts are made to unite the contradictions of normativity and individualism.[27] Often, the construction defects are described in detail and the economic efficiency of the architecture also plays a role. Occasionally, the shortcomings are excused because the housing estate was a pilot project.[28] Mainly, the deficits of Törten are juxtaposed with the residents who compensate the mistakes by their own actions.[29] In this way, reality and the desire for a successful history are combined. Indirectly, all these arguments refer to the standards that Gropius himself set for his architecture. Ultimately, the starting point of the argumentation is always a question of the functionality of the buildings and the limits of normalized living. Reconciling the comprehensible individualism of the residents with the intentions of the architect is thereby a possible conclusion of the argumentation.

Walter Gropius' statements are also central to external mediation. The local signage refers to Törten as “Bauhaus architecture”. Quotations by Walter Gropius and Sigfried Gideon which clearly associate the settlement with a strictly rational architecture are depicted on two explanatory panels (Figure 2–3). Terms such as "rationalization", "profitability" or "subsistence level" are highlighted in the text. Brochures advertising Törten depict the settlement as a product of an economical approach to construction. The aesthetics of the architecture are barely mentioned.[30] Of course, this is only a small part of the external mediation of Törten. However, the examples clarify that the image of the settlement is often defined by Gropius' own statements and ideas.

Gropius himself had described the housing estate as an extremely functionalistic and efficient architecture. The answer in the media was an in-depth discussion of the functionality and cost-effectiveness of standardized buildings. Likewise, political systems referred to the discussion and used the arguments for their propaganda machine. After the reunification, the normativity of the architecture is contrasted with the individualism of the residents. Simultaneously, the housing estate is framed as heritage. Over time, engagement with architectural deficiencies and issues of functionality have become patterns in the reception.

Retracing expectations of Törten and the 'Bauhaus'

The presented reception phenomena concentrated on the continuous references to economy, functionality and normativity in many articles on Törten. In addition, it was highlighted that Walter Gropius' own statements play an enormous role in the perception of the housing estate. His medial framing literally set the frame for the reception. Perhaps one could come to completely new considerations when looking at the housing estate from a different angle. A reflection on its framing could provide an impetus to find such a different perspective on the Törten estate.

Undoubtedly, Walter Gropius is one of the most important figures for the Bauhaus School as well as its founder. Still, the Bauhaus School was a heterogeneous movement formed by many people. In that way, the question arises whether to equate Gropius’ architecture with the Bauhaus movement. Hence, it would be rewarding to reflect on the term ‘Bauhaus’ and possible contradictive associations. Another aspect worth exploring further is to which degree economic thinking influences the framing of the Bauhaus in general. While Bauhaus could be regarded as an idea that assumed many different forms, it is quite often associated with a minimalistic and functionalistic design.[31] Although ubiquitously studied, research on the Bauhaus and its reception have until now failed to reflect on the (self-)stylising aspects of its medial framing. It would, therefore, be very enriching to examine whether the strong reception simply integrated on certain framings that steer the research perspectives in a certain direction. This would pave the way for new and vital scholarly research on the century-defining Bauhaus School.

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[2] Bauhaus and its sites.
[3] "Pressemappe: Bauhaus-Archiv / Museum für Gestaltung Berlin," accessed on October 24, 2018, https://www.bauhaus.de/files/Pressemappe.pdf.
[4] Jörg Matthes, Framing, Baden-Baden, Nomos, 2014, 9.
[5] Hans Robert Jauss, "Rezeption, Rezeptionsästhetik," in Historisches Wörterbuch der Philosophie, ed. Joachim Ritter, Karlfried Gründer, vol. 8 (Darmstadt: Wissenschaftliche Buchgesellschaft, 1992), 996–1004.
[6] Andreas Schwarting, "Die Siedlung Dessau-Törten: Rationalität als ästhetisches Programm" (PhD diss., Dresden University of Technology 2008), Dresden, Thelem, 2010, 23; Walter Gropius, Bauhausbauten in Dessau. 1930. Reprint, Mainz/Berlin, Florian Kupferberg Verlag, 1974, 153.
[7] Schwarting, Die Siedlung Dessau-Törten, 33–40.
[8] German translation of Konsum: consumption.
[9] Schwarting argues similarly: Schwarting, Die Siedlung Dessau-Törten, 370–371.
[10] Schwarting, Die Siedlung Dessau-Törten, 210–212.
[11] Gropius, Bauhausbauten Dessau, 153–200.
[12] Gropius, Bauhausbauten Dessau, 162–163.
[13] Gropius, Bauhausbauten Dessau, 200.
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[19] Andreas Schwarting, „Zeitschichten: Die Siedlung als Palimpsest", Das Verschwinden der Revolution in der Renovierung, Berlin, 2011, 59–60.
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[21] This is one of the results of my master thesis on Törten. In addition, it becomes apparent when entering the housing estate.
[22] Sophie Stackmann, "Living in the cathedral of the future. Retracing the architectural changes of the settlement Dessau-Törten", The ascription of values and logics in planning within historic city spaces, University of Bamberg Press, 2018, 108.
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[28] Ungers, Suche nach einer neuen Wohnform, 125–126; Hans Maria Wingler (ed.), Das Bauhaus: 1919–1933 Weimar Dessau Berlin, Bramsche, Gebr. Rasch & Co, 1962, 378
[29] Christine Engelmann and Christian Schädlich, Die Bauhausbauten in Dessau, 2nd ed., Verlag Bauwesen, Berlin 1998, 61–62; Andreas Schwarting, "Wohnen in einer Versuchssiedlung. Zur Problematik der baulichen Veränderungen in der Siedlung Dessau-Törten", Wohnformen und Lebenswelten im interkulturellen Vergleich, Frankfurt am Main, 2003, 266–267; Silke Steets, Der sinnhafte Aufbau der gebauten Welt: Eine Architektursoziologie, Berlin, Suhrkamp, 2015, 121–122; Schwarting, neue und bessere Welt, 242.
[30] Examples for brochures: Stadt Dessau-Roßlau/Stiftung Bauhaus Dessau (ed.), Bauhausbauten Dessau, Leipzig, Pöge-Druck, 2014; Stiftung Bauhaus Dessau (ed.): Bauhaussiedlung Dessau-Törten.
[31] The focus becomes quite clear when googling the terms "Bauhaus style" and searching for pictures. Eckstein, Inszenierung einer Utopie, 15.

Image Credits

Fig. 1: Walter Gropius, Bauhausbauten in Dessau. 1930. Reprint, Mainz/Berlin, Florian Kupferberg Verlag, 1974, S. 198–199.
Fig. 2: Sophie Stackmann 2016.
Fig. 3: Sophie Stackmann 2016.

Notes

Jean Molitor

Photographer
Leipzig Academy of Graphics

Jean Molitor was born in Berlin in 1960 and studied Artistic Photography at the Leipzig Academy of Graphics with Arno Fischer. He has been a freelance photographer for magazines, newspapers and industry since 1994. In 2009 he started his project bau1haus and today he continues to work on it, traveling through Africa, North and South America, Europa and the Middle East.

Kaija Voss

Architect; Dr.
Technical University of Dresden

Kaija Voss was born in Berlin in 1965, studied Architecture in Weimar, was awarded her doctorate in Hannover and then worked in research at the Technical University of Dresden. Today she is an architectural historian, author and lecturer and also works as a freelance writer for the Süddeutsche Zeitung and the Bayerische Staatszeitung newspapers. She has published numerous articles about architecture and art history. In 2016 she became the academic consultant for the bau1haus project.

Fig. 1: Deutschland, Dessau, Appartementgebäude (Prellerhaus), Walter Gropius, 1925/26.

Das Projekt bau1haus - Vom Bauhaus in die Welt

Abstract

The Bauhaus movement, founded in Weimar in 1919, influenced the development of modern architecture far beyond the borders of Germany. For almost a decade, photographer Jean Molitor has traveled around the globe to document its influence – be it in Berlin or Casablanca, Stuttgart or Havanna, St Petersburg or Guatemala City, Vienna or Bukavu in the Democratic Republic of the Congo. Additional to the impressively-staged photos from Molitor, the architectural historian Kaija Voss supports the project, writing texts, giving lectures and doing researches. Classic Modernism masterpieces from all over the world are in the focus of Voss and Molitor, some of them unknown until now.

Fig. 2: Deutschland, Dessau, Bauhausgebäude, Walter Gropius, 1925/1926.

Das Projekt bau1haus - Vom Bauhaus in die Welt

Im Jahr 2019 feiert das Weimarer Bauhaus sein hundertjähriges Bestehen, besser, seinen 100. Geburtstag, denn die Ideen der wichtigsten und einflussreichsten Gestaltungshochschule des 20. Jahrhunderts leben weiter. Für den Fotografen Jean Molitor und die Architekturhistorikerin Dr. Kaija Voss ist das Bauhaus zentrales Element innerhalb einer epochemachenden internationalen Bewegung in Architektur, Kunst und Design, die aus dem Jugendstil in die Klassische Moderne führt. Bauhaus-Ästhetik und Funktionalität sind bis heute allgegenwärtig und in der Architektur weltweit zu finden.

Globale Verbindungen sichtbar zu machen, ist ein Ziel des großen Projektes bau1haus. Das Kunstprojekt reist auf der Spur der Idee vom kosmopolitischen Austausch in Kunst, Kultur und Wissenschaft – am Beispiel der Architektur. bau1haus ist eine Hommage an eine Ära und eine bestimmte Art, Häuser zu bauen: sachlich, funktional, kühn, industriell.

Angefangen hat das Projekt bau1haus 2009 im Osten Afrikas. Mit finanzieller Unterstützung der Botschaften von Frankreich und Deutschland fotografiert Jean Molitor in Bujumbura, der Hauptstadt von Burundi. Daraus entsteht eine erste Ausstellung in Burundi, die für großes Interesse auch seitens der burundischen Politik sorgt. Seit 2016 bekommt der Berliner Fotograf wissenschaftliche Unterstützung durch die Münchner Architekturhistorikerin Dr. Kaija Voss.

bau1haus dokumentiert als fotografisches Kunstprojekt die Ästhetik der Moderne weltweit.

Die Arbeit von bau1haus zeigt eine Formensprache und stellt diese erstmalig gegenüber und zusammen. Es formulieren sich Fragen nach dem woher und wohin. bau1haus will anhand von Bildern die kosmopolitische Ausrichtung jener Zeit aufzeigen und damit eine breite Öffentlichkeit erreichen. Die künstlerischen Fotografien von Jean Molitor werden ergänzt durch wissenschaftliche Recherchen, einbezogen darin die Biographien von Architekten, ihre Verbindungen untereinander, die Entstehungsgeschichte der Bauten sowie konstruktive Merkmale.

Einen einheitlichen Bauhaus-Stil gibt es nicht, zum einen, weil sich bereits seine Protagonisten gegen solche Festlegungen verwahrten, zum anderen, weil die „Moderne“ zu vielschichtig und heterogen war. Der Begriff Bauhaus steht heute für edles Design, industrialisiertes Bauen und für eine Architekturschule und -sprache, deren Entwürfe geprägt sind von Sachlichkeit, Funktionalität und perfekter Ästhetik. Generationen von Architekten sind von Bauhausformen, sachlich-kühnen Entwürfen, dem Einsatz von flachen Dächern und gläsernen Ecken sowie von modernen Materialien wie Glas, Stahl und Beton geprägt worden. Doch die Ideen des Bauhauses umfassten weit mehr als Funktionalität und perfekte Ästhetik. Es ging ebenso um politische Prozesse, um den gesellschaftlichen Aufbruch, zu denen der soziale Wohnungsbau, die Gleichberechtigung der Frau, die Vorstellung vom mobilen Leben, von kreativer Arbeit und Internationalität gehörten. Man begreift das Bauhaus am besten als Prozess, als eine Art zu entwerfen und zu bauen, als eine Methode im Denken und Entwerfen. Es handelte sich um eine interdisziplinäre und globale Ideenwerkstatt, der es nach dem Ersten Weltkrieg mit unterschied-

Fig. 3: Deutschland, Löbau, Haus Schminke, Hans Scharoun, 1932/33.

lichen Ansätzen und wissenschaftlichen Theorien vor allem um einen Neuanfang ging, bei dem die Welt neu gedacht werden sollte. Die Moderne in der Architektur ist ein Projekt – bis heute und in der Zukunft.

bau1haus präsentiert, wie wirkmächtig das Bauhaus und ähnliche Strömungen waren und sind.

Der Einfluss der Kunstschule Bauhaus erwies sich als so bedeutend, dass der Begriff heute umgangssprachlich mit verschiedenen Strömungen der Moderne in Architektur und Design in der ersten Hälfte des 20. Jahrhunderts gleichgesetzt wird. In diesem erweiterten Sinn ist auch fotografische Arbeit von Jean Molitor zu sehen.

bau1haus fokussiert auf Architektur: funktional, sachlich, den modernen Zeitgeist bis heute widerspiegelnd.

Das Bauhaus als Prozess der Moderne, verträgt sich scheinbar mühelos mit dem heutigen Zeitgeist und der Architektur weltweit. Architekten wie Frank O. Gehry, Daniel Libeskind oder das Büro COOP Himmelb(l)au, die dynamische, sich (scheinbar) bewegende Strukturen bauen, dekonstruieren die allgegenwärtigen Formen der Moderne. Heute sind Generationen von Architekten, mit der Moderne sozialisiert worden.

bau1haus zeigt Häuser der Moderne so, wie sie kurz nach Fertigstellung ausgesehen haben könnten. bau1haus stellt zeitlose Ideale der Moderne aus.

Über die Architekturfotografie werden die Formen des neuen Zeitgeistes, der sich zwischen den beiden Weltkriegen als internationale Idee manifestiert, erfasst.

Mit extrem nüchternem Blick, ausgelöst von einer leicht erhöhten Position, hält Jean Molitor, der künstlerische Fotografie an der Hochschule für Grafik und Buchkunst Leipzig studiert hat, die Architektur fest. Mess-Bildtechnik nennt er sein Verfahren mit Verweis auf historische Vorbilder. Die Häuser wirken auf den Fotos gleichermaßen strahlend und erhaben, nur selten sind Menschen auf den Abbildungen zu sehen. Die Ästhetik der Architektur steht damit im Mittelpunkt. Die Bilder stellen in der immer schneller und hektischer werdenden Lebenswelt einen Ruhepol dar. Die Fotografie, als Grenzen überschreitendes Medium, erklärt sich überall auf der Erde. Ohne Übersetzer versteht man die Sprache der Bilder.

bau1haus dokumentiert die Zeugnisse eines internationalen Zeitgeistes in Schwarz-Weiß. bau1haus erschafft ein weltweites Fotoarchiv der Moderne.

„Mein Ziel ist ein weltweites Fotoarchiv dieser Gebäude“, sagt der Berliner Fotograf Jean Molitor. Allein die bislang recherchierte Liste von Städten, in denen die Moderne bis heute sichtbar wird, lässt ahnen, dass die Bauhaus-Schule nur ein Bruchteil der gesamten Bewegung gewesen sein kann. Die Bauwerke selbst und die Fotografien stehen über Namen, Definitionen und Schubladen, sie reichen weit darüber hinaus. Das Kunstprojekt zeigt eine Formensprache und stellt Bauten erstmalig gegenüber und zusammen. bau1haus will mit Mitteln der Fotografie die kosmopolitische Ausrichtung der Moderne aufzeigen und ins allgemeine Verständnis bringen.

Fig. 4: Israel, Tel Aviv, Boathaus, Shimon Hamadi Levi, Arieh Cohen, 1934/35.

bau1haus feiert Architektur-Ikonen und Weltkulturerbe.

bau1haus zeigt Bauwerke in ihrer Alltäglichkeit: Tankstellen, Bootshäuser, Krankenhäuser, Kinos, Wohnanlagen, Bahnhöfe, Industriebauten

bau1haus ist bis heute ein frei finanziertes Projekt. Es erklärt sich über die Fotografie. Eine kritische Masse an Bildern ist nötig, damit es für eine breite Öffentlichkeit verständlich bleibt. Architektur-Ikonen und Weltkulturerbe ist ein wichtiger Teil des Projektes, doch bau1haus will weiter gehen, nämlich dorthin, wo die Menschen schon jahrzehntelang mit ihren Architekturschätzen leben, sich dessen aber vielleicht nicht immer bewusst sind. Das Projekt bau1haus will die Architektur der Moderne kommunizieren und für viele Menschen sichtbar machen Nahezu überall gibt es überraschende Spuren der Bauhaus-Architektur. Das Motto von Kaija Voss Arbeit lautet „Architektur: Sehen lernen!“ - eine wesentliche Intention des Projektes bau1haus. Molitor und Voss wollen die Zeugnisse eines internationalen Zeitgeistes gerade auch in ihrer Alltäglichkeit dokumentieren.

bau1haus stellt hochwertige Fotografien aus über 30 Ländern aus.

2007 reist Jean Molitor nach Afghanistan für die UNDP, zufällig und intuitiv entdeckt und fotografiert er das zerstörte Lichtspielhaus „Barikot“ in Kabul. Weitere Reisen folgen, darunter Argentinien, Burundi, Chile, Dänemark, England, Finnland, Frankreich, Guatemala, Indien, Indonesien, Israel, Kambodscha, Kenia, Kongo, Kuba, Libanon, Norwegen, Österreich, Polen, Rumänien, Russland, Schweden, Spanien, Tschechien, die Türkei und die USA. Der Katalog der Arbeiten wächst täglich. Zum gegenwärtigen Zeitpunkt gibt es hochwertige Fotografien aus über 30 Ländern, recherchiert sind über 100 Länder. Ein enormes Netzwerk. Der Fotograf der Bauhaus-Ästhetik ist stets auf der Suche nach dem perfekten Bild. Jean Molitor: „Ich möchte mit bau1haus zeigen, wie wirkmächtig das Bauhaus und ähnliche Strömungen auf der ganzen Welt waren.

bau1haus wandelt auf den Spuren der Moderne in Deutschland.

bau1haus macht internationale Netzwerke von Architekten sichtbar. Bekannte internationale Wegbereiter der Moderne sind die drei Bauhausdirektoren, Walter Gropius, Hannes Meyer und Ludwig Mies van der Rohe. Architekten der Moderne waren aber nicht immer direkt mit dem Bauhaus verbunden. Die Arbeiten von Le Corbusier und Oskar Niemeyer reflektierten nicht allein den Zeitgeist, sie prägten ihn. Fortschrittliche Bauherren finanzierten die Umsetzung der kühnen Entwürfe. Das Netzwerk ist riesig, Architekten haben in mehreren Städten und Ländern gleichzeitig gebaut, andere blieben ihrer Stadt im Wesentlichen verhaftet. bau1haus trifft die Bauten von Ernst May in Frankfurt/Main, in Russland und in Kenia. bau1haus spürt Bruno Taut in Berlin, Istanbul und Tokio nach. Ebenso Erich Mendelsohn, der in Deutschland, Russland, England, Norwegen, Israel und den USA baute.

Fig. 5: Russland, St. Petersburg, Fabrik „Rotes Banner“ (Kraftwerksbau) , Erich Mendelsohn, 1927.

bau1haus bewahrt Häuser dem Vergessen.

bau1haus versteht seine Arbeit als Wettlauf gegen die Zeit.
Schon zu Beginn des Projektes in Afrika wird klar, dass die moderne Architektur gefährdet ist, vom Abriss durch internationale Investitionen oder die Vernachlässigung in tropischem Klima. Durch die fotografische Dokumentation, ihre Erforschung und Beschreibung werden die Bauten zwar vor dem Vergessen bewahrt, oft ist ihr Verfall nicht weit entfernt. Handeln ist von hoher Dringlichkeit. Oft erschweren örtliche Bedingungen das Fotografieren: Regen, Schnee, dichte Vegetation, Absperrungen, Straßenverkehr, Verbote.

bau1haus in der Zukunft

Das Projekt schreitet voran und greift in die Zukunft. Die Ergebnisse ihrer Arbeiten werden anlässlich des Bauhausjubiläums 2019 in einer weltweiten Wanderausstellung bzw. in mehreren Satellitenausstellungen präsentiert. Begleitet wird die Ausstellung durch Vorträge und Buchpublikationen, durch Presseartikel und Filme. Interviews mit Zeitzeugen und Diskussionen zur aktuellen Baukultur in Vorbereitung. Momentan befindet sich das Projekt noch in seiner ersten Ebene, der Erfassung von Häusern und Rohdaten. Die zweite Ebene wird den Fokus auf Erforschung der Bauten und ihrer Architekten lenken sowie auf die Ergänzung der Außenaufnahmen durch Grundrisse, Innenaufnahmen und Modelle. Dr. Kaija Voss als Autorin und wissenschaftliche Basis des Projektes will die Brücke zwischen Kunst und Wissenschaft schlagen. Die Suche nach internationalen Kooperationspartnern ist dabei ein wesentlicher Bestandteil der Arbeit. Weltweite Recherche ist nicht immer leicht. Oft sind die Architekten der Häuser nicht mehr auszumachen, häufig sind keine Baudaten oder -pläne vorhanden. Eine weltweite Ausstellung mit Fotografien von Bauten der Moderne würde den Focus von Deutschland aus auf die Welt und wieder zurück zum Bauhaus richten, als internationale kulturelle Zusammenarbeit.

Die Liste der noch zu fotografierenden Bauwerke ist lang. Die schon heute vorliegenden Ergebnisse sind als Teil eines Projektes, als erste Recherche zu verstehen. Bau1haus wird systematischer und wissenschaftlicher, fotografierte Häuser werden – neben ihrer geographischen Zuordnung – unterschiedlichen Themen zugeordnet und ergänzt durch Architektenbiographien und -netzwerke, ihre Geschichte und konstruktive Merkmale. Nicht nur das historische Bauhaus soll dabei im Mittelpunkt stehen, die Ausstellung wird zudem ein wichtiger Beitrag zur Vermittlung eines aktuellen Bildes von Deutschland und seiner Baukultur sein. Das Interesse an der Erfassung und Präsentation jenes Kulturgutes Architektur wird weit über das Jubiläum hinausreichen. Die schon jetzt unendlich scheinende Serie von Architekturfotografien ist nur ein geringer Prozentsatz eines riesigen Projektes, das in seiner Art und Weise - ausgeführt von nur einem einzigen Fotografen – auf der Welt seinesgleichen sucht.

Fig. 6: Burundi, Bujumbura, Hotel Burundi Palace, 1941.

English summary

All the photographs were taken by Jean Molitor on behalf of the project bau1haus. The aim of this project is to raise the profile of global connections and international exchange in the field of architecture. In doing so, the aesthetics of the Bauhaus is understood as the central element within an epoch-making international movement in architecture, art and design. The work of this project is a race against time. Many buildings in the photographs no longer exist today. Others are threatened by demolition, collapse, the pressure of investment or extremes of climate. Photography will save them from oblivion. As our way of life accelerates and becomes increasingly hectic, the pictures offer a Ruhepol and Sehnsuchtsort of Modernism. In the photos, the buildings look both radiate and sublime, with seldom a person to be seen. The art of photography is exactly what is needed: an extremely prosaic view from a slightly raised position captures the architecture. The model is historic photogrammetry. As a medium that crosses borders, photography is understood all over the world. The language of pictures can be comprehended without a translator. So far, bau1haus is a freely-financed and open project. International research is not always easy; often it is not possible to locate the architect of the building and only rarely are their building plans. The search for international cooperation partners is an essential part of the work. All the texts oft the project are written by Dr. Kaija Voss. She is the scientific leader oft the project, who tries to connect art and science. Further research, photographs of interiors, drawing and models will enhance the project in the future.

Image Credits

Fig. 1: Photography Jean Molitor 2014
Fig. 2: Photography Jean Molitor 2014
Fig. 3: Photography Jean Molitor 2014
Fig. 4: Photography Jean Molitor 2014
Fig. 5: Photography Jean Molitor 2014
Fig. 6: Photography Jean Molitor 2009

Notes

Gonçalo Canto Moniz

Assistant Professor

Centre for Social Studies, Department of Architecture, University of Coimbra

Gonçalo Canto Moniz (Porto, 1971) is a researcher of the Cities, Cultures, and Architecture (CCArq) Research Group. Graduated on Architecture at the Department of Architecture of Faculty of Sciences and Technology of the University of Coimbra in 1995, where he is Assistant Professor. Obtained his PhD degree in Architecture at the University of Coimbra in 2011, based on the thesis: “Modern Architectural Education”.

He coordinates the european project URBiNAT "Healthy corridor as drivers of social housing neighbourhoods for the co-creation of social, environmental and marketable NBS", with 28 international partners, supported by H2020. He is researching and teaching about the reuse of modern buildings and its impact on the urban context, in the frame of the european project Reuse of Modernist Buildings, supported by Erasmus Plus. He participates in the national project "Atlas of school buildings in Portugal, supported by FCT. He has been publishing about modern architecture in Portugal, namely about urban regeneration, school buildings and architectural education.

Notes

Session 2.1: Education

Gonçalo Canto Moniz

The academic curricula on Architecture, either for graduation or for post-graduation are step by step integrating the reuse of modernist buildings as a key topic for design and theoretical courses. More close to the everyday professional and research practice, the education of the architect is facing the challenge of working with the existing city and buildings. The architect is no more an artist drawing beautiful buildings for the new extension of the modern city. Today, the architect is out of the office trying to understand the complexity of the urban society, the fragility of the past production, the qualities of the unqualified buildings. Most of the times, the architecture production is not made of drawings, models and renders, but of workshops, surveys, photos and schemes to add light fragments to an existing structure. In this sense, the question raised by teachers and students is how to teach and learn architecture today, when the architect's activity is changing every day? The papers presented in the 2.1 Education Session offer some perspectives to these challenges, proposing different tools and methods to face the Reuse of Modernist Buildings problematic.

Sara Di Resta, Elena Lemma, Davide Tassera, develop research on the hidden modern architecture, built out of the cities for the industrial activities. The map of this modern "cathedrals" is putting in discussion the reuse of functional buildings that are today symbols of modern identity, spanning the concept of heritage. The legacy of Piero Portaluppi's electric architecture - Valdo power station (1919-1923) case study – is not only a "cathedral" of the modern times but also an infrastructure that reorganize the territory and the landscape.

Haluk Zelef's design studio on Reuse of Modernist Buildings explores the contribution of Bruno Taut for modern culture through his projects for school buildings in Ankara. This is the starting point for the student's projects to transform the school according to contemporary without losing Taut identity. In fact, research through design method integrates history in the design process, offering an operative role to the theoretical studies.
Jülide Akşiyote Görür explores the photograph as a research tool to understand the modern city and it's permanent reuse, as a project of the future. In this sense, the student's photos of the "Modernist Photo Project" are not only an analytical tool but also a design one, are not only an objective inquiry register but also an inquiry to intangible materials that built the contemporary city.
Alessandra Cappana and Susana Clemente present research on the Rome office of The Architects Collaborative (TAC), the professional platform created by Walter Gropius in 1945, that worked globally. On one hand, the research maps the less-know production of the office and on the other hand, it goes beyond the collection of projects to integrate the discourses of the former workers or people related to it. This methodology brings the social actors to the research, introducing a human layer to the understanding of the architecture production and its collaborative dimension.

100 years after the opening of Bauhaus, modern education is also being reinvented in worldwide schools with tools and methods imported of other knowledge areas from art to social sciences to face contemporary needs and complexity.

Davide Tassera

M. Arch for the New and the Old.
Iuav University of Venicea

Davide Tassera, Master degree in Architecture for the New and the Old at Iuav University of Venice in 2018 and Bachelor degree in Architecture at Polytechnic of Turin in 2015. Actually intern at Sergio Pascolo Architects, in Venice. Member of Associazione Canova whose main goal is the recovery and the re-evaluation of rural medieval stone architecture. He attended a workshop for making the models exposed in Anupama Kundoo's installation at the 15th International Architecture Exhibition.

Elena Lemma

M. Arch for the New and the Old.
Iuav University of Venice

Elena Lemma, Master degree in Architecture for the New and the Old at Iuav University of Venice in 2018 and Bachelor degree in Science of Architecture at the University of Parma in 2015. Currently working for La Biennale di Venezia Foundation as an 'Active Catalogue' of the 16th International Architecture Exhibition. She worked as a cultural mediator for the Global Art Affairs Foundation at the 57th International Art Exhibition. She attended a workshop for making the models exposed in Anupama Kundoo's installation at the 15th International Architecture Exhibition.

Sara Di Resta

M. Arch; PhD in Conservation of Architectural Heritage
Iuav University of Venice

Sara Di Resta, PhD in Conservation of Architectural Heritage, is Assistant Professor of Architectural Preservation at Iuav University of Venice. Her research activities are focused on the conservation of 20th-century heritage and on the architectural language in conservation design. Her last volume is Forms of conservation. Purposes and practices of contemporary architecture for restoration. She is a member of SIRA, the Italian Society of Architectural Restoration. Gold Medal at the Domus International Prize for Architectural Conservation (2017), in the same year she obtained the habilitation as Associate Professor according to the Italian National Scientific Qualification procedure.

Fig. 1: Valdo hydroelectric power station, view south east.

Cathedrals of Modernity.

The legacy of Piero Portaluppi's electric architecture - Valdo power station (1919-1923) case study

Abstract

Starting from 1912, the architect Piero Portaluppi (1888-1967) was entrusted to design six hydroelectric plants in Val d'Ossola, a valley in North-West Italy. The power stations, a clear representation of modern monumentality, became one of the most important systems of water reservoir exploitation in Europe. Built in the Twenties and abandoned in 1941, the hydroelectric plant of Valdo played an important social role for the valley, becoming the vehicle for the development of the area. Portaluppi's hydroelectric architectures were illustrated as modern cathedrals or castles; the modernity of the plant (even though mainly built with traditional materials) resides in the idea of society, development and progress that building still documents. The spaces, the relationship established between the power station and its natural environment are part of the legacy of the Modern Movement. From a cultural point of view, dealing with the preservation of these buildings testifies an extension of the traditional concept of 'heritage'. From an educational point of view, the challenge of their protection doesn't represent only a technical issue, but a path that requires to involve these buildings in today's social and economic demand. The paper describes the cultural and creative approaches of an academic path aimed at returning the modern building both to the locals and the community. The proposal is the outcome of multi-layer research that converts the former hydroelectric plant of Valdo, actually used as a warehouse, into a multi-functional building that meets the needs of the inhabitants, becoming a new district hub.

Full paper will be published in a separate publication series of DOCOMOMO Germany after the conference.

Notes

Susanne Clemente

Architect and Engineer; PhD Candidate
University of Rome

Susanna Clemente, Architect and Engineer, is a PhD candidate in Architecture and Construction at La Sapienza University of Rome. She participated with Brocchetta in “Objects”, section of the 13th Prague Quadrennial curated by Tomáš Svoboda. She recently won the call “Inhabited Landscapes”, Italian Pavilion, 14th Architecture Biennale, Venice, and the first edition of “Terme di Chianciano Garden Festival” with UnderWaterGarden. She collaborated with Teatro dell’Opera di Roma for several scenic projects. She participated in World Stage Design 2013, Cardiff, and, as a member of the jury, in the second edition of the Rome Film Festival and for the prize David Giovani.

Alessandra Capanna

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TAC Office Rome.
From interviews with the protagonists.

Abstract

The Architects Collaborative (TAC), founded in 1945 by Walter Gropius and seven colleagues from the prestigious university institution of MIT in Cambridge, Massachusetts, was one of the most influential and prestigious names in the international architecture field of the twentieth century. The TAC worked for 50 years, closing definitively in 1995. In the 1960s they opened an office in Rome, which mainly dealt with projects in Europe, North Africa and the Middle East. Our research deals with this experience, little-known, but fundamental for the experimentation of a method that acknowledged a great role in the collaboration between peers and to the rejection of individualism in the project. The research began about a year ago, interviewing some witnesses participating in the projects developed in the TAC Office in Rome. The heritage which we take from the Modern Movement today is one of the consequent remarks that can be followed in the exposition of the interviews which we propose to present in the conference celebrating the 100 years from the foundation of the Bauhaus and the 50 from the death of Gropius. Through the witnesses collected, we will then analyze the methodological aspects of the collective work in architectural design, which today are not only sustainable but at the basis of the training for the modern professional.

Introduction

In 2014 the USA pavilion at the 14th Biennale of Venezia[1] exhibited a catalog entitled OfficeUS; among these, the TAC[2] dossier briefly showed the numerous achievements that over time involved the architects of the various offices, opened as an emanation of the Boston-based architecture company. The seat of Rome was the largest, after that of Cambridge (Massachusetts), and was active for ten years, from 1960 to 1970. The research presented, therefore, began by putting into practice recent studies on the Heritage of the Modern Architecture in Western Europe and the encounters with the Roman architects who were hired as collaborators of the TAC Office in Rome. The interviews that are currently been made are Arch. Piero Moroli, who worked for the Roman TAC Office from 1960 to 1966; Arch. Piero Sartogo, from 1960 to 1961; Arch. Marco Peticca from 1965 to 1969. From the list of architects and collaborators inserted at the end of the book that Gropius and his partners published after the first twenty years of activity (TAC 1945-1965)[3] and from the memoirs of the architects already interviewed, who referred to other designers present in the study after 1965, it was possible to trace other collaborators with whom more meetings are scheduled. An important testimony was given by Mrs. Maria Rivalta, who at the time was a member of the Panero-Weidlinger-Salvadori Company, and her husband, the architect Richard Brooker, who was the president and CEO of the TAC Office in Rome, since 1962. Dick and Mimi Brooker nostalgically recall those years in Rome. Panero was an Italian-American engineering company that had offices in New York, Boston, Washington, San Francisco and at the time of the “Italian Boom of the Sixties”, for a short time, even in Rome: for this great engineering studio many young surveyors and architects worked and were then recruited by Gropius and his associates for the executive design activities of the buildings for the University of Baghdad, Tunis, Lagos, whose stories, long and complex, are currently in an early stage of the present research.

The interviews with the witnesses of the time as a tool, not only allows to know the facts from the historiographic point of view, in the absence of adequate publications but is also useful for critical analysis of the cultural heritage that years later those protagonists claim to have acquired. It also becomes a means to share an analysis of the project as a product of the architect's profession, between thought, professional practice and decoding of contemporaneity.

An interview with Marco Peticca

The interviews conducted so far have been structured around constant themes, focusing primarily on the organization of the study, the working method, the techniques of drawing, the role recognized to Walter Gropius and, finally, the particularity of the Office in Rome. From the comparison of the experiences, it was possible to obtain a fairly faithful reconstruction, even more, precious thinking of the lack of publications related to this spot experience in Rome. Finally, for each of the testimonies, thanks to the collaboration of the architects involved, aspects and influences were investigated at an individual level.

Among the interviews conducted so far, we chose to report that one with Marco Peticca[4]. His direct witness allows us to highlight the main methodological aspects characterizing the TAC Office in Rome, in particular, those ones related to the collaboration between peers and the rejection of individualism in design and planning. As we will see later, Peticca was classified as an architect even though he was still a student and he was part of a medium-sized group of peers, in which the tasks could be carried out with some interchangeability.

What are your first memories related to your professional experience at the TAC Office in Rome?

The office around the mid-60s was located between Corso Trieste and Via Nomentana (precisely, after the first year in Via Nomentana, 126, it moved to Viale Gorizia, 24c – Ed.). It consisted of two apartments inside an ordinary building. In addition to the real workplaces and administrative offices, there were also a library and a storage room for stationery materials, kept by an office boy. I had many peers even younger than me. I remember the executives Richard Brooker and Cliff Morse, and my friend Bob Barnes. At the studio I had recognized the qualification as an architect, even though I was not yet graduated; there was no academic aspect and the qualification was defined by the managers, as well as the job descriptions. You were framed on the basis of your real skills.

How did you arrive at the TAC?

I was contacted by Cliff Morse, who met me in an Italian studio with international orders, called Panero, where I worked, at Parioli in Rome. There were mainly designed mosques for Saudi Arabia. I was contacted together with other people on the occasion of the opening of the Roman office. Basically, the recruitment took place through known studies in which young people like me were selected.

What were the main projects carried out at the time in the Roman office?

The University of Baghdad, obviously some buildings because of the vastness of the campus; the University of Tunis, to which I have not participated, however, and the laboratories of Mali. These were the main projects that were carried out while I was there. I have worked for a long time and I have designed a lot especially for the University of Baghdad project. TAC showed some of these works in an exhibition in Cesena, from October 16th to November 6th, 1993, entitled "Through architecture". I have always understood architecture both as a space to cross and as a means. In particular, I have dedicated to the experience at the TAC Office in Rome a real "chapter" entitled "Training Paths", which established a direct relationship between those years spent in the TAC and my personal approach to the profession of the following years.

How many employees were in the office?

The majority were represented by designers applied to the executives, there were Italians from Tunis who spoke French and Arabic, languages useful for the projects of Mali and Baghdad; many were the professional designers older than me, Italians, who had worked on numerous orders. I remember a colleague named Sorrentino; there were also several young Americans, coming from various parts of the United States. Among the main figures represented: graphic designers, interior designers, architects, engineers, business consultants

How did you draw?

In pencil, never in pen, the drawings were deliberately very much trodden. Common materials were used, from the bell to make the tip, to the blade, from the steel masks to the brushes with glass tips to reconstruct the paper on which you draw, from the soft, hard, less hard rubbers, to the parallel with the adjustable square instead of the drafting table. It was drawn on flat boards, lined with dust-paper and white plastic, which was stretched out, very smooth, anchoring it with the stapler. The lining was made by the office boy. Paper was rather robust, edged. Above all, there were drawings of an executive level, mostly on a scale of 1:50, with dowels to contain the construction details in the most appropriate scales. Architectural, structural, plant, hydraulic and electrical tables were drawn, and numbered perspectives, often linked in volumes or constituting entire rolls.

How was the work organized?

We were controlled and directed, there was no space for invention. I met Gropius, he was the one who decided how the drawings should be made. The sketches, the real projects were conceived and carried out by others. It was, therefore, the code, the mode of representation, the essential element of identification. Each sign had its graphic code which made it unequivocal; for example, the dot-like stroke indicated the weft of the pillars, the axes. Then there was a very wide catalog from which it was possible to choose, copy and insert the construction details. It was absolutely not necessary to think about how to represent, for example, a spiral staircase; it was already done. There was alternation on the drawings, the representation code was made to continue the work ensuring the interchangeability of the operator and not to make the diversity of the hand appreciable.

In Rome no drawings were made that today we would call "rendering", probably not even in the American office; the designers of perspectives and three-dimensional views were external consultants. That kind of design was completely out of our code, of our work setting.

Why was Rome chosen?

Due to the proximity to the Middle East, to the functionality of the connections, because of the airport. In Rome, it was possible to find extremely qualified personnel, given the ancient tradition of La Sapienza University. Rome is a town that is not comparable to any other, it was certainly a strategic choice. Rome allowed access to important tasks, which however hardly ever materialized. False departures were recorded, such as the design competition for the enlargement of the Chamber of Deputies. I took photos myself, but it was never started, because of the lack of probability it could be realized. Even Argan had great respect for Gropius and was constantly in contact with him. The office was therefore supportive, however, it had a rather long activity. The Boston office closed in fact in 1995. (As a matter of facts, Mrs. Mimi Rivalta Brooker answered to this question affirming that the presence in Rome of the Panero firm, as a starting logistic support, was as well, a strong motivation – Ed.).

Where are the archives related to the activities of those years kept?

Probably at Harvard, where they had returned; the headquarters were that of the office, at 42 Brattle Street, Cambridge, Massachusetts.

What role did Gropius play? How were his visits?

Gropius visited the studio on average once a month when he had to go to Germany he also passed from Italy, but he was not regular in his travels. He did not review the projects directly, but always together with the structure managers. He allowed himself to have brief conversations with the employees, he was interested in what you did, what you were doing; I experienced the great emotion of meeting this living monument.

Did you follow the construction sites? The implementation phase?

Absolutely not, those who did the projects did not go to the construction sites, there was personnel who took care of the contracts, of the execution, but those ones were particular tasks that had little to do with the design, the project. Of course, the design was an integral part of the contract; in case of errors, it was paid for personally; the work proceeded calmly, it was never convulsed; to avoid mistakes, deadlines were set in advance. The estimative metric computations were also performed in Rome.

Conclusions

The activity of the "TAC - Società per Azioni", which was set up in Rome "with the social purpose of assisting the underdeveloped countries of North Africa through the provision of projects for public works at lower costs than those that would have had to be sustained if they were carried out in the USA", as one of the first articles of the Association states, played a very important formative role on those young architects who, some students, others recent graduates, were employed at TAC.

As confirmed by Pietro Sartogo, whose U.S. license allowed him to practice in the United States of America, the collaborators in the TAC Office in Rome had the opportunity to acquire skills that were not taught at Sapienza University courses, which were not organized with internships on the training of the architects.
The rigorous setting of the work that required to stick to codes that precisely identified the construction details, so different from the Italian practice whose approach was largely handicraft, was a testing ground that young people now declare to have transferred in their professional practices also in terms of figurative reference. About 10 years had passed since the start of the first phase of the Great Reconstruction in Italy. The architects had abandoned the main road of rationalist architecture for a neorealist declination of the image of the city. Now "the Americans", as the members of the TAC were called in Rome, for the worldwide commitments put forward a less homologated form of International Style and a direct derivation from the Modern Movement as Gropius and the architects of the Bauhaus made explicit. In the sixties, this renewed adherence to the reinforced concrete construction and its architectural form was certainly partly a consequence of the changed economic conditions, but that in the young Roman collaborators had a particular derivation from the architectures that they drew in the TAC Office Rome. After the interviews, we are in fact about to face this analysis on the works.
In conclusion, it was not only the actual heritage of the Modern Movement through a realistic practice of architecture that Gropius developed in the TAC period that influenced the young architects in Rome. This cultural heritage took advantage as well of the concept of collaboration, which Gropius had wanted to express even in the name of the American society, of which he was the co-founder and which was also a kind of design philosophy since the Bauhaus years.
The concept of collaboration was added to the concept of "integrated architecture"[5] (that is a sort of educational total architecture) extending its boundaries. In Italy in the midst of the revival, thanks to government policies for post-war reconstruction, this American lesson by The Architects Collaborative, which over the years had become one of the most prestigious in the international arena, provided the young Italian collaborators a textbook example of organization for their future activities of designers.

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Notes

[1] "Fundamentals" appointed to Rem Koolhaas
[2] TAC is the acronym for: The Architects Collaborative, the association founded by Walter Gropius with Jean and Norman Fletcher, John and Sarah Harkness, Louis McMillen, and Benjamin Thompson in 1945.
[3] In W. Gropius, J.B. Fletcher, N.C. Fletcher, J.C. Harkness, S.P. Harkness, L.A. McMillen, B. Thompson (edited by), The Architects Collaborative, 1945–1965, Niggli, Teufen, 1966
[4] Marco Peticca (Rome 1941) is architect living and working in Cesena, near Bologna. After the collaboration with Panero and other international firm in Rome he was called to work at TAC Office Rome; he then collaborated at the faculty of Architecture of Rome Sapienza and was awarded of a fellowship at IUAV in Venice. In Cesena, since the year 1973 he is architect and urbanist with many important works in his portfolio.
[5] W. Gropius, Architettura integrata, Mondadori, Milano, 1959 –. First Edition: Scope of total Architecture, New York: Harper & Brothers, 1955

Notes

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Fig. 1: Two partite windows in Taut's Cebeci School.

Architecture of Modern Schools in the 1930s Ankara - Extension to Atatürk High School as a design studio exercise

Abstract

Research on the reuse of the modernist buildings can be pursued with different approaches and methods. This paper focuses on the potential of the modern heritage buildings on the education of the young architects. Though such buildings are mostly covered in the history and theory courses, their role in the design studios is scarce. In this regard, a design studio exercise at the Middle East Technical University (METU) with its pedagogical framework is described here. The case study is Ankara Atatürk High School (AAL) designed by Bruno Taut, to which the students were asked to design an annex. This exercise informed them not only in terms of the historical, social, economic and educational contexts of the school but also about the approach of a well-known master of modern architecture. Interpreting the historical/theoretical information mentioned at the first of the paper, students developed their own particular design approach.

Fig. 2: Articulation of different functional units in the AAL design, front facade.

Introduction:

Schooling of new generations of modern Turkey in the 1930s. After the proclamation of the Republic in 1923 one important objective of the new regime was the creation of a new generation with republican, secularist and nationalist ideals. Education was an important means in this social modernization process. Therefore changing the content of the education was followed by the wave of construction of new facilities. It was a nationwide enterprise but Ankara was also the capital of education with new institutes.[1]

Since the compulsory education period in those times was five years, the emphasis was more on the basic primary education of the masses and non-vocational secondary and high schools (named after the French term Lycée) remained relatively limited in number.[2] The first examples of new high schools in the new capital were "Ankara Lycée for Girls" (1935), "Ghazi Lycée" (1936), Turkish Education Society Yenişehir College (1939).

Architectural Modernism in School Buildings of Turkey

Schooling of the young generation was satisfied in "Nationalist Style" buildings in the early 1920s. The pair of Ghazi and Latife hanım schools, and Mimar Kemal primary school were examples of this style in Ankara. However, parallel to the radical social modernization steps, modern architecture started to be favored by the state institutions particularly by the Ministry of National Education after 1927, and foreign experts from German-speaking countries were invited to design modern schools. Austrian/Swiss Ernst Egli is the first such figure who became not only the consultant to the Ministry in 1927 but also a Professor in Istanbul Academy of Fine Arts in 1930. Egli designed many modernist schools including Faculties for Political Sciences and Agriculture, Conservatory of Music and İsmetpaşa Girls' Institute in Ankara. After his leave in 1936, the first candidate to replace him was Hans Poelzig, but after his untimely death, Bruno Taut was invited instead.

Taut was already an international avant-garde figure in the 1920s and had lived in the Soviet Union and Japan after being expelled from Germany. He had one more advantage; his previous experience in educational buildings.[3]

Taut is associated with five educational buildings[4] in Turkey, three of which are in Ankara: Language and History-Geography Faculty (DTCF), Cebeci Secondary School and Atatürk High School (AAL)[5] besides High School for Boys in Trabzon and Republic Institute for Girls in İzmir.

Ankara Atatürk High School had already been established in 1889. However, in the late 1930s, it was in need of a new building. Eventually, the Ministry of Education initiated the construction of a new comprehensive school including a large conference hall, laboratories, cafeteria, museum, sports hall and large outdoor spaces in 1937. In 1940, its educational facilities and, in the following year, dormitory facilities were opened and it became a boarding school.

Previous 1889 building was known as the "Stone School" in reference to its construction system. Its symmetrical disposition of masses, disconnected interior and exterior spaces and badly lit interiors with inadequate windows were actually the antitheses of Taut's modern design.

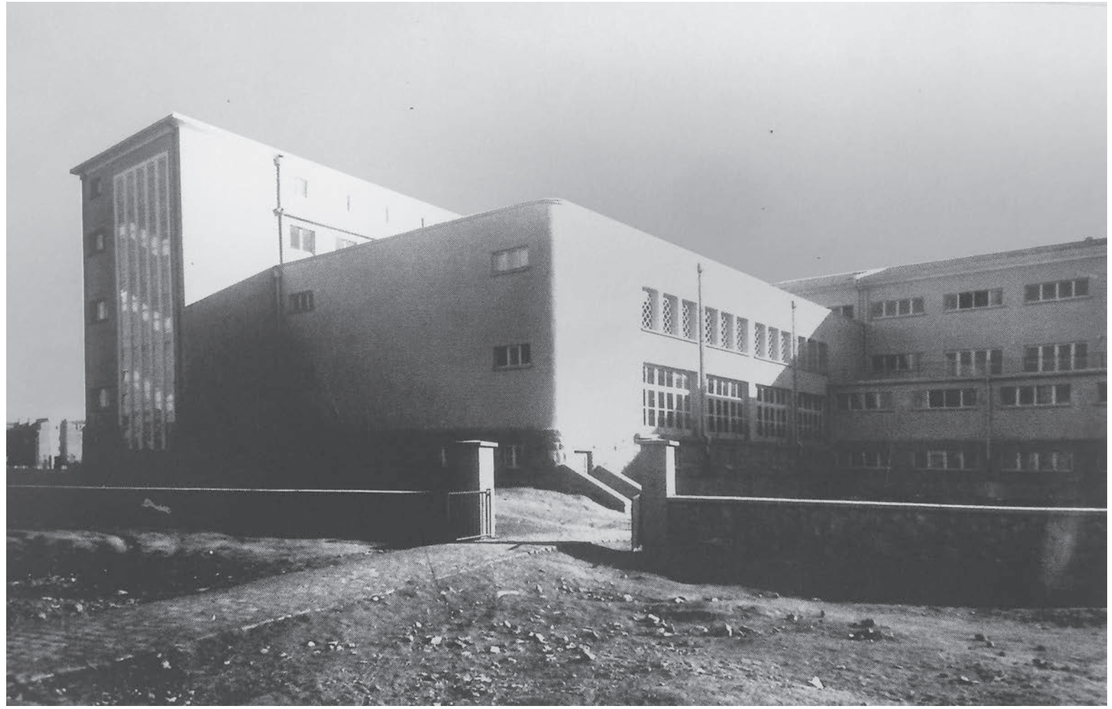

Fig. 3: Articulation of different functional units in the AAL design, back facade.

Modern Architecture and Bruno Taut's Ankara Atatürk High School (AAL)

"Modern" is a heterogeneous term that embraces a variety of different approaches and outcomes. While it implies the mainstream "international style" buildings, on the other hand, it also covers the marginal, reactionary contemporaneous figures challenging the universality of any modernist architectural vocabulary. Taut is a difficult figure for many historians to be incorporated in a standard account of modern architecture. His expressionist attitude in the 1910s and vividly colored housing schemes in the early 1920s do not fit comfortably next to the rationalist, abstract, white building blocks.

Furthermore, he was both a promoter and a critic of modern architecture. While he was parallel to the functionalist doctrines in the 1920s, he explicitly reacted towards the universality claims of "modernist" building vocabulary in his years in Japan. Similarly, during his stay in Turkey in the late 1930s, he dissociated himself from the abstract, formalist language of modern movement which was started to be ridiculed as "cubic architecture". However, he was also reserved about the new architectural paradigm known as "nationalist architecture" which was the outcome of the prevalent nationalist ideologies of those years. Monumental masses with symmetrical, classicist or historicist articulations were to be rejected for Taut. In the opening speech of his exhibition in Istanbul, he stated that

"Today what we should search for is the synthesis between old traditions and modern civilization. This should exclude any one-sided approach…I do not care about insisting on certain external appearances and developing a personal style that makes my work characteristic."[6]

On Turkish architecture Taut notes that:

"when our (Turkish) architects freed from the average cubic style architecture fashion a new Turkish House will be born. In that case, the modern technology will be applied with a free state of mind and climate will be a major concern, and automatically (eventually) will turn back to the historical features of the old Turkish buildings such as the shade supplying verandas, independent pavilions and two partite openings in the high ceiling rooms. The large bottom part of the window will provide a good view and light for working, and the window above will provide ambient light for the rest of the room".[7]

Even when he particularly refers to a particular window type, it is not an explicit folkloric reference but a rational, functional solution for the control of light and heat in the interiors. Actually what Taut emphasize is a synthesis, between the local characteristics with modernity (technology, organization and aesthetics), that draws him close to the term "regionalist".[9]

Taut always warns, "Undoubtedly we should refrain from superficial imitation, otherwise it will turn into a sentimental romanticism which is a wrong understanding of nationalism that will lead to kitsch". Referring to Danish architect Hansen, he notes "all national architectures are bad" but "all good architecture is national".

In this regard, he is not to be considered as "modernist" but "modern" implying the rejection of a stylistic attitude. Some modernist principles such as asymmetrical mass and facade organization characterize his works both in Germany and Turkey. However, his school buildings in Turkey were attempts to reach "modern" architecture with an accent of locality as epitomized in the Language and History-Geography

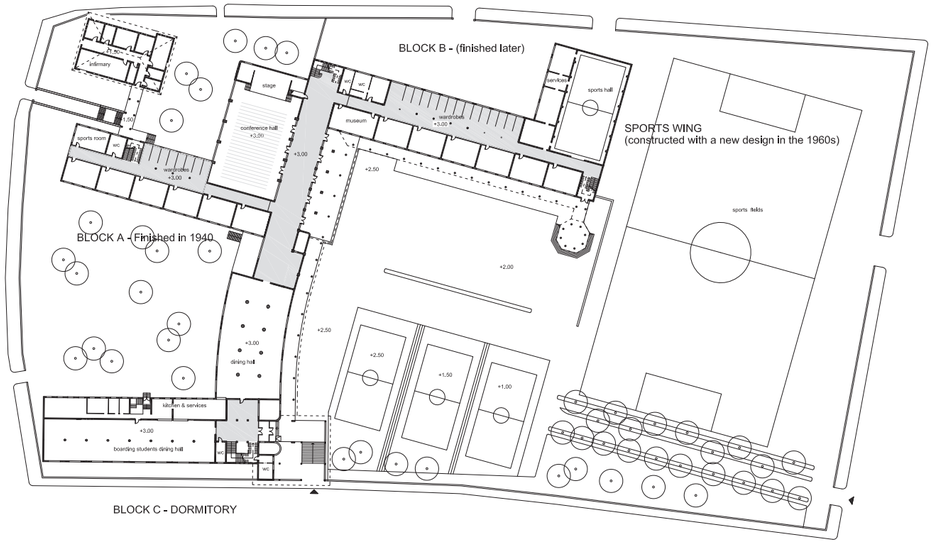

Fig. 4: Plan of the Ankara Atatürk High School.

Faculty in Ankara (DTCF). Stone cladding patterns, turquoise tiles and articulated ceilings inside the building have explicit references to the historical architecture in Turkey.

Such cultural references in design vocabulary are more implicit in the AAL building. Nevertheless, spatial and formal characteristics i.e. verandas, pavilions and two partite windows he mentioned related to the local houses are also evident in AAL, as well as in his other schools in Ankara, İzmir, and Trabzon. (fig.1) The verandas are to protect the students from the snow and rain in winter and sun in summer. Designing in independent or attached pavilions is a means to incorporate different functional units together as well as to create defined outdoor spaces as observed in the octagonal entrance canopy. (fig.2)

One other common feature of Taut's educational buildings is their gable roofs, unlike the characteristic terrace roof of the "international style".[10] AAL pavilions, other than the conference hall, evoke vernacular houses, in terms of the material and pitch of the roofs. We can also mention the use of local materials as a design attitude common to his works. AAL and his other schools are finished with less expenditure, unlike the more pompous DTCF. However "Ankara Stone" which is the cladding material on the front façade of the faculty was employed in the plinth walls of the high school as well.

Interaction of local circumstances and "modern" movement is an extensive issue that goes beyond the forms and materials to social, cultural and economic frameworks. In the AAL case, design methodology, and urban morphology are two potent areas to discuss modern heritage.

Economically, developing prototypes for schools to be built in different sites and cities of the war-torn country seemed to be a viable option at the first sight. However, the Ministry of Education directed by Taut's planning office emphasized the uniqueness of each case and made individual designs for each school.[11] Uniqueness went hand in hand with common rational, functional and climatic principles, therefore similarities and variation in planning ideas and formal vocabulary can be observed.

Location of AAL is another issue to dwell on the modern heritage within the city plan of the new capital Ankara, which was the outcome of an invited international competition in 1927. According to the winner Hermann Jansen, this is the first modern city designed after the motorcars and his plan demonstrate interesting modernist principles, such as developing a "new city" independent from the old city with green corridors passing through. Jansen's plans have central locations for education facilities, especially the university faculties. Other schools including AAL, are also located in central nodes that students can reach from different parts of the city with public transportation.[12] He studied several alternatives for the placement of AAL within its neighborhood. How to relate the school with the green urban corridor going through that district was his important design concern.

Taut was also fond of Ankara: "Here a large modern city is being built, and this bigness does not come from the population but its character as a large and modern city inside a large landscape."[13] However Taut did not always have good relations with Jansen. Since all the official buildings in the city had to be approved by the planner, the AAL project was also submitted to him. Although Taut's design of the faculty building (DTCF) caused many debates, AAL case went smoothly.[14] Here two designers complemented each other's modernist ideas.

Construction started in 1937, two wings (A and B) were completed

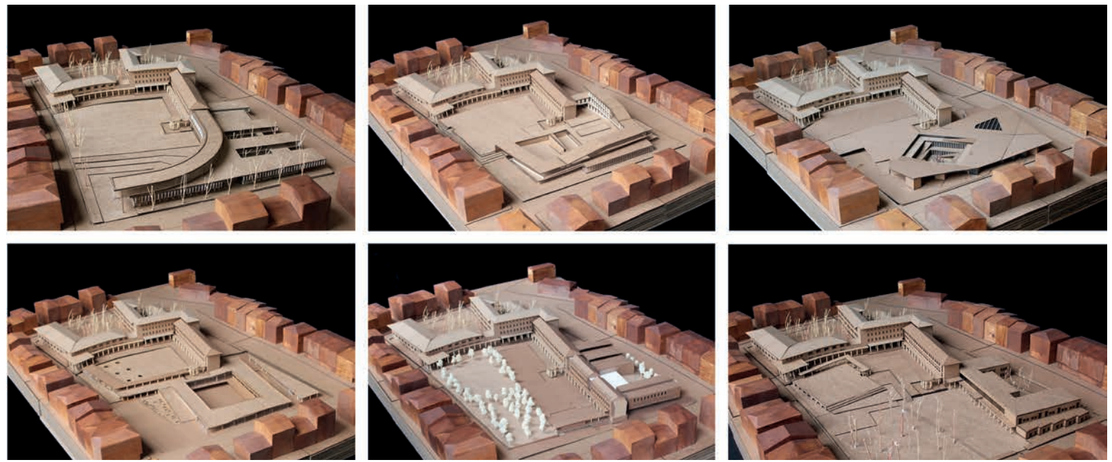

Fig. 5: Samples of student works

in 1938 and wing C a couple of years later. Mass of the school is composed in functional units without any symmetrical arrangement. Long wings on the west-east direction accommodate classrooms facing south, whereas shorter wings have large social spaces such as the conference hall and eating facilities. The main blocks are connected with a veranda (colonnade) at the front ending with carefully designed entrance canopy to the campus. Outdoor spaces have a variety of different potentials; the large open area at the entrance side is for sports fields (originally including a football pitch) and smaller gardens with large trees at the back are for informal recreation. The independent pavilion in one of these gardens is for the infirmary.[15] (fig.3)

AAL as an Exercise in Architectural Education

In recent years there is a growing tendency in Ankara to demolish the modern buildings (even the registered ones) and replace them with "new" structures. In this sense, many non-governmental organizations are established to raise public awareness of modern heritage and buildings under threat. Chamber of Architects has such an agenda and asked the architectural faculties in Ankara to participate in this awareness-raising ventures. Middle East Technical University Department of Architecture accepted to be a part of this project, and our 3rd-year design studio[16] assigned a project to the students in the framework of "building new in old settings". Our focus was AAL, which was registered in 2003, as a "historical" building to be extended with new needs.

Objectives of such a project can be summarized on general and specific frameworks.

The first objective in the general framework is developing a critical vision in the analysis of old buildings. The second one is equipping the students with designing new structures in relation to the existing contexts.

Among the specific objectives following issues can be mentioned: Students who studied modern movement in the architectural history courses are asked to re-evaluate its conceptual frameworks, prominent movements, and architects in one particular case. A detailed, hands-on a study is assumed to create enthusiasm to analyze modern movement and Taut specifically. In addition, students focused on the history of Ankara, with a particular interest in modern educational buildings to understand modernist architectural, city planning and educational ideals. Besides informing the students on these modernist ethical, social and aesthetical frameworks of the 1930s, considering their relevance for today was a part of the studio discussions.

Discussions on the educational and architectural reforms were based on readings and presentations of experts from other institutions and disciplines.[17] Students also made a survey on the schools of Ankara to observe their architectural values, construction dates, and distribution in the city, and visited them to have firsthand experience. Similarly, AAL was visited and analyzed in detail. Administrators were very welcoming and their narration clarified many issues about the original and contemporary life of the school.

There are new external and internal factors, to be solved in the school campus. The neighborhood, which was planned to be characterized by low rise residences but replaced by 8-10 floor blocks later, turned out to be a business district. The scarcity of parking facilities in the neighborhood exerts pressure on the school administrators to allow the usage of the large front sports field as a car park.

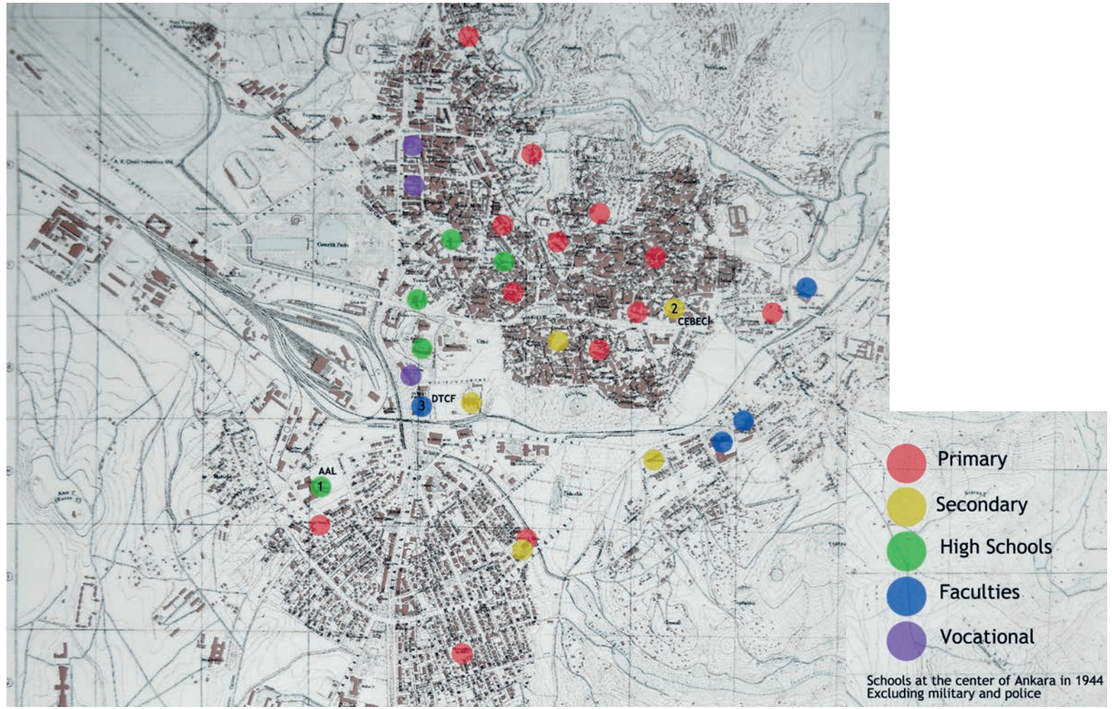

Fig. 6: The municipality building of Pontinia.

Furthermore, educational facility is to answer internal demands emanating from the changes in the Turkish educational system and its consequences i.e. increasing number of the students, new amenities such as smart classrooms, laboratories, art studios, and a sports hall. Eventually, school is envisioned to be extended to respond to the recent actual needs but with a sensitive and respectful approach to the original building. Students struggled hard to design a new annex in a dialogue with Taut.

Juries during the semester included conservation specialists and practicing architects as well to provide feedback from different viewpoints. One of the practitioners[18] perceptively noted that Taut building itself is a good teacher in designing something new, regarding its solutions about the sizes of classrooms, openings, circulation etc.

In the design process, use-reuse and misuses in the building (later additions, or modifications) were analyzed to understand its life cycle. For example, in 1988, dormitories were transformed into classrooms, breakfast hall into the library etc.and this created spatial inadequacies. Some items such as the original wooden, two-layer fenestrations were replaced by PVC windows. Students also noted that some spaces are refurbished and original components such as the laboratory equipment, furniture etc. are carried to the pavilion in the garden to function as a museum.[19]

Some characteristic items of the school were intended to be studied critically by the new technical means. For example, the orientation of the classes and the windows divided by concrete eaves ("Turkish windows") were to be digitally modeled to analyze the penetration of sun for lighting and heating of the classrooms. Many researchers[20] mention the importance of climate in Taut's position, however, it is very rare to see concrete analyses of this issue on factual grounds.

