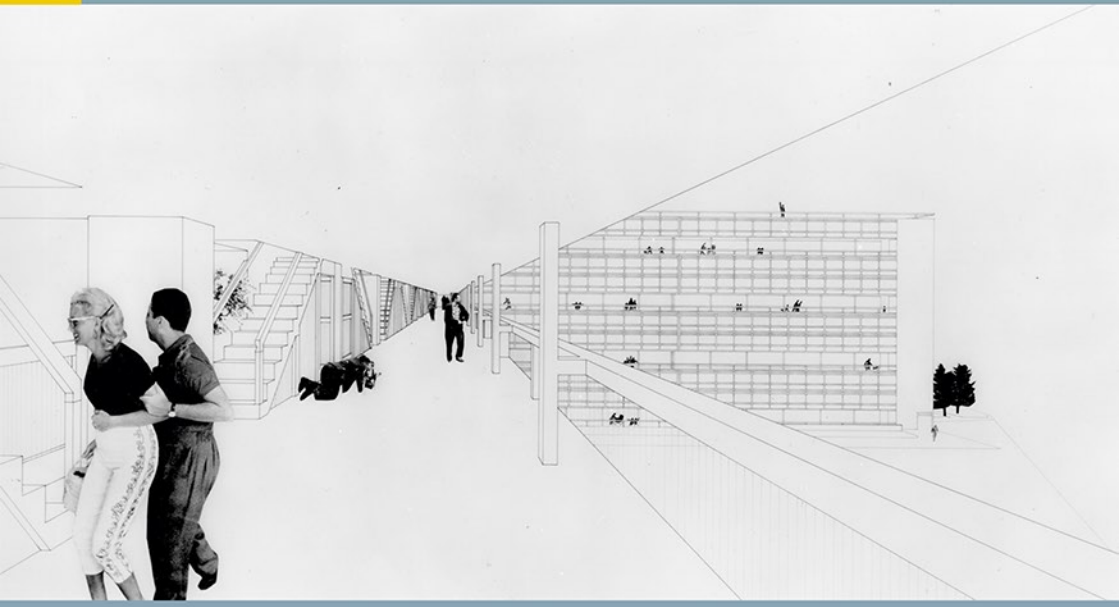
Marianna Charitonidou

Drawing and Experiencing Architecture

The Evolving Significance of City's Inhabitants in the 20th Century

Architecture



[transcript]

Marianna Charitonidou
Drawing and Experiencing Architecture

Architecture | Volume 67

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The research project was supported by the Hellenic Foundation for Research and Innovation (H.F.R.I.) under the »3rd Call for H.F.R.I. Research Projects to support Post-Doctoral Researchers« (Project Number: 7833)

Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.d-nb.de

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First published in 2022 by transcript Verlag, Bielefeld

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Cover layout: Maria Arndt, Bielefeld
Cover illustration: Alison & Peter Smithson, »street-in-the-air« collage for the Golden Lane Housing project, competition, London, 1952. Drawing and collage with Joe DiMaggio and Marilyn Monroe, 20'/ 2 x 38" (52 x 97.5 cm). Credits: Smithson Family Collection
Printed by: Majuskel Medienproduktion GmbH, Wetzlar
https://doi.org/10.14361/9783839464885
Print-ISBN 978-3-8376-6488-1
PDF-ISBN 978-3-8394-6488-5
ISSN of series: 2702-8070
eISSN of series: 2702-8089

Printed on permanent acid-free text paper.

Contents

Acknowledgements 11

Introduction

Architectural drawing as investigating Device 13

0.1 The homogeneous addressee of modernism: perspective representation in the work of Ludwig Mies van der Rohe and Le Corbusier 15

0.2 Postwar engaged users as activators of social change 21

0.3 Architecture's addressees as decomposers and the primacy of the observer over the user 22

0.4 The return to real space through the fragmented user in the post-autonomy era: Rem Koolhaas and Bernard Tschumi's programmatic diagrams 24

0.5 From "property value" to "functional value" to "de-construction value" to "new perception and experience value" 26

Notes 27

Chapter 1: Le Corbusier's act of drawing

The process of crystallization of design ideas 31

1.1 Le Corbusier's conception of patient search: Drawing as pushing inside 35

1.2 The notion of transmissibility in Le Corbusier's thought 39

1.3 Around the capacity of architectural forms to provoke sensations 41

1.4 Le Corbusier vis-à-vis the postwar Italian Neo-Humanistic discourse: The debates around proportions 42

1.5 Human scale and universal needs: Towards a universal user or the *Modulor* 44

1.6 Towards a conclusion: Architecture beyond the machine 48

Notes 50

Chapter 2: Le Corbusier's space beyond words

From assemblages of components to succession of events 59
2.1 The notion of assemblage in Le Corbusier's thought:
Architecture as precise relationships..... 61
2.2 The "maison-outil" as clear syntax:
Towards synchronism or the game of indisputable emotions 63
2.3 Le Corbusier's relationship with De Stijl: The interest in precision 64
2.4 Le Corbusier's double attraction to the straight line or the right
angle and the spiral: Linking geometry to contemporary spirit 67
2.5 The notion of circulation in Le Corbusier's work:
Eyes to feast on the walls or perspectives beyond walls..... 70
2.6 Le Corbusier's conception of the metropolis: Tabula rasa urban theory? 73
2.7 The "Open hand" as an expression of freedom? 76
2.8 Towards a conclusion: From assemblages of components
to succession of events..... 79
Notes 84

Chapter 3: Ludwig Mies van der Rohe's interior perspective views

Around the specificities of his visual dispositifs..... 95
3.1 The viewer vis-à-vis the interior perspective views of Mies van der Rohe 98
3.2 The distinction between tactile and optical perception
in Mies van der Rohe's work 103
3.3 Mies van der Rohe's Brick Country House 104
3.4 Mies van der Rohe vis-à-vis the assemblage of textual counters.....106
3.5 Between Mies van der Rohe and Hans Richter:
Around the use of charcoal tonalities.....107
3.6 Comparing Le Corbusier and Mies van der Rohe's *dispositifs* 110
3.7 Towards a conclusion: Mies van der Rohe's representations
as symbolic montage 115
Notes 117

Chapter 4: Ludwig Mies van der Rohe's Baukunst as Zeitwille

The interest in impersonality and the autonomous individual 123
4.1 Contextualizing Mies van der Rohe's conception of Zeitwille 124
4.2 The ambiguity of Mies van der Rohe's simultaneous interest
in impersonality and the autonomous individual 126
4.3 *Baukunst* as *Zeitwille* and the dualism between object and culture..... 128

4.4 Mies van der Rohe's representations:
Non-resolved emptiness as "negativeness" towards *Großstadt* 131
4.5 Mies's *Baukunst* as an antidote to the chaos of metropolis..... 135
4.6 Representational living and the capacity of space to stimulate the intellect....137
4.7 Teaching as an organic unfolding of spiritual and cultural relationships 138
Notes 146

Chapter 5: The Team Ten and the humanization of architecture

Postwar engaged users as activators of change 155
5.1 The Doorn manifesto as a fruit of generational conflict.....159
5.2 The CIAM X and distrust in the concept of the "new"..... 163
5.3 After the Otterlo meeting: The "Post Box for the Development
of the Habitat" as an agent of dynamic informality.....166
5.4 Alison and Peter Smithson's collages as reinventing established reality 168
5.5 Aldo van Eyck's ethnographic concerns and the search for "the truly human" ..173
Notes 177

Chapter 6: Aldo Rossi's visual strategies and the prioritization of the observer

Urban facts as objects of affection 181
6.1 Aldo Rossi's transatlantic exchanges and the proliferation
of exhibitions on architectural drawings 185
6.2 Aldo Rossi's representations as transforming architectural
and urban artefacts into objects of affection 192
6.3 Aldo Rossi's understanding of the tension between individual
and collective memory.....197
6.4 Aldo Rossi's interest in the vitality of the dynamic
of the expansion of the city..... 198
6.5 The import of the discourse around typology in the American scene.....199
6.6 Aldo Rossi's attitude toward typology and the urban facts
of the American city 202
Notes 203

Chapter 7: Constantinos Doxiadis and Adriano Olivetti's role in reshaping the relationship between politics and urban planning 211
7.1 Constantinos A. Doxiadis and Adriano Olivetti and the formation
of national identity in post-war Greece and Italy.....213
7.2 Adriano Olivetti's political agenda and the UNRRA-CASAS program 214

7.3 The Marshall Plan and the transatlantic exchanges in architecture, urban planning and the arts 217
7.4 Constantinos A. Doxiadis's political agenda and The Plan for the Survival of the Greek Nation 219
7.5 Towards a conclusion or juxtaposing centralized and decentralized political apparatuses 225
Notes 227

Chapter 8: Giancarlo De Carlo's participatory design methods
Growth and flexibility in architectural organisms 231
8.1 From representation of designers to representation of users: Revisiting Giancarlo De Carlo's conception of participation 234
8.2 The Nuovo Villaggio Matteotti in Terni and the concept of participation 236
8.3 Giancarlo De Carlo and the humanization of architecture: The real transformation of the world 244
8.4 Giancarlo De Carlo and architectural pedagogy 248
8.5 Giancarlo De Carlo as exhibition curator 249
8.6 Around the presence of human figures in the photographs and drawings of Giancarlo De Carlo's buildings 250
8.7 Towards a conclusion or problematizing participation: From "participation" to "co-production" to "negotiated planning" to "crossbenching" 257
Notes 258

Chapter 9: Denise Scott Brown and the socio-anthropological meaning as new objectivity
Challenging functionalism through social patterns 265
9.1 Denise Scott Brown at the 1956 CIAM Summer School and the significance of planning 267
9.2 Advocacy planning movement and the critiques of urban renewal 270
9.3 The impact of Herbert Gans's socio-anthropological perspective on Denise Scott Brown's approach 271
9.4 Learning from Levittown Studio: Towards a socio-anthropological perspective 273
9.5 South Street in Philadelphia and a careful regard for people and existing architecture 284
9.6 The patterns of mapped data as signs of life 285

9.7 Towards a conclusion: Looking sociology from an architectural viewpoint 293
Notes 299

Chapter 10: Bernard Tschumi's politics of space

Architecture as instrument of sowcio-cultural change 307
10.1 Bernard Tschumi and May '68: Social concerns and teaching strategies 310
10.2 Diploma Unit 10 and the integration of space into pedagogy: Notation and events 314
10.3 The Insurgent Space Catalogue 317
10.4 Questioning architecture's function as an instrument of socio-cultural change 318
10.5 Bernard Tschumi and the politics of space 320
10.6 A Space: A Thousand Words 321
10.7 The Manhattan Transcripts and the disjunction of the Metropolis..... 328
10.8 Conclusion: Around the relevance of Bernard Tschumi's thought for current debates..... 336
Notes 343

Acknowledgements

I am grateful to Jean-Louis Cohen, Bernard Tschumi, George Parmenidis, Pippo Ciorra, Constantinos Moraitis, Kostas Tsiambaos, and Panayotis Tournikiotis for their insightful comments. Several of the reflections that are developed in this book emerged in the framework of the research I conducted for my Ph.D. thesis entitled *The Relationship between Interpretation and Elaboration of Architectural Form: Investigating the Mutations of Architecture's Scope* for which I was awarded unanimously a Ph.D. Degree from the National Technical University of Athens in September 2018 (jury: Jean-Louis Cohen, Bernard Tschumi, George Parmenidis, Pippo Ciorra, Constantinos Moraitis, Kostas Tsiambaos, Panayotis Tournikiotis). I am particularly theankful to the supervisor of my Ph.D. thesis George Parmenidis and to the advisors of my Ph.D. thesis Jean-Louis Cohen and Panayotis Tournikiotis.

Moreover, I would like to thank Andreas Giacumacatos for mentoring me while working on my postdoctoral project "Constantinos A. Doxiadis and Adriano Olivetti's Post-war Reconstruction Agendas in Greece and in Italy: Centralising and Decentralising Political Apparatus" conducted at entitled at the Faculty of Art Theory and History of Athens School of Fine arts. I would also like to thank the Hellenic Foundation for Research and Innovation for supporting the aforementioned postdoctoral project.

I would also like to thank the Fondation Le Corbusier in Paris, the Canadian Centre for Architecture in Montreal, the Getty Research Institute in Los Angeles, the Archivio progetti of the Università Iuav di Venezia in Venice, the Avery Drawings & Archives Collection of Columbia University's Library in New York City, the Manuscripts division of the Library of Congress in Washington DC., the Department of Architecture and Design MoMA in New York City, the Het Nieuwe Instituut in Rotterdam, the Architectural Archives of the University of Pennsylvania in Philadelphia, and to Constantinos and Emma Doxiadis Foundation for offering me the opportunity to conduct extensive archival research

in their archival resources and for authorizing me to use the images included in this book. I am very grateful to Arnaud Dercelles for his help during my consultation at the Fondation Le Corbusier. I am also grateful to my family and loved ones for their support and their faith in my reflections and work.

Introduction
Architectural drawing as investigating Device

This book examines how the concept of the addressee of architecture has been transformed throughout the twentieth century, demonstrating how the mutations of the dominant means of representation in architecture are linked to the evolving significance of the city's inhabitants. It presents the ways in which the reorientations regarding the dominant modes of representation depend on the transformations of architects' conceptions of the notion of citizenship. Through the diagnosis of the epistemological debates corresponding to four successive generations – the modernists starting from the 1920s, the post-war era focusing on neorealist architecture and Team Ten, the paradigm of autonomy and the reduction of architecture to its syntactics and to its visuality in the 1970s and the reinvention of the notion of the user and the architectural program through the event in the post-autonomy era – it identifies and analyses the mutations concerning the modes of representation that are at the heart of architectural practice and education in each generation under consideration.

The book traces the shifts from Le Corbusier's and Ludwig Mies van der Rohe's fascination with perspective, Team Ten's humanization of architecture and urbanism, Constantinos Doxiadis and Adriano Olivetti's role in reshaping the relationship between politics and urban planning, Giancarlo De Carlo's architecture of participation, Aldo Rossi's design methods, Denise Scott Brown's active socioplactics and Bernard Tschumi's spatial praxis.

The point of departure of this book is the conviction that modes of representation can serve as tools in order to diagnose how the concept of the observer and the user in architecture are transformed[1]. Its main objective is to present the mutations of the addressee of architecture on a diachronic axis. Despite the choice that has been made of analyzing specific episodes, it aims to go beyond the episodic treatment of cases and to relate the metamorphosis of the modes of representation to the dominant ways of understanding the

addressee of architecture corresponding to each of the four successive generations examined: the modernists, with special focus on Le Corbusier and Ludwig Mies van der Rohe, the post-war generation, paying special attention to Neorealist architecture and Team Ten, the generation characterized by the primacy of the observer in the 1970s & 1980s, including Peter Eisenman, John Hejduk, Aldo Rossi and Oswald Mathias Ungers, and the generation of the post-autonomy era, which aimed to rediscover the notion of program and to bring architecture back to real space. As Robin Evans notes, in *The Projective Cast: Architecture and its Three Geometries:* "[a]n episodic treatment [...] has no advantage unless the episodes intimate something other than the fact of their own unique occurrence"[2]. The main intention of this book is to demonstrate how the modes of representation elaborated by the aforementioned architects vehicle different ways of constructing assemblages between the following agents: firstly, the designer of architectural representations; secondly, their observers; thirdly, the users of the spatial assemblages after the construction of the architectural artefacts. During the architectural design process, encounters take place at three different levels: that of design, that of the reception of the architectural drawing by the viewer, and that of the inhabitation of constructed space[3]. It focuses on the interferences between the architect-conceiver, the observer of his architectural drawings and the inhabitants of architectural artefacts and traces the evolution of the way the observer and the user are treated through the analysis of the modes of architectural representation that are at the center of architecture's scope at each historical moment.

Architectural drawings are understood here as *dispositif*s. What interests me the most regarding the concept of *dispositif* is that it does not treat heterogeneous systems – object, subject, language and so on – as homogeneous. It is based on the idea that not only are these different systems characterized by heterogeneity, but the inside of each system is itself heterogeneous. In other words, it assumes that the systems are composed of interacting forces that are in a continuous state of becoming, "always off balance"[4], to borrow Gilles Deleuze's words. Such an understanding of the articulation of systems and of the relationships within each system implies that what is at the center of interest when an object of research is comprehended as *dispositif* are the relationships between all the parameters and the relationships between the interacting forces characterizing each parameter. A comprehension of architectural drawings as *dispositif*s implies their understanding as the meeting points of

the exchanges and the interaction between different parameters; in our case, the architect-conceiver, the observer and the user[5].

The conception of each of the aforementioned parameters changes within time as we move from one social, institutional, cultural and historical context to the other. This study is based on the assumption that new conceptions of space and new modes of inhabitation are addressed through the architectural design process before their theorization. The modes of assembling the real and the fictive aspect of architecture are addressed through written discourse much later than their concretization though the invention of specific *dispositifs* of architectural non-discursive signs. In other words, there is a time lag between the elaboration of new conceptions of fabrication of space assemblages and modes of inhabiting the constructed assemblages, and their theorization through written discourse. At the center of this project lies Sergueï Eisenstein's point of view that "when ideas are detached from the media used to transmit them, they are cut off from the historical forces that shaped them."[6]

0.1 The homogeneous addressee of modernism: perspective representation in the work of Ludwig Mies van der Rohe and Le Corbusier

During the modernist era, despite the dominant rhetoric claiming that function was the main purpose of the architects, the observer was favored over the user and the addressee of architecture was treated in a homogenized way. In parallel, the relationship between the architect-conceiver and the addressee of architecture was not interactive. It was characterized by a mono-directional transmission from the architect to the observer of architectural drawings. This hypothesis is reinforced by the fact that perspective, which is a mode of representation based on a predefined way of viewing and interpreting drawings, was the mode of representation that was privileged by both Ludwig Mies van der Rohe. For Le Corbusier, for instance, the architect was the authority on living and his role was to know what is best for humans, as becomes evident from what he declares in *The Athens Charter* (*Charte d'Athènes*):

> Who can take the measures necessary to the accomplishment of this task if not the architect who possesses a complete awareness of man, who has abandoned illusory designs, and who, judiciously adapting the means to

> the desired ends, will create an order that bears within it a poetry of its own?[7]

A tension that was at the center of architectural epistemology, during the modernist period, was that between universality and individuality. This ambiguity held a particular place in Mies van der Rohe and Le Corbusier's thought: indeed, their architecture and architectural representations could be interpreted as endeavors to respond to this tension. A paradox that is worthy of note is the fact that these architects privileged the use of perspective representation, despite their predilection for the avant-garde anti-subjectivist tendencies, which disapproved the use of perspective and favored the use of axonometric representation or other modes of representation opposed to the philosophical implications of perspective. Theo van Doesburg's approach, for instance, was representative of De Stijl's preference for axonometric representation. Likewise, El Lissitzky rejected perspective, as is evidenced by his text entitled "A. and Pangeometry", which was originally published in 1925[8]. The ambiguity between individuality and universality is related to Mies van der Rohe and Le Corbusier's conviction that the means of their architectural composition process should be generalizable and universally understandable and transmissible[9]. In the case of perspective representation, in contrast to what happens in the case of axonometric representation, the images viewed by the observers of architectural drawings and the inhabitants of architectural artefacts coincide.

The limitations of perspective have been highlighted by Gilles Deleuze and Félix Guattari, who, in *A Thousand Plateaus*, underscore that "[t]here is no falser problem in painting than depth and, in particular, perspective". They also maintain that "perspective lines, far from being made to represent depth, themselves invent the possibility of such a representation, which occupies them only for an instant, at a given moment"[10]. Amédée Ozenfant and Le Corbusier were aware of the accidental nature of the use of perspective, as can be read in "Le purisme", published in *L'Esprit Nouveau* in 1921:

> The ordinary perspective, in its theoretical rigor, gives objects only an accidental aspect: what an eye that has never seen this object, would see if it was placed in the special visual angle to this perspective, angle always particular, so incomplete.[11]

Bruno Reichlin has characterized Le Corbusier's architecture as "anti-perspective", employing the expression "dispositifs anti-perspectifs" in order to describe Le Corbusier's design strategies. He has claimed that Le Corbusier did

not conceive the architectural object "in relation to privileged points of view to which the forms are ordered according to the most advantageous perspective"[12]. In contrast, his architecture and the way he used to present it on paper put forward a plurality of views.

A characteristic of Le Corbusier's design procedure is the fact that he used to design drawings based on different modes of representation – interior and exterior perspectives, axonometric representations, plans etc. – on the same sheet of paper. This choice was guided by his intention to have a holistic view of the design process. For Villa Stein-De Monzie, Le Corbusier drew, in July 1926, an exterior perspective, two axonometric views and two interior perspective views on the same sheet of paper (Figure 1). Another case in which Le Corbusier included drawings based on different modes of representation on the same sheet of paper is the letter to Madame Meyer, where Le Corbusier designed seven different perspective views and an axonometric view on the same sheet of paper (Figure 2). Regarding the sketches accompanying this letter, Reichlin makes the following comments:

> perspectives extended to the point of taking in an entire itinerary. They presuppose movable points of view, cavalier perspectives, and rapid zoom shots, from panoramic view to close-up of plan. Explanatory cartoonlike 'bubbles' are inserted to avoid breaking the optical continuity that the drawings suggest, and to prevent the reader from mistaking these drawings – these graphic annotations – for illusionistic renderings of the building to be built.[13]

Mies van der Rohe used to work on his architectural ideas mainly through sketches of plans and interior perspective views. He often used the points of the grid, which allowed him to capture a rhythm and imagine how movement in space would be orchestrated. Mies van der Rohe's interior perspective views can be perceived differently depending on the distance from which the viewers observe them. In certain representations by Mies, the effects of abstract and figurative images are produced simultaneously. This simultaneity of abstractness and figurativeness could be grasped through Alois Riegl's distinction between tactile or haptic ("taktisch") and optical ("optisch") perception[14]. One might assume that the abstract aspect of the image enables a tactile perception, while the figurative dimension of the image activates an optical perception. The disjunction between abstractness and figurativeness and between tactile and optical perception pushes observers to vary their distance from the architectural drawing in order to capture what the image

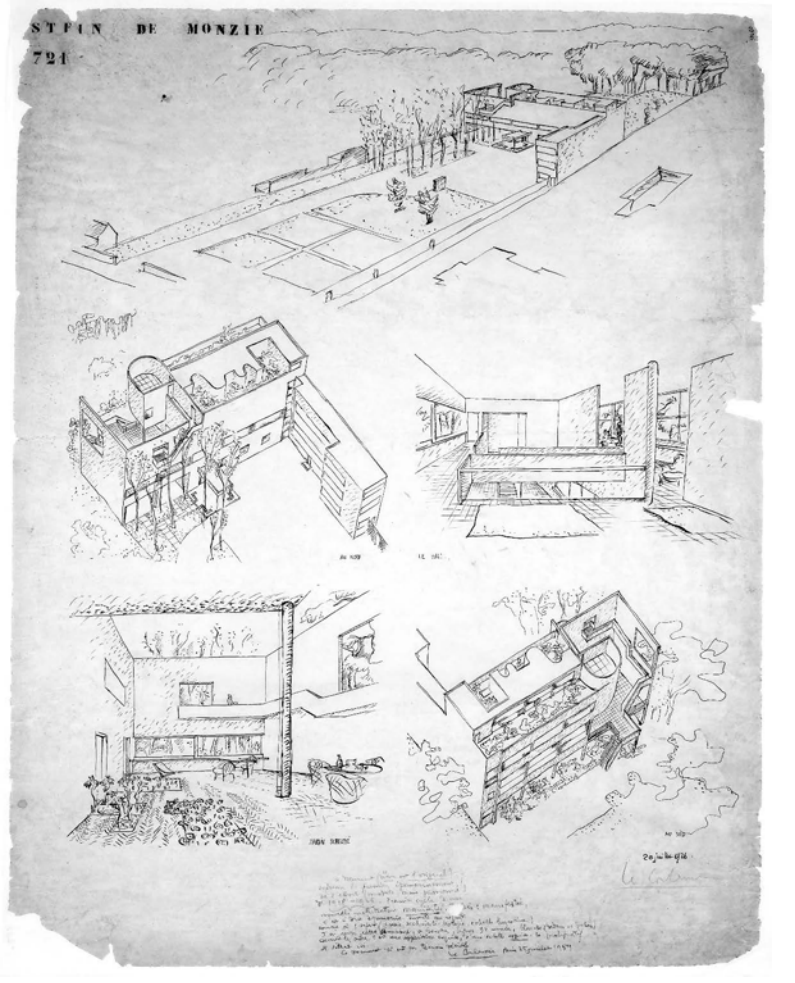
represents. The representational ambiguity produced by the visualization strategies elaborated by Mies van der Rohe provokes a non-possibility to take the distance that is inherent in the use of perspective and in the way the viewer sees images produced according to perspective. The contrast between the discreet symmetrical fond with the grid and the symmetric organization, on the one hand, and the intensely colored surfaces and artworks that are placed on it, on the other hand, cause a non-unitary sensation in the perception of observers, which is in opposition to the unitary dimension of the perspective as described by Erwin Panofsky in *Perspective as Symbolic Form*[15].

During the modernist era, the construction of the "fictive addressee" of architecture was focused on the assumed existence of a "universal user". The issues at stake are outlined in Reyner Banham's following claim:

> To save himself from the sloughs of subjectivity, every modern architect has had to find his own objective standards, to select from his experience of building those elements which seem undeniably integral – structural technique, for instance, sociology, or – as in the case of Le Corbusier – measure[16].

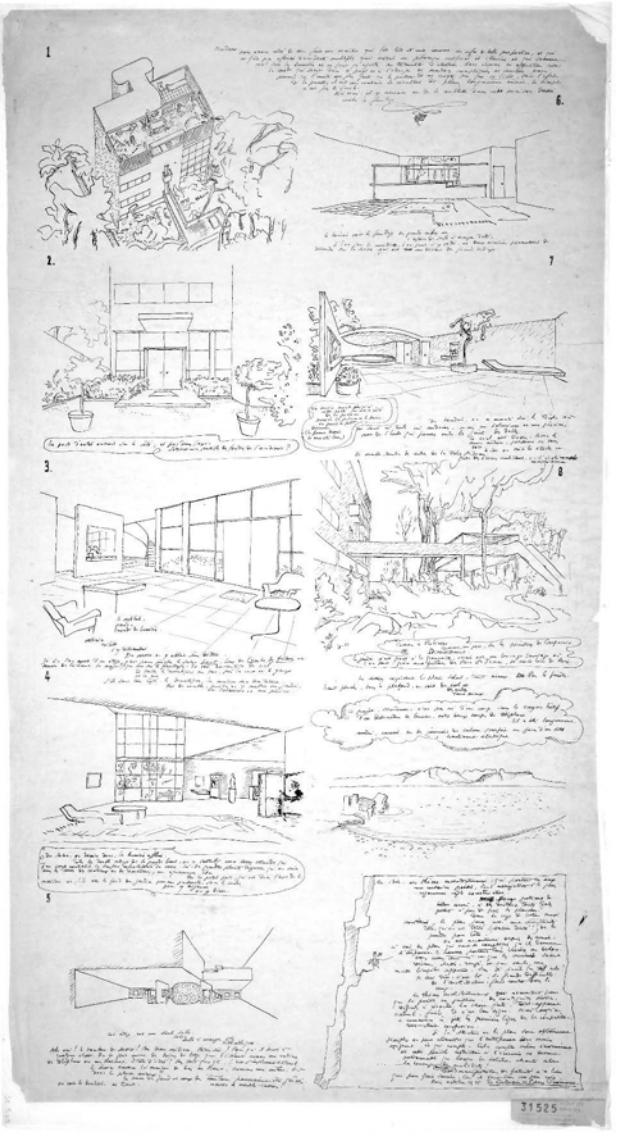
Banham also maintained that "[t]he objectivity of these standards resides, in the first case, in a belief in a normal man, an attractive though shadowy Figure whose dimensions Le Corbusier is prepared to vary from time to time and place to place, thus wrecking his claims to universality"[17]. In the modernist generation, in contrast to the doctrine that "form follows function", architectural drawings were characterized by an elitist vision and architects gave great importance to the observer. Despite the generally accepted perception being that architects' main addressee during the modernist era was the inhabitant and their main ambition the final built outcome, the design practices of Le Corbusier and Mies van der Rohe invite us to question this assumption.

Figure 1. Le Corbusier, an exterior perspective, two axonometric views and two interior perspective views on the same sheet, Villa Stein de Monzie Vaucresson, July 1926.



Credits: Fondation Le Corbusier, Paris, FLC 31480

Figure 2. Le Corbusier, Letter to Madame Meyer, an axonometric view accompanied by seven perspective views – interior and exterior, 1925.



Credits: Fondation Le Corbusier, Paris, FLC 31525

0.2 Postwar engaged users as activators of social change

The fascination with the everyday which characterized the post-war era was linked to the idea that inhabitants can function as agents of society's transformation. Architects invented representational tools that aimed to grasp the way cities were expanding. The concept of user corresponding to the post-war generation was culturally determined and the architectural and urban assemblages were conceived as unfinished and in a state of becoming. The architects of the post-war generation tended to employ modes of representation that put forward the status of architectural and urban artefacts as unfinished. The idea of additive composition and dynamic aggregation of successive elements constituted a common preoccupation for them. A common characteristic of their design processes and modes of representation was the fascination with constantly unsettled urbanistic assemblages. Examples include Alison and Peter Smithson's Cluster City diagrams, Shadrach Woods's "stem" and "web"[18], but also Neorealist architecture's shift from a pre-established concept of compositional unity to one obtained by means of superposition and expressed through the aggregation of successive elements and the obsessive fragmentation of walls and fences, as in the case of Tiburtino district (1949–1954) by Ludovico Quaroni and Mario Ridolfi, in collaboration with certain young Roman architects, such as Carlo Aymonino among other.

The status of the addressee of architecture was transformed in order to respond to the constantly unsettled urbanistic assemblages and to projects in continuous becoming. Concepts such as "city-territory", "network", "open project" and "new dimension" acquired a central role in architectural discourse[19]. The emergence of these concepts coincided with the intensification of interest in the concept of user and the impact of architecture's standardization on mass-production. The shift from an understanding of architecture's addressee as individual towards its understanding as user is related to the ambiguity between citizenship and consumerism. As Kenny Cupers underscores, the user became a central point of reference "during the "golden age" of the welfare state in post-war Europe, when governments became involved with their citizens' well-being in novel ways"[20]. What is worth noting is that "[w]hile the notion of the user initially emerged in the context of industrialised production, mass production, and large-scale government intervention, it evolved to contest exactly those basic qualities of mass, scale, and uniformity"[21]. During this period, we can discern the development of ethnocentric models not only in architecture, but also in cinema. New Brutalism, Neorealism and New

Humanism are labels that appeared in the post-war context. All these labels and the concepts that accompany them are related to a specific ethnocentric character – New Brutalism is associated with Great Britain, while Neorealism and New Humanism are linked to the Italian context – and are interpreted as responses to the identity crisis of the post-war era.

Alison and Peter Smithson, in one of their collages for the Golden Lane Housing project competition (1952), incorporated reproductions of photos of Marilyn Monroe and Joe DiMaggio. This strategy of inserting famous figures in their collages aestheticizing social housing projects is related to the ambiguity between consumerism and citizenship that dominated the post-war era. The Smithsons, through this tactic, invited the future inhabitants of the social housing complexes to construct a paradoxical fiction and to identify themselves with people coming from different social groups. In parallel, they aimed to activate or intensify the users' sense of belonging to a community, inviting them to feel responsible for the future of the society to which they belonged. The Smithsons, through the insertion of two contradictory fictions within the same image – the dream of being part of high society and of having access to the latest products of their epoch and the promise of being part of society's transformation – triggered the encounter between consumerism and citizenship. In their collage for Robin Hood Gardens, through the juxtaposition between their intervention and the existing cityscape, they render visible the contrast between the old and the new society.

0.3 Architecture's addressees as decomposers and the primacy of the observer over the user

The desire to free architecture from functionalism was a defining parameter of the theoretical and design strategies of Aldo Rossi, Peter Eisenman and Oswald Mathias Ungers. Eisenman underscores that the "making of form can […] be considered as a problem of logical consistency, as a consequence of the logical structure inherent in any formal relationship"[22]. The prioritization of the use of axonometric representation by John Hejduk and Peter Eisenman is related to the fact that the process of fabrication and the capacity of its de-codification are treated as the two parameters that provide design procedures with legitimacy. In parallel, Hejduk's use of axonometric representation is related to his intention to erase the illusion of depth. Axonometric representation, as an object-oriented mode of representation, pushes the observer to focus his

interpretation of the architectural drawings on the relation between the various parts of the represented architectural artefact. It invites the observers of architectural drawings to reconstruct in their minds the trajectory that the architects followed in order to conceive and fabricate the architectural drawing under question.

Despite their common attraction to the use of axonometric representation, Eisenman and Ungers's approaches are different in the sense that the former focuses on the "syntactics", while the latter cares more about the "semantics". "Syntactics" is "the study of the syntactical relations of signs to one another in abstraction from the relations of signs to objects or to interpreters", while "semantics" "deals with the relation of signs to their designate and so to the objects which they may or do denote"[23]. As Manfredo Tafuri has remarked, Eisenman, through the use of successive axonometric views that present the successive steps of fabrication of his House series, intended to construct "a controlled and one-way decodification of [...] signs"[24]. Additionally, the way Eisenman fabricates the axonometric views of his House series is based on a prioritization of the syntactic over the semantic aspect of architectural design process. This preference for the syntactic analogy for architectural composition has its roots in Eisenman's adoption of the distinction between "deep structure" and "surface structure", which one can find in Noam Chomsky's *Aspects of the Theory of Syntax*[25].

Eisenman's argument was that, in contrast to language, in architecture the semantic and the conceptual are often confused. He proposed a distinction between semantic and conceptual architecture, labelling as semantic "projects which have the primary intention in the choice of form to convey meaning"[26]. In parallel, he distinguished two different types of architectural semantics – one received directly from the encounter of the observer with the image and one understood through a process of reconstruction in the observer's mind – relating the former with surface structure and perceptual sense and the latter with deep structure and conceptual sense.

A series of collective exhibitions reflects the galloping fascination with architectural drawings' artefactual value and the prioritization of observers of architectural drawings over the inhabitants of spatial formations. The majority of these exhibitions constituted instances of cross-fertilization between European and American participants.

0.4 The return to real space through the fragmented user in the post-autonomy era: Rem Koolhaas and Bernard Tschumi's programmatic diagrams

Bernard Tschumi and Rem Koolhaas intended to transform program into a compositional device, using urban conditions as a starting point of their design process. The way they reinvented the notion of the user of architecture should be comprehended in relation to their affirmative attitude towards the disjunction between determined uses and uses invented by the users. Koolhaas, in the summer of 1969, while he was studying at the Architectural Association in London under the tutorship of Elias Zenghelis, worked on a thirty-page story-manifesto entitled "The Surface", which was based on the conception of the metropolitan city as "a plane of tarmac with some red hot spots of urban intensity" that radiates "city-sense". The conviction behind this project was the idea that if these "spots of urban intensity" were treated "[w]ith ingenuity it [would be] […] possible to stitch the area of urban radiation, to canalize city-sense into a larger network"[27]. Already from this very early project, it becomes evident that Koolhaas understood city primarily as condition and not as place. Elias Zenghelis, in "The Aesthetics of the Present", defined the iconography of the program as "the setting where a sequence of displacements activate the imagination […] and animate the inanimate"[28].

Zenghelis and Koolhaas' explorations of the iconography of the program was paralleled by a quest for new modes of representation, as can be seen in certain projects produced by their students in Diploma Unit 9 at the Architectural Association: for instance, Kamiar Ahari's 2.5m-long drawing, which comprises a plan and an axonometric drawing, mixes exterior and interior, a favored projection technique in the unit. Bernard Tschumi and Nigel Coates, who taught Diploma Unit 10 at the Architectural Association, gave programs that were related to the dynamics of the city as "River Notations" (1977–1978) and "Soho Institutions" (1978–1979). Regarding their pedagogical strategy, Coates notes the following: "Tschumi asked 'if space is neither an external object nor an internal experience (made of impressions, sensations and feelings) are man and space inseparable?' We decided to single out the contents of the brackets; it was the effect that needed to be worked on."[29] During the same period, Tschumi was working on *The Manhattan Transcripts*, which were exhibited in four solo exhibitions at Artists Space in New York in 1978, at the AA in 1979, at P.S.1 in 1980 and at Max Protech in 1981. Tschumi wrote, in the exhibition catalogue of "Architectural Manifestoes": "Architecture will

be the tension between the concept and experience of space"[30]. Tschumi and Eisenstein share the intention to provoke the shift of spectator's perception from a passive stance to an active one. *Manhattan Transcripts* was a series of four theoretical projects, the second of which was an eleven-meter-long illustration of a murder on 42nd Street in Manhattan. The starting point of *The Manhattan Transcripts* was the realization that "architecture's sophisticated means of notation – elevations, axonometric, perspective views, and so on – [...] don't tell you anything about sound, touch, or the movement of bodies through spaces"[31]. Their objective was to go "beyond the conventional definition of use [...] [and] to explore unlikely confrontations"[32] and to reorganize the connections between space, event and movement[33]. In the introduction to *The Manhattan Transcripts*, Tschumi refers to the disjunction between use, form and social value and juxtaposes the world of movements, the world of objects and the world of events.

OMA's diagram for the Parc de la Villette permitted the combination between architectural specificity and "programmatic indeterminacy". What constitutes the main innovation of OMA's proposal for the Parc de La Villette is the interconnection of territorial and programmatic regularities through a common visualization tool: the diagram of strips. Programmatic indeterminacy was treated as the very potential of the architectural design strategy. The diagrams, instead of representing formal configurations, visualized the relationships between different parameters that were incorporated in the design strategy. The elaboration of programmatic aspects in this project was based on the very explosion of the conventions of the modernist functionalist classification systems, as has been underlined by Jean-Louis Cohen[34]. The "tactic of layering creates the maximum length of "borders" between the maximum number of programmatic components" permitted "the maximum permeatability of each programmatic band"[35]. Koolhaas said to Sarah Whiting in 1999: "What I (still) find baffling is their hostility to the semantic. Semiotics is more triumphant than ever – as evidenced, for example, in the corporate world or in branding – and the semantic critique may be more useful than ever: the more artificialities, the more constructs; the more constructs, the more signs; the more signs, the more semiotic"[36].

The starting point of Tschumi's approach is the intention to replace "the project of the Modern Movement, which was after the affirmation of certainties in a unified utopia" by the "questioning of multiple, fragmented, dislocated terrains"[37] . Tschumi maintains, in *Event-Cities 2*, that "[t]he projects always begin from an urban condition and a program. They then try to uncover potential-

ities hidden in the program"[38]. His project for the Parc de La Villette was "an attack against cause-and-effect relationships, whether between form and function, structure and economics, or (of course) form and program"[39] and aimed to show architectural signs' "contingency" and "cultural fragility"[40]. Despite his interest in the reinvention of notational tactics in order to deconstruct the components of architecture, he was aware that the dynamics of reality transcend any representation of it, even if the representation is unconventional. Through the distribution of "programmatic requirements across the entire site in a regular arrangement of variable intensity points, referred to as 'Follies'"[41] Tschumi's objective, in the case of his project for the Parc de La Villette, was the invention of an abstract system mediating "between the site and some other concept, beyond city or program"[42][35] through the "superimposition" of the "system of points", the "system of lines" and the "system of surfaces".

0.5 From "property value" to "functional value" to "de-construction value" to "new perception and experience value"

In the modernist era, the meaning of architectural praxis was linked to the "property value" of the architectural artefact. During the post-war era, what was at the heart of architectural discourse and practice was the "functional value". The ambiguity between consumerism and citizenship that dominated the post-war era and the models of the welfare state contributed to the re-conceptualization of the architectural artefact as an instrument that could enhance access to society. The incorporation of figures such as Joe DiMaggio and Marilyn Monroe in the Smithsons's architectural drawing for a social housing complex shows that the way one inhabited buildings was what counted most, rather than whether or not they were one's property. What is symbolized by this gesture of incorporating DiMaggio and Marilyn Monroe in a drawing is the fact that the users' participation in a collective way of inhabiting the city is able to transform citizens into "heroes" of society's metamorphosis. During the 1970s and the 1980s, within the context of the intensification of the paradigm of the so-called autonomous architecture, what was at the core of architectural epistemology was the invention of design strategies able to challenge the very conventions of architectural discourse.

Through the re-conceptualizations of the assemblages of architectural components into logical structures, architects such as Peter Eisenman invited

the observers of their drawings to re-orientate their understanding of architecture from an experience of space to a sphere of knowledge where what counted most were the syntactic games and their "de-construction value". Finally, in the framework of the post-autonomy era, what was defining for architectural epistemology was the invention of mechanisms able to transform the concept of architectural program into a design strategy, taking as a starting point of the design process the dynamic nature of urban conditions. The importance that Tschumi and Koolhaas attach to the kinesthetic experience of architecture is based on the assumption that within the same subject there are opposing tendencies and forces, and on their desire to employ design strategies capable of bringing architecture back to real space and its experience. In other words, what is at stake in the case of the post-autonomy era is the invention of design tools aiming at the emergence of what one could call "new perception and experience value".

Notes

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Chapter 1: Le Corbusier's act of drawing
The process of crystallization of design ideas

This chapter analyses Le Corbusier's understanding of the role of mental images during the process of crystallization of design ideas. It intends to render explicit why he used sketches as dynamic parts of his design process and not simply as a medium for recording complete mental images. The chapter also explores Le Corbusier's conception of the connection between perception, memory and representation, placing particular emphasis on Henri Bergson's approach. At the core of the reflections that are developed here is Le Corbusier's conception of "patient search" ("recherche patiente") and the vital role of the act of drawing for the process of inscribing images in memory. For Le Corbusier, drawing embodied the acts of observing, discovering, inventing and creating. The chapter explains why the concepts of linearity and zigzag in Le Corbusier's thought are pivotal for understanding the relationship between determined and spontaneous gesture in his architectural design approach. Particular emphasis is placed on how Le Corbusier's definition of architecture was reshaped throughout his lifetime, shedding light on the shift from understanding architecture as clear syntax to comprehending architecture as succession of events.

For Le Corbusier, the sentiment of satisfaction and enjoyment that an architectural artefact can provoke is related to a perception of harmony. This chapter analyses the reasons for which Le Corbusier insisted on the necessity to discover or invent "clear syntax" through architectural composition. Le Corbusier believed that the power of architectural artefacts lies in their "clear syntax". Particular emphasis is placed on the relationship of Le Corbusier's theories of space with those of Henri Bergson and the De Stijl movement. At the center of the reflections that are developed here are Le Corbusier's "patient search" ("recherche patiente") and the vital role of the act of drawing for the process of inscribing images in memory. For Le Corbusier, drawing embodied the acts of observing, discovering, in-venting and creating. This

chapter also relates Le Corbusier's interest in proportions and his conception of the *Modulor* to post-war Italian neo-humanistic approaches in architecture. It intends to render explicit how Le Corbusier's definition of architecture was reshaped, shedding light on the shift from defining architecture as clear syntax to defining architecture as the succession of events.

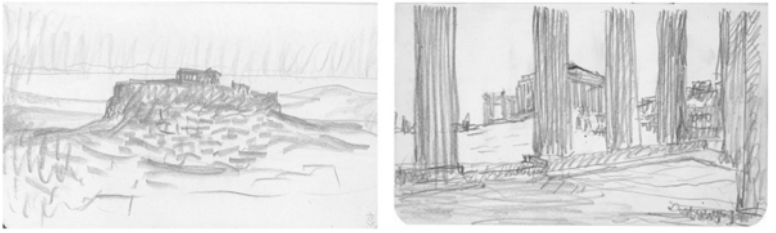
Figure 1.1. Le Corbusier, two pages from the carnet de voyage de Charles-Édouard Jeanneret in Rome in 1911. In these sketched of Le Corbusier, we can see Saint-Pierre et le Belvédère seen from the Villa Médicis.

Credits: Fondation Le Corbusier, Paris

Le Corbusier placed particular emphasis on the process of concretization of mental images through hand drawing. This explains why he used sketches as dynamic parts of his design process and not simply as a medium for recording complete mental images[1]. The way in which he used sketches and visual representation at every stage of the design process shows that he conceived mental images as an architectural design tool[2]. Le Corbusier paid special attention to the role of mental images during the process of crystallization of design ideas. This becomes evident when he refers to the "spontaneous birth… of the whole project, all at once and all of sudden"[3]. In the sixteenth century, Vasari, echoing a Vitruvian view of drawing as a vehicle for speculative thought, wrote: "We may conclude that design is not other than the design of a visible expression and declaration of an inner conception"[4]. The activity of translating a spatial idea into reality was also at the core of August Schmarsow's approach, in "The essence of architectural creation", where he remarks that the "attempts to translate a spatial idea into reality further demonstrate the organization of the human intellect"[5].

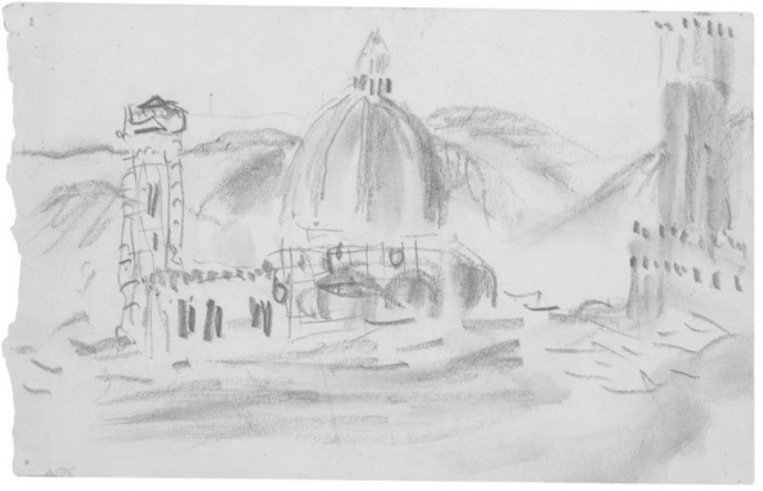
Horst Bredekamp, in *Image Acts: A Systematic Approach to Visual Agency*, draws an interesting distinction between "the desire to understand architecture in an image and the desire to understand it as an image"[6]. Borrowing this distinction from Bredekamp, we could claim that Le Corbusier, during the process of drawing, understood architecture in an image. Bredekamp underscores that central perspective, because of its attachment to one point of view, does not favor the interplay between architecture and bodily movement. This seems contradictory to the insistence of Le Corbusier on the use of interior perspective views in order to communicate his concept of "architectural promenade" ("promenade architecturale"). Le Corbusier declares, in *Creation is a Patient Search*: "To draw oneself, to trace the lines, handle the volumes, organize the surface… all this means first to look, and then to observe and finally perhaps to discover… and it is then that inspiration may come"[7]. Le Corbusier distinguishes the act of looking and the act of observing. He understands the invention that accompanies the architectural design process as organized according to the following steps: firstly, one looks, then they observe and, finally, they discover. For Le Corbusier, the practice of drawing is the procedure that permits the passage from one step of the process to another. Characteristically, he declared in his *Sketchbooks*: "Don't take photographs, draw; photography interferes with seeing, drawing etches into the mind"[8] (Figure 1.1, Figure 1.2, Figure 1.3, Figure 1.4, Figure 1.5).

Figure 1.2, Figure 1.3. Charles-Édouard Jeanneret, "Le Parthénon, Athènes", Carnet du Voyage d'Orient n°3, 1911.



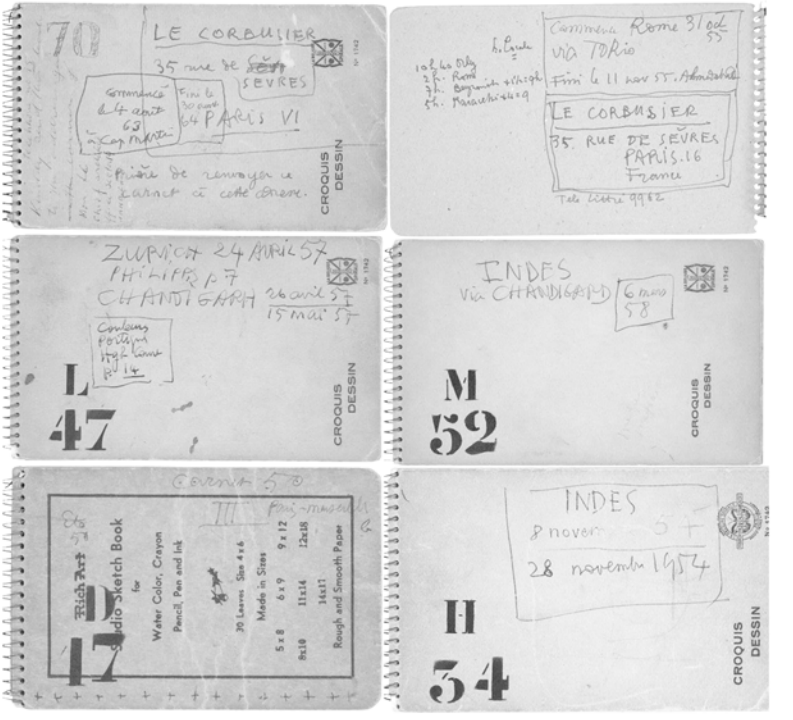
Credit: Fondation Le Corbusier, Paris

Figure 1.4. Le Corbusier, sketch of Dome in Florence, 1911.



Credits: Fondation Le Corbusier, Paris, FLC 2492

Figure 1.5. Carnets de Le Corbusier.



Credits: Fondation Le Corbusier, Paris

1.1 Le Corbusier's conception of patient search: Drawing as pushing inside

Le Corbusier's conception of "patient search" ("recherche patiente"), in *Creation is a Patient Search*, is based on the idea that ideas are placed "in the interior of memory"[9], waiting until their form is concretized. He conceived representation as described in the following metaphoric formulation regarding architecture's poetics: "one draws in order to push inside, in one's own history, the things seen"[10]. This conception of the connection between perception, memory and representation brings to mind Henri Bergson's approach. Bergson, in *An Essay on the Immediate Data of Consciousness*, argues that "art is about in-

scribing feelings in us rather than expressing them". He distinguished different "phases in the progress of an aesthetic feeling"[11] and different degrees of intensity and elevation of the aesthetic emotion[12]. Le Corbusier's sketches can be found in three kinds of sources: his "Cahiers de croquis", the "Albums Nivola" and his "Cahiers de dessins". The way he conceived the process of accumulation of manual and intellectual activities is expressed insightfully in "Albums Nivola":

> I live in an archipelago. My sea is thirty years of accumulation, variously related to intellectual and manual activities. On the ground, here and there, are groups of objects, gear, books, texts, drawings, such are my islands![13]

The metaphors Le Corbusier uses in the aforementioned passage, describing himself as an archipelago and his creations as islands, are indicative of how he conceived the relationship between the manual and intellectual procedures, and the interaction between the different forms of expression. Le Corbusier was particularly interested in the inscription of the products of human activity in consciousness. He paid special attention to the role that time plays in this process of inscription. Bergson's understanding of art's process of its relation to aesthetic emotion is very close to Le Corbusier's concept of "patient search" ("recherche patiente"). In *Creation is a Patient Search*, Le Corbusier refers to the process of learning "to see things come to life"[14], placing particular emphasis on the metamorphosis during the design process. He wrote: "We learn to see things come to life. We see them develop, undergo metamorphosis, flower, flourish, die, etc."[15] The way Le Corbusier described the relationship between the process of drawing and the process of inscribing images in memory shows how vital the act of drawing was for him. This becomes particularly evident in his following words: "Once things come in through the pencil work, they stay in for life; they are written, they are inscribed"[16].

Le Corbusier understood the act of drawing as an act of conquest. He believed that "[w]hen one travels and works with visual things—architecture, painting or sculpture—one uses mind's eyes and draws, so as to fix down in one's experience what is seen"[17]. He also claimed that when one draws by hand, the tracing of their lines functions as an active participant, helping them to connect their mental images to their materialization in a more immediate way. According to Le Corbusier, the architect's own line functions as the means of inventing links between mental images and their formal expression. David Rosand, commenting on the use of the draughtsman's own line, notes that the

"line […] is an active participant in the act of drawing and asserts its own creative independence"[18]. As Elga Freiberga notes, in "Memory and Creativity of Ontopoiesis", "Bergson never strictly detaches perception from imagination, nor perception from memory"[19]. In Bergson's thought, "[p]erception of images is also imagination of images just like memory is "imaginative" because it is coordination of imagination and memory"[20].

In *Matter and Memory*, Bergson underscores that "to picture is not to remember"[21]. He is interested in how memory inserts into perception. For Bergson, the difference between perception and memory is of intensity but not of nature. This remark is useful for examining Le Corbusier's conception of the relationship between perception and memory, in *Creation as Patient Research*[22]. For Bergson, there is no distinction between "matter-images", "perception-images" and "memory-images". His attempt to define both consciousness and the material world as "images" is related to his intention to deal with the subject/object opposition[23]. Le Corbusier argued that "drawing is a language, a science, a means of expression, a means of transmitting thought"[24]. He believed that "drawing makes it possible to fully transmit the thought without any written or verbal explanations"[25] understanding drawing as the "[i]mpartial witness and engine of the works of the creator"[26]. Le Corbusier conceived drawing as the most efficient way of transmitting one's thought. His understanding of the creative process as a "patient search" ("recherche patiente") was based on the idea of a process of concretization through the conservation in the interior memory and a patient and progressive development.

The passion of Le Corbusier for manual labor and his "enduring fascination with the hand"[27] are important parameters for understanding his design process. To describe the process of hand drawing, he mentioned that, through drawing, we enter the place of an unknown and we have a valid exchange with plenty of consequences, which is symptomatic of the role he attributed to the act of drawing within the procedure of capturing and concretizing his ideas. For Le Corbusier, drawing embodied the acts of observing, discovering, inventing and creating. In "L'Esprit Nouveau en Architecture", Le Corbusier refers to the notion of gesture[28], relating it to Paul Valéry's analysis of the first gesture, in *Eupalinos ou L'architecte*[29], which was included in Le Corbusier's personal library. Le Corbusier, departing from Valéry's interpretation of the first gesture in architectural composition, tried to explain what it meant for him. The text "L'Esprit Nouveau en Architecture" was presented at a conference that he gave on 12 June 1924 at the Sorbonne in Paris and on 10 November 1924 at the Ordre de l'Étoile d'Orient. He insisted on the fact that in the first gesture, a will is

embodied. He notes: "For me, who is not a philosopher, who is simply an active being, it seems […] that this first gesture cannot be vague, that at the very birth, at the moment when the eyes open to the light, immediately arises a will"[30]. Le Corbusier paid special attention to the notion of gesture until late in his life, as can be seen in the manuscript of *L'atelier de la recherche patiente*, where he employed the metaphor of the "gesture of the acrobat"[31]. Le Corbusier's interest in the initiative gesture of the design process could be related to Mies's attraction to form as a starting point and not as a result. In the second issue of *G: Material zur elementaren Gestaltung* (*G: Material for Elementary Construction*)[32], published in September 1923, Mies remarks, in "Bauen":

> We refuse to recognize problems of form but only problems of building
> Form is not the aim of our work, but only the result.
> Form, by itself, does not exist.
> Form as an aim is formalism, and that we reject…
> Essentially our task is to free the practice of building from the control of aesthetic speculators and restore it to what it should exclusively be: Building.[33]

In the aforementioned passage, Mies van der Rohe underscores that "[f]orm is not the aim of our work, but only the result". For Mies van der Rohe, the most significant phase of the design process was the "starting point of the form-giving process"[34]. Le Corbusier commented on the importance of spontaneous means in June 1951, two months after the 8th CIAM held in Hoddesdon. In an article he wrote for Madame Chastanet, he underscored the importance of the "spontaneous means" and its connection to the "right time". He also drew a distinction between the act of emerging ("surgir") and the act of counting ("comptabiliser"). More specifically, he stated: "SPONTANEOUS means to emerge and not to count". The fact that he insisted on the importance of inventing the means that correspond best to the time of acting could be related to his conception of architectural practice as a gesture. If we translate the verb "surgir" in English, the connotation of immediacy is lost. Le Corbusier associated the act of "surgir" with an understanding of knowledge as material inscribed in consciousness. Such a conception of knowledge could be related to a Bergsonian conception of memory and inscription in consciousness. Le Corbusier related the spontaneous act to the depth of knowledge and was interested in the connection of knowledge to consciousness. In 1951, Le Corbusier in a text authored for the eighth CIAM defined consciousness as "a

tremendous concentration of events experienced and recorded in the depths of being"[35].

Le Corbusier's understanding of the concept of gesture could be understood in two ways: on the one hand, his reflection on the initiative gesture of the design procedure, and, on the other hand, his concern about the gestures of the inhabitants of his buildings. According to Vilém Flusser, "[t]he concept of the tool can be defined to include everything that moves in gestures and thus expresses a freedom"[36]. This remark of Flusser could be useful in order to interpret Le Corbusier's choice to use the expression "Une maison-outil" ("A house-tool") as the title of a chapter in Almanach d'architecture moderne[37]. Flusser argues, in *Gesten: Versuch einer Phiinomenologie*, that "[t]here is no thinking that would not be articulated by a gesture. Thinking before articulation is only virtual, in other words nothing. It realizes itself through the gesture. Strictly s peaking one cannot think before making gestures"[38]. Le Corbusier argued, in "Où en est l'architecture ?", which was included L'architecture vivante, that every gesture is affected by varying degrees of potentials related to art. More specifically, he claimed that every gesture is affected by an art potential[39]. Le Corbusier also sustained that the house is attached to the gestures of its inhabitants. In "Où en est l'architecture ?", he underscored that "it does not exist any gesture that is not affected to varying degrees of an art potential"[40].

1.2 The notion of transmissibility in Le Corbusier's thought

"Viewer", "spectator", "observer" and "perceiver" constitute different terms that could be employed—each one with its own connotations—to refer to the subject that observes, interprets and decodes architectural drawings[41]. Amédée Ozenfant—the co-director of *L'Esprit Nouveau* along with Le Corbusier—in a text entitled "Sur les écoles cubistes et post-cubistes", originally published in 1926, analyzes the transformation that the inventions of the Cubists and post-Cubists provoked regarding the attitude of the spectators. Ozenfant maintained that the exigency of a sensitivity that is related to vision was one of the new demands of the Cubists and post-Cubists: "the painting of the above schools requires of its spectator the culture of optical sensitivity". The culture of visual sensitivity was predominant in Le Corbusier's intellectual strategies as well. In the same text, Ozenfant notes: "one must avoid looking for what the painting 'represents', since it represents nothing"[42]. A question

that emerges reading this statement of Ozenfant is whether this endorsement of non-representative art is also reflected in Le Corbusier's approach.

Amédée Ozenfant, in the aforementioned article, refers to a "notion of beauty without sign"[43]. According to him, the artist, in order to succeed in reinventing the relationship of the work of art with its spectators, should have the capability to "'measure' the intensity of their excitations in front of the spectacles of art"[44]. In other words, Ozenfant believed in the capacity of works of art to provoke "an eminently intensive state for all"[45]. The notion of transmissibility is at the heart of the philosophy of Purism. An interesting definition of Purism can be found in *The Isms of Art, 1914–1924* (*Kunstismus, 1914–1924*), published by El Lissitzky and Hans Arp in 1925: "The picture is a machine for the transmission of sentiments. Science offers us a kind of physiological language that enables us to produce precise physiological sensations in the spectator"[46]. In 1938, Le Corbusier wrote, in Œuvre plastique. Peintures et Dessins Architecture: "The work of art is" a game "whose author—the painter—has created the rule of his game and the rule must be able to appear to those who seek to play"[47]. We could claim that this remark of Le Corbusier regarding the painter as an author of rules to be perceived by the viewer is also valuable for architectural drawings.

The fact that transmissibility was a central issue for Le Corbusier's architectural approach is apparent from what he wrote, in *New World of Space*, published in 1948, addressed to architects: "You are 'social beings' rather than artists—you are leaders, followed by millions of individuals who are ready to follow you if you seize the exact moment when 'illumination' exists between you and them"[48]. Reading these words of Le Corbusier, one understands that his vision about architecture was characterized by an insistence on the importance of the social role of the architect. The task of the architect, for Le Corbusier, consisted in convincing, in an efficient way, depending on the conquest of the exact moment of illumination, users to endorse the experience of the space conceived by the architect.

In *New World of Space*, Le Corbusier refers to a "transition from an age of subjection to an age of creation"[49]. Two questions that emerge concern (a) when the aforementioned shift took place, and (b) its impact on Le Corbusier's architectural expression. The reinvention of the way one views space is related to the transformation of how one experiences space. According to Carl Einstein, to "transform space […] one must throw into question the view itself"[50]. Einstein's text entitled "Cubic Intuition of Space" ("Kubische Raumanschauung"),

included in Negerplastik[51], is of pivotal importance for understanding the reinvention of how one views space.

1.3 Around the capacity of architectural forms to provoke sensations

Le Corbusier in "L'Esprit Nouveau en Architecture", published in 1925 in *Almanach d'Architecture Moderne*, included four photographs of the Maison La Roche-Jeanneret[52]. These photographs are useful for understanding how he related the quality of architectural forms to their capacity to provoke sensations. It would be thought-provoking to relate Le Corbusier's conception of the relationship between forms and the provocation of intense emotions to Henri Bergson's approach. More specifically, Le Corbusier's understanding of how architecture can provoke intense emotions brings to mind Bergson's endeavor to relate "aesthetic emotions" to "degrees of intensity" and "degrees of elevation". Bergson, in *Time and Free Will: An Essay on the Immediate Data of Consciousness*, examines "aesthetic emotions", placing particular emphasis on the fact that they are characterized by different "degrees of intensity" and different "degrees of elevation"[53]. Bergson also argues, in the aforementioned book, that "the merit of a work of art is not measured so much by the power with which the suggested feeling takes hold of us as by the richness of this feeling itself"[54]. It would be insightful to relate this thesis of Bergson to Le Corbusier's interest relating architectural components to their capacity to provoke intense emotions.

Bergson, trying to relate the way a work of art is perceived and the intensity of emotions it provokes, remarked that "besides degrees of intensity we instinctively distinguish degrees of depth or elevation". He claimed that "the feelings and thoughts which the artist suggests to us express and sum up a more or less considerable part of his history"[55]. Departing from the aforementioned claim of Bergson, we could hypothesize that Le Corbusier shared the conviction that the feelings and thoughts expressed through the creation of an architectural artefact transmit to the inhabitant a part of the architect's own history. According to Bergson, the sensations provoked due to the encounter with a work of art push the spectators to "re-live the life of the subject who [created the work of art in order to] [...] grasp it in its original complexity"[56].

Le Corbusier intended to provoke in the perception of the viewers and inhabitants of his architectural artefacts the curiosity search to live their life in its

complexity. Bergson believed that artists intend to give the spectators or their artworks "a share in this emotion, so rich, so personal, so novel, and at enabling us to experience what he cannot make us understand"[57]. We could relate this point of view of Bergson regarding the capacity of art to transmit the content of the creator's emotions, which cannot be grasped otherwise, to the spectators, to the notion of the "ineffable space" ("espace indicible") in Le Corbusier's thought, which is analyzed in the next chapter of the book entitled "Le Corbusier's space beyond words: From assemblages of components to succession of events".

1.4 Le Corbusier vis-à-vis the postwar Italian Neo-Humanistic discourse: The debates around proportions

The fact that Le Corbusier abandoned the Congrès Internationaux d'Architecture Moderne (CIAM) in 1955 should be interpreted in relation to the development of post-war Italian humanistic discourse. During the 1950s, he participated as a keynote lecturer at the CIAM summer schools, which ran from 1949 to 1956. Le Corbusier gave a lecture at the CIAM summer school held at the Università Iuav di Venezia in 1953 (Figure 8), while he refused the invitation to give a lecture at the CIAM summer school in Venice in 1957[22]. During the same period, Le Corbusier was involved in the design of the hospital in Venice that remained unrealized. An aspect that is of great importance for understanding the impact of the post-war Italian humanistic context on Le Corbusier's thought is his participation in the "First International Conference on Proportion in the Arts" ("II primo Convegno Internazionale sulle proporzioni nelle arti") in the framework of the ninth Triennale di Milano between 26 and 29 September 1951[58]. Le Corbusier, in the talk he gave on 28 September 1951, presented his theory around the *Modulor*[59]. Rudolf Wittkower was a plenary speaker in this conference, and Sigfried Giedion, Matila Ghyka, Pier Luigi Nervi, Andreas Speiser and Bruno Zevi were among the participants. Giulio Carlo Argan refused the invitation. Zevi delivered a lecture entitled "La quatrième dimension et les problèmes de la proportion"[60], while Ghyka's talk was devoted to "Symétrie pentagonale et Section Dorée dans la Morphologie des organismes vivants"[61]. Zevi sent a letter to Le Corbusier on 7 August 1952, reminding him that they had met in the framework of this conference[62].

Regarding the "First International Conference on Proportion in the Arts", Fulvio Irace and Anna Chiara Cimoli remark: "In 1951 the conference De Divina

Proportione was proposed as an ecumenical council of men of arts and sciences, convened to determine the rules of the spirit that were to govern the new areas of the reconstruction of democracy"[63]. As Simon Richards notes, Le Corbusier's *Modulor* "is primarily an epistemological mechanism, and only incidentally a formal one"[64]. The presentation of the *Modulor* by Le Corbusier at this conference was not its first public presentation given that Le Corbusier had already presented it in New York, on 25 April 1947, during his participation in the committee that was responsible for the design of the United Nations complex.

Philip Johnson invited Le Corbusier to contribute to a symposium entitled "De Divina Proportione" that would be held on 11 March 1952 at the Museum of Modern Art (MoMA) in New York. The speakers that contributed to the discussion around the theories of proportion in art held at the MoMA and led by Josep Lluís Sert were the architects George Howe, Eero Saarinen and Enrico Peressutti and the art professor Dr. W.V. Dinsnoor. In the introduction of the symposium, Howe mentioned that "whether systematic or instinctive, good proportion still remains order made visible"[65]. He also referred to Matila Ghyka's *Esthétique des proportions dans la nature et dans les arts* (*Aesthetics of Proportion in Nature and in the Arts*)[66]. Philip Johnson had invited Le Corbusier to participate as one can read in their correspondence[67]. Le Corbusier wrote to Johnson that he would participate in the symposium only if his expenses of travel and accommodation were paid. In the end, he did not participate, but he asked for the proceedings[68]. In the letter he addressed to Johnson in June 1952, he asked for the proceedings as president of the "International Committee for the Study and the Application of the Proportions in Contemporary Arts and Industry" ("Comité internationale pour l'étude et l'application des proportions dans les arts et l'industrie contemporaine"/"Comitato internazionale di studio sulle proporzioni nelle arti").

The debate around the concept of proportions was at the center of the epistemological debates in architecture during the post-war era. To better grasp how central the debates around proportions were during the post-war period, we can bring to mind Colin Rowe's "The Mathematics of the Ideal Villa", published in 1947[69], Le Corbusier's *The Modulor*, published in 1950[70], and Rudolf Wittkower's *Architectural Principles in the Age of Humanism*, published in 1949[71]. According to Francesco Passanti, Le Corbusier's *The Modulor* "encourages a Platonic understanding of architectural proportions, both because it posits a direct correspondence between the human body and the golden section and because its date of publication suggests comparison with the Platonic argument

of Rudolf Wittkower's *Architectural Principles in the Age of Humanism*"[72]. In 1955, Reyner Banham described *The Modulor* as a "blend of residual platonism, actuarial statistics, and plain wishful-thinking."[73]

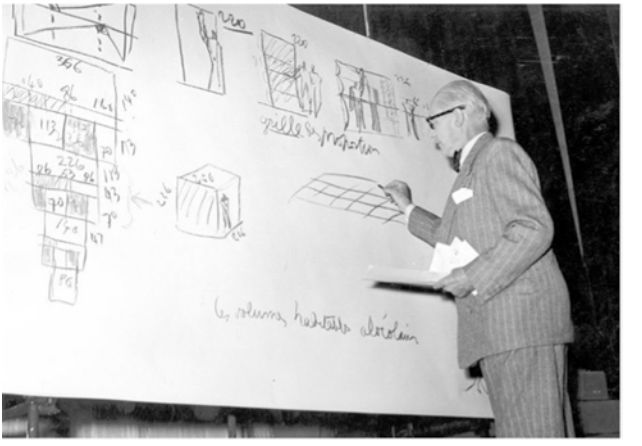
1.5 Human scale and universal needs: Towards a universal user or the *Modulor*

The interest of Le Corbusier in human scale is related to the place that body and physiology had in his thought. The complementarity of spirit and body was defining for him, as it becomes evident from what he sustains in *The Modulor*: "Architecture must be a thing of the body, a thing of substance as well as of the spirit and of the brain"[74]. A remark of Nietzsche that could help us better understand Le Corbusier's concern about human proportions is the claim that "aesthetics is nothing else than applied physiology"[75]. Le Corbusier mentions, in *The Modulor*, that "the desire, the urge, the need to build to the human scale"[76] emerged between 1925 and 1933, when his interest in measurements and requirements for the human body ("resting, sitting, walking") began[77]. He associated the dependence of his design processes on human proportions to the idea that there are human needs that are universal and do not differ from one culture to the other. Heraclitus' thesis that "Man is the measure of all truth"[78] seems to be close to Le Corbusier's understanding of the relationship between human proportions and truth.

Le Corbusier's interest in human proportions is not related to the reduction of architecture to the practicality of satisfying human needs. He believed that architecture is much more than the simple service of human need. This becomes evident from what he notes in *Towards a New Architecture*: "Architecture has another meaning and other ends to pursue than showing construction and responding to needs (and by "needs" I mean utility, comfort and practical arrangement)"[79]. The ambiguity between the insistence on the importance of functionality and the overcoming of the functional aspects of architecture is a non-resolved tension in Le Corbusier's thought. As Stanislaus von Moos mentions, Le Corbusier's stance is characterized by a "contradiction between the architect's constant reference to the machine and his polemical refusal of mere functionalism and utilitarianism"[80]. In *L'art décoratif d'aujourd'hui*, which was originally published in 1925, Le Corbusier writes:

to search for the human scale, for human function, is to define human needs. They are not very numerous; they are very similar for all mankind, since man has been made out of the same mould from the earliest times known to us… the whole machine is there, the structure, the nervous system, the arterial system, and this applies to every single one of us exactly and without exception.[81]

Figure 1.6. Le Corbusier presenting the Modulor at the 1951 Triennale di Milano at the "First International Conference on Proportion in the Arts".



Credits: Fondation Le Corbusier, Paris

Le Corbusier notes in the letter he addresses to Lebhart on 5 June 1950 that the *Modulor* "was invented in 1942 and was developed for eight years"[82]. According to Jean-Louis Cohen, Le Corbusier's *Modulor* was codified in 1945. As Cohen notes, "the term Modulor was composed by the fusion of the notion of module with the notion of the golden section"[83]. In the fourth volume of Le Corbusier's *Œuvre Complete*, one can read: "It was in 1945 that Le Corbusier finally closed the researches on proportion that he had conducted for twenty years, and which had won for him, ten years previously, the degree of Dr. h.c. in philosophy and mathematics of the University of Zürich"[84]. Le Corbusier expressed, for the first time, his interest in a system of proportion in 1910, during his stay in

Germany[85]. The connection of Le Corbusier's *Modulor* with Matila C. Ghyka's thought is important for understanding Le Corbusier's *Modulor*[86]. Ghyka's *Le nombre d'or: Tome 1er les rythmes* is part of Le Corbusier's personal library, and he highlighted many of its passages[87]. A letter from Paul Valéry preceded the edition of Ghyka's *Le nombre d'or*, which we can find in Le Corbusier's personal library. Later, Le Corbusier presented the Modulor at the 1951 Triennale di Milano in the framework of the "First International Conference on Proportion in the Arts" (Figure 1.6).

Rudolf Arnheim, commenting on Le Corbusier's *Modulor* (Figure 1.7, Figure 1.8), notes that Le Corbusier had chosen to use "(t)he traditional doctrine of proportion [and] related architectural shape to man because his body was an example of perfection, not because he was to live in the building."[88] Arnheim, thus, dissociates Le Corbusier's instrumentalization of human proportions from any preoccupation for the way spaces are inhabited. He also interpreted the utilization of human proportions by Le Corbusier as a way to "overcome the uncertainty of intuitive judgment"[89] and as an antidote against arbitrariness. This becomes evident when he declares it "suited the demand for scientific exactness that arose in the Renaissance [...] It helped to make art respectable by demonstrating that the shape of its products was not arbitrary"[90]. The same year, Reyner Banham describes Le Corbusier's *Modulor* as a "biography of a quest for humane and objective standards, adapted to the present state of mechanized society"[91]. Following Richard Padovan, one could claim that "Le Corbusier's practice, at least until he began to employ the *modulor* in his postwar work, seems to accord with [Oskar] Schlemmer's recommendation that systematic proportions should only 'function as a regulative, first simply to confirm what instinct has created and then, proceeding from this confirmation, to establish new rules'"[92].

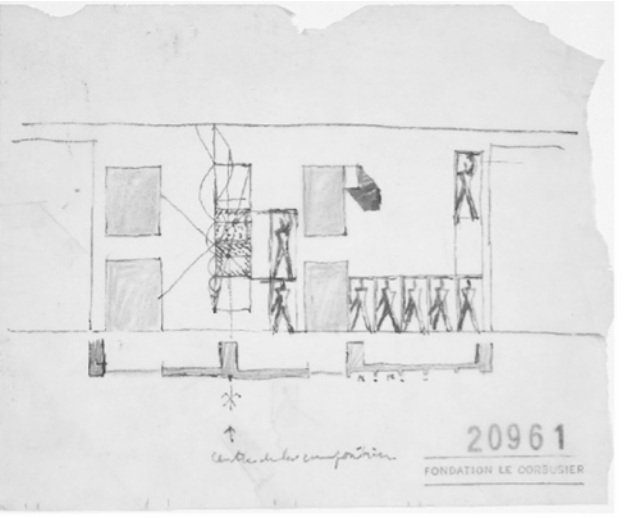
As Alain Pottage notes, in "Architectural Authorship: The Normative Ambitions of Le Corbusier's Modulor", "[t]he measures of the Modulor were held to be objective because they were discovered, not invented". To better comprehend Le Corbusier's conception of human needs, it is important to examine how he conceived the relationship between norms and architecture[93]. Pottage has analyzed the normative ambitions of Le Corbusier's *Modulor*, underscoring that "Le Corbusier saw Renaissance perspective and proportion as the basis of an architecture of abstract, undisciplined subjectivity". He associated the use of perspective and proportions by Le Corbusier with the establishment of strategies aiming to legitimize an "abstract" conception of the inhabitant. Pottage notes: "Le Corbusier saw Renaissance perspective and proportion as the

basis of an architecture of abstract, undisciplined subjectivity"[94]. This interpretation of the *Modulor* as a mechanism of legitimization of "abstract, undisciplined subjectivity" could be related to Rudolf Arnmheim's claim that Le Corbusier's instrumentalization of human proportions should not be related to his understanding of the practices of inhabitation. Understanding the subject corresponding to the *Modulor* as abstractness, as suggested by Pottage, goes hand in hand with understanding it independently from the inhabiting subject, as Arnheim argues[95].

Figure 1.7. Le Corbusier, Modulor.

Credits: Fondation Le Corbusier, Paris, FLC 20944

Figure 1.8. Le Corbusier, Modulor.



Credits: Fondation Le Corbusier, Paris, FLC 20961

1.6 Towards a conclusion: Architecture beyond the machine

Le Concluded concluded "Où en est l'architecture?" with the following questions: "Where is architecture? It is beyond the machine"[96]. Le Corbusier believed that the components that constitute the house have an effect on the experience of the inhabitants that goes beyond function. To explain this effect, he referred to the following metaphor of the objects that speak to the user as a companion, reflecting their aspirations:

> Let me recall to your mind that man of ours seated at his table: he has just got up and walked through his rooms. He listens to the language spoken by the objects around him, his companions, the witnesses to his aspirations. Arranged in his home like a beautiful thought, they speak to him as he moves about. The furniture, the walls, the openings to the outside, this cosy den of his where minutes, hours, days and years of a lifetime unfold, all speak to him.[97]

For Le Corbusier, architecture was beyond the machine. Alan Colquhoun placed particular emphasis on the humanisation of the machine in Le Corbusier's thought, arguing that "[a]ccording to Le Corbusier machinery has to be raised to a conscious level – in fact, to become architecture – before it can truly serve and represent man; it has to be humanised and filled with philosophy and art, which are the truly human realms"[98]. In 1921, the same year that "Le purisme" was published in *L'Esprit nouveau*[99], Le Corbusier used the expression 'machine à habiter' to describe the house. He notes, *in Entretien avec les étudiants des écoles d'architecture*:

> When we founded L'Esprit Nouveau [...], I gave to the home its fundamental importance, I called it a "machine for living," thereby demanding from it a complete, flawless answer to a clearly articulated question. This profoundly humanistic program restores man to the central preoccupation of architecture.[100]

In 1925, Le Corbusier used the expression "maison-outil", publishing a text under this title[101]. Le Corbusier himself identifies 1928 as the turning point at which the human Figure became a major theme of his thought. As he notes, in *A New World of Space*, it was in 1928 that "threw open a window on the human figure"[102]. For Le Corbusier, it was very important "to keep contact with living beings"[103]. This necessity to "keep contact with living beings" could be related to his negation to reject the representational for the abstract[104]. The appearance of the expressions 'machine à habiter' and 'maison-outil' in Le Corbusier's conceptual edifice preceded his concern about the human figure. In 1930, two years after the incorporation of the importance of the human Figure in his thought, in "A cell on human scale" ("Une cellule à l'échelle humaine"), published in *Précisions*, Le Corbusier notes: "What I call looking for "a cell on human scale" is to forget any existing house, all existing housing codes, habits or traditions"[105]. Le Corbusier intended to reinvent the conventional codes of inhabitation.

Le Corbusier's understanding of architectural function goes beyond satisfaction of basic activities. Le Corbusier paid much attention to the spirit of calm and mediation and related these two notions to the beauty of the house's space. He distinguished two 'raisons d'être' of the house: on the one hand, the house should be a persevering machine, which aimed to satisfy body's needs in an exact and efficient way, and, on the other hand, the house should serve as the place par excellence for meditation, contributing to mind's calmness. His anthropocentric should be interpreted in relation to the idea that during architectural composition process everything should "come down to man". For

him, "the house is attached to our gestures: it is the shell of the snail. It must be made to our measure."[106]

Le Corbusier's classification of human needs into two categories is pivotal for understanding how he conceived the inhabitation of space and the role of furniture for it. In *L'art décorartif d'aujourd'hui*, the way he describes the role of furniture is revelatory of his anthropocentric understanding of housing design[107]. He classifies human functions into "type-needs" and "type-functions". For Le Corbusier, objects are destined to serve human needs, while furniture is destined to serve human functions. He defines "human-limb objects" as docile servants and works of arts as "beautiful tools", relating the taste that is expressed through the choice of furniture and works of art to the appreciation of qualities, such as proportion and harmony.

Notes

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2 Charitonidou, Le Corbusier's Ineffable Space and Synchronism: From Architecture as Clear Syntax to Architecture as Succession of Events", *Arts*, 11(2) (2022), doi: https://doi.org/10.3390/arts11020048

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7 Le Corbusier, *Creation Is a Patient Search*, trans. James Palmes. Introduction by Maurice Jardot. New York: Praeger, 1960), 37; Le Corbusier, *Precisions on the Present State of Architecture and City Planning. With a New Introduction by Tim Benton, 58 Original Lecture Sketches by Le Corbusier and Explanatory Sketches* (Zurich: Park Books; Paris: Fondation Le Corbusier, 2015).