We also discussed critically the technical specifications of a "modern" school of the 1930s and today, for example, the regulations concerning fire-escapes or handicapped accessibility. Nevertheless, we appreciated the generosity of the numerous educational, social and sports facilities that is hardly equaled even in today's standard state schools.

Although there is a diversity of solutions it is not wrong to say that many student proposals were influenced by the original Taut schema, with new wings defining new open spaces. Veranda (colonnade) is almost a common theme in many designs. However, they do not imitate the original work and their designs assert their newness with new materials. Unlike Taut's project, many students utilized flat roofs for their annexes. Most of them do not want to create large masses overshadowing the original building and the level difference at the site enabled the creation of low rise structures. (fig.4)

Via these project students got acquainted with the organizations on the preservation of Modern Movement. A group of our students participated in the national chapter of Docomomo meetings in the city of Samsun and presented the building. After the semester, the model of the AAL was bequeathed to the school. Now displayed in the entrance hall, the model aims to raise awareness and enthusiasm about the building as a modern heritage to the high school pupils and to encourage them to apply for architectural education.

Today: Current use of 1930s educational buildings

The studio theme was helpful to develop a critical vision about the recent schools and the current status of the 1930s educational facilities.

Besides the AAL example, most of them keep their educational character. One marginal example is the Turkish Education Society schools (TED) at Yenişehir - downtown of Ankara. When the society built their new campus outside the city around 2000, buildings of the 1930s became dysfunctional and Çankaya District Municipality moved inside the premises. However, recently many of the original buildings of the campus are restored to be used as the facilities of the TED University, which is a new institution. Additionally, new blocks were built with a similar architectural attitude. In between these blocks, common facilities were constructed below the large courtyard. Architects correlate these restorations to the currently popular concept of "sustainability".[21]

Taut's school designs in Ankara are also currently in good condition. Recently restored in 2008, the most well-preserved design is the DTCF. However, due to the increasing number of students, annex buildings had already been constructed in the 1960s.

Cebeci Secondary School had been maintained regularly and a few insignificant changes, such as the facade colors were made. However, nowadays the urban context of the school is becoming a touristic attraction with the restoration of the authentic historical buildings and adding new fake vernacular ones around. In line with this, authorities tried to make the school look more "contextual", by attaching strips of timber on the façade and covering the upper windows with wooden grills. These pastiche-like alterations are rather impairing the ideas of Taut about modern architecture who pointed out that, anachronistically copying historical architecture or its formal motifs are as inappropriate as uncritically copying architecture developed in other geographies.

Although modern movement is assumed to impose starting from scratch as a design ideology many of the proponents of modern movement tried to have a more inclusive approach. As Taut tried to incorporate the local circumstances regarding climate, light or materials, studio exercise mentioned in the paper tried to incorporate a building by Taut to raise awareness not only to such timeless virtues but also to the modern movement. In this regard, being at the center of the architectural curriculum, design courses can be very fruitful beyond the didactic theoretical lecture courses.

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TAUT, Bruno, "Türk Evi, Sinan, Ankara" Her Ay, February, 1938, 93-98.

Notes

[1] See Ömer Faruk Gençkaya, Ankara Capital of Education, Ankara, Vekam yayınları, 2011. Educational facilities for the girls (İsmetpaşa Institute for the Girls /1934), for the peasants on the countryside (Hasanoğlan Village Institute /1941) vocational schools (Lycee for Commerce /1930) were rather new modern institutions exemplified in Ankara.

[2] Leyla Alpagut , "A Productive Architect and a Modern Building in Ankara: Bruno Taut and Atatürk High School" STD Magazine, 2018,14.

[3] Three unbuilt -Hagen Folkwang School, Friedrich Ebert Primary School and Dammwegschule- and one built -High School in Senftenberg- examples are cited in Manfred Speidel, "BrunoTaut, Çalışmaları ve Etkisi" in Atatürk İçin Düşünmek, İstanbul, İTÜ Yayını,1998, 44-67.

[4] Amongst 24 designs, in addition to these 5 schools, only 3 structures (an exhibition pavilion, his own house in İstanbul and Atatürk's catafalque in Ankara) were constructed. Taut also wrote a book "Mimari Bilgisi" (Architectural Knowledge) while he was in Turkey.

[5] Two architects assisted Taut in the design of AAL which was finished after his death. Franz Hillinger collaborated with him extensively after coming to Turkey in 1937. He was a supporter of modern architecture as his publication on flat roofs, defending it against the critics indicated. Franz, Hillinger. "Damın İnşa Şekli hakkında" Arkitekt, 1941-42, no9-10, 221-224. Other was Eyüp Asım Kömürcüoğlu who studied and worked in Berlin with Hermann Jansen. When he came back he worked with Taut. Mimarlık 272, 1997,10.

[6] Alpagut, 140.

[7] Bruno Taut, "Türk Evi, Sinan, Ankara" Her Ay, February, 1938, 93.

[8] Alpagut, 153.

[9] Akcan notes that Taut uses two terms in German "Allerweltsarchitektur" and "Weltarchitektur" to distinguish the exported modern architecture of Europe to the rest of the world from the authentic and cosmopolitan world architecture. Esra Akcan,

Çeviride Modern Olan, İstanbul, YKY, 2009, 94.
[10] However DTCF is an exception. Since it is on the main prestigious Atatürk Boulevard, its metal roof is hidden and looks like a flat roof building from outside, similar to the neighbouring educational buildings.
[11] Alpagut, 142.
[12] AAL is close to Necatibey street (named after the Minister of Education and a proponent of the Latin alphabet). Taut's Cebeci school is also located along a main street.
[13] Taut, 96.
[14] Mentioned in Taut's memoir İstanbul Journal, 46 cited in Esin Boyacıoğlu "Bruno Taut'un Türkiye'deki Mimarlık pratiği ve Mimarlığa Bakışı" in Bruno Taut Türkiye'de, Ankara, Goethe Institut, 2010, 21.
[15] It had been also used for the school director's accommodation.
[16] It was assigned in 2016-17 fall semester. I am indebted to my colleagues Hasan Okan Çetin and Ensar Temizel for the fruitful semester.
[17] I would like to thank Leyla Alpagut/Art Historian – Çağatay Keskinok/City Planner – Giorgio Gasco/ Scholar on Taut for their contribution. [18] I would also like to thank to Architect Eren Başak and other jurors.
[19] This Museum of Education for the commemoration of the 75th year of the Republic, houses prestigious items such as the flag bequeathed by Atatürk which was used during the Turkish war of Independence.
[20] For an example in Turkish context see Boyacıoğlu "Taut's Emphasis on Climate: a Reaction to the Aesthetic Canon of International Style". Aesthetics Bridging Cultures, 2007,135-141.
[21] Celal Abdi Güzer, "Mimarlıkta Modern Mirasın Korunması: TEDÜ/Türk Eğitim Derneği Üniversitesi", Mimarlık ,2013, (371), 120-126.

Image Credits

Fig. 1: Windows – La Turquie Kemaliste, 1939.
Fig. 2: AAL 1943 – ALEV (Ankara Atatürk Lisesi Eğitim Vakfı) Archive
Fig. 3: Front Facade – ALEV Archive
Fig. 4: Plan
Fig. 5: Student projects –photographs by Ensar Temizel
Fig. 6: Ankara Schools map – Author's drawing over 1944 city map

Notes

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Fig. 1: Students exploring the campus, taking photographs in between classes.

Exploring the City Through the Eye of the Modernist Photographer

Abstract

Ankara is often considered a dull, grey city; cold and bland carrying the weight of the government as the capital of Turkey. The city is under constant deconstruction and reconstruction. In this city where there are layers upon layers, it is difficult to differentiate between the new and old, layers of Modernity that are perishing, and harbingers of the future of Ankara. The aim of the Modernist Photo project is to turn the city into a muse for the creative person. It reminds us to look at forms cleared away from colors, to look upwards, and downwards, to zoom in and out of objects, buildings, streets, people and nature. It is to help recognize lines, curves, figurative relationships, the things that are at the center, on the side, or on the corner of a frame. It is to help students who cannot approach the elements of a Modernist city, pull these modernist elements out of the post-modern city and pretend and create their own Utopian cities. It is an effort to discover and find the equivalent of the Modernist New Vision in the 21st Century. The end results of the project created following the footsteps of Moholy-Nagy, the European Avant-Garde and the American Modernists, provide information to the lecturer about the views and sensitivities of the students. Educational and informative, the results speak to the senses. The stories about the city are varied, and a timeless, rediscovered urban symphony is created when the photographs are brought together.

Fig. 2: Students exploring the campus, taking photographs in between classes.

The Project - Introduction

Modernist Photography project is one of the 17 projects that are given to the first year students of Communication and Design[1] as a part of foundation studio[2] in the spring semester. This paper is going to present you the details about the reasons for such a project with its causes and effects. The brief of the project is clear; to be completed in 2 weeks, each student has to create images (make or take photographs) about/ of Ankara stylistically fitting in with the Modernist era, and through juxtaposition, create a body of work consisting of 4 images, and offer a mini-exhibition.[3]

This project has many aims just like it has many outcomes, and is not necessarily designed to make students learn about and understand the city and/or its architecture, or to teach them about photography. Improving photographic skills, learning and thinking about the city with all its components, are all end products of this project.

Firstly and most importantly it aims experience gaining, realization, discovery and through the recovery of the senses, clarity of vision, and simplification. It aims to turn the city into a muse for the creative person. It reminds us to look at forms cleared away from colors, to look upwards, and downwards, to zoom in and out of objects, buildings, streets, people and nature. It is to help recognize lines, curves, figurative relationships, the things that are at the center, on the side, or on the corner of a frame. It is to help students who cannot approach the elements of a Modernist city, pull these modernist elements out of the post-modern city and pretend and create their own Utopian cities. It is an effort to discover and find the equivalent of the Modernist New Vision in the 21st Century.

Prior to the project - Preparation

The very first assignment of the first year, fall semester, as a part of a foundation design studio I, the students are asked to analyze an object through its form and function by drawing, and some text (if deemed necessary). They are limited with one (A3) page and advised to draw multiple angles of the selected object in various sizes and scales to depict its qualities. The assignment is not intended to "facilitate the inner experience of the objects and their characteristics"[4], but is intended to sharpen the observational skills and to test how the senses of sight and touch are being used.

The outcome reveals what students understand from visual analysis. They feel comfortable looking at the object, "with the eye of the camera"[5] not necessarily at its best, testing different angles and sizes, showing details, etc., but mostly by observing it from a distance. Rather than focusing on showing design decisions, form and function relationships, the students mostly be paying attention to the quality of the drawings, to create "realistic and beautiful drawings"[6] as if they are working on still lifes. They rarely touch the objects, and very rarely take it apart to understand the mechanism in which it works. They treat this analysis project the same as they would be analyzing a two-dimensional image.

The project coming right after is another analysis project. This time the students are asked to visually analyze a magazine ad they find successful and draw its abstraction by using only geometric shapes in order to study the ad formally as a composition. In order to abstract, they are asked/allowed to get rid of "unnecessary details". The elements excluded for the sake of abstraction, the "unnecessary details"[7], give us clues to how the students see, perceive and understand the images they are looking at exposing their visual

Fig. 3: Students during discussions.

sensory competence.[8]

The results of this assignment, after being discussed, usually surprises the students as they realize how little they see and/or care about what is in the page, and the project's outcome can be addressed two ways. The students become aware of the formal aspects of the image seen on the page and start to define what is visible to the eye with proper vocabulary. This new language they are learning allows them to talk about what is truly there/seen, without what they signify.

All projects, given in a specific order, are designed to teach and learn by doing, provide insight/knowledge about students' sensibilities. Information gained from these projects is valuable to the teacher, and each project prepares students to what is coming after.[9]

Getting started with the project - Process

Simultaneously looking at the photographs of the Modernist, deciphering the visual language, examining their immediate surroundings, thinking about space through Perec's writings, thinking and researching about Ankara, the students have to tackle with a lot.

They have studied the Avant-Garde art movements sometime before this project, learned about art and culture of the time in a nutshell (in a different course), and had practiced taking photographs with a number of different projects, but never given a technical course on photography or properly taught about architecture, and the history of Ankara in relation to this project or else.

The students are asked to acquire necessary knowledge on their own, and learn by doing. Observation as a method, together with experimentation is promoted with examples from Walter Peterman's meticulous works, not his search for perfection in the technique but his persistence in creating the best image, Nagy's experiments, studies of objectivity by Albert Renger-Patzsch, all of which were produced under hard work. The motivated hardworking creatives of the time, whether making or taking the photographs are discussed with emphasis on the efforts they spent in the creation of the images as well as giving insight to the Bauhauslar attitude.[10]

Working With a Tight Deadline – Classification of Spaces

In order to fulfill the requirements of the Modernist Photography project in a limited time, the students need to be very efficient and fast. The city is vast and offers limitless possibilities. With a wide variety of subject matter to choose from and the styles to work with, the first attempts are always the hardest, and the students at the beginning, are reluctant to act. Disconnected with the city, and Ankara in their minds, they forget about the “New Vision” they have to follow and go back to doing what they feel comfortable. Usually, the only experience they have of photographing the city is like a tourist in a foreign land. With this experience in mind, they begin to search for interesting locations over the internet, plan to go to these landmarks, lakes, park, etc. as if they are asked to promote Ankara for the tourist.

The students having classes every day, almost all day, have to think about the project at all times. While having lunch, at the library, in the labs, in the cafeteria, walking from one location to the other, climbing the stairs, grabbing a coffee, he/she needs to watch his/her surrounding. The limited time frame of the project is carefully planned to force the student into wiring his brain to concentrate on the problem, to awaken his senses and to think about all the bits and pieces of spaces he encounters. (Fig. 1, Fig. 2)

Fig. 4: Students during discussions.

With this project, one who has not taken a photograph in the bathroom realizes how the light bounces repeatedly from the tiles vanishing towards the end of the room, the reflection on the mirror and all the other things he has not realized before. While having lunch, he stages a scene with a fork imitating Andre Kertesz (The Fork, 1928, Paris). He looks under the table which he sees from the top every day. He realizes what it is made up of, the joints, with the bolts and nuts. Under the table in front of him, he sees the shape created by the legs crossed.

Right at this time of struggle, the students are introduced to the writings of Georges Perec[11]. Classifications (of spaces) of Perec[12], easy to understand, calm the mind. Just like the second exercise, his text helps the students to think about the spaces with what they acquire, the things on the front, and at the back, and the area they cover. Each space tells a story, with no beginning, no end, in a timeless manner. These spaces neither have to be interesting, nor functional and in use. It just needs to be there. With this discovery (enlightenment), in relation to Modernist Photographs' subject matters, puts the student back in track.

On Ankara - Sources Of Inspiration - Research

The Street
Practical Exercises 3

... Observe the street, from time to time, with some concern for the system perhaps... Note down what you can see. Anything worthy of note going on. Do you know how to see what is worthy of note? Is there anything that strikes you?

Nothing strikes you. You don't know how to see.
(Perec 1997)

It is important to understand how much the students know and care for both architecture and the city of Ankara, before starting to work on the Modernist Photography project. Questions answered about architecture and the city, reveal a couple of things. The students have neither studied anything on architecture, nor they thought about the city they live in. Not knowing much about Ankara and its history of becoming the capital city of Turkey, they generally describe the city with the very stereotypes; cold, bland and grey regardless of all different qualities and characteristics it has. Almost none of them find the city to be inspiring.[13]

One of the most important goals of this project is to change the perception of the student towards the city he lives in and to turn the city into a muse for the creative person he aspires to be. At this stage of the project, it is about the subtraction rather than addition. The city has to be experienced one at a time and if one knows what to look for and how to look at, he can find pleasure in the most boring, uninteresting, mundane elements of everyday life, and see the beauty in it as seen in the Modernist examples.

Having said that, while for some students taking pictures of anything (mundane) in the Modernist style seems to be enough, for the others the photographs should reflect (the essence of) Modern Ankara. Those students usually research the Modernist buildings of Ankara with the intention of finding places to photograph, learn much more. In this search for the Modernist buildings, they discover a list of names of architects mostly coming from German-speaking countries[14] (such as Clemens Holzmeister, Ernst Egli, Bruno Taut, etc.), a list of

Turkish architects[15] following the Modernist style (Seyfi Arkan, Şevki Balmumcu, Sedat Hakkı Eldem, etc.) with some photographs of what they built including government buildings, academies/schools, factories, hospitals, banks, opera house, conservatory, museum buildings, train station, some examples of civil architecture, etc.

Every document reveals how a city has been built almost from nothing, Ataturk's vision of the capital city of the Republic of Turkey, together with its Modern elements, its philosophy, and values. By looking at these examples, mostly for the first time, these students realize how Ankara is built, once as the epitome of the Utopian city of Modernity and share this knowledge with their classmates during the discussions. (Fig. 3, Fig. 4)

Through this research, the students also realize the threat the Modern architecture is under and learn that most of what has been built within 1930s-1950s has already been demolished. For the students who would like to photograph the Modernist Ankara, there is very little left. The civil modern architecture had perished before others, with its wide streets, its houses with gardens, with its texture and identity questioning its place in the cities cultural heritage.

The city in the 21st century is under constant deconstruction and reconstruction. In this city where there are layers upon layers, it is difficult to differentiate between the new and old, layers of Modernity that are perishing, and harbingers of the future of Ankara. Regardless, this little research conducted is enough to spark curiosity for the city the students live in and helps them understand what belongs to the Modern Ankara, and what does not.[16]

Finalizing the project - Conclusion

When there is too much of everything, our spaces inhibited with what we have no control over, we need to stop and declutter. The overwhelming sensory stimuli create a world where human beings shut down their senses to survive the data flow. Modernist Photography project right at this time serves as a remedy. Removed from the chaos, politics, and depression, zooming in and out of the scenes, looking up and down, tilting the camera, adopting the bird's or the worm's eye views, the students are able to create a new world (through photography).

The project with this idea as one of the core points reminds us of the fundamental purpose of the preliminary course taught under and designed by Moholy-Nagy. The Modernist Photography project, in this case, corresponds with the course's objectives perfectly well. With Moholy-Nagy's words, the course, in this case, the project, will equip them with the basic elements of diverse knowledge. Their attitude to their surroundings will be clarified, their often numbed sensitivity wakened and sharpened, and their usefulness will be placed under the control of their own personality. Lessons will be given in observing the nature of color, surfaces and shapes in materials, in function, proportion and space. (Schmitz 2000)

For them, a city is an uninspiring place which is both under construction and in the process of being built (ignorant to the needs of its people) and being demolished and perishing together with its history. In search of the pure image, the students deconstruct the city and from the pieces of old and new, and they construct it again in the form of the Utopian image they envision.

During the project, like Moholy-Nagy, the students experimented with light and learned to paint with it. They discovered different ways of making photographs, and that photographs can be produced without the camera.[17] They experienced manipulation in a different manner with multiple layers, whether in the form of a montage or a college, or in the form of distortions happening as a result of optical illusions.[18] They experienced the world other than seen from the eye level. By visualizing everyday objects with a different perspective, using the acute angle, they learned to change the images with energy and drama like Rodchenko does in his photographs.[19]

At the end of the project, it is observed that the students started to think about the spaces in relation to human, in relation to other spaces - together with their functions, and understand how the form evolves around that function. They thought about the fuzzy line drawn between the public and the private spaces, and faced the barriers of Ankara (logistically and politically), preventing them from taking photos as they wish.[20]

When the products of the project collected together and exhibited, through the experiences connecting them to the Pioneers, the students, in the end, become motivated and encouraged to create, while the city they live in is turned into a muse within the city symphony playing before their eyes.

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Notes

[1] I.D. Bilkent University, Faculty of Art, Design and Architecture, Communication and Design Department, Ankara, Turkey - Course name: COMD 102 Visual Communication Design II

[2] Coming from a graphic design and photography background, I have, in the many years spent in Bilkent University, designed the foundation studio course based on the the teachings of basic design mixing the analog and the digital processes, borrowing ideas from and working together with other courses based on art and culture, history, literature, psychology, computer science and photography, and depend heavily on experimentation.

[3] The students are given 1 week for research and another week for photographing. After completing the research they are asked to do a presentation with the images inspires them for the project. The presentations are often interrupted with small lectures giving insight to what they are presenting, and discussions are held to further synthesize the analysis. The mini exhibition at the end of the project is a virtual one. Later at the end of the semester the collected pieces of photographs are edited and sorted once more, to be displayed in a larger exhibition together with all the sections of foundation studio.

[4] Johannes Itten gave still life assignment as a part of the preliminary course where he placed a white plate with two lemons and a book with a green cover for his students to draw. His students, insulted with the simplicity of the assignment, drew what they see. Itten then, cut the lemons and presented everyone a piece of it to eat with the remark `Have you portrayed substance of the lemon of your sketch?`. For Itten, one has to allow himself to be led by feelings in order to yield to an "inner vision". (The project given to the communication and design students ask the students to study the object without its substance - the aim of the assignment is to understand the form, function relationship through the senses of seeing, touching and in some cases smell, taste and hear.)

[5] "The eye of the camera" refers to the camera's ability to reflect the objective world rather than its ability to mimic the painterly image. The camera can see the object from various shots and angles, zoom in and out to give details.

[6] The students, when talking about their visual presentation, expresses their goals as to create "realistic and beautiful drawings". According to the most of them, when the object is analysed at its best, together with a skilled drawing, talks about the object at its best. The students who dwell on achieving this quality drawings, often are those who only draw the object from one angle as studies of still lifes, and pay no attention to the design decisions.

[7] What to include to the abstraction of the ad when drawing the objects with simple shapes and what to exclude is the most important decision the students should make. The "unnecessary details" excluded are often not details visually but are left out as the students think very little of them. The "unnecessary details" mentioned in the assignment refers to how much something is seen on the page. If an object, in front of a similar colour background, is subtle with low contrast, it can be an unnecessary detail. If the text is small enough to be perceived as one rectangle/line rather than a combination of different shapes in a line, to depict each letter with a simple shape is unnecessarily detailed. The exclusion of elements often shows how the students think about what he/she sees in the page.

[8] Some of the conclusions drawn from this assignment can be explained as follows: Almost always the product being advertised is depicted, sometimes very thoroughly with all its details, not necessarily because it is the focal point physically, but more as the subject matter of the ad. The human figure usually comes second together with animals, most of the times depicted stereotypically - regardless of what they look like in the ads. A circle for the head is almost always preferred over the other shapes, even if a triangle is formed with the wide forehead and a sharp chin. The forms are usually completed, even if parts of it is dissolved into the background. Text is always the least important, no matter how big it is, what kind of a message it is giving, whether bearing important information, or seen in the form of a logotype.

[9] There is another project that prepares the students for the Modernist Photo

Project and that is another photography project where the students try to define a visual technique from harmony and/or contrast groups which are categorized by Donis A. Dondis. With that project the students without being fully aware create Modernist images which at this point described by using the words "Formal Photography".

[10] The Bauhaus life and conditions in which they have produced work is discussed at the time the students are struggling with the project, and the insight motivates the students to create meticulous works. The students were especially struck by the memories of Gunta Stölzl told by her daughter, Monika Stadler. In a video recording, she talks about the times when the students were still hungry after meals, they would be pushing the tables away to dance the hunger away. The parties, the get-togethers, the social life inspires the students to make most of their times enjoying the process of creation as well as friendship they gain with the school.

[11] Georges Perec (1936 - 1982), a key member of OuLiPo, a writer, essayist, and filmmaker, famous for his constrained writings is introduced to class with chapters from his book "Life: A User's Manual" and "Species of Places and Other Stories".

[12] Perec classifies almost everything –from the Species of Spaces and Other Stories, the students are given an excerpt where the classification is inductive, where he starts with the page and there to the bed, continues with the bedroom, then the apartment, the apartment building, the street, the neighbourhood, the town, the countryside, the countries, Europe, the Old Continent, the New Continent, the World and finally the Universe.

[13] In order to understand how the student's react to, feel about Ankara and its architecture, together with some questions regarding photography, a survey has been conducted. 40 students from first years (prior to the project) and 40 students from second years (the ones who have completed the Modernist Photo project) have participated in the survey. The answers to the questions show that prior to the project 20% of the students describe the city with words other than gray, boring, cold, bland and 80% do not find Ankara inspiring as a city. After the project the students who describe the city with these stereotypical words show a visible decrease in number, and the reactions take a positive turn.

[14] As a result of Nazi regime, in the 1930s, most of them from German speaking countries, hundreds of exiles came to Turkey as a part of Ataturk's nation-building project. Clemens Holzmeister (1886- 1983), Ernst Arnold Egli (1893 - 1974), and Bruno Taut (1880 - 1938) being the prominent figures in architecture, helped design and build the new capital of Ankara. Holzmeister is best known with his complex for the Grand National Assembly of Turkey, Egli for his educational institutes and Taut again for his educational institutes.

[15] Seyfi Arkan (1903 - 1966), Şevki Balmumcu (1905 - 1982), Sedat Hakkı Eldem (1908 - 1988), the pioneers of nationalized modern architecture of Turkey played a major role in the creation of the modern city/nation. In most of the resources online the works of these prominent figures can be seen.

[16] There is a common misunderstanding of the word "Modern". It is often confused with contemporary, and the new high-rise apartments of Ankara, with their shinny surfaces, reminding them of what they have seen mostly in the examples of American Modernist Photography, are wrongfully described as modern. After the research, the students understand what really belong to the Modernist Ankara, and knowingly they use these contemporary elements (new high-rise apartments or others) to mimic and create their own versions of Modernist image.

[17] In order to mimic the photogram, scanners are used to achieve similar results. Constrained to a limited space (that is the flatbed's size) they used technology to create images similar to those that are created in the darkroom.

[18] Prior to the discussions about the methods of the Modernist Photographer, the students, without thinking too much about the time and the state of technology, perceived/accepted the photograms, the distortions, multiple layers, montages, and collages as by products of the digital world. The darkroom techniques and processes behind the images revealed the hard work that went into the production of such images, and resulted in astonishment, admiration, and motivation for the student.

[19] As the influential founder of Constructivism, the photographs of Alexander Rodchenko (1891 - 1956) often portrays the subject matter in strong graphic settings, diagonally stretched within the frame, bold and exaggerated. His ideas behind his technique underlines the philosophy behind the Modernist Image. "In order to educate man to a new longing, everyday familiar objects must be shown to him with totally unexpected perspectives and in unexpected situations. New objects should be depicted from different sides in order to provide a complete impression of the object." "The Art Story - Modern Art Insight," December 20, 2018, https://www.theartstory.org/artist-rodchenko-alexander.htm

[20] The Modern buildings of Ankara, being mostly the governmental buildings, or located within the premises of the military areas require the students to get permission to photograph which is not possible given the limited time.

Image Credits

Fig. 1: Aysenur Koca
Fig. 2: Beril Heral
Fig. 3: Mehmetcan Sarıkaya
Fig. 4: Mehmetcan Sarıkaya

Notes

Uta Pottgiesser

Professor Interior Architecture
University of Antwerp and Chair of Heritage & Technology at TU Delft

Uta Pottgiesser is Professor for Interior Architecture at the University of Antwerp (Belgium) and Chair of Heritage & Technology at TU Delft (The Netherlands). She has been Professor of Building Construction and Materials at the Detmold School of Architecture and Interior Architecture at Ostwestfalen-Lippe (OWL UAS) in Germany. After her diploma of architecture at Technical University Berlin (TU Berlin), she worked as practicing architect for office, administration and high-rise buildings and is today a member of the Berlin Chamber of Architects. From 1998-2004 she had been research assistant at Technical University Dresden (TU Dresden) and obtained her PhD (Dr.-Ing.) in the field of “Multi-layered Glass Constructions” in 2002.

She is active in vice-chair of DOCOMOMO Germany and member of DOCOMOMO International and since 2016 she chairs the International Specialist Committee of Technology (ISC-T). Numerous national and international research projects, teaching and research stays, including the Getty Conservation Institute (GCI) in Los Angeles. As a member in juries of architectural competitions and PhD commissions and as a reviewer and author of international journals and book publications, she has published in particular on constructive and heritage topics (https://www.uantwerpen.be/nl/personeel/uta-pottgiesser/publicaties/).

Notes

Session 2.2:
Technology

Prof. Dr.-Ing. Uta Pottgiesser

The contributions in this session present diverse approaches towards technology by dealing with different scales - from building material to element, building components and entire buildings – and concerns. At the same time it it shown how various building typologies and their specifities influence the technical and constructive evaluation and consecutive interventions while conserved, modified or re-used. Here, architects and conservation practitioners are facing the challenge to balance different priorities and aims, such as authenticity and significance versus functionality and comfort.

Zsuzsanna Böröcz contextualises “The Conservation Challenge of Architectural Glass in Modernist Churches” by presenting different cases in which “the architecture, interior furnishing and stained-glass windows are conceived as one formal, creative unity – the Gesamtkunstwerk.”

Eva Storgaard describes the particular development of “The Danish Window” and of the sliding door as key elements of modern residential architecture realised to create a stronger relation between interior and exterior by enlarging glass proportions and dematrialising the wall with individual details.

Patrícia Lourenço and Alexandra Alegre refer to ‘New Architecture’ in Use when mapping and comparing Portuguese Modern Secondary Schools from the 1930s and 1950/60s with regard to their structure, materiality and architectural attitude before and after renovation.

Finally Su Kardelen Erdoğan and Aslıhan Ünlü Tavil present a „Technological Value Concept for Modernist Residences in Turkey” dating from the 1950s, with which they aim to help analysing the relationship between technology and architecture in the modern period.

Notes

Zsuzsanna Böröcz

Docomomo Belgium, ISC Interior Design, KU Leuven
University of Antwerp

Zsuzsanna Böröcz is an art and architecture historian and obtained her Ph.D. with a study on postwar stained-glass windows (2004, KU Leuven). Since then she has had teaching assignments on art, design and architecture theory, worked on research projects, and has curated exhibitions. At the moment, she is a researcher affiliated to both the KU Leuven, Department of Architecture and the University of Antwerp, Faculty of Design Sciences. She is also Vice-President of DOCOMOMO Belgium and founding member and Co-Chair of the ISC-Interior Design of DOCOMOMO International. Her research topics are 19th- and 20th-century interior issues in the context of monument care and craftsmanship.

Fig. 1: Church of Our Lady, Zonnebeke (B), architect and stained glass windows by Huib Hoste, 1921.

Fig. 2: Church of Our Lady, Zonnebeke (B), architect and stained glass windows by Huib Hoste, 1921.

Fig. 3: Church of Our Lady, Zonnebeke (B), architect and stained glass windows by Huib Hoste, 1921.

The Conservation Challenge of Architectural Glass in Modernist Churches

Abstract

Traditionally, architectural stained glass is classified in the applied arts. This attribution belies its complex relation with architecture and culture and does not help the conservation of modernist architectural glass, especially in the context of reuse. During the Modern Movement, influenced by themes such as functionalism, innovation and democratization, church windows were the subject of vivid debate. Opinions were proposed ranging from 'an outdated visual medium' over 'the ideal pivot between contemporary and Christian art' to 'a true vehicle of artistic quality'. Meanwhile, countless modern stained glass windows were placed in modern churches and also in historic churches. In dealing with the problem of architectural glass, we argue that it is crucial to consider its fluid identity in relation to architecture, technicity, liturgy and society. Churches in Europe are among the most endangered cultural icons, in contrast, the field of architectural church glass enjoys relatively little interest. Architects and art historians are called upon to make inventories and assessments, while expertise remains limited. And the questions are many: How did modernist ideas on free expression reflect on these products of interdisciplinary collaboration? How does architectural glass deal with the functionality and rationality demanded by modernism and by liturgy, or by new use? How to assess value within the interdisciplinary context? Our contribution attempts to shed light on the multifaceted position of church glass windows within the architectural, artistic and social context of early Modernism. And through a number of cases, we wish to show how this approach can inform decisions on preservation and (re)use.

Full paper will be published in a separate publication series of DOCOMOMO Germany after the conference.

Notes

Eva Storgaard

Architect; PhD

Faculty of Design Sciences (FOW), University of Antwerp

Eva Storgaard graduated as an architect at The Royal Danish Academy of Fine Arts, Copenhagen (Denmark). She is finishing a Ph.D. on Danish Modernism and teaching (Master Programme Interior Architecture) at the Faculty of Design Sciences, University of Antwerp (Belgium). Recent articles include “Teaching Re-use Strategies for Modernist Buildings”, (Joelho. Journal of Architectural Culture, 2018), co-authored with Els De Vos and “Domestic Monumentality in the Interwar Years” (OASE, #101, 2018). She is a member of the Erasmus+/ RMB project whose aim is to develop an international master with a focus on the reuse of modernist buildings. Since 2018 she is secretary of the International Specialist Committee-Interior Design (ISC-ID) Docomomo International.

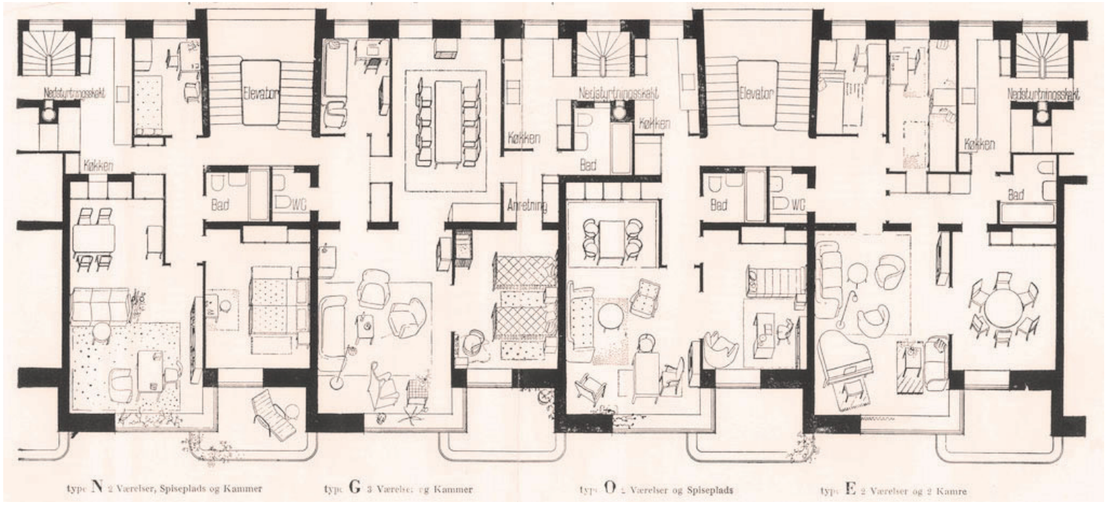

Fig. 1: Close-up of lay-out illustrating the bay balcony-window principle, Vestersøhus, Copenhagen, 1938 by architects Kay Fisker & C. F.

The Danish Window. Key Element of Modern Architecture, Site of new Themes and Techniques.

Abstract

Main qualities of modern architecture, from its advent in the 1920s to the late 1950s, revolved around the window. Crucial, inter-dependent developments in the fields of aesthetics, techniques and ideology influenced its properties. In this process, the window became much more than a mere source of light and fresh air. It developed into a modern architectural element of vital importance, carried out in variegated designs and types. This paper focusses on the particular development of the modern window in Denmark. In Denmark, architects attuned the concept of the window to native customs and regional, climatological specifics. The Danish climate is dominated by short days in winter and long days in summer. These climatological concerns, arguably, have led to an architectural focus on indoor living in the Danish dwelling culture in which the window has played an important role. This focus, related to specific Nordic conditions as well as to restrict building regulations, availability and preference of material and technical progress, is combined with a more general, modernist interest in the physical and visual connection between interior and exterior and enhanced the development of a number of window types that have become distinctive for Danish Modern. This paper examines two prominent window types in the history of Danish Modernism: the bay-balcony window and the sliding glass door. It describes the influence of modern building methods and techniques on the development of these two examples of modern window types in Denmark as well as its architectural importance as a mediator between inside and outside in the architecture of Danish dwelling.

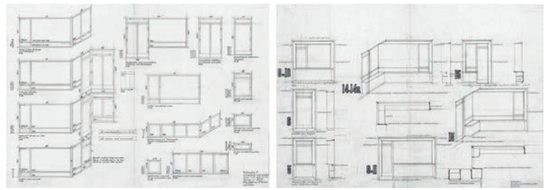

Fig. 2: Details of the bay balcony-window, Vestersøhus, Copenhagen, 1938 by architects Kay Fisker & C. F.

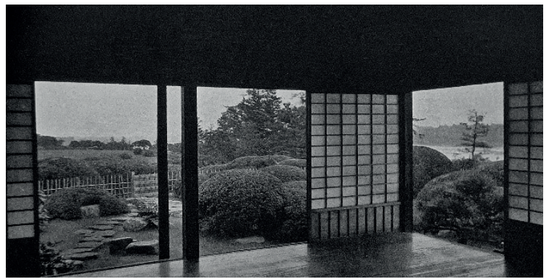

Fig. 3: Japanese paper screens that slide in grooves.

Fig. 4 and 5: Bay-balcony-window, Vestersøhus, 1935-39 by architects Kaj Fisker and C. F. Møller. Vestersøhus, Copenhagen, seen from the inside.

Introduction

Main qualities of modern architecture, from its advent in the 1920s to the late 1950s, revolved around the window. Crucial, interdependent developments in the fields of aesthetics, techniques and ideology influenced its properties. In this process the window became much more than mere source of light and fresh air. It developed into a modern architectural element of vital importance, carried out in variegated designs and types. This paper examines two prominent window types in the history of Danish Modernism: the bay-balcony window and the sliding glass door. By comparing two cooperative housing complex developments during the 1930-50s and three single family houses from the 1950s, it describes the influence of modern building methods and techniques on the development of these modern window types in Denmark as well as its architectural importance as mediator between inside and outside in the architecture of Danish dwelling. In doing so, it points to the importance of a continuous re-reading of the history of modernism in order to reveals its rich properties. In addition, it illustrates how this re-reading can evolve from the analysis of the objects themselves.

The Bay-Balcony Window: Gardens in the air

The corner window appears as the earliest modern window type in the history of modern windows in Denmark. It was the Danish architect's attempt to adapt to the modern idiom, one could argue, defying imposed, traditional building regulations which made the full exploration of for instance the modern ribbon window unattainable. The cultivation of the corner window in Danish modern architecture unfolded furthermore in the many cooperative housing complex developments during the 1930-50s, more specifically in the creation of the so-called bay-balcony-window.

In general, the housing complexes from this period showcased improvement on all levels, from the interior to city planning. Apartments became bigger and were provided with central heating systems as well as kitchen and bathroom facilities. This higher level of comfort was combined with special attention to the configuration of space and maximum daylight permeation. As in many other modern architectural cultures the awareness of the importance of daylight and fresh air for health and for well-being had also become widely spread and commonly recognized in Denmark as indispensable properties in the architectural realm of dwelling. From the 1920s onwards many sites and apartment layouts were designed with optimal daylight conditions in mind. The need for fresh air in the apartment furthermore led to the implementation of balconies. In the beginning, the balcony first and foremost served as a source of ventilation, storage and as a fire escape. A radical change in the building regulations in 1929 enhanced though a new conception of the balcony – and its windows. The installation of central heating systems and rubbish chutes made the obligatory secondary staircase of traditional apartment complexes more or less redundant, now only operational as a fire escape. At this point, its main function as a delivery channel of coal and removal of garbage disappeared, the secondary staircase had become an expensive space-consuming element. Under the pressure of architects and developers who started to advocate for alternative fire escapes, the fire-fighting service adjusted its fire precaution regulations. From 1929 onwards it was allowed to replace the secondary staircase with balconies.[2]

The ordinary balcony transformed hereafter into a novel combination of balcony and corner window. In this constellation, a new architectu-

Fig. 6 and 7: Bay-balcony-window scenery. Solparken, 1949-50 by architect Sven Eske Kristensen, Balcony greenery coming from both inside and outside the balcony.

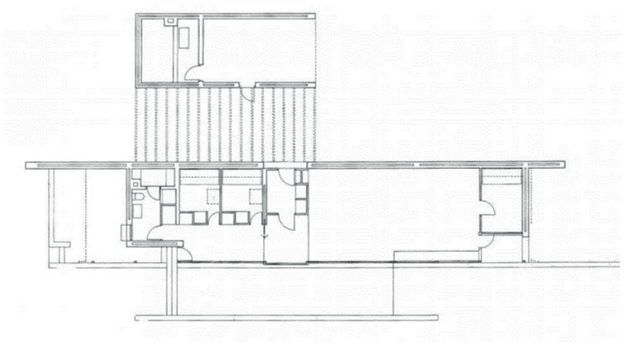

Fig. 8: Plan of Utzon's own house. Interior view glazed facade.

ral element emerged: the bay-balcony-window.[2]
Basically, the bay-balcony-window implies a balcony that projects from the facade and recesses towards the interior at the same time. This basic principle is combined with an adjoining window that turns the corner (the principle of the corner window), into the depth of the balcony, thereby creating the effect of a bay window.
This new formation of corner window and balcony merged the inside and the outside of apartments in a new, dynamic way. It contributed to fresh spatial approaches that influenced the use of the interior as well as the exterior. The joining of window and corner window created a larger window surface, which offered additional light and sight from a side angle. The depth of the balcony, now reaching deeper inwards the building, generated moreover a recreational outdoor space that soon became one of the most valuable assets in housing projects to both architects and inhabitants.
The bay-balcony-window was a beloved architectural theme until the late 1950s. It nurtured a tradition of balcony gardens - literally gardens in the air - that still influences the use and architecture of modern housing complexes of today.

The sliding glass door: dematerialization of the wall

The interplay between inside and outside, architecture and nature, evolved internationally and especially during the after-war years. In Denmark, this architectural theme had developed gradually through the development of the corner window and the bay-balcony-window. The corner window brought more light and sight into the interior; the bay-balcony-window and its counterpart, the balcony, enabled close contact with the outdoor environment by the creation of 'gardens in the air'. While this contact was limited to the surface of the balcony, the installation of a glass sliding door made it possible to establish a physical, straightforward relation between the interior and the exterior. The strive for still stronger relation between interior and exterior was made possible because of the technical improvement of the sliding glass door, which became increasingly popular during the 1950s.
The invention of the sliding door principle dates from the ancient Greece and Rome. At Pompeii remains of Roman sliding door tracks have been found. In Japan sliding panels, composed of a wooden structure and filled with rice paper or cloth, were essential parts of the traditional architecture. The sliding glass door became popular in Great Britain around the turn of the 19th century and again from the 1920s onwards, when Le Corbusier and Pierre Jeanneret improved the sliding glass door on a technical level with the so-called châssis coulissants, or sliding frames.[3] Since then the sliding glass door became a recurrent architectural element in modern architecture.
The elaborated use of the sliding glass door in modern houses by architect Richard Neutra (California) and in the Case Study Houses (Los Angeles) attracted the architect's attention worldwide from the mid-1930s onwards.[4]
In Denmark, numerous single-family houses of high architectural quality were built during the 1950s. Closer scrutiny reveals that what makes many of these houses distinct, is their implementation of the sliding glass door and the approach to the inside outside relation. Due to the invention of double-glazed windows this interrelation intensified during the 1950s. It caused an architectural revolution, one could argue: For the first time, large glass panes could make part of architecture without causing problems with heat loss. In Denmark, the glass brand Thermopane dominated the market.[5]
According to the architectural historian Tobias Faber, the architecture

Fig. 9: Sliding door tracks at the entrance of a Roman shop in Pompeii.

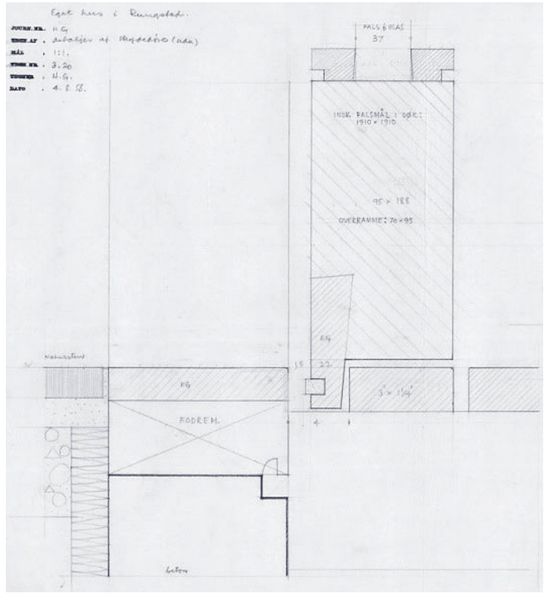

Fig. 10: Details of sliding glass door: customized timber frames and Thermopane™ double glazing.

in this period was inspired by various sources such as the traditional Japanese building culture, Frank Lloyd Wright's spatial approach, the wooden architecture known from the architects Greene, Maybeck and from the Bay-region, and the rigorous, formal and structural architecture of Mies van der Rohe, its open plan and serene play between inside and outside spaces.[6]

Faber draws the attention to three single family houses designed by Jørn Utzon (Hellebæk, 1952), Halldor Gunnlögsson (Rungsted, 1955) and Erik Christian Sørensen (Ordrup, 1955/56). An examination of these houses uncovers indeed both Japanese and American influences. Besides, they share the sliding glass door as a central architectural feature and as a means of mediating between inside and outside. The houses of Utzon, Gunnlögsson and Sørensen demonstrate three different plan solutions and spatial approaches as well as three different ways of applying the sliding glass door.

Jørn Utzon, own House, Hellebæk, 1952

The private house of Jørn Utzon in Hellebæk is one of the very first houses in Denmark in which large, consecutive windows in the outer wall were installed and the traditional composition of a wall with (window) openings was left behind. This had everything to do with the improvement and availability of double glazed windows and as a consequence the elimination of the problem with heat loss during cold periods.

The house in Hellebæk is conceived along a closed longitudinal wall. This wall forms the backbone of the house and an open plan which is oriented outwards by virtue of large windows. These windows form as it were a glazed wall and enhance in the first place a strong visual connection with the surrounding forest, which is deliberately left uncultivated.

The meeting between nature and the domestic sphere is mediated by the use of 'genuine' materials such as wood and yellow brickwork. At the level of the living room, Utzon placed a large sliding glass door which established a physical outdoor connection. The timber frame of the sliding glass door is, in contrast to for instance Neutra's slim steel frames, sturdy, pronounced and present; the transition between inside and outside is explicit and accentuated by a difference in level and an adjoining outdoor plateau, a beloved theme in the architecture of Utzon.[8] In the Hellebæk house, the open sliding glass door becomes a window place, a place to sit, with one part of your body inside and another outside.[9]

Utzon built this house himself, together with four local craftsmen who agreed to work without plans. All architectural decisions were made along the building process, always though following a modular system. Based on some experiments with mock-ups (real size structures), Utzon was able to define the orientation and the embedding of the house.[10] The interior piece of raised floor at the level of the sliding glass door suggests that Utzon probably did not master its detailing of entirely.

Erik Christian Sørensen, Smutvej, Ordrup, 1954

The physical interior-exterior relation became of chief interest for numerous architects during the 1950s onwards. The theme was taken up again by the architect Erik Christian Sørensen when he, in 1954, designed a house for himself and his family in Ordrup. In contrast to the house of Utzon which resonated with the local conditions in terms of natural vegetation, materials and crafts, the house of Sørensen reflects a fascination of the

Fig. 11: Rear facade. Entangled with nature.

Fig. 12: Window place.

Japanese building culture and another sort of link between inside and outside. As in the project of Utzon, it is the appearance of the sliding glass door that enables the physical connection. Two main concepts seem to be principal in Sørensen's house: one that focuses on the purification of a particular construction principle, and another that is revolving around the dialogue between inside and outside 'rooms'.

Contrary to the traditional building method in Denmark, which during the 1950s still was based on construction in brickwork, Sørensen built a house that featured several characteristic Japanese architectural elements. The entire construction is for instance built up by structural elements in timber, which follow a strict modular system, clearly displaying the loadbearing and the load parts, posts and beams. In this system, in which walls are serving mainly as enclosures and partitions, the principle enabled Sørensen to employ large window parts without obstructing the spectacle of the structure. Although this house introduced an unusual building method, it is crafted with precision and a high standards of detail.[11]

Another recognizable Japanese trait concentrates on the close relation between house and garden. In Japan, this interrelation is omnipresent in the traditional architectural culture where "no house is considered complete without a garden of some sort"[12] and where "the garden is an almost integral part of the house".[13] Obviously, the availability of double-glazed windows and sliding doors has been crucial for the concept of the house in Ordup. Without, it would presumably not have been feasible to build in terms of heating loss issues.

As in the Japanese culture, the garden is conceived as a number of different, cultivated 'garden rooms', visually corresponding with adjoining inside spaces. At the level of the living room, Sørensen placed a large sliding glass door which, when open, articulates a particular relation between the two 'rooms' that reminds of settings found in the traditional Japanese dwelling culture. So is this adjoining garden room for instance demarcated by a low stone fence, arranged with a few eye-catching plants and a step stone path. These elements attempt to bind, according to Japanese building custom, house and garden into an inseparable whole. In that respect, the modern sliding glass door emphasizes this crucial aspect.[14]

Halldor Gunnlögsson, Rungsted Strandvej, 1956

Architect Halldor Gunnlögsson was, just like his contemporaries Jørn Utzon and Erik Christian Sørensen, preoccupied by the indoor-outdoor theme. In his private house from 1959 Gunnlögsson challenges the boundaries between interior and exterior in a way which, one could say, dissolves the wall. This achievement had, on the one hand, to do with the applied building method – a loadbearing structure of timber columns, beams a flat roof construction – and on the other hand, it was evoked by the omnipresence of large windows and sliding glass doors.

The house is situated between two large, enclosed blind brick walls towards the boundary lines. In between these walls the house unfolds. It is defined by two horizontal plates, by floor, a flat roof, and glazed walls towards north-west and south-east, respectively facing the sound and the garden.

Each of the glazed facades contains a large, square glass sliding door, positioned exactly opposite each other. This configuration establishes a movement across the house, connecting the front and the back, the garden and the sound both visually and physically with each other.

This particular gesture makes the house of Gunnlögsson different than the houses of Utzon and Sørensen, which both operated towards

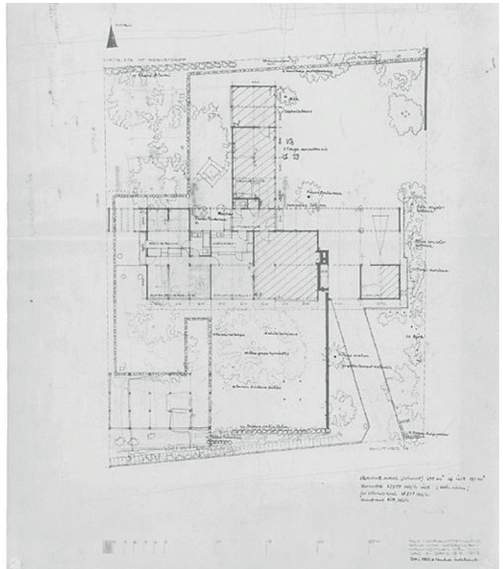

Fig. 13: Glazed facade seen from the 'garden room'.

one outward direction, with only one transparent glass facade at a time.

The design of the sliding glass doors is moreover stressing the interior-exterior relation by implying a top-hung sliding mechanism, which enables a seamless transition by having no floor bound rail. The continuous flow between inside and outside is additionally emphasized by adjoining exterior verandas, which follow the same level as the interior floor.

According to Gunnlögsson's wife and the critic Tobias Faber, Mies van der Rohe and traditional Japanese architecture had been important sources of inspiration for the design of this Rungsted house.[15]

And indeed, having this knowledge in mind, there are obvious links with Rohe's Barcelona Pavilion (Barcelona, Spain, 1929) and Farnsworth House (Illinois, USA, 1951) which demonstrate an alike approach: a structural modular based principle, the employment of few building components to attain a clearly defined space – and an orchestrated, somewhat distant physical relation with the surrounding landscape. This relation connotes the Japanese interior-exterior tradition which is determined by the Japanese building tradition in which houses stand on small foundation stones, one stone for each underpinning and are as a result lifted from the ground, hence detached. In the house of Gunnlögsson the construction is lifted as well, hovering above the sloping topography beneath it. Although the house keeps a sort of distance to the landscape, it also engages with it because of its seamless transition areas and its almost infinite views.[16] Other resemblances with the Japanese building culture is furthermore visible in the adjoining verandas and overhanging eaves, in its modular structure, the customized, built-in furniture and the meticulous detailing and of course in the use of sliding doors in order to entangle inside and outside.

Collectively these three examples mirror the architectural freedom that architects achieved during the 1950s. The war years, characterized by intellectual and physical immobility, economic inertia and lack of construction resources, were now replaced with a period in which knowledge of architectural tendencies and developments from abroad could nurture. True to tradition, the Danes absorbed external influences by attuning them to personal preferences and approaches. Utzon, Sørensen and Gunnlögsson all alluded the modernist and Japanese interplay between inside and outside, but in different and personal ways. Utzon by emphasising the embeddedness of material matter, Sørensen by highlighting the aesthetic and cultivated connection between indoor and outdoor rooms, and Gunnlögsson through attention to transparency and permeability.

Despite these rather variegated outcomes of the same theme, all of them are characterized by a profound concern for customized details and high standards of crafts, an aspect which became explicit in the production of their sliding glass doors. Moreover, these examples demonstrate a search for what one could call the dematerialization of the wall.

Coda

Throughout the development of the Danish modern window, from the 1920s to the end of the 1950s, the quest of the interrelation between interior and exterior, between domesticity and nature, has been a continuous architectural incitement. The corner window, the bay-balcony window and the sliding glass door were all different answers to the same concern, each the result of a (slightly) changed context and new possibilities due to technical

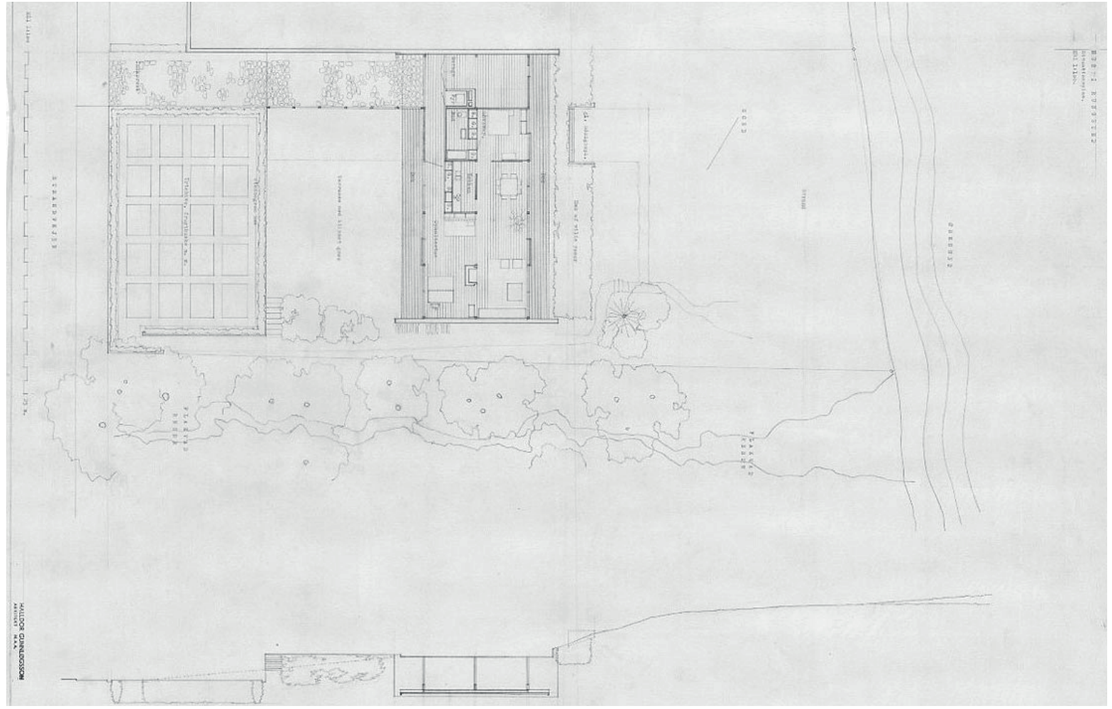

Fig. 14: Longitudinal section and (site) plan.

improvements in terms of thermal glass and building techniques. While the history of the ribbon window is well-known and its feature became emblematic of modern architecture, the particularity of the Danish corner window and the balcony bay-window are examples that show the richness of other idioms. These examples are founded on both modern innovations, empirical research and traditional building cultures which continued to flourish due to political and economic conditions in Denmark.

Conditioned by imposed building regulations and the limited access to modern materials like concrete, iron and steel Danish architects searched for alternative modern expressions. In this sense, the Danish corner window and balcony bay-window can be seen as local answers to the concept of the ribbon window.

This appropriation of international modern ideas, approaches and idioms was moreover expressed in the discussed examples of the sliding glass door. Here as well, the interpretation of the modern flow between inside and outside became a particular Danish expression, alluding to both modern, Japanese and Danish building cultures.

After the 1950s, the building production in Denmark became increasingly industrialized, this also included the window. Since then, the character of the window changed. Plate glass was exchanged by float glass and the customized, handcrafted window frame was taken over by mass-produced frames. In this process, some inherent qualities were lost, which initially had made the Danish modern window distinct. On the other hand, the industrialization of windows and the continuous search for the improvement of daylight and fresh air prompted another type of window: the roof window Velux™ [17]. From the 1940s, Velux windows gradually should become commonly used in Danish architecture. But that is yet another story.

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Fig. 16: Interior views displaying the connection with the exterior.

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[17] Abreviation of ventilation and lux (latin for light)

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Notes

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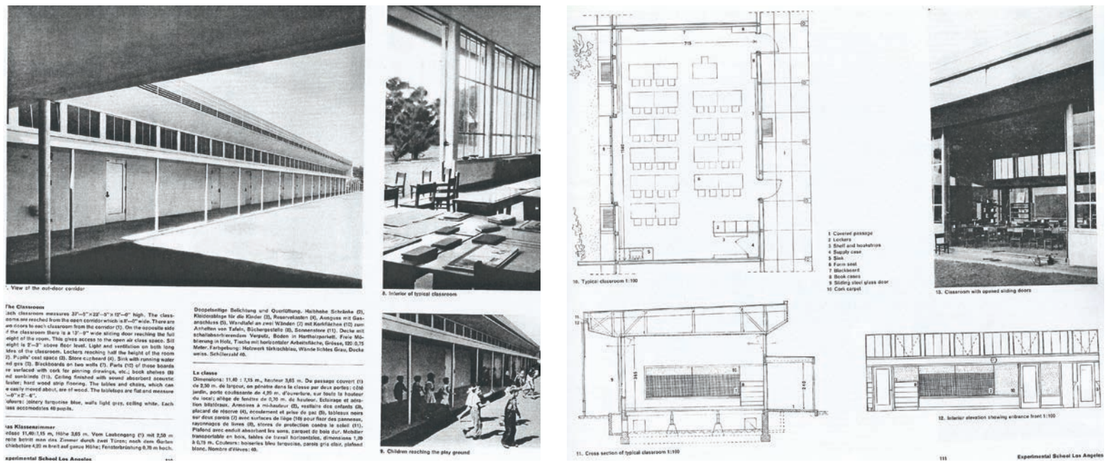


Fig. 1: Corona Avenue Elementary School (1934-35). Richard Neutra.

‘New Architecture’ in Use. Mapping Portuguese Modern Secondary Schools.

Abstract

Attempting to reflect upon the direction of modern architecture of the 1930’s, in his book “The New Architecture. 1930-1940” published in 1939, Alfred Roth selected twenty buildings as modern examples. Among them, two schools fulfilled the predefined criteria of what he called New Architecture. Beyond the establishment of a strong social purpose, these schools expressed a clear spatial structure, and incorporated new contributions provided by science, technics, economy, or art. In Portugal, secondary schools featured three main production moments relatively to the modern period: (i) built in the 1930s, (ii/iii) during the 1950s/60s, according to different approaches: standardized solutions and expressing the vocabulary of the late modern period. This article presents and discusses one example of each period, taking into account their ability to preserve their modern identity. The initial and contemporary technical, environmental and functional requirements are compared. Their impact is evaluated, as well as their effect on the modern identity, of interior atmospheres, spatial clarity, and the expression of materials. These schools combine a modern spatial structure with an expressive use of materials, taking advantage of the best solar orientation, natural ventilation, and construction solutions. This exploration of modern schools in use, enabled us to revisit Roth’s criteria and the relevance of New Architecture today. This research is developed under the scope of two research projects: ASAP_EHC aims at mapping the Portuguese school buildings from the 20th century, while RMB deals with the sustainable re-use of modernist buildings. The combined results of the two projects provided the means for insightful readings of the adaptive capacity of modern school buildings to assimilate various technical, environmental, and legal requirements, while keeping their modern identity.

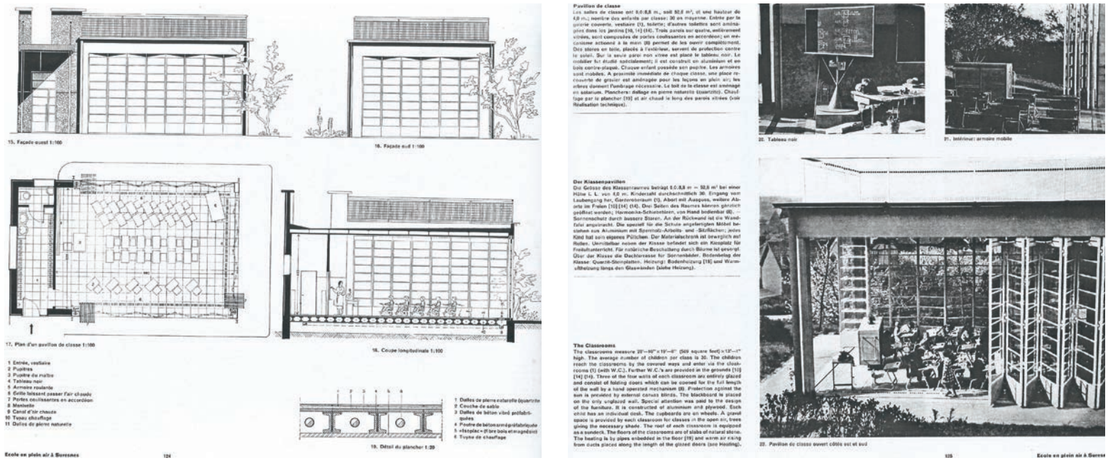


Fig. 2: Open-air School in Suresnes (1935-36).

Introduction

Attempting to reflect upon the direction of modern architecture of the 1930's, in his book "The New Architecture. 1930-1940" published in 1939, Alfred Roth selected twenty buildings as modern examples. Among them, two schools fulfilled the predefined criteria of what he called New Architecture. The first one, Corona Avenue Elementary School (1934-35) was designed by Richard Neutra for the extension of an existing school in the Bell District of Los Angeles (Fig. 1). This small and experimental school was designed to meet new educational purposes and to test new methods based on the concepts of New Education. It was an opportunity for Neutra to apply his design strategies for school buildings; combining a new design for internal space of the classroom (larger area, better natural lighting conditions, flexible use and in contact with the outdoor space) with new effective economical and technical solutions, based on lighter structures and materials, standardized solutions, and prefabricated components. (Fig. 1)

The Open-air School in Suresnes (1935-36) by Eugène Beaudouin and Marcel Lods, near Paris, was designed in order to serve a strong social purpose in receiving exclusively unhealthy children who needed constant medical supervision (Fig. 2). It was identified as a representative building due to its open plan layout and to the attention given to the incorporation of industrial manufacturing and standardized elements in the construction process. Eight independent classroom pavilions connected with covered walkways ensured the direct contact with outdoor conditions, natural ventilation and lighting of the internal spaces. The steel frame structure and industrial steel-sash window walls guaranteed the required flexibility, openness and transparency of the classroom pavilion. Entirely glazed folding doors can be opened for the full length of three of the four classrooms' walls allowing the fulfilment of hygienic and educational requirements that demanded permanent contact with the outdoor spaces.

According to Roth, together with other international examples, these schools represented the state of development of the New Architecture at the time and constituted a contribution to its empirical validation.

This article presents and discusses two schools from different times of the Modern Movement in Portugal: the first one, from the beginning of the 1930s, when new building materials and techniques, especially reinforced concrete, gained importance and became popular in Portugal; and the second, from the 1960s, when standardized prefabricated construction systems were introduced, rationalizing the planning and costs of building production systems in public schools. It is an opportunity to identify similarities and divergences of the Portuguese case with the international scenario, recognizing its specificities and autonomy.