8 Le Corbusier, *Sketchbooks 2. 1950–1954* (London: Thames & Hudson, 1981), 12; Michael Taussig, *I Swear I Saw This: Drawings in Fieldwork Notebooks, Namely My Own* (Chicago; London: The University of Chicago Press, 2011).

9 Le Corbusier, *Creation Is a Patient Search*; Le Corbusier, *Precisions on the Present State of Architecture and City Planning*; Pérez Gómez, Alberto, Louise Pelletier, *Architectural Representation and the Perspective Hinge* (Cambridge; London: The MIT Press, 1997).

10 Le Corbusier cited in Stanislaus von Moos, *Le Corbusier: Elements of a Synthesis* (Rotterdam: 010 Publishers, 2009), 294.

11 Bergson, *Essai sur les données immédiates de la conscience*; Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness.*

12 Charitonidou, "Le Corbusier's Ineffable Space and Synchronism: From Architecture as Clear Syntax to Architecture as Succession of Events".

13 Le Corbusier, "Albums Nivola". Le Corbusier wrote the "Albums Nivola" during his travels in India between 1952 and 1959. Fondation Le Corbusier, Paris, FLC W1-9-93. Translation by the author.

14 Le Corbusier, *Creation Is a Patient Search*; Le Corbusier, *Precisions on the Present State of Architecture and City Planning*; Le Corbusier, *L'atelier de la recherche patiente*.

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16 Ibid.

17 Le Corbusier, *Precisions on the Present State of Architecture and City Planning*, 37.

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20 Ibid.
21 Henri Bergson, *Matière et mémoire. Essai sur la relation du corps à l'esprit* (Paris : Quadrige/Presses Universitaires de France, 1939) ; Bergson, *Matter and Memory*, trans. Nancy Margaret Paul and W. Scott Palmer (New York: Dover Publications, 2004).
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24 Jean Petit, Le Corbusier, *Suite de Dessins*, (Paris: Forces Vives, Collection Panorama, 1968).
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27 Le Corbusier, *Mise au Point*, trans. Ivan Žaknić (New Haven: Yale University Press, 1997), 10.
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Chapter 2: Le Corbusier's space beyond words
From assemblages of components to succession of events

At the core of this chapter is Le Corbusier's concept of "ineffable space". Le Corbusier related "ineffable space" to mathematics, arguing that both mathematics and the phenomenon of "ineffable space" provoke an effect of "concordance". Le Corbusier also argued that when the establishment of relations is "precise" and "overwhelming", architectural artefacts are capable of "provoking physiological sensations".

In a letter he addressed to his mother in 1948, Le Corbusier commented on his book entitled *The New World of Space*. He remarked that his work related to urbanism, architecture, painting and sculpture is characterized by the appearance of "a new notion of space"[1]. He argued that what characterized his notion of space is the dominance of calmness, limpidity and clarity[2]. He also underlined that these three qualities distinguish his own conception of the notion of space from the notion of space corresponding to Fauvism, Cubism, Surrealism and Expressionism[3]. Le Corbusier's concept of "ineffable space" ("espace indicible"), which was also described by him as "space beyond words", acquired a central place in his conceptual edifice after 1945. The fact that Le Corbusier employed the expression "space beyond words" to describe the phenomenon of "ineffable space" is indicative of his awareness that the effect of space is related to a power beyond words. Le Corbusier developed the concept of "ineffable space" in several texts that were published between 1946 and 1953. The first time he mentioned this concept was an article entitled "L'espace indicible", published in *L'Architecture d'aujourd'hui* in April 1946[4]. The first manuscript of this text was written on 13 September 1945[5], and its original title was "Take possession of space" ("Prendre possession de l'espace"). In this text, Le Corbusier maintained that "taking possession of space is the first gesture of all liv-

ing, of men and animals, plants and clouds, a fundamental manifestation of balance and duration". He also claimed that "[t]he first proof of existence is to occupy space"[6].

Le Corbusier referred to the primacy of the activity of taking possession of space for all living creatures in *The Modulor*, where he argues that a primordial trait of his intellectual activity is related to its capacity to manifest space, writing: "I see—looking back after all these years, that my entire intellectual activity has been directed towards the manifestation of space. I am a man of space, not only mentally but physically…"[7]. Le Corbusier drew a distinction between physicality and mentality. He believed that there is a difference between expressing or manifesting the notion of space in a mental way and expressing or manifesting the notion of space in a physical way. This distinction could be related to the distinction between the real and the fictive dimension of architectural practice.

To better understand what Le Corbusier meant when he used the expression "ineffable space" ("espace indicible"), we should bear in mind that, according to him, a work is able to provoke an effect of "ineffable space" when it has acquired "its maximum intensity, proportion, quality of execution, perfection"[8]. Interestingly, this phenomenon, as Le Corbusier remarked, "does not depend on the dimensions but on the quality of perfection"[9]. Le Corbusier maintained that "[t]he key to aesthetic emotion is a spatial function"[10]. He related the phenomenon of "ineffable space" in architecture to mathematics, arguing that mathematics and the phenomenon of "ineffable space" share their capacity to provoke an effect of "concordance". More specifically, he remarked, in "l'espace indicible": "A phenomenon of concordance occurs, exactly as in mathematics"[11]. It would be thought-provoking to relate this "phenomenon of concordance" to the phenomenon of "synchronism" to which Le Corbusier referred in his text entitled "Une maison-outil", published in *Almanach d'architecture* in 1925[12], that is to say 21 years before he authored "L'espace indicible"[13].

Le Corbusier also used the expression "magnification of space"[14] to describe the phenomenon of "ineffable space". He related "magnification of space" to the inventions of Cubism. Amédée Ozenfant and Le Corbusier placed particular emphasis on the accidental nature of perspective from the second year of publication of the magazine *L'Esprit Nouveau*. In 1921, they noted in the fourth issue of *L'Esprit Nouveau*, in an article entitled "Le purisme": "The ordinary perspective, in its theoretical rigor, gives objects only an accidental aspect: what an eye that has never seen this object, would see if it was placed in the special

visual angle to this perspective, angle always particular, so incomplete"[14]. In the same article, Ozenfant and Le Corbusier underscored the importance of transmissibility and universality for Purism. Le Corbusier and Ozenfant understood depth as a generator of the sensation of space. In the same year as the publication of the article "Le purisme" in *L'Esprit Nouveau*, Ozenfant and Le Corbusier, in a different text entitled "Intégrer", published in *Création*, gave their own definition of perspective: "Perspective means creation of virtual space. Purism admits as a constructive means of the first order the sensation of depth, which generates the sensation of space, without which volume is a useless world"[15]. Reading Ozenfant and Le Corbusier's remark that "the sensation of depth [...] generates the sensation of space" brings to mind the notion of "sense of space" ("Raumgefühl") of August Schmarsow[16].

Le Corbusier's "L'espace indicible" was published the same year as *Propos d'urbanisme*[17]. This invites us to wonder to what extent Le Corbusier's understanding of urban planning changed after the invention of the expression "espace indicible". The shift to which Le Corbusier refers is that from "l'esprit nouveau" to "l'espace indicible"[15]. Le Corbusier's theory of "synthesis of major arts" could help us better understand his concept of "ineffable space". The emergence of the concept of "ineffable space" in Le Corbusier's thought is linked to the post-war context[18]. This becomes evident when he introduces his text on "ineffable space" with the following statement: "This text must be in its proper place. Year 45 counts millions of homeless people straining towards the desperate hope of an immediate transformation of their misery"[19]. Le Corbusier also underscored that this text was "addressed to those whose mission is to achieve a fair and effective occupation of space, the only one able to put in place things of life and consequently to put life in its only true milieu, where harmony reigns"[20]. In the aforementioned excerpt, Le Corbusier related the efficient occupation of space to harmony and believed that the capacity of the architect depended on his sense of space. He believed that "[t]o be is to occupy space"[21].

2.1 The notion of assemblage in Le Corbusier's thought: Architecture as precise relationships

Le Corbusier's conception of architecture as the succession of events is founded on the assumption that the events take place through "the creation of precise relations". Le Corbusier argued that in the cases in which the establishment of relations is "precise" and "overwhelming", architectural artefacts are capable

of "provoking physiological sensations". The notion of relationship ("rapport") is central in Le Corbusier's conceptual edifice. This becomes evident when he mentions that "all events and objects are 'in relation to…'"[22]. Le Corbusier also maintained that an efficient choice and setting up of relations are capable of providing "a real spiritual delectation", which "is felt at reading the solution". For Le Corbusier, the sentiment of satisfaction and enjoyment provoked through the "reading of the solution" by the users is related to the "perception of harmony". More particularly, he was convinced that the users can perceive space as harmonious, with "the clear-cut mathematical quality uniting each element of the work"[23]. Le Corbusier places particular emphasis on "the effect of the relationships"[24] on the perception of the addressees of architecture.

According to Pierre Litzler, Le Corbusier defined architecture as the syntax of relationships[25]. Le Corbusier described architectural composition as "living bond as a word" and perceived architectural composition as assemblage. More specifically, he used the term "soudure", which is closely related to the concept of "assemblage". He believed that "the architectural composition manifests itself" when the "objects constitute an organism carrying a particular, precise intention, different according to the feeling which animated the arrangement, the welding, the living connection as a word"[26]. Regarding Le Corbusier's architectural composition process, Bruno Reichlin remarks, in "Jeanneret/Le Corbusier, Painter-Architect":

It's only the ensemble of spaces, elements and accidents that unveil the rules—the syntax—which structure it; it is only at the level of the ensemble that we read the spatial counterpoint between Domino and partition; counterpoint that explains the relationship between the constructive framework and the free articulation of spaces.[27]

The concept of "intertextuality" could help us better understand the role of assemblage in Le Corbusier's conceptual edifice. The role of assemblage in Le Corbusier's thought refers not only to architectural artefacts, but also to the relationship architectural artefacts have with the broader cultural context, or with other forms of art. Regarding the relation of architecture to aspects beyond architecture, Bruno Reichlin, in "L'œuvre n'est plus faite seulement d'elle-même", refers to the intertextuality in Le Corbusier's work, with particular emphasis on the client as intertext, the intertext of open work, and the other as intertext[28].

2.2 The "maison-outil" as clear syntax: Towards synchronism or the game of indisputable emotions

Le Corbusier, in "Une maison-outil", published in *Almanach d'architecture moderne* in 1925, established as a criterion for considering an architectural artefact good its capacity to provoke emotions. He used the expression "game of indisputable emotions", arguing that "the house [should be] […] made of objects that fulfil our functions". He related the efficiency of objects being part of a housing unit to the capacity of the architect to "synchronize" them. This becomes evident when he underscores that the "objects [that constitute the house] are destined for an efficiency that arises from their synchronism". The criterion for judging whether such "synchronism" takes place is the extent to which "particular sensations" are provoked. Le Corbusier defined "synchronism" as the phenomenon provoked when objects are related in a way that provokes "particular sensations". In parallel, he defined "architectural composition" as the capacity to assemble the objects in an organism in a way that demonstrates a precise intention[29].

In 1925, Le Corbusier, in "Une maison-outil", considered clear syntax "the particular quality of order that has been printed on the grouping of the objects"[30] that constitutes the building. Two years later, in "Où en est l'architecture", he declared that he desired "a poem made of solid words in the definite sense and grouped into a clear syntax"[31]. He drew a distinction between architecture and poem. This comparison is reminiscent of the ancient Greek notion of ποίησις and could be related to the distinction he drew between "the living connection as a spoken word" ("la liaison vivante comme une parole") and the establishment of relationships between objects during the process of architectural composition. Le Corbusier used the expression "parole of architecture"[19] to describe the phenomenon of stimulation due to the embodiment of precise intentions during the process of architectural composition. He compared the syntax of relationships to "the living connection as a spoken word"[32] and referred to the "game of indisputable emotions".

Le Corbusier's insistence on the necessity of the discovery or invention of a "clear syntax" could be related to his remark that "the power of architecture, (the potential of architecture) is integrated into the spirit that sets the order of grouping the elements of the house"[33]. In an article entitled "Esprit de vérité" published in the first issue of *Mouvement*, Le Corbusier defined architecture as the activity of "putting in order, establishing relationships and, by the choice of relationships: intensity"[34]. He argued that the main purpose of architecture

should be intensity and believed that intensity could be achieved only "if the objects considered are precise, exact, acute"[35]. Le Corbusier understood precision, exactitude and acuteness as the preconditions of intense relationships. In a different text with the same title— "L'esprit de vérité"—published in 1927, Le Corbusier argued that architecture should be "a pure system of structure" and considered a "pure system of structure" a system that "satisfies the exigencies of reason"[36] These reflections make us realize how important the relationship between reason and emotion was for Le Corbusier.

2.3 Le Corbusier's relationship with De Stijl: The interest in precision

Useful for comparing Le Corbusier's conception of form-making strategies and those of the De Stijl is Bruno Reichlin's chapter entitled "Le Corbusier vs De Stijl" published in De Stijl et L'architecture en France, where the author underscores that among all the projects of Le Corbusier, the one that has the most affinities with the De Stijl approach is the Villa La Roche-Jeanneret[37]. This hypothesis is further reinforced by the fact that Le Corbusier visited the exhibition "Les architectes du groupe De Stijl", held between 15 October and 15 November 1923 at the Galerie de L'Effort Moderne in Paris[38] (Figure 2.1). His encounter with the compositional architectural strategies of De Stijl played a major role in the transformation of his project for the Villa La Roche-Jeanneret. Le Corbusier, after having visited the aforementioned exhibition, revised his drawings for the Villa La Roche-Jeanneret, taking into account the concept of "counter-composition", which was at the core of De Stijl movement. Le Corbusier privileged the use of perspective representation, despite his predilection for the avant-garde anti-subjectivist tendencies, which disapproved the use of perspective and favored the use of axonometric representation or other modes of representation opposed to the philosophical implications of perspective[39].

Theo van Doesburg's approach was representative of De Stijl's preference for axonometric representation. Likewise, El Lissitzky rejected perspective, as is evidenced by his text "A. and Pangeometry" ("K. und Pangeometrie"), first published in 1925[40]. To better grasp Le Corbusier's modes of representations, we should bear in mind that the ambiguity between individuality and universality is Le Corbusier's "conviction that the means of architectural composition

process should be generalizable and universally understandable and transmissible"[41].

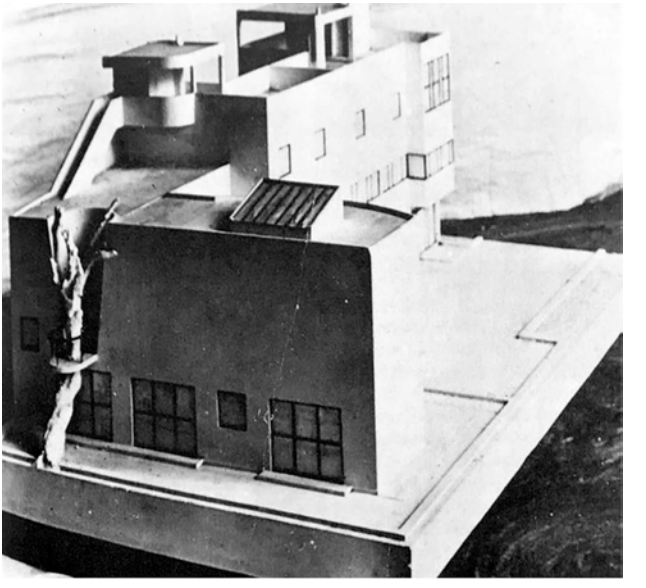
Figure 2.1. Exhibition "Les architectes du groupe De Stijl" held from 15 October to 15 November 1923 at the Galerie de L'Effort Moderne in Paris.

Credits: Het Nieuwe Instituut, Rotterdam

Théo van Doesburg drew a distinction "between composition (placing together) and construction (binding together)"[42]. He argued that neither composition nor construction "can lead to fruitful, monumental artistic production if we do not agree on the elemental means of form-creation"[43]. What was of primordial importance for van Doesburg was the establishment of "elemental means of form-creation"[44]. Théo van Doesburg and Le Corbusier shared their

interest in precision. The former remarked in "Elemental Formation" ("Material zur Elementaren Gestaltung") published in *G*: "the demand of our time: PRECISION"[45]. A large plaster model of the Villa La Roche-Jeanneret was shown at the exhibition in the *Salon d'Automne* in November 1923 (Figure 2.2). One of the major changes that Le Corbusier made in his project for the Villa La Roche-Jeanneret, after having visited the exhibition "Les architectes du groupe De Stijl", was the transformation of the small windows into large ones. Mies van der Rohe participated in this exhibition with a perspective of the Concrete Country House[46].

Figure 2.2. Model of the Maison La Roche-Jeanneret exposed at the "Salon d'Automne" in 1923 in Paris.



Credits: Fondation Le Corbusier, Paris

2.4 Le Corbusier's double attraction to the straight line or the right angle and the spiral: Linking geometry to contemporary spirit

The impact of Paul Valéry's approach on Le Corbusier's understanding of architecture is important for understanding the role of geometry in his thought. Le Corbusier remarked in a lecture he delivered several times in 1924: "I was somewhat surprised by reading a beautiful book by Paul Valéry [...] Valéry puts geometry at the top of the human understanding"[47]. The same year, he argued that "men in everything they do are obliged to go through order"[48]. He also asserted that "man needs geometry"[49]. He interpreted man's admiration for geometry as a means for finding "his standard and to create works whose spirit [...] [is] a favourable spirit"[50]. Le Corbusier believed that works that are created based on geometry are expressions of a favorable spirit. He also maintained that they are capable of provoking "pleasure" ("jouissance"). He related this sensation of "pleasure" to the interpretation of architectural works as products that are able to reflect "the quality of contemporary spirit"[51]. Le Corbusier related geometry to contemporary spirit, understanding geometry as an inherent feature of human action. Contemporary spirit and anthropocentrism were at the core of his conception of geometry. In "Où en est l'architecture?", Le Corbusier interpreted art as "a vital spiritual necessity, which is inseparable of human action"[52]. He also maintained that "art is nothing but an individual manifestation of freedom, of personal choice"[53]. In parallel, he conceived art as "a vital spiritual and motor necessity from human action"[54].

The analysis of the concepts of linearity and zigzag in Le Corbusier's thought is pivotal for understanding the relationship between the determined and the spontaneous gesture in his conception of architecture. Catherine Ingraham, in *Architecture and the Burdens of Linearity*, interprets the line as a conceptual and literal force in architecture[55]. Le Corbusier often expressed his preference for the straight line. In a text written in July 1965 that was included in *Mise au point*, he remarked:

> We must rediscover man. We must rediscover the straight line that joins the axis of fundamental laws: biology, nature the cosmos. A straight line unending like the horizon of the sea.[56]

Until his last days, Le Corbusier related the architects' social role to their capacity to serve as "a datum line in the midst of flux and mobility"[57]. He argued that it is primordial for architects to preserve their capacity to have a clear-sight and

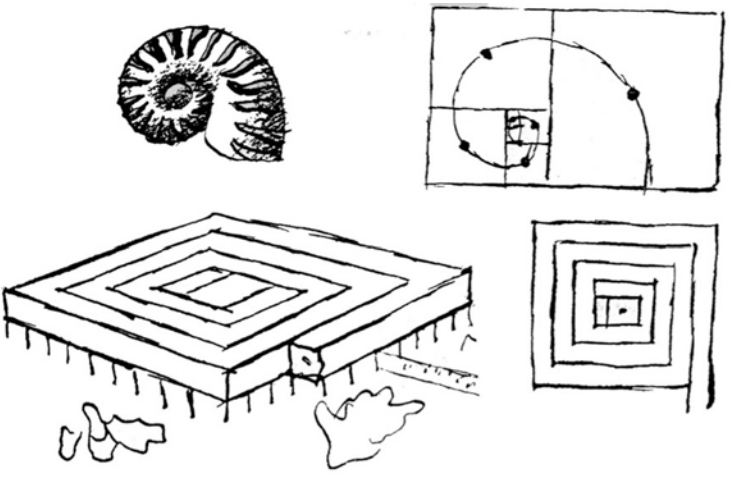
to function as "a measuring instrument"[58]. Le Corbusier maintained that the main quality that is expressed though the act of drawing straight lines is the conquest of control and order. His attraction to the act of drawing straight lines derived from his conviction that men who are capable of drawing straight lines have overcome the state of arbitrariness and have acquired a mental state that makes them capable of acting in a determined way. For Le Corbusier, the value of straight lines was related to his conviction that straight lines can be drawn only "when man is strong enough, determined enough, sufficiently equipped and sufficiently enlightened to desire and to be able to trace straight lines."[59] Apart from the metaphor of straight line, he also admired the metaphor of "orthogonality". Le Corbusier, in *City of Tomorrow and Its Planning*, which was originally published as *Urbanisme* in 1924, argues that the "orthogonal state of mind" best expresses the spirit of the modern age, relating orthogonality to "the height of a civilization". For him, "[c]ulture is an orthogonal state of mind"[60]. Le Corbusier remarks, in the same book:

> Man walks in a straight line because he has a goal and knows where he is going; he has made up his mind to reach some particular place and he goes straight to it. The pack-donkey meanders along, meditates a little in his scatter-brained and distracted fashion, he zigzags in order to avoid the larger stones, or to ease the climb, or to gain a little shade; he takes the line of least resistance…The Pack-Donkey's Way is responsible for the plan of every continental city[61].

Le Corbusier was interested in the distinction between the orthogonal and the oblique. He related the first to the permanent and the latter to the variable. In *La peinture moderne*, Amédée Ozenfant and Le Corbusier: "Whereas the orthogonal is a sensible sign of the permanent, the oblique is that of the unstable and the variable"[62]. They juxtapose the uniqueness of the right with "the infinity of oblique angles"[63], maintaining that "[i]f the orthogonal gives the meaning of the structural law of things, the oblique is only the sign of a momentary moment"[64]. The insistence on spiral movement in the Museum of unlimited growth, which was designed in 1939, shows that Le Corbusier's stance was characterized by an ambiguity[65] (Figure 2.3, Figure 2.4). Jean-Louis Cohen reminds us that Le Corbusier would "implement [in the Museum of Unlimited Extension] in the 1950s in Tokyo, Chandigarh, and Ahmedabad"—with the spiral/ziggurat of the Figure above as the architect's image of "limitlessness," one that would be imitated by Frank Lloyd Wright in his design for the Guggenheim Museum". Cohen also remarks that "these museums hardly represent anything

like Corbusier's unrealised dream of a "true museum, one that contained everything"[66].

Figure 2.3. Le Corbusier, Pierre Jeanneret, sketches for a project for a "museum of unlimited growth" ("Musée à croissance illimitée"), 1931.

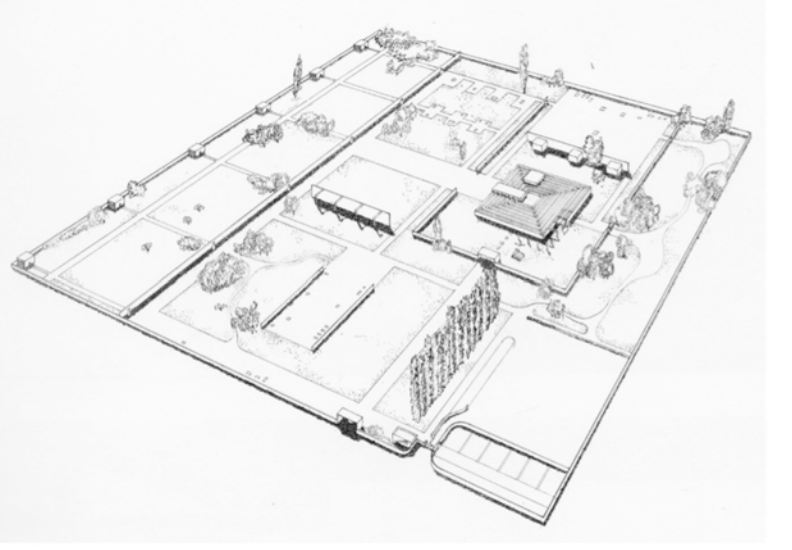


Credits: Fondation Le Corbusier, Paris

Despite the fact that Le Corbusier preferred the straight line, he used the spiral without ignoring its symbolic implications. Nietzsche notes regarding the correspondence between the nature of soul and labyrinth: "If we desired and dared an architecture corresponding to the nature of *our* soul (we are too cowardly for it!) — our model would have to be the labyrinth!"[67] The use of spiral by Le Corbusier could be understood as an echo of a stance similar to that described by Nietzsche above. Another aspect of the labyrinth, which could be enlightening for interpreting the use of spiral by Le Corbusier is its force as "space with no outside"[68]. Le Corbusier remarks, in *Precisions*, that "Art [is the] product of the reason-passion equation […] [and] the site of human happiness"[69]. He also often referred to the orthogonal state of mind, relating the orthogonal state of mind to reason. Following Nietzsche, who claims that "the architecture corresponding to the nature of *our* soul"[70] is the labyrinth, one could relate

the spiral to passion. Le Corbusier's interest in both passion and reason could explain the ambiguity of his double attraction to the straight line or the right angle and the spiral.

Figure 2.4. Le Corbusier, Pierre Jeanneret, Project for a "Museum of Unlimited Growth" ("Musée à croissance illimitée"), general perspective view, 1931.



Credits: Fondation Le Corbusier, Paris

2.5 The notion of circulation in Le Corbusier's work: Eyes to feast on the walls or perspectives beyond walls

Le Corbusier, in *Journey to the East* (*Le voyage d'orient*), defined architecture as interior circulation. He understood spatial experience as a successive process and as taking place in relation to the movement through space[71]. His conception of architecture as "interior circulation" was based on the intention to promote what he called "emotional reasons". He maintained that the perception of space should be revealed to the inhabitants progressively as long as they walk through the spaces of a building. To borrow Le Corbusier's own words, "the var-

ious aspects of the work […] [should be] comprehensible in proportion to the steps which place us here, then take us there"[72]. This kind of sequential perception activates a mode of seeing that is based on Le Corbusier's desire to permit the users' "eyes to feast on the walls or the perspectives beyond them". This intention of pushing "eyes to feast on the walls or the perspectives beyond them"[73] is related to Le Corbusier's ambition to activate an imaginative mode of spatial perception. As he admits, his strategies aimed to activate the sensation of "anticipation or surprise of doors which reveal unexpected space…"[74].

In 1942, Le Corbusier declared that "[a]rchitecture is travelled, is traversed and is not by any means, as in certain teachings, that totally visual illusion organized around a central abstract point pretending to be a man, a chimeric man armed with a fly's eye, whose vision would be simultaneously circular"[75]. The rejection of the "central abstract point pretending to be a man" to which Le Corbusier refers in the aforementioned passage is pivotal for understanding his concept of "promenade architecturale". To what kind of representation and to what kind of architecture this "central abstract point pretending to be a man" would correspond? It is important to respond to the above question if we wish to understand what kind of visual experience Le Corbusier tries to avoid. His remark that "[t]his man does not exist, and it is for that confusion that the classical period provoked the shipwreck of architecture"[76] is useful for answering this question.

The notions of movement and circulation are very central for understanding how Le Corbusier and Mies van der Rohe understood the experience of space by their inhabitants. In the case of Le Corbusier, the concept of 'promenade architecturale' is of great significance for comprehending his conception of movement through space. The concept of "promenade architecturale" can help us examine the strategies used by Le Corbusier in order to impose a specific kind of movement through the spatial arrangements of his buildings. The idea of "promenade architecturale" appears in Le Corbusier's thought during the same period that sequential perception and movement became defining for his work. The first building of Le Corbusier, which is explicitly associated with the concept of "promenade architecturale", is the Villa La Roche-Jeanneret. Le Corbusier, in the first volume of his *Œuvre complète,* presented this project as the origin of "promenade architecturale"[77]. He related the concept of "promenade architecturale" to the fact that "the architectural spectacle unfolds in succession before your eyes", when the inhabitant enters the house, and to the fact that "the perspectives develop with great variety"[78] as the inhabitant follows an itinerary. A question that emerges is how idea of "promenade architecturale"

is put forward through the use of perspective. The emergence of the concept of "promenade architecturale" and its prioritization was accompanied by certain transformations of the way in which Le Corbusier used to fabricate the interior perspective views of his projects.

Le Corbusier insisted on the fact that "[a]rchitecture is experienced as one roams about in it and walks through it"[79]. In 1942, he commented on the concept of "promenade architecturale": "So true is this that architectural works can be divided into dead and living ones depending on whether the law of 'roaming through' has not been observed or whether on the contrary it has been brilliantly obeyed"[80]. The fact that he distinguished architectural works into dead and living ones, adopting as main criterion for their evaluation their capacity to provide spaces that can be "roamed through", should be related to how he drew his interior perspective views, which, in most of the cases, are drawn with a well-defined frame and are not symmetric. They are like sequences or film shots that aim to capture the movement through space, traversing space assemblages. The concept of "promenade architecturale" and the way Le Corbusier drew his interior perspective views should be comprehended in relation to the fact that Le Corbusier, since 1930, had defined architecture as "a series of successive events"[81].

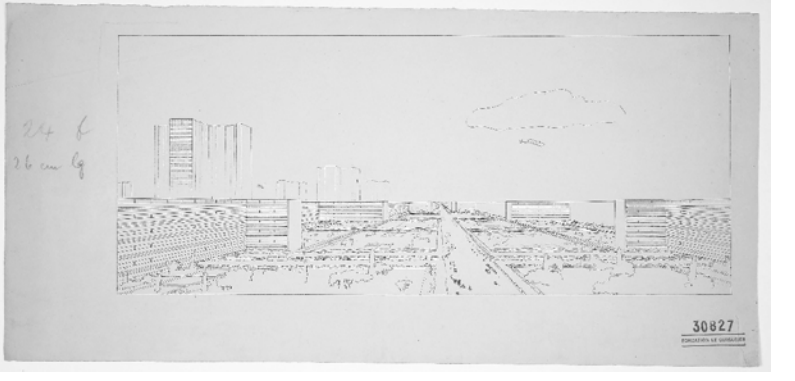
As Bruno Reichlin mentions, in "Jeanneret/Le Corbusier, Painter-Architect", Le Corbusier's "promenade architecturale" activates a perception of architecture that requires the adoption of "a multiplicity of visions from categorically different points of view". This conquest of multiple and distinct points of view pushes the inhabitants who traverse Le Corbusier's spaces to perceive progressively the different aspects of the built forms and their relations[82]. This trick pushes the viewer to try to understand how forms are connected to each other. This strategy is compatible with Le Corbusier's conception of the establishment of relationships as the main factor for transmitting emotions to the spectator. In other words, the sequential unfolding of views though movement activates the process of measuring and comparing forms by the observer of the drawings and the user of the buildings. The "promenade architecturale" pushes the user to produce a synthesis of the different successive views.[83] Another important project for understanding the place of the notions of movement and circulation in Le Corbusier's thought and work is the Centrosoyus building in Moscow, which was designed during the same period as the Villa Savoye, the Villa Baizeau in Carthage, the first urban plans for Algiers and South America and the construction of large-scale buildings such as the Cité de Refuge in Paris.

2.6 Le Corbusier's conception of the metropolis: Tabula rasa urban theory?

Vincent Scully remarked that Le Corbusier's view of urban planning "was destructive of the real urban environment"[84]. Le Corbusier had a *tabula rasa* urban theory, which could be interpreted in relation to his fascination with the new. However, Le Corbusier's urban theory was transformed throughout his life. Manfredo Tafuri analyses Le Corbusier's understanding of the city in "Machine et mémoire: la città nell'opera di Le Corbusier"[85]. The way Le Corbusier treated the housing problem during the 1920s through the repeatable private dwelling shows that he conceived architecture and the city as complementary. His understanding of the modern city was based on the intention to incorporate the articulation of the individual and the collective in his urban theory, as it becomes evident in his following declaration:

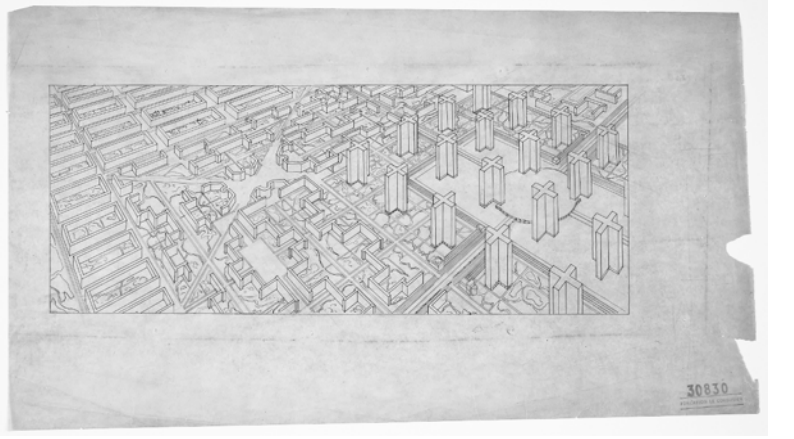
> Urbanism and architecture are the two hands which give order to the natural play between the individual and the group, this complex game whose goal is individual freedom and the abundant radiance of collective power… The clear image of cities – the plan – will be expressed on the ground in an order entirely new.[86]

Figure 2.5. Le Corbusier, ville contemporaine de trois millions d'habitants, perspective view, 1922.



Credits: Fondation Le Corbusier, Paris, FLC 30827

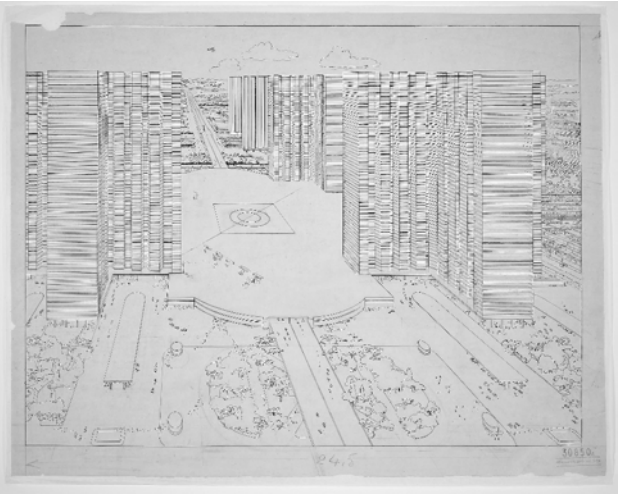
Figure 2.6. Le Corbusier, ville contemporaine de trois millions d'habitants, bird eye view, 1922.



Credits: Fondation Le Corbusier, Paris, FLC 30827

Le Corbusier's interest in the vitality of metropolis becomes apparent since early in his life. For instance, the appeal the mythical and energetic character of Paris has on his approach is very evident in a watercolor that depicts the Pont Neuf, in which the city appears as fantastical and vital. An oxymoron that is very apparent in Le Corbusier's urban theory is the simultaneous admiration for the energy of the city, as it becomes evident in the watercolor "The Seine" mentioned above and his desire to rescue cities from their misery, which is expressed in his following aphoristic declaration: "Cities must be extricated from their misery, come what may. Whole quarters of them must be destroyed and new cities built."[87] In his book entitled *Aircraft*, Le Corbusier wrote: "The city is ruthless to man. Cities are old, decayed, frightened, diseased. They are finished. Pre-machine civilisation is finished."[88] The messianic character of Le Corbusier's aforementioned words is symptomatic of the *tabula rasa* logic of his urban planning proposals for various contemporary cities: Une ville contemporaine pour trois millions d'habitants (1922) (Figure 2.5, Figure 2.6), Le Plan Voisin (1925) (Figure 2.7) and La Ville Radieuse (1930–1933). Mark Pimlott suggests that "[b]y making the horizon line coincide with the top of the skyscrapers, Le Corbusier suggests that they, as representative fragments of the society he wishes to build, are the world"[89].

Figure 2.7. Le Corbusier, Le Plan Voisin, perspective view, 1925.



Credits: Fondation Le Corbusier, Paris, FLC 30850A

Kenneth Frampton, in "Le Corbusier and 'L'esprit Nouveau'", underlines the endeavor of Le Corbusier to incorporate urban implications in his approach. He distinguishes Le Corbusier from Walter Gropius and Mies van der Rohe, arguing that the latter did not try to embrace the urban dimension as much as Le Corbusier. More specifically, he argues: "[u]nlike his German contemporaries-Walter Gropius and Mies van der Rohe-Le Corbusier was always anxious to demonstrate the urban implications of his architecture"[90]. Le Corbusier's remark that "a city made for speed is a city made for success"[91], which was part of the rhetoric that accompanied his 1925 Plan Voisin Proposal for Paris, is representative of his 'accelerationist' view of urban design.

Le Corbusier's "Descartes est-il américain ?" was originally published in the journal *Plans* in 1931[92]. Le Corbusier, in his text entitled "Vers la ville radieuse. Descartes est-il Américain?", relates Manhattan to the "aesthetics of chaos"[93]. In 1938, in *Des Canons, Des Munitions… Merci ! Des Logis, S.V.P*, he declares that "barbarism, chaos, conflicts are below or beyond unity"[94]. In this case, he assimilates barbarism, chaos and conflicts and contrasts them to unity. In other words, for him, barbarism, chaos and conflicts are synonyms and their opposite is unity. Unity, for Le Corbusier, was the antidote to chaos. This becomes

evident in his following words in *Des Canons, Des Munitions… Merci ! Des Logis, S.V.P*: "A day comes when unity flourishes, spreads in all things. Everything is harmonious, smile and serenity"[95]. Despite his rejection of chaos in the aforementioned passage, in the sixth volume of his *Œuvre complète*, he questions whether creative act is an act of unity or one of chaos. In the same instance, relating the notion of unity to the concept of synchronism and the notion of chaos to the concept of incommensurability[96].

The first edition of Le Corbusier's *Charte d'Athènes* was published, in 1943[97], a year after Josep Luis Sert's *Can Our Cities Survive? An ABC of Urban Problems, Their Analysis, Their Solutions*[98]. The simultaneity of these publications is indicative of two opposing stances vis-à-vis the reinvention of how urban reality is understood. The two books, which are based on reflections carried out during the fourth CIAM held in 1933 on the ship "Patris II" in the Mediterranean and in Athens, suggest different conceptions of the user of the city.

2.7 The "Open hand" as an expression of freedom?

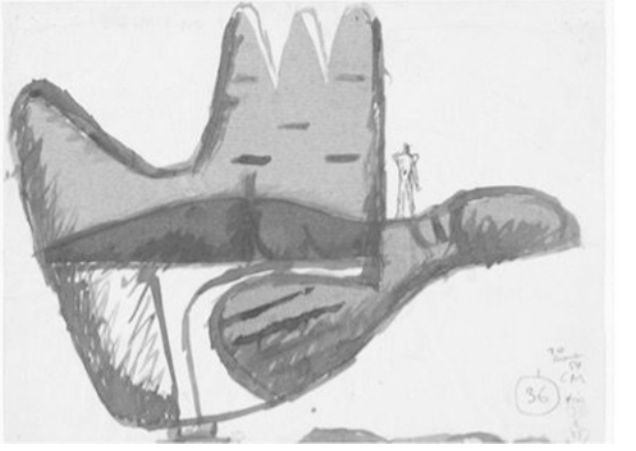
Le Corbusier placed particular emphasis on the notion of freedom. In 1927, in "Où en est l'architecture?", he declares: "I accept a poem only if it is made of 'words in freedom'"[99]. In the same text, Le Corbusier refers to his conception of art as "individual manifestation of freedom"[100]. In *Sur Les Quatres Routes*, originally published in 1941, he refers to the "complex game whose goal is individual freedom"[101]. In the fourth volume of his *Œuvre complète*, originally published in 1946, he poses the question: "Contemporary disaster or complete spatial freedom?"[102]. In a text written in 1965 included in the eighth volume of Le Corbusier's *Œuvre complète*, one can read: "This Open hand, symbol of peace and reconciliation is to be erected in Chandigarh. This emblem which has haunted my thoughts for many years ought to exist to bear witness that harmony is possible among men."[103] (Figure 2.8)

It would be thought-provoking to relate Le Corbusier's interest in freedom to the impact that Albert Camus's view in *L'homme revolté* had on his thought[104]. On 10 October 1952, Le Corbusier sent his "Poème de l'angle droite" letter to Albert Camus[105]. *L'homme revolté* of Albert Camus was published in 1951, two years after *La part maudite* of Georges Bataille[106]. Both books were sent to Le Corbusier by their authors. In the dedication of Camus in *La Chute*[107], we can read: "à Le Corbusier, maître de l'angle droit, cette spiral, amicalement A. C."[108] Le Corbusier had in his personal library the following books of Albert Camus:

L'exil et le royaume[109], *L'homme revolté, La Chute,* and *La Peste*[110]. Among them *L'exil et le royaume* and *La Chute* include dedications by the author.