The analysis of the renovation processes of these schools, integrated into a national programme of modernization of the secondary public schools, provides an opportunity to reflect and discuss on the adaptive capacity of modernist school buildings to assimilate contemporary requirements. With this aim, a post-occupancy study was undertaken, under the scope of two research projects.[1] The combined results of the two projects provided the means for insightful readings of the adaptive capacity of modern school buildings to assimilate various technical, environmental, and legal requirements while keeping their modern identity. The architects responsible for the schools' renovation projects were interviewed, reflecting retrospectively on the projects' main goals, design strategies, constraints and outcomes. The two

Fig. .3: Diogo de Gouveia Secondary School, Beja, Portugal (1930-36), Cristino da Silva architect. Main façade.

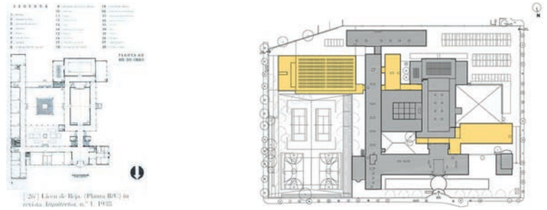


Fig. 4: Diogo de Gouveia Secondary School, Plan of the ground floor.
Fig. 5: Renovation project (grey: original buildings, yellow: new buildings).

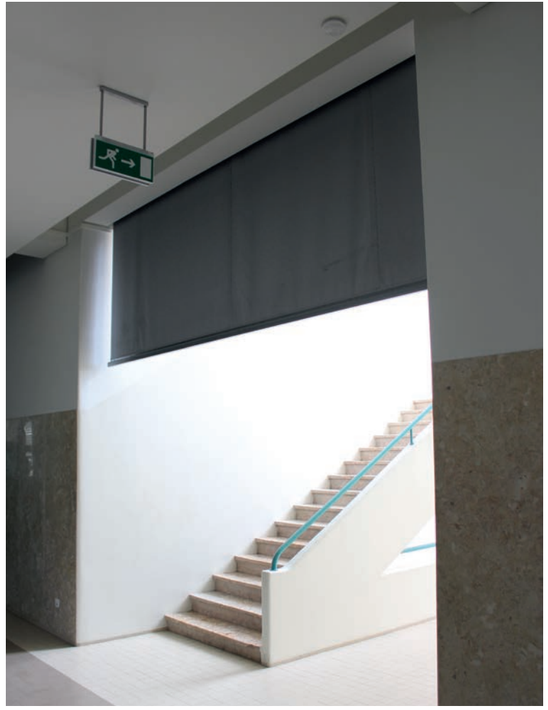


Fig. 6: Diogo de Gouveia Secondary School, Fireproof curtain.

case studies are presented according to the following structure: characterization of their original modern approach, identification of the modern values that should be preserved and their vulnerabilities, aims of intervention and design strategies followed by architectural teams.
The exploration of modern schools in use, enabled us also to.apply Roth's criteria and to revisit the relevance of New Architecture today.

Diogo de Gouveeia Secondary School (1930-36)

Modernist Approach of the 1930s: Diogo de Gouveia Secondary School (1930-36), designed by Cristino da Silva, followed the architectural principles of the beginning of the Modern Movement in Portugal when reinforced concrete allowed the exploration of a modernist vocabulary of form, based on pure, articulated volumes with smooth surfaces and flat roofs, without decorative elements, expressing rigorous geometry and clarity. (Fig. 3)
The structure consisted mostly of load-bearing walls of stone masonry, ceramic brick or concrete block masonry for interior walls, supporting reinforced-concrete slabs. Stairs were also built in reinforced concrete.
Different functional and autonomous volumes, hierarchically and rationally organized, along with the inclusion of new sports facilities, characterize the school building design. The interiors followed a traditional layout arrangement: distribution of the classrooms throughout long and large circulation galleries and a rigid division of spaces, based on the module of the classroom. Open plan layouts and physical permeability between indoor and outdoor space from international examples were avoided. Without questioning or proposing a new educational programme, the new approach was focused on the improvement of physical and comfort conditions as well as hygienic requirements. Specific care was given to lighting and ventilation of internal spaces, with the resource to large windows, but neither bilateral lighting nor cross-ventilation of internal spaces were considered. (Fig. 4)
Some of the design solutions proved to be inadequate, either regarding local climatic conditions, such as the large south-facing glazed façades, leading to overheating or due to technical flaws in the early application of reinforced concrete systems, such as leaks in flat roofs in rainy winters.
Between 2008 and 2011, the architects Pedro Botelho and Rosário Beija carried out the refurbishment of the school. In 2013, the original school building was classified as Building of Public Interest.

The Renovation: preserving Purpose, Meaning and Form
Values to preserve: During the design process, a meticulous historical analysis was undertaken, based on archive research and physical evidence, to identify the building's values and significance. The architects highlighted:
- The modern vocabulary of the façades, in particular, wooden window frames;
- Reinforced concrete terraces;
- Internal layout;
- Original atmosphere of the buildings (space, light and shadow).

Vulnerabilities:
- Poor reinforced concrete system of the terraces;
- Functional and construction obsolescence of the school;
- Poor condition of the reinforced concrete in a water tank (a modern

Fig. 7: Diogo de Gouveia Secondary School, Terrace.

Fig. 8: Diogo de Gouveia Secondary School, New Ceiling in the classroom.

icon of the school).

Aims of Intervention:
These were determined based on the preparatory work and aligned with contemporary pedagogical models:
- Compliance with new educational demands and open school to the community;
- Architectural requalification of the school space;
- Improve the technical performance of the buildings (fire safety and energy performance, accessibility, comfort, interior environment);
- Cost control solutions.

Design Strategies: The renovation was based on the restoration of the original state and character of the pre-existing school, in its spatial, formal and construction features, while respecting the original functional layout and typology. A set of photographs taken by Mário Novais[2] (1899-1967) were a valuable resource to apprehend the original atmosphere of the buildings (space, light and shadow).
The new buildings – extension – were placed and dimensioned so that they would respect the original typology and geometry and not overpower the existing ones (Fig. 5). This articulation with the existing buildings facilitated the functional and safety conditions for opening the school to the community in post-curricular periods. Major technical equipment was placed in the new blocks, avoiding overloading the original structures. In addition, the improvement of accessibility conditions for people with disabilities was accomplished by placing ramps and elevators in the new buildings.
The architects considered a major challenge to comply with fire safety and energy performance regulations while keeping the integrity of the building. Fire safety compliance implied the subdivision of the existing classroom block - with almost 100 meters in length - into isolated units, which would change significantly the buildings' spatial character. Instead, a smoke and fireproof curtain were adopted, that can be lowered to isolate areas in case of fire, avoiding the permanent partition of the space (Fig. 6).
The original structural walls, in stone and ceramic brick masonry, which supported reinforced-concrete slabs and reinforced concrete beams, were in good conditions, requiring only minor repairs. The exception was the water tank, which was demolished, given the degradation of the reinforced concrete, due to corrosion. The terraces were also in a very bad condition, reflecting the lack of technological knowledge in the early days of reinforced-concrete construction in Portugal. The slabs with 8 cm thickness, facing a rainwater infiltration problem, had been unsuccessfully repaired several times since their construction. This refurbishment was an opportunity to rebuild the terraces as they were designed in the 1930's while correcting the drainage problems with the use of upgraded solutions (Fig. 7).
For HVAC and networks infrastructures, a non-intrusive solution was chosen: suspended cable trays and ceilings were installed to avoid the destruction of the existing walls and floors (Fig, 8). The drawbacks, underlined by the users during school visits, are the visual impact and use of space, reducing the classrooms free area and volume.
One of the main important aspects of the refurbishment of modern buildings is the preservation of the original window frames due to their aesthetical value. However, original wooden or metallic frames with single pane do not fulfill the current comfort and energy performance criteria, raising issues related to their replacement by new ones. The original character of these buildings often depends on the design

Fig. 9: Diogo de Gouveia Secondary School, Window.

of the original window frames. In this case, the original wooden window frames had been replaced by new ones, so the option was the redesign of the windows according to their original design and material (wood) but supporting a double-glazed system (Fig. 9 and 10).

Santa Maria Secondary School (1968-1972)

Modernist Approach of the 1960s: Santa Maria Secondary School (1968-1972) was initially designed by the architect Maria do Carmo Matos and expressed a new design philosophy and methodology to increase school construction efficiency, effective cost and planning control procedures. The school was organized according to the pavilion type allowing a rational distribution of the school program among the pavilions: communal pavilion, classroom's pavilions, laboratories' pavilion and gym. Besides its potential for future growth through repetition, pavilion building typology proved to be cost-effective in reducing design and construction costs and enabled safety and comfort requirements to be met. This typology allowed a reduction of the total floor area (by the elimination of corridors and the design of multifunctional spaces) and simultaneously an increase of learning area per student, leading to a further cost economy. At the same time, it was easily adaptable to different plot configurations, means of access and exposure conditions.

The construction system used industrialized and rationalized building systems and components: reinforced concrete structure, with exposed beams and columns, metallic cover, plaster walls and wood window frames. The widespread use of reinforced concrete structures and the improvement of technical expertise of the time led to the use of normalized materials and components.

The structure was based on a standard set of reinforced-concrete porticos, stabilized and fixed by prefabricated floor slabs elements. The space between porticos was calculated from the dimension of the classroom, that similarly to early periods, was still the main modular element of space in school buildings. The concrete structural elements were left exposed in both the interior and the exterior of the building, which had a significant impact on its' appearance. Over-dimensioned, they were used as an icon of the modern structure, gaining a more expressionist character. The spaces between these structural concrete porticos were filled with wood window frames, with standardized design and dimensions. The interior non-structural partition walls were built with extruded brick, plastered and white painted on the exterior. The roof was built using asbestos-cement panels supported directly on the reinforced-concrete structural elements.

The pavilions were connected by covered walkways used as convivial and recreational spaces. Over time, new pavilions were added to the original ones, without following the early design premises. Also, new covered walkways and roofs were added to protect passages between the pavilions.

With a strong social purpose, this school belongs to the late modern period in Portugal, expressing a pragmatic, rational and cost-effective solution in line with the demands of a society marked by economic, social, demographic and cultural changes. The main strategy was based on standardization of procedures helping reducing design and construction costs while producing a range of educational environments that supported teaching and learning. The standardization and adoption of prefabricated modular components reduced significantly the construction timespan, allowing a fast coverage of the national

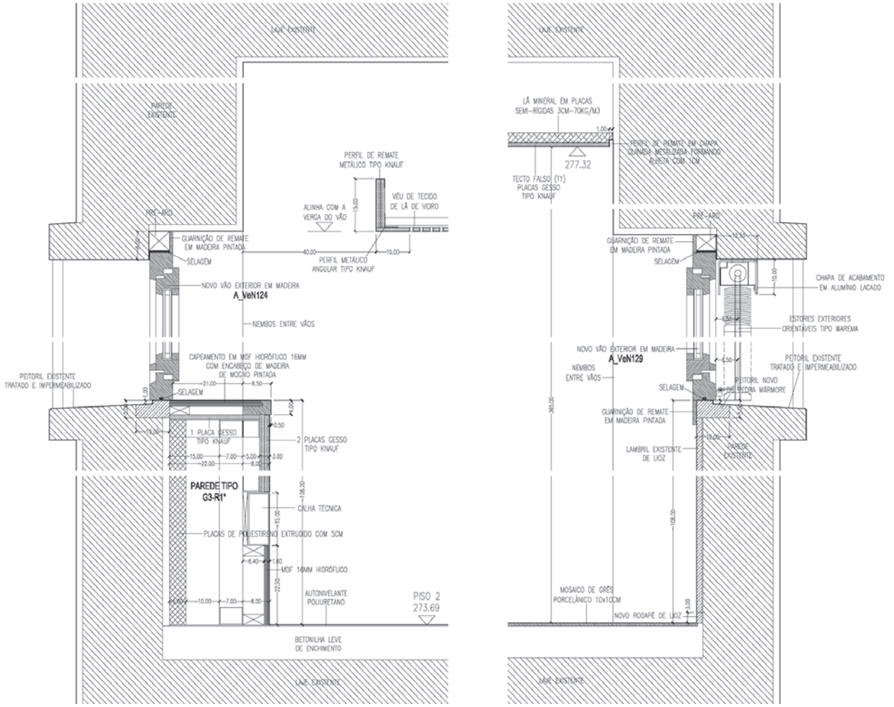


Fig. 10: Diogo de Gouveia Secondary School, , Detail.

territory with these public schools.
In 2008-2009 the architects João Appleton and Isabel Domingos were responsible for the renovation project design of Santa Maria Secondary School.

Renovating and requalifying the School:
Values to preserve: The initial stage comprehended document analysis, historical research, and on-site survey in order to understand the (modern) values to be preserved:
- The character of the school based on pavilion spatial organization connected by covered walkways;
- The architectural principles of the original design related to the pavilion typology, façades design, window wood framework and use of materials;
- The construction and structural system (exposed reinforced concrete);
- The interior atmosphere on the classroom pavilions;
- Use of outdoor spaces as the main recreational and meeting spaces.

Vulnerabilities:
- Pavilion typology: compliance with current educational and comfort demands, namely thermal comfort;
- Mischaracterized group of buildings due to the adding of temporary buildings and spaces over time;
- Poor construction system: roofs, concrete elements and components;
- Reduced dimension of the plot for the proposed functional programme;
- Lack of spatial flexibility: functional spaces, space fluidity and continuity, rationalization of the space through minimal areas/ratios.

Aims of Intervention:
- Compliance with new educational demands and open school to the community;
- Architectural requalification of the school space (spatial significance and coherence);
- Improve the technical performance of the buildings (safety, salubrity, accessibility, comfort, interior environment);
- Cost control solutions.

Design Strategies: The core design principle was to value the original design, returning to the original coherence of their spaces (pavilions and walkways) by the demolition of the provisory constructions. For the extension, new pavilions were designed to house the new programmatic needs: library, auditorium, labs and covered sports field, promoting its use to the community.
The architects started by understanding the architectural logic of the original design rules and architectural vocabulary (typology, geometry, the design of façades, materials) and used that knowledge to guide the architectural renovation design principles. Understand the logic of the original construction and structural system and maintain its principles in the refurbishment of the existing buildings, but also adopt the same principles and elements in the design of the new extensions. The adoption of simple solutions and low-cost materials (tiles, micro-perforated concrete, shale tiles in the roof, birch wood).

Outdoor Spaces: The design of a sequence of outdoor spaces (yards) and an exterior covered pathway that links all the pavilions, provided a cohesive solution to deal with the existent fragmented layout. This pathway is used as a ‘learning street’ since it links a

Fig. 11: Santa Maria Secondary School, Original pavillions.

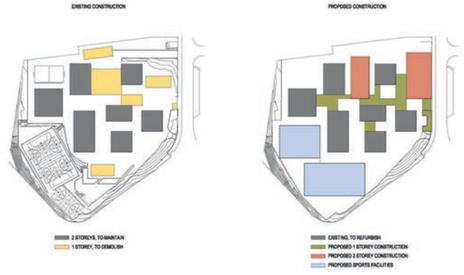


Fig. 12: Santa Maria Secondary School, Left: Original plan, Right: renovation project.

Fig. 13: Santa Maria Secondary School, Covered pathways.

variety of school spaces: entrance, classrooms pavilions, reprography, student's room, canteen, yards, etc. The outdoor spaces initial concept was enhanced by the refurbishment design strategy, that upgraded them as educational and recreational spaces. Exposed concrete in walkways, outdoor furniture, bright and brown tiles on benches and micro concrete floors create the outdoor atmosphere of the yards and covered spaces.
The original adoption of standardized and prefabricated of systems and components were also used in the renovation of the school by using prefabricated concrete elements such as outdoor furniture, steps, or the ping pong table

Building – Roof, Façades and Interiors: Slightly inclined pyramids built with a wood structure, with thermal and acoustic insulation board and coated with shale screens applied in tiling, together with roof windows for lighting and ventilation design the rooftops. The redesign of the rooftop of the pavilions enabled the incorporation of technical infrastructures (air conditioning, ventilation system and exhaustion of smokes), concealed in the roof void. The technical equipment can work autonomously for each pavilion or together through a computerized Building Management System (BMS). The repetition of the same roof design solution gave a sense of unity to the school complex, and this aspect is particularly relevant for its urban image since the school plot is extremely visible due to the topography of the city.

The design of the original façades was maintained, regarding its components and final design expression. Because it was not possible to increase the thickness of external walls without compromising the external image and the internal area, the commonly adopted thermal insulation layer was not considered. The exposed concrete elements of the façades (beams, pillars, external grid) were repaired with the application of a restorative mortar and the structural elements were repaired and reinforced with steel plates. The external walls were covered with a cement hydraulic plaster. The original window frames were in a very good condition so the option was to maintain them, protected by a coating of varnish. Instead of redesigning the windows to incorporate double glass, the original window system was preserved by using laminated single glass with a solar reflective film for protecting the classrooms thermal environment.

The original interior atmosphere of the classrooms was marked by the light coming from the large windows. The slabs were reinforced and the floor and ceiling coatings were replaced by micro-cement. The classrooms' new suspended ceiling incorporates lighting, thermal and acoustic insulation. Inside the classrooms, new wood cabinets along the walls and below the windows hide the HVAC ducts and the electrical room switchboard panel. The materials of the classrooms were also used in the design of other schools' functional areas.

Final conclusions

According to Alfred Roth, a multidisciplinary approach with contributions from the most varied sources provided by science, technics, economy, art, etc. was essential for the foundations of New Architecture. The international examples selected for the book stressed on the comprehension of their social purpose and use value, on their relation and respect for the natural conditions of their surroundings, and on the clear expression of the consciousness of the time. They all expressed a clear spatial structure, a

Fig. 14: Santa Maria Secondary School, Covered pathways.

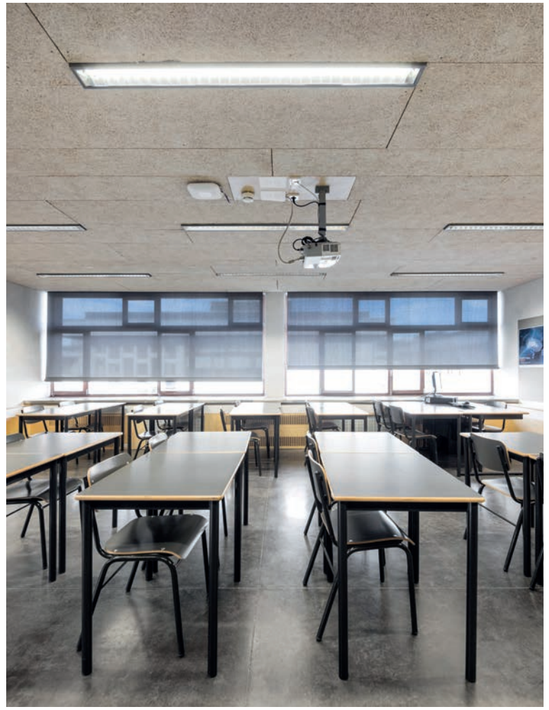
Fig. 16: Santa Maria Secondary School, Covered pathways., Classroom Pavilion.

Fig. 15: Santa Maria Secondary School, Covered pathways., Roof design solution.

clear constructive execution, and a proper application of materials, that constituted the premises for the beauty of a building. The Portuguese cases should be analyzed within the political, social-economical and cultural context of the time. As pointed out by Roth, the selected examples came from stable and democratic countries that highly invested in free development of individual and of society (for instance in education), together with great technical advances. In the early years of the Portuguese dictatorship (Estado Novo), the process of school building design didn't assimilate the new educational and architectural modern principles the same way as they happened in other European countries and in the USA. The social and educational reform movement that occurred internationally didn't find expression in Portugal, in spite of the improvement that was given to the promotion of more active learning, to the practice of physical education, and to the improvement of health conditions in secondary schools. Despite the development of a new aesthetic based on the potentialities of the reinforced concrete system, achieved in Diogo de Gouveia Secondary School, the country lacked an effective cultural and educational reform which,together with a lack of investment in technological knowledge, prevented the development of new spatialities, expressing the new social consciousness referred by Roth. While Roth's new Architecture expressed mostly the value of use, Portuguese schools were still strongly representing institutional values and power. Perhaps this consciousness is much more present in the schools designed during the 1960s, in Portugal. These schools constituted simple and pragmatic buildings, strongly focused on relating design with pedagogical principles and use value. They expressed a pragmatic, rational and cost-effective solution in line with the demands of a society marked by economic, social, demographic and cultural changes. The main strategy was based on standardization of construction helping reducing construction costs while producing a range of educational environments that supported a new educational paradigm. In this respect, the Portuguese secondary school's pavilion model, developed in the '60s, came closer to the international scenario presented by Roth.

The renovation project of both schools was an opportunity to emphasize and to enhance the modern values of the original design, in particular in what matters to a clear spatial structure (DGSS) and on a clear constructive execution (SMSS). The two cases described have some similar concerns and strategies regarding the approach to the refurbishment of the schools; understanding and restoring the buildings' authenticity and value at different levels: functional and spatial, technological and tectonic, programmatic and cultural.

Regarding the modern design features, preserving façade elements and windows, including the qualities of lighting, using similar and compatible construction materials and maintaining the functional layout were common goals to both cases. Although adopting different strategies, the window framing design was maintained while glazing was replaced to comply with current thermal comfort standards. Considering the initial project goals and programmatic guidelines were also common concerns in both cases. The school from the early modern period, built in masonry walls, had more generous areas, while in the later modern period, the rationalization principles along with the adoption of thinner concrete walls and reduced areas and floor to ceiling height, increased the impact of the new infrastructures in the design solutions and in the daily re-use of the schools. In both cases, the lack of quality of the technological solutions regarding the original use of reinforced concrete had a significant impact on the



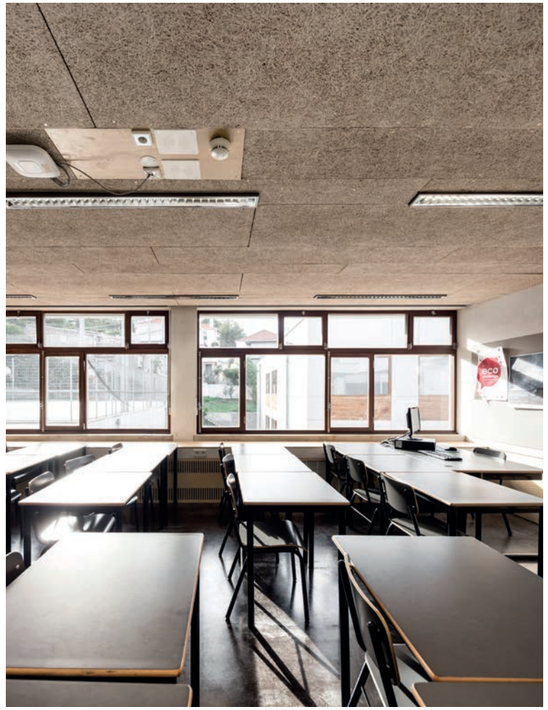


Fig. 17 and 18: Santa Maria Secondary School, Covered pathways, Classrooms.

project decisions.
The holistic approach of the contemporary architects is in line with Alfred Roth criteria for New Architecture: valuing the expression of a clear spatial structure, and considering the modern values and contributions in multiple dimensions: scientific, technological, economic and artistic, along with a strong social purpose.

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Notes

[1] The research project Atlas of School Architecture in Portugal_Education, Heritage, Challenges (ASAP_EHC) aims at mapping the Portuguese school buildings from the 20th century, while RMB deals with the sustainable re-use of modernist buildings

[2] Mário Novais was a famous Portuguese photographer from Lisbon, specialized in photography of art-works and architecture.

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Notes

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Building	Structural system	core scheme
	Building elements	wall window stair floor roof
	External members	balcony shading canopy

Table 1: Classification of building systems.

Criteria	aesthetic	form shape
	function	usage move
	materiality	finishing structural

Table 2: Criteria and sub-criteria for technological value.

		
Name of the Building	**IETT Mass Housing**	**Cem Apartment**
Architect	Leyla Turgut and Berkok İlkünsal	Ferhan Sencer
Year	1962	1974
Code	IST1	IST2

Table 3: Case buildings from Istanbul

		
Name of the Building	**Basin Mass Housing**	**Cinnah 19**
Architect	Vedat Dalokay and Nejat Tekelioğlu	Nejat Ersin
Year	1960	1959
Code	IST3	IST4

Table 4: Case buildings from Ankara

Technological Value Concept for Modernist Residences in Turkey

Abstract

Technology, one of the keys of architecture, has had a major role in Modern Movement, which represents a dramatic shift in construction, away from the traditional forms of the past and toward a new design era. We argue that by focusing on the evolution of technology within Modernism, the identification and documentation of the modern buildings due to their technological aspects are significant for conservation approaches as well as for the protection of the 20th-century heritage. This paper focuses on an approach, which defines the “technological value” of modern buildings in order to be aware of the building components and materiality of the modern period. Furthermore, analyzing the best practices of the Modern Movement facilitates the representation of the technological diversity and developments by discussing the relationship between the technology and Modern Movement. In this context, residential buildings designed in the 1950s reflecting Turkish modern life are selected as cases to emphasize the technological value by the determined criteria.

Aesthetic

		Form (3D)	Shape (2D)
Structural System	Core	curtain wall	--
		circular	--
		cornered	--
	Scheme	--	integrated
		--	discrete
Building Elements	Wall	--	opaque
		--	transparent
	Window	--	horizontal
		--	vertical
		--	other
	Stair	fliers	--
		double-return stairs	--
		winding	--
	Floor	beamed	--
		beamless	--
	Roof	terrace	--
		hipped	--
External Members	Balcony	loggia	--
		cantilever	--
	Shading	--	vertical
		--	horizontal
	Canopy	grid	--
		solid	--

Table 5: Relationship between aesthetic and building elements

Function

		Usage	Move
Structural System	Core	--	--
	Scheme	--	--
Building Elements	Wall	--	--
	Window	lighting	fixed
		ventilation	moving
		aesthetic	opaque
	Stair	--	--
	Floor	--	--
	Roof	usable	--
		unusable	--
External Members	Balcony	--	--
	Shading	--	fixed
		--	moving
	Canopy	--	--

Table 6: Relationship between function and building elements

Introduction

Modern Movement is a school that approves functional design in a simplistic way with existing building technology and materiality, which differentiates from previous movements. Architecture, which was to be the highest form of artistic expression, was based on a new vision of artistic abstraction, a new understanding of spatial qualities, utilized new technology, structural innovations and new materials in the modern era (Macdonald, 2009). This new technology, which includes original craftsmanship values of the modern buildings designed with experimental and innovative approaches, is one of the modern architecture perspectives. Yet, the technical challenges that arise when conserving 20th-century places undoubtedly pose the most difficulties and where conflicts arise with the application of the current methodology of preservation (Macdonald, 2009). For this reason, the identification and documentation of the unique technical features are important for all interventions to avoid these conflicts. In other words, when dealing with the conservation of Modern Movement buildings, it is crucial to take into account the “technological value” of the heritage. The aim of the study is to help to comprehend the evolution of the building technology from the modern period to present. In this context, a systematic classification, which defines the construction and materiality associated with the technological values in relationship with modern residential buildings, was introduced. The technological value of a modern building was identified by considering the determined criteria, assigned for the components such as structural system, interior / exterior building elements. The approach intends to protect significant modern buildings, extend their life with proper conservation and reuse by taking account of their technological values.

Modern movement in Turkey between 1950-1980

Modern Movement in architecture showed itself within the Republican era in Turkey and was shaped within local perspectives from 1930 to 1950 by being affected by the cultural background of the country. However, in the 1950s, international influence started to show effects in architecture because of globalization in every field after World War II (Hasol, 2017). The period between 1950 and 1980 includes various dynamics when Turkish architecture was influenced by international publications and design principles. Many architects were affected by the ideas and works of the world-famous architects such as Rohe, Wright, Aalto, Le Corbusier and Scharoun (Cumhuriyet,). On the other hand, the period of the 1950s was a new era, by the beginning of the multi-party system in Turkey and by the government's new economic solutions. Construction materials to be produced in the new period were limited to cement, brick, tile and glass because of lack of raw material while other materials such as steel, aluminum, aerated concrete have been imported and new possibilities were provided in the building design and construction techniques (Hasol, 2017). Also, being one of the most significant developments, reinforced concrete systems took the place of traditional building systems by eliminating the limitations of past construction techniques. These new construction technologies provided lightness, fineness and pure geometry in design that define the modern style (Omay Polat, 2018). During the 1960s, Modernism began to lose its influence in the world, while it had been continuing in Turkey. In this period, the number of multi-story residential buildings, which were designed by the inspiration of Western Modern, had increased after the new building-zoning law was introduced in Turkey. In the 1970s, since the increase in population was very high in the cities, private entrepreneurs and municipalities

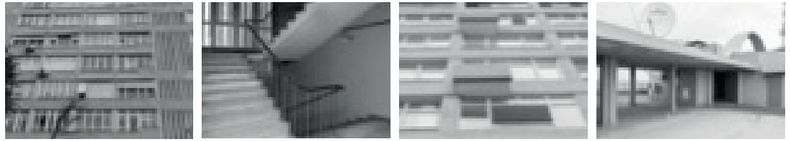

Fig. 1: Aesthetical values of IST1 a) integrated wall-structure, opaque wall b) double return stair c) cantilever balcony d) terrace roof.

Fig. 2: Aesthetical values of IST2 a) horizontal window b) winding c) vertical shading.

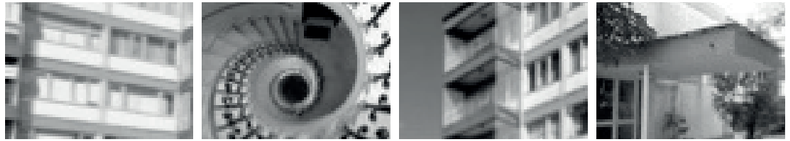

Fig. 3: Aesthetical values of ANK1 a) integrated wall-structure b) winding c) cantilever balcony d) solid canopy.

Fig. 4: Aesthetical values of ANK2 a) curtain wall, integrated wall- structure, b) transparent wall, loggia balcony c) terrace roof d) solid canopy.

facilitated mass housing production. Housing demand had led to new construction techniques having some qualified examples as well as monotonous designs.

The Modern Movement could be observed in big cities such as Ankara and Istanbul. Turkey's capital Ankara, being a newly developed city and the center of the newly established country, had to reflect the modern lifestyle shaped by new urban planning and design approaches. Since Istanbul had become a city of culture, economy and trade, the population of immigrants was gradually increased which facilitated new housing production to meet housing demands of the population. Since residential buildings reflect the spirit of Turkish Modernism at that time, in this study the relationship between technological value and residential buildings in Ankara and Istanbul were analyzed in order to show how the technological aspects influence the Turkish Modernism.

Modern buildings and technology

Technology is defined as the contribution of scientific knowledge to facilitate human life, to produce practical solutions, and to change the human environment. Technology that defined art and science practices in the 17th century, when contemporary thought was shaped by Renaissance and Reform movements, has begun to include a broader range of tools, processes, ideas and knowledge along with mechanization in the 20th century. The knowledge has developed in areas such as communication applications, military and medical technology, food production and as well as building construction, which is an important step in changing design concepts and possibilities (Britannica, 2018).

These developments have strengthened the relationship between architecture and technology and led to the emergence of more up-to-date construction techniques. By providing these developments, the technology shapes and activates the new design concepts that formed a close connection with this period so-called "Modern". In the modernist period, innovative materials and experimental studies on construction techniques have yielded original results; the structure has been interpreted in various forms (Özorhon, 2009). Modern architecture is visually identified by aesthetics and materiality, with the latter being particularly important to the authenticity of the design. Material use and detailing completes the visual language and disposition intended by the architect; materials complement the form, engage users, and add depth and richness to architecture.

Technological value approach in modern heritage

The Modern Movement, which had continued for a long time, began to lose its influence towards the end of the 1970s (Özkaban, 2014). With the closure of the modern period, a new era was opened for architects in the necessity of questioning the concept of inheritance and preserving the works of the former period (Omay Polat and Can, 2008]. The enhancement of new conservation values for the changing architectural heritage has become the main problem. Especially, technological value has necessitated the redefinition because of its strong effect on the modern period.

Technological value approach aims to help to analyze the relationship between technology and architecture in the modern period. The investigation of past architectural techniques in the context of the defined technological value intends to increase the awareness of the modern architectural heritage and to guide the intervention works on construction techniques. While the technological value by Docomomo

Fig. 5: Function value of IST1 a) windows for lighting and ventilation b) usable terrace.

Fig. 6: Function value of IST2 a) windows for lighting and ventilation b) moving shading device.

Fig. 7: Function value of ANK1 a) windows for lighting and ventilation b) fixed shading devices.

Fig. 8: Function value of ANK2 a) windows for lighting and ventilation and aesthetic b) usable terrace c) fixed shading devices.

International is to try new material and construction techniques and to achieve different aesthetic solutions, ICOMOS has defined in the Madrid Declaration that technological value has material and techniques specific to the period and reveals experimental details. As for the UNESCO World Heritage Committee gave importance to originality and paid attention to whether it has special construction techniques in the design and production process (Özkaban, 2014). To sum up, the universally determined technological value examines the modernization process in terms of the development of construction techniques and shows the provided possibilities of building technology in architecture. In this context “technological value” is redefined as:

"The set of values that contribute to the design value in form and aesthetics, having the local and temporal authenticity on the scale of the building elements, using the widespread and materials that are affected from the developed building technology and having unique details."

With the help of the new definition, the technological value can be determined by the technical characteristics of building systems, which are sets of the sub-systems such as construction system, materials, interior details. Besides, it is synthesized with modern attitudes and based on the original solutions with the possibilities and resources of the country. For this reason, a base consisting of building components was formed in order to determine the technological value (Tab. 1).
The features of the building elements reflecting modern aspects constitute the criteria of the technological value. These features are gathered under the primary criteria of aesthetic, function and materiality in accordance with the definition and relationship between technology and architecture in the modern period. These primary criteria are very influential on the establishment of formal, spatial or functional concepts in architecture with the introduction of new building materials and construction techniques (Verpoest, 1990) (Tab. 2). Each criterion has sub-criteria to determine different building components/elements reflecting the modern characteristics of the building components.

Four residential buildings in Ankara and Istanbul are taken as case buildings for this study and the technological values of the structural system; building elements and external members of each building are analyzed in terms of aesthetic, functional and materiality criteria. IETT Mass Housing (Hizli, 2006] and Cem Apartment (Erdogan and Ünlü Tavil, 2017) were selected from Istanbul, Basın Mass Housing (Ünlü Tavil, 2017) and Cinnah 19 (Uz, 2017) were selected from Ankara for case buildings (Tab. 3-4).

Aesthetic – Technological Value

Aesthetics can be an important link between technology development, design and architecture because the visual impact of architectural elements depends on color, light, material, texture, shape, form, size as well as their interrelationship. While creating the space in every scale such as cities, a building, addressing the aesthetical elements is the main criterion of architecture. Aesthetic has been provided with different approaches throughout history and new movements and insights have shaped its perception and definition. In this study, the form and shape of the building sub-systems are accepted as the aesthetical features reflecting the modernist era.

Materiality

			Finishing	Structural
Structural System	Core		--	reinforced concrete
	Scheme		--	--
Building Elements	Wall		mosaic	--
			plaster + paint	--
			marble	--
	Window		--	metal
			--	wooden
	Stair	Core	--	reinforced concrete
		Flooring	marble	--
			mosaic	--
	Floor	Railing	--	concrete
			--	metal
	Roof		--	--
External Members	Balcony	Flooring	mosaic	--
			marble	--
		Parapet	--	brick
			--	metal
	Shading		wooden	--
			metal	--
			hollow brick	--
	Canopy		--	concrete

Table 7: Relationship between materiality and building components / elements

It is seen that the formal properties and planar variety of the structural system, building elements and external members of the building reflect the relationship between the aesthetic and technological value that is categorized as form and shape of the building sub-system (Tab. 5). The form of the structural core, stair type, roof form, location of balcony and canopy volume can be associated with the mass of the building in aesthetical considerations. Geometrical scheme of the structure, layout of walls and windows, and location of shading devices are the elements that have a significant effect on the planar design of the building.
The case buildings are investigated according to their building elements' characters by following the proposed approach. The buildings, IST1 (Fig. 1), IST2 (Fig. 2), ANK1 (Fig. 3) and ANK2 (Fig. 4) have their own unique components in terms of aesthetical value as seen in the figures.

Function – Technological Value

Since the architectural design increases its value as it is used and lived, the functional features of the building systems are crucial in terms of the authenticity of the design. In the 20th century, different spatial and structural approaches to the function of building elements in architecture were thought in accordance with technological developments. These approaches can be considered as bringing into use the roof terrace, spreading of usage of sun shading elements and designing window openings for various purposes. For this reason, the function criterion is chosen to determine technological value. The use of window and roof, the movement of window frame and shading are sub-criteria to define this criterion (Tab. 6).
While analyzing the case buildings, IST1 (Fig. 5), IST2 (Fig. 6), ANK1 (Fig. 7) and ANK2 (Fig. 8), in terms of function criterion, it is seen that there are similar results

Materiality – Technological Value

One of the significant building technology developments in the 20th century was the innovation in material production and their usage. These new materials started to be chosen in building element design and innovative solutions were developed for their application at that time. The advancement of material technology provided different building masses and element details that were unique results of modern designs by improving the visual and spatial character of the building. The structural system and finishing materials are taken into consideration in order to evaluate the technological value for materiality criterion (Tab. 7). Finishing materials of wall, flooring, stair steps, balcony flooring and shading devices are the last building components, which gave the modern appearance to the building. Structural materials of skeleton system, window frame, railing and structure of stair, balcony parapet and canopy specify the modern language on the buildings.
Case buildings, IST1 (Fig. 9), IST2 (Fig. 10), ANK1 (Fig. 11) and ANK2 (Fig. 12), are examined and documented to show which materials are commonly used in constructions of residential buildings.

Conclusion

The proposed technological value approach aims to contribute to protect the potentials of modern heritage buildings and to show the relationship between technology and architecture in the modern era. The definition of the approach, its relationship with the building elements and the assessment system are created to support the

Fig. 9: Materiality value of IST1 a) concrete skeleton b) concrete stair c) brick balcony parapetcony d) terrace roof.

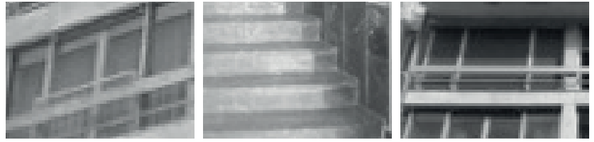

Fig. 10: Materiality value of IST2 a) metal frames b) marble steps c) wooden shading.

Fig. 11: Materiality value of ANK1 a) wooden frames b) marble steps c) concrete canopy.

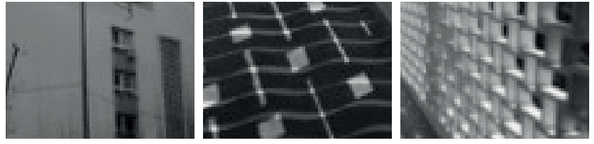

Fig. 12: Materiality value of ANK2 a) plaser+paint finishing b) mosaic balcony flooring c) hollow brick shading.

technological value of the buildings. For this purpose, case buildings are analyzed with the identified criteria aesthetic (Tab. 8), function (Tab. 9) and materiality (Tab. 10), and their technological values were revealed. As a result of the study, most matches were in the ANK2 as the total results of 3 sub-criteria. Respectively; ANK1, IST1 and IST2 followed ANK2 by reflecting the modern era in terms of building technology. About the aesthetical value, shading devices and canopy are sub-criterions that made a difference between the cases. While looking to the function value results, it is seen that usable terrace was widely designed. Concrete, metal, marble and mosaic identified as the most popular materials in terms of materiality.

To conclude, the Modern Movement has a neglected heritage in terms of documentation, preservation, maintenance, repair and re-use potential both in Turkey and in the world. New methods for these problems are being discussed and the technological value approach presented is one of these solutions. In accordance with the method, an assessment system was applied to case buildings by matching criterion-building element-relationship with the goal to find more common features of technological value. According to the results of the proposed approach, it is expected to protect and pay attention to unique and local construction techniques of buildings designed under the influence of Modernism in Turkey in case of any intervention such as protection, rehabilitation or re-use studies.

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		Aesthetic		Case Building			
System	Criteria	Form	Shape	IST1	IST2	ANK1	ANK2
Structural System	Core	curtain wall	--				+
		circular	--				
		cornered	--	+	+	+	
	Scheme	--	integrated	+	+	+	+
		--	discrete				
Building Elements	Wall	--	opaque	+		+	
		--	transparent		+		+
	Window	--	horizontal		+		
		--	vertical	+			
		--	other			+	+
	Stair	fliers	--				
		d.-r. stairs	--	+			
		winding	--		+	+	+
	Floor	beamed	--				
		beamless	--	+			
	Roof	terrace	--	+	+	+	+
		hipped	--				
External Members	Balcony	loggia	--		+		+
		cantilever	--	+		+	
	Shading	--	vertical				
		--	horizontal		+	+	+
	Canopy	grid	--				
		solid	--			+	+

Table 8: Determination of aesthetical value.

		Function		Case Building			
System	Criteria	Usage	Move	IST1	IST2	ANK1	ANK2
Structural System	Core	--	--				
	Scheme	--	--				
Building Elements	Wall	--	--				
	Window	lighting		+	+	+	+
		ventilation		+	+	+	+
		aesthetic		+			
		--	fixed				
		--	moving	+	+	+	+
	Stair	--	--				
	Floor	--	--				
	Roof	usable	--	+			+
		unusable	--		+	+	
External Members	Balcony	--	--				
	Shading	--	fixed			+	+
		--	moving		+		
	Canopy	--	--				

Table 9: Determination of functional value.

			Materiality		Case Building			
System	Criteria		Finishing	Structural	IST1	IST2	ANK1	ANK2
Structural System	Core		--	r. concrete	+	+	+	+
	Scheme		--	--				
Building Elements	Wall		mosaic	--				
			pl. + paint	--	+		+	+
			marble	--		+		
	Window		--	metal		+		
			--	wooden	+		+	+
	Stair	Core	--	r. concrete	+	+	+	+
		Flooring	marble	--		+	+	
			mosaic	--	+			+
		Railing	--	concrete				
			--	metal	+	+	+	+
	Flooring		mosaic	--				+
			marble	--		+	+	
			vinyl tile	--				
	Roof		--	--	+			
External Members	Balcony	Flooring	mosaic	--				+
			marble	--	+		+	
		Parapet	--	brick				
			--	metal	+		+	+
	Shading		wooden	--				
			metal	--				+
			h. brick	--			+	
	Canopy		--	concrete			+	+

Table 9: Determination of material value.

Turkey, Balıkesir, 2017
UZ, Funda, personal photograph archive, Database of Re-use of Modernist Buildings Project, ITU, 2017.
ARTAN, Su Kardelen, UNLU TAVIL, Aslıhan, "Cem Apartment", Türkiye Mimarlığında Modernizmin Yerel Açı lımları XIV, Docomomo Turkey, Zonguldak, 2018.
UNLU TAVIL, Aslıhan, personal photograph archive, 2017.

Image Credits

Fig. 1: Hizli, 2006
Fig. 2: Erdogan and Ünlü Tavil, 2017
Fig. 3: Ünlü Tavil, 2017
Fig. 4: Uz, 2017
Fig. 5: Hizli, 2006
Fig. 6: Erdogan and Ünlü Tavil, 2017
Fig. 7: Ünlü Tavil, 2017
Fig. 8: Uz, 2017
Fig. 9: Hizli, 2006
Fig. 10: Erdogan and Ünlü Tavil, 2017
Fig. 11: Ünlü Tavil, 2017
Fig. 12: Uz, 2017

Notes

Monika Marktgraf

Architect
Stiftung Bauhaus Dessau

Monika Markgraf ist wissenschaftliche Mitarbeiterin für Bauforschung und Denkmalpflege bei der Stiftung Bauhaus Dessau. Davor war sie als Architektin mit den Arbeitsschwerpunkten Bauforschung und Sanierung von denkmalgeschützten Bauten tätig. Heute gilt ihr besonderes Interesse der Erforschung von Architektur und Geschichte der Bauhausbauten sowie der Erhaltung und Pflege dieser Bauten. Denkmalpflege der Moderne sowie Aufbau und Pflege eines Bauforschungsarchivs sind weitere Kernpunkte ihrer Tätigkeit. Ihre Arbeitsergebnisse werden regelmäßig publiziert und sie ist Mitglied bei ICOMOS und DOCOMOMO.

Notes

Session 2.3:
Bildung und Register

Monika Marktgraf

Diese Session schlägt einen kleinen Bogen von der konkreten Auseinandersetzung mit dem Erbe des Bauhauses durch die praktische Umsetzung und Weiterentwicklung bis hin zur Erkundung von Architekten und Projekten, die im Schatten des Bauhauses und weiterer herausragender Protagonisten der Moderne wenig oder verkürzt beachtet wurden. Ein aktuelles ungarisches Forschungsprojekt untersucht konkrete Möglichkeiten, pädagogische Ansätze des Bauhauses, die auf ein interdisziplinäres und prozessorientiertes Arbeiten in der Gemeinschaft zielen, in die heutige Schulausbildung zu integrieren. Ein anderer Beitrag, der aus einem Forschungsprojekt an der Universität Bern hervorgegangen ist, untersucht das Wirken des Architekten Otto Rudolf Salvisberg und die Hintergründe, die zur relativ geringen Beachtung dieses ausgesprochen produktiven und prägenden Architekten beitragen. Am Beispiel der Kantgarage in Berlin wird schließlich ein komplexer Entstehungsprozess analysiert, der zu oft auf das Label “Bauhaus-Architektur” reduziert wird.

Die Relevanz der Moderne wird somit 100 Jahre nach Gründung des Bauhauses sehr unterschiedlich bentwortet.

Notes

Andrea Kárpáti

Kunsthistorikerin, Erziehungswissenschaftlerin; Professorin
Eötvös-Loránd-Universität

Andrea Kárpáti ist Kunsthistorikerin sowie Erziehungs-wissenschaftlerin und seit 2003 Professorin der Pädagogik an der Eötvös-Loránd-Universität (ELTE). Sie leitet die Forschungsgruppe für Visuelle Kultur der Ungarischen Akademie der Wissenschaften und der ELTE. Außerdem hat sie an der ELTE einen UNESCO-Lehrstuhl für Multimedia in der Erziehung inne. Sie war Vizepräsidentin der Internationalen Gesellschaft für Erziehung durch Kunst (International Society for Education through Art, InSEA), war im Vorstand der Europäischen Gesellschaft für Erziehungswissenschaftliche Forschung (European Association for Research on Learning and Instruction, EARLI) und ist Mitglied des Vorstands des Europäischen Netzwerks für Visual Literacy (ENViL). Ihre Forschungsinteressen sind visuelle Kultur der Kinder und Jugendlichen, digitale Kreativität, Auswertung der visuellen Kompetenzen.

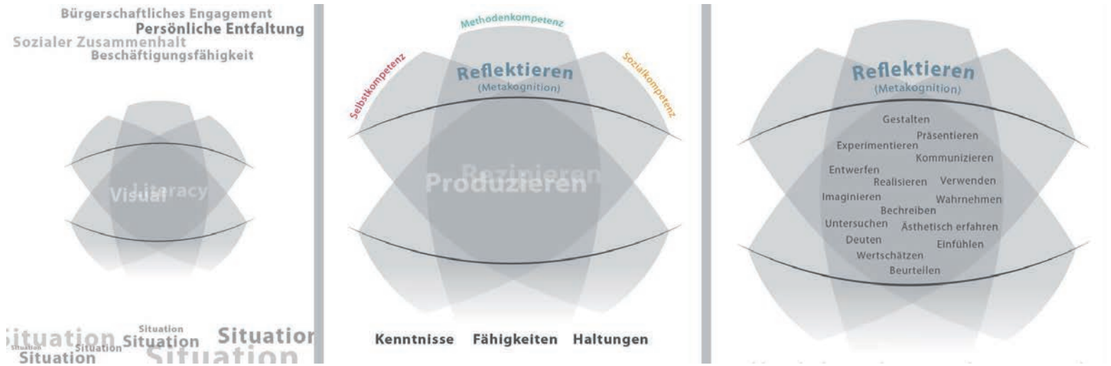

Fig. 1: European Network for Visual Literacy.
a) , links: Modellstufe 1 – Bildkompetenz zwischen Anwendungssituationen und normativen Zielen.
b) Mitte: Modellstufe 2 – Basisdimensionen von Visual Literacy/Bildkompetenz.
c) rechts: Modellstufe 3 – Teilkompetenzen von Visual Literacy.

Visuelle Module Moholy-Nagy: Innovation inspiriert von dem pädagogischen Nachlass ungarischer Meister des Bauhauses

Abstract

Das von den Bauhausmeistern ausgearbeitete pädagogische Konzept innovativer Inhalte und Methoden der Kunst- und Werkerziehung ist auch heute noch aktuell und inspirierend für die Erziehung in den Bereichen Kunst und Design. Projektorientierte, kollektive Planung und Verwirklichung von Arbeiten, die gesellschaftliche Probleme darstellen und diese auch zu lösen versuchen, eine Synthese visueller Kunstgattungen mit Drama, Tanz und Musik, die Entdeckung der kreativen Möglichkeiten der neuen Technologie und vor allem die Betonung der Prozesse und nicht der Endresultate der Kunstgestaltung sind zentrale pädagogische Prinzipien von László Moholy-Nagy, Marcel Breuer und György Kepes, der bedeutenden ungarischen Meister des Bauhauses. Das Projekt „Visuelle Module Moholy-Nagy – die künstlerische Sprache des 21. Jahrhunderts lernen“ entwickelt Lehrplanmodule für die Jahrgänge 6 bis 12 und erprobt diese in den Jahren 2016 bis 2020 in 17 ungarischen Schulen in verschiedenen soziokulturellen Umgebungen.
Die Bereiche visuelle Kommunikation, visuelle Medien, Umweltkultur/Design und Zeitgenössische Kunst können als Bausteine eines Lehrprogramms miteinander kombiniert oder jeweils als Hauptthema eines kunstpädagogischen Programms eingeführt werden. In diesem Aufsatz werden Lerninhalte für Architektur und Umweltgestaltung und Beispiele für eine interaktive, digitale Auswertung von visuellen Fähigkeiten der Raumdarstellung und Raumperzeption wie Visualisierung, Rekonstruktion und Orientierung kurz vorgestellt. In der Begegnung mit historischen und zeitgenössischen Fragen der Stadtplanung und des Wohnungsbaus entwickelt sich eine problemlösende Haltung. Experimente mit Materialien und Techniken sowie die Schulung des Tast- und Sehsinns führen die SchülerInnen weg von einer Wahrnehmung der Architektur, die auf den zweidimensionalen Bildern der Fassaden basiert. Narrativ formulierte Aufgaben („Situationen“), die in einem Prozess des Design Thinking gelöst werden sollen, und die Integration von Wissen und Fähigkeiten aus naturwissenschaftlichen und künstlerischen Studien (Lehrmodell STEAM – Science, Technology, Engineering, Arts and Mathematics) betonen auch die ökonomische und ethische Relevanz der Umweltgestaltung.

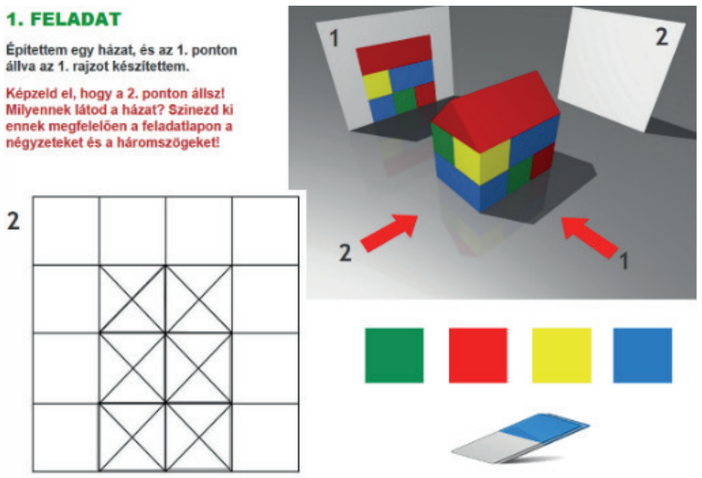

Fig. 2: Visualisierung: mentale Vorstellung eines Objekts von verschiedenen Bezugspunkten aus, Aufgabe für die 5. Klasse (Alter: 11 Jahre).

Inspirierende Pädagogik der ungarischen Meister des Bauhauses

„Die Erziehungstheorie des Bauhauses in seiner Gesamtheit (…) hat es ebenso wenig gegeben wie den Bauhausstil.“[1] Pädagogische Modelle werden aber nicht nur schriftlich veröffentlicht, sondern auch durch von anderen als inspirierend gefundene Praxis verbreitet. Projektorientierte, kollektive Planung und Verwirklichung von Arbeiten, die gesellschaftliche Probleme darstellen und diese auch zu lösen versuchen, eine Synthese visueller Kunstgattungen mit Drama, Tanz und Musik, die Entdeckung der kreativen Möglichkeiten der neuen Technologie und vor allem die Betonung der Prozesse und nicht der Endresultate der Kunstgestaltung sind zentrale pädagogische Prinzipien der bedeutenden ungarischen Bauhausmeister László Moholy-Nagy, Marcel Breuer und György Kepes, die uns auch heute noch inspirieren.

László Moholy-Nagy (1895–1946), der gebürtige ungarische Maler, Fotograf und visuelle Gestalter, der enge Beziehungen zu dem sozialkonstruktivistischen Künstlerkreis „Ma“ (Heute) in Budapest hatte, löste 1923 Johannes Itten als Formmeister der Metallwerkstatt und Leiter des Vorkurses am Bauhaus in Weimar ab. Später unterrichtete er bis 1928 in Dessau. Als Assistent von Walter Gropius gab er gemeinsam mit ihm die Bauhausbücher heraus. György Kepes (1906–2001), Maler, Fotograf und Theoretiker, schloss seine künstlerischen Studien in Budapest ab und war ebenfalls Mitglied des Künstlerkreises „Ma“. In Berlin war er Mitarbeiter im Designstudio von Moholy-Nagy, mit dem er auch später in London zusammenwirkte. Nach seiner Emigration in die USA arbeitete Kepes als Professor am New Bauhaus und dessen Nachfolgerinstitutionen.

Bei der Suche nach Modellen für eine zeitgenössische Erziehung zum Verstehen und zur Erweiterung der visuellen Kultur, waren die Serie der Bauhausbücher und spätere schriftliche Werke der ungarischen Meister, die in den 1970er-Jahren auf Ungarisch veröffentlicht worden sind[2], sowie die Ausstellungen im Kepes-Institut im ungarischen Eger[3] die ersten Inspirationsquellen. Die detaillierte Analyse der „Kunstschule der Moderne“ von Rainer K. Wick[4] gab uns eine Orientierung über den pädagogischen Kontext der innovativen Lehrmethoden und auch die erste ausführliche Analyse und Wertschätzung des kunsterzieherischen Lebenswerks von László Moholy-Nagy, das neben dem Wirken von Johannes Itten und Josef Albers im Hintergrund geblieben ist. In Budapest verewigt die nach ihm benannte Moholy-Nagy-Universität für Kunst den Namen des Künstlers und hat manche seiner Ideen in die Designerausbildung aufgenommen. Unsere Gruppe hat sich das Ziel gesetzt, seinen didaktischen Nachlass auch für die Grund- und Mittelschule zu adaptieren. Eine wichtige Inspiration für uns war die Integration der technischen Medien in die künstlerische Praxis. Für Moholy-Nagy war es die größte Aufgabe des Lehrers, den „totalen Menschen“ im Blick zu behalten, „der von seiner biologischen Mitte her allen Dingen des Lebens gegenüber wieder mit instinktiver Sicherheit Stellung nehmen kann; der sich heute genau so wenig von Industrie, Eiltempo, Äußerlichkeiten einer oft missverstandenen ‚Maschinenkultur‘ überrumpeln lässt, wie der Mensch der Antike die Sicherheit hatte, sich den Naturgewalten gegenüber zu behaupten.“[5]

Seine Äußerung wird von Technikfeinden oft zitiert, diese Haltung kann aber auch zu zeitgenössisch-authentischen Kunstprojekten führen, bei denen die technischen Fähigkeiten durch die ästhetische Praxis entwickelt werden: „Nicht das Objekt, der Mensch ist das Ziel! (…) Die Technik darf also niemals Ziel, sondern stets zum Mittel werden“[6] und

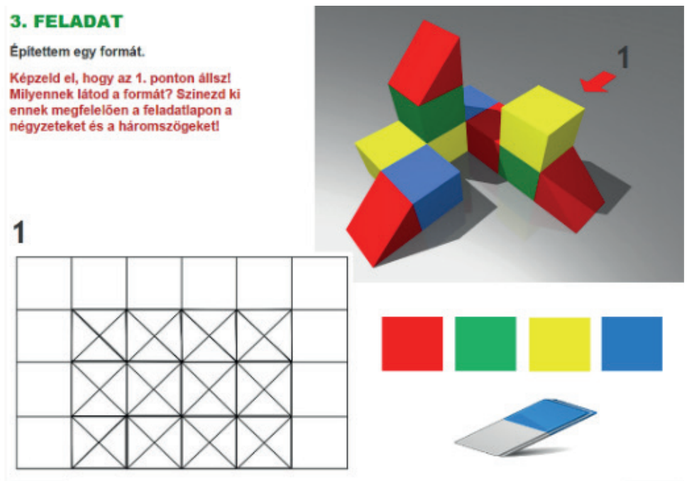

Fig. 3: Aufgabe für die 9. Klasse (Alter: 17 Jahre).

soll für die Stärkung der Sinnesfunktionen, die Förderung des Schöpferischen und das Experimentieren mit kreativen Ideen eingesetzt werden. Darum haben wir in allen unseren vier Lehrplaneinheiten, die je einem Themenbereich gewidmet sind, zeitgenössische und auch klassische bildnerische Techniken wie Demoscene, Videoinstallation, interaktive Multimedia oder im 3-D-Drucker entstandene Skulpturen eingeplant.

Ungarische Schulen wurden in den letzten zehn Jahren mit mobilen digitalen Geräten gut ausgerüstet und werden bald auch 3-D-Drucker erhalten. Das wird es uns erlauben, digitale architektonische Skizzen und Pläne dreidimensional zu repräsentieren, um Design-Thinking-Prozesse durchführen zu können. Nach dem Verstehen des Problems und der Analyse früherer Lösungen, der Ideenfindung und Verfeinerung, wird die technische Ausführung mit digitalen Mitteln ermöglicht. Die multimedialen Werke, die von den Jugendlichen hergestellt werden, reflektieren oft gesellschaftliche Probleme wie die Wohnmöglichkeiten von Obdachlosen, die Modernisierung von gettoartigen Siedlungen der ungarischen Roma oder veraltete Schulgebäude. Moholy-Nagy hat uns gezeigt, dass „Kunst (…) auf die soziobiologische Lösung von Problemen ebenso energisch einen Druck ausüben (kann) wie Sozialrevolutionäre auf die politische Initiative hinzielen. Die Schwierigkeit liegt darin, dass durch mangelnde Ausbildung wenige Leute sensibel genug sind, um die wirkliche Aussage der Kunst wahrzunehmen, sei sie modern oder alt…“[7]

Sensibilisierung oder Sensibilitätserziehung - eine zentrale Zielsetzung von Moholy-Nagy - durch Tast- und Sehübungen sowie kreative Aufgaben mit den vielfältigen Eigenschaften der Materialien haben wir in alle unsere Modulprogramme einbezogen, um den in der digitalen Welt aufgewachsenen Jugendlichen wichtige Lebenserfahrungen zu ermöglichen. Diese Übungen haben wir in unserem Modul 3, Umweltkultur und Design, für alle Altersstufen eingebaut, damit die digitalen Tätigkeiten der Planung auf materiellen Erlebnissen basieren.

Die mit der Hilfe der zeitgenössischen Visualisierungsmethoden dargestellte Ästhetik der Natur von György Kepes gehört auch zu unseren pädagogischen Inspirationen. Jahrzehnte vor STEAM (Science, Technology, Engineering, Arts, Mathematics), dem Integrationsmodell der Naturwissenschaften, Technologie, Informatik, Mathematik und Künste, hat er in seinem Buch „The new landscape in art and science“[8] strukturelle Ähnlichkeiten der technischen, künstlerischen und natürlichen Welt aufgezeigt und für eine ganzheitliche Erziehung, für eine Synergie der „zwei Kulturen“ plädiert. Diese Synergie setzen wir als Ziel für zeitgenössische künstlerische Bildung in unserem Lehrplan. Besonders wichtig ist diese Integration der „zwei Kulturen“ im Bereich Umweltkultur, bei dem für die Analyse der Umgebung und Reflexionen über deren Umgestaltung Kenntnisse und Hinweise aus Chemie, Physik und besonders Geografie und Biologie einbezogen werden müssen.

Architektur und Umweltkultur bei den Visuellen Modulen Moholy-Nagy

Die Forschungsgruppe für Visuelle Kultur an der Eötvös-Loránd-Universität und der Ungarischen Akademie der Wissenschaften erarbeitet 2016 bis 2020 ein auf den pädagogischen Ideen der ungarischen Bauhausmeister gegründetes, modulares Lehrplanprojekt namens Visuelle Module Moholy-Nagy – die bildnerische Sprache des 21. Jahrhunderts lernen. Aus den folgenden Lehrplan-

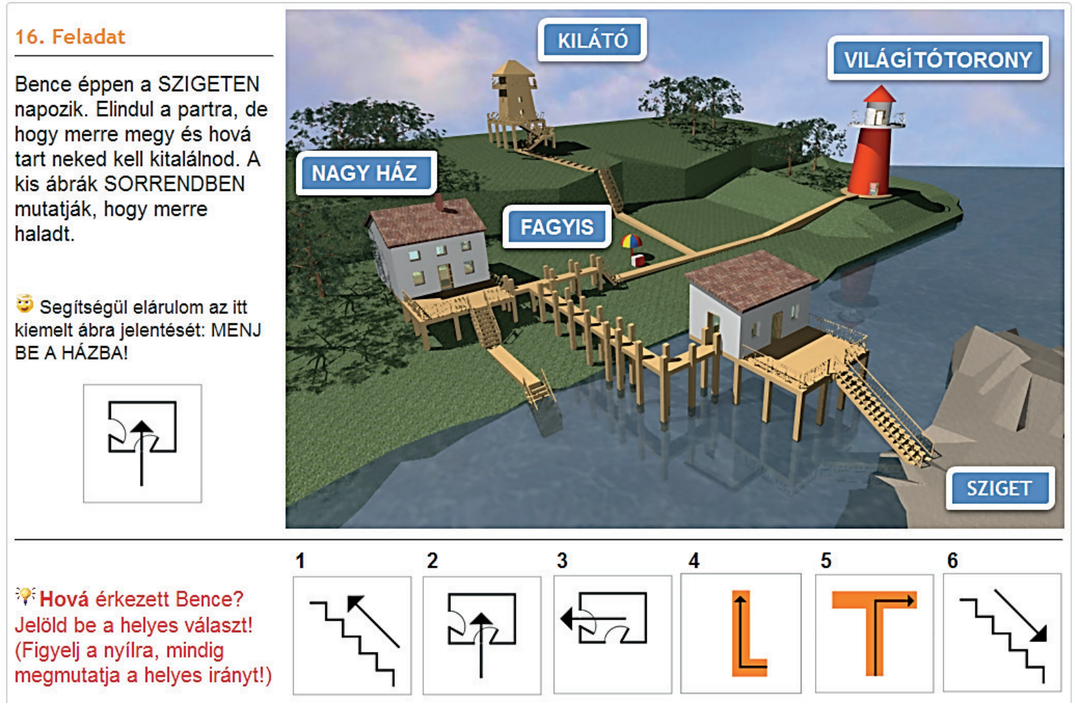

Fig. 4: Orientierung im Raum, Interpretation der abstrakten und konkreten Informationen über Richtungen.

modulen sollen die Lehrer eins als Hauptthema auswählen und in der Hälfte der gesamten Jahresstundenzahl für das Schulfach Visuelle Kultur (64 Stunden in den Klassen 1 bis 8 und 32 Stunden in den Klassen 9 bis 11) unterrichten:

Visuelle Kommunikation: Rezeption und Produktion im Bereich der Bildsprache des Alltags, Interpretation von kulturellen Symbolsystemen, Infografik und wissenschaftliche Visualisierung lesen und entwickeln

Visuelle Medien: Ausdruck der eigenen und gemeinschaftlichen Probleme durch Foto, Film, Animation (Zeichentrickfilm) und Multimedia, kritische Interpretation der Gattungen der Medienwelt

Zeitgenössische Kunst: kreative Begegnungen mit Kunstwerken durch Paraphrase, Erforschung der sozialen Relevanz und der Intentionen der künstlerischen Prozesse, Begegnung mit musealen und virtuellen Präsentationsformen und deren Analyse

Umweltkultur und Design: Identifizierung und Lösung von Designaufgaben durch Problembeschreibung, Forschung, Planen, Modellierung der Alternativen und Identifizierung der optimalen Lösung – Aneignung der designorientierten Denkweise (Design Thinking)[9]

Im Folgenden werden Unterrichts- und Auswertungsmethoden beschrieben, die in den Bereichen Architektur und Umweltgestaltung zu einem neuen Lehrplanmodell für Kunsterziehung geführt haben, das 2017 bis 2020 bei einem vierjährigen Unterrichtsprojekt für die Schulklassen 1 bis 11 (Jahrgänge 6 bis 17), in 17 Grund- und Mittelschulen Ungarns getestet wird.