Le Corbusier highlighted many passages in *L'homme revolté* and as it becomes evident in his annotations in the book he was fascinated by its reading. As we can see in the notes he took on 13 November 1952 in his hard copy of Camus's *L'homme revolté,* conserved at the Fondation Le Corbusier in Paris, Le Corbusier was particularly interested in the chapter devoted to the absolute affirmation. More specifically, he highlighted a passage that analyses the relationship of Nietzsche's theory with the thought of the Presocratics. He also highlighted the following passage, which can help us grasp the idea that was behind his concept of the "Open Hand": "No judgment accounts for the world, but art can teach us to repeat it, as the world repeats itself throughout the eternal returns"[111].

Figure 2.8. 'La Main Ouverte', 1954: The Open Hand monument in Chandigarh defined as 'Open to Give, Open to Receive'. Not all of the city's architecture carries that spirit, or maybe the fault is in its interpretation.



Credits: Fondation Le Corbusier, Paris

Manfredo Tafuri drew on Georges Bataille's work to interpret Le Corbusier's late work[112]. Le Corbusier met Bataille through the journal *L'Esprit Nouveau,* and later through the journal *Minotaure,* founded by the latter and André Masson in 1933, where Le Corbusier published "Louis Soutter, L'inconnue de la soixantaine"[113] in 1936. In 1949, Bataille published *La part maudite*[114], which is an inquiry into the very nature of civilisation. Bataille's approach, in this book, focuses on the concept of excess. For him, a civilisation reveals its order most clearly in the treatment of its surplus. This concept of the surplus in Bataille's thought could be related to Le Corbusier's concept of "The Open Hand". Bataille, in *The Accursed Share,* refers to "The Marshall Plan"[115]. Nadir Lahiji, in "The Gift of the Open Hand: Le Corbusier Reading Georges Bataille's 'La Part Maudite'", remarks that "[o]n the last page of this copy, Le Corbusier wrote "19 Nov. 1953," which indicates the date he finished reading the book."[116] A question that arises is the extent to which Le Corbusier's reading of Bataille's *The Accursed Share* is related to Le Corbusier's concept of "The Open Hand". More specifically, what I argue here is that Le Corbusier's concept of the "The Open Hand" could be related to the following passage of *La part maudite* highlighted in his own copy:

> In this perspective of man liberated through action, having effected a perfect adequation of himself to things, man would have them behind him, as it were; they would no longer enslave him. A new chapter would begin, where man would finally be free to return to his own intimate truth, to freely dispose of the being that he will be, that he is not now because he is servile.[117]

Le Corbusier interpreted "The Open Hand" as his only political gesture. This becomes apparent in what he wrote in a letter addressed to Eugène Claudius-Petit on 14 September 1962:

> I have never been in politics-while respecting those who are in it – the good ones. I've had a political gesture, that of the Open Hand, the day one of the two parties that divide the world for the sake of two different natures forced me to take side, following a moral obligation[118].

As Jean-Louis Cohen has suggested, in his talk entitled "The Art of Zigzag: Le Corbusier's Politics", "Le Corbusier had been able to manipulate in an extremely clever way the meaning of "The Open Hand"". Cohen claims that "[i]nitially, the hand was clearly the hand the communists handed out to the Catholic and this was clear to everybody in French politics. By rotating and

giving it two faces, a sort of strange hand, which has a front and maybe another front on the other side"[119]. This gesture of neutralizing the communist connotations "The Open Hand" permitted Le Corbusier to introduce it in the context of post-war humanistic discourse. Le Corbusier's Open hand could be interpreted as a gesture aiming to express his views concerning freedom and architecture as liberating action.

2.8 Towards a conclusion: From assemblages of components to succession of events

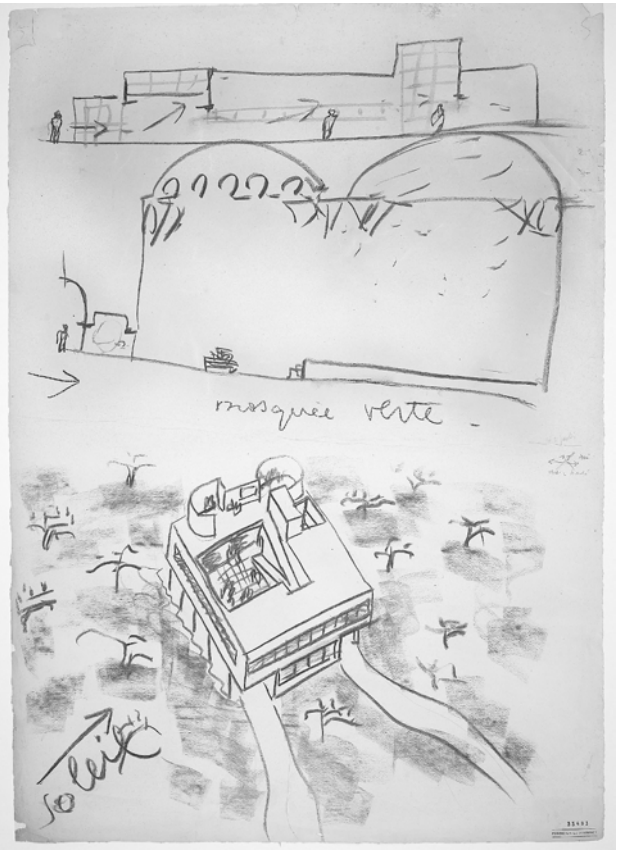
In 1927, in "Où en est l'architecture ?", Le Corbusier interpreted architecture as a "poem made of solid words in the definite sense and grouped in a clear syntax". Clear syntax was of primordial importance for Le Corbusier. Le Corbusier declared, in the aforementioned text:

> I do not just eat and sleep: I read beautiful books, I listen to music, I go to the music hall, the cinema, I go to the Côte d'Azur. What will I do, if not delight? to delight myself, that is to say, to choose from my own arbitrary, relationships of various things which flatter my personal initiative and give me the certainty of my free will and certify that I am a free man.[120]

The fact that Le Corbusier used to draw during the conferences he gave is of great interest for the reflections developed in this article given that it shows that his sketches were used to simultaneously capture and communicate ideas. More specifically, it demonstrates that Le Corbusier was particularly interested in the immediacy of the production of architectural sketches and the presence of the observers of architectural drawings during their production. The special character of the sketches that Le Corbusier used to produce during his conferences is related to the fact that their production was based on the immediacy of the transmission of architectural ideas through representation. Le Corbusier described the activity of producing sketches during his conferences as follows: "The public follows the development and the thought; they enter into the anatomy of the subject"[121] (Figure 2.10). He also remarked regarding the act of drawing: "I prefer drawing to talking. Drawing allows less room for lies"[122]. Moreover, during an interview he gave to Robert Mallet in 1951, Le Corbusier underscored: "when we draw around words, we draw with useful words, we create something"[123]. He believed that "[d]rawing makes it possible to fully transmit the thought without any written or verbal explanations"[124]. For him,

drawing was "a language, a science, a means of expression, a means of transmitting thought"[125].

Figure 2.10. Sketch made by Le Corbusier during a lecture entitled "The Plan of the Modern House" that Le Corbusier delivered on 11 October 1929.



Credits: Fondation Le Corbusier, Paris, FLC 33493

In 1925, Le Corbusier defined architecture as the establishment of relationships between objects or different building components. During the period in which he was focused on this definition of architecture, he was interested in the concept of syntax. The attention he paid to the assemblage of building components is related to the fact that he believed that good relationships can cause intense feelings. Five years later, in 1930, in *Précisions sur un état présent de l'architecture et de l'urbanisme*, he gave a different definition of architecture[126]. More specifically, he defined architecture as the succession of events. Reyner Banham notes regarding the sequential understanding of architecture by Le Corbusier: "Architecture is not an instantaneous phenomenon, but a serial one, formed by the succession of images in time and space". Banham relates this definition of architecture to a "crisis of modern architectural aesthetics"[127].

Le Corbusier's definition of architecture as the establishment of relationships that are able to provoke intense feelings should be understood in conjunction with his interest in using axonometric representation during those years. This connection is legitimized by the fact that the moment he gave the aforementioned definition of architecture coincides with the brief period during which he privileged axonometric representation. Axonometric representation, as an object-oriented mode of representation[128], pushes the observers to focus their interpretation of the architectural drawings on the relationships between the various parts of the represented architectural artefacts. Le Corbusier's definition of architecture as the succession of events should be related to his use of perspective and, mainly, to his tendency to represent several different interior perspective views corresponding to specific spatial sequences on the same sheet of paper. In parallel, Le Corbusier's understanding of architecture as the succession of events should be interpreted in relation to his conception of the so-called "promenade architecturale". The first building of Le Corbusier, which is explicitly associated with the concept of "promenade architecturale", is the Villa La Roche-Jeanneret (Figure 2.11, Figure 2.12). Le Corbusier, in the first volume of his *Œuvre complète*, presents this project as the origin of the "promenade architecturale". In the first volume of Le Corbusier's *Œuvre complète*, regarding Villa La Roche, one can read:

> This second house will be rather like an architectural promenade. You enter: the architectural spectacle at once offers itself to the eye. You follow an itinerary and the perspectives develop with great variety, developing a play of light on the walls or making pools of shadow. Large windows open up view of architectural discoveries: the pilotis, the long windows, the roof

> garden, the glass façade. Once again we must learn at the end of the day to appreciate what is available.[129]

Indicative of how Le Corbusier related the concept of "promenade architecturale" to his definition of architecture as the succession of events is his insistence that "the architectural spectacle unfolds in succession before your eyes"[36], when the inhabitants enter the house. Le Corbusier also believed that "the perspectives develop with great variety"[37] as the inhabitants follow an itinerary throughout the building. The emergence of the concept of "promenade architecturale" and its prioritization in Le Corbusier's conceptual edifice was accompanied by certain transformations of how Le Corbusier used to fabricate the interior perspective views of his projects. Le Corbusier insisted on the fact that "[a]rchitecture is experienced as one roams about in it and walks through it". In 1942, he commented on the concept of "promenade architecturale":

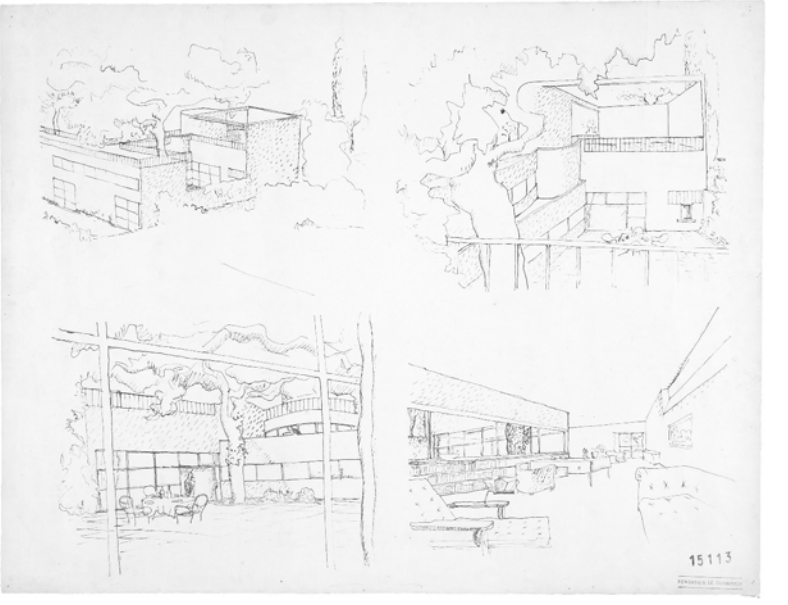
> So true is this that architectural works can be divided into dead and living ones depending on whether the law of 'roaming through' has not been observed or whether on the contrary it has been brilliantly obeyed.[130]

The fact that he distinguished dead architectural works from living ones, adopting their capacity to provide spaces that can be "roamed through" as a criterion of evaluation, should be related to how he used to draw his interior perspective views. His interior perspective views in most of the cases have a well-defined frame, are not symmetric and are like sequences or film shots of the views encountered while moving through space, traversing space assemblages. The concept of "promenade architecturale" and the way Le Corbusier used to draw his perspective views should be comprehended in relation to the fact that Le Corbusier, in *Precisions on the Present State of Architecture and City Planning* (*Précisions sur un état présent de l'architecture et de l'urbanisme*), defined architecture as "a series of successive events"[131].

Bruno Reichlin described Le Corbusier's architecture as "anti-perspective", arguing that Le Corbusier did not conceive architectural artefacts "in relation to privileged points of view to which the forms are ordered according to the most advantageous perspective"[132]. According to Reichlin, Le Corbusier's tactics of representing his architectural ideas put forward a plurality of views. Reichlin uses the expression "dispositifs anti-perspectifs"[133] to describe the representation strategies of Le Corbusier. A distinctive characteristic of Le Corbusier's architectural drawings is his habit to produce drawings that are based on

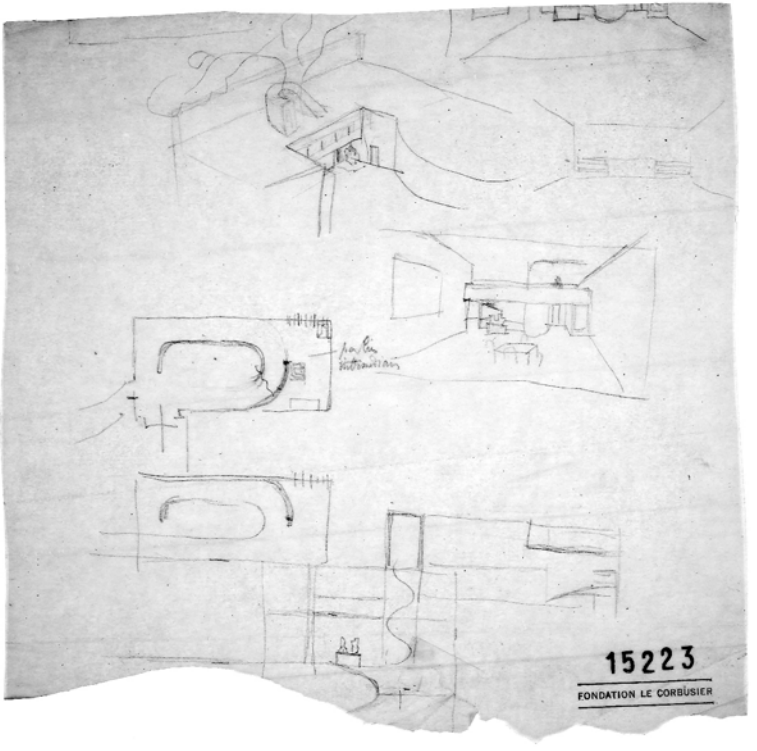
different modes of representation—interior and exterior perspectives, axonometric representations, plans, etc.—on the same sheet of paper. One should interpret this tendency relating it to his definition of architecture as the succession of events. The emergence of his definition of architecture as the succession of events coincides chronologically with the appearance of the notion of the well-known "architectural promenade" ("promenade architecturale") in his discourse. The sequential perception of space through the movement in it is pivotal for understanding Le Corbusier's understanding of the architectural design process. When he declared, in 1942, that "[a]rchitecture can be classified as dead or living by the degree to which the rule of sequential movement has been ignored or, instead, brilliantly observed"[134], he expressed his belief that the transmission of a sequential perception and experience of space is one of the guiding principles of his architectural stance.

Figure 2.11. Le Corbusier, four interior and exterior perspectives on the same sheet of paper, Maisons La Roche-Jeanneret, 1923–25.



Credits: Fondation Le Corbusier, Paris, FLC 15113

Figure 2.12. Le Corbusier, circulation paths, Maisons La Roche-Jeanneret, 1923–1925.



Credits: Fondation Le Corbusier, Paris, FLC 15223

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Chapter 3: Ludwig Mies van der Rohe's interior perspective views

Around the specificities of his visual dispositifs

This chapter analyses the impact of Ludwig Mies van der Rohe's strategies in his interior perspective views on the perception of the viewers of his representations. It places particular emphasis on the reasons for which Mies van der Rohe prioritized horizontality against verticality, analyzing the role of this prioritization in the way his drawings are conceived. The chapter also relates Mies van der Rohe's conception of stratification of parallel surfaces as a mechanism of production of spatial qualities to August Schmarsow's approach, paying special attention to his definition of architecture as a "creatrix of space" or "Raumgestalterin". At the core of the reflections that are developed here are the ways in which Mies van der Rohe's photo-collages invite the viewers of his drawings to imagine their movement through space. Another aspect of Mies van der Rohe's modes of representation that is scrutinized here is the role of tactile and optical perception. Departing from Alois Riegl's distinction between tactile or haptic ("taktisch") and optical ("optisch") perception of artworks, the chapter examines the fact that the effect of abstract images and the effect of figurative images are produced simultaneously in many of Mies van der Rohe's representations. It also compares Le Corbusier and Mies van der Rohe's strategies while producing interior perspective views. The chapter also relates Mies van der Rohe's drawing strategies to Hans Richter's approach. Central for the issues analyzed here is how collage and the use of the images of cut-outs of reproductions of real artworks in Mies van der Rohe's representations affect the interpretatiom of his space assemblages.

The chapter argues that Mies van der Rohe's agenda in both design and teaching was based on his conviction that his designs could achieve timeless and universal validity only if they manage to capture the specificity of

Zeitwille. It explains that Mies's simultaneous interest in impersonality and the autonomous individual is pivotal for understanding the tension between universality and individuality in his thought. The paradox at the center of this chapter is that while Mies van der Rohe believed in the existence of a universal visual language, he placed particular emphasis on the role of the autonomous individual in architecture. The chapter draws upon George Simmel's understanding of the relationship between culture and the individual in order to interpret this paradox characterizing Mies van der Rohe's thought.

One of the key principles of modernism was the concept of a universally understandable visual language. In the framework of this endeavor to shape a universal language, many of the modernist architects and theorists, including Sigfried Gideon, Nikolaus Pevsner, and Serge Chermayeff drew upon the work of philosophers such as Oswald Spengler. The chapter explores Mies van der Rohe's specific perspective on these general ideas that were at the core of many modernist architects's thought. It analyses his representations of interior spaces, such as those for his Court house projects (c.1934 and c.1938) and the Museum for a Small City project (1941–43). These interior perspective views by Mies can help us better understand the specific character of Mies van der Rohe's conception of modernism and his interest in universality. Mies's simultaneous interest in individuality and universality is interpreted here in relation to Simmel's conception of the binary relationship between "subjective life" and the "its contents"[1].

Architectural drawings have the capacity to structure and pilot meaning for viewers. An effect that is provoked when one is confronted with Ludwig Mies van der Rohe's interior perspectives is the difference of the way they are conceived depending on the distance of the viewer from them. We could make the hypothesis that Mies van der Rohe intended to provoke this disjunction between the impression made when the viewers of his drawings have a close look at his representations and the impression made when they get a distance from them. This phenomenon is the outcome of several strategies employed by Mies van der Rohe. A first strategy that one can discern in his representations is the creation of a contrast between the cut-outs of the reproductions of artworks, the colored surfaces, and the almost invisible perspective drawings of the interior views of the buildings he designed. A second strategy often used by Mies van der Rohe in his drawings is the juxtaposition between the standing figures and the ground, which is achieved through the use of grid. These strategies invite the viewer to seek a resolution of the figure/ground opposition. We could argue that, through the activation of this tension in the perception of the spec-

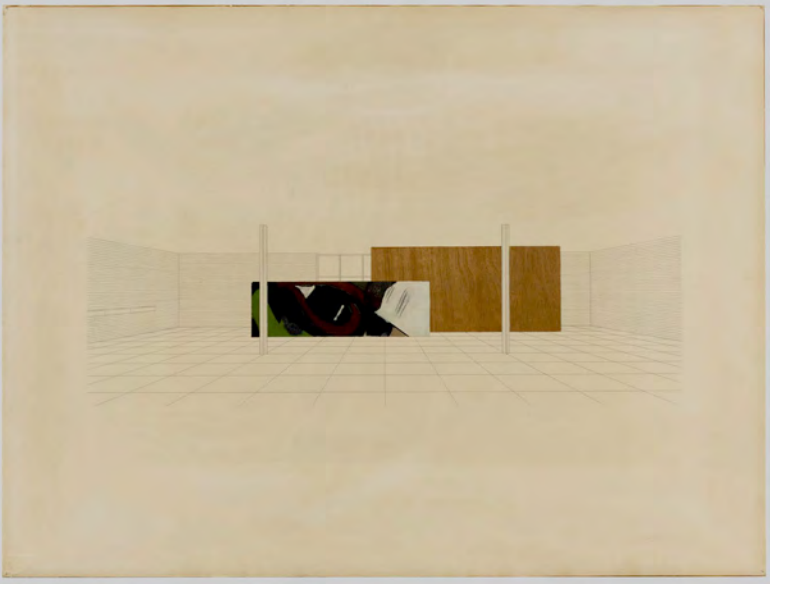
tator, Mies van der Rohe intended to transform the viewers of his architectural drawings into active agents.

Mies van der Rohe prioritized horizontality against verticality. One of the main objectives of this chapter is to examine what are the consequences of such a prioritization for the way the viewers of his drawings and the inhabitants of his buildings conceive his spatial assemblages. If we accept that the Miesian space is always defiend by horizontal planes, we should examine what this assumption presupposes or implies for the way space is viewed and inhabited. A note-worthy characteristic of Mies van der Rohe's interior perspective representations is the insistence on the horizontal axis of the frame. His emphasis on horizontality contributes to the fabrication of *dispositifs* that aim to control the way in which the viewers would construct in their mind their position in space. Regarding the concept of *dispositif*, I use it here as Michel Foucault defines it:

> What I'm trying to pick out with this term is, firstly, a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions–in short, the said as much as the unsaid.[2]

The reinforcement of the horizontal axis activates a desire to conquer the space through movement in it and through looking all around. In other words, Mies van der Rohe's way of fabricating a *dispositif* of extension on the horizontal axis provokes a panoramic effect. This effect is further strengthened when he draws many parallel lines, which are very close to each other, as in the case of the interior perspective for the Row House with Court (Figure 3.1). In this case, the use of dense parallel lines produces a panoramic effect and pushes the viewers of the illustrations to imagine what is not shown in the image, extending their perception in order to embrace the parts of space that are not represented. The reinforcement of the horizontal axis is of particular importance for Mies. The fact that the ceiling of the buildings he designed is in most cases represented without grid, in contrast to the floor, which, in most cases, is represented with grid, reinforces the horizontal axis around which the space is unfolded.

Figure 3.1. Ludwig Mies van der Rohe, Row House with Interior Court, project (Interior perspective) after 1938, Graphite and collage of wood veneer and cut-and-pasted reproduction on illustration board (76.1 x 101.5 cm).



Credits: Mies van der Rohe Archive, gift of the architect. Object number 692.1963. Department of Architecture and Design MoMA © Artists Rights Society (ARS), New York / VG Bild-Kunst, Bonn

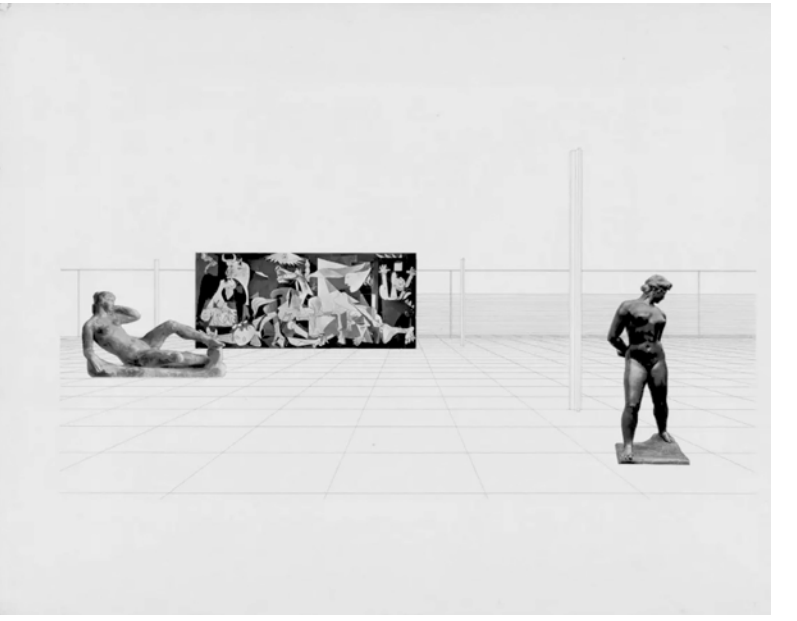
3.1 The viewer vis-à-vis the interior perspective views of Mies van der Rohe

Mies van der Rohe tended to work on his ideas mainly through sketches of plans and interior perspective views, as in the case of the Gericke House (1932). For this project, he also drew several aerial perspective views. The Gericke House and the Hubbe House are European residential projects of Mies van der Rohe that were not built. Mies van der Rohe, during the design process, used very often the points of the grid as guides. This permitted him capture a rhythm and imagine how movement in space would be orchestrated. In his drawings, the stairs play a major role, as in the case of the round stairs

of the Resor House project. Vanishing points represent points in space at an infinite distance from the eye where all lines meet. Perspective drawing in the West uses either one central vanishing point, two vanishing points to the left and the right or, occasionally, three vanishing points, with the third being zenithal. The vanishing point and the eye are symmetrically opposed. In other words, the vanishing point is the eye's counterpart. In Mies van der Rohe's interior perspective views for the Museum for a Small City project, which were produced between 1941 and 1943, the horizon line is placed at the mid-height of the illustration board and the vanishing point is placed at the center. The distance of the horizon line from the ground is the one third of the height of the represented space. The height of the standing statue is almost as the mid-height of the space. If we take as reference the dimension of Guernica and if we make the hypothesis that the cut-and-pasted reproductions of artworks are at the right scale, we can assume the height of the space. The dimensions of Guernica are 3.49 x 7.77 m., that is to say that the height of the space is almost 3.5 m. and the horizon line is placed somewhere between 1.4 and 1.6 m (Figure 3.2). The strategies that Mies van der Rohe usedwhile producing his interior perspective views push the observer to focus on the horizon line. The line of the horizon is identical to the horizon line used to construct the perspective. Nicholas Temple maintains, in *Disclosing Horizons: Architecture, Perspective and Redemptive Space*, that "[t]he notion of horizon […] served as the visual armature around which modern constructs of universal space were articulated"[3].

We could relate the height of the actual horizon to the real dimension of architecture and the height of the horizon line used to fabricate the image to the fictive dimension of architecture. This means that, in the case of several of the interior perspective views of Mies van der Rohe, the real and the fictive dimension of architecture coincide. The apparent horizon, which is called also visible horizon or local horizon, refers to the boundary between the sky and the ground surface as viewed from any given point. A different definition of the visible horizon could be the following: a horizontal plane passing through a point of vision. The visible horizon approximates the true horizon only when the point of vision is very close to the ground surface. The horizon used to construct the perspective view is also called vanishing line. Therefore, we have three horizons: the visible horizon, the real horizon and the vanishing line. The horizon is always straight ahead at eye level.

Figure 3.2. Ludwig Mies van der Rohe, Museum for a Small City project (Interior perspective) (76.1 x 101.5 cm) 1941–43, Ink and cut-and-pasted photographic reproductions. Delineator George Danforth.



Credits: Mies van der Rohe Archive, gift of the architect. Object number 995.1965 © 2018 Artists Rights Society (ARS), New York / VG Bild-Kunst, Bonn. Department of Architecture and Design MoMA

A main implication of the conventional use of perspective is the establishment of a fixed view. We could argue that Mies van der Rohe, in opposition to this implication of perspective, aims to perturb this fixation. This confusion of fixation is provoked due to the way he constructs his interior perspectives, which pushes the viewers of his representations to perceive as equivalent "the ground and the ceiling planes about a horizontal line at eye height"[4]. The line of the horizon is the same as the picture's horizon line. This provokes a confusion of the viewer's perception of spatial and structural elements. The viewer's position within the space is such that the horizon line (eye height) is half the height of the interior. The horizon line (imaginary) coincides with the horizon

(actual). Evans related this effect to that experienced by people when they try to see something far away[5].

The effect of equivalence of floor and ceiling planes locks the view of the observer onto the horizon line. In parallel, this visualization strategy directs the view of the observer outwards, towards the horizon and deep space, where all views vanish. In other words, the visual *dispositifs* that Mies van der Rohe fabricated and his way of establishing a horizon exploiting the confusion between the actual and imaginary horizon, orientate and direct the spectators's view in depth and towards outside. The result is that the spectators are treated in a way that obliges them to construct mentally the image of the real horizon. These tricks that Mies van der Rohe used sharpen spectators's perception, pushing them to view landscape through the opening in a way that reminds the way we view landscape when we take photographs. The architectural frame invents a horizon and hence a world that it masters through its interiorizing devices. Robin Evans has underscored that in the case of Mies van der Rohe's perceptive drawings for the Barcelona Pavilion "[t]he horizon line became prominent"[6]. As Fritz Neumeyer suggests, "[i]n the Barcelona Pavilion, Mies demonstrated brilliantly the extent to which the observer had become an element of the spatial construction of the building itself."[7]

Another distinctive characteristic of the interior perspective views of Mies van der Rohe that should be analyzed is the use of grid. The grid serves to accentuate the distance between the artworks, the columns and the walls, in the case that these (the columns) exist. August Schmarsow notes, in "The essence of architectural creation": "Only when the axis of depth is fairly extensive will the shelter […] grow into a living space in which we do not feel trapped but freely choose to stay and live"[8]. The grid represented on the floor of many interior perspectives of Mies, as in the case of the interior perspective views for the Court house projects (c.1934 and c.1938) and of the two interior perspective views for the Museum for a Small City project (1941–43), which combine collage and linear perspective and have grid on the floor, intensifies the effect of depth in the perception of the observers of the drawings. The space is represented as tending to extended on the axis of depth and on the horizontal axis. We could argue, drawing upon Schmarsow's theory, that the sensation of extension provoked by the use of grid and the use of non-framed perspective view gives to the spectator a feeling of freedom. The use of grid and the dispersed placement of artworks and surfaces on it serve to intensify the sense of spatial extension in the perception of the observers of Mies van der Rohe's architectural drawings.

Certain images and spaces of Mies van der Rohe provoke a deterritorialization in the perception of the observers of the drawings or the users of the buildings. This phenomenon of deterritorialization is intensified by Mies's minimal expression. In many cases, for instance, the lines of the spatial arrangements are less visible than the objects, the artworks and the statues represented in his architectural representations. This strategy pushes the observers of Mies's photo-collages to imagine their movement through space. This effect is reinforced by the simultaneous use of perspective and montage in the production of the same architectural representation. This tactic invites the observers of the images to reconstruct in their mind the assemblage of the space, facilitating, in this way, the operation of reterritorialization, which follows the phenomenon of deterritorialization. In this way, the process of reconstruction of the image provokes a perceptual clarity and an instant enlightenment.

Two aspects of Mies van der Rohe's representations that are note-worthy are the frontality and the stratification of the parallel surfaces he often chose to include in his representations. The choice of Mies to use the stratification of parallel surfaces as a mechanism of production of spatial qualities in combination with the frontality of his representations could be interpreted through August Schmarsow's approach. Schmarsow defined architecture as a "creatrix of space" ("Raumgestalterin"). He was interested in the notions of symmetry, proportion and rhythm. In his inaugural lecture entitled "The Essence of Architectural Creation" ("Das Wesen der architektonischen Schöpfung")[9], given in Leipzig in 1893, he presented "a new concept of space based on perceptual dynamics"[10]. It would be interesting to try to discern the differences between a conception of space based on Schmarsow's approach and a conception of space based on phenomenal transparency, as theorized by Colin Rowe and Robert Slutzky in "Transparency: Literal and Phenomenal"[11].

August Schmarsow, in *Das Wesen der architektonischen Schoepfung*, originally published in 1894, aimed to establish a scientific approach to art ('Kunstwissenschaft') based on the concept of space. His main intention was to discern "the universal laws governing artistic formation and stylistic evolution"[12]. Schmarsow conceived architecture as a "creatress of space"[13]. He used the term "Raumgestalterin" to describe the inherent potential of architecture to create space. A distinction that he drew is that between the sense of space, which he called "Raumgefühl", and the spatial imagination, which he called "Raumphantasie". The concepts of "Raumgestalterin", "Raumgefühl" and "Raumphantasie" could elucidate the ways in which we can interpret the relationship between the conceiver-architect and the observer of archi-

tectural drawings, as well as the relationship between the interpretation of architectural representations and the experience of inhabiting architectural artefacts.

3.2 The distinction between tactile and optical perception in Mies van der Rohe's work

In certain representations of Mies van der Rohe, the effect of abstract images and the effect of figurative images are produced simultaneously. The result of this encounter is different than the effect produced when the observer of architectural drawings is confronted with only abstract or only figurative representations. Borrowing the distinction between tactile or haptic ("taktisch") and optical ("optisch") perception of artworks that Alois Riegl drew in his text entitled "The Main Characteristics of the Late Roman Kunstwollen" (*Die Spätrömische Kunstindustrie nach den Funden in Österreich-Ungarn*)[14], one could make the assumption that the abstract dimension of the representation enables a tactile ("taktisch") perception of the image, while the figurative dimension of the representation enables an optical ("optisch") perception of the image.

The aforementioned hypothesis could be reinforced by the fact that certain visual devices of the representations of Mies invite the observers to search for changing the distance of their position from of the architectural drawing in order to grasp what the image represents. Riegl's distinction between haptic ("taktisch") and optic ("optisch") perception is examined in Gilles Deleuze's *Francis Bacon: The Logic of Sensation*. As Deleuze reminds us regarding Riegl's distinction between tactile ("taktisch") and optical ("optisch") perception of artworks, in the case of the former the observer feels the necessity to be close to the object, while in the case of the latter the observer feels the necessity to view the work of art from distance[15]. Mies, thus, aimed to provok the viewers to move while seeing his interior perspective views and invited them to activate both perceptions – tactile ("taktisch") and optical ("optisch"). Deleuze and Guattari, in *A Thousand Plateaus*, refer to the following two distinctions: that between "close-range" and long-distance vision and that between "haptic" and optical space. They prefer the term "haptic" over the term "tactile" because they believe that the former, in contrast to the latter "does not establish an opposition between two sense organs but rather invites the assumption that the eye itself may fulfil this nonoptical function"[16].

3.3 Mies van der Rohe's Brick Country House

Mies van der Rohe's Brick Country House, as Jean-Louis Cohen reminds us, was part of the Great Berlin Exhibition (*Grosse Berliner Kunstausstellung*), which was held from 31 May to 1 September 1924[17]. John Hejduk was particularly interested in this project. He sent a letter regarding the Brick Country House to Mies van der Rohe on 19 September 1967. In this letter, he wrote:

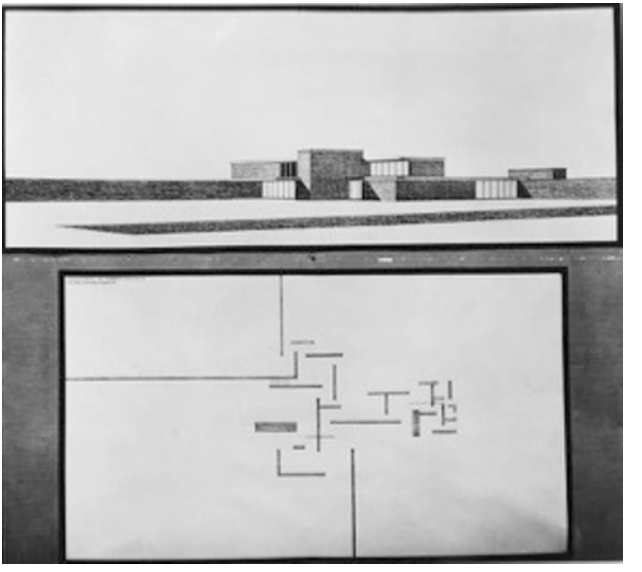
> Your project for a Brick Villa 1923 has drawn me into many pleasurable hours of contemplation due to the vitality and joy of that particular work. It is an idea that grows in strength as one studies it, I have often thought that the Brick Villa project should come into reality, and if built would reveal in depth much of our modern architectural heritage, it is statement of our times[18].

Interestingly, the plan and the perspective view that Mies produced for the Brick House Project do not correspond to each other (Figure 3.3). The abstraction of the plan activates a specific way of grasping this architectural drawing. Despite the fact that Mies van der Rohe's Brick Country House remained unrealized, it is one the most analyzed projects of Mies. This could be explained by the fact that the plan of the Brick Country House is characterized by a clarity that contributes to the creation of a specific kind of relationship between from the drawing and its observers. This relationship is characterized by an intensification of the fictive experience of inhabiting space. This is proven by the fact that a very high percentage of the scholarly descriptions of Mies's Brick Country House focus on the experience of movement through it, despite the fact that it was never inhabited or experienced as real space given that it remained unrealized.

The abundance of the scholarly descriptions of the plan of Mies van der Rohe's Brick House that focus on the fluidity of its space shows that the abstractness and clarity of the representation of the plan transmits a fictive sensation of moving through it. As Wolf Tegethoff notes, in "From Obscurity to Maturity: Mies van der Rohe's breakthrough to modernism", regarding Mies's Brick House, "[t]he interior has become the nucleus of a force-field which, by means of brick walls reaching out in all directions, fixes the co-ordinates of the environment and defines it with exclusive reference to the viewer inside."[19] The aforementioned description confirms the hypothesis that the plan of Mies's Brick Country House activates a mode of interpreting the architectural drawing that is based on the intensity of the experience of moving through

the represented spaces. Tegethoff understands the arrangement of the walls of the plan of Mies's Brick House Project as organized using as "exclusive reference [...] the viewer inside" [20] and their movement. What is implied in the aforementioned remarks concerning Mies's Brick House Project is that the effect of movement is the most distinctive characteristic of the plan of this buidling. The sensation of circulation could be distinguished into pedestrian and visual circulation. In Mies's work these two sensations are often overlapped or confused.

Figure 3.3. Ludwig Mies van der Rohe, Landhaus in Brick, 1924. Exhibition panels showing perspective view (above) and schematic floor plan (below). Print from a photographic negative.



Credits: Stadt Kunsthalle, Mannheim

Manfredo Tafuri, in his article entitled "Theatre as a Virtual City: From Appia to the Totaltheater", published in *Lotus International* in 1977, drew a parallel between the experience in Mies's Barcelona Pavilion and stage experience, as understood by Adolphe Appia[21]. Appia, as we can understand reading his text

"Ideas on a Reform of our Mise en Scène", intended to reinvent stage design, through light and actors's movement in space[22]. The reinvention of spatial experience through the movement of users is a characteristic of Barcelona Pavilion. According to Tafuri, the exact quality that is a common parameter of the Mies van der Rohe and Appia's approach is the effect of rhythmic geometries on how the space is perceived and experienced. Tafuri also refers to the affinities between Mies's technics and the stage design tactics of British modernist theatre practitioner Gordon Craig[23].

3.4 Mies van der Rohe vis-à-vis the assemblage of textual counters

According to Peter Eisenman, Mies van der Rohe's Brick Country House constitutes "[t]he first indication in Mies's work of textual notation"[24]. Eisenman argues that Mies's Brick Country House understanding as as textual notation is related to the exploration of "the limits of the independence of the object from the subject and how these limits can be articulated"[25]. Eisenman is convinced that this project signaled the beginning of a new phase in Mies's work. This new phase corresponded to the fabrication of architectural assemblages that function as "textual counters"[26]. Despite the fact that Mies often underlined the importance of truth for his approach, Robin Evans, in "Mies van der Rohe's Paradoxical Symmetries", argues that what counts most for Mies's compositional approach is the existence of a coherence of synthesis. Evans notes regarding Mies and especially his proposal for the Barcelona pavilion: "its relation to the truth is less significant than its coherence as a fiction"[27]. Evans juxtaposed truth and fiction, relating Mies to the search for a coherent fiction. Evans also remarked that "[t]he elements are assembled, but not held together."[28]

It would be interesting to compare the way Le Corbusier and Mies conceive architecture as assemblage. In the case of Mies "the system as whole is betrayed"[29]. Eisenman aimed to describe this betrayal of the whole in the case of Mies, referring to it as "irresolution of system"[30]. David Leatherbarrow and Mohsen Mostafavi, in *Surface Architecture*, use the term "assemblage" to describe "the juxtaposition of elements in [...] Mies's work"[31]. According to Manfredo Tafuri and Francesco Dal Co, Mies's Barcelona Pavilion "the building is an assemblage of parts, each of which speaks a different language, specific to the material uses"[32]. Evans shed light on the fact that for Mies "structure [was] [...]

something like logic"[33]. Mies remarked regarding this: "To me structure is like logic. It is the best way to do things and to express them."[34]

Evans, in "Mies van der Rohe's Paradoxical Symmetries", also mentions that there is an opposition between Mies's posture in Barcelona Pavilion and the platonic understanding of visual perception. He notes: "Plato was wrong. These tricks do not deceive us; they sharpen our perceptions."[35] Evans also remarks that "Mies's pavilion suggests how, in this constant effort of resuscitation, vision can be revived by means of an elixir concocted from prosaic ambiguities — the ambiguities of everyday language."[36] Evans relates Mies's approach to "the ambiguities of everyday language"[37]. This endeavor to associatr Mies's compositional process with the "ambiguities of everyday language" brings to mind Peter Eisenman's arguments in "miMISes READING does not mean a thing"[38]. In "miMISes READING does not mean a thing", Eisenman relates Mies's architectural signs to textual notation in order to highlight the fact that Mies's architectural signs can only be read and analyzed only in relation to other objects. Eisenman defines text as "a structural simulation of its object,"[39] maintaining that the process of examining a text is based on the revelation of a structural meaning. The fact that the meaning is structural is important, for Eisenman, because it shows that the interpretation of Mies's architectural signs is based on differentiation and not on representation. Eisenman juxtaposes structural reading of architectural signs to metaphoric or formal reading of architectural signs. He relates the textuality of Mies's architectural signs to the fact that "symbol and form can be extracted from the object"[40]. An insightful remark of Eisenman is that, in opposition to "language, where signs represent "absent" objects, in architecture the sign and the object are both present"[41].

3.5 Between Mies van der Rohe and Hans Richter: Around the use of charcoal tonalities

A characteristic of the construction of Mies's perspectives that should be also analyzed is the use of charcoal. The use of charcoal and its manipulation in order to produce different tonalities are very apparent in the exterior perspective views for the Concrete Country house and the three exterior perspective views for Villa Tugendhat. The affinities between the perspective representations of Mies's Concrete Country house and the tonalities in Hans Richter's film *Rhythmus 21* are evident. Hans Richter and Mies van der Rohe, who met each other

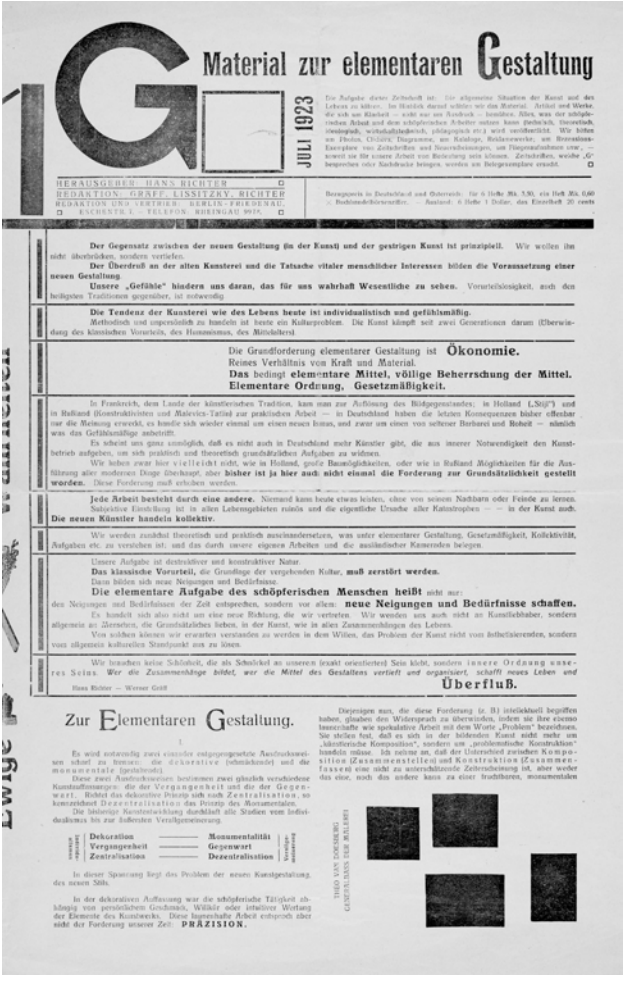
through *Novembergruppe* before the foundation of magazine *G*[42] (Figure 3.4), shared their belief in the existence of "identical form perception in all human beings"[43]. An issue to which both intended to respond was the establishment of a visual language that could function as universal and generally understandable. Another trait that characterized the attitude of both was the understanding of aesthetic perception as a sequential process. This aspect of aesthetic perception was also at the core of Eisenstein's approach[44].

For the Concrete House project, Mies drew four perspective views corresponding to the same point of view. The contour of all the four perspectives is identical; the differences among them concern only their colors and tonalities. The two of them are in grey scale, while the other two are colored. The contrast between the aforementioned four perspective views provokes a cinematographic effect that echoes the techniques that Richter used in *Rhythmus 21*. The impact of the aesthetics of Richter's abstract kinetic art on Mies's representations of the twenties, and especially on the exterior perspective views of the Concrete House project and the Villa Tugendhat, is incontestable. The polarities and the utilization of the tones of black and grey remind the perspective view of the Concrete House project. As we have noted above, the techniques used in the perspective of the Concrete House project are similar to the techniques used by Hans Richter in *Rhythmus 21*.

The concern of Mies regarding the qualities that emerge due to the way the assemblage is conceived, fabricated and perceived by the observer echoes the thesis of Hans Richter, sustaining that "the result […] [should] not [be]just a simple sum of spatial units". Richter, expresses his view regarding the process of synthetically organizing the details in a way that incorporates motion, in "The True Sphere of Film", published in *G. Zeitschrift für elementare Gestaltung* (*G: Materials for Elementary Construction*). He asserted there:

> the whole process obtains the quality of time only because in it the details are synthetically organized as processes of motion in such a way that the whole is invisible, the meaning is acquired only from the whole. Such a temporal unit relates to space as a spatial unit does to the plane. The task would then be to make the whole process that leads in detail to light-space (time) the basis for the structure of the whole, so that the result is not just a simple sum of spatial units but rather a new quality[45].

Figure 3.4. Frontpage of G: Material zur elementaren Gestaltung, 1 (1923).


G
Material zur elementaren Gestaltung
JULI 1923
HERAUSGEBER: HANS RICHTER
REDAKTION: GRAFF, LISSITZKY, RICHTER
Der Gegensatz zwischen der neuen Gestaltung (in der Kunst) und der gestrigen Kunst ist prinzipiell.
Die Tendenz der Kunsterei wie des Lebens heute ist individualistisch und gefühlsmäßig.
Die Grundforderung elementarer Gestaltung ist Ökonomie.
Reines Verhältnis von Kraft und Material.
Das bedingt elementare Mittel, völlige Beherrschung der Mittel.
Elementare Ordnung, Gesetzmäßigkeit.
Jede Arbeit besteht durch eine andere.
Die neuen Künstler handeln kollektiv.
Die elementare Aufgabe des schöpferischen Menschen heißt nicht nur:
neue Neigungen und Bedürfnisse schaffen.
Überfluß.
Zur Elementaren Gestaltung.
Dekoration — Monumentalität
Vergangenheit — Gegenwart
Zentralisation — Dezentralisation
THEO VAN DOESBURG
GEDENKBLATT ZUR JULIHEFT

Credits: Yale University Library Beinecke Rare Book and Manuscript Library. Call number: 1989 Folio S6

Gilles Deleuze, in *Cinema 1: The movement-image*, comments on the differences between the conception of montage of Richter and that of Eisenstein. More specifically, he distinguishes Richter's conception of montage film from the dialectics of Sergei Eisenstein. Taking as a starting point Deleuze's aforementioned distinction, one could reflect upon Mies's conception of montage and examine whether it is closer to Richter's or Eisenstein's conception of montage. Deleuze describes the montage of the "German school [as] intensive-spiritual montage of the German school, which binds together a non-organic life and a non-psychological life"[46].

The use of charcoal for the production of the aforementioned drawings by Mies produces a cinematographic aesthetic, which is further reinforced by his choice to depict the horizontal surfaces, such as the roof as bright and the vertical surfaces as dark. Mies also drew some aerial perspective sketches for the Villa Tugendhat, which helped capture the project as a whole. Mies used the charcoal to produce a big variet of grey tones. The use of charcoal and its utilization in order to produce tonalities echoes the impact of Hans Richter on Mies's visualization techniques in an ensemble of exterior non-symmetrical perspective views he produced for his proposal for Villa Tugendhat. The use of charcoal is characteristic of these perspective views. Mies drew two different versions of aerial perspective views from southwest. What is note-worthy is the fact that the two aerial perspective views do not show the transparency of the façade of the house, despite the fact that it is one of its principal characteristics. The transparency of the façade is visible only in the third perspective view, which is not aerial and which accentuates the contrast between the horizontal and the vertical surfaces.

3.6 Comparing Le Corbusier and Mies van der Rohe's *dispositifs*

Le Corbusier related the awareness of architectural invention to the experience of living "a human, intimate hour, fruit of the creation of the spirit". Corbusier also believed that in order to achieve this capacity of providing the possibility of such an experience of architecture, architects should "see the real and look inside it" and distance themselves from the attitude photographers, journalists or schoolmasters. The way in which Le Corbusier associates the invention in architecture with "a human hour", which is "[h]igh and never low, rather difficult to understand and decipher"[47] could be related to a remark of Robin Evans regarding the relationship of Mies van der Rohe's point of view with

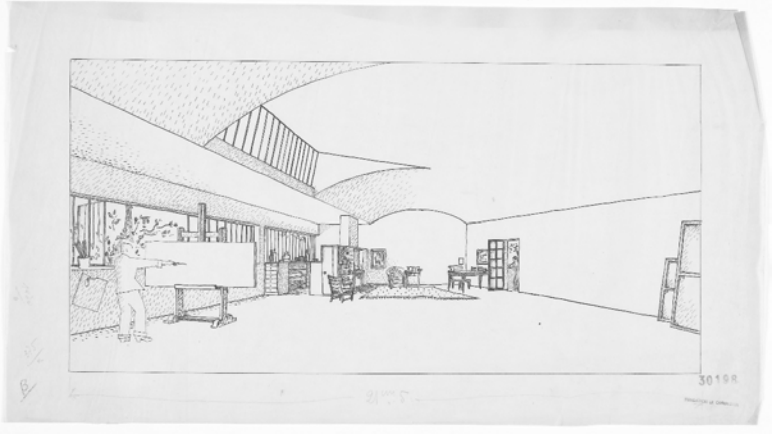
certain ideas of Spinoza. Evans refers to the following quotation of Spinoza by Mies: "Great things are never easy"[48]. Twenty-six years earlier, Le Corbusier, in "L'Esprit Nouveau en Architecture", related the architectural invention to the notions of relationship, rhythm, proportion and to the conditions of emotion, employing the expression "machine for provoking emotions" ("machine à emouvoir")[49].

It would be interesting to compare the use of the grid in Le Corbusier and Mies van der Rohe's perspective views. Mies van der Rohe's interior perspective views are characterized by the use of grid. This is not the case for Le Corbusier, despite the fact that, in certain perspective views, he used grid only for the floor of his interior perspective views. In parallel, Le Corbusier, in most of his interior perspective views, used a frame in contrast to Mies van der Rohe who did not. Mies used a grid only in the floor of his interior perspective views, and, in certain cases, for the ceiling of his interior perspective views as well, as in the case of the interior perspective views for the project for Ron Bacardi y Compania (c. 1957).

In contrast to Mies van der Rohe, Le Corbusier used clearly distinctive frames in his interior perspective views. This choice witnesses a specific stance vis-à-vis the subject that views his drawings and vis-à-vis the subject that inhabits the space to which the drawings refer. In the first volume of Le Corbusier's *Œuvre complète*[50], there are several interior perspective views with frame, such as the sketches for the interiors of the maison Dom-ino (1914–1915), the Villa au bord de la mer (1916), the "Immeubles-Villas" (1922), the Villa à Vaucresson (1922), the maison d'artiste (1922) (Figure 3.5) and the Villa Le Lac (1924) among other. Apart from the interior perspective view for the Villa Le Lac (1924) and the maison d'artiste (1922), almost all the other interior perspective views that are included in this volume have a frame. In the same volume, there are some axonometric representations, as those for the maison "Citrohan" (1922–27), the villa au bord de la mer (Côte d'Azur), the "Immeubles-villas" in Pessac (1925) and the Villa Meyer (1925). For the latter, he also produced many interior perspectives (Figure 3.6). Le Corbusier used the technique of collage for the perspective views he produced for the Salon d'Automne (1929) (Figure 3.7). Le Corbusier used for these collages represent furniture designed by himself. In this specific case, the representation of furniture is more intense than the representation of space. This feature brings to mind Mies van der Rohe's collages, especially those for the Resor House project.

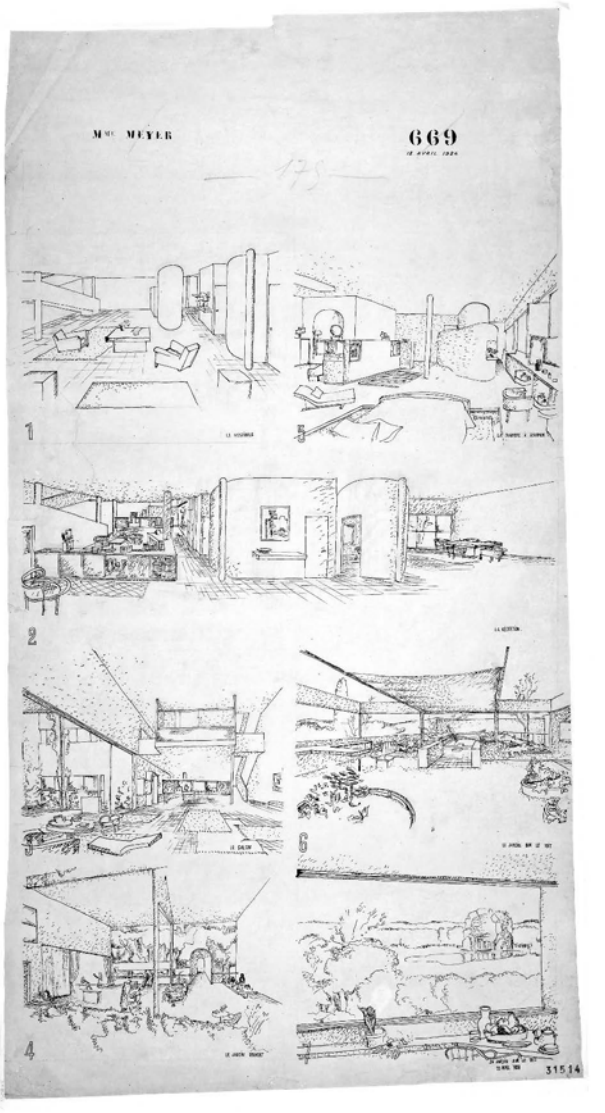
Both Mies van der Rohe and Le Corbusier intended to construct spaces that are based on the experience of spatial sequence, but they use different design strategies and prioritize different building components for similar purposes. Following Caroline Constant, we could claim that for Mies van der Rohe the walls are the primary agents for the production of spatial sequence, while for Le Corbusier the primary agents for the production of spatial sequence are the columns. Constant also argues that Le Corbusier's "concept of the free plan relied on the structural and conceptual primacy of the columns"[51], while Mies's concept of free plan of relied on the primacy of walls.

Figure 3.5. Le Corbusier, maison d'artiste (unrealised project), 1922.



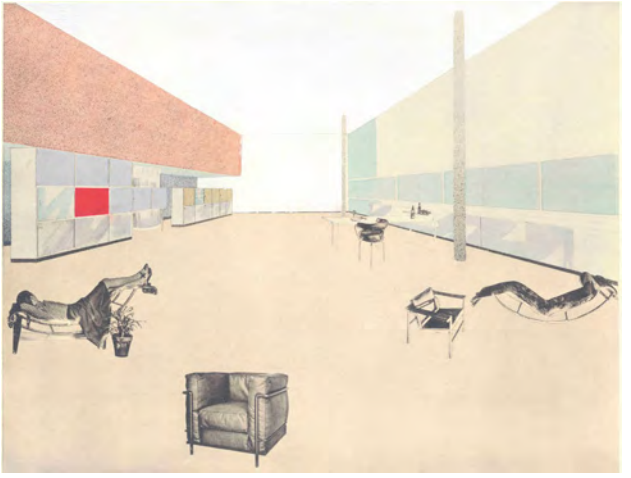
Credits: Fondation Le Corbusier, Paris, FLC30195

Figure 3.6. Le Corbusier, Interior perspectives for Villa Meyer.



Credits: Fondation Le Corbusier, Paris, FLC31514

Figure 3.7. Furniture presented at the Salon d'Automne, Paris, 1929.



Credits: Fondation Le Corbusier, Paris © FLC/ADAGP

Mies van der Rohe and Le Corbusier shared an interest in using spatial sequence as a guiding strategy during the design process as it becomes evident in the design of Tugendhat house and Villa La Roche-Jeanneret respectively. This is evident in the interior perspective views that the two architects drew for the aforementioned houses. For instance, one can bring to mind the sketches concerning the circulation paths that Le Corbusier drew for the Villa La Roche-Jeanneret. The three most significant gestures regarding the spatial sequence in the case of the design of the Villa La Roche-Jeanneret are the following: firstly, the double height space, which provides visual perception of the bridge which links the spaces; secondly, the design of the bridge, and thirdly, the design of the ramp. Peter Eisenman has drawn a distinction between sign and symbol. He claims that Mies van der Rohe's columns have the status of sign, while Le Corbusier's columns have the status of symbol. Moreover, Eisenman compares the roof plane of Mies van der Rohe's Barcelona Pavilion and Le Corbusier's Maison Dom-ino. More specifically, he remarks: "The condition of the roof plane in the Barcelona Pavilion is in opposition to Le Corbusier's Maison Dom-ino, where the stature and status of man is symbolized by the roof plane/podium as coupled horizontal datums"[52].

3.7 Towards a conclusion: Mies van der Rohe's representations as symbolic montage

Mies van der Rohe used perspective as his main visualizing tool against the declared preference of De Stijl, El Lissitzky and Bauhaus's for axonometric representation. Many of his perspective drawings were based on the distortion of certain conventions of perspective. In order to grasp how his drawing techniques shaped the way the interpreters of his drawings viewed them, it is important to discern and analyze what are the exact effects produced by the overcoming of the conventions of perspective by Mies. An important role in his endeavor to challenge the conventions of perspective played the use of the technique of collage or montage. In an interview, he gave to six students of the School of Design of North Carolina State College, in 1952, Mies van der Rohe remarked:

> People think with the open plan we can do everything – but that is not the fact. It is merely another conception of space. The problem of space will limit your solutions. Chaos is not space. Often, I have observed my students who act as though you can take the free-standing wall out of your pocket and throw it anywhere. That is not the solution to space. That would not be space[53].

Mies van der Rohe, in many of his representations, brought together different visual devices, as in the case of the illustrations he produced for the Row House with the Court and the Museum for a Small City project (1942), where he combined the technique of the photo-collage or photo-montage with the linear or nonlinear perspective. In some cases, Mies did not use at all linear perspective. He implied it and used only the cut-outs of reproductions of images and artworks, as in some of his representations for the Small City Museum, in which the frontality of the way the reproductions of Pablo Picasso's painting Guernica (1937) framed by Aristide Maillol's sculptures Monument to Paul Cézanne (1912–1925) and Night (1909), and of the images of the nature scenes outside the window are placed imply the existence of a viewer. These representations invite the viewers to imagine that they move through the represented space.

In the case of the combined elevation and section for the Theatre project of 1947, he used only frontal surfaces: one gridded surface designed with graphite ink and colored yellow and the other created using cut-and-pasted papers, and cut-and-pasted photo-reproductions. In a collage for the Concert Hall (1942), he did not use any traces of lines. Despite the fact that the way he fabricated

was based on the use of the the technique of collage, it gives a sense of depth and linear perspective. The use of the images of cut-outs of reproductions of real artworks for his collages or montages reinforces the cultural reading of his space assemblages. The placement of these cut-outs of reproductions of real artworks on the grid of the linear perspective views produces matrixes on which the ambiguities of cultural objects are unfolded. These choices of Mies van der Rohe make us think that he was interested in the multiple layers of the interpretation of images. This becomes evident in a collage he produded for the Concert Hall. In this case, Mies van der Rohe converted the image of the military warehouse into a cultural sign. In order to do so, he used the image of a statue of an ancient Buddha, at a first place, and then he added the title "Concert Hall", at a second place. Mies van der Rohe through the use of the reproduction of the image of a military warehouse, the placement of a statue and the written message aimed to convey an argument. The importance of Mies van der Rohe's aforementioned gesture lies on the fact that through the use of these three devices he turns abstract objects into cultural objects. Another instance in which Mies van der Rohe did not use at all conventional perspective, but he utilized only collage or photomontage was his collage for the Convention Hall. In this case, he used a picture of attendees at the 1952 U.S. Republican National Convention from *Life* magazine. What is of great interest in this case is the fact that Mies van der Rohe brought together many copies of the same image in order to create multiple vanishing points.

The techniques of the collage and montage are considered as avant-garde techniques. However, the technique of perspective is considered as non-avant-garde. Mies van der Rohe combined the two techniques in a way that challenged the very conventions of perspective and its philosophical implications. Collage and montage as techniques are opposed to perspective and are symbolic forms of modernity. Mies van der Rohe brought together these two opposed means of representation. The outcome of this strategy invokes a mode of viewing architectural representations that manages to activate modes of perception that are not reducible to the ways that are provoked by each of the aforementioned visual representation tool. In this sense, we could claim that in Mies van der Rohe's representations the disjunction of avant-garde and non-avant-garde techniques activates a mode of perception that is special to Mies. Martino Stierli notes in "Mies Montage" regarding this issue: "montage and collage have different qualities of visuality and tactility. The inclusion of 'reality fragments' (Peter Bürger) means that collage is subject to tactile perception; mon-

tage, conversely, is not."[54]. Peter Bürger writes, in *Theory of the Avant-Garde*, regarding Cubist collage:

> the reality fragments remain largely subordinate to the aesthetic composition, which seeks to create a balance of individual elements (volume, colours, etc). The intent can best be defined as tentative: although there is a destruction of the organic work that portrays reality, art itself is not being called into question[55].

Following Peter Bürger and Martino Stierli, we could argue that at the core of collage is the incorporation of reality fragments, which in contrast to montage, provokes a tactile perception. The technique of montage emerged in the circle of the Dadaists after the First World War. It was at the center of the avant-garde discourse. A distinction that would be useful for problematizing Mies's conception of montage is the distinction that Jacques Rancière draws between "dialectical montage" and "symbolic montage". According to Rancière, "dialectical montage" reveals a reality of desires and dreams, hidden behind the apparent reality, while "symbolic montage" creates analogies by drawing together unrelated elements, proceeding by allusion[56]. In many instances, Mies used real pieces of materials, such as pieces of flag, wood, veneer, or glass, and not only small reproductions of artworks. The tendency of Mies to bring together unrelated elements makes us think that he could be classified in the second category mentioned by Jacques Rancière, that is to say "symbolic montage".

Notes

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2 Michel Foucault, *Dits et écrits. 1954–1988, vol. III: 1976–1979* (Paris: Éditions Gallimard, 1994).

3 Nicholas Temple, *Disclosing Horizons: Architecture, Perspective and Redemptive Space* (Oxon and New York: Routledge, 2007), 237.

4 Mark Pimlott, *Without and Within: Essays on Territory and the Interior* (Rotterdam: Episode publishers, 2007), 42.

5 Robin Evans, "Mies van der Rohe's Paradoxical Symmetries", *AA Files*, 19 (1990): 56–68; Evans, *Translations from Drawing to Building and Other Essays* (London: Architectural Association, 1997), 233–277.

6 Ibid., 253.

7 Fritz Neumeyer, "A World in Itself: Architecture and Technology", in Detlef Mertins, ed., *The Presence of Mies* (New York: Princeton Architectural Press, 1994), 54.

8 August Schmarsow, "The Essence of Architectural Creation", in Robert Vischer, Harry Francis Mallgrave, Eleftherios Ikonomou, eds., *Empathy, Form, and Space: Problems in German Aesthetics, 1873–1893* (Santa Monica, CA: Getty Center for the History of Art and the Humanities, 1994), 281–297; Schmarsow, *Das Wesen der architektonischen Schoepfung* (Leipzig: Karl W. Hiersemann, 1894).

9 Ibid.

10 Mitchell W. Schwarzer, "The Emergence of Architectural Space: August Schmarsow's Theory of 'Raumgestaltung'", *Assemblage*, 15 (1991), 50.

11 Colin Rowe, Robert Slutzky, "Transparency: Literal and Phenomenal", *Perspecta*, 8 (1963): 45–54.

12 Robert Vischer, Harry Francis Mallgrave, Eleftherios Ikonomou, eds., *Empathy, Form, and Space: Problems in German Aesthetics, 1873–1893* (Santa Monica: Getty Center for the History of Art and the Humanities, 1994), 40.

13 Schmarsow, "The Essence of Architectural Creation," in Vischer, Francis Mallgrave, Ikonomou, eds., *Empathy, Form, and Space: Problems in German Aesthetics, 1873–1893, 281–297*; Schmarsow, *Das Wesen der architektonischen Schoepfung* (Leipzig: Karl W. Hiersemann, 1894);

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16 Gilles Deleuze, Félix Guattari, *Capitalisme et schizophrénie 2 : Mille plateaux* (Paris : Éditions de Minuit, Collection Critique, 1980) ; Deleuze, Guattari, *A Thousand Plateaus. Capitalism and Schizophrenia*, vol. 2, trans. Brian Massumi (Minneapolis, London: University of Minnesota Press, 2007), 492.

17 Jean-Louis Cohen, *Mies van der Rohe* (London : Spon, 1996), 34.
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19 Wolf Tegethoff, "From Obscurity to Maturity: Mies van der Rohe's breakthrough to modernism", in Franz Schulze, ed., *Mies van der Rohe: Critical Essays* (New York: The Museum of Modern Art, 1989), 56.
20 Ibid.
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24 Peter Eisenman, *Re-working Eisenman* (London: Academy Editions, 1993), 12; Eisenman, "miMISes READING; does not mean a thing", in John Zukowsky, ed., *Mies Reconsidered: His Career, Legacy, and Disciples* (Chicago: Art Institute of Chicago; New York: Rizzoli, 1986), 86–98; Eisenman, "miMISes READING does not mean a thing", in idem., *Eisenman inside out: selected writings, 1963–1988* (New Haven, CT: Yale University Press, 2004).
25 Ibid.
26 Ibid.
27 Evans, "Mies van der Rohe's Paradoxical Symmetries".
28 Ibid., 242.
29 Eisenman, *Re-working Eisenman*, 16.
30 Ibid.
31 David Leatherbarrow, Mohsen Mostafavi, *Surface Architecture* (Cambridge, Mass.: The MIT Press, 2005), 157.
32 Tafuri, *Francesco Dal Co, Architettura contemporanea* (Milan: Electa, 1976), 154; Tafuri, Dal Co, *Modern Architecture* (New York; Milan: Rizzoli; Electa, 1986).
33 Evans, "Mies van der Rohe's Paradoxical Symmetries", 247.
34 Ludwig Mies van der Rohe, Peter Blake, "A Conversation with Mies", edited by Gerhardt M. Kallmann, in "Four Great Makers of Modern Architecture, Gropius, Le Corbusier, Mies van der Rohe, Wright", A verbatim record of a symposium held at the School of Architecture from March to May 1961,

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35 Evans, "Mies van der Rohe's Paradoxical Symmetries", 248.

36 Ibid.

37 Ibid.

38 Eisenman, "miMISes READING does not mean a thing".

39 Ibid.

40 Ibid.

41 Ibid.

42 Detlef Mertins, Michael William Jennings, eds., *G: An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923–1926* (Los Angeles: Getty Research Institute, 2010).

43 Hans Richter cited in Edward Dimendberg, "Toward an Elemental Cinema: Film Aesthetics and Practice in G", in Mertins, Jennings, eds., *G: An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923–1926*, 56.

44 Sergueï Eisenstein, *The Film Sense* (New York: Dey Street Books, 1998).

45 Hans Richter, "The True Sphere of Film", in Mertins, Jennings, eds., G: *An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923–1926*, 223.

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Chapter 4: Ludwig Mies van der Rohe's Baukunst as Zeitwille

The interest in impersonality and the autonomous individual

This chapter explores the relationship between *Baukunst* and *Zeitwille* in the practice and pedagogy of Ludwig Mies van der Rohe, and the significance of the notions of civilization and culture for his philosophy of education and design practice. Focusing on the negation of metropolitan life and *mise en scène* of architectural space as its starting point, it examines how Georg Simmel's notion of objectivity could be related to Mies's understanding of civilization. Its key insight is to recognize that Mie's practice and pedagogy was directed by the idea that architecture should capture the driving force of civilization. The chapter also summarizes the foundational concepts of Mies's curriculum in Chicago. It aims to highlight the importance of the notions of *Zeitwille* and impersonality in Mies van der Rohe's thought and to tease apart the tension between the impersonality and the role of the autonomous individual during the modernist era.

The chapter also aims to link Mies's representations to Nietzsche's theory and to Simmel's understanding of culture and spirituality. The concept of negation functions as the common denominator that relates the design of Barcelona pavilion to Nietzsche's and Simmel's approaches. The "negativeness" towards the metropolis that characterizes Barcelona pavilion is not far from the "representational living" (*Ausstellungswohnen*) enhanced by the design of Tugendhat House. The "representational living" promoted through the austerity of the design of Tugendhat House had a liberating impact on its inhabitants that goes hand in hand with the "negativeness" towards metropolis characterizing not only the design of Barcelona pavilion, but also in the representations for Court house projects, Resor House project (1939), and the Museum for a

Small City project. The liberating force of Mies's representations and designs is linked to his understanding of teaching as an organic unfolding of spiritual and cultural relationship and to his preoccupation with the preservation of every individual's autonomy. Mies's concern about preserving the autonomy of external culture and the social forces of a given historical period echoes Simmel's theory[1].

4.1 Contextualizing Mies van der Rohe's conception of Zeitwille

Mies often designed vast open spaces, which represented the universal value of civic life. Mies's interiors were designed with the intention of helping inhabitants to distance themselves from the chaos of the city. Mies understood *Baukunst* as an action. He considered it to be a result of the *Zeitwille* as it becomes evident in his article entitled "Baukunst und Zeitwille!" published in *Der Querschnitt* in 1924[2]. In this article one can read his famous aphorism "Architecture is the will of time in space". The German and original version of this aphorism is: "Baukunst ist raumgefaßter Zeitwille", while the term *Zeitwille* expresses simultaneously a Schopenhauerian "will of the age" and a "will of time". It would be interesting to juxtapose the notion of *Zeitwille* with that of *Kunstwollen* and *Zeitgeist*. In Maike Oergel's recent study the concept of Zeitgeist is related to the "formation of modern politics". The term is said to "capture key aspects of how ideas are disseminated within societies and across border, providing a way of reading history horizontally"[3]. This connection of the Zeitgeist to the intention to disseminate ideas universally could be related to Mies's understanding of universality.

As Hazel Conway and Rowan Roenisch highlight, "[i]n an attempt to establish modernism as the only true style, early twentieth-century historians such as Nikolaus Pevsner and Sigfried Giedion employed the concept of the *Zeitgeist*"[4]. Nikolaus Pevsner "interpreted the styles of the past as the inevitable outcome of what he conceived as their social and political Zeitgeist"[5]. David Watkin characterizes Mies's conception of *Zeitwille* as a "blend of Lethaby and the *Zeitgeist* into a menacing vision of the depersonalized, secular, mechanistic future"[6]. Given that the notion of *Zeitwille* implies a non-stop process of becoming which is inherent in life; a comprehension of architecture as *Zeitwille* implies a perception of architectural representation as a snapshot of a continuous process of transformation. *Zeitwille* implies a state of continuous becoming and a state of action. Mies's understanding of *Baukunst* as *Zeitwille* is characterized

by the following ambiguity: on the one hand, it shows that Mies was attracted by man's capacity to convert his spiritual energy into something tangible, such as a building, and, on the other hand, it demonstrates that he was interested in the impact that products of human creation can have on civilization.

Oswald Spengler's work was influential on many modernists[7]. For instance, Oswald Spengler's *Man and Technics: A Contribution to a Philosophy of Life*[8] had an important impact on Sigfried Giedion's *Mechanization Takes Command: A Contribution to Anonymous History*[9]. The impact of Spengler's work of Mies is of great importance for understanding Mies's conception of *Baukunst* as *Zeitwille*. Spengler declared, in *The Decline of the West*, that "[e]very philosophy is the expression of its own and only its own time". He rejected the distinction "between perishable and imperishable doctrines" and replaces it with the distinction "between doctrines which live their day and doctrines which never live at all." Spengler believed in the capacity of "philosophy [to] […] absorb the entire content of an epoch". For him, the main criterion for evaluating the potential and the eminence of a doctrine was "its necessity to life"[10]. In 1959, during his presentation of The Commander's Cross of the Order of Merit of the Federal Republic of Germany, Mies underscored his conviction that "architecture belongs to an Epoch". He claimed that he believed it would "take fifty more years to clarify the relationship of architecture to the epoch" and that "[t]his will be the business of a new generation"[11]. Konrad Wachsmann notes in 1952, in *Arts and Architecture*, regarding the new conception of inhabitants that is implied in Mies's interior perspective views and their relationship to the will of epoch: "Thus he paves the way for anonymous building which will enable sensible solutions of modern problems to be achieved"[12].

Many of his representations that played a significant role in the dissemination of his work were produced in collaboration with Lilly Reich, before his departure to the United States, and in collaboration with his students or his employees after his settlement in Chicago. For instance, given that Lilly Reich and Mies collaborated closely between 1926 and 1938, her role in the design of the Barcelona Pavilion and Tugendhat House should not be underestimated[13]. The tendency of both Mies and Lilly Reich to avoid taking an explicit political position could be interpreted in relation to a generalized stance developed in Germany, since the late nineteenth century, around German Idealism, and especially around the notions of *Bildung* and *Kultur*[14]. Esther da Costa Meyer relates this unpolitical attitude to Thomas Mann's book entitled *Betrachtungen eines Unpolitischen* [*Reflections of a Non- political Man*] published in 1918[15]. Acknowledging Reich's role is useful for placing Mies's work within a broader cultural context.

Mies's simultaneous interest in impersonality and the autonomous individual should be understood in relation to the perspectives that were at center of architectural and artistic debates in Germany at the time.

4.2 The ambiguity of Mies van der Rohe's simultaneous interest in impersonality and the autonomous individual

Central for Mies's work was the phenomenon of inhabitants distancing themselves from the chaos of the city, which is a particular effect of his interiors. This trait of his interiors should be associated with his belief in the autonomous individual and his conviction that in "town and city living […] privacy is a very important requirement"[16]. Mies's interiors function as fields within which the subjects are autonomous individuals, and as mechanisms permitting to overcome the tension – characterizing the modern metropolis – between the frenetic city and the private bourgeois dwelling. They could be perceived as indoor fragments of the metropolis. The way he represented his interiors, blending linear perspective and photomontage, intensifies the sensation of leaving behind the chaos of the metropolis.

Mies privileged the use of perspective as mode of representation, despite his predilection for the avant-garde, anti-subjectivist tendencies, which rejected the use of perspective and favored the use of axonometric representation or other modes opposed to the assumptions of perspective. Mies used perspective as his main visualizing tool against the declared preference of *De Stijl*, El Lissitzky and Bauhaus's for axonometric representation. However, many of his perspective drawings were based on the distortion of certain conventions of perspective. Mies van der Rohe, despite the fact that he preferred objectivity, he did not privilege axonometric projection.

In "The Preconditions of Architectural Work" (1928), Mies claims that "[t]he act of the autonomous individual becomes ever more important"[17]. As Robin Schuldenfrei notes, the "phenomenon, of the inhabitant set apart from his surroundings, was a particular effect of Mies's interiors"[18]. Schuldenfrei associates this aspect of Mies's way of representing interiors with his belief "in the autonomous individual"[19]. The place of the "autonomous individual" in Mies's thought is an aspect that needs to be examined attentively, if we wish to understand the ambiguity between universality and individuality in his thought. Mies gives credence to the acts of the autonomous individual, but mistrusts the endeavor to "express individuality in architecture", as is

evident when he affirms that "[t]o try to express individuality in architecture is a complete misunderstanding of the problem"[20].

For Mies, individuality and autonomous individual are two different things. The way Kant and Nietzsche conceive the notion of autonomous individual is pivotal for understanding the distinction between individuality and autonomous individual in Mies's thought. Nietzsche, while appropriating Kant's notion of autonomy, rejects "its link to the categorical imperative and the 'formal constraints' interpretation of morality"[21]. In order to understand the differences between Kant's and Nietzsche's conception of the autonomous individual, we could juxtapose the Kantian rule "act always according to that maxim whose universality as a law you can at the same time will"[22] to the Nietzschean rule "act always according to that maxim you can at the same time will as eternally returning".

Deleuze notes regarding the conception of "sovereign" or "autonomous" individual, in Nietzsche's second essay contained in his book entitled *On the Genealogy of Morals*, that it is "liberated [...] from morality of customs, autonomous and supramoral (for 'autonomous' and 'moral' are mutually exclusive), in short, the man who has his own independent, protracted will"[23]. Deleuze's claim that "[i]n Nietzsche [...] the autonomous individual is [simultaneously] [...] the author and the actor"[24] relates to Mies's idea of the autonomous individual. We could claim that Mies was favorable towards acts that were expressions of autonomous individuals but negative towards individual means.

The individual's autonomy preoccupied not only Mies, but Georg Simmel as well. This common interest between Mies and Simmel's ideas is significant for understanding the differences between the concept of autonomous individual and that of individual means. Simmel introduced "The Metropolis and Mental Life" with the following phrase: "The deepest problems of modern life derive from the claim of the individual to preserve the autonomy and individuality of his existence in the face of overwhelming social forces, of historical heritage, of external culture, and of the technique of life."[25] Mies's concern about the autonomous individual is related to his modes of representation, in the sense that his visualization strategies provoked a specific perception of his interiors.

4.3 *Baukunst* as *Zeitwille* and the dualism between object and culture

Mies's understanding of *Baukunst* as *Zeitwille* should be understood in relation to his interest in man's capacity to convert his spiritual energy into something tangible, such as a building. In parallel, he was interested in the impact that products of human creation can have on civilization. This is very close to the binary relationship between "subjective life" and the "its contents", as described by Simmel, in "On the Concept and the Tragedy of Culture", where the author examines the "radical contrast: between subjective life, which is restless but finite in time, and its contents, which, once they are created, are fixed but timelessly valid"[26].