Unsere pädagogischen Konzepte des Moduls über Umweltkultur und Design wurden von dem in Ungarn geborenen und geschulten Architekten und Designer Marcel Lajos Breuer (1902–1981) beeinflusst. Er schrieb sich 1920 in Weimar am Bauhaus ein und arbeitete in der Möbelwerkstatt, deren Leitung er 1925 bis 1928 innehatte. Er entwarf außerdem im Büro von Walter Gropius Serienwohnhäuser. 1937 emigrierte Breuer in die Vereinigten Staaten, wo er an der Graduate School of Design der Harvard University unterrichtete. Mit Walter Gropius baute er die Architekturfakultät auf und gründete ein gemeinsames Architekturbüro. Hier integrierte er die rationalistische, universelle Architekturauffassung der „weißen Moderne“ mit Motiven und Materialien der regionalen Kultur. Die kunstpädagogische Tätigkeit von Marcel Breuer wird oft mit dem Designprozess seiner Freischwinger identifiziert, weil gemäß der Bauhauspädagogik bei der Planung die Ästhetik und die Funktionalität gleichwertig berücksichtigt wurden und Handwerk und Kunst optimal integriert sind – ein Grundsatz der kunstpädagogischen Konzepte des Bauhauses.

Gemeinschaftliche Relevanz ist ein zentraler Aspekt unseres Erziehungsvorhabens, insbesondere in unserem Lehrplanmodul 3, Umwelterziehung und Design. Lehrmaterialien werden in diesem Modul direkt auf alltägliche persönliche und gesellschaftliche Probleme, wie der gesunde und praktische Lebensraum, die Vermeidung der Umweltverschmutzung, bezogen. Dafür fanden wir in den Werken von Marcel Breuer und den sozialen Aktivitäten der Bauhäusler wichtige, in die Kunstpädagogik übersetzbare Hinweise. „Das Bauhaus nahm sich nicht nur als pädagogische Institution wahr, weil es im Hause junge Menschen zu Handwerkern, Architekten, Künstlern erzog. Vielmehr wollte es auch ‚Erzieher‘ für diejenigen, die die in den Werkstätten hergestellten Dinge benutzten oder gar in den vom Haus entworfenen und errichteten Gebäuden wohnten, sein. Indem man (Wohn-)Bauten und deren Inneneinrichtung so konzipierte, dass sich deren Bewohner bzw. Benutzer eine andere

Lebensweise aneignen müssen, wollte man einen ‚neuen Menschen' schaffen. Man wünschte sich eine sozialere und harmonischer geordnete Gesellschaft als die bisherige."[10]

Lernziele für Architektur bei Moholy-Nagy Modul 3, Umweltkultur und Design

Unser Lehrplan ist kompetenzorientiert und Bildkompetenz (Visual Literacy) dient als Leitbegriff unserer Kunstpädagogik. Unsere Lernziele, die Grundlage unserer Lehreinheiten (Module), sind Folgende:

- Entwicklung einer kreativen und disziplinierten problemlösenden Haltung, ergänzt um die Selbstreflexion des Verlaufs und der Resultate des schöpferischen Prozesses (Lehrmodell Design Thinking – Phasen des Designs in den schöpferischen Prozess integrieren)
- Schulung des Tast- und Sehsinns durch Beobachtungen und Experimente mit Materialien und Medien
- Integration des Wissens und der Fähigkeiten, die in naturwissenschaftlichen und künstlerischen Studien durch fächerübergreifende kreative Projekte erworben wurden (Lehrmodell STEAM – Science, Technology, Engineering, Arts and Mathematics)
- Interpretation der zeitgenössischen Gattungen der visuellen Kultur in Bezug auf ihre ökonomische und ethische Relevanz

Da die traditionellen ungarischen Kunstlehrpläne immer auf „hohe Kunst" fokussiert sind, versuchen wir die Integration der bildenden Künste mit den angewandten Künsten, Design und Medien. Architektur wird kulturhistorisch und durch zeitgenössische Probleme der Umweltkultur vermittelt. Unser Lehrprogramm beinhaltet regelmäßig technische Experimente mit traditionellen und digitalen Materialien und Medien, fächerübergreifende Projekttage, die sich mit sozialen Problemen beschäftigen und Ideenentwicklung, Planen, Modellieren und Realisieren disziplinübergreifend einbeziehen.

Der Einfluss der oben angeführten Elemente der nicht kodifizierten, aber durch die Schriften und Dokumente der Lehrtätigkeit doch erkennbaren Bauhauspädagogik lässt sich in Inhalt und Methodik aller vier Unterrichtsmodule beobachten. Unterricht in den Moholy-Nagy-Modulen ist prozess- und nicht produktorientiert. Die Schüler führen Skizzenbücher (logbooks) und benutzen illustrierte Listen der Kriterien mit der Beschreibung der Kompetenzebenen für die Selbstbewertung.[11] Die pädagogische Arbeit mit den Modulen in den 17 Versuchsschulen wird von in der Kunsterzieher-Ausbildung und -Weiterbildung tätigen Forschern mit langer Lehrerfahrung (die Meister) moderiert. Die LehrerInnen – die Jungmeister (von denen eine Hälfte sich im Doktorstudium befindet, weil sie über dieses Projekt promovieren wollen) – treffen die Meister jeden Monat in ihrer Schule, wo sie nach einer Supervision des Unterrichts über die Resultate und Pläne diskutieren.

Interaktive Auswertung

2008 bis 2011 entwickelte unsere Forschungsgruppe den Ungarischen Referenzrahmen für Visuelle Kultur, der auch heute der fördernden Auswertung der bildnerischen Erziehung dient.[12] Diese Arbeit haben wir als Mitglieder des 2013 gegründeten Europäischen Netzwerks für visuelle Kompetenz (European Network of Visual Literacy, ENViL)[13] weitergeführt. Mit der Unterstützung der EU wurde 2014 bis 2016 ein kompetenzorientierter Referenzrahmen für bildnerische Erziehung auf Grundlage der Analyse von 21 Kunstlehrplänen aus Europa[14] und der angelsächsischen Welt[15] sowie Diskussionen von Experten aus 21 Ländern entwickelt. Der Referenzrahmen bezieht sich auf ein erweitertes Bildkonzept, weil vorrangig visuell gestaltete und wahrgenommene Produkte und Phänomene, die eine Bedeutung für den Menschen als Artefakte, Objekte oder Zeichen haben können, in der Schule heute genauso repräsentiert werden wie Kunstwerke und Baudenkmäler. Die Fachkompetenz Visual Literacy beinhaltet die beiden grundlegenden Dimensionen Produzieren und Rezipieren von Bildern/Objekten. In vielen Kompetenzanwendungen durchdringen sich Produzieren und Rezipieren.[16]

Für die Teilkompetenzen haben wir traditionelle und computergesteuerte, interaktive Testaufgaben ausgearbeitet und in einem Pre- und Posttest-Format eingeführt. Beide Datengewinnungsprozesse beinhalten auch international standardisierte Tests der Kreativität und Resilienz (flexibles Denken und Handeln), sodass wir die Zusammenhänge der visuellen Kompetenz mit diesen beweisen können. Hier sind einige im Internet zu findende Testtypen für Raumwahrnehmung gezeigt. Die Aufgaben sind überall in Ungarn über die eDIA online als kompetenzorientierte Testumgebung frei erreichbar und können auch als Übungen genutzt werden.

Visuelle Produktion wird durch Aufgaben und Projekte (domain project) entwickelt, die modellierte Lebenssituationen nachahmen. Für die Erfassung des Entwicklungsniveaus der einzelnen Schüler in den verwendeten Fähigkeiten benutzen wir eine traditionelle, aber im Dienst der Erforschung visueller Fähigkeiten überarbeitete Methode, die Prozess-Folio.[18] Durch eine solche Sammlung von datierten Skizzen, Gattungsvarianten und gefertigten Werken lässt sich über einen längeren Zeitraum die Entwicklung der einzelnen SchülerInnen durch den Vergleich mit eigenen früheren Werken dokumentieren. Für das Alltags- und Berufsleben wichtige Teilkompetenzen der visuellen Perzeption, wie Erinnerungskraft, Differenzierungsfähigkeit, genaues Lesen von technischen Zeichnungen oder Landkarten und Plänen, werden durch die digitale, interaktive diagnostische Testumgebung der Forschungsgruppe für Kompetenzen der Szeged-Universität erforscht. Eine Aufgabe dazu ist hier als Beispiel für die realitätsnahe Konstruktion des Auswertungsinstruments dargestellt.

Zusammenfassung

Die Visuellen Module Moholy-Nagy, die den pädagogischen Nachlass der ungarischen Bauhausmeister für die öffentliche Bildung übersetzen wollen, sind seit 2017 in der Experimentphase. Nach zwei Jahren werden Interviews mit Schülern und Lehrern und Fallstudien sowie Posttests durchgeführt, um die Effekte der Lernmodule zu untersuchen. Unsere Messresultate mit geprüften und detailliert beschriebenen Fähigkeitsniveaus im Bereich von Planung und Ausarbeitung von visuellen Ideen, Gestaltung im zwei- und dreidimensionalen Bereich, Raumwahrnehmung und Raumgestaltung, Rezeption und Interpretation der Farbe, divergentem Denken und Kreativität werden hoffentlich auch für die Weiterentwicklung des Gemeinsamen Europäischen Referenzrahmens für Visual Literacy benutzt.[19]

Das vom Bauhaus inspirierte Unterrichtskonzept – gesellschaftlich relevante Themen, interdisziplinäre Projekte, Experimentieren mit Materialien und Formen, Integration der zeitgenössischen technischen Mittel mit traditionellen kreativen Verfahren, Gruppenarbeit auf Grundlage des Designprozesses und ein kooperierendes Verhältnis der LehrerInnen – scheint für SchülerInnen und LehrerInnen gleichermaßen anregend zu sein. Mit der Ausarbeitung der Visuellen Module Moholy-Nagy möchten wir ein Beispiel für die

nicht zentralisierte, sondern an lokale Bedürfnisse und Bedingungen angepasste, freie Gestaltung von Lehrplänen anbieten. Wie wir diese Haltung mit dem 2018/19 neu geschaffenen zentralen Kunstlehrplan in Einklang bringen können, ist fraglich, aber einen Versuch wert.

Danksagung

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Notes

[1] Rainer K. Wick (2000): Bauhaus – Kunstschule der Moderne. Ostfildern-Ruit: Hatje Cantz Verlag, S. 10.
[2] Einige Beispiele: László Moholy-Nagy (1972): Az anyagtól az építészetig (Von Material zu Architektur). Budapest: Corvina; László Moholy-Nagy (1978): Festészet, fényképészet, film (Malerei, Photographie, Film). Budapest: Corvina; György Kepes (1979): A világ új képe a tudományban és a művészetben (Neue Landschaften). Budapest: Corvina; György Kepes (1979): A látás nyelve (Die Sprache des Sehens). Budapest: Gondolat Kiadó
[3] Die englischsprachige Webseite des Kepes-Instituts in Eger, Ungarn: http://www.kepeskozpont.hu/eng/ (letzter Zugriff am 26.9.2018)
[4] Rainer K. Wick (2000), op. cit.
[5] László Moholy-Nagy (1929): Von Material zu Architektur. München: Albert Langen Verlag, S. 18.
[6] László Moholy-Nagy (1925): Malerei, Photographie, Film. München: Albert Langen Verlag, S. 13.
[7] László Moholy-Nagy zit. nach Rainer K. Wick (2000), op. cit., S. 148.
[8] György Kepes (1956): The new landscape in art and science. Chicago: Paul Theobald and Co.
[9] Rim Razzouk und Valerie Shute (2012): What Is Design Thinking and Why Is It Important? In: Review of Educational Research, Bd. 82, Nr. 3, S. 330–348.
[10] Anja Unger (2004): Raum als pädagogische Dimension – Das Bauhaus. Berlin: Humboldt-Universität zu Berlin, Institut für Erziehungswissenschaften. Onlineveröffentlichung: https://homepage.univie.ac.at/henning.schluss/seminare/015Raum/Bauhaus/bauhaus-ausarbeitung.htm (letzter Zugriff am 6.12.2018)
[11] Über die Entwicklung und Validierung der visuellen Rubriken bzw. der illustrierten Kriteriumslisten für die Selbstbewertung: Talita Groenendijk, Folkert Haanstra und Andrea Kárpáti (2018): Self-assessment in art education through a visual rubric. In: International Journal of Education through Art (IJETA), 14(3), S. 353–378.
[12] Andrea Kárpáti und Emil Gaul (2011): From Child Art to Visual Language of Youth: The Hungarian Visual Skills Assessment Study. In: International Journal of Art Education, Bd. 9, Nr. 2, S. 108–132 Abstract: http://ed.arte.gov.tw/uploadfile/periodical/3058_9-2-p.108-132.pdf (letzter Zugriff am 26.9.2018)
[13] Einführung in die Tätigkeit der internationalen Forschungsgruppe: http://envil.eu
[14] Constanze Kirchner und Folkert Haanstra (2016): Expertenbefragung zu Lehrplänen in Europa: Formate, Strukturen und ihre Verbindung zum CEFR-VL. In: Ernst Wagner und Diederik Schönau (Hrsg.): Gemeinsamer Europäischer Referenzrahmen für Visual Literacy – Prototyp. Münster, New York: Waxmann Verlag, S. 192–202.
[15] ndrea Kárpáti (2016): B.3.3 Lehrpläne in englischsprachigen Ländern – Formate, Strukturen und ihre Verbindung zum CEFR-VL. In: Ernst Wagner und Diederik Schönau (Hrsg.), op. Cit., S. 211–245.
[16] Ernst Wagner (2018): Bildkompetenz – Visual Literacy. Kunstpädagogische Theorie- und Lehrplanentwicklungen im deutschen und europäischen Diskurs. In: Kulturelle Bildung online: https://www.kubi-online.de/artikel/bildkompetenz-visual-literacy-kunstpaedagogische-theorie-lehrplanentwicklungen-deutschen (letzter Zugriff am 26.9.2018)
[17] Detaillierte Beschreibung des Gemeinsamen Europäischen Referenzrahmens Visual Literacy: Ernst Wagner und Diederik Schönau (Hrsg.) (2016), op. cit., und Ernst Wagner (2018): Bildkompetenz, op. cit.
[18] Rebecca E. Wolfe, Adria Steinberg und Nancy Hoffman (Hrsg.) (2013): Anytime, Anywhere. Student-Centered Learning for Schools and Teachers. Cambridge, Mass.: Harvard University Press
[19] Ernst Wagner (2018): Bildkompetenz, op. cit.

Image Credits

Fig. 1: Webseite des Europäischen Netzwerks für visuelle Kompetenz, http://envil.eu[17]
Fig. 2: /
Fig. 3: /
Fig. 4: Bernadett Babály, 2016, reproduziert mit der Genehmigung der Autorin

Notes

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Schwerpunkt seiner Forschungsarbeit ist die Architekturgeschichte und Denkmalpflege des 19. und 20. Jahrhunderts. Hierzu zahlreiche Ausstellungsbeiträge und Veröffentlichungen u.a. über Alfred Grenander, das Frühwerk Mies van der Rohes, den Berliner Architekten Georg Heinrichs sowie zur Architektur der Nachkriegsmoderne in Deutschland. Abschluss der Dissertation über den Grafiker, Raumkünstler und Reformarchitekten Bruno Paul im April 2018 („Der Neue Stil: Bruno Paul – Protagonist der Werkbund-Bewegung und künstlerischer Leiter der Vereinigten Werkstätten").

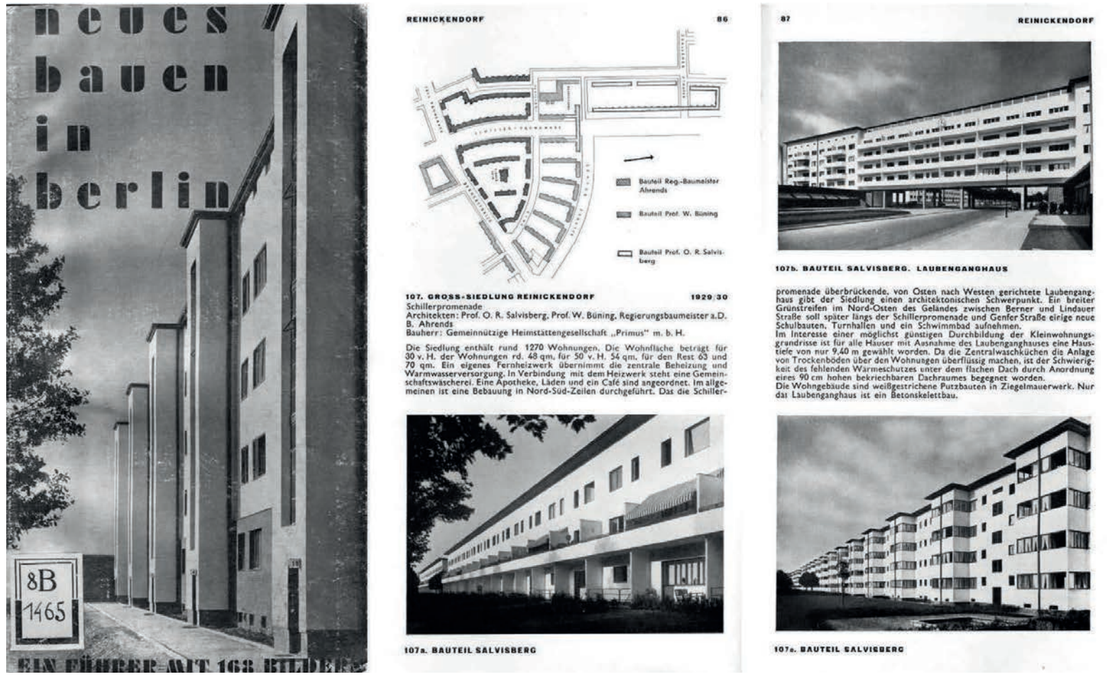

Fig. 1: Otto Rudolf Salvisberg.

Otto Rudolf Salvisberg (1882-1940) – Architekt der Moderne

Abstract

Otto Rudolf Salvisberg (1882-1940) unterhielt in Berlin (1914-1932), Bern (1921-1940) und Zürich (1929-1940) florierende Architekturbüros und prägte seit 1929 als alleiniger Diplom-Professor an der ETH Zürich maßgeblich die ihm nachfolgende Architektengeneration. Dieser Beitrag behandelt einen kleinen Ausschnitt seines facettenreichen Werkes: Salvisbergs Stellung zum Neuen Bauen im Wechsel- und Konkurrenzverhältnis zur deutsch-schweizer Avantgardeszene, deren zunehmend erfolgreiche Selbstvermarktung zu einer sehr einseitigen Wahrnehmung der Architekturmoderne nach 1945 führte. So gilt Salvisberg heute als Exponent einer „anderen Moderne", dem vermeintlich nie ein vollgültiger Beitrag zum Neuen Bauen gelungen sei. Hier wirkt ein Verdikt nach, das im CIAM-Kreis um Karl Moser, Sigfried Giedion und Walter Gropius seinen Ursprung hat und noch die Wiederentdeckung des Architekten in den 1970er und 1980er Jahren überlagerte.

Im Zentrum dieser Untersuchung steht die gut dokumentierte Kontroverse um Salvisbergs Berufung an die ETH Zürich im Jahr 1928, an der sich beispielhaft die Argumentationsmuster und Abgrenzungsmechanismen der vorwiegend mit Schlagworten argumentierenden Avantgardeszene aufzeigen lassen sowie die Notwendigkeit, etablierte Entwicklungsmodelle und Narrative noch einmal zu hinterfragen.

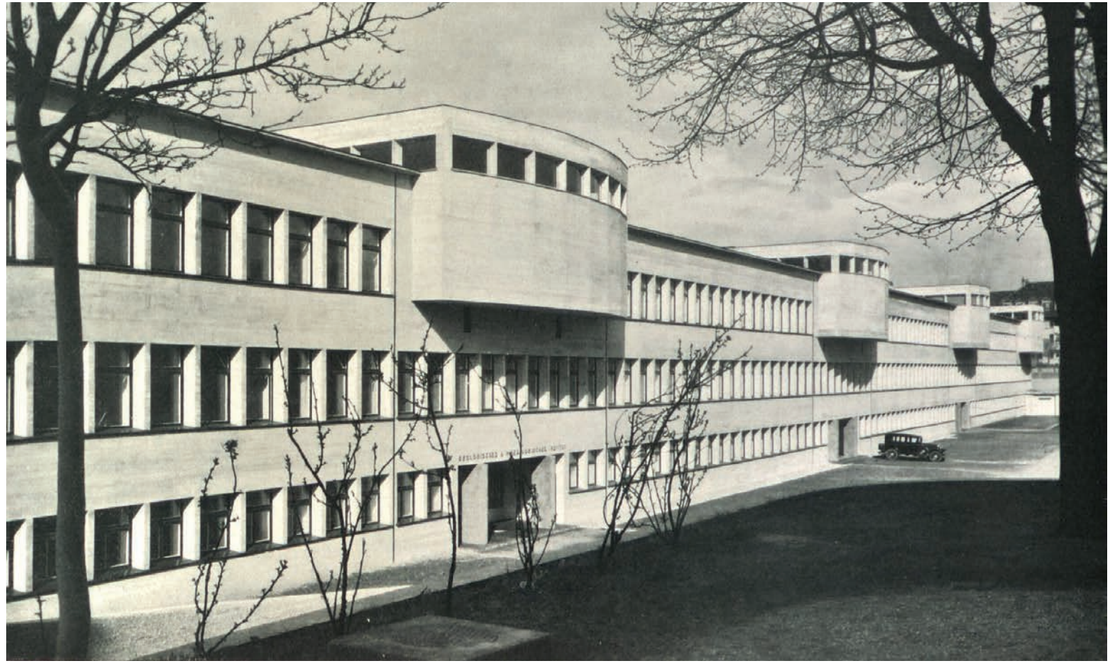

Fig. 2: Cover und Doppelseite aus: Heinz Johannes, Neues Bauen in Berlin.

Über drei Jahrzehnte zählte der gebürtige Schweizer Otto Rudolf Salvisberg zu den erfolgreichsten Architekten im deutschsprachigen Raum: Im Berlin der 1910er und 1920er Jahre und zuletzt in Zürich seit 1929, bis zu seinem plötzlichen Tod im Dezember 1940.
Salvisberg realisierte allein bis 1933 etwa 10.000 Wohnungen und war damit neben Ernst May in Frankfurt, Wilhelm Riphahn in Köln sowie den ebenfalls in Berlin ansässigen Architekten Paul Mebes und Bruno Taut einer der produktivsten Siedlungsarchitekten der Weimarer Republik. Gleiches gilt für seinen Beitrag zum gehobenen Einfamilienhausbau. Etwa 100 Villen und Landhäuser in Deutschland, der Schweiz, im heutigen Tschechien und in Polen sind mittlerweile bekannt.
Daneben errichtete Salvisberg, der 1920 in seiner Geburtsstadt Bern ein Zweigbüro eröffnete, mehrere Kirchen und Kapellen, Geschäftshäuser, ganze Krankenhauskomplexe sowie die Volksbank in Solothurn, wobei die meisten dieser Großaufträge auf gewonnene Wettbewerbe zurückgingen. So etwa auch die Universitätsinstitute in Bern (Abb. 1), ein gut 200 Meter langer, gänzlich in Sichtbeton ausgeführter Baukörper mit markant exponierten Hörsälen, der nicht nur als proto-brutalistische Großstruktur bemerkenswert ist, sondern auch durch den hohen Grad der Durchrationalisierung während des Bauprozesses.
Salvisbergs enorme Produktivität überstieg zwischen 1919-1933 das Bauvolumen sämtlicher Bauhaus-Direktoren (Walter Gropius, Hannes Meyer, Ludwig Mies van der Rohe) und das wohl selbst dann noch, wenn man auch die realisierten Entwürfe ihrer ehemaligen Bürochefs (Adolf Meyer, Hans Wittwer, Ernst Neufert usw.) mit dazurechnet.
Natürlich lässt die realisierte Baumasse per se keine qualifizierenden Aussagen über materielle, gestalterische oder funktionale Qualitäten von Architektur zu. Dennoch muss es erstaunen, dass ein so vielbeschäftigter und im zeitgenössischen Diskurs durchaus präsenter Entwerfer wie Salvisberg in der Architetkurhistoriographie bislang kaum eine Rolle spielt. Während die Literatur zum Bauhaus seit den 1980er Jahren so weit angeschwollen ist, dass man ganze Regalwände damit füllen könnte und „Bauhaus“, ähnlich wie „Jugendstil“, „Expressionismus“ und „Art Déco“ längst auch in den Kunstwissenschaften zu einer Art Epochen- und Stilbegriff umgedeutet wurde, liegt über Salvisberg bislang nur eine nach 1945 erschienene Monografie vor.[1]
Dieser Befund ist der Ausgangspunkt vorliegenden Beitrages: Wie und wann kam es zu dieser publizistischen Schieflage und was waren bzw. sind die Folgen? Salvisbergs Beispiel steht dabei exemplarisch für eine allgemeine Tendenz, folgt die Architekturgeschichte doch im Wesentlichen bis heute einem auf Avantgarde-, Stil- und Entwicklungsphänomene konzentrierten Narrativ, das seit dem Ende der 1920er Jahre geprägt und in den 1930er und 1940er Jahren etabliert wurde, um dann bis weit in die 1960er Jahre hinein kaum mehr hinterfragt zu werden. Erst seit dem Anfang der 1970er Jahre setzte eine grundlegende Neuorientierung ein, die den Kanon immergleicher Referenzbauten und Vergleichsbeispiele bislang allerdings wenig zu verändern oder auszuweiten vermochte.

Im Gegensatz zu heute war Salvisberg in zeitgenössischen Veröffentlichungen, die einen Überblick zum aktuellen Stand der Architekturentwicklung geben, durchaus präsent. Dies gilt für Heinrich de Fries´ Moderne Villen und Landhäuser (1924) oder die noch heute maßstabsetzende Gesamtdarstellung zur Baukunst der Neuesten Zeit von Gustav Adolf Platz (1927 und 1930) bis hin zu den populären,

Fig. 3: Hugo Häring, Siedlung Onkel Toms Hütte, Riemeisterstraße/ Am Fischtal.

in Zehntausender-Auflagen erschienenen drei Blauen Bücher zur Modernen Baukunst der Gegenwart, die Walter Müller-Wulckow zwischen 1925 und 1932 herausgab.
Allein im handverlesenen Kreis der radikalen Neuerer, die 1926 den Ring und 1928 die Internationalen Kongresse für Neues Bauen (Congrès Internationaux de l'Architecture Moderne / CIAM) gründeten und sich selbst als Speerspitze einer internationalen Architekten-Avantgarde verstanden und inszenierten, stieß Salvisberg auf kategorische Ablehnung. In sämtlichen ihrer Publikationen wird der gebürtige Schweizer dann auch konsequent ignoriert. Walter Gropius´ Internationale Architektur (1925), Walter Curt Behrendts Sieg des Neuen Baustils (1927), Adolf Behnes Neues Bauen, Neues Wohnen (1928) oder Sigfried Giedions Befreites Wohnen (1929) sind nur einige prominente Beispiele aus der Frühzeit.

Neues Bauen

Für das Gros der zeitgenössischen Beobachter stand hingegen außer Frage, dass Salvisbergs jüngstes, seit Mitte der 1920er Jahre entstandenes Oeuvre, ebenso zum Neuen Bauen zu zählen sei, wie etwa die gleichzeitig realisierten Entwürfe von Walter Gropius oder Ernst May. In Heinz Johannes´ Überblickswerk Neues Bauen in Berlin ist er beispielsweise neben Paul Mebes, Erich Mendelsohn und Bruno Taut mit insgesamt acht Einträgen der meistvertretene Architekt, weit vor Walter Gropius oder Ludwig Mies van der Rohe. Eine ganze Doppelseite dieses wohl ersten Architekturführers der klassischen Moderne ist beispielsweise der 1931 fertiggestellten Weißen Stadt (Abb. 2) gewidmet, die 2008 als eine der sechs Berliner Siedlungen der Moderne von der UNESCO in die Liste des Welterbes aufgenommen wurde. Unter der künstlerischen Leitung Salvisbergs fand hier der vergleichsweise junge Bautypus Großsiedlung eine idealtypische Umsetzung, deren städtebauliche Einbindung mit einem die Hauptstraße überspannenden Brückenwohnhaus als Dominante ebenso überzeugend gelöst ist, wie die Grundrissdisposition der einzelnen Wohnungen.
Salvisberg legte sich allerdings nie auf die formalen und funktionalistischen Ideale des spätestens mit der New Yorker Ausstellung von 1932 kanonisierten International Style fest und erhielt auch von konservativeren Bauherren wie etwa der GAGFAH (Gemeinnützige A.G. für Angestellten-Heimstätten) zahlreiche Aufträge. Gleichzeitig zur Weissen Stadt entwarf er beispielsweise die Großsiedlung Lankwitz weitgehend als Blockrandbebauung mit Walmdachbekrönungen. Der Name GAGFAH lässt aufhorchen, war die gleiche Gesellschaft doch 1928 auch Auftraggeberin der bekannten Berliner Siedlung am Fischtalgrund, deren ebenfalls satteldachbekrönte Ein- bis Sechsfamilienhäuser gegenüber der Flachdachsiedlung Onkel Toms Hütte den sogenannten Zehlendorfer Dächerkrieg provozierten. Hier stand Salvisberg allerdings auf Seiten der Modernisten, zeichnete er doch zusammen mit den beiden Ring-Mitgliedern Hugo Häring und Bruno Taut verantwortlich für den ersten Bauabschnitt der im Auftrag der GEHAG (Gemeinnützige Heimstätten A.G.) ein Jahr früher fertiggestellten Flachdach-Zeilen gegenüber.
Härings Urteil über seinen Berliner Kollegen fiel dennoch denkbar negativ aus: Salvisberg sei ein Entwerfer, „dem es nicht auf Entwicklung der Architektur ankommt, sondern auf einen gewissen Bluff in der äußeren Erscheinung. Ihm sind nur Motive wichtig. Er hat keine geistige Grundlage."[2] Vergleichbar urteilte Walter Gropius, wenn er auch Salvisberg ein „sehr gediegenes Können" bescheinigte: „Ich halte ihn keineswegs für einen ersten Mann, der aus eigener

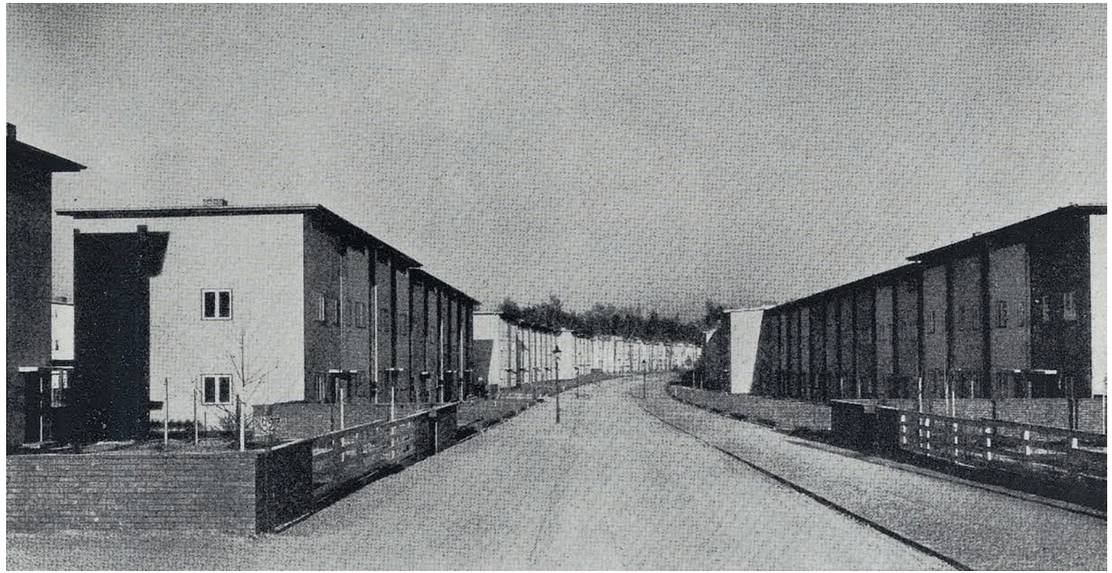

Fig. 4: Otto Rudolf Salvisberg, Siedlung Onkel Toms Hütte, Reiherbeize.

schöpferischer Quelle schafft."[3]
Pauschalurteile solcher Art spielten im Rahmen der Kanonisierung der frühen Architekturmoderne seit den 1930er Jahren eine erhebliche Rolle und bleiben in der Regel – was bezeichnend ist – ohne nähere Begründung. Tatsächlich ließe sich trefflich darüber streiten, ob die einheitlich gestrichenen und blockhaft zusammengefassten Reihenhäuser Hugo Härings (Abb. 3) gestalterisch mehr überzeugen, oder die durch eine einfache Ziegel-Rollschicht voneinander getrennten und auch farblich individualisierten Reihenhauszeilen Salvisbergs (Abb. 4). Was die weitmöglichst optimierte Grundrissgestaltung und den hohen Grad der Typisierung (Fensterformate und Türen) angeht, unterscheiden sich die standardisierten Reihenhäuser von Taut, Häring und Salvisberg ohnehin nur marginal voneinander.
Die Vorbehalte gegenüber Salvisberg rührten meiner Einschätzung nach vielmehr daher, dass der überaus erfolgreiche, effektive, geschäftstüchtige und apolitische Berlin-Schweizer sich zu den omnipräsenten Theorie-Diskussionen seiner Zeit nicht positionierte und je nach Bauaufgabe und Bauherr genauso auch in den Formen einer eher moderaten Moderne zu entwerfen vermochte, wie das ähnlich auf Peter Behrens, Emil Fahrenkamp, Bruno Paul oder Hans Poelzig zutrifft.

Salvisbergs Berufung als Fallbeispiel

Neu aufgefundene Quellen zur Berufung Salvisbergs, aus denen eben bereits zitiert wurde, ermöglichen es, solche Pauschalurteile und für die CIAM insgesamt typische Exklusions-Mechanismen mitsamt der Frage nach ihrer Berechtigung und Motivierung etwas näher zu beleuchten.
Im Dezember 1928 war Otto Rudolf Salvisberg nach langwierigen Verhandlungen und Diskussionen, die sich vom Frühjahr bis Herbst 1928 hinzogen, als alleiniger Diplom-Professor an die Eidgenössische Technische Hochschule in Zürich berufen worden. Die Frage der Neubesetzung dieser kulturpolitischen Schlüsselposition schlug im Vorfeld ungemein hohe Wellen, witterte die noch junge schweizer Avantgarde-Szene doch die Chance einer gleichermaßen programmatischen wie radikalen Neuausrichtung der Architektenausbildung. Dreh- und Angelpunkt der nur teilweise öffentlich ausgetragenen Personaldebatte war Salvisbergs Vorgänger Karl Moser, bei dem fast alle der jungen Neuerer in den 1910er Jahren studiert hatten und dessen in Sichtbeton ausgeführte Baseler Antoniuskirche (1925-27) wie kein anderer Bau den architektonischen Neubeginn in der Schweiz symbolisierte. Moser, der den Werkbund auf seiner Seite wusste, hatte im Zuge der Berufungsverhandlungen u.a. die gebürtigen Schweizer Hannes Meyer, Hans Wittwer und Le Corbusier sowie den Deutschen Walter Gropius und den Niederländer Jacobus Johannes Pieter Oud als mögliche Nachfolger ins Spiel gebracht.[4]
Mosers Wunschkandidat war indes sein ehemaliger Schüler und enger Vertrauter Hans Schmidt, den er bereits im November 1927 in seine Nachfolgepläne eingeweiht hatte.[5] Schmidt, damals erst 35 Jahre alt, hatte u.a. zwei Jahre bei Le Corbusier gearbeitet und gab seit 1924 zusammen mit Mart Stam die antibürgerliche und stark polemisch gehaltene Zeitschrift ABC, Beiträge zum Bauen heraus. Ganz im Gegensatz zu Salvisberg konnte er allerdings nur auf eine sehr bescheidene Baupraxis verweisen.
Da Moser wohl von Beginn an mit Widerständen gegen Hans Schmidt rechnete, hatte er seine Nachfolge von langer Hand geplant und versuchte diese nun unter erheblichem Zeit- und Kraftaufwand und mit allem Nachdruck seiner internationalen Strahlkraft und fachlichen

Autorität durchzusetzen. Bereits im September 1927, sechs Monate bevor er seine vorzeitige Emeritierung offiziell bekannt gab, hatte er auf der Jahrestagung des Schweizerischen Werkbundes eine programmatische Rede gehalten, die unter dem Titel Hochschule und Neues Bauen zusammen mit Beiträgen von Conelius van Eesteren, Walter Gropius und Hans Schmidt abgedruckt wurde.[6] In bislang unbekannter Absolutheit wurden hierin die schweizer Leser auf die Zukunftsaufgaben und gesellschaftlichen Verheißungen des Neuen Bauens eingeschworen, was eine Fundamentalkritik an staatlichen Behörden und dem von diesen angeblich ausschließlich geförderten Akademismus miteinschloss.

Ganz ähnlich argumentierte Moser nun auch gegenüber dem für sämtliche Neuberufungen zuständigen Präsidenten des schweizerischen Schulrates Arthur Rohn, den er am 1. Februar 1928 über seine Rücktrittspläne informiert hatte und 10 Tage später dann in einem umfangreichen Gutachten auf seine Zukunftsvorstellungen einzuschwören versuchte: „Die Architekturentwicklung, die wir heute erleben […] hat die verderbliche Belastung mit den Formen historischer Stile endlich abzuwerfen vermocht und ebnet damit den Weg zu einwandfreien Lösungen aller Probleme der Gegenwart." Nur ein „modern gerichteter, lebendiger junger Professor" wie Hans Schmidt komme darum für die Entwurfsprofessur in Frage. Gleichzeitig warnte Moser eindringlich vor Kompromisslösungen: „Ich kann mir nicht denken, dass die Schule gedeihen könnte, wenn ein unsicherer und unselbständiger Mann der Kompromisse zwischen Alt und Neu, also ein Eklektiker oder gar ein Historiker auf den freiwerdenden Lehrstuhl berufen würde […]."[7]

Während gleichzeitig noch bis zum 31. März 1928 die offizielle Stellenausschreibung lief, setzten Moser und der in Avantgardekreisen bestens vernetzte Siegfried Giedion alle Hebel in Bewegung, um die Entscheidung des Schweizerischen Schulrates in ihrem Sinne zu beeinflussen. So schickte Moser Anfang März an Mitglieder des Schulrates und andere wichtige Entscheidungsträger seinen Aufsatz Hochschule und Neues Bauen mit einem Anschreiben, das auf die Wichtigkeit der bevorstehenden Neuberufung hinwies.[8] Hinter den Kulissen gelang es zudem, den Schweizerischen Werkbund und die Gesellschaft ehemaliger Studierender der ETH auf Linie zu bringen. Beide hielten am 14. bzw. am 16. März 1928 eigens Mitgliederversammlungen ab und sprachen sich im Anschluss einstimmig für Hans Schmidt aus:[9] „In unserer Zeit, in der die Architektur vor so viel neue Probleme gestellt ist, ist vor allem eine kräftige Persönlichkeit mit dem Mut zu klarer Stellungnahme nötig […]. Nichts wäre darum verhängnisvoller, als die Professur mit einem noch so gewandten Eklektiker zu besetzen."[10]

Nachdem sich auf die offizielle Stellenausschreibung bis zum Bewerbungsschluss Ende März 1928 kaum geeignete Kandidaten gemeldet hatten, avancierte die Berufungsfrage nun auch für Arthur Rohn zur obersten Priorität. So unternahm der Schulratspräsident in der ersten Aprilhälfte mehrtägige Reisen nach Berlin und an die Technische Hochschule in Stuttgart, um sich dort u.a. mit Paul Bonatz zu beraten. Zudem verbrachte er auf Empfehlung Karl Mosers vier Tage in Holland, wo er, vermittelt und in Begleitung von Hendrik Petrus Berlage, die Architekten Willem Marinus Dudok, Cornelis van Eesteren, Jacobus Johannes Pieter Oud sowie den von Berlage favorisierten Hendricus Theodorus Wijdeveld aufsuchte und deren Werke besichtigte. Ganz ähnlich wird Rohn auch in Berlin verfahren sein und sich in diesem Zuge für Otto Rudolf Salvisberg entschieden haben.

Etwa im gleichen Zeitraum reiste auch Karl Moser auf der Suche nach einem geeigneten Nachfolger u.a. nach Berlin und Dessau, wie er Ende März 1928 Arthur Rohn mitteilte.[11] Mosers Berlin-Aufenthalt vom 7.-17. April 1928 ist durch umfangreiche Tagebuchaufzeichnungen dokumentiert. So besichtigte er u.a. Bauten und Ladeneinrichtungen von Häring, den Brüdern Luckhardt, Arthur Korn, Erich Mendelsohn, Ludwig Mies van der Rohe und Salvisberg, die er meist auch persönlich traf, wobei sein wichtigster Berliner Ansprechpartner der Ring-Sekretär Hugo Häring war, dessen Negativurteil über Salvisberg weiter oben bereits zitiert wurde. Den 13. April 1928 verbracht Moser dann fast vollständig mit Otto Rudolf Salvisberg, den er in seinem privaten Wohnhaus in der Steglitzer Oehlertstraße besuchte, wo auch das 1926 umfassend erweiterte Architekturbüro untergebracht war. Moser ließ sich aktuelle Planungen vorführen, darunter das Berner Säuglings- und Mütterheim (1928-30), das Gemeindehaus der Ev. Matthäuskirche in Steglitz (1928-30) sowie das nicht realisierte Projekt für ein Wertheim-Warenhaus in der Berliner Schloßstraße. Nach dem gemeinsamen Mittagessen besichtigten beide Architekten mehrere Wohnbau-Projekte und Villen Salvisbergs „in Backstein, Putz, alles mit flachgeneigtem Dach von 10 %" und ließen den Tag auf dem Berliner Funkturm ausklingen.[12]

Am Folgetag findet sich im Tagebuch folgender Eintrag: „Salvisberg entfaltet eine große Tätigkeit mitten durch. Er ist kein Neuerer. Er bemüht alte Möglichkkeiten. – Aber er ist ein angenehmer Mensch, naiv wie er scheint, tüchtig i. d. Ausführung, unerschrocken und überzeugend i. Verkehr. Er hat eine Menge Qualitäten. Ober er als Lehrer Talente besitzt, muss dahingestellt bleiben. Jedenfalls ist er ein tüchtiger Mensch und hat Talente."[13]

Gleichwohl zeigte sich Karl Moser stark enttäuscht, als er von Arthur Rohn erfuhr, dass Hans Schmidt aufgrund mangelnder

Baupraxis und seiner politisch stark links stehenden Orientierung keine Chance auf eine Berufung hatte und mittlerweile Salvisberg favorisiert wurde. Mit Bedauern, so Moser, müsse er feststellen, dass seine „ebenso sachlichen, als durch die Entwicklung der Architektur naturgemäß gegebenen Gründe“ keinen Widerhall fänden, und warnte einmal mehr: „Wenn Sie einen Mann der ‚mittleren Linie‘, also einen Mann ohne Sicherheit, in heutiger Zeit den Vorzug geben würden, so würde zweifellos nicht nur die Abteilung I, sondern die E.T.H. schwere Schädigung erleiden […] und die Studenten werden anderswo und anderswie ihre Fähigkeiten zu entwickeln suchen.“[14] Noch deutlicher wurde die Gesellschaft ehem. Studierender der Eidg. Technischen Hochschule, nach deren Auffassung Hans Schmidt „unbedingt“ Salvisberg vorzuziehen war, der als „Opportunist“ charakterisiert wurde, dessen „scheinbare, nur äusserliche Modernität“ auf „Geschäftsgewandtheit, nicht aber auf Ueberzeugung und inneren Drang“ zurückzuführen sei.[15]

Noch gaben Karl Moser und seine Mitstreiter nicht auf und sorgten dafür, dass sich selbst die CIAM auf ihrem Gründungskongress mit der Berufungsfrage beschäftigten. In einer von allen Teilnehmern mitgetragenen Stellungnahme wurde noch aus ihrem Tagungsort in La Sarraz der Schulratspräsident in höflichen aber doch deutlichen Worten ermahnt, den so wichtigen Posten „einer Persönlichkeit anzuvertrauen, welche dieses Apostolat im Geiste unseres geschätzten Kollegen Karl Moser fortsetzt, eines Geistes, der auch die Tage in La Sarraz bestimmte.[16] Neben dem Gründungsdokument ist der u.a. von Josef Frank, Sigfried Giedion, Hugo Häring, Pierre Jeanneret, Hannes Meyer und Gerrit Rietveld unterschriebene Aufruf die erste offizielle Stellungnahme der CIAM zu einem aktuellen Architekturproblem.

Notes

[1] Claude Lichtenstein (Hg.), O. R. Salvisberg. Die andere Moderne. Dokumente zur modernen Schweizer Architektur, Zürich 1985.
[2] Eintrag im Tagebuch Karl Mosers am 7./8.4. 1928, Zürich, Institut für Geschichte und Theorie der Architektur der ETH (gta), NL Karl Moser, 1928-TGB-5. Muriel Pérez danke ich für zahlreiche wertvolle Hinweise.
[3] gta, 42 K, Giedion-Gropius 1929, Brief Walter Gropius vom 7.1.1929
[4] „Bericht über die Entwicklung der Abteilung I der E.T.H.“ (8 S.) vom 13.2.1928, Zürich, Hochschularchiv der ETH (ETH-Archiv), 32a/Nr. 4. Zwei teilw. abweichende Entwürfe im Nachlass Karl Mosers. gta, NL Karl Moser, Akten und Brief zum An- und Rücktritt
[5] gta, NL Karl Moser, Akten und Brief zum An- und Rücktritt
[6] Karl Moser et. al., „Bauwille und Staatspflicht“, Der kleine Bund 8, 1927, S. 289-296.
[7] ETH-Archiv 32a/Nr. 4
[8] gta, NL Karl Moser, Akten und Brief zum An- und Rücktritt
[9] ETH-Archiv 32a/Nr. 5, Nr. 13, Nr. 31 u. Nr. 33; Protokoll der Besprechung über gegenwärtige Organisation und Entwicklungsmöglichkeiten der Abteilung I der E.T.H, 14.3.1928, in: NL Karl Moser, Akten und Brief zum An- und Rücktritt
[10] ETH-Archiv, 32a/Nr. 13, Schreiben vom 27.3.1928
[11] „Ich bin unterwegs, um mich über Schule und Arbeiten des ‚Bauhaus Dessau‘, sowie über die meisten Bauten in Leipzig, Berlin, Hamburg und Köln zu orientieren.“ Brief Karl Moser an Arthur Rohn vom 28.03.1928
[12] gta, NL Karl Moser, 1928-TGB-6. „Salvisberg geht bis zu 10 % Neigung mit Eternitbedachung. Die Hauser machen alle den Eindruck von flachgedeckten (horizontal abgedeckten) Körpern. Aber von weiter her sieht man die Dächer.“
[13] Eintrag am 14.4.1928. gta, NL Karl Moser, 1928-TGB-6
[14] ETH-Archiv, 32a/Nr. 28
[15] ETH-Archiv, 32a/Nr. 33, Brief vom 19. Juli 1928
[16] ETH-Archiv, 32a/Nr. 30, Übers. durch d. Verf. Die Dokumente im ETH-Archiv hat mein Kollege Florin Gstöhl aufgespürt

Image Credits

Fig. 1: Otto Rudolf Salvisberg, Institute der Universität Bern (1928-31), aus: Moderne Bauformen 32, 1933, S. 69
Fig. 2: Cover und Doppelseite aus: Heinz Johannes, Neues Bauen in Berlin, Berlin 1931
Fig. 3: Hugo Häring, Siedlung Onkel Toms Hütte, Riemeisterstraße/ Am Fischtal, aus: Die Form 4, 1929, S. 11
Fig. 4: Otto Rudolf Salvisberg, Siedlung Onkel Toms Hütte, Reiherbeize, aus: Die Form 4, 1929, S. 7

Notes

Thomas Katzke

Architekt, Historiker
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Architekturstudium an der TFH Berlin mit Schwerpunkt Bauerhaltung, Dip-lom bei Prof. Dr. Schäche mit dem Entwurf eines neuen Nutzungskonzeptes für das Kantgaragengebäude in Berlin.
Aufbaustudium am Institut für Geschichtswissenschaften der HU Berlin bei Prof. Dr. Demps, Masterarbeit mit dem Thema: Die Großstadtgarage – Einfluss der Automobilisierung auf die Berliner Architektur der 1920er Jahre.
Seit 1998 angestellter Architekt mit Schwerpunkt Denkmalpflege (Architekten Petersen GmbH; Winfried Brenne Architekten; FU Berlin, Referat Bauplanung und Baudurchführung).
Historiker mit den Hauptaugenmerken Architektur der Zwischenkriegszeit und Berliner Großgaragenprojekte. Einschlägige Publikationen und Rezensionen in diversen Fachzeitschriften.

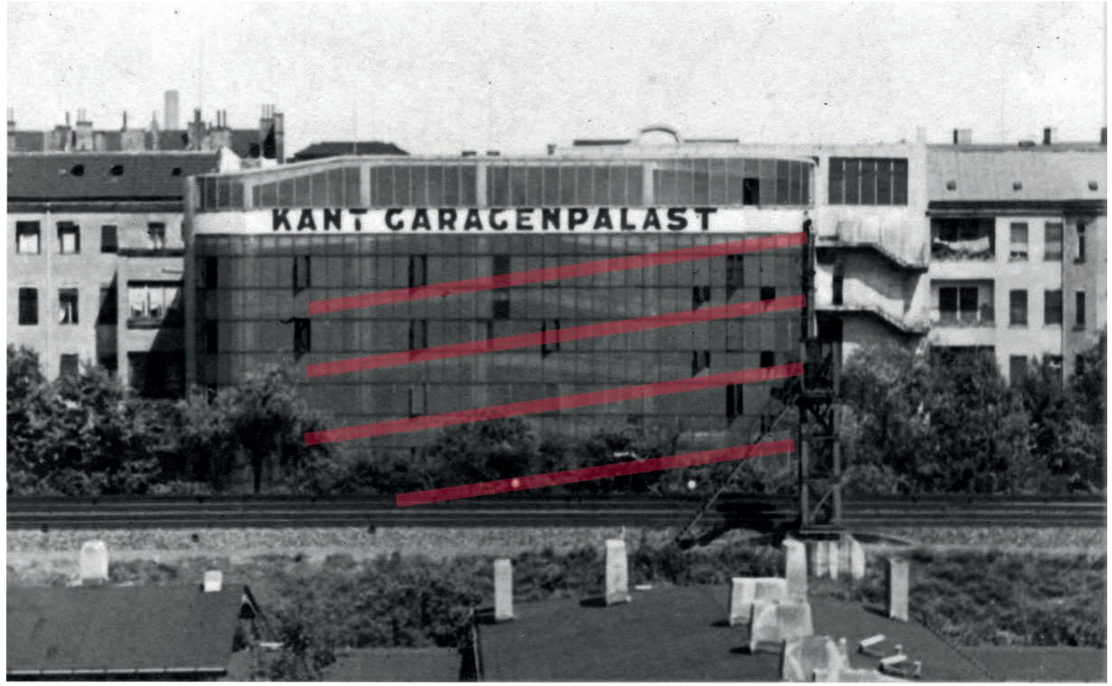

Fig. 1: Vom Verfasser in Rot dargestellter, ursprünglich von Zweigenthal vorgesehener Rampenverlauf.

Bauhaus in Berlin?

Die Entwicklungsgeschichte der Kantgarage 1928-2018

Abstract

Bis Anfang 2017 deutete ein Leuchttransparent an einem in die Jahre gekommenen Gebäude in Berlin-Charlottenburg auf dessen Funktion hin – „Kant-garagen“. Zu seiner Eröffnung im Jahr 1930 war es das erste Garagenhochhaus in Berlin und ein Fanal moderner Sachlichkeit in der Phalanx der wilhelminischen Fassadenarchitektur der Kantstraße. Verantwortlich für die Entwicklung des Ge-bäudes waren neben dem Bauherrn Louis Serlin das Architekturbüro Lohmüller, Korschelt, Renker und zwei junge, gerade diplomierte Architekten – Herrmann Zweigenthal und Richard Paulick.

Die Gestaltung des zeitlos modernen Fassadenentwurfes und der Rampenanlage oblag federführend Hermann Zweigenthal. Dieser realisierte bereits als 19-jähriger Bühnenbilder in Berlin, mit 23 Jahren wurde er Architekt und sechs Jahre später infolge der nationalsozialistischen Machtergreifung seines beruflichen Erfolges in Deutschland beraubt. Zweigenthal emigrierte über die Schweiz und England in die USA und nannte sich von 1940 an Hermann Herrey. In den USA entwickelte er sich zu einem angesehenen Raum- und Stadtplaner, ohne seine Architektur- oder Theaterambitionen zu vergessen. In den 1950er Jahren kehrte er für einige länge-re Aufenthalte nach Berlin zurück und erhielt als Theaterregisseur den Kritikerpreis für die Saison 1957/58.

Dennoch ist der Architekt, Designer, Bühnenbildner, Regisseur, Raum- und Verkehrsplaner, Dozent und Autor Hermann (Herrey-) Zweigenthal heute selbst den Kennern der Berliner Baugeschichte unbekannt. Und wer doch die Kantgarage mit seinem Namen in Verbindung bringt, kann kaum weitere seiner Arbeiten nennen.

Fig. 2: Straßenansicht der Kantgarage und Nachbarbebauung um 1936, Blick Richtung Leibnizstraße.

Exkurs

Mit seiner Präsentation im Jahr 1886 entwickelte sich das Automobil zum Inbegriff individueller Mobilität – mit der Folge einer weltweit einsetzenden, bis heute anhaltenden Motorisierungswelle. Trotz der mit dem Ersten Weltkrieg einhergehenden desolaten Wirtschaftslage stieg die Zahl der Automobile in Deutschland von 1913 bis zum Ende der 1920er Jahre um jährlich ca. 25-30% an.[1] Nach zeitgenössischer Meinung hatte sich diesem Progress der 'althergebrachte Städtebau anzupassen'.[2] Folgen waren neben der Lärm- und Abgasbelastung die ansteigenden Verkehrsunfallzahlen und die Behinderungen durch den ruhenden Individualverkehr. Letzteres ein Widernis, aus dem sich eine neue Bauaufgabe entwickelte – die Großgarage.

In Berlin war der Garagenbedarf verstärkt in den Innenstadtbezirken zu verzeichnen. Diese machten zwar nur ca. 8% der Fläche des Stadtgebiets aus, waren aber Wohnstätte für annähernd 41% der Berliner Bevölkerung. Neben Berlin-Mitte litten im Besonderen die Bezirke Wilmersdorf und Charlottenburg unter der Stellplatznot.[3] Die in den USA ab den 1910er Jahren einsetzende Evolution zur Stockwerksgarage erreichte Europa um 1920, eine der ersten dieser Art in Deutschland war die 1926 in Stuttgart errichtete „Schwabengarage".[4] Parallel ergriff die technoide Ästhetik der zunehmend im Alltag präsenten Maschinen die zeitgenössische Kunst. So definierte Filippo Marinetti 1909 in seinem Manifest des Futurismus ein Rennautomobil in seiner Schönheit strahlender als die Nike von Samothrake.[5] Le Corbusier stellte 1923 das Automobil als ‚Erzeugnis der zu einem Standard gesteigerten Auslese'[6] auf eine Entwicklungsstufe mit dem Parthenon-Tempel und Walter Gropius propagierte am Weimarer Bauhaus die Losung ‚Kunst und Technik – eine neue Einheit'[7]

Prolog

Mit Abbildungen der Straßen- und der Rückfassade des Kantgaragenge-bäudes nahm die 1995 vom Bauhaus Archiv herausgegebene Publikation „Bauhaus in Berlin, Bauten und Projekte"[8] die Kantgarage in dessen Werkkanon auf und reihte Hermann Zweigenthal (1904-1968) und Richard Paulick (1903-1979) in den Reigen der Bauhaus Architekten ein – so auch geschehen durch Hans Engels und Ulf Meyer in ihrem Bildband „Bauhaus Architektur 1919-1933".[9] Richard Paulick, der zusammen mit Georg Muche 1926-27 das „Stahlhaus" in Dessau entwickelt hatte und von 1928-30 Angestellter in Gropius Dessauer und Berliner Privatbüros war, könnte oberflächlich betrachtet als Indiz der Einflussnahme der Bauhauslehre auf das Garagenprojekt genügen. Der 1903 in Roßlau/Elbe geborene Paulick war aber weder Studierender noch Meister am Bauhaus, sein Architekturstudium hatte er 1923 an der TH Dresden begonnen und das Diplom 1927 an der TH Berlin bei Hans Poel-zig erlangt – der, weder Für noch Wider das Bauhaus, mit bewusster „Stillosigkeit" ein prägender Lehrer Moderner Architektur war.

Hermann Zweigenthal, 1904 in Wien geboren, hatte - nach kurzem Intermezzo an der Wiener Kunstgewerbeschule – sein Architekturstudium 1923 an der TH Berlin begonnen und dieses zeitgleich mit Paulick 1927 bei Poelzig absolviert. Ihrem Kommilitonen Julius Posener galt er als dessen bester Adept,[10] selbst negierte Zweigenthal für sich aber jegliche Stilaffinität, Gropius und der Bauhauslehre stand er kritisch gegenüber.[11] Infolge der Machtübernahme der Nationalsozialisten und der damit einhergehenden Gefahr für ihr Leben flohen Paulick und Zweigenthal bereits 1933 aus Deutschland, letzterer nahm 1940 mit der amerikanischen Staatsbürgerschaft den Nachnamen Herrey an.

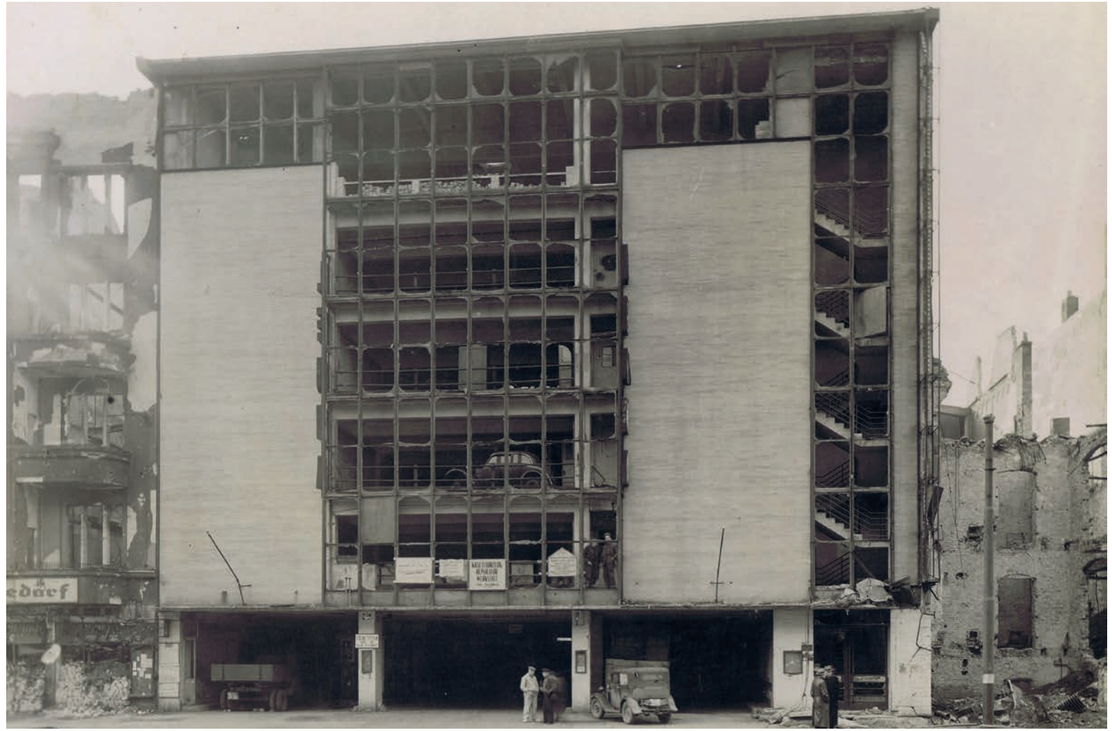

Fig. 3: Straßenansicht der Kantgarage nach 1945 .

Zweigenthal und Paulick sind aber nur zwei von sechs Protagonisten, deren Namen im Zusammenhang mit dem Planungs- und Bauprozess zu nennen sind.
Für die Idee, Entwicklung und letztendlich Realisierung des Garagenprojektes ist Louis Serlin (1886-1967) deutlich in den Vordergrund zu stellen. Der in Pieski im russischen Teil Kareliens geborene Serlin konnte dank eines Stipendiums seiner jüdischen Gemeinde ein Maschinenbaustudium in Mannheim absolvieren. Von 1907 an war er für einem amerikanischen Landmaschinenhersteller wechselweise in Südamerika sowie Osteuropa tätig. Um 1914 wurde er in Posen sesshaft und führte einen Handel mit Schmierstoffen. Die 1920 erfolgte Abtretung der Provinz Posen an Polen war ihm Anlass, 1922 mit seiner Familie nach Berlin überzusiedeln. Neben dem Schmierstoffhandel führte er einen Autoreparaturbetrieb in der Charlottenburger Leibnizstraße. Serlin hatte während seiner USA-Aufenthalte die dortige Hochgaragenentwicklung verfolgt und erkannte in der in Charlottenburg herrschenden Stellplatznot erfolgversprechendes Potential für ein mehrgeschossiges Hochgaragenprojekt.[12]
Um diese Idee zu realisieren erwarb er im Dezember 1928 einen der letzten freien Bauplätze im dicht besiedelten Berliner Westen, das nur teilweise mit einer kleinen Villa und einigen Pferderemisen bebaute Grundstück in der Kantstraße 126/127. Mit der Vorgabe einer in moderner, sachlicher Formensprache zu gestaltenden Gebäudehülle, die eine Tankstellenanlage und die Bestandsvilla zu integrieren hatte, bat Serlin mehrere Architekten um Entwurfsvorschläge für sein Großgaragenprojekt.
Den Zuschlag erhielt die Architektensozietät Lohmüller, Korschelt, Renker – die drei weiteren, für den Planungs- und Bauprozess der Kantgarage als wesentlich zu nennenden Namen. Die Architekten hatten zuvor bereits mehrere Garagenprojekte in Berlin realisiert, wie z. B. die 1929 fertigge-stellte „Großgarage des Westens“ in der Charlottenburger Sophie-Charlotte-Straße. 1925 hatte die Zeitschrift „Neue Baukunst“ in Bezug auf deren Schaffen festgestellt, ‚dass aus der sachlichen und klaren Strenge ihrer Bauten ein gefestigter künstlerischer Charakter spricht‘.[13]

Die Entwicklungsphase der Kantgarage 1929–30

Nach nur zweimonatiger Planung erging im Februar 1929 der Bauantrag für einen viergeschossigen Garagenbau in Stahlbeton-Skelettbauweise mit 157 Stellplätzen.[14] In den statischen Berechnungen der mit der Bauausfüh-rung beauftragten Kell & Löser AG fanden die von Anbeginn bestehenden Expansionsabsichten Serlins mit vier weiteren Obergeschossen Berücksichtigung.
Der Charlottenburger Bauausschuss lehnte den Garagenbau im März 1929 ab, dennoch begann Serlin im Juli 1929 mit den Ausschachtungsarbeiten und konnte letztendlich erlangen, dass die Baupolizei im August 1929 dem Bauantrag mit den Auflagen stattgab, einen Abstand von 10 m zur unmittelbar anschließenden Stadtbahn einzuhalten und an der Rückfront eine gesonderte Treppenanlage vorzusehen. Untersagt wurde jegliche Nutzung der Dachfläche zur Aufstellung oder Pflege von Fahrzeugen.
Zur Erfüllung der Behördenauflagen versuchten Lohmüller, Korschelt, Renker mit unterschiedlichen Ansätzen gewinnversprechende Lösungen für die Fahrzeugaufstellung und für das System der Höhengewinnung zu erarbeiten – jedoch ohne ein akzeptables Ergebnis. Der Erhalt der Bestandsvilla, erforderlich durch Serlins Eigenbedarf, der sein bisheriges Wohnhaus zur Finanzierung des Projektes verkauft hatte, erwies sich hinsichtlich der Rentabilität

Fig. 4: Ansicht der Straßenfassade um 1964 .

des Garagenprojektes für die Architekten als unlösbares Problem. Mangels Erfolgsaussicht empfahlen Sie letzten Endes, das Projekt aufzugeben.