Simmel also analyses how culture can help us resolve the dualism between object and culture. Mies's insistence on the importance of the understanding of architectural praxis as an expression of civilization and the fact that he perceived architecture as an act in "the realm of significance"[27] are compatible with Simmel's theory. Mies until his late days believed that "architecture must stem from sustaining and driving forces of civilisation."[28] He was convinced that if the architect, during the procedure of concretizing his ideas, manages to capture the "driving forces of civilization" and convert them into a space assemblage through the process of *Baukunst*, then the products of human intellect – the architectural artefacts – can acquire a universally and timelessly valid effect on the human intellect. For Mies, in order to achieve this timeless and universal validity, the architect had to grasp the specificity of the *Zeitwille*.

Georg Simmel examines the notion of objectivity in "On the Concept and the Tragedy of Culture", where he associates the "potentialities of the objective spirit" with the fact that it "possesses an independent validity". He claims that this independent validity makes possible its re-subjectivization after "its successful objectification". For him, the wealth of the concept of culture "consists in the fact that objective phenomena are included in the process of development of subjects, as ways or means, without, thereby losing their objectivity"[29]. We could argue that Mies understands *Baukunst* as an objective means, believing that only if *Baukunst* is based on objectifiable, impersonal and generalizable processes can it allow the subject to appreciate their visual interaction with the built artefact. Mies, in "Baukunst und Zeitwille", associates *Zeitwille* with impersonality, declaring: "These buildings are by their very nature totally impersonal. They are our representatives of the will of the epoch. This is their significance. Only so could they become symbols of their time." He also affirms:

"The building-art can only be unlocked from a spiritual center and can only be understood as a life process"[30]. Mies insisted on the fact that his way differed from any kind of individualistic approach, saying: "I go a different way. I am trying to go an objective way."[31]

A characteristic of the concept of *Zeitwille* that should not be overlooked is the fact that it is always in a state of becoming. The process of *Baukunst* is, thus, perceived by Mies as being in a permanent state of becoming and, for this reason, is conceived as a crystallization of an epoch. Mies declares in "Bürohaus", published in the first issue of the journal *G*:

> We reject every aesthetic speculation, every doctrine, and every formalism.
> The art of building is the will of our time captured in space.
> Living. Changing. New.
> Not yesterday, not tomorrow, only today can be formed.
> Only this practice of building gives form.
> Create the form from the nature of the task with the means of our time.
> That is our task.[32] (Figure 4.1)

Mies's interest in impersonality should also be related to his belief in the significance of anonymity. In "Baukunst und Zeitwille", he remarks:

> The individual is losing significance; his destiny is no longer what interests us. The decisive achievements in all fields are impersonal and their authors are for the most part unknown. They are part of a trend of our time towards anonymity.[33]

Mies often referred to the following quotation of Erwin Schrödinger: "But the creative vigour of a general principle depends precisely on its generality."[34] This quotation brings to mind Mies's remark, in "Baukunst und Zeitwille", that "[t]he decisive achievements in all fields are impersonal and their authors are for the most part unknown"[35]. Mies related the idea of innovation to impersonality and insisted on the fact that the notion of renewal in any discipline is "part of the trend of [...] time toward anonymity."[36]

Mies's interest in anonymity and impersonality should be contextualized given that it was at the center of the discourse developed around *G: Material zur elementaren Gestaltung*. Two artists that were particularly interested in these two notions are Hans Richter and Werner Gräff, who declared in the first issue of the journal: "Today the trend of both artsiness and of life is individualistic and emotional. Operating methodically and impersonally is a cultural challenge today"[37]. They opposed individualistic stance to culture, claiming that in order to

contribute to culture creative processes should be impersonal. In the same text, they also refer to the "will to solve the problem of art not from an aestheticizing standpoint but from a general cultural one"[38].

Figure 4.1. Page from Ludwig Mies van der Rohe, "Bürohaus", G, 1 (1923), 3.

The individual will or intention is peripheral to Mies's approach since his main concern seems to be the conception of a system that organizes an environment of changes toward progress. Fritz Neumeyer notes, in "A World in Itself: Architecture and Technology", that for Mies, "the merging of technology and aesthetic modernism embodied the promise of a culture suited to the age, one in which form and construction, individual expression and the demands of the times, as well as subjective and objective values would converge into a new identity"[39].

4.4 Mies van der Rohe's representations: Non-resolved emptiness as "negativeness" towards *Großstadt*

The representations that Mies van der Rohe produced for his Court house projects, Resor House project, and the Museum for a Small City project combine the techniques of collage and linear perspective. This combination of collage and linear perspective, the use of grid only in the ground floor, and the absence of frame around the representation intensify the effect of depth in the perception of the observer[40]. They provoke a sensation of extension, which is further reinforced by his choice to place the artworks and surfaces in a dispersed way. Additionally, the lines of the spatial arrangements are less visible than the objects, artworks and statues represented in his architectural representations. The impact of these techniques on the perception of the observers is intensified by the minimal expression of Mies's representation, pushing the observers of Mies's representations to imagine their movement through space. The contrast between the discrete symmetrical fond with the grid and the non-symmetrical organization of the intense surfaces and artworks that are placed on it activates a non-unitary sensation in the way the observers perceive the Mies's drawings. This non-unitary sensation is in opposition to the unitary dimension of Erwin Panofsky's understanding of perspective. Mies overcame Panofsky's conception of the linear perspective apparatus as a "Will to Unification"[41]. The representational ambiguity provoked by Mies's visualization strategies provokes a non-possibility to take the distance that is inherent in the use of perspective[42].

The stagelike experience of Mies's interiors is related to a specific attitude of the inhabitant towards the metropolis[43]. Manfredo Tafuri related Mies's interiors to a "negativeness" towards the metropolis, which brings to mind what Georg Simmel called "blasé attitude" in "The Metropolis and Mental Life"[44]. The

reinvention of spatial experience through the movement of users is a characteristic of the Barcelona Pavilion. Tafuri drew a parallel between the visitors' experience in Mies's Barcelona Pavilion and stage experience. He related the experience of moving in Barcelona Pavilion to Adolphe Appia's understanding of the effect of rhythmic geometries on how space is perceived and experienced[45]. The *mise en scène* of a stagelike experience by Mies in the Barcelona Pavilion activates a specific kind of perception of the relation between the spatial experience of the interior of the Barcelona Pavilion and the city. Mandredo Tafuri shed light on the sensation of "the impossibility of restoring 'syntheses'" provoked by the perception of the interior of the Barcelona Pavilion as an "empty place of absence"[46]. This sensation is related to a specific kind of "negativeness" towards the metropolis that could be interpreted as a *mise en suspension* of the synthesis or suspended perception. It brings to mind Robin Evans' remark that in the case of Mies's Barcelona Pavilion "[t]he elements are assembled, but not held together"[47], and Hubert Damisch's claim that, in Mies' Barcelona Pavilion, "circulation [...] was more visual than pedestrian"[48]. This distinction between visual and pedestrian circulation is useful for comparing Mies's conception of circulation, which is more visual than pedestrian, to that of Le Corbusier that is simultaneously visual and pedestrian.

Tafuri analyses the effect of non-resolved emptiness of space produced by Mies's Barcelona Pavilion, noting: "In the absolute silence, the audience at the Barcelona Pavilion can thus 'be reintegrated' with that absence"[49]. Mies avoided representing human figures in his interior perspective representations, especially during the first decade after he moved to the United States. The fact that Mies preferred the observers of his images and the users of his spaces not to meet other people while they mentally visualized or physically experienced his spaces shows that he prioritized the solitary experience of space. This choice reinforced that sensation of meditation and of taking distance from the chaotic rhythms of metropolitan life. Walter Riezler juxtaposed the experience based on a conception of the house as a "living machine" ("machine à habiter"), as defined by Le Corbusier, with the experience of the interior space of Mies's Villa Tugendhat, noting:

> no one can escape from the impression of a particular, highly developed spirituality, which reigns in these rooms, a spirituality of a new kind, however, tied to the present in particular ways and which is entirely different therefore from the spirit that one might encounter in spaces of earlier epochs... This is not a "machine for living in", but a house of true "luxury",

> which means that it serves highly elevated needs, and does not cater to some "thrifty", somehow limited life style.[50]

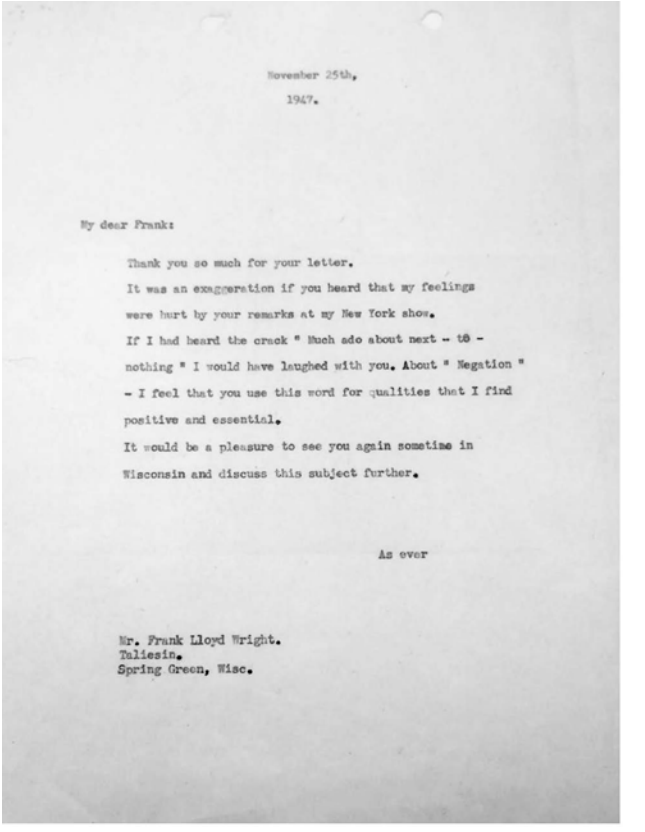
Regarding the Barcelona Pavilion, Mies held the following claim: "I must say that it was the most difficult work which ever confronted me, because I was my own client; I could do what I liked."[51] Frank Lloyd Wright, in a letter he sent to Mies in 1947, wrote: "the Barcelona Pavilion was your best contribution to the original 'Negation'"[52]. Mies responded to this letter telling Wright: "About "Negation" – I feel that you use this word for qualities that I find positive and essential"[53] (Figure 4.2). The "original 'Negation'" to which Wright refers in his letter is related to the fact that the Barcelona Pavilion constitutes a reaction "against both classical and modern [...] simultaneously and *in extremis*"[54], as Robin Evans suggests. The aforementioned exchange between Frank Lloyd Wright and Mies van der Rohe should be interpreted with the context of the theoretical debates of the modernist architects as far as the relationship between modern society and urbanism is concerned.

Through the design of the Barcelona Pavilion Mies expressed his rejection of both symmetry and asymmetry. Tafuri, analyzing this building, refers to the "'negativeness' towards metropolis" and interprets its "'signs' as devoid of meaning"[55]. Wright's comment on the contribution of Mies's Pavilion "to the original 'Negation'" and Tafuri's remark regarding the "negativenesss" of Mies's stance towards metropolis might seem an oxymoron if we think that "[t]he Elementary design proclaimed by the Berlin circle around Mies, Ludwig Hilberseimer and Hans Richter outwardly promoted an unconditionally affirmative, yes-saying attitude toward reality"[56]. The "negativeness" towards metropolis and the phenomenon of claustrophobia are apparent in Mies's collages for the Resor House project[57].

Evans notes, in "Mies Van Der Rohe's Paradoxical Symmetries": "The problem is that we are being offered two extreme options: either the vertigo of universal extension, or the claustrophobia of living in a crack"[58]. The claustrophobic aspect of Mies's representations could be related to the concept of *Berührungsangst* in Simmel's work. The dimension of *Berührungsangst* in Mies's representations is intensified during the first years of his life in the United States. Simmel's understanding of *Berührungsangst* as the fear for public spaces could be related to claustrophobic aspect of Mies's representations. Analyzing the relationship between Simmel's approach and Mies's design strategies is useful for understanding the fact that Mies did not design alone in a vacuum, but was responding to a cultural moment and others were responding to him.

In this sense, Mies was part of a particular sensibility. A distinction that is important for understanding the vision of Mies is that between the dialectic of Enlightenment and the dialectic of Romanticism, which is analyzed by Peter Murphy and David Roberts in *Dialectic of Romanticism*[59].

Figure 4.2. Ludwig Mies van der Rohe, letter to Frank Lloyd Wright, 25 November 1947.



November 25th,
1947.

My dear Frank:

Thank you so much for your letter.
It was an exaggeration if you heard that my feelings were hurt by your remarks at my New York show.
If I had heard the crack " Much ado about next - to - nothing " I would have laughed with you. About " Negation " - I feel that you use this word for qualities that I find positive and essential.
It would be a pleasure to see you again sometime in Wisconsin and discuss this subject further.

As ever

Mr. Frank Lloyd Wright.
Taliesin.
Spring Green, Wisc.

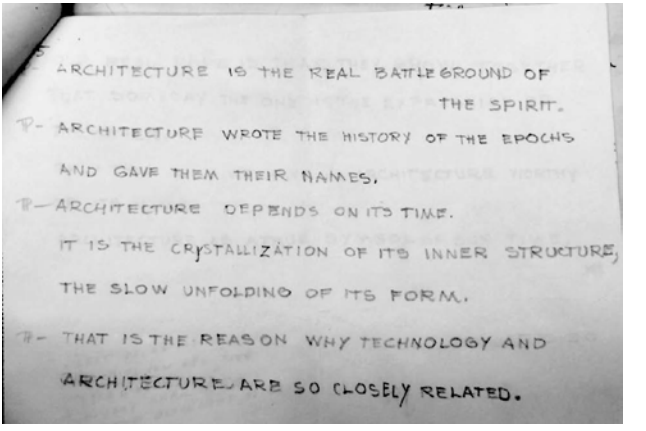
Credits: Ludwig Mies van der Rohe papers, Box 60, Folder "Wright, Frank Lloyd 1944–69". Manuscripts Division, Library of Congress, Washington, DC

4.5 Mies's *Baukunst* as an antidote to the chaos of metropolis

For Mies, *Baukunst* functioned as an antidote to the complexity and the chaos of metropolis. The way he used glass in his architecture should also be understood in relation to his intention to respond to the chaos of metropolis. Characteristically, Francesco Dal Co and Manfredo Tafuri note in *Modern Architecture* regarding the role of glass in Mies's work:

> But the perfectly homogeneous, broad glassed expanse is also a mirror in the literal sense: the "almost nothing" has become a "large glass," although imprinted not with the hermetic surrealist ploys of Duchamp, but reflecting images of the urban chaos that surrounds the timeless Miesian purity.[60]

Figure 4.3. Ludwig Mies van der Rohe's notes for his speeches.



Credits: Ludwig Mies van der Rohe papers, Box 61, Folder "Mies drafts for speeches, Speeches, Articles and other Writings", Manuscripts division, Library of Congress, Washington, DC

Francesco Dal Co associated Mies's approach to Nietzsche's "Beyond Good and Evil"[61], relating the conflict between the *arete* (*αρετή*) of *operari* and its historical determination in Nietzsche's thought to the tension between architecture and *Baukunst* in Mies's approach. Mies understood *Baukunst* as an expres-

sion of spirit and "[a]rchitecture [as] […] the real battleground of the spirit"[62] (Figure 4.3), and elaborated the term *Baukunst* to capture the practice of building as a spiritualized art[63]. Useful for grasping Mies's understanding of spirituality is Simmel's remark that "the subjective spirit has to leave its subjectivity, but not its spirituality, in order to experience the object as a medium for cultivation"[64]. This thesis of Simmel brings to mind Mies van der Rohe's conviction that the architectural artefacts and the ideals that are intrinsically linked to them can acquire a universally valid status only if their creation is based on the metamorphosis their concepts into something tangible as their architecture.

Franz Schulze and Edward Windhorst's argument that Mies "was […] bound up with the aesthetic, with art, […] with architecture, but it took on an elevated quality that reached fully to the divine"[65] can help us understand how Mies understood the notion of *Baukunst*. Mies was interested in form as starting-point and not as result. In the second issue of *G: Material zur elementaren Gestaltung* (*G: Material for Elementary Construction*, published in September 1923, Mies wrote, in "Bauen" ("Building"):

> We refuse to recognise problems of form but only problems of building
> Form is not the aim of our work, but only the result.
> Form, by itself, does not exist.
> Form as an aim is formalism, and that we reject…
> Essentially our task is to free the practice of building from the control of aesthetic speculators and restore it to what it should exclusively be: Building.[66]

Mies insisted on the fact that for him the most significant phase of the design process was the "starting point of the form-giving process". He associated the significance of the starting point of architectural design process to life. He distinguished two types of architectural forms: those that derive from life and those do not derive from life. This becomes evident from what he wrote in a letter he sent to Walt Riezler:

> We want to open ourselves to life and seize it. Life is what matters in all the fullness of its spiritual and concrete relations. We do not value the result but the starting point of the form-giving process. It in particular reveals whether form was arrived at from the direction of life or for its own sake.[67]

4.6 Representational living and the capacity of space to stimulate the intellect

The concept of representational living is pivotal for understanding Mies's interiors. Representational living was linked to the cultural criticism of Walter Benjamin as well as the architecture of Adolf Loos. Walter Riezler's article in *Die Form* provoked the reactions of Justus Bier, Roger Ginsburger and Grete and Fritz Tugendhat, who also published articles commenting on the same building in the same journal[68]. What these exchanges reveal is that Mies's Villa Tugendhat activated a new mode of inhabiting domestic space. Bier, in his provocative article entitled "Can one live in the Tugendhat House?" ("Kann man im Haus Tugendhat wohnen?") associated the living experience in the Villa Tugendhat with an "ostentatious living" (*Paradewohnen*) and a "representational living" (*Ausstellungswohnen*). According to him, the special characteristic of this new mode of inhabitation was its capacity "to lead a kind of representational living and eventually overwhelm the inhabitants' real lives"[69]. Grete and Fritz Tugendhat, Mies's clients and first inhabitants of the house, responded to Bier and Ginsburger's critiques, asserting that their experience of the spaces of the Tugendhat house was "overwhelming but in a liberating sense." They related the liberating force of the space of the house to its austerity, claiming that "[t]his austerity makes it impossible to spend your time just relaxing and letting yourself go, and it is precisely this being forced to do something else which people, exhausted and left empty by their working lives, need and find liberating today."[70] Useful for understanding the place of dweller in Mies's thought is the work of Hans Prinzhorn[71]. The fact that the two men were friends should also be taken into account.

We can juxtapose the concept of the "machine for living in" ("machine à habiter") in Le Corbusier's thought and that of the "meditating machine" ("machine à méditer") in Mies's approach, drawing upon Richard Padovan's "Machine à Méditer", where the author claims that Mies desired to convert buildings into objects of meditation[72]. The following words of Mies confirm his desire to create objects that pushed him to think and to further activate his intellect: "I want to examine my thoughts in action.... I want to do something in order to be able to think."[73] One could relate the "representational living" to Mies's desire concerning the capacity of space to further stimulate the intellect through action. The attention that Mies paid to the intellect becomes evident in an interview he gave to some students of the School of Design of North Carolina

State College, in 1952: "The shock is emotional but the projection into reality is by the intellect"[74].

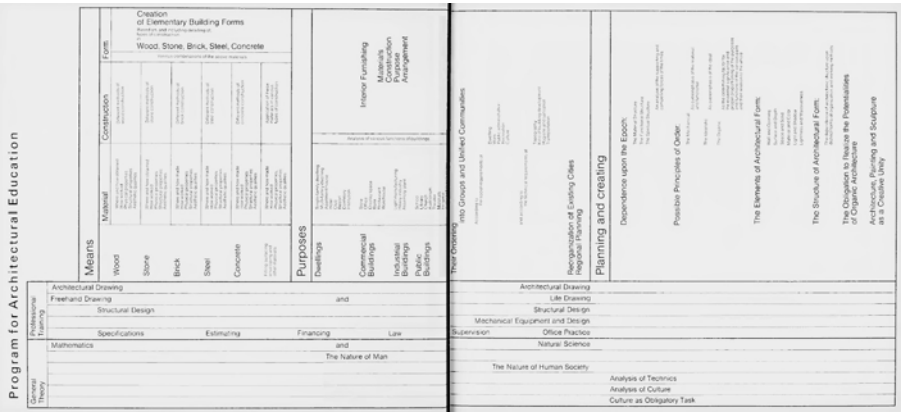
4.7 Teaching as an organic unfolding of spiritual and cultural relationships

Mies's ideas about the autonomous individual and timeless architecture had an important impact on his conception of architectural education. This is evident in a letter from Mies to Henry T. Heald in December 1937, in which Mies claimed that the curriculum he proposed "through its systematic structure leads an organic unfolding of spiritual and cultural relationships"[75]. In the same letter, he also declared that "[c]ulture as the harmonious relationship of man with his environment and architecture as the necessary manifestation of this relationship is the meaning and goal of the course of studies"[76]. This quotation makes the importance of culture for his pedagogical agenda clear. He continued writing:

> The accompanying program is the unfolding of this plan.
>
> Step I is an investigation into the nature of materials and their truthful expression. Step II teaches the nature of functions and their truthful fulfilment. Step III: on the basis of these technical and utilitarian studies begins the actual creative work in architecture.[77]

Mies's curriculum at the Department of Architecture of the Armour Institute of Technology, which would be renamed Illinois Institute of Technology (IIT), moved from "Means" to "Purposes" to "Planning and Creating", placing particular emphasis on the different successive phases of the pedagogical process, and the significance that the notions of civilization, culture and *Zeitwille* (Figure 4.4). Mies divided the curriculum into three main progressive stages, that would be preceded by a short period of "preparatory training". This was influenced by the so-called *Vorkurs*, the preliminary course at the Bauhaus. For Mies, the main components of "preparatory training" would be mathematics, natural sciences and drawing. In parallel, he considered that the main objective of the preparatory training would be "to teach the students to draw, to see proportions and to understand the rudiments of physics before starting the study of structural means"[78].

Figure 4.4. Program for Architectural Education, Illinois Institute of Technology, 1938.



Credits: Courtesy of Brenner Danforth Rockwell

Walter Peterhans, who used to teach photography courses at the Bauhaus and was invited by Mies to join the faculty of the Department of Architecture of the Armour Institute of Technology, started teaching the "Visual Training" course there in 1938. He placed particular emphasis on the role of visual perception for architectural practice. Mies, in "Program for Architectural Education", commented on the logic of the "Visual Training" course. He believed that the "Visual Training" course served "to train the eye and sense of design and to foster aesthetic appreciation in the world of proportions, forms, colors, textures and spaces"[79]. In parallel, he prioritized "visual training" over freehand drawing. For him, "visual training" was "indispensable as a means of recording an idea", while freehand drawing should be understood as "a means of fostering insight and stimulating ideas"[80]. Mies described the philosophy of the "Visual Training" course as follows:

> Visual Training is a course which serves to train the eye and sense of design and to foster aesthetic appreciation in the world of proportions, forms, colors, textures and spaces. We attach incomparably more importance to visual training than freehand drawing or drawing from nude. Sketching is indispensable as a means of recording an idea, clarifying it and communicating to others; but as a means of fostering insight and stimulating ideas

> visual training has quickly shown itself to be a greatly superior method since it begins as a deeper level in training the eye for architecture.[81]

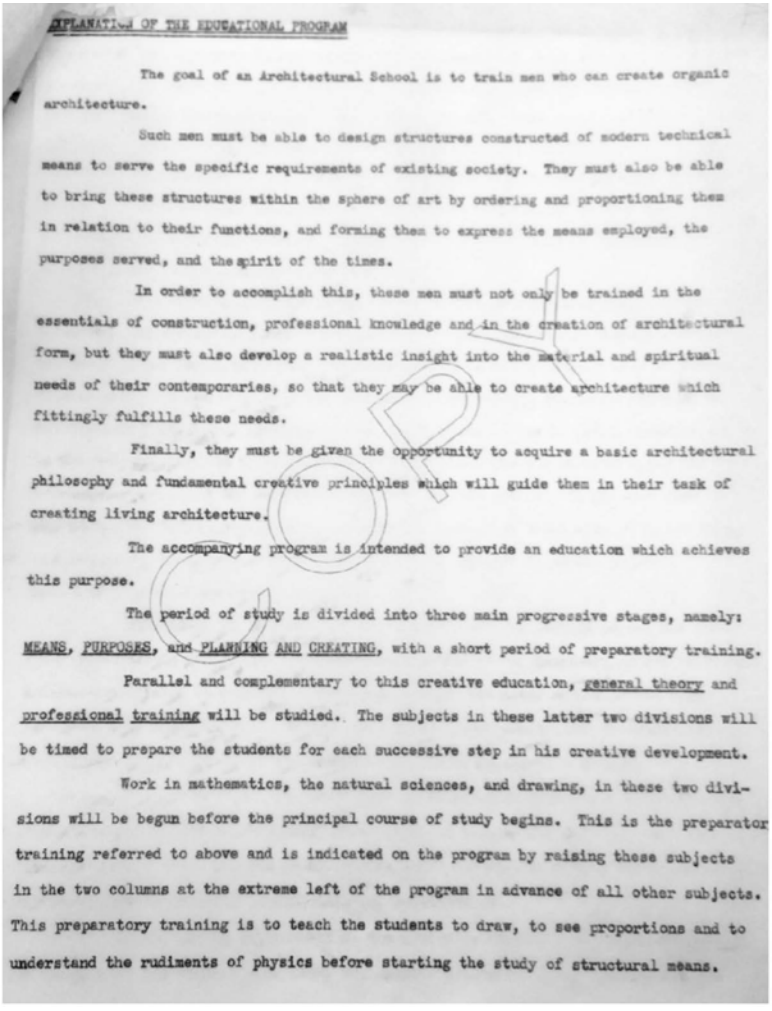
Undoubtedly, the strategies employed in the *Vorkurs* at the Bauhaus constitute the precedents for the exercises given to the students in the framework of the "Visual Training" course. According to Peterhans, who taught this course, "Visual Training […] [was] a […] conscious education for seeing and forming, for aesthetic experience in the world of proportion, shape, color, texture, space"[82]. Its philosophy was based on the conviction that sensory knowledge can be a path to insight. What is of particular interest for this paper is the fact that the innovative quality of the "Visual Training" course taught by Peterhans lay in his intention to reconcile aesthetic and scientific perspectives instead of prioritizing one over the other. Another distinctive characteristic of the didactic vision behind "Visual Training" is the fact that it treated the students' own work as its main material. Thus, students were invited to sharpen their visual perception on their own artefactual products, and not on pre-existing cases or works of major architects that already occupied an important position within architectural epistemology.

In a letter that accompanied the "Explanation of the Educational Program" (Figure 4.5, Figure 4.6), which Mies sent to Henry T. Heald on 31 March 1938, he wrote: "I lay special worth upon the sharpening of the powers of observation and the development of the capacity to create imaginatively as well as a general control of the quality of the students' work by photographic methods"[83]. Mies believed that the teaching of "Visual Training" by Peterhans could serve this purpose.

The "means" were divided into material, construction and form. Informative for understanding the philosophy of not only the "preparatory training", but also of the whole educational program that Mies suggested as newly-appointed Director of the Armour Institute of Technology is what he called "General theory", which included the six following sub-categories: mathematics and natural sciences, the nature of man, the nature of human society, analysis of technics, analysis of culture, and culture as obligatory task. Mies's curriculum was based on the idea that during the first phase of education, the students should focus on the development of their "drawing ability and visual perception, progressing through Construction as an understanding of principles, acquiring the technical knowledge of related Engineering and studying Function as a way of understanding problems and building types"[84]. Therefore, during the first three years the pedagogical agenda was concen-

trated on the sharpening of visual and spatial perception, while the last two years of education were conceived as serving to enhance the synthesis of the skills acquired previously.

Figure 4.5. Ludwig Mies van der Rohe, Explanation of the Educational Program sent to Henry T. Heald on 31 March 1938.



EXPLANATION OF THE EDUCATIONAL PROGRAM

The goal of an Architectural School is to train men who can create organic architecture.

Such men must be able to design structures constructed of modern technical means to serve the specific requirements of existing society. They must also be able to bring these structures within the sphere of art by ordering and proportioning them in relation to their functions, and forming them to express the means employed, the purposes served, and the spirit of the times.

In order to accomplish this, these men must not only be trained in the essentials of construction, professional knowledge and in the creation of architectural form, but they must also develop a realistic insight into the material and spiritual needs of their contemporaries, so that they may be able to create architecture which fittingly fulfills these needs.

Finally, they must be given the opportunity to acquire a basic architectural philosophy and fundamental creative principles which will guide them in their task of creating living architecture.

The accompanying program is intended to provide an education which achieves this purpose.

The period of study is divided into three main progressive stages, namely: MEANS, PURPOSES, and PLANNING AND CREATING, with a short period of preparatory training.

Parallel and complementary to this creative education, general theory and professional training will be studied. The subjects in these latter two divisions will be timed to prepare the students for each successive step in his creative development.

Work in mathematics, the natural sciences, and drawing, in these two divisions will be begun before the principal course of study begins. This is the preparator training referred to above and is indicated on the program by raising these subjects in the two columns at the extreme left of the program in advance of all other subjects. This preparatory training is to teach the students to draw, to see proportions and to understand the rudiments of physics before starting the study of structural means.

Credits: Ludwig Mies van der Rohe papers, BOX 5. Manuscripts division, Library of Congress, Washington, DC

Figure 4.6. Ludwig Mies van der Rohe with his students at IIT discussing some problems they have come up in their individual projects. While emphasizing fundamental principles of architecture, he reminds them that "God is in the details".

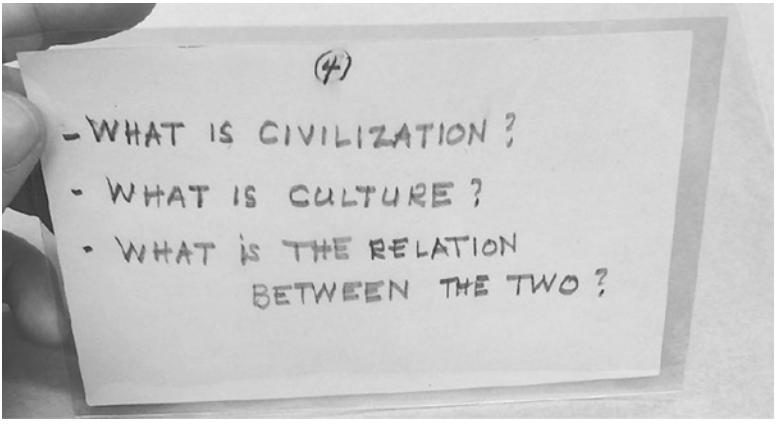
Photograph taken by Frank Scherschel on 1 November 1956. Credits: Getty Images

Central for his teaching and design strategy was the relationship between culture and civilization. Mies's hostility toward subjectivity in art is characterized by a paradox: despite his rejection of individualized aesthetics, he asserts in the first issue of the journal *G* that "we need an inner order of our existence"[85]. This inner order of our existence, which Mies refers at the same moment that he rejects individualized aesthetics, reveals the paradoxical relationship between subjectivity and objectivity as Simmel describes it. An aspect of Simmel's approach, which reveals its affinities with Mies's point view, is the concern about the double gesture of the "objectivization of the subject and the subjectivization of the object", in *Philosophie der Kultur*[86]. This connection between Simmel and Mie's perspective is further legitimized by the fact that Mies owned Simmel's *Philosophie der Kultur*. Mies van der Rohe poses the following

questions: "What is civilization? What is culture? What is the relation between the two?"[87] (Figure 4.7) The distinction between civilization and culture was at the center of Oswald Spengler's thought, as it becomes evident in his following words:

> Civilization is the ultimate destiny of the Culture… Civilizations are the most external and artificial states of which a species of developed humanity is capable. They are a conclusion, the thing-become succeeding the thing-becoming, death following life, rigidity following expansion… petrifying world-city following mother-earth and the spiritual childhood[88].

Figure 4.7. Ludwig Mies van der Rohe's notes for his speeches.



Credits: Ludwig Mies van der Rohe papers, Box 61, Folder "Mies drafts for speeches, Speeches, Articles and other Writings", Manuscripts division, Library of Congress, Washington, DC

For Mies, clarity was important not only in terms of its application to the design process, but for pedagogy as well. This becomes evident from what he declared in his inaugural address as Director of Architecture at Armour Institute of Technology, in 1938, in which he underscored the significance of "rational clarity" for education. More specifically, he declared that "[e]ducation must lead us from irresponsible opinion to true responsible judgment". His pedagogical vision was characterized by the intention to replace "chance and

arbitrariness" with "rational clarity and intellectual order."[89] A meeting point between Mies's design approach and his teaching philosophy is the interest in promoting clarity. He understood teaching as a means for clarifying his ideas. This becomes evident in what he declared a year before his death, in January 1968:

> Teaching forced me to clarify my architectural Ideas. The work made it possible to test their validity. Teaching and working have convinced me, above all, of the need for clarity in thought and action. Without clarity, there can be no understanding. And without understanding, there can be no direction — only confusion.[90]

The main principle on which Mies's curriculum was based was the promotion of clarity and order. Regarding the importance of clarity for education, he remarked: "If our schools could get to the root of the problem and develop within the student a clear method of working, we could have given him a worthwhile five years"[91]. To understand Mies's conception of clarity it would be useful to relate it to the debates around clarity in the pages of *G. Zeitschrift für elementare.* Regarding the theme of clarity Théo van Doesburg declares in the first issue of the aforementioned journal:

> What we demand of art is CLARITY, and this demand can never be satisfied if artists use individualistic means. Clarity can only follow from discipline of means, and this discipline leads to the generalization of means. Generalization of means leads to elemental, monumental form-creation.[92]

Clarity in the sense described in the journal *G* is associated with the invention of generalizable means. Mies's interest in generalizable means and the rejection of individualistic is related to his concern about objectivity as Georg Simmel describes it in "The Stranger"[93]. Mies believed that one of the most important criteria for judging the practice of architects and educators in the field of architecture is the clarity of their working methods and the knowledge of the tools of the discipline. Mies's belief in the necessity of an extreme discipline of the design process could be associated with St Thomas Aquinas's conviction that "[r]eason is the first principle of all human work."[94] St Thomas Aquinas agrees with Aristotle's point of view in *Nicomachean Ethics* (*Ηθικά Νικομάχεια*) according to which ethical is what is in accordance with right reason[95]. In this sense, we could claim that, in Mies's case, good architecture is assimilated to an architecture that is conceived according to right reason. Mies declared: "I don't want to be interesting – I want to be good!"[96] This declaration, apart from an

echo of St Thomas Aquinas and Aristotle, can also be interpreted in relation to Nietzsche's approach in *Will to Power*, where the latter claims that it is important to avoid any confusion between the good and the beautiful. More precisely, Nietzsche states: "For a philosopher to say, 'the good and the beautiful are one,' is infamy."[97] Mies, as Nietzsche, refused to assimilate good and beautiful. The belief in the extreme discipline of the design process, which characterizes Mies's point of view, could be interpreted as an incorporation into architecture of the idea of St Thomas Aquinas that "Reason is the first principle of all human work."[98] For both Aquinas and Aristotle behaving according to reason is the first principle of ethics.

Mies understood *Baukunst* as an expression of spirit. The elaboration of the term *Baukunst* permitted him to capture the practice of building as a spiritualized art. It also helped him to grasp the idea of spiritual pertinence, which was, for him, the means to freedom and clarity. In parallel, he "saw architecture as the expression of a certain Zeitwille"[99]. Mies's interest in the spatial expression of *Zeitwille* is related to his conviction that *Zeitwille* can be apprehended spatially[100]. As Jean-Louis Cohen has remarked, Mies believed that "the teaching of architecture should focus on the importance of values 'anchored in the spiritual nature of man'"[101]. Descartes and Kant claimed that our rational minds impose meanings to the world, while St Thomas Aquinas understood this process in the reverse. The approaches of Descartes, Kant and St Thomas Aquinas can help us understand the relationship between the mental image and the art of building in Mies's thought, and his belief that "the art of building [arises] out of spiritual things"[102].

Notes

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senschaft (Frankfurt Society for Trade, Industry and Science) in Frankfurt am Main. Unpublished manuscript in the collection of Dirk Lohan, Chicago; see also Fritz Neumeyer, *The Artless Word: Mies van der Rohe on the Building Art*, trans. Mark Jarzombek (Cambridge, Massachusetts: The MIT Press, 1991), 299–300.

18 Robin Schuldenfrei, "Contra the Großstadt: Mies van der Rohe's Autonomy and Interiority", in Beate Söntgen, Ewa Lajer-Burcharth, eds., *Interiors and Interiority* (Berlin; Boston: De Guyter, 2016), 287.

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28 Revised version of a speech that Ludwig Mies gave in January 1968. Ludwig Mies van der Rohe papers, Box 61, Folder "Speeches, Articles and other writings", Manuscripts division, Library of Congress, Washington, DC

29 Georg Simmel, "On the Concept and the Tragedy of Culture".

30 Mies van der Rohe, "Baukunst und Zeitwille!".

31 Mies van der Rohe cited in Moisés Puente, ed., *Conversations with Mies Van Der Rohe* (Princeton, New Jersey: Princeton Architectural Press, 2008), 59.
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37 Hans Richter, Werner Gräff, *G: Material zur elementaren Gestaltung*, 1 (1923), 1.
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85 Mies van der Rohe, "Bürohaus", *G*, 1 (1923), 3.
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98 St Thomas Aquinas, *Summa Theologiae* I II, q. 58, a. 2.

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100 Mies van der Rohe referred to the "the spatially apprehended will of the epoch" [*raumgefaßter Zeitwille*]; Mies van der Rohe, "Bürohaus", 3.

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Chapter 5: The Team Ten and the humanization of architecture

Postwar engaged users as activators of change

This chapter examines the Post-CIAM generation, placing particular emphasis on Le Corbusier's diagram sent in 1956 to the tenth CIAM at Dubrovnik. With this letter Le Corbusier called attention to a turning point within the circle of the CIAM, maintaining that after 1956 its dominant approach had been characterized by a reorientation of the interest towards what he called "action towards humanization". It examines whether this humanizing process is part of a crisis or an evolution, on the one hand, and compares the directions that were taken regarding architecture's humanization project within a transnational network, on the other hand. In 1957, Ernesto Nathan Rogers, in "Continuità o Crisi?", published in *Casabella Continuità*, considered history as a process, highlighting that history can be understood as being either in a condition of continuity or in a condition of crisis "accordingly as one wishes to emphasize either permanence or emergency"[1].

An important instance regarding this reorientation of architecture's epistemology was the First International Conference on Proportion in the Arts at the IX Triennale di Milano in 1951, where Le Corbusier presented his *Modulor* and Sigfried Giedion, Matila Ghyka, Pier Luigi Nervi, Andreas Speiser and Bruno Zevi intervened among others. The debates that took place during this conference epitomize the attraction of architecture's dominant discourse to humanization ideals. In a different context, the Doorn manifesto (1954), signed by the architects Peter Smithson, John Voelcker, Jaap Bakema, Aldo van Eyck and Daniel van Ginkel and the economist Hans Hovens-Greve and embraced by the younger generation, is interpreted as a climax of this generalized tendency to "humanize" architectural discourse and to overcome the rejection of the rigidness of the modernist ideals.

Despite the intensity of the debates during the late 1950s such as those between Reyner Banham and Ernesto Nathan Rogers in the pages of *The Architectural Review* and *Casabella Continuità* or the critique of BBPR's Torre Velasca by Peter Smithson and Jaap Bakema at the 1959 CIAM conference in Otterlo, there are certain common denominators characterizing the rejection of the rigidity of the modernist ideals in different national contexts. Their affinities are related to the socioeconomic conditions of the post-war context and the reconceptualization of the relationship between architecture and urban planning. Within such a context, the conflicts between the protagonist figures representing different national contexts became an engine of regeneration of architecture's scope, revitalizing the architects' role in the transformation of post-war societies. These debates not only are of great importance for understanding the shift between the CIAM and the post-CIAM philosophy, but also shaped the ideals and vision that dominated the architectural scene of the 1960s and 1970s. A common preoccupation was the concern about the humanist aspect of architecture. As Ákos Moravánszky remarks, "[h]umanism as a program that places the human being in the center of the universe was embraced by all sides during the Second World War and in the years of reconstruction"[2]. Moravánszky also underscores that humanism "[i]n the postwar years [...] provided an ideal common ground for liberal and socialist positions"[3].