Serlin, der in Berliner Gesellschaftskreisen aufgrund seiner früheren Tätigkeiten und seines Engagements in der jüdischen Gemeinde gut vernetzt war, konnte Mitte 1929 den Deutschen Auto Club (D.A.C.) als Pächter der gesamten Garagenanlage gewinnen und hierdurch gegenüber den finanzierenden Banken die Sinnhaftigkeit seines Unternehmens behaupten. Der D.A.C. war 1927 aus Protest gegen den Automobilclub „ADAC“ gegründet worden, da dessen Mitgliedsplaketten auch neun Jahre nach Ende der Monarchie noch immer die kaiserlichen Farben trugen. Die überwiegend aus dem finanzkräftigen Bürgertum stammenden Mitglieder des D.A.C. hinge-gen bekannten sich bewusst mit den Vereinsfarben schwarz-rot-gold und in ihren Publikationen zum republikanischen Deutschland.[15] Der Club hatte sich u. a. zur Aufgabe gesetzt, den innerstädtischen Mobilitätsproblemen entgegenzuwirken und Lösungen für den ruhenden Individualverkehr zu entwickeln. Diese Aufgabe war Hermann Zweigenthal im Juli 1929 durch den Club-Vorstand übertragen worden, als Forschungsgrundlage dienten Zweigenthal u. a. die Grundrisspläne der Schwabengarage.[16]

Der D.A.C. hatte an seine Mietzusage Bedingungen geknüpft, so z. B. die Betreiberschaft der Garage, das ergänzende Attribut „Palast“ im Garagennamen, um zu signalisieren, dass die Innenräume selbst den höchsten Anforderungen genügen[17] und die Einbeziehung ihres Architekten Hermann Zweigenthal in den weiteren Planungsprozess der Garage. Obwohl erst seit zwei Jahren diplomiert und trotz eines jungen Alters von 25 Jahren, war Zweigenthal neben seiner Tätigkeit als Architekt ein gut beschäftigter Bühnenbildner, Szenograph und Innenraumgestalter. Aufgrund anderer beruflicher Verpflichtungen konnte er das Garagenprojekt nur eingeschränkt begleiten und bat seinen ehemaligen Kommilitonen Richard Paulick um dessen Mitarbeit.[18]

In Arbeitsgemeinschaft mit Lohmüller, Korschelt, Renker überarbeiteten die beiden jungen Architekten ab September 1929 das Höhengewinnungskonzept und die Fassadengestaltung der Garage.

Mit dem von Zweigenthal Ende September 1929 entwickelten Vorschlag, die Rampenanlage in Form einer Doppelwendelrampe an die Rückseite des Hauses zu legen und dadurch den Abstand zur Stadtbahn – da nur noch Verkehrswege an den Bahndamm grenzten - auf genehmigungsfähige 5 m zu reduzieren, konnte eine wirtschaftliche Stellplatzanzahl erzielt werden.

Eine Prinzipskizze und ein Schaubild einer Garage mit doppelgängiger Wendelrampe hatte Georg Müller bereits in seiner 1925 erschienenen Pub-likation „Großstadt-Garagen“ abgebildet,[19] in der Kantgarage wurde das System erstmalig in Deutschland projektiert.

Die von Zweigenthal ursprünglich über die ganze Breite der Rückfassade vorgesehene Rampe wurde jedoch auf Anordnung Serlins verkürzt und stärker geneigt in einem seitlich-rückwärtigem Annex ausgeführt, womit pro Geschoss weitere sechs Stellplätze gewonnen wurden. Allerdings korrespondierte die nun steiler ansteigende Rampe nicht mehr mit den bereits fertiggestellten Rohbauanschlüssen des Garagenbaus, so dass eine bogenförmig abwärts gerichtete Rampe zum Anschluss an die Fahrstraßen des Garagentraktes notwendig wurde.

Im Januar 1930 beantragte Serlin eine Erweiterung der genehmigten, viergeschossigen Garagenplanung um zwei Obergeschosse,[20] dem Ersuch wurde von der Baubehörde zunächst nicht stattgegeben. Da

die Folgen der im Oktober 1929 in den USA ausgelösten Weltwirtschaftskrise bereits auch in Deutschland deutlich spürbar waren, konnte Serlin die Zustimmung der Baubehörde im März 1930 mit dem Argument erlangen, das die Fortsetzung des Projektes die Beschäftigung von ca. 150 andernfalls erwerbsloser Arbeiter[21] ermöglicht. Paradoxerweise haben somit erst die ansonsten das Baugeschehen hindernden Folgen des „Schwarzen Freitages“ dazu beigetragen, dass die Kantgarage weitergebaut werden konnte.
Im April 1930 stellte das Stadterweiterungsamt die Forderung, die Straßenfassade derart zu gestalten, dass das Höheniveau des Gesimsabschlusses dem des Nachbargebäudes Kantstraße 128 entspricht. Zweigenthals ursprüngliche Entwurfspläne sahen für den Ausgleich der Höhendifferenz von ca. 4,55 m ein auf Stützen gelagertes Flugdach als oberen Abschluss der Straßenfront vor. Ausgeführt wurde jedoch die noch heute vorhandene, verglaste Frontblende, die als Querriegel oberhalb des vierten Geschosses die transparenten Felder der Vorderfassade fortsetzte. Die Blende wurde ohne Genehmigung der Baubehörde montiert und wiederholt von dieser bemängelt.[22] Die Behörde wollte nur gegen Abriss und Ersatz der Villa durch einen Neubau, oder einer Sicherheitsleistung von 40.000,-- RM, den Dispens zur Frontblende erteilen. Um den Dispensbedingungen der Baubehörde zu entsprechen, stellten Zweigenthal und Paulick, ohne Beteiligung von Lohmüller, Korschelt, Renker, im Juni 1930 einen Bauantrag für ein anstelle der Villa vorgesehenes Wohngeschäftshaus.[23] Der Entwurf sah im Erdgeschoss ein Restaurant und ein Ladengeschäft, im 1. und 2. Obergeschoss Wohnungen, im 3. bis 5. Obergeschoss die Nutzung als Hotel vor. Die Fassade sollte gleich der Garage mit sandgrauen Verblendern verkleidet werden. Dieser Entwurf wurde im August 1930 vom Bauausschuss genehmigt, realisiert wurde er aber nicht, da das Wohnungsamt für jeden zerstörten Wohnraum 4.000,-- RM als Entschädigung verlangte und Louis Serlin sich außer Stande sah, dieser Forderung nachzukommen.
Zwischenzeitlich war die ausführende Baufirma im Mai 1930 in Konkurs gefallen, Serlin übernahm daraufhin selbst die Restarbeiten an der mittlerweile im Rohbau fertiggestellten Garage. Im Zuge dessen ließ er, um mehr Nutzfläche zu gewinnen, im Auge der Rampenanlage Zwischendecken ein-ziehen, das vorgesehene Oberlicht entfiel. Die Tagesbelichtung der Rampenanlage erfolgte nun nur noch über deren seitliche Verglasung.
Der Garagenbetrieb wurde am 1. Oktober 1930 von der Garagenpalast-Betriebs-GmbH des D.A.C. aufgenommen. Das Fassungsvermögen betrug insgesamt ca. 300 Fahrzeuge, davon 200 in Einzel- und 100 in Gemeinschaftsboxen. Die Baukosten wurden mit ca. 1.25 Mio. RM angegeben.
Das Garagengebäude wurde unmittelbar nach Eröffnung zu einer Attraktion der Architekturwelt, kaum eine Publikation zum Baugeschehen der Zeit verzichtete auf eine Würdigung. Allerdings fielen nicht alle Kritiken zur Garage positiv aus. So bezeichnete Julius Posener das Gebäude als Beispiel eines Generationskonfliktes, aus dem die jüngeren nicht als Gewinner hervorgegangen seien[24] und Georg Müller lobte zwar das Engagement des Bauherrn, diesen Garagenbau trotz widrigster wirtschaftlicher Umstände realisiert zu haben, bemängelte aber die Art der Höhengewinnung mittels Doppelwendelrampe als platzraubenden Modegag.[25]

Die Erweiterungsphase 1931–36

Tatsächlich war der Kantgaragenpalast aber noch ein „ungeschliffenes Juwel“. Da Serlin von Anbeginn des Projektes die Absicht verfolgte, sieben oberirdische Geschosse zu erstellen, war die Decke über dem 4. Geschoß, die mit Abschluss der 1. Bauphase das Dach ausbildete, nicht einer solchen Anforderung entsprechend abgedichtet und das offene Rampenauge nicht mit einem Schutzdach abgedeckt worden.[26]
Neben den Niederschlägen, die ungehindert über die Rampenanlage in das Gebäude abflossen, bildete sich an der Decke des vierten Geschosses erhebliches Kondensat, besonders im Winter bestand daher akute Unfallgefahr. Infolge dessen sperrte die Baubehörde die Nutzung der vierten Etage, die mehrfach beantragte Genehmigung zur weiteren Aufstockung wurde aufgrund der Überschreitung der maximal zulässigen Bebauung von ihr abgelehnt. Zwar erkannte die Behörde ein Dach als zwingend erforderlich an, wollte hierfür aber nur eine Bauhöhe von 70 cm über der Geschoßdecke zulassen.
Der D.A.C kündigte aufgrund der fehlenden, bzw. nicht vermietbaren Stellflächen im Frühjahr 1931 den Mietvertrag auf. Damit einhergehend fand auch Zweigenthals Verpflichtung ihr Ende, der sein von Serlin bestrittenes Urheberrecht an den Fassaden per Gerichtsentscheid erstritt. Zeitgleich löste Zweigenthal die Bürogemeinschaft mit Richard Paulick aufgrund von Honorar-Streitigkeiten auf.
Paulicks Tätigkeit für Serlin endete vermutlich erst im Frühsommer 1931, nachdem er noch einen Bauantrag für den Ausbau des Dachgeschosses zu einer Tennistrainingshalle bei der Baubehörde eingereicht hatte – dessen Genehmigung aber abgelehnt wurde. Nach einigen weiteren erfolglosen Versuchen ein finanzierbares Konzept zu finden – so. z.B. als Bowlingbahn oder Reparaturwerkstatt – sah Serlin von weiteren Baumaßnahmen ab. Erst 1936 bekam die Garage nach Planung der Siemens-Bauunion mittels eingeschossiger Aufstockung ein richtiges Dach.[27] Konstruktiv wich der Aufbau, der die transparente Frontblende integrierte, mit sechs über die gesamte Gebäudebreite spannenden Betonrahmen von dem Stützenraster der unteren Etagen ab. So konnte eine stützenlose Grundrissfläche von annähernd 220 m² mit einer Raumhöhe von max. 5,70 m realisiert werden.
Wider dem Novemberpogrom des Jahres 1938 konnte Serlin aufgrund seiner argentinischen Staatsbürgerschaft die Garage noch bis Mitte 1939 betreiben, dann wurde auch er zu deren Verkauf und Flucht aus Deutschland gezwungen. Das Gebäude überstand die Flächenbombardierung Berlins mit relativ geringen Schäden, die Villa hingegen wurde zerstört und deren Überreste 1951 abgeräumt.
Serlin kehrte nicht mehr nach Deutschland zurück, erlangte aber die Rückübereignung des Garagengebäudes noch Ende der 1940er Jahre. 1956 errichtete die Deutsche Shell AG auf den Fundamentresten der Villa eine eingeschossige Pflegedienst- und Wagenabstellhalle, 1961 wurde die Kantgaragen GmbH des K.H.Pepper neue Eigentümerin des Gebäudes.
Im August 1991 wurde die Garage in die Liste denkmalgeschützter Gebäude eingetragen. Gegen den Verwaltungsakt legte die Eigentümerin Rechtsmittel ein, das Verfahren wurde aber durch das 1995 in Kraft getretene, Berliner Denkmalschutzgesetz ausgesetzt.
Ende 1993 erging der Antrag für eine Nutzungsänderung zu Büro- und Ausstellungszwecken, die Pflegehalle von 1956 sollte zu einem siebengeschossigen Bürogebäude aufgestockt werden. Nach einem langen Einigungsprozess wurde 1997 die Baugenehmigung erteilt. Das Projekt wurde aber wegen mangelnder Profitabilität nicht realisiert.
Im Jahr 2013 rückte die Garage durch einen Abrissantrag, den die Eigentümerin mit einer nicht mehr tragfähigen Bausubstanz begründete, in den Fokus der Öffentlichkeit. Folge war eine heftige

Kontroverse um den mögli-chen Erhalt der Garage, in deren Verlauf Gutachten zwar erhebliche Mängel bestätigten, diese jedoch als zumutbar reparabel einstuften. Der Abrissantrag wurde Ende 2016 mit dem Verkauf der Garage an einen neuen Ei-gentümer, die Gaedeke & Sons GmbH, hinfällig. Dieser beabsichtigt einen denkmalgerechten Umbau der Garage zu einem Büro-, Event- und Gale-riegebäude unter größtmöglichem Erhalt der überkommenen Substanz. Ei-ne automobile Nutzung wird für die Zukunft ausgeschlossen. Anstelle der Pflegehalle von 1956 soll ein Hotelneubau erstellt werden. Bis Ende 2016 wurde das Gebäude komplett entmietet, Anfang 2017 begann der Umnutzungsprozess mit ersten Sondierungsmaßnahmen, seit Mitte 2018 liegt ei-ne Baugenehmigung für das Projekt vor.

Epilog

Zweifelsohne ist die - gegenüber der Gründung des Bauhauses nur zehn Jahre jüngere - Kantgarage ein herausragendes Beispiel des „Neuen Bau-ens“, der „Neuen Sachlichkeit“, der „Klassischen Moderne“, des „Internatio-nal Style“. Aber bei allem Respekt vor Hundertjährigen – nicht alle Gebäude der Zwischenkriegszeit aus Beton, Putz und Glas sind „Bauhausarchitektur“. Diese im Verlauf der Jahre manifestierte ‚völlig unspezifische Bauhaus- Definition, bei der „Bauhaus“ und „Moderne Architektur“ gleichgesetzt werden‘ tadeln die Herausgeber der im Prolog zu diesem Beitrag genann-ten Publikation des Bauhaus -Archivs bereits auf den ersten Buchseiten, unterliegen aber mit der Zuordnung der Kantgarage leider selbst diesem Irrtum. Dies verdeutlicht umso mehr, dass „Documentation and Conservation of the Modern Movement“ eine erforderlich Notwendigkeit für die Rezeption dieser Bauwerke ist und oberflächliche Schubladeneinordnungen den Erkenntnisgewinn keinesfalls fördern – oder wer hat bei der Betrachtung von Zweigenthals Fassaden erkannt, dass diese die szenografische Um-setzung des Tempo-Tempo-Zeitgeists der Zwischenkriegszeit durch einen Bühnenbildner wiedergeben, der gekonnt den Auftritt und Abgang der Dar-steller in den Fokus des Rampenlichts setzte.

Notes

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[3] Müller, Georg: Großstadt-Garagen, Berlin 1925, S. 104
[4] Der Baumeister, München 1931, S. 170ff
[5] Nobis, Norbert Hrsg.: Der Lärm der Straße, Italienischer Futurismus 1909-1908, Hannover 2001, S. 367
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[8] Bauhaus Archiv Hrsg.: Bauhaus in Berlin – Bauten und Projekte, Berlin 1995, S. 70
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[10] Julius Posener 1968 in einem Brief an Egon Eiermann, Südwestdeutsches Archiv für Architektur und Ingenieurbau
[11] Zweigenthal 1935 in einem Brief an Fritz Jaenecke, im Besitz Andreas Jaenecke
[12] Angaben der Tochter Ilse (Serlin) Perlman gegenüber dem Autor am 06.11.2010
[13] Neue Baukunst, Berlin 1925, Heft 21
[14] Bauaktenarchiv Charlottenburg-Wilmersdorf, Kantstr. 126/127, Bd. 4
[15] 1936 Umbenennung erzwungen in Jüdischer Autoclub e.V.; November 1938 Verbot; Quelle: Hochstetter, Dorothee, Motorisierung und Volksgemeinschaft, Das Nationalsozialistische Kraftfahrkorps 1931-45, 2005
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[17] Mitteilungen des Reichsverbandes des Kraftfahrzeughandels und -gewerbes e.V., Berlin 1930, Nr. 48, S. 1672
[18] Fritz Jaenecke bezeichnete Paulick 1935 in einem Brief an Zweigenthal als „... ihren alten Freund und Mitarbeiter...“ im Besitz Andreas Jaenecke
[19] Müller, Georg, Großstadtgaragen, Berlin 1925, S. 19; 55.
[20] Bauaktenarchiv Charlottenburg-Wilmersdorf, Kantstr. 126/127, Bd. 4
[21] Bauaktenarchiv Charlottenburg-Wilmersdorf, Kantstr. 126/127, Bd. 4
[22] Bauaktenarchiv Charlottenburg-Wilmersdorf, Kantstr. 126/127, Bd. 13
[23] Bauaktenarchiv Charlottenburg-Wilmersdorf, Kantstr. 126/127, Bd. 13
[24] Posener, Julius: „Garage Kant à Berlin“, Architecture d'Aujourd'hui, Bologne 1933, H. 5 S. 42-44
[25] Müller, Georg in Bauwelt, Berlin 1930, S. 1413f und in Beton und Eisen, Heft 1/1931 S. 5;10-12; Stellungnahmen des Bauherrn und der Planer Korschelt, Oskar und Renker, Jakob in Bauwelt, Berlin 1930, S. 1701f
[26] Bauaktenarchiv Charlottenburg-Wilmersdorf, Kantstr. 126/127, Bd. 12
[27] Bauaktenarchiv Charlottenburg-Wilmersdorf, Kantstr. 126/127, Bd. 14

Image Credits

Fig. 1: Zeitgenössische Postkarte um 1938, Urheberangabe auf der Rückseite: „Reinhold“
Fig. 2: Zeitgenössische Postkarte, Urheberangabe auf der Rückseite: „Aufnahme Schwarz“)
Fig. 3: Archiv Verfasser, Urheberangabe auf der Rückseite: Photo Pflugfelder
Fig. 4: Archiv des Verfassers

Notes

Aslihan Ünlü Tavil

Prof., Department of Architecture,
Istanbul Technical University (ITU), Turkey

Aslihan Ünlü Tavil being a full-time professor at Istanbul Technical University (ITU), Department of Architecture, she has taught several PhD, master's and undergraduate classes on building technology and has conducted extensive research on sustainable building technologies and construction, building performance simulation, and high performance façade and window systems. Being a Fulbright Fellow, she taught as a Visiting Professor at Roger Williams University, School of Architecture, Art and Historic Preservation at Bristol, Rhode Island between 2012-2013. She has been working as the ITU coordinator of EU Erasmus Strategic Partnership Project "Re-use of modernist buildings".

Notes

Session 3.1
Education

Aslihan Ünlü Tavil

In this session “Education topic” was discussed with three papers that have different standpoints as the influence of Modern Movement on architectural education approaches, ideologies and the challenging conservation methodologies of a modern university buildings.

In her paper entitled as “Walter Gropius and Operative History: An Architectural Palimpsest” Jasmine Benyamin offers a critical re-assessment of the central role the founding members of the Bauhaus played in shaping the discourse and subsequent historicisation of architectural modernism. More specifically, the author discusses the manifestations of operative history in architecture schools by taking account of Walter Gropius’ views on history.

With their paper entitled “Constituting an Archive: Documentation as a Tool for the Preservation of the METU Faculty of Architecture”, Ayşen Savaş and Ipek Gursel Dino present a comprehensive internationally supported research and management plan of Middle East Technical University Campus, which is one of the best products of Modern Architecture in Turkey. The paper focuses on the new methodology developed to address the existing challenges and prepare long-term conservation policies for the campus, which possesses strong material and symbolic manifestation of a holistic Modernist approach with its architectural elements, built-in furniture and art works as well as with its mission, vision and social structure.

In the third paper in the session Teaching Modernism “A Study on Architectural Education in Hungary (1945–60)” by Rita Karácsony, Zorán Vukoszávlyev, discuss the influence of the Modern Movement felt in Hungary from the ‘20s onwards’ and how teaching architecture was challenged to adapt the situation. Moreover the reactions of the university professors’ design styles react to the new architectural tendencies and the student communities’ satisfactions were put forward with an extensive research of the archives.

Notes

Jasmine Benyamin

Associate Professor of Architecture,
University of Wisconsin-Milwaukee School of Architecture and Urban Planning

Jasmine Benyamin holds a Bachelor's degree in Architecture and French Literature from Columbia University, a Master of Architecture degree from Yale University, and a PhD in architecture from Princeton University. Her doctoral research was the recipient of several grants, as well as fellowships from both the DAAD and Fulbright Foundation. Among her publications include essays and reviews for the Journal of the Society of Architectural Historians, the Journal of Architectural Education and the Journal of Architecture.

Fig. 1: Walter Gropius, Internationale Architektur, Munich, Albert Langen Verlag, 1925, 15.

Walter Gropius and Operative History: An Architectural Palimpsest

Abstract

This paper evaluates the legacy of the pedagogical model set by Walter Gropius and other founders of the Bauhaus on subsequent curricula for schools of architecture. More specifically, it uses Gropius' views on history as a backdrop for a closer reading of operative history. While at the Bauhaus, Gropius did not initially mandate the teaching of history. Later, as Dean of Harvard's Graduate School of Design, he re-structured the history sequence as electives, thereby undermining its hitherto central role in what he viewed as a traditional approach to pedagogy that was overly analytical and intellectual. Rather, he encouraged his students to 'make history' for themselves. What are the manifestations of operative history in architecture schools today, and how have they gone beyond references to twentieth century modernism? It is undeniable that there is a concerted effort among contemporary historians to complicated the history of the movement. Nonetheless, the impulse to self edit persists, such that imagery of like minded practitioners converge and sometime eclipse other architectural production.

Full paper will be published in a separate publication series of DOCOMOMO Germany after the conference.

Ipek Gürsel Dino

Assoc. Prof. Dr., Architect
METU Faculty of Architecture, Ankara

Dr. Gürsel-Dino completed her M.Arch degree at Middle East Technical University, Department of Architecture. She pursued her studies further in computational design at Carnegie Mellon University in USA (M.Arch) and Technische Universiteit Delft in the Netherlands (PhD in Architecture). She has led and participated in research projects in both USA and Europe on the development of computational tools and methods for building performance assessment, sustainable building design, parametric design systems, building information modeling, building energy efficiency, virtual-reality design tools and building retrofit. Dr. Gürsel Dino is currently working as a faculty member at METU Department of Architecture, where she also acts as the coordinator to the Graduate Program in Architecture.

Ayşen Savaş

Prof. Dr., Architect/Museolog
METU Faculty of Architecture, Ankara

After being trained as an architect in the METU Department of Architecture and Bartlett School of Architecture, she received her PhD from the History, Theory, and Criticism Program at MIT. For the last 20 years she has been converting historical buildings into museums and curating national and international exhibitions. Currently, she is teaching courses on representation and architectural design at METU. Her publications include exhibition catalogues, books and articles particularly on the transformation of space by means of architectural interventions and the preservation of Modern Architecture. She is the founder of a non-profit organization: Exhibition Design Workshop that established and designed museums such as Sabancı Museum, Erimtan Archeology Museum (EMYA finalist 2017), MKEK Technology Museum and METU Science and Technology Museum. Her achievements include a number of national and international awards and fellowships, including the Getty Keeping It Modern Grant, AIA Architectural Award, AAUW Research Prize, Schlossman Prize in historical research, Sir John Soane Museum, CCA and Bologna University fellowships. The museological theme she had developed for the Turkish Pavilion at the World EXPO in Shanghai won The Silver Medal in 2010.

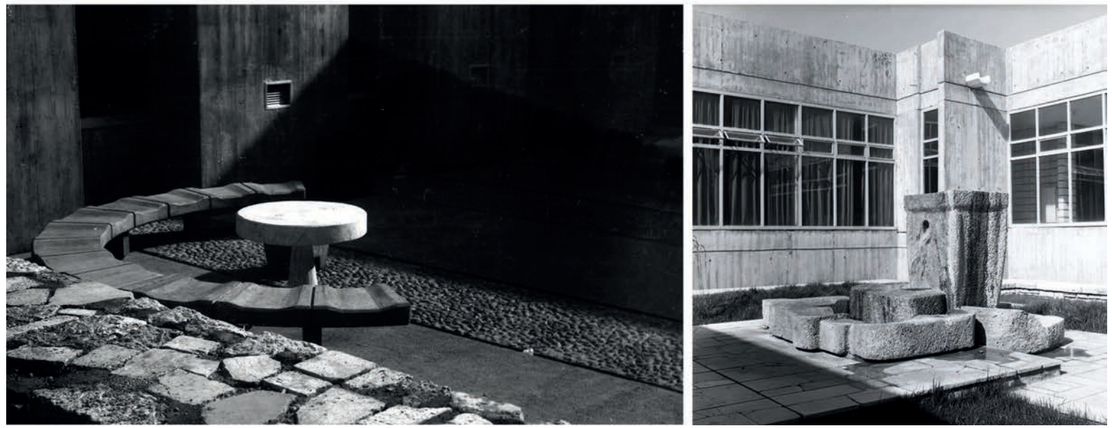

Fig. 1: Altuğ-Behruz Çinici, METU Faculty of Architecture, Ankara, Turkey, 1961, Built-in furnitures placed in courtyards. © Salt Research, Altuğ-Behruz Çinici Archive, 1963.

Constituting an Archive: Documentation as a Tool for the Preservation of the METU Faculty of Architecture

Abstract

It is not an overstatement to say that METU Campus located in Ankara is the best product of Modern Architecture in Turkey. Not only with its architectural elements, built-in furniture and artworks but also with its mission, vision and social structure, it is the material and symbolic manifestation of a holistic Modernist approach. Embodying the branded aphorism “university as a society” and designed by the architect couple Behruz-Altuğ Çinici, the campus was erected on the bare mounds of Anatolian prairie in the late 1950s. For the last ten years, the campus has been exposed to a series of physical interventions and started to lose its original qualities. The 20th-century architecture is not of interest particularly in Turkish governance, where the definition of historical heritage is quite narrowly defined within a time limit of the late 19th century. Appreciating the minimalist interiors, white plaster surfaces, glass brick separators, exposed concrete walls have also been rather difficult for the users coming from different backgrounds and social classes. The maintenance of the buildings becomes an obvious necessity in regard to central Anatolia’s severe geographic characteristics. Recently a comprehensive research and management plan is implemented with the support of international organizations and this paper focuses on the new methodology developed to address the existing challenges and prepare long-term conservation policies for the campus. Documentation here is understood as the leading action of preservation.

Fig. 2: Altuğ-Behruz Çinici, METU Faculty of Architecture, Ankara, Turkey, 1961, The interior view from the building and the aerial view of the campus. © Salt Research, Altuğ-Behruz Çinici Archive, 1961 and 1973.

1. METU Faculty of Architecture

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The 20th-century architecture is not of interest particularly in Turkish governance, where the definition of historical heritage is quite narrowly defined within a time limit of the late 19th century. Appreciating the minimalist interiors, white plaster surfaces, glass brick separators, exposed concrete walls have also been rather difficult for the users coming from different backgrounds and social classes. The maintenance of the buildings becomes an obvious necessity in regard to central Anatolia's severe geographic characteristics. Recently a comprehensive research and management plan is implemented with the support of international organizations and this paper focuses on the new methodology developed to address the existing challenges and prepare long-term conservation policies for the campus. Documentation here is understood as the leading action of preservation. (Fig. 3)

2. BIM for Modern Heritage Buildings

According to the Recording, Documentation, and Information Management (RecorDIM) guiding principles[2] of the Getty Conservation Institute, heritage documentation includes metric, quantitative, and qualitative information about the building assets, their values and significance, their management and the threats and risks to their safekeeping).[3] While computer-aided architectural design (CAAD) tools are widely used for geometric modelling, they cannot extensively support the information-rich workflows of heritage planning processes. Building Information Modelling (BIM) stands as a recent technology that can effectively support conservation planning as well as other architecture, engineering and construction and facilities management activities. The main premise of BIM is one single model that is encoded in a standard, interoperable file format that maintains the whole building data. The value of BIM is realized as it provides direct access to building information and it allows the near-seamless integration of innovative technologies. In METU HBIM research, following the increased need for information management, the scope of BIM has been expanded to support heritage information. HBIM aims to leverage the existing capabilities of BIM and further harness it by the domain-specific heritage information gathered through a diverse set of abovementioned sources. The object-oriented structure of BIM allows a diverse set of heritage building objects with properties that both exist as part of the model and that can be added as needed. A wide range of technologies (including information capturing and structuring, performance analysis, visualization) need to converge on HBIM. Central to such technologies is the capture of building geometry, which is primarily handled with 3D data acquisition methods such as photogramme-

Fig. 3: Altuğ-Behruz Çinici, METU Faculty of Architecture, Ankara, Turkey, 1961, The interior view from the building. © METU Faculty of Architecture Archive, Fatma Serra İnan, 2017.

Fig. 4: Altuğ-Behruz Çinici, METU Faculty of Architecture, Ankara, Turkey, 2018, Renderings from HBIM model. © produced by Şahin Akın, 2018.

try and 3D laser scanning. The latter is being increasingly used to document heritage buildings due to its increased accuracy, dataset quality and data visualization capabilities, albeit with significantly higher costs. The resulting 3D model is significant especially for the documentation of buildings under the threat of being demolished, for the remote/virtual access of heritage buildings that are otherwise inaccessible, and for buildings that require the application of visual analytical methods on buildings in three dimensions.[4] Semantic data is a critical complement to geometric data in HBIM. It accounts for the non-geometric information about the building, its site, components and processes, is gathered through surveying or existing building documentation. This includes not only technical data but also information regarding the cultural, social and historical significance values of a heritage building. Despite the increase in the amount and various types of data in HBIM, the uniqueness of each heritage building and its architectural and heritage values challenge the standardization of the model. (Fig. 4)

3. Documentation of the METU Faculty of Architecture Building Complex

With respect to the abovementioned needs for information documentation, a Heritage Building Information Model was developed particularly for the METU Faculty of Architecture Building complex. The HBIM development process was carried out in parallel with the other planning activities, including the elicitation of cultural and spatial values, structural assessment, material and environmental performance assessment. The data that was generated during these diverse set of activities were first identified, categorized and integrated into the model by the development team. The purpose of the model is the documentation of the building, including the three-dimensional geometry, architectural significance, and the results of the assessment activities; data sharing between the work packages during the project; and data interoperability with the third party analysis tools, such as structural analysis tools and energy performance simulation tools. The HBIM also has the potential to be used as a long-term digital medium that supports future activities regarding operations and maintenance, major renovation or analysis. The geometry of the building was captured using different sources, including; a. The existing drawings: a number of existing drawings of the Faculty building that were drawn at different times for different purposes were identified. Due to the variety in the survey methods, the level of precision of these drawings was not sufficient to be able to draw a detailed and accurate model and they did not acquire any information regarding the infrastructure of the building complex. Nevertheless, these drawings acted as the primary resources as a three-dimensional model before the Faculty building's HBIM model was fully developed. b. The faculty building was documented using a hand-held 3D laser scanner-ZEB-REVO.[5] It is advantageous to steady cameras due to its ease of use, flexibility and speed of scan. The scanner has 100Hz of line speed that gives a very good homogeneous data collection while in operation. The result of the laser scanning process is a point cloud with x, y, and z coordinates of all the physical objects in the physical environment. This includes all the architectural elements, but also the furniture, people and other objects. CC detects the reference points automatically and aligns each point cloud according to the reference point cloud data consisted of 140.000.000 points. c. For the second phase of laser scanning, a stationary, high-precision, high-speed laser scanning device, (Faro Focus Laser Scanner

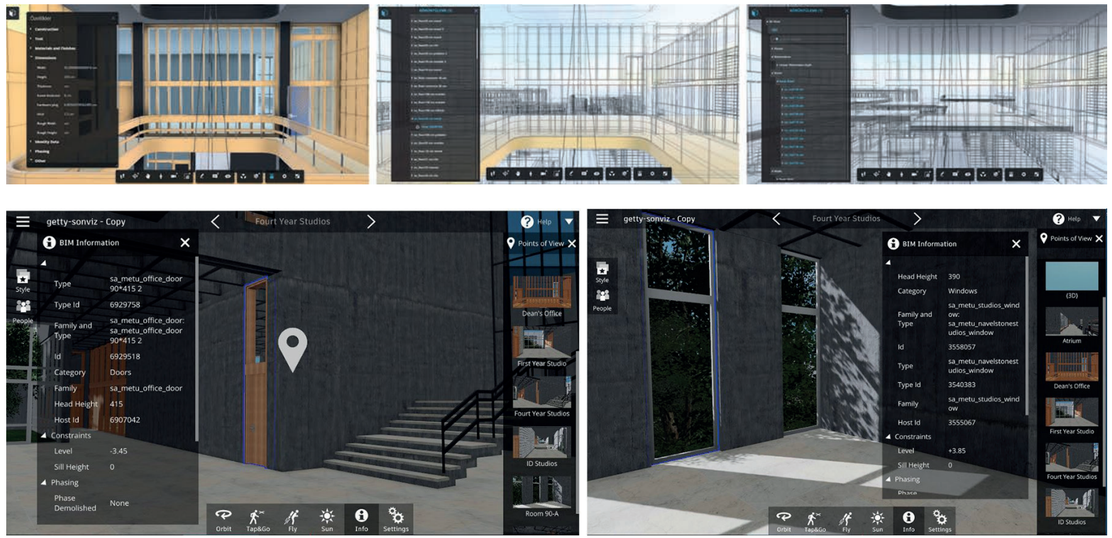

Fig. 5: Altuğ-Behruz Çinici, METU Faculty of Architecture, Ankara, Turkey, 2018, Interactive visualization of HBIM model and its associated BIM data on web-based browser. © produced by Şahin Akın, 2018.

120)[6], was used for detailed measurements of complex environments and geometries. Scanning was carried out both internally and externally resulting in a dense point cloud. The library of parametric objects (Revit families) that was developed previously were both validated and articulated during this phase using the 3D point cloud. Finally, the Revit[7] model was built using these parametric objects. In case of discrepancies between the survey results and the point cloud, the model has adjusted accordingly. As a result, a precise, as-is geometry model was built in Revit. d. In the final step, the building details that were not previously documented or not captured by the laser scanner were documented by means of on-site surveys. This task was carried out in parallel with the data collection and condition assessment activities and registered the gathered information in the model as required. While the information that was already contained in the Revit model was instantiated directly, a lot of new information types was identified and captured during the project, which were added to the HBIM by extending the Revit API as classes or class properties.

4. HBIM and the Visualization of Data

The existing building data in the standard BIM schema, as well as the extended schema that contains the new data types, provides critical support to the heritage professionals during assessment processes. Therefore, the expressive visualization of these data types is one of the primary concerns of HBIM development. For the Faculty building, these new data types and the existing ones are made complementary to the 3D visualizations of the building. As such, distinctive visual markers are inserted into the 3D view of the building where the data was collected or associated with. This could be a room, an architectural element or any part of an element. These markers contain the newly added sets of HBIM data, which, upon clicking, display the information to the users. For instance, during a structural assessment, the data regarding an existing crack, such as the images of the crack, its depth and hazard condition, can be viewed by the users. Clicking on a staff office door, helps the retrieval of historical data related to the previous users of that particular space, restorations that the door had been subject to, material properties, manufacturing techniques of that door and the industrial resources of its doorknobs, hinges, and locks. One of the major advantages of this medium is its sustainability. This interactive medium allows further additions, corrections, and subtractions. It has the potential to be used as a long-term digital medium that supports future activities regarding long-term management activities, including operations and maintenance, major renovation or analysis. The simultaneous visualization of the geometry and the semantic data is useful both for assessment activities and also for sharing the architectural heritage values with a wider audience (Fig. 5). The Faculty of Architecture Building complex is an outcome of the creative intellect of post-war architectural engineering and became the laboratory of new materials, mechanical equipment and construction techniques in Turkey. Starting from the use of a waffle slab system to the production of fan coil units, it marked a number of “firsts” in the country. Making the scientific data visually available is one aspect and providing its integrity with the social and cultural documentation is another. Personal histories, historical narrations, memoirs, legal documents, photographs, films, building codes, the gradual growth and integration of the landscape elements, users’ demands, architect’s dreams, and many similar and seemingly unrelated data needs to be overlapped with the more

quantitative information. METU HBIM was developed to convey this information effectively and provide insights into a rather sparse and complex data set. Proper visualization provided a different approach to show potential connections, relationships, which are not as obvious in non-visualized qualitative and quantitative data. This comprehensive 3D environment provided interactive and comparative data visualization that has the capacity to provide relevant knowledge in the most efficient manner possible. The HBIM model can be considered as a virtual replica of the building that evolves in time. Besides being an operational and management tool for heritage buildings it also has the potential to become a new representation tool for architectural education.

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Notes

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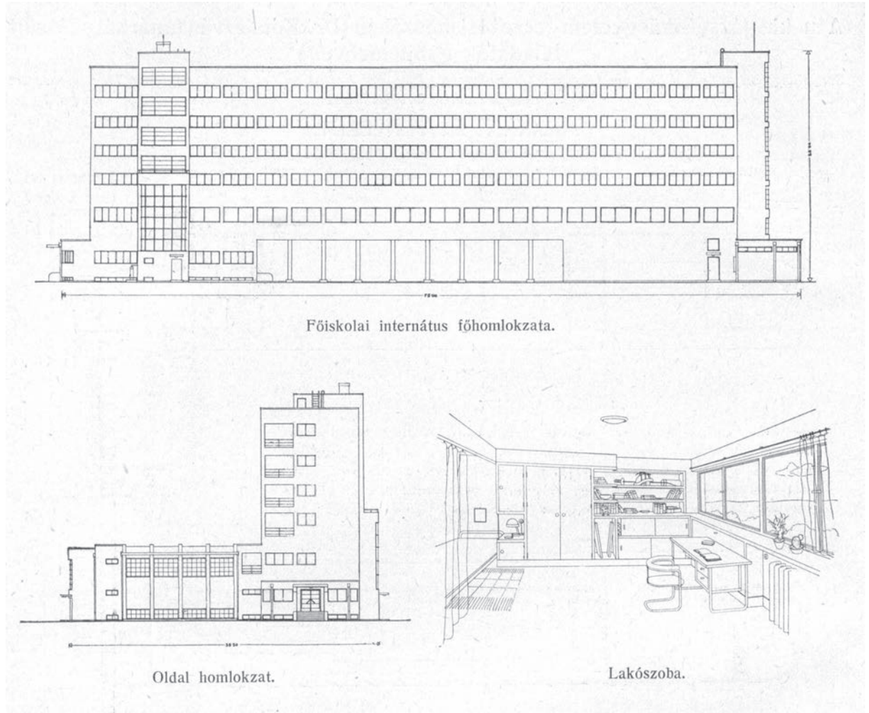

Fig. 1: Gyorgy Racz, diploma project, professor: Ivan Kotsis, Budapest, 1930.

Teaching Modernism

A Study on Architectural Education in Hungary (1945–60)

Abstract

"One should not wear swimming suits where others wear smoking. Modern architecture needs to be humanised."[1] These are the words Károly Weichinger used in a consultation at the Architecture Faculty of the Budapest Technical University during the 1940s. The influence of the Modern Movement was felt in Hungary from the '20s onwards[2] – teaching architecture was challenged to adapt to this situation. How did professors designing in historical styles react to new architectural tendencies? To what extent was the architectural profession or the student community satisfied with the changes? From the '30s onwards the teaching methods were increasingly related to modernism, but after WWII the Soviet occupation had a significant impact on the alteration process: it was temporarily suspended. The Soviet-type state organisation forced socialist realism as style dictatorship on culture. This paper's aim is to investigate what kind of influence that commitment caused around 1951 on architectural education, which was fundamentally based on modernism that time. Several interviews have been conducted with former students, which can help in answering the question. The recollections point to the fact that the changes that started at the end of the '20s did not stop entirely in the 1951–54 period due to some teachers devoted to modernism.

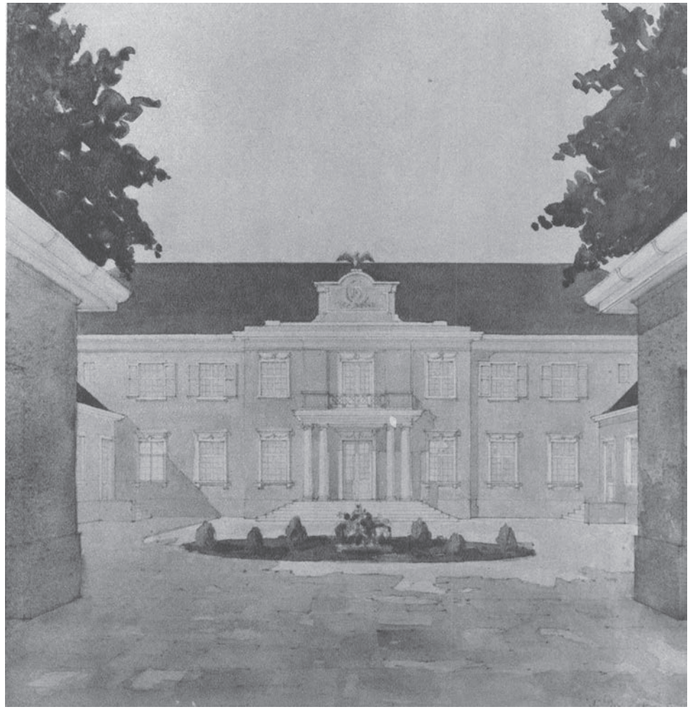

Fig. 2: Karoly David, diploma project, professor: Gyula Walder, Budapest, 1930.

This paper investigates the development of the architectural teaching methods connected to modernism at the Budapest University of Technology (BTU), then the period that interrupted this process: the era of socialist realist style in architecture (1951–54). During this time modernist approaches were marginalised at first sight, giving place to designs in some kind of historical style. By reading the documents from the archives and the former professional press one can feel the overall presence of socialist realism, at the same time the recollections of former students can call this strong influence into question at least at the field of architectural education. Meanwhile, after WWII a lot of significant artefacts were designed at the state-owned offices, then built due to the partly recovering economy. First, we should go back to the end of the '20s: two architectural student exhibitions were organised at BTU, which can show how the judgement of the Modern Movement was modified in Hungary within a few years. Reactions to the student exhibition organised in 1927 well demonstrate the range of diverse attitudes that members of the architect profession held to modernism. Besides drawings submitted as university assignments in historical styles, the exhibition showcased plans independent of any Departments. Such was the work Villa le Corbusier by second grade student György Rácz, was inspired by the writing Towards a New Architecture by the famous architect.[3] Three years later, the plan Rácz submitted as his diploma project once again "reflected a style of seeking new forms". This design of a student dormitory, as far as the layout and facade were concerned, adopted a functionalist approach, with the furniture of the rooms showing some further influence of modernism[4] (Fig. 1). Another student, Farkas Molnár[5], who studied in BAUHAUS before returning to Hungary, submitted several plans in modern spirit to the student exhibition in 1927. While the professional paper Tér és Forma [Space and Form], which was promoting modernism in Hungary, welcomed the creations of the young ones as fresh and up-to-date[6], the magazine Technika [Technics] criticised the curators of the exhibition with strong words: "A few extraneous drawings appear in the corners of the exhibition, which we spare no words for while hoping that the curators will take better care of standards next time"[7]. A mere three years later, in 1930, another student exhibition was put on at BTU based on the concept of one of the teachers, Iván Kotsis. The exhibition was linked to the XII. International Congress of Architects taking place in Hungary at the same time, which focused on the current state of teaching architecture, too[8]. The selected student plans indicate that, due most probably to the pressure from the Hungarian professional audience[9], modern drawings were in majority, although the design for a building executed in purely historical style was also showcased[10] (Fig. 2). This duality was seen on the designs of the BTU teachers who were working as private practitioners during the mid-war years. For example, Dezső Hültl, head of the Modern Age Architectural Department and Rector of BTU in 1930–32, executed designs sometimes in Neo Baroque while in other cases modern styles depending on the function, environmental context and representational objectives. Although from the '20s onwards a gradual disengagement with the practice of designing in style took place at BTU[11], this tendency, instead of fostering a superficial adoption of the latest trends, was conducive to the birth of buildings with a better fit to local economic and contextual conditions. Professor Kotsis himself referred to this practice as "conservative progression"[12] which contributed to reinforcing and institutionalising the so-called "other modern". However, during WWII students received education with a predominantly modern approach

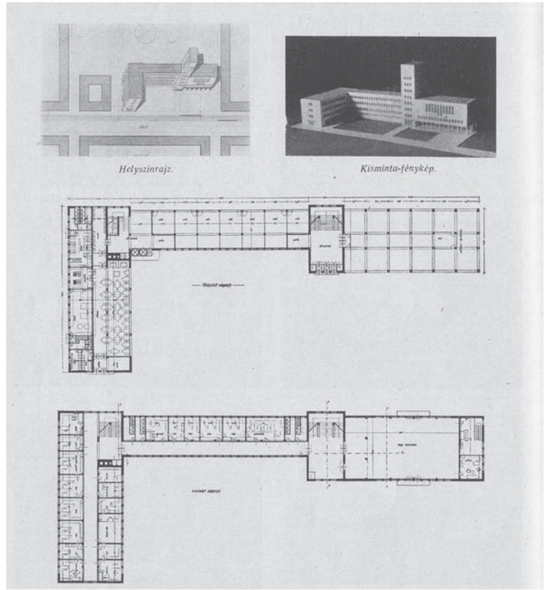

Fig. 3: Arpad Szabo, diploma project, professor: Ivan Kotsis, Budapest, 1939.

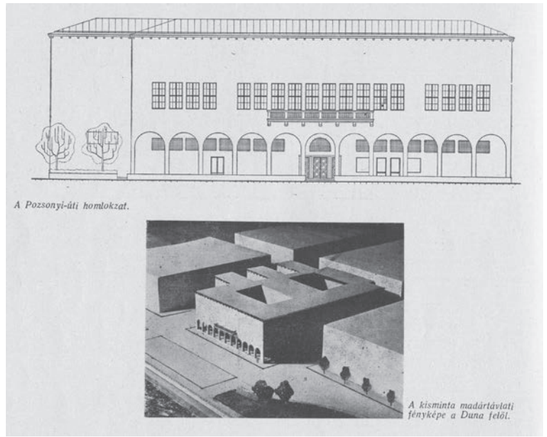

Fig. 4: Ferenc Stechauner, diploma project, professor: Ivan Kotsis, Budapest, 1939.

(Fig. 3–4). This tendency continued and was even further enhanced by the influence of a group of students and teachers returning from Denmark in 1946. "The Danes" were relocated from Hungary in December 1944, by the Nazi-friendly government after concluding an agreement with the German leadership about transporting tangible and intangible assets to Germany[13]. Due to the forward shift of frontlines, the relocation project soon turned into an escape and architecture students and teachers ended up, temporarily or forever, in Nordic countries. Those who returned, brought home many valuable professional publications[14], which they studied with great interest together with their peer students at BTU. After the Soviet occupation in Hungary, just like in all the other countries of the Eastern Block[15], major changes were introduced into the practice of teaching architecture, too. In 1948–49 many teachers were replaced by others who were considered more reliable by the Communist Party[16]. Classes with political content were included in the curriculum while later in 1952 the overall educational system was reformed which had an impact on technical classes too. This came as a result of the fact that during the 1951–54 periods, the State adopted dictatorship to culture and made it obligatory to apply the style of socialist realism in the fields of art[17]. In connection with this, the Party leadership forbade architects and students to embrace Western "imperialist" approaches. Instead, it was expected that architects once again design more or less in style, evoking the architectural heritage of the Hungarian classicism[18]. It was this style that was considered most compatible with socialist realism since classicist buildings originated from an era that coincided with the early years of civic development: an era of progression that could serve as an example to follow. The style was primarily important in the case of public and residential buildings. Socialist realism had a smaller impact on industrial design; nevertheless there appeared a few cases when prominent industrial buildings were ornamented with archaic facades[19]. Teaching industrial design, as well as city planning to some extent, were the two areas that enjoyed perhaps the highest degree of freedom at BTU. In these fields, the style did not make a statement[20]. But as a result of style dictatorship, a few old classes were reintroduced into the curriculum whereby a new attempt was made to encourage students to use historical forms for practical use. By the end of the '40s, architects were forced into state-owned design offices and private practices were forbidden. The impact of collectivisation was immediately felt in the educational system too: previously a department of architecture could also act as a design studio – in other words, the professors could have their own design offices at the university and could offer employment for their colleagues and students. This practice was immediately discontinued. Departments of architecture were soon restructured by functional arrangements adopting the logic of large state-owned design offices. This typically was resulted in the creation of four design departments each specialising in a specific design function. From these departments of public, residential, industrial and agricultural buildings as well as city planning, the students could follow a straight road to large government-owned corporations[21]. In comparison with architects employed at state design offices, students of architecture were in an easier position, because there weren't as many expectations towards them in connection with socialist realism. Style dictatorship did not disrupt their professional development as much. This conclusion is supported by interviews conducted during the 2016–18 periods with the architects who were students at that time[22]. Several interviewees pointed out that they considered socialist

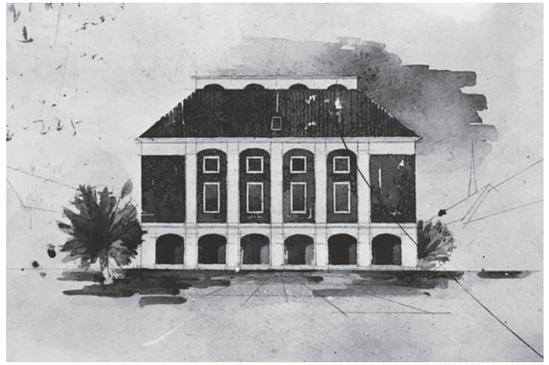

Fig. 5: Zoltan Kery, student work, professor: Karoly Weichinger, Budapest, 1954.

Fig. 6: Dezső Ercsi, dilpoma project, professor: Karoly Weichinger, Budapest, 1954.

realism as an “add on” activity. Accordingly, they fundamentally designed functional buildings and met style expectations by adding some ornamental features to the facade. During the era of socialist realism (1951–54), for a few years, this method of composition was thought in independent classes (Fig. 5–6). Special permissions were given to the talented students by their teachers to submit two parallel designs. The first one was the original one, which met the requirements of the style dictated by the Communist Government and the second one was the secret one reflecting the modern approaches[23]. In case of assignments for lower grade students, vernacular architecture also offered a starting point; students enjoyed tapping into this source[24]. Furthermore, Scandinavian classical modern architecture could also be used within the framework of the socialist realist style (Fig. 7.), The usability of Scandinavian architecture was proved by buildings designed in state-owned planning offices, too. For example, BTU’s new complex, the execution of which could be observed by the student community too (1950–54), was built in such style. Thanks to some teachers – who remained dedicated to modernism during the era of socialist realism – continuity with the previous period could also be maintained. Professor Károly Weichinger gave secret lectures in closed private groups, with the use of professional publications, which evoked an interest in his audience for the latest trends in Western architecture[25]. Around 1955–56, due to arrangements made by Professors Alajos Sódor and Frigyes Pogány, a few students had the opportunity to visit studios where they were introduced to “non-official” painting. The professors took advantage of these situations to offer an overview of modern, foreign religious architecture, by the use of architectural journals or books[26]. Such activities involved major risks even during the era of political relief around 1956, since at that time it was forbidden to build any religious buildings and such architecture was not accepted as the subject of design tasks in the education system either. These secret lectures were only accessible to a small audience. However, Professor Pogány's official lectures on art history at BTU were popular beyond measure; even students from other universities attended his classes so that they could “do some travelling abroad (in their mind)”[27], which was otherwise not allowed for a long time after the Iron Curtain had been installed from 1949. Due to changes upon the death of Stalin, style dictatorship was abolished, too. After Khrushchev’s speech in 1954, the practice of modern design could be continued where it was stopped before 1951. Unfortunately, for many students of architecture, there remained little room to explore the new approaches of Socialist architecture beyond 1956, since they were forced to leave their home country once the 1956 Revolution was defeated[28]. However compared to their peers in Hungary, they could join the latest trends, such as structuralism and new brutalism, somewhat earlier. 1956 gave a temporary pause to the development of Hungarian architecture, but opportunities for progressive architectural thought once again opened up later on. Instead of giving an archaic character to socialist realism, modern Socialist architecture was defined as one that relies on technical innovations, prefabrication and standardization. By this, a new era dawned on Hungarian architecture[29].

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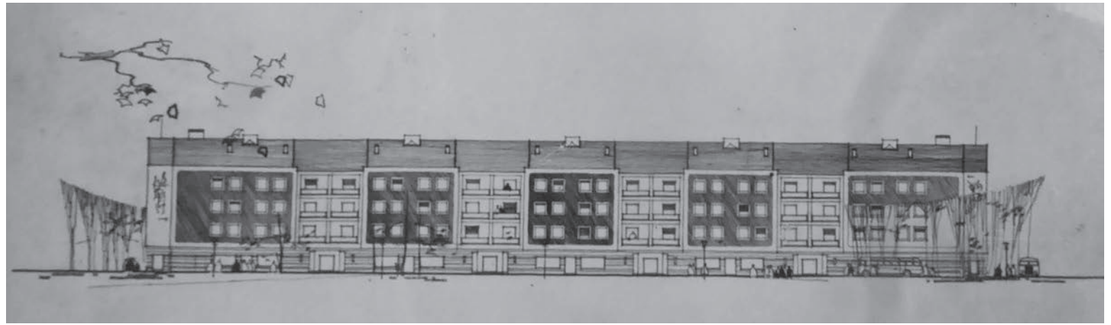

Fig. 7: Zoltan Kery, dilpoma project, professor: Karoly Weichinger, Budapest, 1955.

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Students' works of the midwar period at BTU
Fig. 1: György Rácz, diploma project, professor: Iván Kotsis, Budapest, 1930.
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Fig. 2: Károly Dávid, diploma project, professor: Gyula Wälder, Budapest, 1930.
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Fig. 3: Árpád Szabó, diploma project, professor: Iván Kotsis, Budapest, 1939.
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Fig. 4: Ferenc Stechauner, diploma project, professor: Iván Kotsis, Budapest, 1939.
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Students' works of the decade after WWII at BTU
Fig. 5: Zoltán Kéry, student work, professor: Károly Weichinger, Budapest, 1954.
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Fig. 6: Dezső Ercsi, dilpoma project, professor: Károly Weichinger, Budapest, 1954.
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Fig. 7: Zoltán Kéry, dilpoma project, professor: Károly Weichinger, Budapest, 1955.
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Els de Vos

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Els De Vos, engineering architect and spatial planner, is associate professor at the Faculty of Design Sciences at the University of Antwerp, where she lectures in the field of architectural history, architectural theory and interior design. She is a member of the research group Henry van de Velde. Her PhD dissertation on the architectural, social and gender-differentiated mediation of dwelling in 1960s–1970s Belgian Flanders has been published with the University Press Leuven in 2012. She has co-edited with the University Press Antwerp several volumes in the field of architecture, including one on the architectural education in Antwerp, entitled Van academie tot universiteit [From Academy to University] (2013) and Theory by design (2013). In October 2012, she co-organised the international conference Theory by Design. Architectural research made explicit in the Design Teaching Studio (Antwerp). She was awarded the Society of Automotive historians Student Paper Competition Award 2007, the Flemish Movement of Urban Planners Dissertation Competition Award 2002 and the BWMSTR label 2016 Award by the Flemish Government Architect together with Kimoura Hauqier and Jonas De Maeyer. She published in several national and international journals, including Technology and Culture, Home Cultures and The Journal of Interior Design. She's a member of the scientific committee of the new open source scientific magazine called Inner – The interior architecture magazine (www.innermagazine.org).

Session 3.2
Standardisation and Rationalisation

Els De Vos and Maria Leus

In addition to political, economic and social changes, the interwar period is also marked by architectural innovations in terms of spatial, functional and formal characteristics. The need to accommodate entire populations and to support the economic and industrial revival offered new opportunities for new ideas in the field of urban planning and architecture. From the interwar period onwards, affordable housing for the masses came high on the agenda of national governments, but also architects and housing reformers. In order to achieve this objective and to reduce costs, the modernists predicted three basis axioms: austerity (especially the plea to do away with heavy ornamentation), rational features (which manifested itself in the application of abstract geometry) and the aim for standardization and prefabrication. Walter Gropius, the architect and founder of the Bauhaus in 1919, pleaded architecture and art that was accessible to the masses, and not just a luxury of the few. The application of rational techniques was central in the educational system of the Bauhaus. Industrialisation and standardization were ways to achieve this. In Frankfurt, the modernist architects, such as Walter Gropius, Mart Stam, Bruno Taut and Adolf Meyer, could develop their ideas in practice by building affordable public housing. Experiments happened with standardization and industrial building techniques, but also with the rational arrangement of the apartments. The Franckfürter Küche of the architect Grete Schütte-Lihotsky is one of those experiments, that became exemplary all over Europe. In 1929, the Congrès Internationaux d'Architecture Moderne (CIAM) was held in Frankfurt am Main and dedicated to the Minimum Dwelling. In the postwar period, the ideas developed during the interwar-period were employed at a large scale. To answer the housing need, social housing programs were developed in all Western countries, the Bijlmer in the Netherlands, Luchtbal and Kiel in Belgium (Antwerp), the HLM's (Habitation à Loyer Modéré) in France or New Belgrade in Serbia, to name but a few. As the loans had increased, the need for standardization and economies of scale became unavoidable. The design of these housing projects was focusing on functionality, effectiveness and efficiency, but also health and emancipation of the workers.

In this session, two articles are dealing with this topic, but in a completely different context: Anica Dragoutinovic, Uta Pottgiesser and Michel Melenhorst focus on housing in former Yugoslavia, while Fernando Páez Delgado discusses the houses of Paulo Mendes da Rocha in Brazil. Anica Dragoutinovic et al. investigate different aspects of the "minimum" in post-war large-scale housing project 'New Belgrade', a new housing settlement of socialist Yugoslavia. They discuss how concepts for the minimum dwelling evolved into the concept "minimum for the maximum", referring to the application of different aspects of the "minimum" in order to achieve a "functional maximum" in the usability of space. Especially interesting is their reference to the term "flat value", as defined by architect Mihailo Canak in 1975, a combination of functionality (quality) and economical factor (price) while meeting the residents´ needs with as little resources as possible. In addition, they compare these standards and needs with the actual ones in a society where the market dominates and housing is disconnected from its social function. Fernando Páez Delgado scrutinizes the work of the Brazilian modernist architect Paulo Mendes da Rocha, a leading member of the Paulista school and Pritzker Prize Winner in 2006. In the overview of his oeuvre, he includes also less well known (housing) projects of the architect. While doing so, he discusses how his architecture uses certain ideas and principles of the modern movement such as standardization and rationalisation but did it in another condition for other reasons. Delgado shows that there are significant variations on the idea of a prototype, variations on how Mendes da Rocha dealt with this topic and with those related to it, like standardisation or rationalisation.

Notes

Ana Tostões

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Ana Tostões, PhD is an architect, architecture critic and historian, and is president of Docomomo International and Editor of the Docomomo Journal. She is a Full Professor at Técnico, University of Lisbon, where she teaches Theory of Architecture and Critical History, and coordinates the Architectonic Culture research group. Since 2012, she has been in charge of the Architectural PhD program. She has been invited professor at FAUP, EPFL, ETHZ, UTSOA, RSA, ETSAB, ETSAUN. universities worldwide. Her research field is the Critical History and Theory of Contemporary Architecture, focusing on the relationship between European, Asian, African and American cultures. On this topic, she has published 13 books and 95 essays, curated 9 exhibitions, participated in 47 juries, 40 scientific committees and gave lectures in 72 universities worldwide. She has acted as peer referee for scientific journals. She coordinated the research projects "Exchanging World Visions (1943-1974)" and "Cure and Care the rehabilitation".

Fig. 1: Bauhaus: 1919-1928, cover catalogue of the Exhibition held in 1938 at The Museum of Modern Art, New York. © Ana Tostoes.

The Power of the Bauhaus, the worldwide design shift

Abstract

The Bauhaus had a pioneering influence on design worldwide which still endures today. Through education, experimentation and materialization, a revolution took place in the use of space, combining clarity, fluidity, functionality and beauty. The Weimar/Dessau school is remembered – from Gropius' Weimar office to the Dessau masters' houses, interiors and furniture – for its avant-garde approach to architecture, urbanism, and design for mass production and commercialization. While the objects it produced are its material legacy, the human body (or Oskar Schlemer's "Human being") was definitively at the centre of this experimental work. The unity between spirit and body spurred a quest into health, movement, hygiene, comfort, and rationality. The aim here is to demonstrate how this concept was achieved within a new use of space through innovative interior design. Materials and forms, as well as reinvigorated bodily awareness, contributed to this transformation. The question is, how did Bauhaus' "bodies" and "minds" challenge traditional ideas about daily life shaping the connection between physical and mental harmony. Using Gideon's writings, namely "Mechanization takes command" and interior design case studies acquired in Japan, the goal of this paper is a threefold analysis: to explore the way the Bauhaus has inspired modern movement architecture up to the present day, to transform firstly space, and secondly, its use. Finally, the concept of the body: how Bauhaus ideas have migrated around the world to simultaneously promote a clear and hygienic aesthetic, connecting function and abstraction; to demonstrate, beyond *Die Neue Sachlichkeit*, how one may realize the truth of Novalis' metaphor: "the more poetic, the more truthful."

Full paper will be published in a separate publication series of DOCOMOMO Germany after the conference.

Michel Melenhorst

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Prof. ir. Michel Melenhorst studied architecture at Delft Technical University and worked for Wiel Arets and OMA. He switched in 2012 to hold the chair for Contextual Design at the the Detmold School of Architecture and Interior Architecture of OWL UAS (Germany). Michel Melenhorst has extensive experience in teaching and lecturing and research at i.e. TU Delft, Design Academy Eindhoven, HCU Hamburg, Arhus school of Architecture, University of Antwerp and K´Arts Seoul. He coordinates a European project on reuse of modernist buildings (RMB) and is active in workgroup education of Docomomo Germany.