The cross-fertilization between *The Architectural Review, Architectural Design, Casabella Continuità, Arquitectura, L'Architecture d'aujourd'hui* and *Forum* can inform our comprehension of the exchanges and cultural transfers regarding architecture between the UK, Italy, Portugal, France and Holland. All the above-mentioned architecture journals contributed to the dissemination of Team Ten's concerns. Of great significance regarding the reception of Team Ten in France is the special issue of *L'Architecture d'Aujourd'hui* in 1975 devoted to Team Ten and titled "Team 10 + 20". The journal *Arquitectura* was one of the most significant architecture journals in Portugal in the 1950s.

Important for understanding the exchanges between Portugal and Italy is Nuno Portas, who was among its main contributors. His article entitled "Literatura arquitectónica I: L'Architettura, cronache e storia" was published in *Arquitectura* in 1957[4], while "A responsabilidade de uma novíssima geração no Movimento Moderno em Portugal" ["The responsibility of a brand new generation in the Modern Movement in Portugal"] appeared in the same journal two years later, in 1959[5]. The former is useful for grasping the cross-fertilization between Portugal and Italy in general, and the Portuguese journal *Arquitectura* and the Italian journal *L'architettura: Cronache e storia,* founded in 1955 by Bruno Zevi in

Rome, more specifically, while the latter is important for understanding how the generational shift and the inauguration of the 3rd series of *Arquitectura* contributed to the reorientation of ideas regarding architecture in Portugal. The issue 57/58 of the journal *Arquitectura*, published in winter 1957, was the first issue of the 3rd series of the journal and represents a turning point since it is linked to a new generation within the Portuguese context, which was more open to European debates than the previous series of the same journal.

The post-war context in Portugal was characterized by an intention to reinvent the connection between the architects and the social, economic and political setting within which their practice was inscribed. This reinvention of the architects' role within society was related to the intensification of multidisciplinary approaches and the opening of architecture toward social sciences, geography, economics, anthropology and so on. The intensification of multidisciplinarity in architectural discourse and the critique of the principles of the Athens Charter were two central characteristics of this attempt to strengthen the articulations between architecture and its social, economic and political context. Regarding the sharpening of the multidisciplinary facet of architectural discourse, Portuguese architect Pedro Vieira de Almeida's approach is worth noting, while the relationship of the Portuguese architect Amâncio Guedes, a.k.a. Pancho Guedes, with Team Ten should not be underestimated. The latter, who was dean of the Department of Architecture at the University of the Witwatersrand, and a professor at the Faculty of Architecture of the University of Lisbon and the Architectural Association in London, perceived architecture as an open-ended discipline. Guedes had studied at the Escolas das Belas Artes in Porto. Since 1962, when he was invited by the Smithsons to attend the meeting at Royaumont, he participated regularly in the Team Ten meetings.

As Jaap Bakema notes, the Dutch group of CIAM consisted of two groups: "Opbouw", which was related to Rotterdam, and "De 8", which was linked to Amsterdam. Of great significance for the dissemination of the ideas of Team Ten in Holland is the Dutch journal *Forum*. In 1959, it initiated a new series of which the first issue was devoted to the thematic 'The story of another idea'. This issue was distributed to the architects that attended the 1959 CIAM meeting in Otterlo, where Aldo van Eyck, Alison and Peter Smithson and Jaap Bakema announced the death of the CIAM. As Pedro Baía underscores, in his article entitled "Appropriating Modernism: From the Reception of Team 10 in Portuguese Architectural Culture to the SAAL Programme (1959–74)"[6], this issue of *Forum* represents a turning point. A statement signed by Alison and Peter Smithson that was published in the 7th issue of *Forum* in 1959 was

later included in the British journal *Architectural Design*, where the death of the CIAM was also announced[7].

Among the episodes that are vital for understanding what was at stake in the post-war Italian context are the foundation of the Associazione per l'architettura organica (APAO) by Pier Luigi Nervi and Bruno Zevi in 1945 and the approach developed by Ernesto Nathan Rogers in *Casabella Continuità* during the post-war years. An important instance regarding this reorientation of architecture's epistemology during the post-war years in Italy and the embracement of humanism under the label "New Humanism" was the "primo convegno internazionale sulle proporzioni nelle arti" ("First International Conference on Proportion in the Arts") organized in 1951 in the framework of the ninth Triennale di Milano. Le Corbusier publicly presented his *Modulor*. Sigfried Giedion, Matila Ghyka, Pier Luigi Nervi, Andreas Speiser and Bruno Zevi were among the participants who attended this event, while Giulio Carlo Argan refused the invitation. The debates that took place during this conference epitomize the attraction of architecture's dominant discourse to ideals of humanization. In conjunction with the above-mentioned conference, among the exhibitions held during that same Triennale, I could mention "Architettura. Misura dell'uomo" ("Architecture. Mesure of man") and "Architettura spontanea" ("Spontaneous architecture") since both reflect the prevalent attraction to humanism. Ernesto Nathan Rogers curated the former in collaboration with Vittorio Gregotti, Lodovico Meneghetti and Giotto Stoppino, while Giancarlo De Carlo mounted the latter.

The post-war attraction to the ideals of humanism had already been apparent in London, within the context of the Warburg Institute, where the publication of Rudolf Wittkower's *Architectural Principles in the Age of Humanism*[8] in 1949 played a major role, but also in Italy, through the foundation of the Associazione per l'Architettura Organica (APAO) in 1944, which was driven by the conviction that modern architecture's liberation from rigid functionalism would allow humanism and democracy to serve as liberating forces within post-war Italian society. In order to grasp what was at stake in the architectural debates in Italy during the post-war years, one should bear in mind that there was a tension between the Milanese and the Roman contexts. The differentiation between the Milanese and the Roman scene is related to the contrast between Ernesto Nathan Rogers's approach and Bruno Zevi's vision respectively. Both Rogers and Zevi played an important role in the dissemination of architectural debates given that, at the time, they directed two major journals engaging in these debates, such as *Casabella Continuità* and *L'architettura: Cronache e storia* re-

spectively. The contrast between the post-war architectural debates in Milan and in Rome can best be explained by pointing out that the former city was much more closely related to Team Ten than the latter.

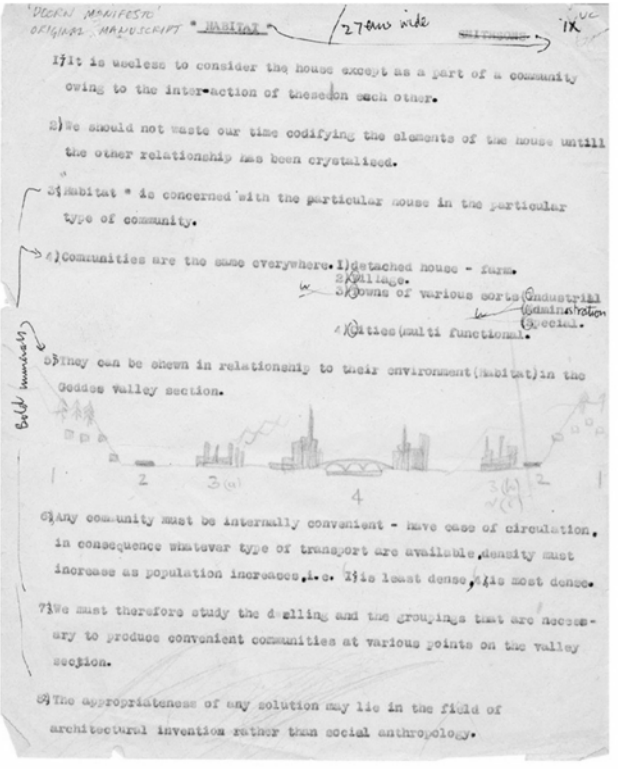
The CIAM summer schools, many of which were held in Venice, had an important impact on the Italian post-war architectural debates. The Italians who took part in the CIAM of 1953, held in Aix-en-Provence on the theme "The Charter of Habitat", were: Franco Albini, Ludovico B. Belgioioso, Luigi Cosenza, Ignazio Gardella, Ernesto N. Rogers, Giovanni Romano, Giuseppe Samonà. Ignazio Gardella and Vico Magistretti. According to Eric Mumford "[u]ntil the end of CIAM the Italian group would remain one of the most active and productive national groups"[9]. Rogers added the subtitle *Continuità* to the name of the journal *Casabella* in 1953, that is to say the year of the CIAM in Aix-en-Provence. In 1957, Rogers wrote, in "Continuità o Crisi?": "Considering history as a process, it might be said that history is always continuity or always crisis accordingly as one wishes to emphasize either permanence or emergency"[10]. Giancarlo De Carlo and Ernesto N. Rogers attended the last CIAM, held in Otterlo in 1959, two years after the former had resigned from *Casabella Continuità*. De Carlo presented "Memoria sui contenuti dell'architettura moderna" in Otterlo, while Rogers presented the Torre Velasca. Peter Smithson and Jaap Bakema criticized sharply BBPR's Torre Velasca, when it was presented at the 1959 CIAM conference in Otterlo. Peter Smithson argued that it was aesthetically and ethically wrong and "a bad model to give because there are things that can be so easily distorted and become not only ethically wrong but aesthetically wrong"[11]. He described it as a model with dangerous consequences and blamed Rogers for not being aware of his position in the society.

5.1 The Doorn manifesto as a fruit of generational conflict

The post-war context was characterized by the intention to "re-humanize" architecture, and the Doorn Manifesto was pivotal for this project. The rediscovery of the "human" and the intensification of interest in proportions are two aspects that should be taken into account if we wish to grasp how the scope of architecture was transformed during the post-war period. The interim meeting at Doorn, which was organized by Jaap Bakema and Sandy van Ginkel, took place in January 1954. The Doorn Manifesto or "Statement on Habitat" (Figure 5.1), which is often considered to be the founding text of Team Ten, was named after the city in which it was formulated and was signed in 1954 by

the architects Peter Smithson, John Voelcker, Jaap Bakema, Aldo van Eyck and Sandy van Ginkel and the social economist Hans Hovens-Greve who shared "their desire to produce towns in which 'vital human associations' were expressed"[12].

Figure 5.1. Team Ten, typescript of "Habitat," also known as the "Doorn Manifesto", 1954.


'DOORN MANIFESTO'
ORIGINAL MANUSCRIPT * HABITAT 27mm wide IX

1) It is useless to consider the house except as a part of a community owing to the inter-action of these on each other.

2) We should not waste our time codifying the elements of the house untill the other relationship has been crystallised.

3) Habitat * is concerned with the particular house in the particular type of community.

4) Communities are the same everywhere. 1) detached house - farm.
2) village.
3) towns of various sorts (industrial, administration, social.
4) cities (multi functional.

5) They can be shown in relationship to their environment (habitat) in the Geddes valley section.

Build mountains

6) Any community must be internally convenient - have ease of circulation, in consequence whatever type of transport are available, density must increase as population increases, i.e. 1) is least dense, 4) is most dense.

7) We must therefore study the dwelling and the groupings that are necessary to produce convenient communities at various points on the valley section.

8) The appropriateness of any solution may lie in the field of architectural invention rather than social anthropology.

Credits: Collection Het Nieuwe Instituut/TTEN, 9–1 (Team Ten archive), Rotterdam

The Doorn Manifesto suggested the replacement of the CIAM grid by the "Scale of Association"[13]. In the Doorn Manifesto, Team Ten presented their "Scale of Association", which was a kind of re-interpretation of Patrick Geddes's Valley Section. This gesture demonstrates Team Ten's intention to replace the four functions — dwelling, work, recreation and transport — of the Charter of Athens by the concept of the 'human association', on the one hand, and to incorporate within the scope of architecture reflections regarding the impact of scale on the design process, on the other hand. One can read in the draft statement for the tenth CIAM: "This method is intended to induce a study of human association as a first principle, and of the four functions as aspects of each total problem"[14].

In order to interpret the fact that any French delegate of the CIAM did not sign the Doorn Manifesto, we should retrace certain events related to the French context, which preceded the meeting in Doorn. One of them is a meeting that was held in May 1952 at Le Corbusier's office in Paris and that was organized by Sigfried Giedion in collaboration with Walter Gropius, Mary Jaqueline Tyrrwhitt, Cornelis van Eesteren, André Wogenscky, Sven Markelius, Wells Coates, Godfrey Samuel, Jean-Jacques Honegger, Steiner, George Candilis, Ernesto Nathan Rogers and Bill Howell. In this meeting Le Corbusier described the attitude of the old generation as "too rigid […] especially on social issues"[15].

An issue that dominated the discussions during this meeting in Paris was that of the transitional status of the next congress. This should be related to the fact that the CIAM IX, that would be held a year later, in July 1953, at Aix-en-Provence, coincides with the arrival of many new members representing the younger generation, such as the Indian architect Balkrishna Vithaldas Doshi and the Finnish architect and theorist Frans Reima Pietilä among other. It was at this congress that Alison and Peter Smithson presented their Urban Re-identification Grid. Another event that was held in Paris was the interim meeting on 30 June 1954 organized by the CIAM Council and attended by Sigfried Giedion, Walter Gropius, Le Corbusier, José Lluis Sert, Jacqueline Tyrwhitt, Jaap Bakema, Aldo van Eyck, Georges Candilis, Rolf Gutmann, Bill Howell, Peter Smithson and John Voelcker. It was during this meeting that CIAM X committee (CIAX) was appointed. Three additional meetings were also held in Paris with the objective to prepare CIAM X, on 14 September 1954, 14 April 1955 and 4 July 1955 respectively. That of April 1955 was organized by Team Ten and took place at Candilis's office with the presence of Bakema, van Eyck, the Smithsons, Voelcker and Woods. As we can see in the unpublished correspondence

conserved at the Fondation Le Corbusier in Paris, Ernesto Nathan Rogers wrote to André Wogenscky on 27 April 1955:

> On the question of these famous "young people" I think I have always been very clear – and you will remember my frequent intervention trying to fight what I call the "youth complex" and criticizing this definition "young" that threatens to divide the CIAMs according to the date of birth and not according to the vitality of the spirit[16].

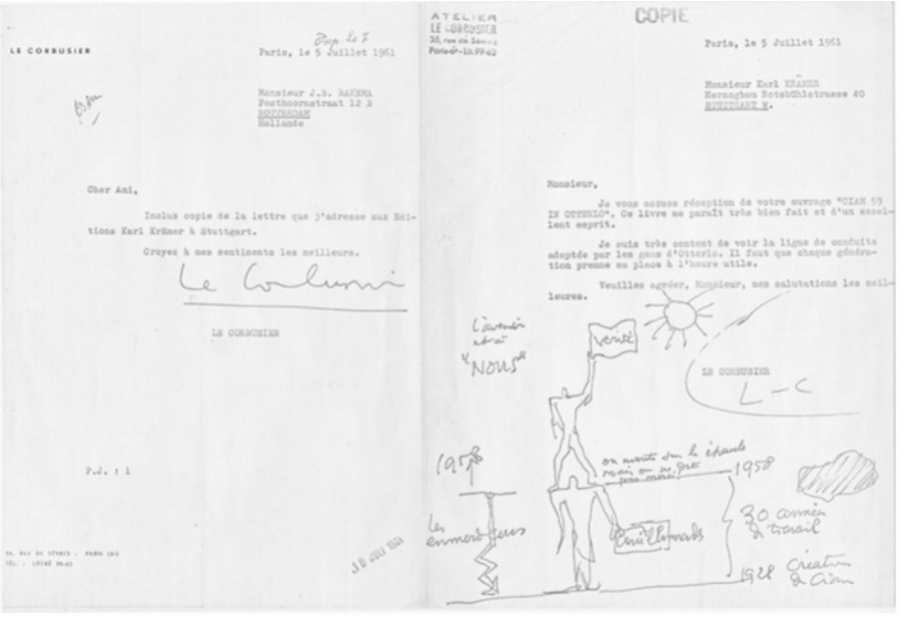
In 1956, during the opening of the CIAM X held at Dubrovnik, Sert read Le Corbusier's "Letter to CIAM 10"[17] (Figure 5.2), in which the latter was declaring that the ideology of the first era of CIAM was no longer relevant. What is worth noting is his remark that the older generation of the CIAM could not understand "the direct impact of the situation". More specifically, Le Corbusier wrote in this letter:

> It is those who become 40 years old, born around 1916 during wars and revolutions, and those then unborn, now 25 years old, born around 1930 during the preparation of a new war and amidst a profound economic, social, and political crisis – thus finding themselves in the heart of the present period the only ones capable of feeling actual problems, personally, profoundly, the goals to follow, the means to reach them, the pathetic urgency of the present situation. They are in the know. Their predecessors no longer are, they are out, they are no longer subject to the direct impact of the situation.[18]

In the same letter he also invited the members of the CIAM to "continue to thrive with creative passion and idealism"[19]. Five years later, after the meeting at Otterlo, Le Corbusier also wrote in a letter he addressed to Karl Kramer in 1961 regarding the book *CIAM '59 in Otterlo*: "Every generation must take its place at the right time"[20]. This letter was accompanied by a sketch illustrating the emergence of Team Ten out of CIAM, which showed Team Ten on the shoulders of CIAM. Of great significance for understanding how the generational conflict is linked to the emergence of the Team Ten out of the CIAM is the fact that the CIAM X was structured around two groups representing the two conflicting generations. As Nicholas Bullock notes, in *Building the Post-war World: Modern Architecture and Reconstruction in Britain*, the group representing the older generation focused on "the work of CIAM since its foundation in the form of a charter similar to the Athens Charter", while the group representing

the younger generation tried "to extend the work of CIAM to include the latest thinking"[21].

Figure 5.2. The letter that Le Corbusier wrote to Karl Kramer in 1961 regarding the book CIAM '59 in Otterlo.



Credits: Collection Het Nieuwe Instituut/BAKE, g83-2 (Bakema archive), Rotterdam

5.2 The CIAM X and distrust in the concept of the "new"

One of the central concerns of Team Ten was, as Alison and Peter Smithson noted in 1956, to rethink "the basic relationships between people and life"[22]. A concept that they employed was that of doorstep. As the Smithsons emphasized in a draft written that same year containing instructions to the different groups who would take part in the CIAM X meeting, Team Ten started their "thinking at the bottom with the primer contact at the Doorstep between man and men"[23]. Of great interest for understanding the epistemological shift

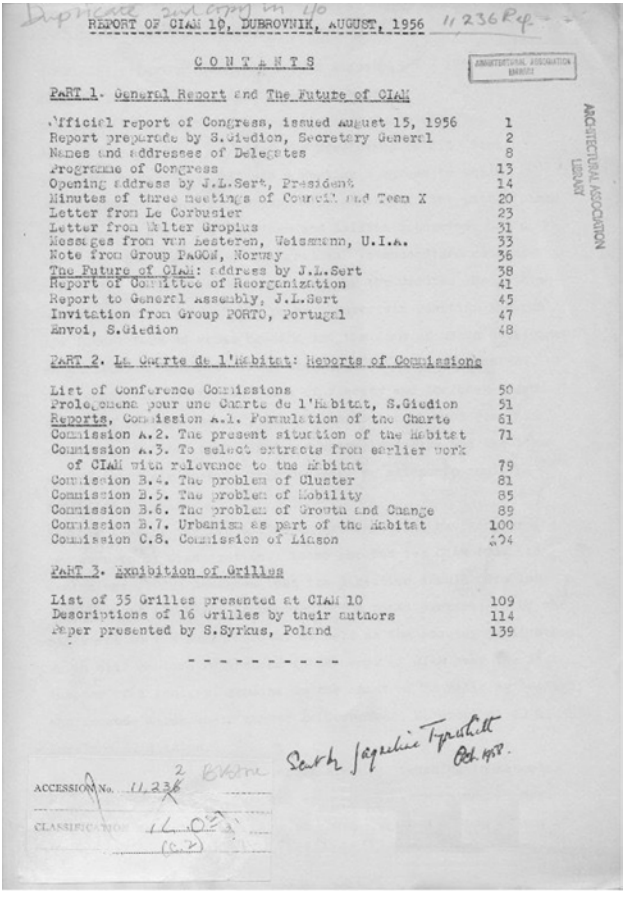
linked to the dissolution of CIAM and the emergence of Team Ten, is Jaap Bakema's distrust in the concept of the "new". Characteristically, he noted, in a draft written on 7 February 1956, during the preparations for CIAM X: "'New' was too much a slogan developed in times of specialization […] In our days "new" will be more the result of integration of existing possibilities"[24]. This concern of Bakema's about the osmosis between the existing and the new brings to mind Van Eyck's talk at the CIAM X, entitled "Is Architecture Going to Reconcile Basic Values?", where he emphasized the issue of morality as well as the need "to gather the old into the new' through the rediscovery of 'the archaic principles of human nature"[25].

The goal of the CIAM X, held in Dubrovnik between 19 and 25 July 1956, was to challenge the assumptions of the Charter of Habitat (Figure 5.3). During this meeting, which neither Le Corbusier nor Walter Gropius attended, the younger generation consisting of Aldo van Eyck, Jacob Bakema, Georges Candilis, Shadrach Woods, and Alison and Peter Smithson established a new agenda for mass housing, "Habitat for the Greater Number". It was at this CIAM meeting that the Smithsons presented their "Fold Houses". A number of meetings preceding the CIAM X were held in London, Doorn, Paris, La Sarraz, and Padua. The main question that was raised during these meetings was how to challenge the Charter of Habitat. The debates that were developed reflect not only the conflicts and disagreements between the older and younger generation, but also the contrast between the different national subgroups. Eric Mumford has characterized the CIAM X as the end of CIAM for its national groups and most of its members, while Francis Strauven has highlighted the fact that "[t]he suicide and resurrection that were decided upon in Dubrovnik had a devastating effect on the national CIAM groups"[26].

Regarding the abandonment of the CIAM ideals during the CIAM X, Reyner Banham has remarked that "[t]he sense of the end of an epoch was so strong that the Congress accepted the fact of death with comparative calm…"[27] The identification of that moment as a turning point becomes apparent in Josep Lluís Sert's statement in the report of CIAM X where he declared: "As for tomorrow – which begins with this year 1956 – my friends and colleagues the road is clear, but beware we are coming to a turning point!"[28]. After the meeting at Otterlo, the news of the dissolution of the CIAM was disseminated through articles in the two major UK journals of the time that published architectural debates: *The Architectural Review* and *Architectural Design*. In the first page of relevant text in *Architectural Design*, one can read: "It was therefore concluded that the name of CIAM will be used no more in relation to future

activities of the participants"[29]. Alison Smithson was the guest editor of a group of 30 pages of texts, which were published in this issue under the title "Ciam Team 10". Among the contributors were John Voelcker, Aldo van Eyck, Georges Candilis, Alexis Josic and Shadrach Woods, Jaap Bakema, Louis Kahn, Kenzō Tange and Giancarlo De Carlo.

Figure 5.3. Jaqueline Tyrwhitt, Report of CIAM 10, Dubrovnik, August 1956.



REPORT OF CIAM 10, DUBROVNIK, AUGUST, 1956

CONTENTS

PART 1. General Report and The Future of CIAM

Official report of Congress, issued August 15, 1956	1
Report prepared by S.Giedion, Secretary General	2
Names and addresses of Delegates	8
Programme of Congress	13
Opening address by J.L.Sert, President	14
Minutes of three meetings of Council and Team X	20
Letter from Le Corbusier	23
Letter from Walter Gropius	31
Messages from van Eesteren, Weismann, U.I.A.	33
Note from Group PAGON, Norway	36
The Future of CIAM: address by J.L.Sert	38
Report of Committee of Reorganization	41
Report to General Assembly, J.L.Sert	45
Invitation from Group PORTO, Portugal	47
Envoi, S.Giedion	48

PART 2. La Charte de l'Habitat: Reports of Commissions

List of Conference Commissions	50
Prolegomena pour une Charte de l'Habitat, S.Giedion	51
Reports, Commission A.1. Formulation of the Charte	61
Commission A.2. The present situation of the Habitat	71
Commission A.3. To select extracts from earlier work of CIAM with relevance to the Habitat	79
Commission B.4. The problem of Cluster	81
Commission B.5. The problem of Mobility	85
Commission B.6. The problem of Growth and Change	89
Commission B.7. Urbanism as part of the Habitat	100
Commission C.8. Commission of Liaison	104

PART 3. Exhibition of Grilles

List of 35 Grilles presented at CIAM 10	109
Descriptions of 16 Grilles by their authors	114
Paper presented by S.Syrkus, Poland	139

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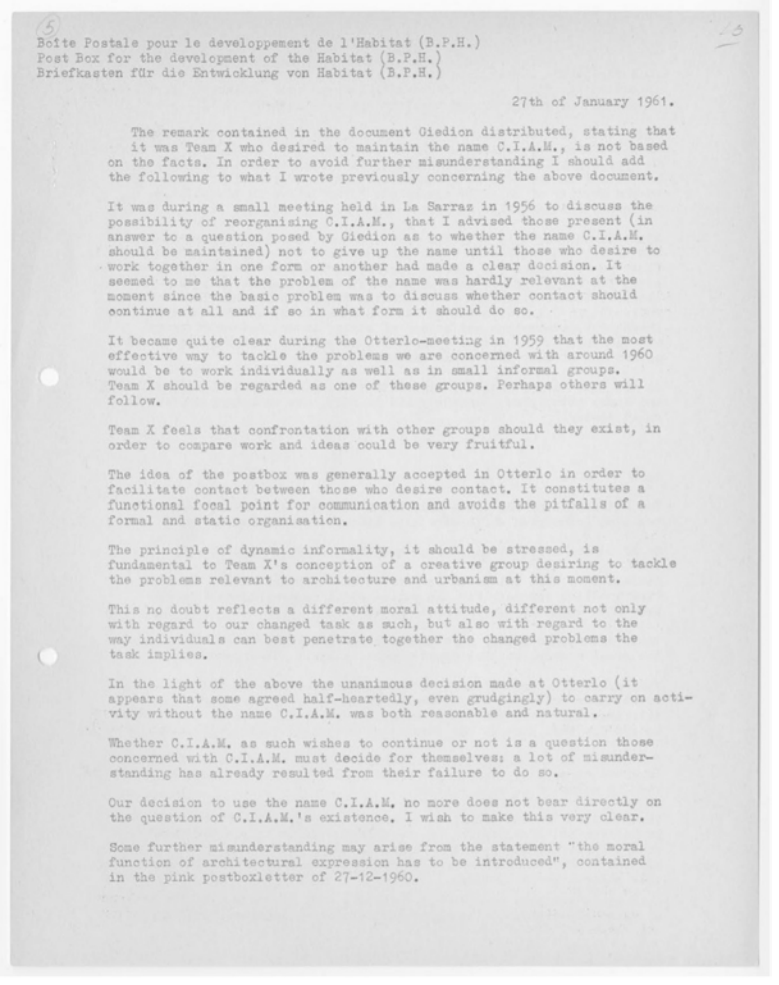
In order to understand the vision of the English delegates of the CIAM one should examine the debates that were developed within the British CIAM Chapter, the MARS (Modern Architectural Research) Group, which was active between 1933 and 1957 and was involved in the preparation of the 1951 congress at Hoddesdon, which was devoted to the theme "The Heart of the City". According to John R. Gold, "[t]he younger members clearly saw MARS membership as their passport to participation in CIAM congresses, in which they were passionately interested."[30]

5.3 After the Otterlo meeting: The "Post Box for the Development of the Habitat" as an agent of dynamic informality

Of great significance for understanding how the debates after the meeting at Otterlo in 1959 evolved are the Newsletters of the "Post Box for the Development of the Habitat" (B.P.H.), containing eighteen issues circulated between September 1959 and July 1971. These were established by Bakema, who had organized the last CIAM conference at the Kröller-Müller museum in Otterlo, in order to keep contacts on the subject of habitat alive on an international scale. They constituted a means of communication avoiding "the pitfalls of a formal and static organisation" since it was based on the "principle of dynamic informality"[31]. Bakema, who signed the Newsletters as "Postman Bakema", was convinced that this means of communication reflected a "different moral attitude" from that of CIAM. He insisted on the necessity to introduce "the moral function of architectural expression" and believed that the main differentiation between the vision of CIAM and that of Team Ten concerned this aspiration to put forward the "morality of architectural expression". This 'Postbox' can be treated as an archive of exchanges between the various international avant-gardes during the 1960s. In the Newsletter of 27 January 1961[32] (Figure 5.4), Bakema highlighted a distinction between the "social responsibility" and the "morality of architectural expression"[33]. He underscored that the former is contained in the latter, while the opposite is not true and claimed that the CIAM – even though they in certain cases, mainly during their first yeas, paid much attention to social responsibility – neglected the significance of the moral aspect of architecture.

Figure 5.4. Post Box for the Development of the Habitat (B.P.H.), Newsletter 27 January 1961.



Boîte Postale pour le developpement de l'Habitat (B.P.H.)
Post Box for the development of the Habitat (B.P.H.)
Briefkasten für die Entwicklung von Habitat (B.P.H.)

27th of January 1961.

The remark contained in the document Giedion distributed, stating that it was Team X who desired to maintain the name C.I.A.M., is not based on the facts. In order to avoid further misunderstanding I should add the following to what I wrote previously concerning the above document.

It was during a small meeting held in La Sarraz in 1956 to discuss the possibility of reorganising C.I.A.M., that I advised those present (in answer to a question posed by Giedion as to whether the name C.I.A.M. should be maintained) not to give up the name until those who desire to work together in one form or another had made a clear decision. It seemed to me that the problem of the name was hardly relevant at the moment since the basic problem was to discuss whether contact should continue at all and if so in what form it should do so.

It became quite clear during the Otterlo-meeting in 1959 that the most effective way to tackle the problems we are concerned with around 1960 would be to work individually as well as in small informal groups. Team X should be regarded as one of these groups. Perhaps others will follow.

Team X feels that confrontation with other groups should they exist, in order to compare work and ideas could be very fruitful.

The idea of the postbox was generally accepted in Otterlo in order to facilitate contact between those who desire contact. It constitutes a functional focal point for communication and avoids the pitfalls of a formal and static organisation.

The principle of dynamic informality, it should be stressed, is fundamental to Team X's conception of a creative group desiring to tackle the problems relevant to architecture and urbanism at this moment.

This no doubt reflects a different moral attitude, different not only with regard to our changed task as such, but also with regard to the way individuals can best penetrate together the changed problems the task implies.

In the light of the above the unanimous decision made at Otterlo (it appears that some agreed half-heartedly, even grudgingly) to carry on activity without the name C.I.A.M. was both reasonable and natural.

Whether C.I.A.M. as such wishes to continue or not is a question those concerned with C.I.A.M. must decide for themselves: a lot of misunderstanding has already resulted from their failure to do so.

Our decision to use the name C.I.A.M. no more does not bear directly on the question of C.I.A.M.'s existence. I wish to make this very clear.

Some further misunderstanding may arise from the statement "the moral function of architectural expression has to be introduced", contained in the pink postboxletter of 27-12-1960.

Credits: Collection Het Nieuwe Instituut/BAKE, g119-5-1 (Bakema archive), Rotterdam

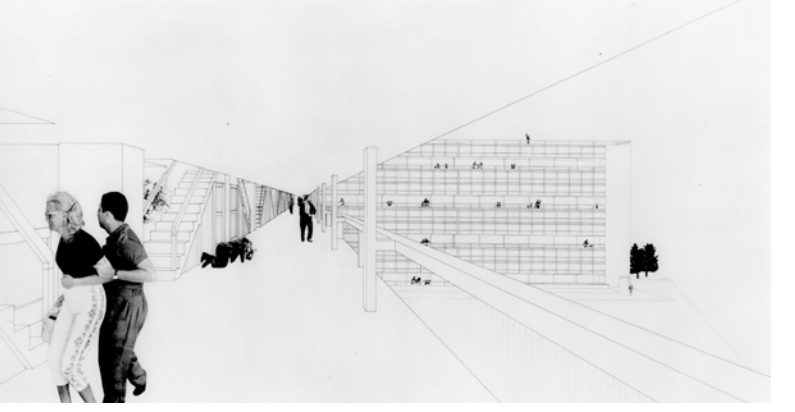
Jaap Bakema's concern about the "morality of architectural expression" cannot be thought without bringing to mind the humanist values. Similarly, Roger's temporally driven aesthetic model and his search for continuity reflects his endeavor to embrace the social reality of the post-war era. This can also explain his close relationship with Enzo Paci's approach. Van Eyck's desire "to gather the old into the new' through the rediscovery of 'the archaic principles of human nature"[34] is also an expression of this appeal to humanism, as is Alison and Peter Smithson's effort to rethink "the basic relationships between people and life"[35]. Undoubtedly, despite their disagreements, the different personalities that formed Team Ten, coming from varied national contexts, shared a determination to reconciliate the past with the future. Simultaneously, an affinity between the different agents of dissemination of the principles on which the shift from CIAM to Team Ten was postulated is their aspiration to disapprove of the mere search for the new. What connects them is their conviction that architecture had the moral target of situating the human at the center of its reflection. To conclude, I would claim that the generalized belief in humanism within the post-war context in Europe is founded on the wish to shape the conceptual tools that would provide such a role for the architects as citizens and as agents in the transformation of society, which was a central preoccupation within these different national contexts during the post-war years.

5.4 Alison and Peter Smithson's collages as reinventing established reality

Alison and Peter Smithson used photographs of existing celebrities, such as Marilyn Monroe and Joe DiMaggio (Figure 5.5), French actor Gérard Philipe and first prime minister of Independent India Jawaharlal Nehru. This tactic of introducing figures that were protagonists in the news in their architectural drawings for projects concerning social housing buildings, as in the case of their collages for the Golden Lane Estate project (1953), shows that they intended to reinvent through their architecture the established reality. Golden Lane Estate, which occupied an area flattened by wartime bombing, was one of the most defining public housing projects during the post-war reconstruction era in Great Britain. It was rather provocative to introduce in the visual representations concerning the design of council housing blocks of flats famous figures such as Marilyn Monroe and Joe DiMaggio. The contrast between Ali-

son and Peter Smithson's anti-aesthetic stance and their choice to use figures that were part of the present culture in their collages could be interpreted as an invitation to challenge existing reality and its conventions. The incorporation of existing figures in the images functioned as a gesture of integration in the architectural representation of fragments of existing context and reality.

Figure 5.5. Alison & Peter Smithson, "street-in-the-air" collage for the Golden Lane Housing project, competition, London, 1952. Drawing and collage with Joe DiMaggio and Marilyn Monroe, 20'/2 x 38" (52 x 97.5 cm).

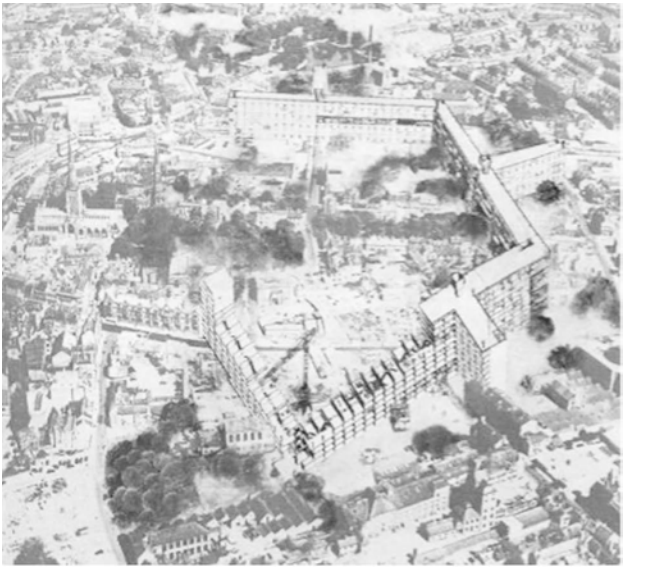


Credits: Smithson Family Collection

In the collages of the Smithsons for the Golden Lane housing project, the contradiction between the reproduction of photographs of famous figures of the time and post-war context intensifies the impression of the contrast between the status of the inhabitants of the Golden Lane housing building and the old British society. The starting point of the strategies that the Smithsons in their collages for this project was the intention to show how the way of life of the dwellers of the housing complex would be opposed to the parochial British model. In their text entitled "The 'As Found' and the 'Found'", Alison and Peter Smithson interpreted "the "as found" was a new seeing of the ordinary, an openness as to how prosaic "things" could re-energize our inventive activity."[36] This belief in the capacity of the "as found" to revitalize the way one sees the

ordinary is very present in the aesthetics of the collages for the Golden Lane housing project.

Figure 5.6. Alison & Peter Smithson, the Golden Lane Housing project, competition, London, 1952.

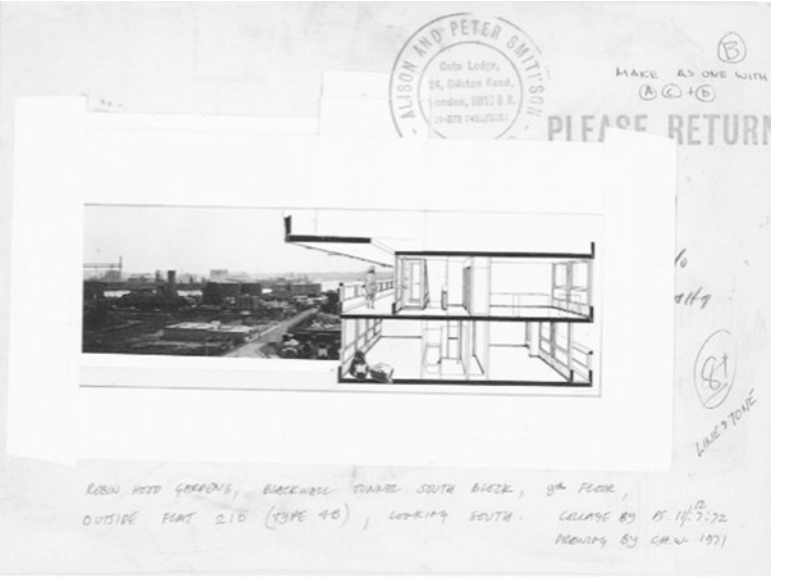


Credits: The Alison and Peter Smithson Archive, Special Collections, Frances Loeb Library, Graduate School of Design, Harvard University

The Smithsons produced two types of collages: the first type concerns the perspective views with reproductions of human figures, such as the collage with Marilyn Monroe and Joe DiMaggio for the Golden Lane Housing project (1952) or the collages with human figures for the Economist Building (1964) and the Robin Hood Gardens (1972); the second type of the Smithsons's collages concerns the bird-eye collages that they produced in order to show how their projects would be inserted in the existing urban fabric. For a collage they produced for Golden Lane Housing project, they used a photograph to represent the urban context and they drew their design proposal as a continuation of the photograph (Figure 5.6). For the Robin Rood Gardens, they also produced a col-

lage of the plan. Their collages for the perspective views of the Robin Rood Gardens show the relationship between the cityscape, the street-in-the-air and the flats (Figure 5.7).

Figure 5.7. Alison and Peter Smithson, Robin Hood Gardens, 1966–1972; collage showing relation between cityscape, street-in-the-air and flats.