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Prof. Dr.-Ing. Uta Pottgiesser is Professor of Interior Architecture at the Faculty of Design Sciences of the University of Antwerp (Belgium) since 2017 and since 2018 Chair of Heritage & Technology at TU Delft. From 2004-2017 she was Professor of Building Conastruction and Materials at the Detmold School of Architecture and Interior Architecture of OWL UAS (Germany). In 2002 she obtained her PhD at TU Dresden on the topic “Multi-layered Glass Constructions. Energy and Construction” and holds a diploma in architecture from TU Berlin (Germany). She is chair of the DOCOMOMO ISC-T, is board member and reviewer of international journals and participated in more than 50 peer reviewed publications (https://www.uantwerpen.be/en/staff/uta-pottgiesser/publications/).

Anica Dragutinovic

M.Arch., PhD
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Anica Dragutinovic's, is a PhD Candidate at the University of Antwerp (Belgium). Her PhD research is focusing on the evaluation and transformation of modernist housing blocks in New Belgrade. She is a research assistant and coordinator of Master Program MIAD/MID-Facade Design at OWL UAS (Germany) since 2016; and a member of the Erasmus+ project Re-use of Modernist Buildings. She obtained Master of Architecture in 2016 at the University of Belgrade, Faculty of Architecture (Serbia), and Bachelor of Architecture in 2014 at the same Faculty. During her studies she was a student teaching assistant and had different internships on international level.

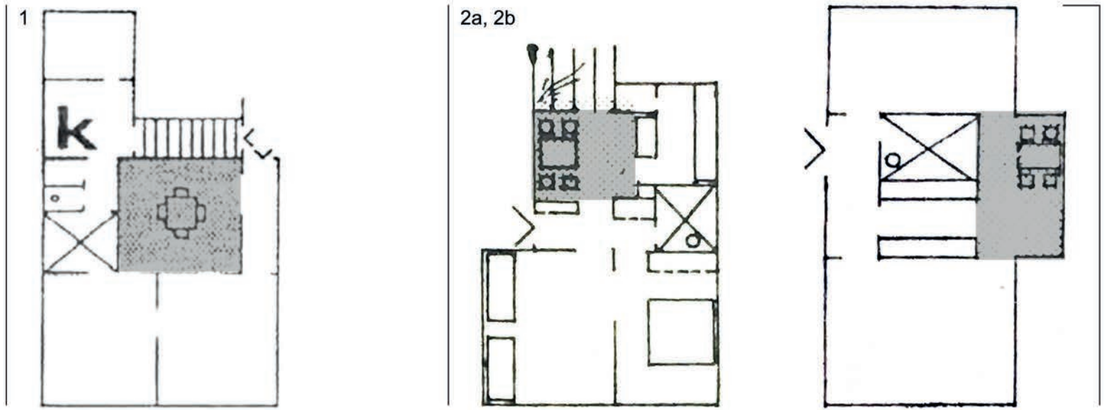

Fig. 1: Reuse of the central dining room of the inter-war flat (1) within the post-war (New) Belgrade flat in a form of "widened communication" (2a, 2b).
© Illustration Anica Dragutinovic, December 2018, according to the original drawings: (1) P. Krstic, B. Krstic, Residential building in P. Brigada 39, 1932. in: Dragana Mecanov, "Valorizacija arhitekture stambenih zgrada iz perioda moderne", Nasledje, 2010; (2a, 2b) Flat with widened communication in: Mate Bajlon, "Neka pitanja u vezi sa upotrebnom vrednosti stana", Stan i stanovanje, 1973.

The Minimum Dwelling:
New Belgrade Flat and Reflections on the Minimum Today

Abstract

The concepts for the minimum dwelling investigated by inter-war modernists were further developed and largely applied in the construction of post-war large-scale housing. As elsewhere in post-war Europe, affordable housing was high on the agenda in Socialist Yugoslavia. The right to a residence was an imperative of the socialist state, which set an enormous housing construction program so that each family could be housed in its own apartment. To meet the huge housing needs, another imperative was to build quickly and cheaply. New Belgrade, a project for the capital of the newly founded socialist state, eventually became the biggest construction field for providing societally owned flats for tens of thousands of inhabitants. The demand for huge amounts of flats, efficient construction and low-costs dictated the optimization of design, standardization, and rationalization. The paper investigates the design of New Belgrade flats focusing on different aspects of the "minimum" that were applied. It additionally analyses how compared to the inter-war concepts the perspective on the minimal needs changed. Furthermore, it compares these standards and needs with the actual ones. The research aims to trace these changing perspectives on minimum, to rethink the modernist minimum dwelling and explore how it relates and reflects the minimum in design today.

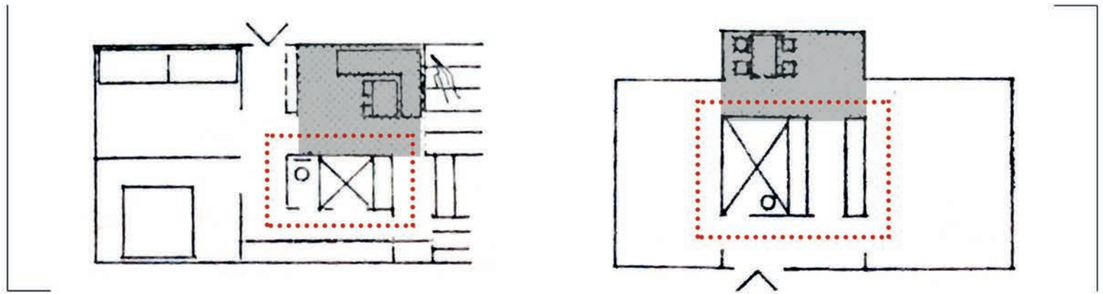

Fig. 2: Circular connection within the (New) Belgrade flat.
© Illustration Anica Dragutinovic, December 2018, according to the original drawings in: Mate Bajlon, "Neka pitanja u vezi sa upotrebnom vrednosti stana", Stan i stanovanje, 1973.

1. Introduction

"The so-called housing shortage, so much talked about in the press these days, cannot be simply dismissed by admitting that the working class is generally living in bad, overcrowded, and unhealthy apartments. The housing shortage is not just a phenomenon of the present and is not merely an evil that has visited the oppressed classes in the past, or the modern proletariat alone. On the contrary, it has affected almost equally all the oppressed classes at all times."[1] (Engels, 1872) The housing crisis phenomenon, identified already in the 19th century, escalated by 1920s due to the overpopulation and influx of people into cities. The issue was addressed by Bauhaus, and beyond the Bauhaus, modernists, hence the second CIAM (Congrès International d´Architecture Moderne) Congress, held in Frankfurt in 1929, discussed the question of minimum dwelling, or the dwelling for the subsistence minimum. The largely present issue of bad, overcrowded and unhealthy apartments was present in the context of Belgrade at that time as well. The evolution of the Belgrade dwelling was an important question for the inter-war modernists, however mainly focusing on bourgeois villas and rental apartments, while the steps towards new dwelling types and new housing policy that would enable humane, decent dwellings for everyone, was developed only in the post-war period in Belgrade. The main polygon for new concepts was New Belgrade, the biggest construction field for providing societally owned flats for tens of thousands of inhabitants. New Belgrade was a housing laboratory with an experimental character at first, becoming a norm for the whole country in the end.

2. Changing Perspectives on Minimum

The following chapter investigates the changing perspectives on the minimum dwelling and inter-relation between the notions of a minimum in the inter-war period and in the post-war period in Belgrade. It investigates the continuity or discontinuity of concepts, but also needs and standards of the two phases of modernism (or the two periods) in Belgrade.

2.1. The Notion of Minimum and its (Non-) Application by Modernists in Inter-war Belgrade

Demolished Belgrade with ruined around one-third of building supply after the WWI was faced with an immense population influx, mainly working class moving from rural areas into the city. Therefore, the demand for modest apartments in Belgrade was high. Since there were no systematic state-running social housing projects, the housing problem relied on the private investment of landlords.[2] The evolution of Belgrade dwellings in the following years was polarised into expensive, large flats and villas for privileged classes; and cheap, overcrowded, unhygienic apartments. The approach to solving open social issues was very unsystematic and inter-war modernists in Belgrade mainly serviced the middle-class market. Although there were few projects addressing the issue of urban working-class housing, the production of dwellings "got diverted from social and political issues into those of commerce".[3] In the inter-war period, the construction of dwellings for the underprivileged was beyond the *existenzminimum* concepts. The apartments were extremely modest with basic functions of sleeping and eating, usually about 20 m2 for the whole family.[4] The minimum dwelling standards were investigated at the same time by the modernists

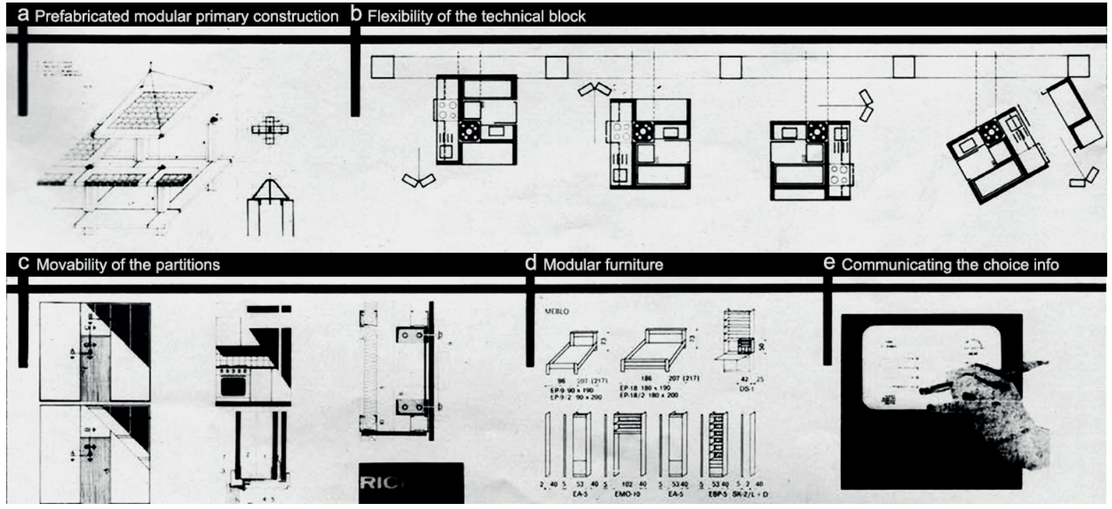

Fig. 3: Basic equipment according to the modular coordination. Milan Lojanica, "Zapisi sa crtaceg stola", Arhitektura Urbanizam 74-77, 1975.

internationally; the recommended minimum measurements for spaces, exact measurements for standardized furnishings and standard-sized elements and rooms in apartments, were only applied in the post-war period in Belgrade, when the housing policy, but also the socio-political context, changed. However, there were certain elements of residential architecture developed by the inter-war modernists in Belgrade, although not for the *existenzminimum* purpose, that strongly influenced the evolution of the (New) Belgrade flat and development of norms and minimum standards in the post-war period. As already discussed, Belgrade modernists in this period were mainly focusing on the rental property market, and the most common residential typology at that time, apartment blocks for the middle-class population. Considering their commercial character, economical aspects of the buildings were very important for the landlords - invest minimally, gain maximal. Therefore, the minimalist approach was in a way present. Modernist, purist architecture without decorative plasticity was especially suitable for investors. On the other hand, architects were able to express the new aesthetic of purism.[5] The layout of apartments was not as minimalist as the appearance of the buildings since the tenants were middle- and higher-income people. However, within this typology modernists developed a specific concept of the "Belgrade flat", a flat with a central dining room as a core of the residential unit. The central dining room was an in-between room, connecting the entrance and the salon, creating a representative area in the apartment, intended to receive guests, but also to organize family gatherings. Besides the representative area, there was a private area with bedrooms and bathroom(s); and service area with the kitchen, rooms for servants, storage rooms, a guest toilet, and usually a terrace or a loggia.[6]

The concept of the Belgrade flat was further developed within the "Belgrade School of Residential Architecture" in the post-war period, into the (New) Belgrade flat that was going to have a completely different character and different purpose in the new (socialist) society.

2.2. *We are not starting from scratch!* – (dis)continuity of the minimal dwelling

"A good dwelling isn´t a luxury. It is, on the contrary, an important need for all families, regardless of their income, or overall situation."[7] This was a basis of housing policy in post-war Yugoslavia (and so post-war Belgrade), a policy set by the socialist country having the "right to residence", or "flat for everyone", as an imperative. Market mechanisms were perceived as the main source of social inequalities, and therefore the institution of "investors" disappeared. The state became the main investor in housing, aiming to solve the existing issues of all the people, following the right to residence. Due to the huge population increase in Belgrade, and having previous imperative set, the minimum for the maximum was needed. The main aim of enabling better conditions of living for everyone, followed to a typification of the flats, as the equality of the units was a reflection of equality of its inhabitants. The variability in flat size (square meters) that the inhabitants were entitled to, was related to the number of family members. Family, the core of society, was very important in the planning of housing. The aspects of family members´ needs and their dwelling practices or use of space and patterns of movement influenced the flat design. Also, the functions of the rooms and their interrelations were important factors in flat design. Norms and the modular coordination were as much about construction as about rationalization of space. Mate Bajlon, one of the modernists,

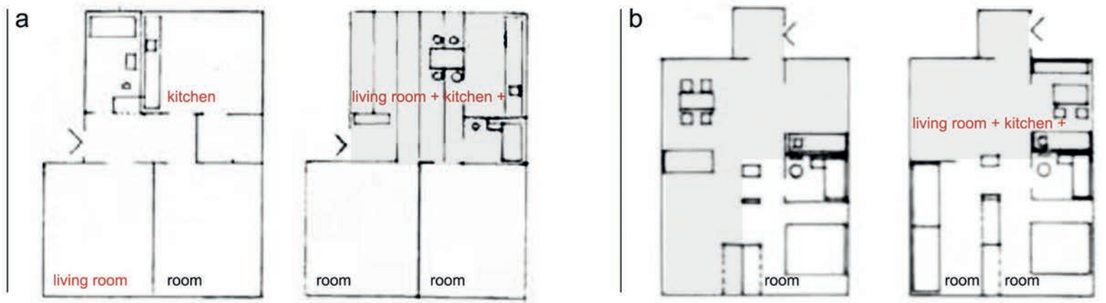

Fig. 4: Optimization of the layout design (a). Adaptability potential of the layout (b).
© Illustration Anica Dragutinovic, December 2018, according to the original drawings in: Mate Bajlon, "Stan u Beogradu", Arhitektura Urbanizam 74-77, 1975.

especially investigated the question of functionality and usability values of a flat that is designed according to modernist norms. He investigated the possibilities of functional organization of a flat and brought significant innovations. Nevertheless, in his article[8] from 1974 he refers to Belgrade flat of the inter-war period, underlining the importance of the central dining room as a core of the residential unit, and further underlining the continuity in Belgrade flat design from the inter-war period to the post-war period. The central space was reused and defined as "widened communication" (Fig. 1), and integrated into the design of the (New) Belgrade flat having a very important role in overall quality of the flat[9]. The continuity was in a way present, however, significant improvements were conducted in the second period. Hence, the (New) Belgrade flat, due to the changed policy and further improved design, enabled better conditions of living for the masses.

3. New Belgrade Flat and Aspects of Minimum

New Belgrade was the biggest construction field in post-war Yugoslavia for conducting housing experiments to provide societally owned flats to tens of thousands of inhabitants. The demand for huge amounts of flats, efficient construction and low-costs dictated the optimization of design, standardization and rationalization. In order to meet the housing needs, and at the same time providing good quality of living for the residents, modernists were investigating on spatial qualities of apartments built according to modest standards. The next chapter investigates the design of New Belgrade flats focusing on different aspects of the "minimum" that were applied, while achieving "maximum" in the usability of space.

A. Norms (spatial minimum)

The first norms regulating the size of flats and other requirements in mass housing construction in Yugoslavia emerged in 1947. The norms forsaw three categories of flats (categorized according to the number of people)
a) small flats (for 3 persons) around 50 m^2,
b) medium flats (for 4 persons) around 60 m^2 and
c) large flats (for 5-6 persons) around 70 m^2.

The regulations went through several reviews in the following years, however without major changes. In 1955, the so-called JNA norms emerged, special norms developed by (and for) a powerful federal organization, the Yugoslav People´s Army (JNA). According to these norms, the sizes of flats increased: 66 m^2 for 3 persons, 74 m^2 for 4 persons and 83 m^2 for 5 persons.10 The first New Belgrade Central Zone block, Block 21, planned for JNA (planned in 1960, built 1962-1966), applied the JNA standards. After the construction of the Block 21, the Urban Planning Institute of Belgrade, aiming to enable a higher standard of living, and taking into consideration that the categorization and standardisation of housing units was not a topic of any urban regulations or solutions at that time, provided a guidelines as follow: "In the context of New Belgrade, better layout of flats is required, i.e. a higher percentage of larger flats (three-rooms, four-rooms and larger) as well as a general increase in comfort of the flats. In that way, using the most valuable central part of New Belgrade for construction of flats that will be, in the recent future, perceived as too modest, will be avoided."[11] This idea of creating "elite blocks" in the Central Zone was not achieved completely, due to the affordability issue of the other institutions and companies

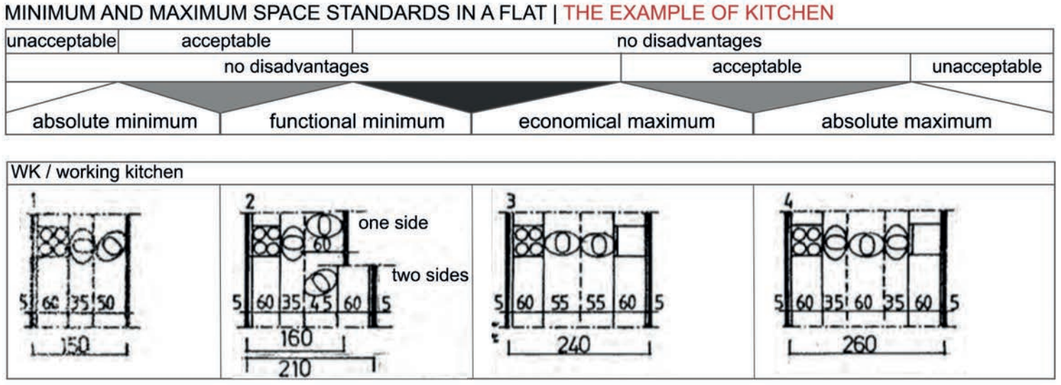

Fig. 5: Minimum and maximum space standards in flats, the example of kitchen,
© Illustration Anica Dragutinovic, December 2018, according to the original table in: Canak Mihailo, „Centar za Stanovanje IMS - naucni rad", 2011.

building flats for their workers in the context of New Belgrade. The modest two-rooms apartment remained the most common flat structure in the Central Zone as well (in the Block 28 for example, there are 58% of two-rooms apartments and 12% of smaller ones). Nevertheless, the spatial minimum was maximised through modernist design, and the New Belgrade Central Zone was the prime site for the emergence of the so-called Belgrade plan and the Belgrade School of Residential Architecture, determined at a series of public competitions, thus prompting the Belgrade architects to follow and improve each other´s solutions.[12]

B. Elements of New Belgrade Flat (functional maximum)

Following the modular coordination[13] and the set of previous norms, most New Belgrade flats were dimensioned at around 15-20 m^2 per person. The m^2 as a given frame was a challenge and possibility for creative solutions. Norms encouraged the opening, and connection of space, circular connections, etc. The circular connection was a typical spatial element of the New Belgrade flat enabling free circulation around a zone in the flat (Fig. 2). Besides circular connection and widened communication, an important element for achieving higher "usability value" of flats (or design criteria for it) was the functional scheme of the flats or interrelation of functions (rooms/spaces) within a flat. Criteria for its design were: bio-rhythm (day and night zones), two centres (possibility for generations division), technical block (usually the central element of flat with circular connection around it, as in Figure 2), flexibility, structural system, and modular coordination, etc. According to the modular coordination, basic equipment and finishings were planned and provided as well (Fig. 3). All technical and technological elements were coordinated, while as noted by architect Milan Lojanica " an innovative method of managing the data is needed in order to achieve complete efficiency of the complex system"[14].

C. Variability (optimization)

The scale of construction, or the number of proposals and variations, influenced the quality of the (New) Belgrade flat design and its optimization in order to increase usability. Differentiation on unit-scale was investigated and different types were analyzed and compared. Especially architect Mate Bajlon was focusing on evaluating the flats, and therefore analyzed same-sized flats with different layouts comparing their "usability value" (Fig. 4a). Taking as an example a layout of a constructed flat of 56 m^2, Mate Bajlon analyzed and evaluated its design. The layout composed of a living room, a separate kitchen and one room could accommodate only 2 family members. According to the architect´s optimization of the layout design, creating a mixed-use area in the flat that is combining daily functions, was giving more space for the "night zone", and therefore 2 separate rooms. In that way, the same flat could accommodate 4 family members.
Furthermore, Belgrade modernists investigated the adaptability of flats, or the potential for layout transformation of the same flat in order to meet different demands over time, e.g. changes in family structure (Fig. 4b).

4. Reflections on the Minimum Today

Besides Mate Bajlon, architect Mihailo Canak contributed to the evaluation of the (New) Belgrade flat and norms. He founded the Center for Housing within the IMS Institute, bringing together research in technology, and housing. In his article from 1975 he elaborates the evaluation system developed within the Center, proposing a value coefficient[15]:

$Cv = \frac{Q \times R}{N \times P}$ (Cv: value coefficient; Q: quality; R: resources; N: needs; P: price)

rameter, a set of criteria and aspects are defined, and also a transforming technic that is equalizing value scales of different parameters. The notion of "flat value" itself is questioned as well, and if a flat can be perceived only as a commodity. The evaluation system is based on the opposite premise, underlining the complexity of the relation between a man and its dwelling; although on one hand, a flat is indeed a commodity, yet it is an inseparable part of a man, its materialized imprint. Therefore, the "flat value" is defined as a combination of functionality (quality) and economical factor (price), while meeting the residents´ needs with as little resources as possible. An important aspect of the quality parameter was space standards. The earlier norms and regulations (3.A) were reviewed (and in 1983 systematized into new ones by Mihailo Canak) defining both minimum and maximum standards, or providing a gradient in form of different categories for standard-sized rooms: absolute minimum, functional minimum, economical maximum, absolute maximum (Fig. 5).

The changes in socio-political context that followed, paused the housing construction activities and further developments. During and after the so-called post-socialist transformation, the housing policy changed as well. Market-dominated production of dwellings was re-introduced, and socially-owned housing that was enabling qualitative, affordable dwellings for masses was privatized in the 1990s. Fragments of modernist ideas are being investigated by different scholars and academics, mainly as theoretical works, however, since then, there are no systematic social housing projects. Minimum dwellings are still being produced for the masses, however, as in the 1930s, within the rental property market for the underprivileged ones. The production of minimum dwellings got diverted once again from social issues into those of commerce. The commodification of housing resulting in the relativization of the notion of minimum. As the notion of dwelling changed from human right to commodity, the minimum (or maximum) is dictated by the market - as much as you can afford, and therefore the absolute minimum denotes 0 m^2. Disconnected from its social function, housing is reflecting and producing more layers of social inequality and the question of affordability is becoming increasingly important. Therefore, the de-commodification of housing, and re-introducing models of minimal dwelling and communal living in cities with a gradient of minimal possession is needed – an architecture of use against the architecture of property.

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[6] Dragana Mecanov, "Valorizacija arhitekture stambenih zgrada iz perioda moderne", Nasledje, 2010.

[7] Andrija Mendelson, "Zastita covekove sredine i stanovanje" in M. Jaric, M. Bajlon, A. Markovic (ed.) Stan i stanovanje, posebno izdanje casopisa Izgradnja, 1973.

[8] Mate Bajlon, "Stan u Beogradu", Arhitektura Urbanizam 74-77, 1975.

[9] The introduction of the "widened communication" in the layout design brought significant changes in "usability value", since it reduces the need for a separate living room; and yet when the living room is planned in addition, it increases the living standard. Mate Bajlon, 1975.

[10] Mate Bajlon, 1975.

[11] Aleksandar Djordjevic (ed), Problemi urbanistickog razvoja Beograda, Beograd: Urbanisticki zavod grada Beograda, 1966, p. 61. cited in Lj. Blagojevic, Novi Beograd: Osporeni Modernizam, 2007, p. 192.

[12] Vladimir Kulic, Maroje Mrduljas, Modernism In-between: The Mediatory Architecture of Socialist Yugoslavia, Jovis, 2012, p. 177.

[13] The regulations about the basic module unit (1M = 10 cm) were published within Yugoslav standards in 1957: "Unique modular coordination in building construction – JUS – U. A 9. 001."; and theoretical and practical analysis of application of the modular coordination was published within "Manual for flats design in modular coordination". Nikola Sercer, "Typification and standardization in building construction", Arhitektura Urbanizam 7, 1961.

[14] Milan Lojanica, "Zapisi sa crtaceg stola", Arhitektura Urbanizam 74-77, 1975.

[15] Mihailo Canak, "Formiranje sistema vrednovanja upotrebne vrednosti stana", Arhitektura Urbanizam 74-77, 1975.

Notes

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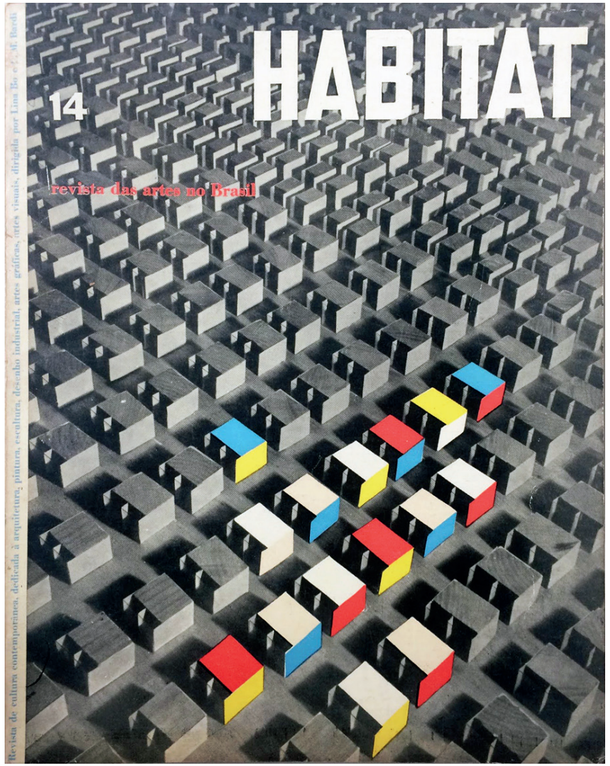

Fig. 1: Lina Bo Bardi, Standard Apartments, undated, model. FAU-UFRJ Library, Habitat 14 cover, 1954.

Paulo Mendes da Rocha: Prototype and Housing

Abstract

Paulo Mendes da Rocha is being considered as one of the most prominent figures of the contemporary architecture, which is reflected by the relevant prizes he won in the last years, exemplified by the Biennale's Golden Lion (2016) or the Pritzker (2006). On the other hand, his work grew up in the 50s, in the Brazilian modern architecture apogee and consolidation. So, main topics for the Modern Movement architect's agenda, such as the architectural object's to be serialised, appear frequently in the architect's works. The accelerated population growth was a perfect problem to justify experiments following these strategies in the field of housing, and, in Brazil, the vertiginous population growth was also a problem that encouraged local architects to follow the same way. The result was an important number of relevant works in Brazil, like CECAP Cumbica (1967), one of the first of housing projects designed by Mendes da Rocha. The analysis of the housing projects we know Mendes da Rocha later designed –until the last housing built by the architect in Madrid (2006)– shows that there are significant oscillations on the idea of prototype, oscillations on how Mendes da Rocha deal with this topic and with those related to it, like standardisation and rationalisation. The analysis of this group of projects, that belongs to a contemporary architect with modern roots, could give us some possible answers about the conference's main question: which interest do we take in Modern Movement today?

Fig. 2: Mendes da Rocha, Artigas and Penteado, CECAP Cumbica, Guarulhos, Brazil, 1967, model. FAU-USP Library, Acrópole 372 cover, 1970.

An architectural event marked January 1954 in São Paulo: the IV Brazilian Congress of Architects, which took place in parallel to the II Biennial of Arts. Both events had the international presence of architects such as Sert, Aalto and Gropius and preeminent architects such as Artigas, Reidy or Warchavchik. Through the proceedings, we know of the participation of another - then unknown - figure: the student Paulo Mendes da Rocha, who would later graduate in the same city and year.

It would be difficult to imagine that the young student, in an embryonic phase of constructing of his own discourse, did not pay much attention to the ideas and projects of the founder of the Bauhaus, who was the most outstanding figure in these events. At the biennial, Gropius had a special room dedicated to his work and received the São Paulo Architecture Prize by recommendation of Le Corbusier, among others. At the congress, Gropius gave lectures in which he addressed his main concerns, such as the relationship between mass production, industrial design or pre-fabrication, especially when addressing the pressing issue of the housing shortage. This problem was common in the European interwar context, in the context of the American phase of World War II and post-war, and in the context of Brazilian developmentalism, whose culminating icon was the construction of Brasília led by Costa and Niemeyer.

However, the debate brought to light by Gropius in the Congress probably was not a novelty for the young Mendes da Rocha, since these questions were already widely discussed in Brazil. It was not by chance that the 14th issue of Habitat magazine of January 1954 - which contained the inaugural lecture given by Gropius at the congress, entitled “The architect within our industrial society”- had an epigraph signed by van de Velde entitled “Trust in the machine”. The cover also included an eloquent image of the model of the “Standard Apartments” projected by Lina Bo Bardi Fig.1, who was editor of the magazine.

The roots of the architecture of Mendes da Rocha are surrounded by the aforementioned architects, as well as by the debate of modern architecture whose apogee was parallel to the beginning of his career. Considering this influence, it does not seem accidental that the cover of the Habitat #14, bore a striking resemblance to the cover of the 132th issue of Acropolis, from 1970, featuring the photography of a model of housing prototypes, this time the CECAP Cumbica Fig.2, designed by Mendes da Rocha, Penteado and Artigas. The project, which began in 1967, consisted of a housing complex comprising more than 10.000 apartments. For such a huge housing project, the architects designed a single 64m2 standard apartment whose vertical and horizontal stacking capacity set a standard building, which could, in turn, be replicated in the parcel. The territorial proposal does not seem to take into account the contingencies of the extended portion of terrains, such as perimeter irregularities or the presence of a highway that cuts the lot. All the blocks, on pilotis, raised from the ground, had the same dimensions and orientation. The repetition of a standardized apartment and building seemed to pursue the economy and speed of construction since the components could be industrially prefabricated on a large scale. The ladder, of exempt location, facilitated the repetition of units and the consequent standardization of its components. Based on the sketches we know that the project consists of a modulated structural grid, allowing a limited variety of replicable elements such as beams, slabs, window frames and facade walls, that also function as a

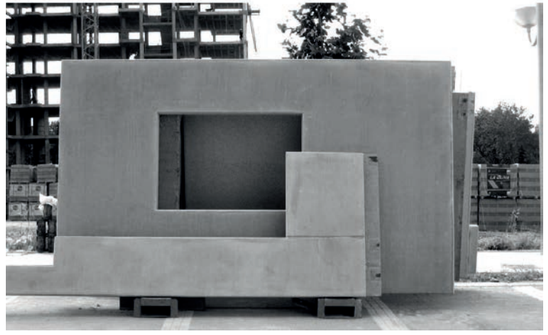

Fig. 3: First: Mendes da Rocha, Bellosillo and MMBB, Vallecas Building, Madrid, Spain, 2004, prefabricated wall panels. MMBB Archive.
Second: Walter Gropius, Prefabricated Copper Houses, 1931-1932, prefabricated wall panels. Busch-Reisinger Museum.

cabinet. These elements, among other design details for the interiors, refer to modern architects' ideas, diffused especially in the Bauhaus, to project integrally from the urban scale to the smaller elements. A few years earlier, in 1962, Mendes da Rocha designed the Guaimbê Building[1]. The project already rehearsed some mechanized construction possibilities, such as lateral facades that allowed the use of sliding moulds and the subsequent installation of prefabricated slabs and brise-soleils. Those design proposals were not applied during construction, and the building was carried out through traditional procedures in loco, as it also happened in almost all of CECAPs. Some solutions of this first housing project – such as the use of pilotis, a plan that tends to the sectorization of uses through partitions in almost modulated strips, or even the soft separation of the core of vertical circulation and service of the building body that avoids interfering with the internal distribution – are experimental strategies that the architect would adopt in subsequent projects. This is the case of the two buildings of the 70's, which the architect designed for the construction company Formaespaço: the Jauaperi (1972) and Prototype (1973). In the first project, in addition to the use of pilotis, a solution that the architect applied in every housing project and the use of a regular grid of pillars in the manner of CECAP, we highlight the use of the standard plan in two clearly defined bars. The geometric simplification of the plan compared to the Guaimbê also extends to the volumetric aspect of the building, with the brise-soleils in this case embedded in the facade, gave it a less expressive and particular appearance. In turn, the mismatch of the pillars to the divisions disguises its modulation.

Formaespaço, interested in the advantage of constructive efficiency that allowed housing projects produced on large scale, allied itself with Mendes da Rocha to accomplish such purposes, as the company had done previously with Abrahão Sanovicz and Eduardo Almeida for the buildings also suggestively named Modular and Gemini[2]. Unlike these, Prototype Building was not built. The vertical circulation core and the four pillars are included in the volume of the building, but completely separated from the spatial configuration of the apartments. As in the CECAP, the internal distribution is flexible due to the grouping of the hydro-sanitary cores and the proposal of light partitions. The modulation and symmetry of the floor plan and facades are strict, which facilitates the standardization of its components. Still in continuity, although tended to smooth, some of these strategies reappear in the Penhasco das Gaivotas towers, in Guarujá, as the proposal of a single type of apartment, twice and mirrored in each floor, to 72 units, which results in only two types of facades, both similar in terms of the variety of its components. The only hiatus in the symmetry of the block is the core of stairs and elevators, which is once more detached of the apartments.

The solutions adopted, far from being lost, find variations that are more significant in subsequent projects. Today it would be little adventurous to state that the work of Mendes da Rocha around the 80's follows new paths[3]. New paths that today do not seem strange to us if we consider the Brazilian context with the diminished presence of the generation of the beginning of the century and the international context of the critical revision of the modernism. Nowadays it is understood that in the context of the architecture of the 80's, the age of IBA-Berlin and the gestation of Olympic Barcelona, a commentary such as the one made by Gropius to Niemeyer in his Brazilian trip in 1954, about Canoas House, that it was "very beautiful, but not multipliable"[4] wouldn't be widely accepted.

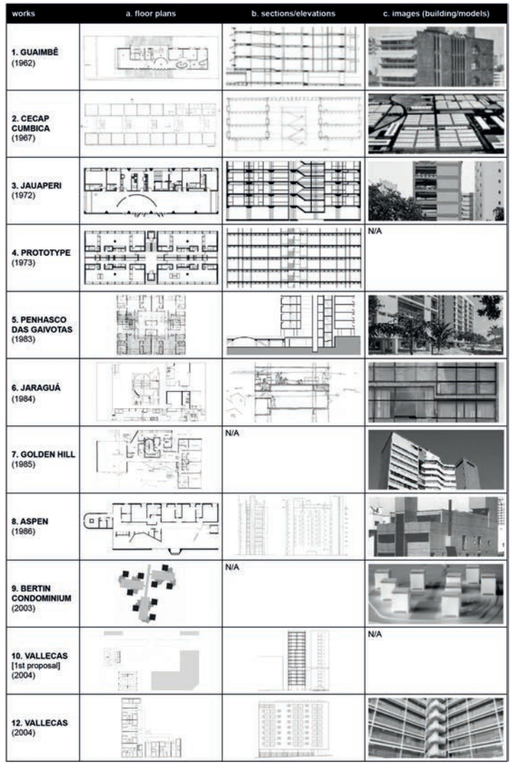

Fig. 4: Works plans/images. Credits. 1a/1b/1c/2a/2b/2c: FAU-USP Library; 3a/3b/4a/4b/6a/6b/8a: Mendes da Rocha Archive; 3c/5c/6c: Leonardo Finotti; 5a/5b/7a/8b: Débora Saldanha de Avila, Habitações coletivas de verticais de Paulo Mendes da Rocha: 1962 a 2004; 7c: Construtora Bauhaus; 8c: Construtora Yazigi; 9a/9c/10a/10b/11a/11b: MMBB Archive; 11c: Autor.

In this context, during the 80's, Mendes da Rocha projects of diverse nature - such as the MuBE Museum (1986) or the Chapel of St. Peter (1987) - have an intricate relationship with the surroundings: it is difficult to imagine them elsewhere, unlike the CECAP or, if one prefers to compare them with two previous projects of similar program, the MAC-USP Museum (1975) or the Chapel Jardim Virginia (1955). Without reaching such a degree of influence of the environment, the Jaraguá Building (1984) not only seems to relate to the place where it is located, but also exclude certain proposals for multipliable design: this is clear in section and floor plan. An ingenious cross-section solution allows transverse visual permeability, allowing views of two landscape icons of São Paulo located in the surroundings: Pinheiros and Tietê River Valleys. The core of elevators and stairs is centralized, resulting in an internal distribution totally conditioned by its presence, with which the architect organized the sectors, which are no longer schematic strips, nor is there any concern with the grouping and independence of the hydro-sanitary cores or the pillars regarding internal divisions. The floor level differences, unusual in residential buildings (but which had already been used although much more subtly in Guaimbê), also show little concern for eventual serialization and internal flexibility. In the facades, the recurrent solution of two blind gables opposing two glazing facades shows that certain issues remain, such as the uniformity of window frames, which is altered only to show the particularity of internal difference in floor levels, emphasizing that these permanent issues are being reconsidered. The Golden Hill Building (1985) is another example of new experiments, which allows a double reading. As a whole, it is a clearly singular and unrepeatable work, but if observed in terms of its parts, it has evidently prototypical fragments. The plant is divided into three cores: a service core, irregular, centralized and specific for this case – which is, as in Jaraguá building, conditioned by elevators and stairs – and two regular cores, rotated 90° at the extremity and connected by a gallery, with open plan design in the living area and modulated partitions for the other rooms. The solution seems to be a strong assertion of ambiguity since the project shows a desire to seek a specific proposal from prototypical solutions. In the Aspen Building (1986), the two strips of the block are less diffuse than in the Jauaperi. The "semi-detached" elevator is incorporated into the plan at one end to develop a very particular solution for both facade, form and access. The project includes two variants of apartments, and although the apartments are quite similar, there are distinctions, showing reduced concern with standardization, which is apparent in the sculptural chimneys of the fireplaces. The most particular proposal of the architect's housing projects is his last work, designed in collaboration with Bellosillo and MMBB, the Building in Vallecas, Madrid (2004). The obligation to follow the alignments of traditional block forces a solution in which, for the first time, the building is not detached. In this case, the building is attached to the neighbouring building, and the formal configuration is L-shaped, leaving the central part of the block free. It seems that this was due to an imposition since a preliminary design shows two towers rotated between each other 90° and connected by a footbridge at the middle floor. The towers - which are not identical and contain three variants of apartments - seems to deviate from mass reproduction like the CECAP. A project prior to 2003, the Bertin Condominium, designed in collaboration with MMBB, seems to be the precedent of the preliminary design of Vallecas. However, the Bertin Condominium seems much closer to the radicalism of the CECAP, since it consists

of nine towers with the same orientation and shape, each measuring approximately 30x30m.
The final Valleca's building design could not escape from the alignments of the traditional block. The building is raised from the ground, but it does not avoid the particularities of the place. It is perhaps no coincidence that the walkways of the common inner courtyard are almost figuratively close to the traditional corralas madrileñas, which are lightweight constructions of external horizontal circulation attached to the building. The particularities of the parcel prevent the use of a uniform structural grid and force the adoption of specific solutions like the corner apartment that changes the schematic horizontal scattering of standard solutions. At the same time, among other Mendes da Rocha housing projects, Vallecas possess a higher degree of pre-fabrication of components. The brise-soleil of Guaimbê and Jauaperi and the panelling facades of the CECAP are in Vallecas effectively prefabricated, referring to first modern experiments of prefabricated houses. Fig.3. However, we see that the industrialization contrasts with the scarcity of repeated components. For instance, in the north facade, only one of the nine panels of each floor is repeated, and those are stacked only eight times. It would be possible to relate these housing projects to Mendes da Rocha to his single-family houses. One of the last houses designed by the architect, Gerassi (1989), achieves the highest degree of industrialization, with the particularity that the pieces were prefabricated but re-dimensioned to adapt to the specific design. It is also inevitable to bring to the surface an initial house, Butantã (1964), which was conceived rigorously modulated as an essay feasible to pre-fabrication and serialization. This case is especially striking because Butantã's project was conceived to be duplicated, resulting in the construction of a twin house neighbouring it. However, neither of them were built by industrialized means, but rather by repeating each element concreting in loco, handcrafted, one by one, as happened in CECAP. Both the CECAP and the houses of Butantã were designed contemplating, at the same time, the possibility of its prefabricated, traditional, or mixed construction. Ana Luiza Nobre's remark about Butantã Twin Houses and House Gerassi that “both projects, after all, react with some suspicion - and not without a fine irony - to the art-industry equation as set by Bauhaus and pushed to the extreme by Ulmian scientism”[5], seems equally relevant to the cases of CECAP and Vallecas. Nobre suggests that perhaps the crucial question of the Butantã houses may be “in the question that this project simultaneously throws at the notions of one and multiple, whose limits, far from dissolving, reappear as objects of criticism”[6]. If the architect's series of residential buildings seems to trace a tenuous evolutionary line - with an ever closer approach to the individual object - there is above all a creative and critical attitude that is evident in Vallecas (and among the single-family houses in Gerassi). We can observe recurring oscillations present in all his work regarding the prototypical solutions. The last projects show that the familiarity of the young Mendes da Rocha with Gropius and other masters present at the 1954 Congress, as well as the national and international context in which his career emerges, is still present and reverberating in his work, although in a different way. The diverse answers to the different scenarios that each project faced, raise the question if the use of prototypical and industrialized solutions could be, for Mendes da Rocha, simply an answer to the problems commonly proposed by the modernist architects’ discourse of fast construction of affordable housing for mass-production. The continuities, discontinuities and contradictions of the observed solutions are manifestations that Mendes da Rocha is dealing with different contexts and circumstances, but also reflecting on prototyping and industrialised design at each project. This is the case of the social housing projects for the developing Brazil of the 1950s and 1960s – exemplified by CECAP –, as well as the projects for an industrialised metropolis of the XXI century – exemplified by Vallecas – or the designs for wealthy clients – such as the Guaimbê and Aspen. Perhaps the greatest importance of these works is precise that they do not give answers to problems that arose in modernity, but rather as complex questions in an exercise ever exploratory and in a transformation of the possibilities and limitations of these problems. In this sense, in this event motivated by the 100 years of the Bauhaus, we could conclude that the richness and contemporaneity of these works may be in highlighting the heterogeneity of the Bauhaus legacy, incorporating fragments from pragmatic industrial and, simultaneously, artistic expressionist roots of Gropius sketched by Maldonado[7], as well as of the coexistence of the masters in which it is possible to observe, besides the rational illuminist side criticized by Argan[8], the "irrational, strong dark side", noted by Rykwert[9].

Notes

[1] Mendes da Rocha might have conceived approximately 35 housing projects. However, we only have knowledge of the designs of the ten projects mentioned in this paper. Cf. Daniele Pisani, Paulo Mendes da Rocha:Obra Completa, São Paulo, Gustavo Gili, 2013, 377-383

[2] Cf. Maria Isabel Imbronito, “Três Edifícios de Habitação para a Formaespaço:Modulares, Gemini e Protótipo”, São Carlos, 5° Seminário Docomomo Brasil, 2003

[3] With more or less emphasis this thesis is supported, for example, in: Daniele Pisani, Op.Cit., 255, 259. Maria Alice Junqueira Bastos, “Paulo Mendes da Rocha: breve relato de uma mudança”, São Paulo, Arquitextos, no. 122.01, 2010. Carlos Eduardo Comas, “Paulo Mendes da Rocha:O prumo dos 90”, São Paulo, Arquitetura e Urbanismo, no.97, 2001. Ruth Verde Zein, “Arquitetura brasileira, Escola Paulista e as casas de Paulo Mendes da Rocha”, MSc diss., UFRGS, 2000, 160

[4] Episode reproduced in: Cecília Rodrigues dos Santos, “Casa das Canoas de Oscar Niemeyer: fazendo a alma cantar”, São Paulo, Arquitextos, no.040.05, 2003

[5] Ana Luiza Nobre, “Um em dois. As casas do Butantã de Paulo Mendes da Rocha”, São Paulo, Arquitextos, no.086.01, 2007

[6] Ibid.

[7]Tomás Maldonado, El diseño industrial reconsiderado, Barcelona, Gustavo Gili, 1977, 52-77

[8] Giulio Carlo Argan, ¿El diseño sirve a las masas?, In., Tomás Maldonado, Op.Cit., 7

[9] Joseph Rykwert, The necessity of artifice, New York, Rizzoli, 1982, 23-31

Notes

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Session 3.3:
Diskurs und Detail

Luise Schier

Was interessiert uns heute noch an der Moderne? - Wenn wir in diesem Jahr 100 Jahre Bauhaus feiern, dann einerseits in Erinnerung an das Manifest für „den neuen Bau der Zukunft“[1] und andererseits in Betrachtung der Bauten, welche aus diesem Geist heraus geschaffen worden sind und von denen heute nicht wenige als „gegenständliche Zeugnisse menschlichen Lebens aus vergangener Zeit, die im öffentlichen Interesse zu erhalten sind“[2], d.h. als Kulturdenkmale gelten. Die Moderne als Synonym für Neues Bauen im Umbruch gegenüber der Tradition ist seither in dem Dilemma, selbst zur architekturhistorischen Epoche geworden zu sein. So reicht das Interesse an der Moderne von Begeisterung für deren Ideen bis hin zur Analyse der Bauten, welche in diesem Geist entstanden sind bzw. sich darauf berufen haben. Die Wirkungsrezeption des Neuen Bauens schließt mit gewachsenem zeitlichem Abstand inzwischen auch die Nachkriegsmoderne in diese Betrachtungen ein.

Diskurs & Detail: Das Motto der Sektion verdanke ich Mark Escherich. Zunächst könnte man Diskurs mit „Randbemerkung“[3] übersetzen, gemeint ist gleichermaßen die systematische und methodische Abhandlung wie auch die Aufforderung zum Gedankenaustausch. Der Beitrag von Mark Escherich „Late modern beyond the icons“ (übersetzbar als „Spätmoderne jenseits der Ikonen“[4]) zeigt beim Erforschen und denkmalkundlichen Inventarisieren markante Parallelen zum Beginn der Diskussion zur Denkmalwürdigkeit der Vorkriegs-Moderne, z. B. bei der Denkmalauswahl anhand zeitgenössischer Primärliteratur als Qualitätskriterium.

Einen im Diskurs anregenden Beitrag mit Blick aufs Detail trägt Nina Nedelykov vor: Die Grabstätten Laura Perls und Albert Mendel in Berlin-Weißensee. Die akribisch erforschten und reflektierten Entstehungsgeschichten vom Zusammenwirken von Architekten der Moderne und ihrer Bauherrschaft sind ein Thema mit Brennspiegelpotential.

Der Beitrag von Max Korinsky „Die Bauhausküchen - bis heute mehr als nur „Bauhausstil“ gibt ein Beispiel für das Weiterwirken der Moderne mit der daraus gewachsenen Akzeptanz der Moderne wie auch der Irrtümer über diese.

Alle drei Beiträge zeigen, dass unser Interesse an der Moderne beginnt, wenn wir deren Fortwirken hinterfragen.

Notes

[1] Walter Gropius: Manifest und Programm des Staatlichen Bauhauses, April 1919, mit Titelblatt „Kathedrale“ von Lyonel Feininger, 1919, in www.dnk.de/_uploads/media/186_1919_Bauhaus.pdf

[2] Denkmalschutzgesetz des Landes Sachsen-Anhalt vom 21.10.1991 (GVBl. LSA S. 368), zuletzt geändert durch Artikel 2 des III. Investitionserleichterungsgesetzes vom 20.12.2005 (GVBl. LSA S. 769), § 2 (1), in https://www.lda-lsa.de/denkmalschutzgesetz/

[3] https://de.langenscheidt.com/fremdwoerterbuch/diskurs [OWL-2018]

[4] https://www.dict.cc/dictionaries english-German/ [29.01.2019]

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Notes

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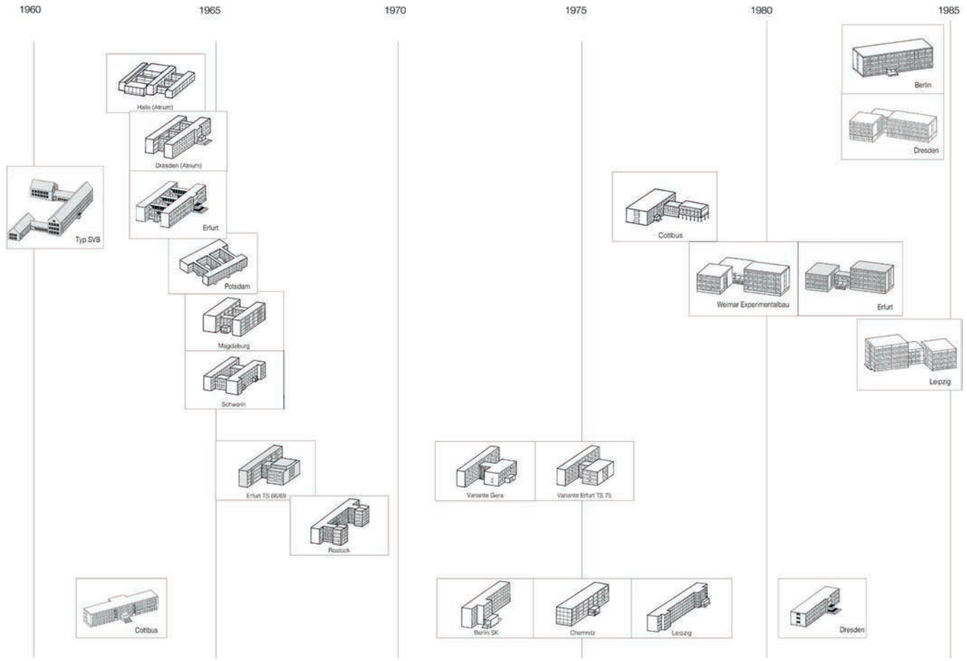

Fig. 1: Typologisch-chronologische Übersicht: Bezirkliche und zentrale (grau angelegt) Typenschulen, die zwischen 1959 bis 1985 in Ostdeutschland eingeführt wurden und in unterschiedlichen Seriengrößen gebaut wurden. Ganz links, der erst zentrale Schultyp SVB

Late modern beyond the icons. Industrialisierte Alltagsarchitektur nach 1960 erforschen und denkmalkundlich inventarisieren

Abstract

Zur Moderne gehören die gewaltigen Baubestände, die während der Boomzeiten nach dem Zweiten Weltkrieg weltweit und in den beiden Teilstaaten Deutschlands entstanden sind. Vor allem die konzeptuell seriellen Architekturen der 1960er und 70er Jahre stellen uns weit mehr als die Bauten und Anlangen des Neuen Bauens der zwanziger Jahre vor aktuelle Herausforderungen. Vielfältige soziale, wirtschaftliche und kulturelle Problemstellungen ergeben sich im Zusammenhang mit der Frage des angemessenen Umgangs mit diesen Beständen. Sie sind maßgeblich von modernen Denk- und Organisationsweisen im Bauen geprägt worden und werden zukünftig einen großen Teil des Erbes der Moderne ausmachen.

1. Perspektiven der Architektur- und Baugeschichte sowie der Denkmalpflege

Notwendigerweise gewinnt die serielle und industrialisierte Alltagsarchitektur nach 1960 immer mehr gesamtgesellschaftliche, wie auch dezidiert fachliche Aufmerksamkeit: Während die Aufmerksamkeit der deutschen architektur- und baugeschichtlichen Forschung vor einigen Jahrzehnten noch mehr auf dem Städtebau des Wiederaufbaues und architektonischen Ikonen lag, betrachtete man später auch weniger hervorstechende Gattungen und Objekte. Allerdings ist man der tatsächlichen Breite und Masse des Bauens noch lange nicht gerecht geworden. Das zeigt beispielsweise der anhaltende latente Fokus auf baukünstlich greifbare Phänomene in der Architekturgeschichtsschreibung. In der Alltagsarchitektur der späten Moderne, die wesentlich durch Serialität, Typisierung und industrielle Herstellung geprägt ist, findet sie eher selten ihre Gegenstände. Dabei liegt die große Praxisrelevanz des architektur- und baugeschichtlichen Wissens auf der Hand, allein angesichts der schieren Menge der damals errichteten Bauwerke. Die - überschaubaren - aktuellen Forschungen versuchen folgerichtig größere Baubestände 'zu überblicken' und das Material mehr quantitativ zu erfassen.

Bei den Überlegungen der Denkmalpflege, spielt zwar die – nicht ganz neue – Einsicht eine Rolle, dass Umwelt- und Ressourcenbewusstsein Teile des Denkmalbewusstseins sind, andererseits wird die Zeitschicht auf ganz klassische Weise denkmalfähig. In der Zivilgesellschaft nimmt das Bedürfnis zu, auch Bauwerke der 1960er bis 1980er Jahre 'aufzuheben', um sich anhand ihrer zu erinnern, historisch zu vergewissern, zu orientieren, sich in ihnen zuhause zu fühlen oder auch ihren ästhetischen Reiz zu genießen. Das 2017 abgeschlossene Forschungsprojekt „Welche Denkmale für welche Moderne“ hat bei den Aufgaben der Denkmalpflege für die Spätmoderne spezifische Justierungen festgestellt: Während man beispielsweise für die konservatorische Praxis an die notwendige Erhaltung der Objekte als glaubwürdige Baudenkmale - und zwar in ihrer ganzen Komplexität - erinnerte, wurden bezüglich der Inventarisation auf die "weitaus umfangreicheren Denkmalpotentiale“ hingewiesen, die hier im Vergleich zu älteren Beständen bestehen. Dies erfordere vor allem von Seiten der amtlichen Denkmalpflege eine besser begründete Bewertung und Auswahl.[1]

2. Reihenuntersuchung als Beitrag zur bauhistorischen und denkmalkundlichen Forschung

Die in meinem Vortrag vorgestellten Forschungsbeispiele stammen aus dem Arbeitsfeld der Professur Denkmalpflege und Baugeschichte der Bauhaus-Universität und aus eigener freiberuflicher Arbeit. Sie sind in Ostdeutschland verortetet, wo das Bauen der Zeit in besonderem Maße von Serialität und Industrialisierung geprägt war. Es steht gewissermaßen "paradigmatisch für die Spätmoderne."[2] Bei den Reihenuntersuchungen von Bauwerksbeständen bzw. -gruppen, wird schnell ein 'Mengenproblem' deutlich, das nicht umgehbar, weil zwangsläufig, ist. Idealerweise sollen voreilige Fokussierungen auf irgendwie ‚vorausgewählte' Bauten vermieden werden. Ziel müsste nach Hans-Rudolf Meier, eine „vorurteilsfreie gleichwertige Betrachtung [… möglichst vieler] Objekte“ sein.[3] Möglicherweise bereits vorhandene Sekundärliteratur kann zwar Orientierung für Einordnung und Bewertung von Einzelbauten bieten, aber eine flächendeckende systematische Erfassung als Voraussetzung für Einordnung und Bewertung nicht ersetzen. Erforderlich ist streng genommen das Ablaufen bzw. Abfahren des Untersuchungsterritoriums, so wie dies im Rahmen klassischer Erfassungskampagnen, vor allem seit den 1970er Jahren, praktiziert wurde. Der Aufwand ist enorm, selbst wenn man heute Drohnenbilder, google streetview und Ähnliches zur Hilfe nimmt.

Die seit etwa der Jahrtausendwende anlaufenden Erfassungskampagnen haben deswegen vor allem Primärliteratur genutzt – auch um das Material etwas einzugrenzen. Pragmatisch geht man davon aus, dass die zeitgenössische Publikation per se eine Vorauswahl 'interessanter' Objekte ist, auf die man aufbauen kann.[4] Ein Meilenstein war das universitäre Projekt "Architektur der 50er, 60er, 70er Jahre in Nordrhein-Westfalen" am damaligen Lehrstuhl für Denkmalpflege und Bauforschung der TU Dortmund. Im Zentrum stand eine gewaltige "Datenbank mit Bauten und Projekten, die zeitgenössisch in einer der führenden Baufachzeitschriften oder in der zeitgenössischen Fachliteratur veröffentlicht wurden."[5] Die Online-Datenbank ist eine wichtige Quelle für die grundsätzliche Wiederentdeckung der Nachkriegsmoderne im ganzen Bundesland gewesen. Regelrechte bauhistorische Untersuchungen oder gar Bewertungen konnten im Rahmen des Projektes zwischen 2000 und 2003 nicht geleistet werden. Und obwohl die Datenbank durch Verknüpfung von Suchkriterien forschungsrelevante Recherchen ermöglicht, hat bis heute eine „Auswertung … nur ansatzweise stattgefunden.“[6]

In Thüringen wurde 2001 eine mehrstufige Erfassungsarbeit gestartet. Der Einstieg war eine Literaturrecherche "Architektur zwischen 1960 und 1990" im Auftrag des Landesdenkmalamtes. In der dazugehörigen Datenbank sind fast 1000 Bauwerke mit Basisinformationen, ähnlich der NRW-Datenbank, aufgelistet. Die Sammlung der Bauten getrennt nach Bauaufgaben und eine chronologische Sortierung zielten bereits auf eine anschließende Auswertung, die

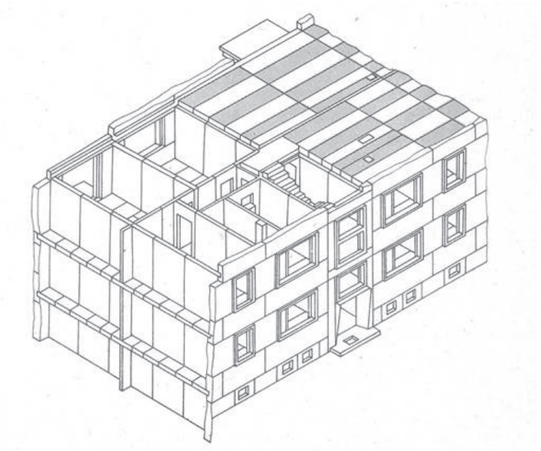

Fig. 2: Isometrie Streifenbauweise, hier bei einem Wohngebäude. Sie fand für vielfältige Bauaufgaben Verwendung, so auch im Verwaltungsbau. Laststufe 2 Mp (© Hoscislawski, Thomas: Bauen zwischen Macht und Ohnmacht. Architektur und Städtebau in der DDR. Berlin 1991).

zumindest teilweise im Rahmen des Gutachtens von 2001 geleistet werden konnte.[7] Für die denkmalkundliche Bewertung notwendige Vor-Ort-Begehungen und Fotodokumentationen konnten nur an vergleichsweise wenigen Objekte durchgeführt bzw. angefertigt werden. Ungeachtet dessen wurden offensichtlich baugeschichtlich herausstechende Objekte mit gleichzeitig weitgehend erstbauzeitlichem Zustand sogleich als 'Verdachtskandidaten' beschrieben, gewürdigt und vorgeschlagen. Das waren klassisch-baukünstlerische Objekte, aber auch Bauten mit experimentellen Tragwerkskonstruktionen[8] und Prototypen späterer Typenserien. Trotzdem haben diese Kandidaten bisher nur selten Eingang in die Denkmalliste gefunden.

2.1. Gattungsspezifische Untersuchungen

In einem etwas stärkeren Maße flossen in die Denkmaleintragung in Ostdeutschland und Thüringen Ergebnisse ein, die in der Folge des Inventarisationsgutachtens von 2001 entstanden. Die fünf vertiefenden gattungsspezifischen bauhistorischen Untersuchungen entstanden grundsätzlich in Kooperation mit dem Landesdenkmalamt zwischen 2002 bis 2016, mit von Fall zu Fall unterschiedlichen Arbeitsanteilen.[9] Die Fokussierung auf bestimmte Bauaufgaben erschien nicht nur angesichts des 'Mengen-Problems' sinnvoll, sondern begründete sich auch mit der Entwicklungsdynamik bestimmter Bestandsgattungen.[10] Einem sehr hohen Veränderungsdruck waren beispielsweise Warenhäuser sowie Mensa-Bauten ausgesetzt und wurden auch deswegen zum Untersuchungsgegenstand.

Methodisch bezogen wir uns dabei auf die typologische Reihe der Ur- und Frühgeschichtsforschung, die dort längst obsolet ist. Hier, wo die Chronologie nicht gefragt ist, sondern schon feststeht, war sie eine tragfähige methodische Inspiration.[11] So ergab die jeweilige Auswertung 1.) die Zusammenschau einzelner Bauten einer Bauaufgabe – also eine erste Kontextualisierung der 'Funde'. Der Vergleich der 'Funde' und die Betrachtung der chronologischen Abfolge macht 2.) Unterschiede und Entwicklungslinien innerhalb des gattungsspezifischen Bestandes deutlich. In solchen typologischen Reihen wird die spezifische Stellung des jeweiligen Objekts in der Objektgruppe klar. Konkret wird erkennbar, mit welchen Reihen-Gliedern 'Umbruchstellen' oder 'Sprünge' verbunden waren; welche Bauten als prototypisch anzusehen sind und welche als Nachahmungen und Wiederholungen eher typisch waren (Fig. 1). Späte Kümmerformen sind oftmals die 'Auslaufmodelle', die von neuen Entwicklungen bald überschnitten werden, im Verborgenen und in der territorialen Peripherie aber noch lange Zeit vereinzelt fortleben können.

Die Forschungen zu den Typenschulserien, die zwischen 1959 und 1985 in Ostdeutschland ‚eingeführt' wurden, also in Serie gingen, offenbarten beispielsweise die Geschichte des DDR-Schulbaues als Durchdringung fachlicher (Pädagogik, Hygiene, Bauingenieurwesen, Architektur) und politischer Entwicklungsfaktoren auf unterschiedlichen, sich beeinflussenden, institutionellen Ebenen. Der jeweilige Form- bzw. Gestalt-Typ war stark funktional bestimmt: von der einhüftigen Gangerschließung mit angegliederten Saalbaukörpern, über flurlose Atriumanlagen bis zu kompakten Gebilden aus „Funktionsbausteinen" mit Mittelgang, die dann Ende der 1970er Jahre auftauchten. Manchmal wurden – und das gehört zu den Eigenarten eines staatlich gelenkten Bauwesens – ungeachtet von offensichtlichen fachlichen Nachteilen 'Auslaufmodelle' per Dekret zu 'Dauerbrennern' erhoben (so der Satteldachtyp SVB), während die innova-

Fig. 3: Konstruktionsperspektive des zentral standardisierten Stahlbetonmontagebausystems "Vereinheitlichter Geschoßbau (VGB)" als Längsriegelbau, Laststufe 5 Mp, ab 1970 DDR-weit eingeführt (© https://www.bbr-server.de/bauarchivddr/finbuch/kataloge/index.htm, Zugriff Oktober 2018).

tivsten Konzepte regional und auf Kleinstserien begrenzt oder auch gar nicht verwirklicht wurden.[12]
Gleichzeitig wirkten selbstverständlich - und gerade in der DDR - auch Konstruktionsweisen gestaltbildend. Nicht nur gab es im DDR-Bauwesen eine besonders stringente Hinwendung zur Effizienz in Konstruktion und Technologie - die serielle Ästhetik galt als adäquater Ausdruck des egalitären Gesellschaftsideals und tatsächlich basierten alle dem SVB-Typ (ab 1959) nachfolgenden Schultypen auf der Verwendung vorgefertigter Großelemente. Oftmals waren diese identisch mit denen, sie auch für den Wohnungsbau verwendet wurden. Ein Beispiel dafür, dass sich solche Reihenuntersuchungen sinnvoll auch auf konstruktiv-technologische Entwicklungen beziehen lassen, war die Untersuchung zu Verwaltungsbauten im Bundesland Thüringen. Im Gutachten von 2001 waren etwa 70 Bauwerke aus den 1960er und 1970er Jahren erfasst, die in den Jahren 2010/11 vergleichend und im DDR-Kontext analysiert wurden, um sie schließlich in die Abfolge der markanten Entwicklungsschritte der Tragwerkstechnologie einordnen zu können (Fig. 2 und 3).

3. Stand und Trends der denkmalpflegerischen Inventarisation – Erforschung und Auswahl

Die Ergebnisse der insgesamt fünf Reihenuntersuchungen flossen sehr unterschiedlich in die Eintragungspraxis der Ämter ein: Grundsätzlich hat sich gezeigt, dass der Aufwand lohnt, vor allem angesichts des großen Orientierungsbedarfs bei der bauhistorischer Einordnung und Bewertung industrialisierter Alltagsarchitektur nach 1960. Auffällig ist aber, dass bei denjenigen Gebäudetypen, die sehr häufig identisch gebaut wurden, wie beispielsweise die zentralen und bezirklichen Typenschulen, noch große Zurückhaltung herrscht.[13] Die Untersuchung zu den zwischen 1960 und 1989 errichteten gerade einmal 28 DDR-Hochschul-Mensen erwies sich dagegen als sehr produktiv.[14] Den konkreten Anlass bot der im Jahre 2010 erwogene Abbruch der Mensa am Park der Bauhaus-Universität Weimar. In der vergleichenden Betrachtung wurde die Denkmalwürdigkeit von vier Mensabauten – zwei Vertretern eines Typenprojektes und zwei individuellen Entwürfen - fundiert herausgearbeitet. Die Weimarer Mensa war eines der Einzelstücke und wurde noch 2011 in die Denkmalliste eingetragen.
Grundsätzlich hat die Denkmalinventarisation die Aufgabe eine Auswahl von Bauwerken vorzunehmen, an deren Erhaltung ein öffentliches Interesse besteht. Bei den industrialisierten Baubeständen der Spätmoderne ist das eine Herausforderung – nicht nur angesichts personell und finanziell oft schwieriger Rahmenbedingungen. Aus der gerechtfertigten fachlichen Perspektive 'die ganze Geschichte' der 1960er bis 1980er Jahre mittels baulicher Zeugnisse erinnern und dokumentieren zu wollen[15], erscheint die bisher wenig systematische Erfassung und Inventarisation der Spätmoderne als unzureichend. Tatsächlich ist die "Auswahl der bereits eingetragenen Zeugnisse aus dem großen Fundus … der Objekte [bisher] in der Regel zufällig".[16] Und sie entspricht auch zahlenmäßig nicht der Epoche des Booms. Beispielsweise sind von den etwa 10 000 Baudenkmalen in Leipzig gerade mal 25 nach 1965 errichtet wurden.
Zunehmend reflektiert man nicht nur die geringen absoluten Denkmal-Zahlen der Spätmoderne, sondern auch die qualitativ-inhaltlichen Missverhältnisse in den Listen. So die weitgehende Ausklammerung bestimmter - sperriger - Baugattungen, wie etwa technische und verkehrliche Infrastruktur, Produktions- sowie Landwirtschaftsbauten, und eben auch der industriealisierten Alltagsarchitektur.

Fig. 4: Fassadenoberflächen der industriealisierten Spätmoderne (© Fotos: Benjamin Rudolph, Marin Maleschka, Mark Escherich, Julia Heiser).

Ihre Bewertung ist kompliziert, nicht zuletzt weil solche Objekte den Denkmalbegriff strapazieren und allgemein anerkannte Denkmalvorstellungen teils konterkarieren: einerseits kann die charakteristische serielle Ästhetik als Monotonie gedeutet werden, andererseits steht die ‚Vervielfachung im Rahmen der Serienfertigung' in einem Missverhältnis zu den wichtigen Merkmalskriterien des Eigenartigen und des Andersartigen. Nicht einfach ist zudem der inventarisatorische Zugriff auf von Anfang an als wandelbar konzipierte Architekturprojekte bzw. –objekte.
Die Beschäftigung mit der industriealisierten Alltagsarchitektur der Spätmoderne hat bisher in den Landesdenkmalämtern Ostdeutschlands sehr unterschiedlich stattgefunden. Obwohl die Bemühungen insgesamt überschaubar blieben, bemüht man sich doch mittlerweile zumindest um Orientierung in der Masse dieser Bestände.

3.1. Von Prototypen über das "Arche-Noah-Konzept" zu den letzten Exemplaren

Bei der Bewertung und Auswahl zeichnen sich grob drei grundsätzliche Strategien bzw. Trends ab. Es verwundert vielleicht nicht, dass das baukünstlerische Bedeutungskriterium dabei weniger eine Rolle spielt. Eher werden die Kategorien von Dokument und Zeugnis - für die Architektur- , Technik- und Sozialgeschichte - herangezogen sowie in der letzten Zeit auch immer öfter emotionale Geschichtswerte, wie beispielsweise der Erinnerungs- und Identitätswert.
Der früheste Ansatz - mit Wurzeln in der DDR-zeitlichen Beschäftigung mit zeitgenössischen Bauwerken als „Denkmale unserer Zeit“[17] – zielte auf ‚prototypische Objekte'. Das war eine nachvollziehbare Fokussierung, sah man sich doch bei der Auswahl einer nicht gekannten gewaltigen Menge von Bauwerken gegenübergestellt. Sogenannte Versuchs-, Muster- und Experimentalbauten sind zwar Teil der Masse, lassen sich aber – weil sie zeitlich den Serienanwendungen vorausgehen – gut aus dieser Masse herauspräparieren. Zudem markieren sie Umbruchstellen innerhalb von Entwicklungslinien (z. B. einer jeweiligen Bauaufgabe) und können als Innnovations-Schritte oder gar "Meilensteine" beschrieben werden.
Doch prototypische Objekte repräsentieren die eigentliche und typische Masse der „gebauten DDR“ nur scheinbar.[18] Denn das Prägende waren die erwähnten Typenbauten, die in teils sehr großen Serien identisch errichtet wurden. Für die beispielhafte gegenständliche Dokumentation und Überlieferung des Typischen in der Bandbreite vieler Baugattungen hat Ulrike Wendland das Bild der „Arche-Noah-Besatzung" verwendet.[19] Gesucht werden hier besonders authentische 'Zeugen', die pars pro toto Andere, gleich oder ähnlich gebaute 'repräsentieren'. Dieser Ansatz dürfte noch lange die probateste methodische Orientierung bieten, zumindest noch solange man angesichts der großen Mengen an Bauten der DDR-Alltagsarchitektur die Wahl zwischen bereits veränderten und erstbauzeitlich überlieferten Objekten hat (sogenannte Authentizität). Zu dieser, mit den Reihenuntersuchungen korrelierenden Denk- und Arbeitsweisen muss man allerdings ergänzend sagen, dass einerseits Denkmalwerdungsprozesse natürlich nicht ausschließlich geschichtswissenschaftlichen Ergebnissen folgen, sondern oft auch in der Zivilgesellschaft ausgehandelt werden und andererseits auch die Zahl der authentischen Objekte unweigerlich schwindet. Die Rasanz der Transformation des Baubestandes – einst wiedervereinigungs- und nun lebenszyklisch bedingt - hält in den neuen Bundesländern an. Flächendenkend formatieren vor allem energetische Sanierungen die Städtebilder um und so bekommen zukünftig Keramik-Fliesen,

poppige Alu-Vorhang-Fassaden oder Sichtbeton- und Kies-Oberflächen heruntergekommener Plattenbauten die Rolle des Andersartigen, des Besonderen und damit Erhaltungswürdigen (Fig. 4). „Verlusterfahrungen“ und kontinuierliche Verknappung lenken schon jetzt den inventarisatorischen Blick gelegentlich auf ‚letzte Exemplare‘, die z. B. eine bestimmte Stadt oder Region aufzuweisen hat.[20]
‚Letzten Exemplare‘ generieren sich gewissermaßen zufällig und/oder als regelrechter Galapagos-Effekt. Wie schon bei der "letzten Windmühle" erhalten sich ursprüngliche Reinformen in Landstrichen mit wenig Veränderungsdruck. Und spätestens an diesem Punkt hat die Denkmalpflege in ihrer Geschichte schon immer angesetzt. Das wird einerseits völlig legitim sein, andererseits ist es schlicht schade angesichts der Chancen, die bei der Spätmoderne für eine wohlüberlegte baukulturelle Überlieferungsbildung gegeben sind.

Notes

[1] Das bauliche Erbe der 1960er bis 80er Jahre: Auswahl, Akteure, Strategien (Thesenpapier des BMBF-Verbundforschungsprojektes „Welche Denkmale welcher Moderne?“ der Technischen Universität Dortmund und der Bauhaus-Universität Weimar zusammen mit KooperationspartnerInnen aus der praktischen Denkmalpflege; Potsdam am 19. und 20.1.2017), https://www.uni-weimar.de/fileadmin/user/fak/architektur/professuren_institute/Denkmalpflege_und_Baugeschichte/Downloads/Forschung/WDWM/WDWM__Thesenpapier_final.pdf (Zugriff Mai 2018). Die Abschlusspublikation des Projektes: Frank Eckardt/ Hans-Rudolf Meier/Ingrid Scheurmann/Wolfgang Sonne (Hg.):Welche Denkmale welcher Moderne? Zum Umgang mit Bauten der 1960er und 70er Jahre, Berlin 2017.
[2] Hans-Rudolf Meier: Zwischen ungeliebt und neu entdeckt. Werte der Nachkriegsarchitektur in Europa, in: Olaf Gisbertz (Hg.): Bauen für die Massenkultur, Berlin 2015, S. 197-208, hier: S. 206.
[3] Ebenda.
[4] Auch jüngste Projekte der Landesdenkmalämter halten an der Vorgehensweise fest. Zuletzt: Martin Hahn/Clemens Kieser/Melanie Mertens: Projekt Youngtimer. Denkmalwerte der 1980er Jahre - eine Annäherung, in: Die Denkmalpflege 2/2016, S. 117-129.
[5] http://www.nrw-architekturdatenbank.tu-dortmund.de/index.html (Zugriff Mai 2018).
[6] Silke Langenberg: Das Werk des Architekten und seine Veröffentlichung. Zur Einflussnahme von Fachzeitschriften auf das Architekturgeschehen der Nachkriegszeit, in: Regine Heß (Hg.): Architektur und Akteure. Praxis und Öffentlichkeit in der Nachkriegsgesellschaft, Bielefeld 2018, S. 33 – 44, hier: S. 33f.
[7] Mark Escherich: Architektur 1960-1989 in Thüringen - eine Recherche als erster Überblick, Auftraggeber: Thüringisches Landesamt für Denkmalpflege, Werkvertrag 2001 (unveröffentlichtes Typoskript, u. a. im Thüringischen Landesamt für Denkmalpflege und Archäologie).
[8] z. B. hyperbolisch-paraboloide (HP-)Schalen, Kuppelschalen und Raumstabtragwerke
[9] Schulhausbauten 1950 bis 1965 in Thüringen (2002/2016). Escherich, Mark: Schulbaukonzepte in der SBZ und der frühen DDR, in: Lichtnau, Bernfried (Hg.): Architektur und Städtebau im südlichen Ostseeraum zwischen 1936 und 1980, Berlin 2002, S. 249-267 und Eheim, Annika: Schulbau in Thüringen 1955 - 1965. Ein Beitrag zur denkmalpflegerischen Praxis (Bachelor-Thesis, Typoskript, betreut durch die Professur Denkmalpflege und Baugeschichte der Bauhaus-Universität Weimar) 2016 /// Warenhäuser der 1960er und 1970er Jahre in Ostdeutschland (2007). Schmidt, Sebastian: Konsument & Centrum. Warenhäuser der 60er und 70er Jahre in der DDR und ihr Nachleben (unveröffentlichte wiss. Hausarbeit, betreut durch die Professur Denkmalpflege und Baugeschichte der Bauhaus-Universität Weimar) 2007 /// Bezirksparteischulen der 1960er und 1970er Jahre in Ostdeutschland (2007/2008). Curti, Rocco/Rudolph, Benjamin: Die ehemalige SED-Bezirksparteischule in Erfurt, in: Die Denkmalpflege – wissenschaftliche Zeitschrift der Vereinigung der Landesdenkmalpfleger in der BRD, Jg. 67, Nr. 1, München 2009, S. 32-37. /// Mensen an Hochschulen der 1960er bis 1980er Jahre in Ostdeutschland (2010). Rudolph, Benjamin: Zum Mensabau in der DDR zwischen 1960 und 1989 – Eine Be¬standsaufnahme, in: Aus der Arbeit des Thüringischen Landesamtes für Denkmalpflege Bd. 36, Erfurt 2010, S. 106-147. /// Verwaltungsbauten der 1960er und 1970er Jahre in Thüringen (2010/11) Escherich, Mark: Verwaltungsbauten der 1960er Jahre in der DDR. Entwicklungslinien in den ehemaligen thüringischen Bezirken Erfurt, Gera und Suhl, in: kunsttexte.de, Nr. 1, 2012, www.kunsttexte.de, 11 S.
[9] Hans-Rudolf Meier: Zwischen ungeliebt und neu entdeckt. Werte der Nachkriegsarchitektur in Europa, in: Olaf Gisbertz (Hg.): Bauen für die Massenkultur, Berlin 2015, S. 197-208, hier: S. 204.
[9] Mark Escherich: Die Aneignung der Ostmoderne durch die Denkmalpflege, in: Mark Escherich (Hg.): Denkmal Ost-Moderne. Aneignung und Erhaltung des baulichen Erbes der Nachkriegsmoderne, Berlin 2012, S. 10-25, hier: S. 18.
[9] Mark Escherich: Schulbaukonzepte in der SBZ und der frühen DDR, in: Lichtnau, Bernfried (Hg.): Architektur und Städtebau im südlichen Ostseeraum zwischen 1936 und 1980, Berlin 2002, S. 249-267, hier: 266f.
[13] Lediglich in Bergholz-Rehbrücke (Landkreis Potsdam-Mittelmark) und Dresden-Plauen, Bernhardstraße 80 sind zwei Beispiele für jeweils bezirkliche Schultypen (Typ „Potsdam Atrium" bzw. „Dresden Atrium“) 2009 und 2013 eingetragen worden.
[14] Rudolph, Benjamin: Zum Mensabau in der DDR zwischen 1960 und 1989 – Eine Be¬standsaufnahme, in: Aus der Arbeit des Thüringischen Landesamtes für Denkmalpflege, Bd. 36, Erfurt 2010, S. 106-147.
[15] Sie wird auch in dem schon zitierten Thesenpapier des BMBF-Verbundforschungsprojektes „Welche Denkmale welcher Moderne?“ (wie Anm. 1) vertreten: „Die ausgewählten Denkmale der zweiten Hälfte des 20. Jahrhunderts sollen in mehrfacher Hinsicht repräsentativ für ihre Zeit sein und die Bandbreite der historischen Ereignisse sowie der Bauaufgaben und Architekturrichtungen wiedergeben.“
[16] Martin Petsch in einem bisher unpublizierten Typoskript für ein Buchprojekt der Wüstenrot Stiftung, Ludwigsburg zum Umgang mit der Architektur aus der DDR der Jahre 1960-1980.
[17] Mark Escherich: „Denkmale unserer Zeit“. Inventarisation von Bauwerken der DDR-Moderne zu Zeiten der DDR, in: Hans-Rudolf Meier (Hg.): Forum Stadt, Jg.42, Nr.1, 2015, S.55-73.
[18] Bruno Flierl: Gebaute DDR. Über Stadtplaner, Architekten und die Macht, Berlin 1998.
[19] Ulrike Wendland: Nachkriegsmoderne in Sachsen-Anhalt. Eine denkmalpflegerische Zwischenbilanz, in: Mark Escherich (Hg.): Denkmal Ost-Moderne. Aneignung und Erhaltung des baulichen Erbes der Nachkriegsmoderne, Berlin 2012, S. 86-95, hier: S. 94.
[20] Wenn man zukünftig angesichts von Wandel und Verknappung nicht mehr ‚aus den Vollen wird schöpfen‘ können, sollten und werden Unterschutzstellungen an nachträglichen Veränderungen nicht scheitern, vorausgesetzt natürlich dass die entscheidenden wertkonstituierenden Merkmale überliefert sind. Warum sollten auch nur bei der Spätmoderne besonders hohe Authentizitätsanforderungen gelten? – könnte man fragen.

Notes

Pedro Moreira

Architect, Historian and Visual Artist
Nedelykov Moreira Architekten

Nedelykov Moreira Architekten, Berlin was founded 1994. Selected projects: Museum Max Liebermann-Villa in Berlin-Wannsee (Europa Nostra Medal 2008), Archaeological Museum Wukro/Ethiopia (2015), Burial Chapel, Dorotheenstädtischer Cemetery Berlin-Mitte, with James Turrell (KiBA-Prize 2018). Working on historical cemeteries since 2006.

Pedro Moreira was born in São Paulo, studied Architecture and Urbanism at the FAU-USP and the Technical University Berlin. Architect, Historian and Visual Artist. Worked at offices in São Paulo and London (1988-91), and Berlin (1991-94). Publications, Lectures and Debates on Architecture, Material Heritage and History in Germany, Switzerland, Spain, Brazil, UAE and Ethiopia a.o.. Member of the Architects and Urbanists Council of São Paulo. Member of DOCOMOMO Germany.

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Nina Nedelykov was born in Berlin, studied Architecture at the Technical University Berlin. Numerous publications, lectures and moderations in Germany and internationally, member of the Förderverein Bundesstiftung Baukultur e.V. and ICOMOS Germany. Institutional activities 2000-2014: Vice-President of the Berlin Architects Chamber (AKB), Architects Chamber of Germany (BAK), Council Member oft the International Union of Architectes (UIA) and the Architecs Council of Europe (ACE).

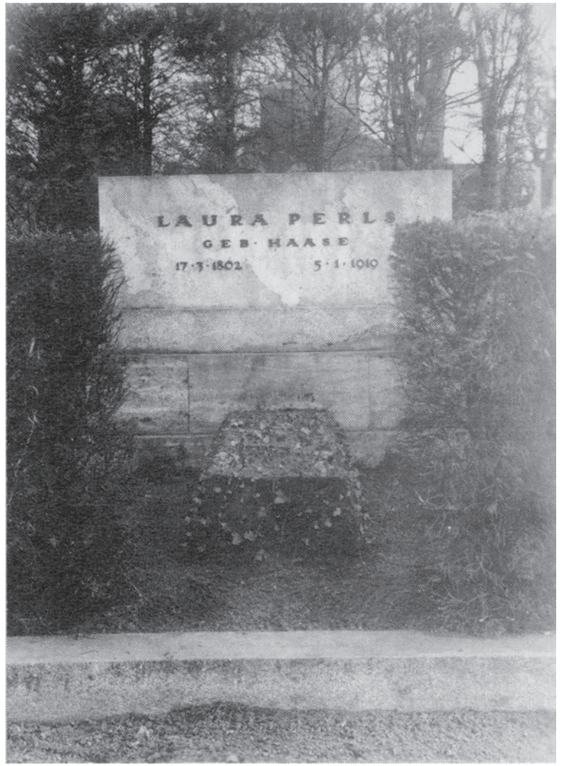

Fig. 1: Laura Perls Grave, Foto 1920´s, photographer and location unknown. First published by Franz Schulze 1985 with credits to the MoMA Mies van der Rohe Archives, New York.

The Graves Laura Perls and Albert Mendel in Berlin-Weissensee

Abstract

The Graves of Laura Perls (1919) designed by Ludwig Mies (van der Rohe) and of Albert Mendel (1923) designed by Walter Gropius are located in the Jewish Cemetery Weissensee in Berlin. Both were commissioned by early clients and promoters of the architects: Ludwig Mies had built House Perls in Berlin-Zehlendorf for Laura Pearl´s only son Hugo in 1911-12, and Gropius designed interiors and furniture for the apartment of Albert Mendel and his wife Tony in Berlin-Tiergarten in 1913-14 and 1921 remodelled their lakeside mansion in Berlin-Wannsee.

Members of both families left Germany in the early 1930´s, the cemetery remained neglected and the graves were almost forgotten. At the beginning of the 1980´s they were „rediscovered", when in 1985 Franz Schulze included the Laura Perls Grave in his monography on Mies van der Rohe, and Hartmut Probst, preparing the work-catalogue of Gropius with Christian Schädlich, rediscovered the Albert Mendel Grave and documented it for the first time in 1983.

These two graves stand for an almost forgotten field of activity of architects in the early XXth century, sepulchral architecture. They document the special relationship between the architects and their clients, and they well represent a transitional phase in the œuvre of both architects, in which seeds for subsequent developments can be recognized. The research and the restoration work also brought us new insights into the lives of the clients and into the working methods and techniques of both architects in that period.

Full paper will be published in a separate publication series of DOCOMOMO Germany after the conference.

Notes

Max Korinsky

HTWG Konstanz

Max Korinsky (*1984) absolvierte sein Studium Freie Kunst an der Kunstakademie Düsseldorf, Germanistik und Geschichte an der Universität Wuppertal und ist Mitbegründer des Studios Korinsky in Berlin. Künstlerische Forschung zur akustischen Wahrnehmung von Architektur und Veröffentlichungen und Vorträge zum Thema, z.B. an der University of Greenwich, der Muthesius Hochschule Kiel und der Kunstakademie Düsseldorf. 2014-17 Lehrbeauftragter an der HTWG Konstanz, Fachbereich Architektur und Gestaltung. Dissertationsprojekt an der Kunstakademie Düsseldorf über die Kontinuitäten im westdeutschen Alltagsdesign der 1950er-Jahre.

Fig. 1: Bulthaup Küchen, Werbefoto zum Modell b3, 2018. ©Bulthaup GmbH & Co KG

Die Bauhausküchen - bis heute mehr als nur „Bauhausstil“

Abstract

Küchentrends werden heute fast immer mit unterschiedlichsten Design-Begriffen beworben. Doch entgegen der Vermutung, dass damit die funktionalen Vorzüge beschrieben werden, sind es zumeist emotionale Verheißungen, die zum Kauf einer neuen Küche anregen sollen. Vor 100 Jahren stand die Funktion der Küche und die Effizienz der Hausarbeit im Mittelpunkt der Untersuchungen und Entwürfe unterschiedlichster Protagonisten. In einem engen personellen Geflecht entstanden in den 1920er-Jahren fast zeitgleich moderne Küchen am Bauhaus und die weltberühmte Frankfurter Küche. Aber was unterscheidet heutige Ansprüche an die Küche von denen vor knapp einem Jahrhundert?

Die Beschäftigung mit aktuellen Trends bei Kücheneinrichtungen führt vor dem Hintergrund der Geschichte zur Entwicklung der Einbauküchen oft zu unerwarteten Erkenntnissen. In Katalogen und Werbebroschüren ist die Rede vom funktionalen Design, das die neuesten Erfindungen oder Verbesserungen bei technischen Geräten bewirbt. Diese werden als Kaufargumente für eine neue Küche in den Mittelpunkt gesetzt. Denn obwohl die Küche der technisierteste Raum innerhalb der Wohnung ist, bedeutet der Kauf einer neuen Einbauküche in der Regel mehr als der Austausch überholter Elektrogeräte. Deshalb lenkt die Werbung den Blick auf die äußeren Merkmale und emotional aufgeladene Atmosphären. So wird mit dem Begriff Design die Gestaltung der Möbelkästen und Arbeitsflächen beschrieben. Je nach Farbe, Oberflächenstruktur oder Material ist die Rede von einer modernen, klassischen, einer Landhausküche oder einer Designerküche. Dass dabei keine genauere Definition für die gewählten Attribute gegeben wird, versteht sich fast von selbst. Vielmehr setzt die Werbung hier auf die Assoziationen der Kunden.

Seit einigen Jahren hat der Aspekt des Wohnens in der Küche wieder an Bedeutung gewonnen. Große Tische finden dort ebenso Platz wie ausladende Bänke und gepolsterte Stühle. Die Küche ist nicht mehr vorrangig der Raum der Essenszubereitung, sondern wie viele Küchen vor den Reformbewegungen der 1920er-Jahre der zentrale Raum der Wohnung. Dies spiegelt sich in der gegenwärtigen Tendenz zu offenen Wohnküchen wider, die andere Räume innerhalb der Wohnung erschließen oder Kochinseln, die das Kochen in den Wohnraum hineinbringen, anstatt es mit dem Gesicht zur Wand an die Ränder des Raumes zu verbannen. Entsprechend sind die Ansprüche der Küchenhersteller formuliert: „Für das Leben in der Küche“ (Nolte Küchen), „Zentrum von Wohnen und Leben“ (Poggenpohl Küchen), „Wir schaffen Räume zum Wohlfühlen im Zentrum des Hauses – und mitten im Leben“ (Leicht Küchen). Die Firma Bulthaup fasst die Wohnidee der Küche am Beispiel der Kochinsel zusammen: „[Sie] ermöglicht, sich frei und dem Raum zugewandt zu bewegen. Sie wird zum Zentrum der Kommunikation, des gemeinsamen Kochens und Genießens“ (Abb. 1). Moderne Küchen verstehen sich als Treffpunkt aller Bewohner der Wohnung, sind aber zugleich durch ihre technische Ausstattung geprägt, die häufig mit einem bestimmten Statusanspruch einhergeht. Dadurch dass die Küche nicht mehr nur die verschlossene »Werkstatt der Hausfrau« ist, wird sie auch für Besucher sichtbar und es geht beim Kauf einer Küche auch wieder mehr um Fragen der Repräsentation. Der Blick auf die gegenwärtigen Tendenzen im Küchenbau zeigt, dass das Design nicht mehr zuerst die funktionale Gestaltung der Küche und ihrer Ausstattung meint, sondern in vielen Fällen den jeweiligen Stil der Möbel, die Materialwahl sowie die Wahl eines bestimmten Aufbaus der Küche. Genau müsste man hier von einem Styling sprechen.

Vielfach klingt in den neuen Konzepten die Idee von Vernetzung, Kommunikation einerseits und Rückzug und Konzentration auf den Menschen andererseits an. Themen, die das moderne Leben im Großen prägen, werden hier im Kleinen erprobt. In der Wohnküche finden Gespräche statt, die Begegnung der Bewohner oder mit ihren Gästen findet einen geschützten Raum. Psychologische und soziale Fragen spiegeln sich im Design der Küchen wider. Die Küche vermittelt als Herzstück der Wohnung auch die Einstellung ihrer Bewohner zu Fragen, die heute weitreichende gesellschaftliche Relevanz haben, z.B. die Ernährung. Aus diesem Grund steht in den Küchen von heute nicht mehr die effiziente, zeitsparende und hygienische Essenszubereitung an erster Stelle (diese Faktoren gelten als selbstverständlich und bedürfen keiner gesonderten Planung), sondern die Kompatibilität mit den individuellen Lebensansprüchen. Die Küche muss sich deshalb an neue Familienkonstellationen ebenso wie auf Berufstätigkeit von Frauen oder die stetig wachsende Zahl an Single-Haushalten anpassen.

Die Küche hat in den vergangenen 100 Jahren eine tiefgreifende Wandlung erfahren. Spuren dieses Prozesses sind bei der Untersuchung heutiger Küchenvorschläge nachvollziehbar. Die Küchen des 19. Jahrhunderts waren in weiten gesellschaftlichen Schichten der zentrale Raum der Wohnung, da sie oft der einzige gut beheizbare Raum waren. In den sogenannten Rauchhäusern oder den Rußküchen in ländlichen Regionen wurde der Rauch des Feuers nicht durch einen Schornstein, sondern durch Fenster, Türen und Ritzen nach draußen geleitet. Rußgeschwärzt waren die Wände vom Feuer, auf dem gekocht wurde und das im Winter auch eine wichtige Lichtquelle darstellte. Neben den Bewohnern hielten sich auf dem Land auch kleinere Tiere in der Küche auf. Oft lagen die Küchen mittig im Haus am Übergang vom landwirtschaftlich genutzten Bereich zum Wohnteil. Erst die Erfindung energieeffizienter, sicherer und industriell gefertigter Kochmaschinen verdrängte diese Küchenformen.

Anders sahen die Küchen in adeligen und großbürgerlichen Kreisen aus, wo die Küchenarbeit vom Personal übernommen wurde. Diese Küchen lagen weniger zentral innerhalb der Häuser, häufig im Souterrain, weil sie nicht zu den Wohnräumen, sondern den Wirtschaftsräumen gezählt wurden. Dienstboten brachten die Speisen in die Speiseräume. Im Verlauf des 19. Jahrhunderts machte sich den obersten Schichten der Mangel an Dienstboten bemerkbar, da aufgrund der schlechten Bezahlung viele von ihnen die Arbeit in Fabriken der Arbeit als Hausangestellte vorzogen. Als 1919 die Gesindeordnung in Deutschland außer Kraft gesetzt wurde, waren Hausangestellte, die nun mit gewerblichen Angestellten gleichgestellt wurden, für große Teile des Bürgertums nicht mehr bezahlbar.

Technische und soziale Veränderungen ermöglichten und erforderten ein Umdenken beim Bau und der Nutzung von Küchen. Beide Bereiche näherten sich an und erreichten eine erste „Demokratisierung“ von Küchenräumen. Die Ausstattung der Küchen mit Wasser-, Elektro- und Gasanschlüssen sowie der dadurch mögliche Einsatz neuer Geräte führten zu einer Industrialisierung des privaten Umfelds. Die Laborküche entstand. Auch die Erkenntnisse über den Zusammenhang von Hygiene und Gesundheit stellten neue Anforderungen an die Küchenarbeit. Dies erschien besonders in den deutschen Großstädten angebracht, wo besonders untere Schichten unter zum Teil katastrophalen Bedingungen hausten. Die notwendige Arbeit vieler Frauen des Proletariats in den Fabriken hatte zur Folge, dass ihnen die Zeit zur Hausarbeit fehlte und die Ernährung in vielen Arbeiterfamilien unzureichend war. Platzmangel und hygienische Defizite eröffneten in vielen deutschen Städten Debatten um sogenannte Einküchenhäuser, Mehrparteienhäuser mit einer zentralen Küche für alle Bewohner. Für diese Genossenschaftsidee engagierte sich um 1900 die SPD-Politikerin Lily Braun. Obwohl es realisierte Beispiele gab, konnte sich diese Küchenform nicht durchsetzen. Dennoch appellierte Braun an den sachlichen Verstand von Bauherren und Bewohnern, indem sie verdeutlichte, wie effizient dieses Konzept sei. Moderne Maschinen sollten die Arbeit vieler Hausfrauen gebündelt übernehmen. Zugleich wollte sie damit der schlechten Ernährung durch fehlender Kenntnisse der Frauen entgegenwirken. Auch die Kostenersparnisse erschienen ihr als attraktives Argument gegen die individuell geführten Einzelküchen. Die große Diskrepanz in der

Ernährung zwischen bürgerlichen Schichten und dem Arbeitermilieu wurde im letzten Drittel des 19. Jahrhunderts bis in die 1920er-Jahre hinein zu einem Thema, dem sich die Politik in regulierender Form annahm. Die Vorteile der Einküchenhäuser fanden Einzug in die Überlegungen zu neuen Küchen im Wohnungsbau der zwanziger Jahre.

Obwohl bereits um 1900 in den USA und Europa die Effizienz bei der Küchenarbeit diskutiert wurden, dauerte deren flächendeckende Durchsetzung noch bis in die 1950er-Jahre. Der einsetzende strukturelle Wandel ab dem Ende des 19. Jahrhunderts bestimmt unser Bild von einer Küche jedoch bis heute. Die frühen Erkenntnisse über Effizienzen im Haushalt bündelte Christine Frederick in USA 1913 in ihrem Buch The New Housekeeping, das 1920 unter dem Titel Die rationelle Haushaltführung in Deutschland erschien. Der Ingenieur Frederick Winslow Taylor versuchte ebenfalls in den USA die Bewegungsabläufe bei der Arbeit zu rationalisieren. Das nach ihm benannte Prinzip des Taylorismus zeigte, dass kleinere Küchen für die Verrichtung der täglichen Arbeit nicht nur zeitsparender, sondern vor allem arbeitserleichternd sind. Deshalb sollten Handgriffe und Laufwege in der Küche optimiert bzw. verkürzt werden, um sie zu beschleunigen. Nach diesen Einschätzungen waren die frühen Reformküchen fast immer zu groß, weil sie noch mit freistehenden Einzelmöbeln, z.B. Buffetschränken, ausgestattet wurden.

Aufgrund der neuen technischen Gegebenheiten, der erheblich verbesserten Sauberkeit in den Küchen ergaben sich Konzepte, die diesem Umstand auch ästhetisch Rechnung tragen sollten. Während im 19. Jahrhundert Küchenmöbel aus dunklem Holz üblich waren, unterstrichen ab etwa 1900 vermehrt hell oder weiß lackierte Möbel die hygienischen Ansprüche. 1902 zeigte das Warenhaus Wertheim in seiner Ausstellung Neue Wohnräume und neues Kunstgewerbe bei A. Wertheim, Berlin weiße Küchenmöbel nach dem Entwurf von Patriz Huber, Mitglied der Darmstädter Künstlerkolonie . Heute sind weiße Küchen selbstverständlich, um 1900 waren sie eine ungewöhnliche Ausnahme. Auch aus Produktionsgründen wurden lackierte Küchenmöbel sinnvoll, weil so auch preiswerteres Holz zum Einsatz kommen konnte.

Die rasanteste Entwicklung erfuhr die Küche in den 1920er-Jahren, als sich unterschiedliche Gruppen um Fragen der Gestaltung bemühten und wechselseitig beeinflussten. Die Anforderungen von Bürgertum und Proletariat hatten sich so stark angenähert, dass die Diskussion vordergründig keine Klassenunterschiede machte, wobei es durchaus unterschiedliche Ausführungen mit entsprechend abweichenden Kosten gab. Möbelfirmen spezialisierten sich auf den Küchenbau, Architekten befassten sich mit dem Thema der Typisierung, Interessenverbände von Hausfrauen mit der effizienten Hausarbeit. Auch die Politik beteiligte sich über die öffentlichen Siedlungsbauprojekte in deutschen Großstädten zur Bekämpfung der Wohnungsnot an der Entwicklung.

Den bis heute bekanntesten und wichtigsten Beitrag dazu leistete die Wiener Architektin Margarethe Schütte-Lihotzky, deren Entwürfe für Einbauküchen für das Siedlungsbauprogramm des Neuen Frankfurts unter der Leitung von Ernst May, als die Urform der Einbauküche gelten. Als Mitarbeiterin der Abteilung für Typisierung entwickelte sie mehrere Küchenmodelle für unterschiedliche Siedlungshäuser, die alle auf demselben Prinzip beruhen: Durch die Aneinanderreihung von Unter- und Oberschränken in einer räumlich stark konzentrierten Küche sollte die Arbeit der Frau in der Küche durch verkürzte Laufwegen und Berücksichtigung von immer gleichen Arbeitsabläufen erheblich vereinfacht werden. Ihre Frankfurter Küche (wobei es die Frankfurter Küche nicht gibt) geht auf die Speisewagenküchen in Mitropa-Zügen zurück, in denen auf kleinster Fläche von 7,12 m² in kurzer Zeit von zwei Personen Speisen für 80 Fahrgäste zubereitet werden mussten und zugleich das Geschirr, Gläser, Bestecke sowie die Getränke aufbewahrt wurden. Aus ihren Beobachtungen leitete Schütte-Lihotzky eine Möblierung von Wand zu Wand ab, die exakt auf die Raummaße zugeschnitten war.

Nicht zuletzt weil etwa 10.000-12.000 dieser Küchen in Frankfurt realisiert wurden, ist ihr Modell das bekannteste. Heute ist noch eine Reihe an Küchen im musealen Kontext erhalten und es ist durchaus zu erwarten, dass weitere Exemplare auftauchen, da nicht alle Wohnungen mit möglichen Frankfurter Küchen zugänglich sind. Frankfurter Küchen in unterschiedlichen Ausführungen und Restaurationsvarianten sind u.a. im Werkbundarchiv – Museum der Dinge Berlin, im Bröhan-Museum Berlin, im Historischen Museum Frankfurt a.M., im Germanischen Nationalmuseum Nürnberg oder im MoMA New York zu sehen. Im Rahmen der Lehre verfügen die Universität Wuppertal und die Hochschule Detmold über Originale. Das einzige Beispiel am ursprünglichen Standort ist im Ernst-May-Haus in Frankfurt a.M. zu besichtigen.

Die große Popularität der Frankfurter Küche hat mehrere Gründe. Einerseits war Schütte-Lihotzky Teil eines äußerst umfangreichen Siedlungsbauprojekts, so dass ihre Küche von Anfang an dazu bestimmt war, tausendfach gebaut zu werden. Auf der anderen Seite sah sich die Architektin auch mit einer diffizilen Aufgabe konfrontiert: May plante in den Wohnungen möglichst große Wohnzimmer, zugleich durften die Wohnungen aber nicht besonders groß ausfallen, um durch niedrige Baukosten auch günstige Mieten ermöglichen zu können. Ein willkommener Kompromiss schienen platzsparende Küchen zu sein. Allerdings war das Ergebnis räumlich so reduziert, dass es aus den Erfahrungen der potentiellen Mieter zunächst unmöglich erschien, diese Räume zu nutzen. Sofern sie eigene Möbel für die Küche beim Einzug hätten mitbringen wollen, wären diese für die Küchen viel zu groß gewesen. Die fest eingebaute Küche, die beim Mieterwechsel in der Wohnung verbleiben sollte und nur 1 Mark Miete zusätzlich im Monat kostete, war dementsprechend die beste Lösung.

Um bei den Bewohnern ein Verständnis zu entwickeln, wurde großer Wert auf die Vermittlung zum Gebrauch der Küchen gelegt. Vorträge halfen dabei ebenso wie die Zeitschrift Das Neue Frankfurt, die May ab 1926 zunächst selbst herausgab und in der Schütte-Lihotzky, über die Rationalisierung im Haushalt schrieb. Obwohl die Frankfurter Küche keine durchschlagende gesellschaftliche Akzeptanz erreichte, war sie durch die zahlreichen Veröffentlichungen sehr präsent und fand auch in anderen Städten in Bauprojekten Anklang.

In Köln wurde 1928 eine Frankfurter Küche für mehrere Tage der Öffentlichkeit zugänglich gemacht. In der Presse stand die Behauptung im Raum , dass die Frankfurter Küche für Köln ungeeignet sei. Daran wird sichtbar, was für ein Echo die Entwicklung der neuen Küchenformen hervorrief, die ja zunächst eine architektonische Frage war. Die Diskussion zeigt aber auch, dass das Thema Küche und Kochen nicht allein analytisch, nüchtern ausmessend und berechnend behandelt werden konnte, wie es Schütte-Lihotzky anging. Der Aspekt des Sinnlichen, des sozialen Miteinanders, der heute wieder eine große Rolle in der Küche und beim Kochen spielt, fehlt ihrem Entwurf.

Trotz der großen Bedeutung der Pionierarbeit Schütte-Lihotzkys

entstand diese nicht im luftleeren Raum. Die Überlegungen zum Neuen Bauen für neue Menschen und die damit verbundenen Probleme und Ansprüche beschäftigten auch weitere Architekten und Gruppierungen. Der Blick in die Autoren der Zeitschrift Das Neue Frankfurt zeigt anschaulich das Netzwerk, aus dem ein großer Teil der Überlegungen hervorging. Neben Schütte-Lihotzky und May schrieben darin Le Corbusier, Heinrich Tessenow, Frank Lloyd Wright, Martin Elsaesser und Walter Gropius. Die Zeitschrift kann so als wichtiges Sprachrohr für die Interessen des Neuen Bauens gesehen werden, dem sich auch das Bauhaus zugehörig fühlte. Da auch in Weimar bzw. Dessau davon ausgegangen wurde, dass das Neue Bauen kein Stil, sondern eine Haltung zu sozialen Anliegen ist, sind die Beispiele von Küchen, die aus dem Umfeld des Bauhauses hervorgingen, aufs Engste mit den Überlegungen in Frankfurt verbunden.

Noch vor dem Entwurf der Frankfurter Küche zeigte das Bauhaus 1923 im Rahmen der ersten Bauhausausstellung eine Küche, die diesen Prinzipien folgte. Für das Modellhaus Haus am Horn in Weimar erhielten Benita Otte und Ernst Gebhardt den Auftrag für die Küchenmöbel. Sie entwarfen eine Einrichtung für einen sehr kleinen, als Küche vorgegebenen Raum. Sie bestand aus hell lackierten Einbaumöbeln, verteilt auf Ober- und durchlaufende Unterschränke. Neu war an den Möbeln, dass sie um die Ecke liefen, um den Raum optimal auszunutzen. Einzelmöbel können so in der Regel nicht aufgestellt bzw. gehängt werden. Diese aus heutiger Seherfahrung zunächst nicht weiter auffällige Idee war ein Meilenstein auf dem Weg zur An- und Einbauküche, ein Prinzip, das auch der Frankfurter Küche zugrunde liegt. Möbel wurden nicht mehr einzeln aufgestellt, sondern ohne Abstand aneinander gereiht. Ab den späten 1950er-Jahren wurden sie mittels durchlaufender Arbeitsflächen miteinander verbunden.

Obwohl die Küchenentwürfe der zwanziger Jahre eng mit den öffentlichen Wohnungsbauprogrammen für die bürgerliche Mittelschicht verbunden waren, gibt es auch Beispiele für private Bauherren, die sich für die neuen Küchen interessierten. Diese bilden jedoch die Ausnahme, da während der Weimarer Republik trotz aller Prozesse zur Erneuerung in der Architektur, konservative Tendenzen in unterschiedlichen Bereichen nie überwunden wurden. 1928 gewann der Bauhausstudent Hans Volger den Auftrag des Arztes Dr. Karl Nolden für den Bau eines Praxis- und Wohnhauses in Mayen in der Eifel. Nolden war von den Zielen der Bauhauslehre so angetan, dass er sich den Neubau seines Hauses im „Bauhausstil“ wünschte. Er wendete sich direkt an das Bauhaus, und Walter Gropius stellte in seiner Meisterklasse die Aufgabe, das „Haus eines geistigen Arbeiters“ zu entwerfen. . Die Lage der Küche innerhalb des Hauses, ihre Aufteilung und Ausstattung entsprachen den Ideen Schütte-Lihotzkys. Obwohl es sich in diesem Fall nicht um eine prototypische Frankfurter Küche handelte, wie sie für die Siedlungswohnungen entwickelt wurde, fanden deren Aluminiumschüttenschrank für Nährmittel und Gewürze der Firma Gebrüder Haarer aus Hanau sowie die die Oberschränke Verwendung. Dafür soll Volger vor der Planung der genauen Größen und Anzahl der Einbauschränke zunächst den genauen Bedarf anhand der Menge und Größen von Töpfen und Geschirr berechnet haben. Insgesamt ist die Küche der Arztfamilie durch eine angeschlossene Speisekammer und die benachbarte Waschküche weniger beengt als die Exemplare in den Siedlungswohnungen.

Der Vergleich der Küchen im Haus der Familie Nolden (1945 zerstört) und im Haus am Horn zeigt große Übereinstimmungen. Alle beteiligten Architekten verfolgten dieselben Ziele der Rationalisierung, Typisierung, Vereinfachung auf funktionaler aber auch auf ästhetischer Ebene. Durch die Demokratisierung wurde eine gute Küche erstmal durch ihre Struktur und Funktion und nicht durch die Dekoration ihrer Einzelmöbel identifizierbar. Das Praktische, die Arbeit Vereinfachende zeichnet seitdem den Küchenbau aus. Nach dem Zweiten Weltkrieg beriefen sich zahlreiche Küchenhersteller auf die Errungenschaften der zwanziger Jahre. Walter Ludewig, Chef der Küchenfirma Poggenpohl in Herford, orientierte sich bei der Entwicklung seiner Küche Form 1000, der ersten Anbauküche für den Massenmarkt, an der Küche im Haus am Horn. Er machte die bekannten Prinzipien durch den Einsatz eines Setzkastens, in dem die angebotenen Schrankelemente beliebig kombiniert werden konnten, für die Kunden nachvollziehbar und an individuelle Raumgrößen anpassbar.

In den fünfziger Jahren nahm die Entwicklung der Küche in bisher vernachlässigten Bereichen an Fahrt auf. Durch die Entwicklung von neuer Kunststoffe wurden die Oberflächen robuster. Während der Aufbau der Küchen über Jahrzehnte nur leichte Wandlungen erfuhr, schritt die Technisierung weiter voran. Küchenmaschinen versprachen immer neue Erleichterungen. Gleichzeitig ist eine Lockerung der strengen Konzepte, denen die Laborküche der 1920er-Jahre zugrunde liegt, zu beobachten. Während diese Küchen dem Speise- bzw. Esszimmer zugeordnet waren, wird heute die Küche selbst zum zentralen Raum. Im Zuge dieser Entwicklung wird eine Balance zwischen den Aufgaben dieses Raumes gesucht und die ästhetische Erscheinung der Küchenmöbel denen der Möbel des Wohnbereichs angepasst.

Die Fragen nach den funktionalen Aufgabe einer Küche haben die 1920er- und die 1950er-Jahre weitgehend beantwortet. Sie erfahren durch punktuelle Veränderungen und kleinere Neuentwicklungen regelmäßige Auffrischungen. Die Frage, die sich immer wieder neu stellt, ist die nach der sozialen Funktion des Konzepts Küche. Die Antwort muss jede Generation ihren gesellschaftlichen Ansprüchen gemäß immer wieder zeitgemäß geben.

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Notes

Ana Nikezic

Prof. Dr., Associate Professor/Vice Dean for Education and Research
University of Belgrade

Prof. Dr. Ana Nikezic holds a PhD in Architecture (2006) with more than 20 years of teaching experience in the area of Architectural and Urban design and over 14 years of experience in research projects. Since 2010 she is a member and mentor for the elaborations of doctoral thesis. She has had more than 30 papers published in monographies, magazines, journals and conference proceedings of international importance. She was also a member of the organizing and science committee for a number of national and international conferences. She also participated in a great amount of international and national workshops. She is particularly interested in connecting of the theoretical and the practical dimension of designing and architecture in general. Particular academic attention has been brought to the subject of relations between architecture and nature, architecture and urban culture, as well as to the subject of socially responsible architectural education based on an interdisciplinary approach.

Notes

Session 4.1
Housing reloaded

Ana Nikezic

The two postersessions are aiming to provide a stage for the next generation of academics on master, PhD and postdoc level. Students, graduates and young researchers were invited to reflect on their educational projects and studios – in theory or history or through research by design. Eight posters representing works from the universities of Antwerp, Belgrade, Hacettepe in Ankara, Oxford and Weimar will be exhibited and presented to give inside into current academic programs and research in Europe.

Housing Reloaded' the selected posters from Belgrade and Antwerp are all dealing with the adaptation of middle class housing estates from the post-war period to current needs. Although different in appearance and scale, political and economic context, both estates can be identified as heirs and descendants of the Modern Movement.

Notes

Ana Nikezic

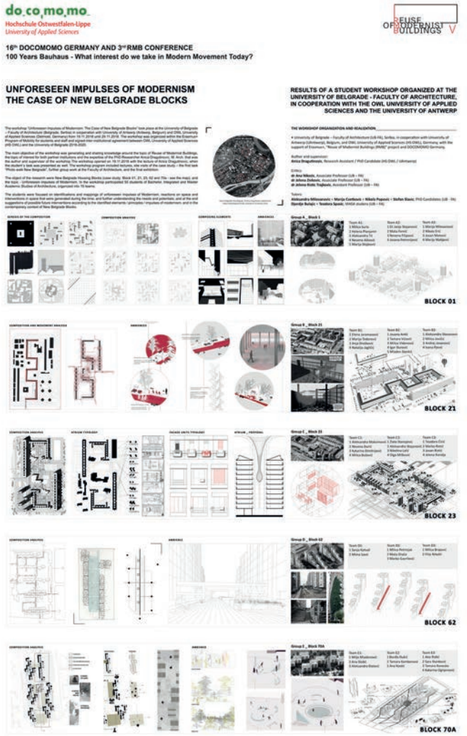
Prof. Dr., Associate Professor/Vice Dean
University of Belgrade

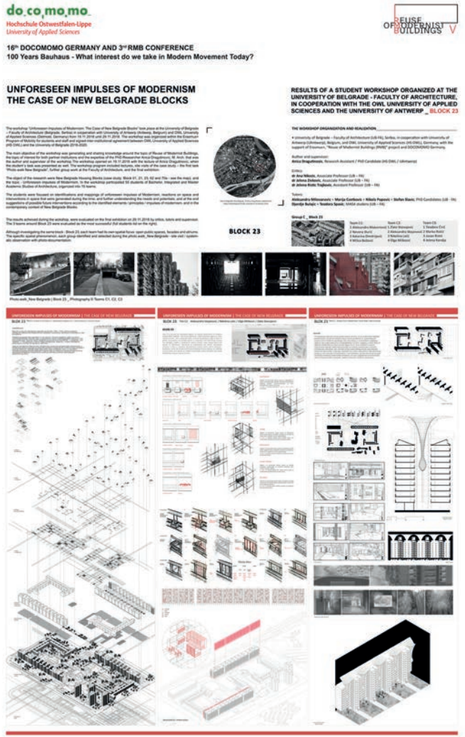
Prof. Dr. Ana Nikezic holds a PhD in Architecture (2006) with more than 20 years of teaching experience in the area of Architectural and Urban design and over 14 years of experience in research projects. Since 2010 she is a member and mentor for the elaborations of doctoral thesis. She has had more than 30 papers published in monographies, magazines, journals and conference proceedings of international importance. She was also a member of the organizing and science committee for a number of national and international conferences. She also participated in a great amount of international and national workshops. She is particularly interested in connecting of the theoretical and the practical dimension of designing and architecture in general. Particular academic attention has been brought to the subject of relations between architecture and nature, architecture and urban culture, as well as to the subject of socially responsible architectural education based on an interdisciplinary approach.

Anica Dragutinovic

M.Arch., PhD Candidate
University of Antwerp, Belgium

Anica Dragutinovic's, is a PhD Candidate at the University of Antwerp (Belgium). Her PhD research is focusing on the evaluation and transformation of modernist housing blocks in New Belgrade. She is a research assistant and coordinator of Master Program MIAD/MID-Facade Design at OWL UAS (Germany) since 2016; and a member of the Erasmus+ project Re-use of Modernist Buildings. She obtained Master of Architecture in 2016 at the University of Belgrade, Faculty of Architecture (Serbia), and Bachelor of Architecture in 2014 at the same Faculty. During her studies she was a student teaching assistant and had different internships on international level.





Unforeseen Impulses of Modernism: The case of New Belgrade Blocks

The workshop "Unforeseen Impulses of Modernism: The case of New Belgrade Blocks" took place at the University of Belgrade - Faculty of Architecture (Belgrade, Serbia) in cooperation with University of Antwerp (Antwerp, Belgium) and OWL University of Applied Sciences (Detmold, Germany) from 19.11.2018 until 29.11.2018. The workshop was organized within the Erasmus+ Program of Mobility for students and staff and signed an inter-institutional agreement between OWL University of Applied Sciences (HS OWL) and the University of Belgrade 2018-2020. The main objective of the workshop was generating and sharing knowledge around the topic of Reuse of Modernist Buildings, the topic of interest for both partner institutions and the expertise of the PhD Researcher Anica Dragutinovic, M. Arch. that was the author and supervisor of the workshop. The workshop opened on 19.11.2018 with the lecture of Anica Dragutinovic, when the student's task was presented as well. The workshop program included lectures, site visits of the case study- the first task "Photo walk New Belgrade", further group work at the Faculty of Architecture, and the final exhibition. The object of the research was New Belgrade Housing Blocks (case study: Block 01, 21, 23, 62 and 70a - see the map), and the topic - Unforeseen impulses of Modernism.

In the workshop participated 55 students of Bachelor, Integrated and Master Academic Studies of Architecture, organized into 15 teams. The students were focused on identifications and mappings of unforeseen impulses of Modernism, reactions on space and interventions in space !hat were generated during the time; and further understanding the needs and potentials; and at the end suggestions of possible future interventions according to the identified elements / principles / impulses of modernism, and in the contemporary context of New Belgrade Blocks.

_Block 23

The results achieved during the workshop, were evaluated an the final exhibition on 29.11.2018 by critics, tutors and supervisor. The 3 teams around Block 23 were evaluated as the most successful (full students list on the right). Although investigating the same block - Block 23, each team had its own spatial focus: open public spaces, facades and atriums. The specific spatial phenomenon, each group identified and selected during the photo.walk_New.Belgrade - site visit/systematic observation with photo-documentation.

Notes

Sanne Louwerens

Master of Interior Architecture
University of Antwerp (Belgium)

Personal
Birthday: 5 December 1993
Nationality: Dutch / Australian
Email: SanneLouwerens@gmail.com
Based in: Sydney, Australia

I am a passionate, proactive, innovative graduate who is eager to face new challenges. My goal is to join an inspiring company that focuses on more aspects than just functional design solutions, such as understanding its users, integrating the surroundings and designing spaces that focus on our future.

Education
I started my Bachelor of Interior and Spatial Design at the University of Technology Sydney (Australia) in 2013. In 2014 I decided to study abroad for 6 months studying Interior Architecture at San Diego State University (USA). After finishing my bachelor degree I decided to move to Europe in 2017 to complete a Master of Interior Architecture at the University of Antwerp (Belgium).

Experience
During and in between my studies I entered a few competitions, for companies including Westfield and Merivale, in Sydney Australia. In 2017 I completed some short-term work experience drafting at Collard Maxwell Architects in Sydney using AutoCAD.

Sanne Kunst

Interior Architect / Project Manager
University of Antwerp (Belgium)

Personal
Birthday: 27 March 1992
Nationality: Dutch
Email: sanne.kunst92@gmail.com
Based in: Antwerp, Belgium

Education
Recently I graduated from the University of Antwerp with a Master's degree in Interior Architecture
(2016-2018). Ten years before that I started my first degree in Design and Space at Cibap Vakcollege for Imagination (2008-2012), where my love for interior architecture began. After this I completed a year of Engineering (2012-2013). I then started my Bachelor of Interior Architecture at the University of Antwerp (2013-2017).

Experience
Currently I'm working full time as project manager for Facilitus in Wommelgem, based in Belgium. It is a young and upcoming company specialized in construction and renovations. During my studies
I had the opportunity to complete multiple internships. I worked with different architects, interior architects and designers. I also taught students different CAD and Adobe programs during one of
my internship at a design school. During my final year of my bachelor degree I was also member of a faculty board (Modulor), where I was responsible for all the graphics.

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REUSE OF MODERNIST BUILDINGS V

16th DOCOMOMO GERMANY AND 3rd RMB CONFERENCE
100 Years Bauhaus - What interest do we take in Modern Movement Today?

'THE VERTICAL VILLAGE'

Sanne Kunst & Sanne Louwerens

Abstract
We as interior architects play a leading role in addressing current issues such as the ageing population and social segregation. These aspects were addressed in our project where we created a **collective living community**: a place for connectivity in a reused modernist building. 'The Vertical Village' is split up into elements that reflect a village experience, allowing a social community to form within. The concept of 'The Vertical Village' is a potential answer to the complex socio-economic issues of today's society. This model can be used within other modernist buildings to bring back social aspects, giving the residents the opportunity to create a community together.

Master thesis: Reuse of Modernist Buildings
We had the opportunity to make a proposal for a renovation of a modernist residential block in Berchem (a district within Antwerp) Belgium. Before we started designing we asked ourselves the question: How can we, as interior architects, contribute to the social context in Berchem? Furthermore we asked ourselves how could we play a role in resolving the current issue for this location. We believe that interior architects can play a bigger role in addressing the social problems in our community. With this big question in mind we started our research in Berchem.

During our research we found statistics, which stated that nearly half of the population in Berchem lives alone. This is one of the consequences of increasing divorces in Belgium. In different statistics we found out that about half of the population is over fifty years old and that quarter of the total population is over seventy-five years old. Like every other country, Belgium has to find a solution for a continuous increase in ageing populations. In addition to this problem, a large number of elderly people do not want to grow old in a nursing home. Sadly enough their children are often unwilling or unable to care for them, usually because they don't have the time as they work fulltime. We found this issue concerning and addressed these aspects in our project 'The Vertical Village' in Antwerp. We did this by looking at the concerning issue in a different way. In order to do that we started with examining ourselves, and especially looked at the environment where we both grew up in. We grew up in different environments; different parts of the world as well as in cities of different size, and that last part really fascinated us. We looked at the differences between a city and a village. This approach is certainly not obvious, but it gave us captivating perspectives into living in smaller communities. This became the underlying idea for our concept and a base for the design of 'The Vertical Village'. In this big city we designed a **small village feeling** by creating a collective living community, a place for connectivity, in a reused modernist building.

'The Vertical Village' is split up into elements that reflect a similar experience to a village, allowing a **social community** to form within. We designed 'The Square' to connect 'The Districts' to each other by replacing the current various entrances with one main entrance. 'The Square' will be the social core of the 'The Vertical Village'. This green oasis serves as a connection, and more importantly, a meeting place between 'The Districts', within which multiple neighbourhoods are located. The voids increase the transparency between 'The Streets', allowing for vertical interaction to occur.

'The Neighbourhoods' are the four blocks in each district. Each block has tree levels that we call 'The Streets' where you find different sized private homes that are connected to multiple **communal spaces**, encouraging more connectivity between the residents. One of the three streets consists of eight studios and one large communal area where **common functions are shared**. Every studio is equipped with a multifunctional object that provides the residents with their basic needs. The other two street levels consist of small apartments that are connected to each other through smaller communal spaces; the linking threshold between the exterior circulation and the private homes. There is also the option to combine the apartments that are placed next to each other. This way you have the possibility to take care of your relatives that may live next to you.

Originally our site consisted of two separate yet similar concrete apartment blocks, which we analysed through a SWOT-analysis, but each discovery evoked a greater question. We found out that the 'Strength' of this building is the organised grid that allows for a diversity of layouts but how can we use this grid to structure the apartments and communal spaces? The strong grid allowed us to shape 'The Streets' to its current layout. The biggest 'Weakness' of this building is that there are a lot of small entrances that give no opportunity of social interaction. With this problem came a bigger one; there is only vertical circulation in this building. The greatest 'Opportunity' is the unused space between the two buildings, which had a potential to improve the circulation problem. We quickly realized that if we combine these last two together, we are able to create a new entrance between the two blocks to form enough space for **social interaction.** Because of the existing grid there is not enough space inside the building to create horizontal circulation, therefore we decided that we would add the horizontal circulation to the exterior. This allowed us to create a front garden feel, like you would have in a small village. In addition, we created a connection between the communal space and the horizontal circulation, by copying some parts of the interior to the exterior space. This way you can enjoy your cup of coffee with a view of the treetops outside, but if the weather isn't great you can enjoy your cup of coffee behind the glass with the same view, at the same place.

The concept of 'The Vertical Village' is a potential answer to the complex socio-economic issues of today's society. This model can be used within other modernist buildings to bring back social aspects, **allowing communities to form within**. With this project we want to give the residents the opportunity to create a community together. With our design we give them the tools for social interaction, to create and connect with the people around them, so they can create a caring community among each other.

Biography
Sanne Kunst: Recently I graduated from the University of Antwerp with a Master's degree in Interior Architecture. Currently working in Belgium as project manager for a young and upcoming construction company specialising in technical renovations.
I have always had a small, but healthy, obsession with social interactions. I like to observe people and their behaviour in public spaces, like parks, city squares or public buildings. It still fascinates me how people use spaces designed for them; how they copy each others' behaviour, the good and the bad ones, sometimes resulting in the destruction of the designer's intention.

Sanne Louwerens: In 2018 I graduated from the University of Antwerp with a Master's degree in Interior Architecture, before which I completed a Bachelor of Interior and Spatial Design at The University of Technology Sydney.
I hope that in the future I can help our society by designing spaces that focus on our future population and the environment. I want to implement more sustainability within buildings and combine this with my vision to incorporate thresholds, transition or shared spaces to stimulate social interaction.

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The Vertical Village

Abstract

We as interior architects play a leading role in addressing current issues such as the ageing population and social segregation. These aspects were addressed in our project where we created a collective living community: a place for connectivity in a reused modernist building. 'The Vertical Village' is split up into elements that reflect a village experience, allowing a social community to form within. The concept of 'The Vertical Village' is a potential answer to the complex socio-economic issues of today's society. This model can be used within other modernist buildings to bring back social aspects, giving the residents the opportunity to create a community together.

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Vertical Village'. This green oasis serves as a connection, and more importantly, a meeting place between 'The Districts', within which multiple neighbourhoods are located. The voids increase the transparency between 'The Streets', allowing for vertical interaction to occur. 'The Neighbourhoods' are the four blocks in each district. Each block has three levels that we call 'The Streets' where you find different sized private homes that are connected to multiple communal spaces, encouraging more connectivity between the residents. One of the three streets consists of eight studios and one large communal area where common functions are shared. Every studio is equipped with a multifunctional object that provides the residents with their basic needs. The other two street levels consist of small apartments that are connected to each other through smaller communal spaces; the linking threshold between the exterior circulation and the private homes. There is also the option to combine the apartments that are placed next to each other. This way you have the possibility to take care of your relatives that may live next to you. Originally our site consisted of two separate yet similar concrete apartment blocks, which we analysed through a SWOT-analysis, but each discovery evoked a greater question. We found out that the 'Strength' of this building is the organised grid that allows for a diversity of layouts but how can we use this grid to structure the apartments and communal spaces? The strong grid allowed us to shape 'The Streets' to its current layout. The biggest 'Weakness' of this building is that there are a lot of small entrances that give no opportunity for social interaction. With this problem came a bigger one: there is only vertical circulation in this building. The greatest 'Opportunity' is the unused space between the two buildings, which had the potential to improve the circulation problem. We quickly realized that if we combine these last two together, we are able to create a new entrance between the two blocks to form enough space for social interaction. Because of the existing grid, there is not enough space inside the building to create horizontal circulation, therefore we decided that we would add the horizontal circulation to the exterior. This allowed us to create a front garden feel like you would have in a small village. In addition, we created a connection between the communal space and the horizontal circulation, by copying some parts of the interior to the exterior space. This way you can enjoy your cup of coffee with a view of the treetops outside, but if the weather isn't great you can enjoy your cup of coffee behind the glass with the same view, at the same place. The concept of 'The Vertical Village' is a potential answer to the complex socio-economic issues of today's society. This model can be used within other modernist buildings to bring back social aspects, allowing communities to form within. With this project, we want to give the residents the opportunity to create a community together. With our design we give them the tools for social interaction, to create and connect with the people around them, so they can create a caring community among each other.

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Ellen Mollen

Master of Interior Architecture
University of Antwerp (Belgium)

Ellen graduated from the University of Antwerp as Master in Interior architecture in 2018. During her education she participated in student workshops in Marl and Coimbra that specified on the Reuse of Modernist Buildings theme. For the subject of her master thesis she also focused on this theme. After her education she started working as an interior architect at Trias Architecten. Trias Architecten is a multidisciplinary design studio where urbanism, architecture, interior architecture and landscape design meet each other to obtain a total design.

Pieternel Van Steenbrugge

Master of Interior Architecture
University of Antwerp (Belgium)

In 2018, I obtained my Master in Interior architecture at the University of Antwerp. After my studies, I started working at the architectural office Blockx, Peeters & Van Looveren in Belgium. Here I hope to learn more about the building process in the practice and the connection between interior and exterior. In addition, I am working on own interior projects. As an interior designer I endeavour to create a physical and emotional value for the consumer, using the knowledge and skills I have been developing over the past years. To create a unique design, one needs to think and design with an open mind. With that open mind, I'm able to empathize on a perceptual and physical level during the whole process. My designs are compiled out of the elements mentioned above. Each time I try to design a timeless and contemporary interior with a twist (personification of the user). I love it when an interior is taken for granted, when at the same time it represents something expressive, evocative and vivid. "The art of simple living."With great pleasure I enlight my motivation and skills further during a personal meeting at the Conference in Berlin.

Anne Wisse

Master of Interior Architecture
University of Antwerp (Belgium)

Anna Nelly Maria (Anneke) Wisse obtained her master of science in interior architecture at the University of Antwerp (Belgium) in 2018. During study, she participated in Docomomo congresses and workshops in Coimbra (Portugal) and Marl (Germany). Reuse of modernist buildings is challenging and interesting! Soon after her graduation Anneke started working as a designer at Lavoir, which is a designing company with over 35 years of experience. Lavoir is located in Arnemuiden (The Netherlands) and focuses on the design of cafeterias, healthcare institutions and schools with a young and energetic team. As a designer Anneke is responsible for creating various concepts in different projects. She also communicates the concepts and designs to her clients. Anneke is a creative designer who focuses on interaction with users to determine their wishes and delivers high quality final concepts. Also, Anneke is creative in other forms of art. For example, she played as an actress in various films and she did the art-direction of one of those movies.

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REUSE OF MODERNIST BUILDINGS

16th DOCOMOMO GERMANY AND 3rd RMB CONFERENCE
100 Years Bauhaus - What interest do we take in Modern Movement today?

RESTORE THE OLD PROMISE OF MODERNISM
Responding to the contemporary housing needs with functionality and quality living environment as criterion.

Three modernist buildings in Antwerp (Belgium), dating from the late 1960s, are being used as case studies to investigate functional and spatial possibilities. How are we able to redesign and reassign the Mercator buildings, located at the Fruithoflaan in Berchem, optimizing reduced living space, integrating collective purposes, defining a difference between public and private space and taking into account a shifting society with changeable family and working situations? Can a methodology be defined that could be applied for further cases?

Preface
Western and industrialized countries in the 21st century, as well as most other parts of the world, are confronted with increasing populations and urbanization resulting also into changing societies. Among other things, they are characterized by shifting family situations such as reconstituted families, single-parent families and a growing number of single households that have an effect on this families' preferable living space. They are also shaped by new forms of work where more people tend to work at home, are open to a shared economy system and to sharing collective spaces with others. To address these changes, architects and interior designers have to combine reduced living space with valuable collective space.

In this case study we were able to grasp the context after studying relevant literature on modernism, interviewing the residents, observing the site and analysing the existing design and construction. We discovered that the Mercator buildings had been built in a modernist way but without the basic foundations of early modernism such as functionality, quality living and interaction with the outside space and the neighbourhood. Therefore, examples of early modernist buildings that do have a modernist soul can be used to address the shortcomings of the Mercator buildings.

By rethinking, reusing and eventually redesigning the old promise of modernism, a strong concept could be developed through which we were able to add tangible as well as intangible values to the design in order to comply with the residents' requirements and improve their living environment.

Rethink
Since we are working in the context of 'Reuse of Modern Buildings', we felt it was very important to understand the foundations of modernism. Literature research shows that modernism wants to respond to the needs of the population in a functional way while focusing on the interaction between the indoor and the outdoor space. Green space, light and air were focal points in the functional, architectural design of the modernists. The two world wars were very important events during the modern period as well. Modernism had to respond to the housing need after the destruction of many residential areas. For the reconstruction, collective and social engagement became more important. Small communities were being created that were almost self-sufficient by setting up things like a school, a playground, shops, etc.

Reuse
The buildings on the Fruithoflaan were built during the modernist period, but do not necessarily meet the core ideas of modernism. These Mercator buildings do have a modernist appearance because of the many windows on the facade and the green areas between the buildings. The apartments even have been sold with the idea 'living in a park'. However, this modern idea merely seemed to have been a sales trick, a thin layer of modernist appearance, for as we analysed the building and by the way it is used by his residents, there is little to be noticed about modernism. The buildings on the Fruithoflaan were fully utilized by private houses, where no architectural intervention responds to interaction between the residents or the outside space. The only collective part of the residence are the gardens between the buildings, but they may not be entered.

We can therefore conclude that the Mercator buildings in question are phoney modernist buildings, lacking, as it were, their real modernist soul. The search for that modernist soul will form the foundation for the redesign of these buildings. Based on the research and our findings about the Mercator building, three ramifications will arise that will form the base for the search of the modern idea. In addition, the Mercator buildings have a lot of potential because of the quiet environment, the extensive public transport nearby, the large open space in combination with the proximity to the city centre of Antwerp.

The question 'what can modernism mean today?' will also often be discussed. Therefore, we will re-evaluate the project on three levels: the building and it surroundings, the user and the interior.

Redesign
Answering to today's housing needs, we focused on the shifting society with changeable family and working situations. Nowadays, there are more households consisting of one person or newly composed families. The housing needs depend on the changing family situation and often have a more temporary character. Therefore, we wanted to create more opportunities for variable family situations inside the building. We created three living typologies where there is a gradation in collective use of the living spaces. In line with the joint use of certain living areas, we also included a sharing economy for cars, bicycles, work areas, wellness and laundry services. An important consequence of the car sharing system is that a lot of space is recovered from the underground parking. The recovered underground space will be used to create a connection between the different buildings of the Mercator park. Some of the underground parking space will be opened up to create a double high ground floor where public services such as a collective working area, a fitness, a wellness and a social meeting point can be provided. This intervention also creates a more dynamic landscape around the buildings.

What can modernism mean today? We gave three modern building blocks, which no longer met our current housing standards and needs, a new life by rethinking, reusing and redesigning the building from the 1960s into a new modern context. We appealed to our current living culture and responded to the changeable and temporary living situations of today. We have studied the usable surfaces and living capacity so that more people can live and use collective and private areas in the new design.

Restore the old Promise of Modernism: Responding to the contemporary housing needs with functionality and quality living environment as a criterion.

Three modernist buildings in Antwerp (Belgium), dating from the late 1960s, are being used as case studies to investigate functional and spatial possibilities. How are we able to redesign and reassign the Mercator buildings, located at the Fruithoflaan in Berchem, optimizing reduced living space, integrating collective purposes, defining a difference between public and private space and taking into account a shifting society with changeable family and working situations? Can a methodology be defined that could be applied for further cases?

Preface

Western and industrialized countries in the 21st century, as well as most other parts of the world, are confronted with increasing populations and urbanization resulting also into changing societies. Among other things, they are characterized by shifting family situations such as reconstituted families, single-parent families and a growing number of single households that have an effect on these families' preferable living space. They are also shaped by new forms of work where more people tend to work at home, are open to a shared economy system and to sharing collective spaces with others. To address these changes, architects and interior designers have to combine reduced living space with valuable collective space. In this case study, we were able to grasp the context after studying relevant literature on modernism, interviewing the residents, observing the site and analysing the existing design and construction. We discovered that the Mercator buildings had been built in a modernist way but without the basic foundations of early modernism such as functionality, quality living and interaction with the outside space and the neighbourhood. Therefore, examples of early modernist buildings that do have a modernist soul can be used to address the shortcomings of the Mercator buildings. By rethinking, reusing and eventually redesigning the old promise of modernism, a strong concept could be developed through which we were able to add tangible as well as intangible values to the design in order to comply with the residents' requirements and improve their living environment.

Rethink

Since we are working in the context of 'Reuse of Modern Buildings', we felt it was very important to understand the foundations of modernism. Literature research shows that modernism wants to respond to the needs of the population in a functional way while focusing on the interaction between the indoor and the outdoor space. Green space, light and air were focal points in the functional, architectural design of the modernists. The two world wars were very important events during the modern period as well. Modernism had to respond to the housing need after the destruction of many residential areas. For the reconstruction, collective and social engagement became more important. Small communities were being created that were almost self-sufficient by setting up things like a school, a playground, shops, etc.

Reuse

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Notes

Dr. Ing. Thomas Ludwig

Department of Preservation of Historical Monuments
RWTH Aachen

Thomas Ludwig studied architecture at the RWTH Aachen and in Paris from 1968 to 1975. After his postgraduate studies in monument conservation "Studio ed Restauro dei Monumenti" at the ICCROM in Rome, he worked as a scientific trainee at the Bavarian State Office for Monument Conservation and as a freelance building researcher in addition to his scientific work in the field of architectural history at the Technical University of Darmstadt and at the State Office for Monument Preservation in Hesse. In 1987 obtained his Doctorate at the TH Darmstadt on "The Romanesque House in Seligenstadt". In 1990 he became head of the department "Building Matters and Monument Conservation" of the Administration of State Palaces and Gardens, Hesse. Since 2001 he has been lecturing on "Preservation of historical monuments at castles and gardens" at the Department of Preservation of Historical Monuments at RWTH Aachen.

Notes

Session 4.2
Education and Theory

Dr. Ing. Thomas Ludwig

Education and Theory the selected approaches and themes are more diverse. The role of craftmanship and industrialization for design education was a central theme of the Bauhaus. Industrialization also played a role in urbanizing the rural areas by developing ‘Agro-Cities’. These still are relevant topics today in the 21st century, similar to the energy savings and energy efficiency that seem to have become the predominant ‘design guidelines’ – but detached from design principles.

Notes

Moe Omiya

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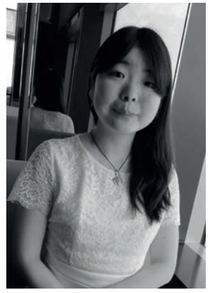
University of Oxford, England



Born in Tokyo in 1994, Moe Omiya spent her schooldays in Tokyo – Futaba School – and in Berlin – Rudolf Steiner Schule –. On graduating from high school in 2013, she entered the University of Tokyo, Japan, which was followed by the entrance into Bauhaus-Universität Weimar, Germany, Faculty of Architecture. She spent one semester at the Bauhaus University, after which she returned to Tokyo. Graduating from Cultural Representation course in March 2018 with a BA's degree for the dissertation on Bauhaus movements, she went on to the Graduate School of the University of Tokyo. In October 2018, she entered the Graduate School of the University of Oxford, England, where she is currently studying for her Master's degree at the History of Art department.

'Haus am Horn' – Its Experimental Spirit

Abstract

The experimental house, 'Haus am Horn', is a co-production of all the Bauhaus members for the first and only official Bauhaus Exhibition in Wei-mar in 1923, which marks the crucial point in the 14 years of Bauhaus' existence, a change from mere pursuit of 'the total work of art' by 'Zunft-cooperation' to becoming more conscious of industrial demand. This remaining 'specimen' reflects the members' efforts to include traditional elements, modern materials, and artistry at the same time. Despite the contemporaneous dispute over its value, this house should still be re-appreciated in representing the integral forms of two contrary destinations of the Bauhaus; toward the past and toward the future.

The 'Haus am Horn' – Its Experimental Spirit

During the mere 14 years of its existence, Bauhaus is said to have gone through a couple of changes in policy. The director Walter Gropius came to encourage more cooperation with industry rather than pushing ahead solely with the collaboration of art and handicrafts.[3] At the same time he proceeded with pursuing his original goal, which was to create architecture as a 'total work of art'.[5] This largest turning point is marked by an exhibition held by Bauhaus in 1923, which turned out to be the first and only official Bauhaus exhibition held in Weimar. Unlike most of the displays that have been lost or ruined since then, a house built for this exhibition still exists today on the same location. The following sections analyse this 1923 Bauhaus Exhibition and the 'Haus am Horn', which can be called, in a sense, a 'monument' to the Bauhaus in its Weimar days. In my analysis, a fundamental tension between two vectors in ear-ly Bauhaus works will be indicated, one toward the past and one toward the future. Issued on the 100th anniversary of the Bauhaus' establishment, this essay looks back on the origin of the Bauhaus principles in its early stage

The 1923 Exhibition and the Experimental House: 'Haus am Horn'

The Haus am Horn is a single-family residential building built for the 1923 Bauhaus Exhibition in the southeast of the city of Weimar. There was a construction period of only four months; the Bauhaus members managed to complete it on August 15th, on the opening day of the exhibition itself.[2] Regarding the impact of the exhibition on the Bauhaus School itself, this event had a significant influence on the mental state of the Bauhaus members as well as some practical effects on the actual administration of the institution. Firstly, the effect of strengthening the group unity was very clear. Prior to the start of the preparation period for the exhibition, the Bauhaus School had been in a fragmented situation. Since Meisters and students were assigned to a specific workshop, which was individually carrying out experiments with new materials as well as instructing its students, occasions for interaction among work-shops were restricted. The very short preparatory

period and Gropius' idea of 'total work of art through interactions among workshops' obliged them to cooperate all the more with one another.[5] Among all the displays for the exhibition, which contributed to unifying the Bauhaus most was unquestionably the Haus am Horn. Unlike other exhibition areas, which mainly displayed individual works by Meisters and students, the Haus am Horn was an attempt to build one house concentrating all the members' efforts, and so needed overall consistency and conceptual direction, which must have led the members to have much discussion and collaboration.

A Memorial to Changing Residential Lifestyles – New Form of Family and Medieval 'Siedlung'

The house's heritage value can also be appreciated by the fact that a prototype of the ideal of living in a modern way finds a very pure form in this construction as if it were captured out of the flux of time. Hereafter two analyses shall be presented in regard to how the dynamic course of direction in pursuing the philosophy of the Bauhaus is captured through the construction of this house. The Haus am Horn was constructed as a single-family house that presumed a typical nuclear family as its residents. As the interior work and the supposed activities in each room were pre-meditated in detail, only a specific type of a family of a specific generation could have led a life that would suit this prerequisite if the house was indeed to be inhabited. It was Georg Muche, the youngest Meister of Bauhaus, who was entrusted with the design of the house. The plan was undoubtedly a reflection of Muche's personal circumstances, but can also be regarded as a specimen that documented a phase of the changing process in the form of a family from early-modern to modern times, resulting in the isolation of the families in the late 19th Century. However, this does not mean that the house was solely intended to respond to the new family lifestyle. It is useful here to recall the idea of 'Bauhaus-Siedlung (Bauhaus-Estate)', which had been planned by Bauhaus members since the school's establishment. Bauhaus-Siedlung was an idea of a kind of small village inhabited by all the Bauhaus members to share their daily activities.[4] Gropius had already stated this concept in the 'Bauhaus Manifesto' on the establishment of the school in 1919, which was as follows; 'Let's build a new Zunft (Guild) of craftsmen without class-dividing presumption that would erect an arrogant barrier between craftsmen and artists![5] This clearly suggests that Gropius was attempting to form a community that would serve as a new Zunft of craftsmen similar to the medieval craftsmen trade association. It was no coincidence that the plot where the Haus am Horn was built was the planned construction site for this Siedlung. While the Haus am Horn faithfully reflected the new form of a family, with the fact that it was constructed along with the future plan of realising the Siedlung – a type of medieval Zunft — it might well be argued that this community form in the past period and the nuclear family life in this single-house were aimed to compensate for each other.

Art and Industry

The Haus am Horn also shows the changing attitude of the Bauhaus in its early phase toward industrialisation and handicrafts. Facing the further industrialisation of Germany, Gropius sought for a better means of producing artistic handicrafts that would meet the needs of the times. He planned to fuse the industry and the total work of art, which was to be created through the collaboration of handicrafts and arts. He declared this new theory in his lecture 'the Theory and Organisation of the Bauhaus' on August 15th, 1923, making use of the occasion of the opening of the exhibition.[3] The house was opened to the public on the same day of this declaration so that it could concretely present the ideas and theories of the Bauhaus. In order to embody the ideas above, Bauhaus members included many elements of handicrafts, industrially prefabricated materials, and also pursued artistic value in this construction, all at the same time. Indeed, this house was furnished with carefully handmade craftwork, whereas the prefabricated exterior walls and doors were produced by the local industry with the most advanced methods.[2] However, these experimental and 'comprehensive' practices turned out to come in for harsh criticism for all these elements being incomplete.[1] It may be true that this house seemed to be inconsistent if considered as representative artwork of the Bauhaus theory. It is also true that the house was not as complete a work as other pieces that were displayed in the same exhibition. However, the Haus am Horn, in which the retrospective medieval craftsmanship and the industrial innovation of the modern era compete with each other, should be appreciated in representing the integral forms of two contrary destinations of the Bauhaus. In this respect, the dynamic competition in this experimental house can be recognised again here; the competition between two vectors, one pointing to the past, the other to the future.

Notes

[1] Hahn, Peter (Ed.). (1980). Pressestimmen für das Staatliche Bauhaus Wei-mar: Auszüge, Nachtrag, Kundgebungen. München: Kraus-Reprint. (Original work published 1924).

[2] Meyer, Adolf, et al. (1924). Ein Versuchshaus des Bauhauses. München: Al-bert Langen, Bauhausbücher 3.

[3] Nierendorf, Karl (1980). Staatliches Bauhaus Weimar 1919-1923. München: Kraus Reprint.

[4] Siebenbrodt, Michael (2006). Das Haus am Horn in Weimar – Bauhausstätte und Weltkulturerbe: Bau, Nutzung und Denkmalpfl ege. In IV. World Heritage Sites of the 20th Century – German Case Studies. Retrieved May 1, 2017, from http://www.icomos.org/risk/2007/pdf/Soviet_Heritage_27_IV-3_Siebenbrodt.pdf

[5] Wingler, Hans Maria (1962). Das Bauhaus : 1919-1933 Weimar Dessau Ber-lin. Bramsche: Rasch.

Notes

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Dr. Çiler Buket Tosun has a 20 years of experience as a researcher and lecturer at Hacettepe University, Department of Art History, Ankara, Turkey from where she holds PhD with specialization in Late Ottoman and Early Republican Architecture. She completed her M.S degree in Architectural Conservation and Restoration at the Middle East Technical University, METU. Her B.S degree is in architecture from İstanbul Technical University, İTÜ. She is granted 2017 VEKAM (Koç University, Vehbi Koç Ankara Studies Research Center) Research Award for her research on Ankara Construction Craftsmen School.

A case study on 'revealing creativitiy through craftsmanship'

1.1. Abstract

This research is a reading on Bauhaus 'revealing creativity through making' based on a case study on Construction Craftsmen School in Turkey. The Republican ideology of the newly founded Turkish Republic integrated with a determination of modernization and industrialization in national development, thus modernization in education and modern movement in architecture. Ankara Construction Craftsmen School founded in 1931 as the first vocational and technical training school to train skilled construction craftsmen needed in nation building in Turkey. The research concentrates on the 'creativity' revealed through Construction Craftsmen School, questioning how the vision of Bauhaus emanate through modern movement in time.

1.2. Body text

Bauhaus, as a school of design and a design laboratory aiming creative design work for industrial production within integration of art, craft, technology and industry; spread out into the world as a philosophy and vision with its modern approach in design, training and education. A new model applied by 'Vorkurs' where theory and practice are combined in workshops through technical, formal, structural experiments and practical experimental works aiming personal experiences in order to reveal creativity through making; reveal art through craftsmanship. Bauhaus focused on design, where as construction craftsmen schools in Turkey are focused on constructing through experience. The education modelled throughout international researches and based on 70% 'Learning through making' in workshops. The buildings of the schools were built by students in collaboration with their instructors just like the construction process of Dessau buildings of Bauhaus. Students learned construction through constructing their own school buildings and ateliers subsequently the housing for the teachers and dormitory for the students in the on-going process. Furthermore, they also made some of their instruments and their tools by themselves which were needed for construction. The first Construction Craftsmen School founded in 1931 under Gazi Mustafa Kemal Atatürk's order and was built on eighty acres in the forest farm in the new capital of the Turkish Republic, Ankara. The first building master teachers were gathered internationally mostly from Germany, Hungary, Turkey and a few from Poland and Switzerland.

The students mostly coming from rural areas and low-income families had craftsmanship education in masonry, stonework, carpentry and plastering for three years after the primary school. Education was not only based on the vocational courses but also included listening to classical music during applications in ateliers; reading classics, having active roles in cultural and sportive activities like cultural trips, school theatre plays or writing in the school magazine. Hence, they were raised to be cultured, competent individuals, some proceeding to lead in construction or building material companies, some proceeding to teach within the country. When the construction craftsmen schools were established in 1939 in Istanbul and Erzurum, the teachers were the graduates of the Ankara Construction Craftsmen School, who also built the buildings of the schools with their students. In 1945 when new construction craftsmen schools were established in Adana, Kayseri and Rize, the schools

Fig. 1: Students in Stonework Atelier and examples of their productions, Istanbul

were transformed into Construction Institutions, having an education program of 5 years. In 1959 the Construction and Art Institutions were established in Tunceli and in the Senirkent district of Isparta. The research undertaken through the architectural site analysis of these schools located in eight different cities of Turkey mentioned above and studies in their archives as well as the oral history study with their graduates', highlights some significant results.

1. The modern training education system developed in Ankara Construction Craftsmen School had been applied in the other construction crafts-men schools. The successful graduates of Ankara Construction Craftsmen School became the teachers of the schools for 13 years until the first graduates graduated from High Technical Teachers School in 1947. This also explains the reason why some of the productions of the ateliers of all construction craftsmen schools are the same. The graduates of Ankara Construction Craftsmen School applied the same workshops and application practices in the ateliers when they became teachers in schools in other cities. Thus, they carried the modern capital's education system to rural places of the country and made an important contribution to the Republican period's educational philosophy of educating people and society.
2. Through oral history studies, the graduates mentioned that they learned all types of building materials in such detail that they knew how and where to use them very well. For example, in carpentry atelier, they had learned all the trees with their unique qualities so that they were capable of choosing the best type of wood. Therefore, consequently, they knew the building construction systems as well. It is determined that through this learning process the graduates could provide new building details or new building materials in the construction sector.
3. In this system of education the graduates had rights to have university education on either architecture or construction engineering departments of Yıldız Technical University in İstanbul. Being one of them, Hamdi Aksoy stated that the teachers of the construction craftsmen school gave the most importance to the details and perfection and that's why he could worked for construction companies in detail production and solving, after his education. He mentioned how he created new aluminium details by basing his success on his training at the Construction Craftsmen School rather than his architectural education. Through this success soon he became the head of the İstanbul Aluminum Industry.
4. In need of such qualified people, most of the graduates took positions in the construction sector of the industry and the government rather than working as construction craftsmen.
5. The construction industry, as well as the market, was also following the school. Being equipped with the latest industrial machines, the building material laboratory established within the High Technical Teachers School in 1943 was identified as an analysis laboratory for the markets of the country.
6. Ankara Construction Craftsmen School had apparently been a laboratory for university students of architecture till the 1950's in Turkey where they had their site internships in summers.
7. The modern educational approach of 'Learning through making' in vocational and technical training developed in Ankara Construction Craftsmen School was also used with improvements in the village institutions established in 1940's where people who would be responsible for the development of the villages of the country were raised. Furthermore, in each village institution, a graduate of Ankara Construction Craftsmen School was appointed as a teacher in order to ensure the construction of the institution buildings together with their students.

As a conclusion Ankara Construction Craftsmen School itself appears to be creative as well as the graduates, not only in the construction of the buildings of the country but also in the different positions they took in society. Basing on the Republican period's educational philosophy of raising people who would play an important role in the development of industrialization in the country; 'Learning through making' method of the Construction Craftsmen School in Ankara could be evaluated as a value-creating educational approach, in which individuals were placed in the centre in order to raise qualified, problem-solving and value-creating people for the society.

Image Credits

The black and white photographs used in this poster are taken from the construction craftsmen schools' archives. The year in which the photographs were taken is mentioned together with the city, indicating the school and its archive. Colour photographs are taken by the researcher.

Acknowledgement

I would like to express my sincere gratitude to the Construction Craftsmen Schools' headmasters for providing archives of the schools; to the graduates included in oral history study for all their support and to Koç University Vehbi Koç Ankara Studies Research Center (VEKAM) for providing 2017 research award for the work.

Notes

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Fridtjof Florian Dossin graduated at Bauhaus-Universität Weimar as B.Sc. in Urban Studies in 2018. During his studies he participated in research projects on the topic of post-war/late modernism in Halle-Neustadt and Berlin. The bachelor thesis examined this topic in rural areas. Currently studying a master in heritage conservation at the Otto-Friedrich-Universität in Bamberg. For many years voluntary work as project coordinator for the TRAFO/10000Volt project in Jena, which is also concerned with the topics of conservation and cultural reuse.

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REUSE OF MODERNIST BUILDINGS

Moderne Sozialistische Landschaft?
Die „Ländlichen Siedlungszentren“ als Planungskonzept der 1960er-Jahre

FRIDTJOF FLORIAN DOSSIN
BAUHAUS-UNIVERSITÄT WEIMAR

Das Bauwesen war ein konstituierender Bestandteil der gesellschaftlichen Entwicklung der DDR. Die bisherige architektur- und planungshistorische Betrachtung ist trotz der Fülle an Forschungen vorwiegend durch einen urbanen Fokus geprägt. Das Selbstbild der DDR versteht sich jedoch als Arbeiter- und Bauernstaat, sodass neben dem „urbanen Raum der Arbeiter“ auch der „nicht-urbane Raum der Bauern“ entwickelt werden sollte. Die dafür angewendeten Konzepte aus dem Bereich der Architektur-, Stadt- und Territorialplanung sind besonders ab der sogenannten „Einführung industriemäßiger Methoden in der Landwirtschaft“ ab den 1960er-Jahren kaum untersucht und bilden das Forschungsdesiderat des vorliegenden Beitrags. Der beginnende Forschungsdiskurs kann mit der abgeschlossenen Zwangskollektivierung 1961 recht genau begrenzt werden, durch das Überlagern der Konzepte ist ein Abschluss des Zeitraums jedoch nur unscharf Ende der 1970er-Jahre auszumachen.

Den Forschungsgegenstand bilden dabei die sogenannten „Ländlichen Siedlungszentren“, welche als übergreifendes Konzept zwischen Dorf- und Territorialplanung zur Entwicklung des ländlichen Raums angewendet wurden. Die Untersuchung erfolgte unter folgender Leitfrage:

Stellen die Ländlichen Siedlungszentren mit dörflichen Strukturen eine eigenständige und DDR-spezifische Städtebautypologie der „Moderne auf dem Land“ dar, welche durch ihr Konzept und bestimmte städtebauliche „Bausteine“ charakterisiert und somit von anderen Typologien abgegrenzt werden kann?

Nach dem einleitenden ersten Kapitel widmet sich das zweite Kapitel den Grundlagen der Raum- und Dorfplanung der DDR sowie deren territorialen, gesellschaftlichen und planerischen Kontext. Der darauffolgende Hauptteil der Arbeit versucht den Forschungsgegenstand hinsichtlich der Frage nach Typologie und Typus zu untersuchen und gliedert sich in zwei Teile, welche sich nach Quellengattungen unterscheiden lassen. Der erste Teil setzt sich dabei mit den theoretischen Konzeptionen und Planungen auf dem Papier auseinander, während der zweite Teil mittels einer städtebaulichen Analyse einen Blick in die Praxis wirft und dazu exemplarisch ein verwirklichtes „Ländliches Siedlungszentrum“ betrachtet.

Die Arbeit schließt mit einer Synthese dieser beiden Teile (Planung und Verwirklichung) hinsichtlich der Forschungsfrage ab und nennt in verkürzter Form mögliche weitere Themenfelder, welche sich im Laufe der Forschung ergaben, aber nicht bearbeitet werden konnten.

Das Planungssystem der DDR war zentralistisch organisiert und politisch/ideologischen Zielen unterworfen. Da die Siedlungs-, Wirtschafts- und Sozialstruktur der DDR diverse strukturelle Unterschiede zwischen den Nord- und Südbezirken sowie zwischen Stadt und Land aufwies, war die „Schaffung gleichwertiger Lebensverhältnisse in Stadt und Land durch Herausbildung sozialistischen Lebensverhältnisse“ ein erklärtes Leitziel der Politik. Durch die enge Verknüpfung von Fachplanung und Politik sowie deren spezifischen Zielen ergibt sich zudem ein enger Zusammenhang zwischen Landwirtschafts- und Siedlungsentwicklung im ländlichen Raum. Ein erklärtes Ziel war es deshalb die Lebensverhältnisse auf dem Land an die „industriemäßigen Methoden in der Landwirtschaft“ anzupassen.

Dieses Vorhaben wurde von staatlicher Seite „aus Berlin“ auf allen Planungsebenen durchgesetzt. Auf Ebene der bezirklichen Territorialplanung bestand das Ziel vornehmlich in der Herausbildung eines „hierarchisierten Siedlungssystems“, während die Ebene der kommunalen Dorfplanung durch städtebauliche und siedlungsstrukturelle Eingriffe das Konzept der „Ländlichen Siedlungszentren“ durchzusetzen versuchte. Im Rahmen der Arbeit wurden insbesondere letztgenannte Eingriffe in die Struktur ausgewählter Dörfer durch folgende städtebauliche und konzeptionelle Bausteine näher beschrieben und charakterisiert:

1. Industrialisierung
2. Verdichtung
3. Städtebauliche Grundstruktur
4. Landschaftsbild
5. Grün- und Freiflächen
6. Bestandsnutzung/W
7. Trennung von Arbeiten und Wohnen
8. Gesellschaftliches Zentrum
9. Ingenieurstechnische Infrastruktur
10. Verkehr
11. Produktionsanlagen der Landwirtschaft

Durch diese schematische Analyse war es möglich, Theorie und Praxis zu vergleichen und eine typologische Einordnung vorzunehmen. Daraus ergab sich zumindest für das Fallbeispiel Dedelow eine hohe Deckungsgleichheit zwischen den theoretischen Planungsvorhaben und der Verwirklichung, sodass Dedelow als „Lesebild eines Ländlichen Siedlungszentrums“ angesehen werden kann.

Ab den 1960er-Jahren entstand das „Ländliche Siedlungszentrum“ als Konstruktion der DDR-Planung mit utopischen Zügen, welche mit baulichen Mitteln die Herausbildung der sozialistischen Lebensweise im ländlichen Raum und damit die Abschaffung ungleicher Lebensverhältnisse zwischen Stadt und Landbevölkerung sollte. Die industrialisierte Landwirtschaft nach dem Prinzip der sog. „sozialistischen Rationalisierung“ fungierte hierbei als dorfprägender Faktor und Antriebskraft dieser Entwicklung.

Die herausgearbeiteten Leitziele und Bausteine in Architektur und Städtebau lassen zahlreiche Bezüge zwischen den „Ländlichen Siedlungszentren“ und den sozialistischen Stadtzentren erkennen. Durch die ländliche Lage sowie die Integration in ein übergeordnetes raumplanerisches Netz ist eine klare typologische Unterscheidung jedoch gut möglich, sodass der Forschungsgegenstand nicht nur als „verkleinerte Städte“ oder „Platten auf dem Acker“ angesehen werden kann. Demzufolge liegt mit den Ländlichen Siedlungszentren ein eigenständiger und abgrenzbarer Typus „Neuer Art“ vor, welcher in besonderem Maße von der ideologischen Motivation der DDR-Planung zeugen kann, den ländlichen Raum umfassend und planmäßig mit baulichen Mitteln zu entwickeln.

Mit dem „Blick aufs Land“ versucht die Arbeit eine Lücke in der bisherigen Forschung zu füllen und damit einen Beitrag zur Erforschung der Architektur- und Planungsgeschichte der DDR liefern. Es wäre zu begrüßen, diesen vorwiegend baulichen Blick durch in der Arbeit letztgenannte Ansichtsbetrachtungen zu ergänzen.

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Moderne auf dem Land? Städtebau und Konzeption Ländlicher Siedlungszentren im Kontext der industrialisierten DDR-Landwirtschaft

(Bachelorthesis Fridtjof Florian Dossin, BUW, 2018)

Abstract

Das Bauwesen war ein konstituierender Bestandteil der gesellschaftlichen Entwicklung der DDR. Die architektur- und planungshistorische Betrachtung ist trotz der bisherigen Fülle an Forschungen vorwiegend durch einen urbanen Fokus geprägt. Das Selbstbild der DDR versteht sich jedoch als Arbeiter- und Bauernstaat, sodass neben dem „urbanen Raum der Arbeiter“ auch der „nicht-urbane Raum der Bauern“ entwickelt werden sollte. Die dafür angewendeten Konzepte aus dem Bereich der Architektur-, Stadt- und Territorialplanung sind besonders mit der sogenannten „Einführung industriemäßiger Methoden in der Land- und Bauwirtschaft“ ab den 1960er-Jahren kaum untersucht und bilden das Forschungsdesiderat des vorliegenden Beitrags. Im Mittelpunkt stehen dabei die sogenannten „Ländlichen Siedlungszentren“, welche als übergreifendes Konzept zwischen Dorf- und Territorialplanung zur Entwicklung des ländlichen Raums dienen sollten. Die politischen Hauptziele dieser Entwicklung bestanden in der „Schaffung gleichwertiger Lebensverhältnisse in Stadt und Land durch Herausbildung sozialistischer Lebensverhältnisse“ sowie der „Anpassung der Lebensverhältnisse auf dem Land an die industriemäßigen Methoden in der Landwirtschaft“. Die Fachplanung setzte dabei auf die Herausbildung eines „hierarchisierten Siedlungssystems“ mit ausgewählten Zentren, in denen durch umfangreiche bauliche und strukturelle Eingriffe im Sinne der Moderne, die Lebensverhältnisse drastisch verbessert werden sollten. Die industrialisierte Landwirtschaft fungierte hierbei als dorfprägender Faktor und Antriebskraft dieser Entwicklung. Es entstanden sogenannte Agro-Städte.

Die Forschung stellte die Frage nach der Beurteilung und Einordnung dieser Planungen als eigenständigen Typus in der Architekturlandschaft der Nachkriegs- bzw. Spätmoderne. Dazu wurden sowohl theoretische Konzeptionen und Planungen auf dem Papier, als auch ein verwirklichtes „Ländliches Siedlungszentrum“ mittels einer städtebaulichen Analyse und der Charakterisierung von konzeptionellen und städtebaulichen „Bausteinen“ herangezogen. Die herausgearbeiteten Charakteristika in Architektur und Städtebau lassen zahlreiche Bezüge zwischen „Ländlichen Siedlungszentren“ und „Sozialistischen Stadtzentren“ erkennen. Die ländliche Lage sowie die Integration in ein übergeordnetes raumplanerisches Netz ermöglichen jedoch eine klare typologische Unterscheidung, sodass der Forschungsgegenstand nicht nur als „verkleinerte Städte“ oder „Platten auf dem Acker“ angesehen werden kann.

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REISE OPPOSITIONIST BUILDINGS

THE ZEITGEIST.
DES YEUX QUI NE VOIENT PAS...

Abstract

From the moment the first primitive huts appeared, through different historical periods, the authenticity of the form and the yardstick used to measure it gradually evolved, becoming progressively complex as the canons of beauty evolved. However, this authenticity of form entered into crisis with the arrival of the Modernism, as it sought to return to pure forms. In the same way, in the twenty-first century incipient technology has once again had this effect on our current architecture. Where are we heading? The purpose of this communication is to try and answer the question of why we have not been able to properly interpret our era.

Keywords

Modernism; Le Corbusier; Mies van der Rohe; Zeitgeist; Technology.

It is not our intention to offer a lesson on anything, simply to propose a reflection.

Architecture has its origin in the satisfaction of the basic needs of the human being. Man, faced with the need for shelter and refuge, begins to build. In the beginning there was nothing, everything was to be done; there were no codes of beauty, no pre-established aesthetic a priorís, only construction, and after construction a common language based on the conditions and materials of the place. However, since the first primitive huts appeared, the authenticity of the form has evolved, becoming progressively complicated with the canons of beauty, to the point where the norms are what dictate the guidelines of beauty, not reason or the logic of construction. Canons, proportions and treaties act as a blindfold over the eyes that prevent us from clearly perceiving the reality of the time, *Des yeux qui ne voient pas…*,[1] an architecture full of aesthetic prejudices stagnates in its formal evolution, only dependent on the norm. The Modern Movement erupted from within this panorama at the start of the 20th century, once again seeing architecture with eyes that were uncontaminated by sterile mannerisms and norms. In his book *Vers une architecture*, Le Corbusier vindicates the objectivity of the engineer as opposed to the aesthetics of the architect. The engineer better captures and summarizes the concerns that surround this historical moment. Architecture must be a reflection of the zeitgeist, and not the consequence of a formal aesthetic. The same concept is simultaneously established by Mies van der Rohe from his first manifestos; architecture is neither a theory, nor a speculation, nor an aesthetic doctrine, but instead the spatial expression of the spirit of the time.[2]

For the Modern Movement, engineering and industry, together with the industrial revolution, played a leading role in a renewal of architectural approaches. A prioriism are abandoned and the gaze is turned towards new materials, not contaminated by canons, whose aesthetics are dictated by the reason of calculation, of mathematics. Industry eliminates craftsmanship and brings about standardization and mass production. New forms emerge in the world of engineering: silos, aircraft and ships are sources of inspiration that cause architecture to break away from the pre-established canons. The porticoed structure, concrete, steel and glass, the sun, ventilation, access to electricity and drinking water, are the new rules of reason that bring new types and forms adapted to the man of the time.

But what about today?

Has the Modern Movement become the new mannerism of the twenty-first century that prevents architecture from seeking out new avenues, without complexes? Why does the architecture of this century continue to copy forms from 100 years ago that respond to another era? Are these forms still effective today, or is architecture blind and incapable of responding to the needs of the present moment?

It is not difficult to draw a parallel between Engineering and Industry, to compare the industrial revolution of 100 years ago with the new requirements of today, which respond to a real revolution led by energy and new technologies. New communication protocols globalize the place; there are no more places, only the world. Scientific advances occur at a faster and faster rate, energy is becoming expensive, and research provides new solutions that do not find an answer in today's architecture. Perhaps the energy bill has not yet reached the critical point of no return; perhaps today's man is not aware of what globalization and the boom will have to do so, but architecture and architects must be able to respond to a society that demands a new reality. It is not only a question of consuming less, nor of recycling more. Contemporary society must be able to manage itself and even produce energy surpluses and translate this into new architectural forms, new processes, new directions, without conventionalisms. The architecture of our time cannot continue to be blind to the fact that it is not capable of living up to the spirit of the masters of the Modern Movement, not to remain with formal and superficial copies that not even they themselves would propose today, a hundred years later.

Le Corbusier, versus Le Corbu,... Mies van der Rohe, versus Mies... Frank Lloyd Wright, versus Wright...

It is enough to know a little about the history and to have read their texts to understand that TODAY it is urgent to assert their spirit, without formal prejudices, seeing the future as they knew how to see it. Our time deserves it.

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The Zeitgeist
Des yeux qui ne voient pas…

Abstract

From the moment the first primitive huts appeared, through different historical periods, the authenticity of the form and the yardstick used to measure it gradually evolved, becoming progressively complex as the canons of beauty evolved. However, this authenticity of form entered into crisis with the arrival of the Modernism, as it sought to return to pure forms. In the same way, in the twenty-first-century incipient technology has once again had this effect on our current architecture. Where are we heading? The purpose of this communication is to try and answer the question of why we have not been able to properly interpret our era. It is not our intention to offer a lesson on anything, simply to propose a reflection. Architecture has its origin in the satisfaction of the basic needs of the human being. Man, faced with the need for shelter and refuge, begins to build. In the beginning, there was nothing, everything was to be done; there were no codes of beauty, no pre-established aesthetic a *prioris*, only construction, and after construction a common language based on the conditions and materials of the place. However, since the first primitive huts appeared, the authenticity of the form has evolved, becoming progressively complicated with the canons of beauty, to the point where the norms are what dictate the guidelines of beauty, not reason or the logic of construction. Canons, proportions and treaties act as a blindfold over the eyes that prevent us from clearly perceiving the reality of the time, *Des yeux qui ne voient pas…*,[1] an architecture full of aesthetic prejudices stagnates in its formal evolution, only dependent on the norm. The Modern Movement erupted from within this panorama at the start of the 20th century, once again seeing architecture with eyes that were uncontaminated by sterile mannerisms and norms. In his book *Vers une architecture*, Le Corbusier vindicates the objectivity of the engineer as opposed to the aesthetics of the architect. The engineer better captures and summarizes the concerns that surround this historical moment. Architecture must be a reflection of the zeitgeist and not the consequence of a formal aesthetic. The same concept is simultaneously established by Mies van der Rohe from his first manifestos; architecture is neither a theory, nor speculation, nor an aesthetic doctrine, but instead the spatial expression of the spirit of the time.[2]
For the Modern Movement, engineering and industry, together with the industrial revolution, played a leading role in a renewal of architectural approaches. A prioriism are abandoned and the gaze is turned towards new materials, not contaminated by canons, whose aesthetics are dictated by the reason of calculation, of mathematics. Industry eliminates craftsmanship and brings about standardization and mass production. New forms emerge in the world of engineering: silos, aircraft and ships are sources of inspiration that cause architecture to break away from the pre-established canons. The porticoed structure, concrete, steel and glass, the sun, ventilation, access to electricity and drinking water, are the new rules of reason that bring new types and forms adapted to the man of the time.

But what about today?

Has the Modern Movement become the new mannerism of the twenty-first century that prevents architecture from seeking out new avenues, without complexes? Why does the architecture of this century continue to copy forms from 100 years ago that respond to another era? Are these forms still effective today, or is architecture blind and incapable of responding to this era? *Des yeux qui ne voient pas…* It is not difficult to draw a parallel between Engineering and Industry, to compare the industrial revolution of 100 years ago with the new requirements of today, which respond to a real revolution led by energy and new technologies. New communication protocols globalize the place; there are no more places, only the world. Scientific advances occur at a faster and faster rate, energy is becoming exponentially more expensive... And how does today's architecture respond? Architecture is required to meet energy efficiency standards, conditions to ensure the growing number of installations... and the landscaped roof is contaminated by foreign elements, the smooth skins of façades are altered with installations alien to an architecture that still does not know how to read this era, nor to solve the problems of the human being of today. It is very revealing to see how some forms have evolved which, because they are every day, are invisible to us. Fifteen or twenty years ago, nobody could have imagined that a simple rectangle five millimetres thick, which fits in a pocket, was a telephone; or that by means of a computer we could connect to satellites through simple apps. Until very recently, this was purely science fiction. The phenomenon is clear: the number of functions increases and improves, while the form becomes more and more abstract. However, the same cannot be said of Architecture. On the contrary, new constructions are hardly different from those of twenty, thirty, or forty years ago... The Architecture of our time, that of the 21st century, of the age of globalisation, of energy, of the digital era, is not in accordance with the needs of its time: it has not evolved. *Des yeux qui ne voient pas…* Today, energy is becoming more and more expensive, and research provides new solutions that do not find an answer in today's architecture. Perhaps the energy bill has not yet reached the critical point of no return; perhaps today's man is not aware of what globalization means. But soon he will have to do so, obligatorily, and Architecture will have to be able to respond to a society that demands new needs. It is not only a question of consuming less, nor of recycling more. Contemporary society must be able to manage itself and even produce energy surpluses and translate this into new architectural forms, new processes, new directions, without conventionalities. The architecture of our time cannot continue to ignore this reality. It is imperative to recover the spirit of the masters of the Modern Movement, not to remain with formal and superficial copies that not even they themselves would propose today, a hundred years later.

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Andrea Kalinova

Director and Producer of the Movie *Off Season*

Andrea Kalinová studied Photography and New Media at the Academy of Fine Arts and Design in Bratislava and finished her postgraduate studies at the Intermedia and Multimedia Department of the same university in 2014. She is the initiator of the artistic project Abandoned (Re)creation and director and producer of the movie *Off Season*. She is interested in the overlap of art and activism, focused mainly on the protection of modernist architecture. By her debut mockumentary The Secret Of One Swimming Pool (2006) she mystified history of a never finished swimming pool under Bratislava's castle.

Documentary movie

Off season
35 min., 2018
director: Andrea Kalinová

A documentary about one of the most remarkable buildings of the 20th century – the abandoned Machnáč Sanatorium in Trenčianske Teplice spa town. The constructivist building was once an ode to progress, the architect's materialized vision of humanism. The architect demonstrated in it his own ideas on technical and social progress, and thus built a symbol of a modern society. Today it is just a modernistic ruin of utopia, a transoceanic cruiser that shipwrecked in a spa park. The owners are not interested in maintaining a building which is not paying. The film is dedicated to the phenomenon of this extraordinary building through people who haven't give up their efforts to save the Machnáč.

About:
DOCOMOMO International + Germany

Prof. Dr.-Ing. Uta Pottgiesser, Dipl.-Ing. Frank Jaschke

DOCOMOMO International is a non-profit organization dedicated to the DOcumentation and COnservation of buildings, sites and neighborhoods of the MOdern MOvement. Docomomo´s main goals are brought together in the Eindhoven statement which was issued at the conclusion of the founding conference in 1990. It was updated in Seoul, 2014, where it was approved the Eindhoven-Seoul statement.

It aims to:
· Bring the significance of the architecture of the Modern Movement to the attention of the public, the authorities, the professionals and the educational community.
·Identify and promote the surveying of the works of the Modern Movement.
· Promote the conservation and (re)use of buildings and sites of the Modern Movement.
· Oppose the destruction and disfigurement of significant works.
· Foster and disseminate the development of appropriate techniques and methods of conservation and adaptive (re)use.
· Attract funding for documentation conservation and (re)use
· Explore and develop new ideas for the future of a sustainable built environment based on the past experiences of the Modern Movement

Docomomo International has been initiated in 1988 by Hubert-Jan Henket, architect and professor, and Wessel de Jonge, architect and research fellow, at the School of Architecture at the Technical University in Eindhoven, the Netherlands. In 2002, the Docomomo International secretariat relocated to Paris and was hosted by the Cité de l'Architecture et du Patrimoine in the Palais de Chaillot. The chair general was Maristella Casciato, architect and architectural historian. In January 2010, the Docomomo International secretariat relocated to Barcelona, hosted by the Fundacion Mies van der Rohe. Currently, Docomomo International is hosted in Lisbon, at Instituto Superior Tecnico - Lisbon University (IST). The chair is Ana Tostoes, architect and architecture historian, and Full Professor IST.

Docomomo International's missions are to:
· act as a watchdog when important modern movement buildings anywhere are under threat
· exchange ideas relating to conservation technology, history and education
· foster interest in the ideas and heritage of the modern movement
· elicit responsibility towards this recent architectural inheritance.

Since its creation, Docomomo International has experienced rapid growth, establishing itself as a major player not only in the realm of conservation but also in the broader field of architectural culture. The pluralist, interdisciplinary nature of Docomomo International, due to its ability to bring together historians, architects, town planners, landscape architects, conservationists, teachers, students and public officials, has been a strong asset. At present, Docomomo International includes 69 chapters and more than 3,000 members, in Europe, America, Asia, Oceania and Africa. In their variety of cultures and experiences, the chapters represent the true richness of Docomomo International.

DOCOMOMO Germany has been founded in 2006 as an association. The starting point and focus of the work has been the modern movement of the 1920s and 1930s and the continuation and further developments of its principles after 1945.

https://www.docomomo.com/ and https://www.docomomo.de/

Fig. 1: Marl Hill Houses; new concepts for living.

About: Reuse of Modernist Buildings
Design tools for a sustainable transformation (RMB)

Prof. ir. Michel Melenhorst, Dipl.- Soz.päd. (FH) Theresa Kellner M. A. Innenarch.

The project, Re-use of modernist buildings. RMB wants to initiate an educational framework of common definitions, approaches, and methodologies on a European level. It is based on existing research, educational practices and reference projects in the European countries. RMB will develop a Joint master on reuse of modernist buildings. The preparation and development of this master will take form, from Sept 2016 until August 2019.
The project consortium took form by selecting partners according to their complementary experiences and competencies in the field of design methodology, practical adaptive reuse, refurbishment and improvement and policy-making on housing and urban development. Since one of the aims of RMB is to combine a broad spectrum of European practices the partners are geographically chosen accordingly.

Projects cause

Demographic and climate change has resulted in huge qualitative and quantitative challenges and demands for the European building sector. The need for suitable and affordable housing in the city centers and urban agglomerations is increasing and cannot, and should not, be fulfilled with new constructions only. A major task for the building industry should be realized through the refurbishment of the existing housing stock, as well as conversion from other building typologies such as warehouses and offices, with a special focus on the so-called modernist era.

Given the differing vintage of the building stock and its expected development non-OECD countries (OECD = **Organisation for Economic Co-operation and Development**) face huge growth in expected construction. OECD countries have a large stock of residential buildings, most built before 1970, that is not growing quickly and will be retired slowly. Currently, the rate of residential building refurbishment to improve envelope efficiency is low, estimated to be 1% per year (BPIE, 2011). Urgent policy action is required because energy efficiency refurbishments are potentially expensive and likely to make economic sense during major refurbishments that occur only every 30 or more years
Source: Transition to Sustainable Buildings, OECD/IEA (2013)

RMB is unique in its identification of the main study subject since it focuses on a very specific, often problematic, very important segment of the building stock; modernist architecture. Neighborhoods, quarters and buildings from this era are in danger of being destroyed with the risk of specific cultural elements and environments at loss.

Three aspects of Focus

Modernist architecture can be characterized by different aspects: modernist technology, modernist architecture concepts and the societal impacts of modernism.

On a technological level, refurbishment shows how difficult modern structures are to adapt to high contemporary standards. Modernist architectures experimental nature, it's fragile constructive systems make its attractiveness but also its vulnerability to non-professional refurbishments.

Fig. 2: Marl Town Hall, construction experiments.

Fig. 3: Marl large scale Social housing blocks

On a conceptual level, modernist architecture shows a re-definition of the habitat through new inside-outside relations and open floor plans, supported on innovative urban design goals. This was a major effort to prevent excesses caused by the unhealthy, unhygienic industrialized cities. Modernist architects sought for new worldwide solutions for cities and buildings. Once innovative and very adequate, today modernist typologies for housing and other communal facilities such as schools, often don´t meet our contemporary needs

On a societal level, the global large-scale replication of modernist buildings has led to a critical perception of this huge building stock. This lack of acceptance and appreciation complicates sustainable reuse and retrofit into energy efficient and user-friendly buildings. Through the specialized input by the project partners, RMB addresses all three levels in its educational pact.

RMB´s educational methodology

RMB is able to integrate different European approaches and knowledge on conversion and refurbishment of this specific post-war era to meet these professional challenges. The partners in RMB will contribute specific knowledge and input regarding spatial patterns, cultural heritage, climate and construction principles, social and technical evaluation and the monitoring of built spaces. Thus creating a well-balanced adequate curriculum for preparing graduates for this international job market and strengthen the European common ground in this specialized expertise.

RMB´s Innovative aspects and expected outcomes

RMB is innovative in the sense that it will contribute to the urgent speed up of the transformation of our building stock, create better job chances for students in the field, generate more jobs for the building industry as a whole and most of all wants to improve people's lives and build greener and better societies. RMB follows very closely the definition of the EU Commission on innovation.

RMB makes knowledge and existing teaching formats accessible on a European level. Specific parts from the curricula of the partner institutions are inserted into a comprehensive well-balanced educational pack. The combination of these contributions forms a unique program pool.

The teaching formats contribute to the execution of the EU targets on Modernisation Agenda's priority areas and the implementation of the 2013 Communication on opening up education. RMB will explore combinations of ´traditional´ e-learning formats, on-site events -such as conferences and workshops- as well as extended very innovative e-learning options in digital fabrication and building integrated management (BIM). It will improve the possibilities of remote teaching in design education, which is not self-evident. The results are to be disseminated to a wider audience through open courses, open sources, and best practice syllabi.

In an up-to-date adaptation and optimization of the environmental performance in the construction process, with respect to the modern legacy lies an important task for architects, stakeholders, and future users. The expected results will be valuable to extend the yet very limited database and knowledge on buildings user behavior, which is currently a restraint to the potential improvement of energy policies and environmental sustainability strategies. Researchers who develop buildings' performance simulation models, can use the conclusions regarding user behavior.

State of things in the development of RMB

In the first year of RMB, the main effort was to compile the curriculum and the accompanying description of content, goals, and formats of the modules within the curriculum. Parallel, the role of the partners was further defined, an RMB course statement was produced, and a start has been made in collecting case studies. Tests with workshops, projects, and courses started in spring 2016 and continue until the end of the project. The development and production of the course materials was the next step, the dissemination of project results and scientific output started in the first year but became more important in the later phases of RMB. Presently the accreditation for a new master study course and new alliances and collaborations with new partners take form.

Methodology and Project Partners

The case study design projects form the spine of the RMB master. Teachers with different professional backgrounds support these case study design projects. Each semester will set specific accents, students work on location for one semester and then move to the next.

Fig. 4: Student workshop Marl - May 2017

Project Partners:

HS OWL, Detmold School for Architecture and Interior Architecture – Germany (Applicant);
ITU, Department of Architecture –Turkey;
ULisboa, Instituto Superior Técnico –Portugal;
Universidade de Coimbra, Faculty of Science and Technology – Portugal;
University of Antwerp, Faculty of Design Sciences –Belgium;
DOCOMOMO International –Portugal

Semester Focus:

First semester:
HS-OWL/Antwerp, Project on the axis Detmold-Antwerp + Document and analyze/Type and Function/History of Modernism.

Second semester:
IST/Coimbra: Project in Portugal, + focus on Social aspects/ Assessment of buildings in use/ Environmental design.

Third semester:
ITÜ + partner/ Free project location in the southeast of Europe + Building construction /Reporting and writing /preparation of the thesis.

Fourth semester:
Thesis at one of the partner schools.

All semesters start with a workshop on location. The modules are related to the design studios, the intensity of the relation, however, may vary, from direct interaction trough building survey to background information over lectures.

Input, learning objectives, and graduation skills:

RMB is open for students with a bachelor diploma from different backgrounds such as architecture, heritage or urban planning. Students who already have a master but want to specialize in the field of reuse will also be recruited for RMB.

The students learn to deal with heritage- and reuse issues in a self-conscious, methodological clear and respectful way. They will approach the topic of conservation, transformation and reuse from a broad perspective, have a holistic multidisciplinary view and knowledge on reuse, but will be specialists as well because of the Master´s specific focus on the field of Modernist Architecture.

Output qualities and professional (job) perspectives

After graduating from RMB, Students will be able to further develop their gained knowledge and solve independently and in a responsible manner, complex assignments in the field of heritage and reuse, in design practice as in science and research.

Through the helicopter view on reuse on a European scale and the international collaborations with students and teachers during the master courses, they will be well prepared for the European job market. Through the application of distant-learning and designing skills in the project-based learning during their RMB master, students are very well equipped for contemporary working practices of ´footloose´ offices with collaborators in different geographical locations. They combine a high sensitivity for local conditions with broad experience and knowledge of international best practices, and cooperative, effective working skills.

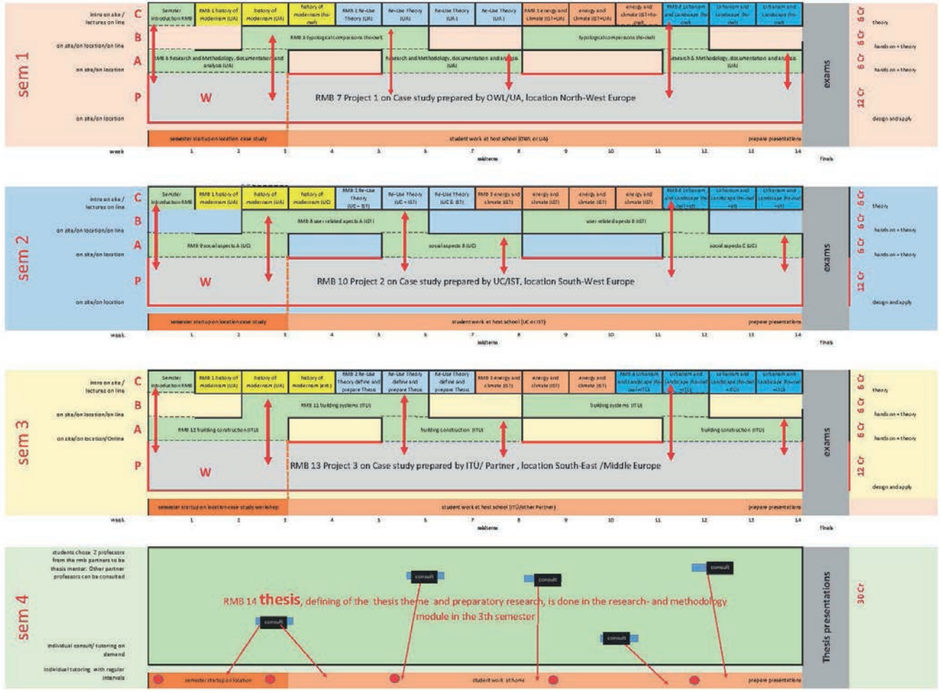

Fig. 5: Modules

RMB targets in Internationalisation in education, job prospects, and general benefits

Due to discrepancies in the European job market and employment situations, graduates are well aware of the fact that they may have to leave their country to work in a different country or to be able to work in their countries but in international projects. In several international networks, Bachelor and Master Students already have the opportunity to get familiar with the challenges and requirements of the global job market in the building sector. This experience related to language training, intercultural and interdisciplinary competences is very much appreciated by the students as relevant for their professional future. RMB will add an extra level to this by not only offering a coherent international study program, combining the local and the international but also by inserting in this curriculum cooperation with industry and with other institutions to investigate and solve relevant practical, technical and societal questions. Students get acquainted with industry and with praxis via internships, graduation assignments, conferences, workshops, and guest speakers. This connection between academic education and the practice is perceived as an asset for the future profession of the graduates.

The participating partners are convinced their cooperation will better prepare graduates for the requirements of a European and international job market. So first students will benefit from this, secondly the building industry, as well as authorities, will profit and of course, in the end, the urgent European topics on human habitat will find better solutions.

RMB Advisory and Supervisory Board

The project is accompanied by a Supervisory and an Advisory Board:
Prof. Dipl.-Ing. Tim Rieniets, Leibnitz Universität Hannover
Akad. Oberrat. Dipl.-Ing, Alex Dill, KIT, Germany (SB)
Prof. ir. Wessel de Jonge, TU Delft/ Wessel de Jonge Architects, Netherlands (SB)
And associate partner ´the energy and resources institute´ (TERI) – New Dehli, India

OWL University of Applied Sciences, Campus Emilie

About: HS OWL

Detmolder School of Architecture and Interior Architecture

Prof. ir. Michel Melenhorst

The Detmold School of Architecture and Interior Architecture is the largest School for Interior Architecture in Germany. It benefits from almost 125 years of teaching tradition in the field of design. In 1952 the German Association of Interior Architects (BDIA) was founded in Detmold. Today, the Detmold School is a department of the University Ostwestfalen-Lippe.

With her three fields of study in interior design, architecture and urban planning, she offers the entire spectrum of architectural education - from chair to city. The fundamentally interdisciplinary design education is understood here as a holistic commitment, supported by creative dynamics, technical innovation, and sensitive sustainability. Of central importance is the relationship between humans and space - Human Centered Design.

The Detmold School maintains a personal and intensive exchange between students and lecturers on its deliberately open campus with loft-like work areas, workshops, studios, and laboratories - in lectures, excursions, guest lectures, symposia, exhibitions, and festivals.

With its 36 professorships in the fields of design, technology, organization, scenography, art, social sciences and communication, the Detmold School covers a broad spectrum of specialist knowledge. In four research areas, the ConstructionLab, the PerceptionLab, nextPlace, and the UrbanLab, research, and teaching are entangled in an innovative way, which opens up new fields of competence for the students.

The Detmold School supports its students with internships and scholarships, arranges stays abroad and contacts in the field. The graduates are trained in the creative design and technical implementation of their designs as well as in the efficient organization. They also gain valuable knowledge in the areas of office creation, communication, marketing and artistic matters, which also qualifies them for employment in adjacent areas of expertise.

The Detmold School offers two six-semester and eight-semester undergraduate programs as well as the consecutive master's programs in interior design, and Integrated Architectural Design (four semesters).

Three specializations in the Master's program Integrated Design, Facade Design and Computational Design (four semesters in English), a specialized Master in Lighting design (two semesters in English) as well as the Ph.D. (in cooperation with universities), broaden the variety of study programs.

http://www.hs-owl.de/fb1/en/

Editors

Franz Jaschke (*1955) is a gratuated Dipl.-Ing. Architect who studied at the Technische Universität Berlin, Germany. Since 2002 he is a managing partner of BRENNE ARCHITEKTEN Gesellschaft von Architekten mbH in Berlin. He is a member of Association of German Architects (Bund Deutscher Architekten BDA), German Association of Craftsmen (Deutscher Werkbund Berlin DWB), Bauhaus Archive Berlin, Baudenkmal Bundesschule Bernau, Association for the Monument Trade Union School in Bernau (Baudenkmal Bundesschule Bernau), Ernst May Society Frankfurt, German National Committee ICOMOS and a Founding member of DOCOMOMO Germany.

Uta Pottgiesser (*1964) is Professor of Interior Architecture at the Faculty of Design Sciences of the University of Antwerp, Belgium, since 2017, teaching in the master program of interior architecture and is a member of the Henry van der Velde Research Group. From 2004-2017 she was Professor of Building Construction and Materials at OWL, University of Applied Sciences (HS OWL), Germany. She was trained as an architect at TU Berlin, Germany, and graduated in 1991. After her degree, she worked as a practicing architect, for office, administration and public buildings. Her academic career started as research assistant at TU Dresden where she obtained her PhD in 2002 with the topic “Multi-layered Glass Constructions. Energy and Construction”. She is internationally active as a board member and reviewer of international journals, in PhD commissions and organiser of several conferences and seminars. As Chair of the DOCOMOMO International Scientific Committee of Technology (ISC-T) she is concerned with the protection and adaptive reuse of Modern Movement Architecture. She is a co-founder of the European Facade Network (efn).

Michel Melenhorst (*1964) studied architecture at Delft Technical University and worked for Wiel Arets (1991-1995) and OMA (1995-1999) before starting his own office in 1999. In 2005, he became a partner in DAAD Architects. In 2012, he switched to Detmold Germany to hold the chair for Contextual Design at the Hochschule Ostwestfalen Lippe, where he coordinates the Master’s in Architecture.
Michel Melenhorst has extensive experience in teaching and lecturing at institutions such as TU Delft, Design Academy Eindhoven, Lasalle University Bogota, HCU Hamburg, Arhus school of Architecture, University of Antwerp and K´Arts Seoul. He is a member of Docomomo international and is active in Docomomo Deutschland Workgroup education. At the HS-OWL he is coordinating the Master in Architecture, he is a member of the Researchgroup Urban Lab and co-organises the Universities annual workshop week and Conference ´Detmolder Räume´
Since 2016 he leads ´RMB´, an europewide intiative to start a specialized, two years master studies on reuse of modernist buildings

Theresa Kellner (*1984) is scientific and teaching assistant at the Detmold School of Architecture and Interior Architecture, a department of OWL University of Applied Sciences (UAS OWL) since 2014. She is an Interior Architect and Social Pedagogic, who studied at the UAS OWL, Germany, strike at the University of Florida, USA and at the Otto-Friedrich-University in Bamberg, Germany. She holds a Master Degree in Interior Architecture and a Diploma in Social Pedagogy. Since 2014 she is working as a research assistant at the International Office and the Department 1 of UAS OWL and is managing several international third-party funds projects together with various partner universities.
The focus of her professional work lies on topics such as: perception and space, the phenomenology of architecture, participative architecture, modern movement and heritage.

DOCOMOMO Germany with the Detmold School of Architecture and Interior Architecture, Ostwestfalen-Lippe University of Applied Sciences (OWL UAS) and the EU project 'Reuse of Modernist Buildings' (RMB) invite you to the 16th DOCOMOMO Germany and 3rd RMB Conference. The International Conference in Berlin takes the 100th anniversary of the Bauhaus as an opportunity to discuss the significance of modernity in the 21st century. The conference focus will be on the concepts, visions, and impulses emanating from Modern Movement and how they can be related to today's social, economic, cultural and in particular creative issues.

Are the social, spatial and constructional concepts formulated by modern movement and post-war modernism still sustainable today?
What role do cultural and climatic conditions play in the preservation, renovation and transformation of spaces, buildings, and modern movement sites?
How can the basic ideas of classical modernism be continued 100 years later and thus contribute to solving current challenges?
What contribution can be expected from academic and professional education, and which learning formats are suitable for this?

The 2019 DOCOMOMO Germany event will move from Karlsruhe and be held for the first time in Berlin, Neukölln at the Werkstatt der Kulturen. It continues the tradition of the Karlsruhe DOCOMOMO Germany Conference. This year the conference is co-organised by 'RMB', a project that is funded by the EU and coordinated by the OWL University of Applied Sciences. RMB initiates a pedagogical framework on a European level on the reuse of modernist buildings based on common definitions, methods, and approaches. RMB prepares a Joint Master on Reuse of Modernist Buildings. This cooperation of DOCOMOMO Germany and RMB resulted in a new conference format: a combination of invited keynote speakers and selected scientific lectures under the theme of 'What interest do we take in the Modern Movement today?'.

do_co_mo_mo_ REUSE OF MODERNIST BUILDINGS V Hochschule Ostwestfalen-Lippe University of Applied Sciences

Erasmus+ DAAD do_co_mo_mo_ international Universiteit Antwerpen İTÜ UNIVERSITY OF COIMBRA TÉCNICO LISBOA KIT Karlsruher Institut für Technologie