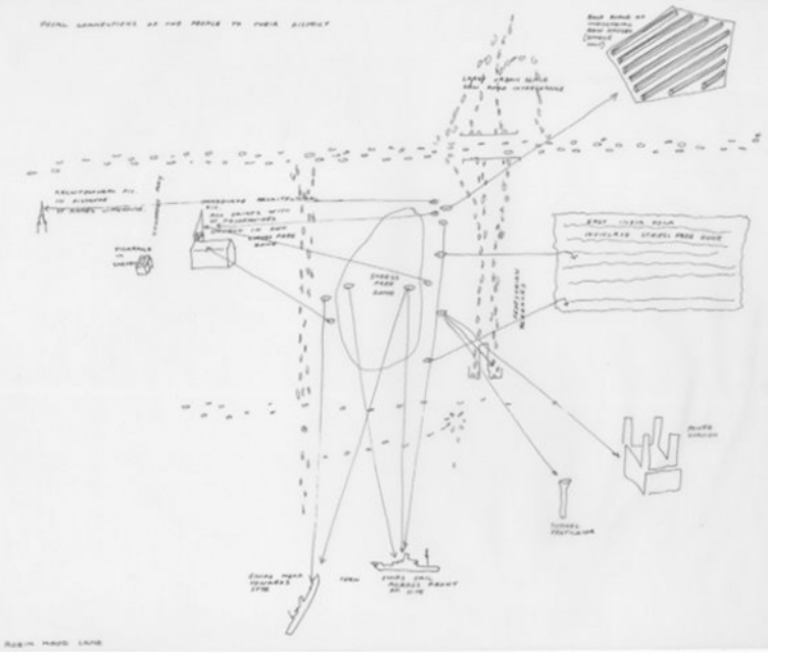


Credits: Smithson Family Collection, London

The strategy of inserting famous figures in their collages aestheticized social housing projects and should be interpreted in relation to the attention Alison and Peter Smithsonn paid to the ambiguity between consumerism and citizenship. Their strategies contributed to the construction of the following paradoxical fiction: by inserting contradictory fictions in the same image — the dream of being part of the high society and of being able to have access to the latest products of their epoch and the dream of being part of the transformation of the society — they manage, in a sense, to bring together consumerism and citizenship. Moreover, the way their buildings were photographed reinforces the aforementioned strategy. The human figures, despite the fact that

they are shot during their quotidian activities, are stylized. Such an example is Sandra Lousada's photos of the Robin Hood Gardens estate that captured children playing in the courtyard. The children of this image, as in many other cases during this period, are like they come from another world, very different from the real world, where one can return to the naivety and carelessness of the childhood. The contradiction of this sense of carelessness with the intensity of the post-war society is striking. The aestheticization of the quotidian life, despite its promises for a reinvented relationship with citizenship, contributes to the moralization of the users's consumerism.

Figure 5.8. Alison and Peter Smithson, analysis of vistas and routes, Robin Hood Gardens, Poplar, London, 1966–1972.



Credits: The Alison and Peter Smithson Archive, Special Collections, Frances Loeb Library, Graduate School of Design, Harvard University

The diagram of the vistas and routes that Alison and Peter Smithson drew for their project for the Robin Hood Gardens housing estate shows how much attention they paid to circulation (Figure 5.8). According to Dirk van den Heuvel, this project could be "characterized as a rather early urban renewal project"[37]. The impact of the British Welfare state agenda on the design strategy of this project has been analyzed by Nicholas Bullock, in "Building the Socialist Dream or Housing the Socialist State? Design versus the Production of Housing in the 1960s"[38]. The replacement of design with the production of housing that is analyzed by Bullock in the aforementioned text is related to the shift from an understanding of the addressee of architecture as individual to its understanding as user. The Smithsons, through their project for the Robin Hood Gardens housing estate, aimed to upgrade the ordinary and the anonymous to an apparatus for social change. They analyzed their attraction to the ordinary and the anonymous their book *Without Rhetoric*, which was published a year after this project, in 1973[39].

5.5 Aldo van Eyck's ethnographic concerns and the search for "the truly human"

The open project as compositional device played a preeminent role within the circles the so-called Structuralist Movement in the Netherlands or Dutch structuralism[40], which was developed mainly between 1955 and 1980. Protagonist figures of this movement were Aldo van Eyck (1918–1999) and Herman Hertzberger (1932-). The main characteristics of buildings that are connected to Dutch structuralism are the elaboration of repetitive elements in their composition, on the one hand, and their capacity to be adjusted to a variety of functions, that is to say their adaptability to change, extension, and reprogramming, on the other hand. A typical example of this stance is Aldo van Eyck's Municipal Orphanage in Amsterdam. Moreover, social preoccupations were a defining component of Dutch structuralism.

The so-called Dutch structuralist architects often used modes of representation that challenged the conventions of former generations. Of great significance is the fact that in the case of Dutch structuralism the buildings are considered as "open structures" and are opposed to buildings that are conceived as complete "works of art," or "closed" structures[41]. This shift from a conception of architectural artefacts as "closed" structures towards an understanding of architectural artefacts as "open structures" is useful for understanding

the transformation of the status of architectural drawings and the emergence of attitudes vis-à-vis the fabrication of drawings that are compatible with a conception of architectural artefacts as "open structures". Moreover, the use of colors in architectural drawings played an important role in the case of Dutch structuralism.

Dirk van der Heuvel, reminds us that "structuralism never turned into a real movement or an organized group". He claims that the common parameter of the approaches of different architects that are related to Dutch structuralism is the way they conceived "the relation between the user and architecture". For him, "Dutch structuralism is about making open-ended building structures by the repeated use of basic elements". He sheds light on the fact that the way "the elements […] are linked […] facilitate[s] multiple uses and future growth and change". He also underscores that Herman "Hertzberger was the only architect among the Dutch structuralists to declare explicit relations to the French linguist Ferdinand de Saussure and anthropologist Claude Levi-Strauss, referring for example to the former's distinction between langue and parole"[42].

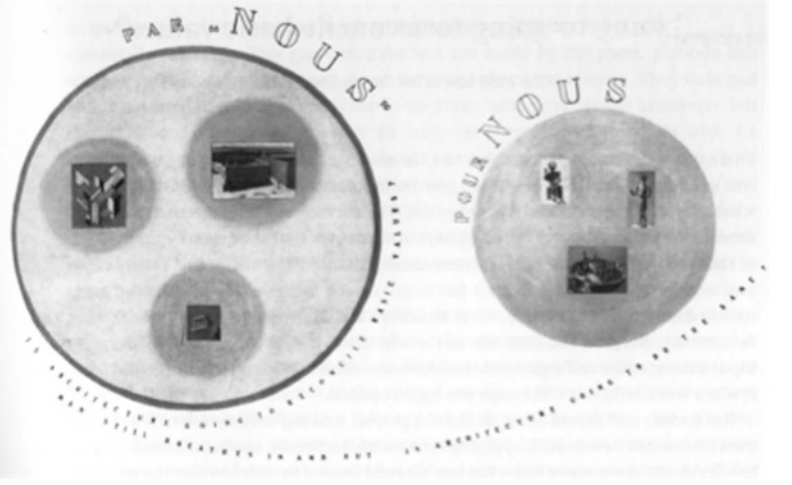
The search for the human through architecture and urban planning was seen as the antidote against the homogeneity and monotony of the universal solutions of the previous generation. Aldo van Eyck returned from his Dogon fieldwork in 1960. What is paradoxical is the fact that in many instances the ethnographic interest in different ways of building and living, as that of Aldo van Eyck in the Dogon, is not a symptom of an acceptance that there is no universal model of conceiving human experience. Instead, the opening towards other cultures should be interpreted as part of a strategy of redefining a new universal model of what is "truly human", to borrow an expression used by Aldo van Eyck.

Aldo van Eyck's ethnographic interest could be related to the fact that he believed that discovering the ways in which other cultures build and live could help him grasp what he labelled "truly human". The encounter with different cultures was, for him, a way to come closer to what he called "the mystery of man". He declared:

> It is possible for us to discover different cultures and by so doing enrich ourselves, not by copying, not by eclecticism, but by more deeply understanding the mystery of man […] It is not a question of history when I study a house in Ur or a Greek house from the period of Pericles. I only want to see, to enjoy the marvel of a house which is truly human, for each time I

see a house which is truly human, of whatever period, I am enriched. It's not a question of form but a question of human content[43].

Figure 5.9. Aldo van Eyck, the original Otterlo circles, 11 September 1959; left: a contra-construction of Van Doesburg (1923), Temple of Nike in Athens (424 b. C.), Houses at Alouef in the Algerian Sahara; right: 3 bronze age sculptures: a Sardic statuette, an Etruscan statuette, a Cypriot burial gift.

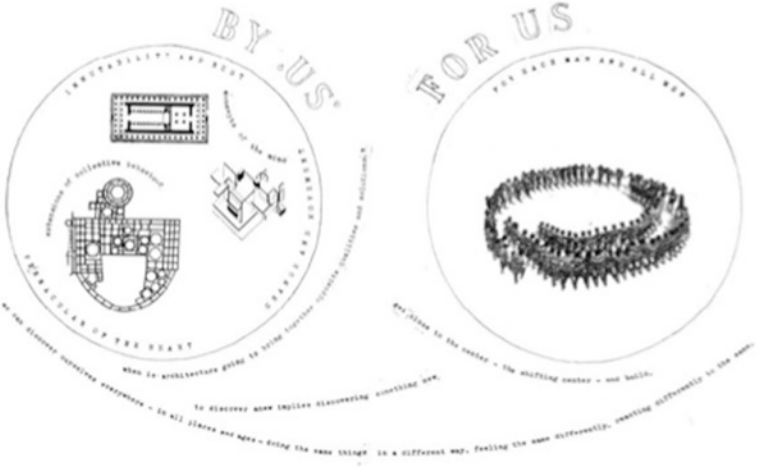


© Aldo van Eyck. Credits: Archives Aldo & Hannie van Eyck architecten, Amsterdam

What attracted Van Eyck in Dogon's attitude was their endeavor to make "the world system graspable" and to bring "the universe within their measurable confines; they made the world a habitable place, they brought what was 'outside,' 'inside'"[44].

As Sarah Deyong has argued, the approach of the Smithsons was based on the investigation of "patterns of association" in traditional cultures. Their designs were based on the translation of these traditional patterns into new patterns. Such a case is Golden Lane Housing project by Alison and Peter Smithson, where "they transposed the English vernacular of a neighborhood street into the modern context of a high-rise apartment building"[45].

Figure 5.10. Aldo van Eyck, Otterlo Circles, 1959–62. s, Later version of the first in 1959. Left, Parthenon, Pueblo Arroyo in New Mexico (11th century), a contra-construction of Van Doesburg; right, dancing group of Kayapo Indians from the Orinoco basin in Venezuela.



© Aldo van Eyck. Credits: Archives Aldo & Hannie van Eyck architecten, Amsterdam

Aldo van Eyck first presented the "Otterlo Circles" diagram at the eleventh CIAM, held in Otterlo in 1959 (Figure 5.9 and Figure 5.10). In the same CIAM meeting, Giancarlo De Carlo presented his housing complex in Matera (1954)[46]. Van Eyck, through the "Otterlo Circles" diagram, tried to render comprehensible how a balance between the classical, the modern and the archaic could be possible. In the left circle of the diagram, he illustrated three architectural paradigms that are emblematic for the principles of the classical, the modern and the archaic: the Parthenon for the classical, a De Stijl counter-construction by Theo van Doesburg for the modern and a Pueblo village for the archaic. For him, the classical represented the notions of "immutability and rest", the modern epitomized the concepts of "change and movement" and the archaic was related to "the vernacular of the heart". What he argued was that these three traditions should be reconciled. He believed that architecture could be compatible with contemporary reality only if these traditions are mutually sustained.

As Francis Strauven has argued, in his lecture entitled "Aldo van Eyck: Shaping the New Reality from the In-between to the Aesthetics of Number", the right circle intends to communicate the significance of "the reality of human relationships"[47] for architecture. The group of people who dance Kayapó Indians symbolized the necessity to transform architectural scope in order to embrace the "constant and constantly changing" human reality. During that same CIAM, Van Eyck gave a talk entitled "Is Architecture Going to Reconcile Basic Values?"[48]. In this talk, Aldo van Eyck raised the following question: "Man still breathes both in and out. When is architecture going to do the same?"[49] Van Eyck also argued in 1962: "What you should try to accomplish is built meaning. So get close to the meaning and build!"[50] With these phrases, Colin Rowe introduced his text in the exhibition catalogue *Five Architects*[51] a decade later.

Notes

1 Ernesto Nathan Rogers, "Continuità o Crisi?", *Casabella Continuità*, 215 (1957): 3–4;

2 Ákos Moravánszky, "Re-Humanizing Architecture: The Search for a Common Ground in the Postwar Years, 1950–1970", in Ákos Moravánszky, Judith Hopfengartner, eds., *Re-humanizing Architecture: New Forms of Community, 1950–1970* (East West Central: Re-Building Europe, 1950–1990) (Basel: Birkhauser, 2017), 23–42.

3 Ibid., 23.

4 Nuno Portas, "Literatura arquitectónica I: L'Architettura, cronache e storia", *Arquitectura*, 59 (1957), 45.

5 Nuno Portas, "A responsabilidade de uma novíssima geração no Movimento Moderno em Portugal", *Arquitectura*, 66 (1959): 13–14.

6 Pedro Baía, "Appropriating Modernism: From the Reception of Team 10 in Portuguese Architectural Culture to the SAAL Programme (1959–74)", *Footprint*, 5/2 (2011), 50.

7 Alison Smithson, "Ciam Team 10", *Architectural Design* (1960): 175–205.

8 Rudolf Wittkower, *Architectural Principles in the Age of Humanism* (London: The Warburg Institute, 1949).

9 Eric Mumford, *The CIAM Discourse on Urbanism*, 1928–1960 (Cambridge, Mass.: MIT Press, 2002), 65.

10 Ernesto Nathan Rogers, "Continuità o Crisi?", *Casabella Continuità*, 215 (1957): 3–4.

11 Peter Smithson cited in Oscar Newman, ed., *New Frontiers in Architecture, CIAM '59 in Otterlo* (New York: Universe Books, 1961), 94–97.

12 Dirk van der Heuvel, Max Risselada, eds., *Team 10: In Search of a Utopia of the Present 1953–1981* (Rotterdam: NAi Publishers, 2005), 43.

13 Marianna Charitonidou, "From the Athens Charter to the 'Human Association': Challenging the Assumptions of the Charter of Habitat", in Katarina Mohar, Barbara Vodopivec, eds., *Proceedings of the international conference of the project Mapping the Urban Spaces of Slovenian Cities from the Historical Perspective* (Ljubljana: Založba ZRC, 2020), 28–43, doi: https://doi.org/10.3929/ethz-b-000426865

14 Draft statement for the tenth CIAM with Patrick Geddes's valley Section, CIAM Congresses and Team 10 Meetings, Collection Het Nieuwe Instituut, Rotterdam.

15 "Conseil CIAM", May 1952, Archives of the Fondation Le Corbusier, Paris, FLC D3-1-2-8.

16 Ernesto Nathan Rogers, letter to André Wogenscky, 27 April 1955, Fondation Le Corbusier, Paris, FLC D2-8-339.

17 Le Corbusier, Message to the tenth CIAM at Dubrovnik: "Crisis or Evolution?", 23 July 1956, Archiv Institut für Geschichte und Theorie der Architektur (GTA), ETH Zurich, CIAM archives, 42-HRM-X-17.

18 Le Corbusier cited in Kenneth Frampton, *Modern Architecture: A Critical History*, 3rd ed. (London: Thames and Hudson, 1992), 271–272.

19 Le Corbusier's message addressed to the 10th CIAM, 23 July 1956, Fondation Le Corbusier, Paris, FLC D3-7-121-127.

20 Le Corbusier, letter sent to Karl Kramer in 1961 for the book *CIAM '59 in Otterlo*, Collection Het Nieuwe Instituut, Bakema archive, BAKE, g83-2,

21 Nicholas Bullock, *Building the Post-war World: Modern Architecture and Reconstruction in Britain* (London; New York: Routledge, 2002), 144.

22 Alison and Peter Smithson, Draft Framework 4, 1956, concept document for CIAM X, Collection Het Nieuwe Instituut, Rotterdam; van der Heuvel, Risselada, eds., *Team 10: In Search of a Utopia of the Present 1953–1981*.

23 Alison and Peter Smithson cited in Dirk van der Heuvel, Max Risselada, eds., *Team 10: In Search of a Utopia of the Present 1953–1981*, 50.

24 Jaap Bakema, Response to the Draft Framework 2 drawn up in preparation for CIAM X, letter, dated 7 February 1956, Collection Het Nieuwe Instituut in Rotterdam, Bakema archive.

25 Aldo Van Eyck, "Is Architecture Going to Reconcile Basic Values?", in Newman, ed., *New Frontiers in Architecture, CIAM '59 in Otterlo*, 28–29.

26 Francis Strauven, *Aldo van Eyck: The Shape of Relativity* (Amsterdam: Architectura & Natura, 1998), 274.

27 Reyner Banham, "R. CIAM", in Vittorio Lampugnani, Barry Bergdoll, eds., *The Thames and Hudson Encyclopaedia of 20th century Architecture* (London: Thames Hudson, 1986), 70.

28 CIAM X Report, p. 5, Archiv Institut für Geschichte und Theorie der Architektur (GTA), ETH Zurich, CIAM archives.

29 Alison Smithson, "Ciam Team 10", *Architectural Design* (1960), 175.

30 John R. Gold, "A Very Serious Responsibility'? The MARS Group, Internationally and Relations with CIAM, 1933–39", *Architectural History*, 56 (2013), 231.

31 Newsletter 27 January 1961, Post Box for the Development of the Habitat". Collection Het Nieuwe Instituut in Rotterdam, Bakema archive.

32 Post Box for the Development of the Habitat (B.P.H.), Newsletter 27 January 1961, Collection Het Nieuwe Instituut in Rotterdam, Bakema archive, BAKE, g119-5-1.

33 Ibid.

34 Van Eyck cited in Newman, ed., *New Frontiers in Architecture, CIAM '59 in Otterlo*, 28–29.

35 Alison and Peter Smithson cited in Dirk van der Heuvel, Max Risselada, eds., *Team 10: In Search of a Utopia of the Present 1953–1981*, 50.

36 Alison and Peter Smithson, "The 'As Found' and the 'Found'", in David Robbins, ed., *The Independent Group. Postwar Britain and the Aesthetics of Plenty* (Cambridge, Mass.; London: The MIT Press), 201–202.

37 Dirk van den Heuvel, *Alison and Peter Smithson: A Brutalist Story Involving the House, the City and the Everyday (plus a Couple of Other Things)*, PhD thesis, (Delft: Technische Universiteit Delft, 2013), 228.

38 Nicholas Bullock, *Building the Post-war World: Modern Architecture and Reconstruction in Britain* (London; New York: Routledge, 2002), 321–42; Bullock, "Building the Socialist Dream or Housing the Socialist State? Design versus the Production of Housing in the 1960s", in Mark Crinson, Claire Zimmerman, eds., *Neo-avant-garde and Postmodern. Postwar Architecture in Britain and Beyond* (New Haven: The Yale Center for British Art and The Paul Mellon Centre of Studies in British Art, 2010).

39 Alison and Peter Smithson, *Without Rhetoric: An Architectural Aesthetic, 1955–1972* (London: Latimer New Dimensions, 1973).

40 Arnulf Lüchinger, "Structuralism in Architecture and Urban Planning. Developments in the Netherlands. Introduction of the Term", in Tomás

Valena, ed., *Structuralism Reloaded. Ruled-based Design in Architecture and Urbanism* (Stuttgart; London: Axel Mendes, 2011).

41 Herman Hertzberger, "Open Versus Closed Structures", in *Open Structures: An Introductory Dossier on Dutch Structuralism. Supplement to Volume 35: Everything Under Control* (Rotterdam: The Delft University of Technology's Architecture Department, the Berlage Center for Advanced Studies in Architecture and Urban Design, and The New Institute, 2014), 17–19.

42 Dirk van den Heuvel, "Rotterdam 1974. The Consumer society. Centraal Beheer corporate offices, Apeldoorn 1968–72. Herman Hertzberger", in Dirk van der Heuvel, Max Risselada, eds., *Team 10: In Search of a Utopia of the Present 1953-1981* (Rotterdam: NAi Publishers, 2005), 208.

43 Aldo van Eyck, *Writings. Collected Articles and Other Writings 1947–1998*, vol. 2, edited by Vincent Ligtelijn and Francis Strauven (Amsterdam: SUN, 2008), 200–01. Text originally published in 1959.

44 van Eyck, "Dogon: mand-huis-dorpwereld", *Forum*, 17 (1967), 35; republished in Charles Jencks, Georges Baird, eds., *Meaning in Architecture* (New York: Brazilier, 1969), 170; see also van Eyck, "A Miracle of Moderation", *Via*, 1 (1968): 96–125.

45 Sarah Deyong, "An Architectural Theory of Relations: Sigfried Giedion and Team X", *Journal of the Society of Architectural Historians*, 73(2) (2014), 231.

46 See John R. Gold, *The Practice of Modernism: Modern Architects and Urban Transformation, 1954–1972* (London; New York: Routledge, 2007).

47 Francis Strauven, "Aldo van Eyck – Shaping the New Reality from the In-between to the Aesthetics of Number", Study Centre Mellon Lectures, Canadian Centre for Architecture, 24 May 2007.

48 van Eyck, "Is Architecture Going to Reconcile Basic Values?", in Oscar Newman, Jürgen Joedicke, eds., *CIAM 59 in Otterlo. Documents of Modern Architecture* (London: Alec Tiranti, 1961), 26–35.

49 van Eyck, *Writings. Collected Articles and Other Writings 1947–1998*, vol. 2, 203.

50 Alison and Peter Smithson, *Team 10 Primer* (London: Studio Vista, 1968), 7.

51 Colin Rowe, Introduction to *Five Architects: Eisenman, Graves, Gwathmey, Hejduk, Meier* (New York: Wittenborn, 1972). Reprinted in K. Michael Hays, ed., *Architecture Theory since 1968* (Cambridge, Massachusetts; London: MIT Press, 1998), 74.

Chapter 6: Aldo Rossi's visual strategies and the prioritization of the observer

Urban facts as objects of affection

This chapter examines the following two aspects of the impact that Aldo Rossi's encounter with the American context on his design process: firstly, the tension between architecture as art-object manifestation and architecture as reflection of reality in his work, which becomes particularly apparent during the period of his stays in the United States of America; secondly, the impact that the American "urban facts" had on his understanding of architectural objects as objects of affection. At the core of influence of his stays in the United States on Rossi's thought is the ambiguity between the individual and the collective dimension of architecture. Comparing Rossi's approach with Oswald Mathias Ungers and John Hejduk's viewpoints and *modus operandi* would be helpful for better grasping the tension between the individual and collective dimension in his thought, on the one hand, and to question to what extent the relationship between the individual and collective memory is dialectic, on the other had. Hejduk was particularly interested in individual memory. Rossi shared with Hejduk his interest in individual memory and poetic imagination and with Ungers his concern about collective memory and *genius loci*. For Rossi, "[t]he city [is] a concomitance of different architectures whose meanings lie in the context"[1]. According to Ungers's understanding of the city as Archipel, "the city is a history of formation and transformation, from one type into another, a morphological continuum"[2]. Given that their approaches are characterized by many affinities, it would be thought-provoking to reflect upon how their collaboration at the Cornell University affected their approaches.

Two parameters of architecture's epistemological reorientation are linked to the period of the first visiting professorships of Aldo Rossi in the United States: firstly, the transformation of the status of architectural drawings;

secondly, the redefining of architecture's role in the city. Among the episodes scrutinized are Rossi's collaboration with Ungers at Cornell University, his teaching at Cooper Union, Yale University and Princeton University, his lectures at Pratt Institute and Harvard University and his involvement in the Institute for Architecture and Urban Studies. The main objective is to explain how Rossi's double preoccupation with individual expression and architecture's civic effectiveness evolved during his teaching in the United States. Rossi was invited to join as Visiting Professor Cooper Union's School of Architecture and the Department of Architecture of Cornell University by Hejduk and Ungers respectively. During his stays in the United States, he participated in various collective exhibitions along with Hejduk and Ungers and gave several lectures in various institutions.

A statement of Rossi that is at the center of his encounter with the American urban artefacts is the following: "A knowledge of the city [...] enables us not only to understand architecture better, but also, above all as architects to design it"[3]. Given that, for Rossi, the understanding of a city played an important role in establishing his design process, it would be interesting to reflect upon the impact that his encounter with the different urban artefacts in the United States of America, in general, and Manhattan, more specifically, on his compositional strategies. According to Rossi, "no urban construct in the world equals that of a city like New York"[4]. Rossi also underscored that "New York is a city of monuments such as I did not believe could exist"[5] and that his experience of America confirmed the theory he had developed in his famous book *The Architecture of the City*, which was originally published as in 1966[6]. He also said to Agrest during an interview he gave to her for *Skyline* in 1979:

> in no other city are monuments more present than in New York. They witness the city's history and underline its personality [...] the city grows, changes, and renews itself around them.[7]

The idea that a city's knowledge enables new design methods "has never appeared so clearly to" Rossi as when he "saw the city of New York, and above all Manhattan."[8] The concept of geography of experience is useful for understanding how Rossi conceptualized the impact of his encounter with the American urban and architectural artefacts on his design methods. Characteristically, he remarks, in his *Scientific Autobiography,* regarding this concept: "If I were to speak now of my American work or 'formation,' I would be digressing too far from the scientific autobiography of my projects and would be entering into a personal memoir or a geography of my experience"[9]. He also notes: "I will say

only that in this country, analogies, allusions, or call them observations, have produced in me a great creative desire and also, once again, a strong interest in architecture"[10]. Rossi, referring to the way in which his ideas were reconceived when his geographical context shifted, stated: "These experiences [...] had a peculiar effect on me: while on the one hand they increasingly distracted me from my concentration on architecture, on the other they seem to have crystallized objects, forms, ideas about design"[11]. He placed particular emphasis on the phenomenon of crystallization of design ideas about design thanks to his relocation in the United States of America.

Rossi drew a distinction between the impact that American culture had on him through cinema and literature and America's impact on him through his real encounter with the American cities. He wrote, in the introduction to the American edition of *The Architecture of the City*: "Even though I was influenced by American culture as a young man, especially its literature and film, the influence was more fantastic than scientific."[12] According to him, his real encounter with the American "urban facts" helped him transform his "fantastic" experience into a "scientific" one, and the American architectural and urban artefacts into "objects of affection"[13]. This process of looking at architectural and urban artefacts as "objects of affection" is essential for understanding the importance of Rossi's experience in the United States for the evolvement of his design processes. Rossi, in "The Meaning of Analogy in my Last Projects", published in *Solitary Travelers*, during his first appointment as Mellon Professor at Cooper Union affirmed: "My last projects represent the way I have found of looking at objects. I look at things as I always have, but I have reached a firmness that frees me from every technique of representation"[14]. Therefore, in Rossi's case, we are confronted with a manner of looking at objects that tends to overcome the obstacles of conventional modes of representation. This freeing from representation's conventional techniques is related to an act of liberation from memory and a sensation of "uneasiness of "déjà vu""[15]. Rossi shed light on the fact that his conception of architecture differs from a "sense of "toward" a form of architecture, or a new architecture"[16]. On the contrary, what was essential for him were "the usual objects, fixed and rigid with the accumulation of meanings"[17].

Rossi, during his teaching in the United States, took into account the specificity of American urban artefacts. He chose topics related to the American urban reality and intended to put forward the articulation between architecture and reality. He mentions: "when in past years at the Cooper Union and last year in the Institute I have been working with American students, I have preferred to choose themes linked to the American town, to your tradition and your expe-

rience"[18]. For his studio at Cooper Union, he chose as topic the "American Academical Village", asking students to work on a new version of the Academical Village on the site of their choice. In the introduction of the American edition of *L'architettura della città*, one can read: "After I had completed work on the Casa dello Studente in Chieti, an American student gave me a publication on Thomas Jefferson's Academical Village at the University of Virginia. I found a number of striking analogies to my own work"[19]. Hejduk wrote to Rossi regarding this choice of topic for his studio: "Your idea about doing an "American Village" sounds perfect; I think it would be an excellent problem"[20]. Rossi writes, in his *Scientific Autobiography*: "In 1978, when I was teaching at The Cooper Union, I gave my students the theme of the "American academical village." This theme interested me because it has many references in the culture, which are truly foreign to Europeans: for example, the very concept of the "campus""[21].

The results of this assignment "seemed extraordinary [to him] because they rediscovered older themes and went back beyond the unique order of Thomas Jefferson's "academical village" to the architecture of forts, to the New World where the old was silence above all."[22] In the preparation notes of this studio at Cooper Union, Rossi wrote that he chose this subject because it is, at least for a European, typically American. He also explained that the idea of this topic for his design studio came to him when a student, after a presentation of Students' Residence Building for Chieti in Cambridge, Massachusetts, gave him me the publication of University of Virginia of Thomas Jefferson's project: the academical village of 1819. He did not know this project and was impressed by the similarities between Jefferson's project and his project. He was particularly interested in the relationship between the small buildings and the two central ones and the historical relationship with the imported English models from Cambridge to the United States.

According to Rossi, the significance of this topic lied, according to him, on the fact that it could make visible and comprehensible how these imported English models "have changed and become an original part of American history [...] like the transformation of Spanish and Portuguese models in South America". He believed that the consideration of these transformations could help students understand "that in sciences as in culture nothing is ever invented, but progress, as in architecture, takes place by means of development and the study of reality"[23].

Aldo Rossi, for a design workshop in architecture and urban form that he taught at the Institute for Architecture and Urban Studies in 1980, he chose as theme "Columbus Circle Hotel", which also shows his insistence on choos-

ing topics related to the American reality. His interest in the mechanisms of metamorphosis of models coming from different geographic contexts when imported in the context of New York City becomes also apparent from what he said to Agrest in 1979:

> Venice, during its economic and commercial expansion, brought home elements of architecture from distant cities and used them to give birth to a new composition. In this respect New York City is similar to Venice: its neighbourhoods such as Chinatown, Little Italy, the Ukrainian quarter, are attempts at reproducing a certain environment. Put all together they form a city which is different from, but at the same tine analogous to the previous one."[24]

6.1 Aldo Rossi's transatlantic exchanges and the proliferation of exhibitions on architectural drawings

The publication of Rafael Moneo's "Aldo Rossi: The Idea of Architecture and the Modena Cemetery" next to Rossi's "The Blue of the Sky", introduced to the "English-speaking readers, for the first time, the work of Aldo Rossi"[25]. This may seem contradictory if we think that, in his first days, *Oppositions*, as Paul Goldberger informs us, "better read in Europe than America"[26]. The introduction of Rossi's work in the American milieu was characterized by a misinterpretation of his oeuvre, which reduced his draughtsmanship to an aesthetic fetishizing. This becomes evident when we read: "[w]hat remains in question, ten years after Rossi's book, is whether 'architecture autonomy' is merely another architect's smokescreen, as Functionalism was, for 'aesthetic free-play'"[27]. This reductive reading of Rossi's work could be explained by the fact that his first stays in the United States coincided with significant changes in the status of architectural drawings, which, during the late 1970s and the 1980s, acquired a protagonist role in the American architectural debates. This transformation was expressed through the abundance of exhibitions focused on architectural drawings, such as a series of exhibitions at Max Protetch, Leo Castelli and Rosa Esman galleries.

This proliferation of exhibitions on architectural drawings in the United States was paralleled by an intensification of the interest in architectural drawings in Italy, expressed through several shows at the Galleria Antonia Jannone in Milano and exhibitions as "Europa-America. Architettura urbana, alternati-

ve suburbane" and "10 Immagini per Venezia: Mostra dei Progetti per Cannaregio Ovest", held in Venice in 1976 and 1980 respectively, and "Roma Interrotta", held in Rome in 1978[28]. The epistemological and semantic significance of the mutation of architectural drawings' status is related to the recognition of architects' individual expression and of the autobiographical character of their creative processes.

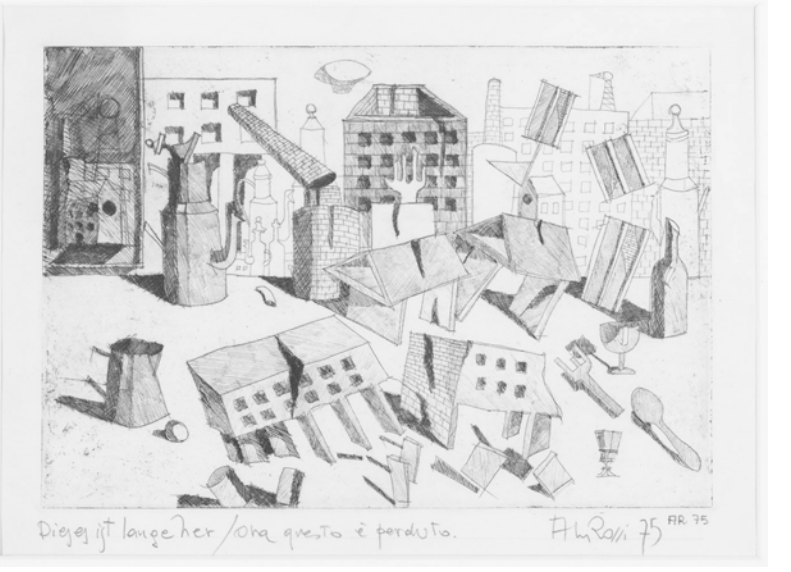
The raise of architectural drawings to art-objects is linked to the acceptance of the "archaic" or "archetypal" dimension of architectural design process, which cannot be expressed through words. The elaboration of the expression "silent witnesses" by Hejduk and the adoption of Carl Jung's definition of analogical thought by Rossi as "sensed yet unreal, […] archaic, unexpressed, and practically inexpressible in words"[29] are symptomatic of the recognition of a non-accessible through words dimension of architectural design process. Ungers also drew on Jung's approach in order to explain how archetypes and primeval images are inherited and "contained in the 'collective unconscious'"[30].

In conjunction with Rossi's arrival as Andrew Mellon Visiting Adjunct Professor at Cooper Union an exhibition was held at Arthur A. Houghton Gallery in March 1977. This show displayed projects by Raimund Abraham, Peter Eisenman, John Hejduk and Aldo Rossi previously shown in the American section "Alternatives: Eleven American Projects" of the exhibition "Europa-America. Architettura urbana, alternative suburbane", held in the framework of the Biennale di Venezia of 1976. The fact that much attention was paid to Rossi's drawing "Dieses Ist lange Her" ("Ora questo è perduto"), which was among the exhibits, pushes us to think that the interpretation of Rossi's work in the United States was based on an understanding of his work as an "architecture of melancholy"[31] and not as "an architecture of optimism"[32]. Rossi claimed that in his "etchings "L'architettura assassinata" and "Dieses is lange her. Ora questo e perduto", there is a romanticising […] process, although […] it is a sanctioned act"[33] (Figure 6.1).

A significant exhibition for the transformation of architectural drawings' status, held in New York during the period of the first stays of Aldo Rossi in the United States, was the exhibition "Architecture I: Architectural Drawings" at Leo Castelli gallery (22 October 22–12 November 1977) and the Institute of Contemporary Art of the University of Pennsylvania in Philadelphia (15 December-February 2 1978), which brought together drawings of Raimund Abraham, Emilio Ambasz, Richard Meier, Walter Pichler, Aldo Rossi, James Stirling and Robert Venturi and John Rauch[34]. Among Rossi's works displayed in this exhibition were a drawing and a model for the Cemetery of San Cataldo in Modena.

Ada Louise Huxtable's "Architectural Drawing as Art Gallery Art" and Paul Goldberger's "Architectural Drawings Raised to an Art" are useful for understanding the role that the display of Rossi's drawings played for the transformation of architectural drawings' status. Both articles show that Rossi's first encounter with the American scene was linked with the construction of his persona as the architect that contributed to the raise of architectural drawing to art. Huxtable shed light on the "dramatic changes in [...] theory and practice" and "the state of architecture vis-a-vis the other arts" that the "interest in architecture on the popular high art circuit" had provoked. She described Rossi's drawing for the Cemetery of San Cataldo as "one of the more remarkable drawings" and as a "Boullée-like vision [...] [and] a "post-modernist" icon"[35].

Figure 6.1. Aldo Rossi, "Dieses Ist lange Her" ("Ora questo è perduto"), 1975, etching.



Credits: collection Bonnefantenmuseum © Eredi Aldo Rossi

Skyline's issue of September 1979 featured Rossi's drawings for the Modena Cemetery (Figure 6.2) and announced a major two-part exhibit: "Aldo Rossi in America: Città Analoga Drawings" at the Institute for Architecture and Ur-

ban Studies and "Aldo Rossi: Architectural Projects" at Max Protetch Gallery. In the same issue of *Skyline* two other architecture exhibitions at Max Protetch Gallery were advertised: John Hejdkuk's from 23 January to 16 February 1980 and Massimo Scolari's in May 1980. In the same issue of *Skyline*, a thought-provoking axonometric drawing with a view from above of Frank Gehry for Los Angeles law office was also published, accompanying an article of Joseph Giovanni on Los Angeles[36]. Peter Eisenman writes, in his preface to the catalogue of the exhibition "Aldo Rossi in America":

> To explore the foundations of Rossi's imagery the Institute has prepared this exhibition and catalogue. This effort, which will soon be complemented by the first English translation of his seminal The Architecture of the City, to be published in the Institute's series of Oppositions Books, will begin to situate his work in the context of his emerging ideas of the city. But it will not entirely explain his drawings, which as he himself states in the essay reprinted here, are inspired by an idea of analogy which can never be fully possessed by the conscious and rational mind[37].

The special attention that Eisenman paid to the *Città analoga* should be interpreted in relation to the fact that the introduction of Rossi's theory in the American context is linked to the concept of analogy. Eisenman wrote to Rossi that "[i]n order to make the catalogue unique and valuable […] [he wished] to concentrate on […] the Citta Analoga"[38] and that they would try to include in the exhibition as many as possible "original drawings from the Rome exhibition", from Rossi's archive and "from collections […] in New York"[39]. His insistence on the significance of original drawings reinforces that hypothesis that Rossi's encounter with the American milieus is related to the upgrading of architectural drawings' artefactual value. A model of Rossi's first American solo exhibitions was the exhibition "Aldo Rossi: "Alcuni mie progetti" held from 31 May to 30 June 1979 at Antonia Jannone gallery in Milan, which was the first gallery in Italy to display architects' designs. This becomes evident from what Franklyn Gerard wrote to Rossi: "I think that the exhibition of your work at Antonia's Gallery is a good example of how the show at Max's Gallery should be"[40].

Max Protetch wrote to Huxtable on 9 August 1979: "As you know Aldo Rossi will be having a one-man show of drawings and models at my gallery in the Fall. I know from your review of the 'Roma Interrotta' exhibition at the Cooper-Hewitt that you are interested in his work. I've therefore taken the liberty of enclosing a translation by Aldo, of one of his texts"[41]. The exhibition "Roma interrotta", which was held in Rome in 1978 in the framework of the Incontri

Internazionali dell'Arte and at the Cooper-Hewitt National Museum of Design in New York from 12 June to 12 August 1979. It brought together works by Piero Sartogo, Costantino Dardi, Antoine Grumbach, James Stirling, Paolo Portoghesi, Romaldo Giurgola, Robert Venturi, Colin Rowe, Michael Graves, Leon Krier, Aldo Rossi and Robert Krier.

Figure 6.2. The cover of the issue of September 1979 of the journal Skyline that featured a drawing of Aldo Rossi for the Cemetery of San Cataldo in Modena.

Credits: Aldo Rossi Papers, Getty Research Institute, Los Angeles, CA. My own photo

Huxtable, in "The Austere World of Rossi", which was published in *New York Times* when Rossi's exhibition at Max Protetch gallery was still on display, wrote that "[m]uch has been made of Mr. Rossi's [...] connection with Marxist politics" and that "[f]or Marxists, architecture has lost all public meaning". The aforementioned words of Huxtable invite us to wonder whether she situated all the Italian Marxists architects under the same umbrella, neglecting the differences between Manfredo Tafuri's approach and Rossi's stance. She reduced the complexity and heteronomy that characterized different Italian Marxist stances during that period and also disregarded that public meaning was a very essential aspect of Rossi's preoccupations. She characterized Rossi's stance as destructive and nihilist and ignored his interest in architecture's social role. Huxtable concluded her aforementioned article with the following phrases: "To those practicing architects who still believe that building is a positive, creative and problem-solving necessity, this makes Mr. Rossi not an architect at all"[42]. The proof that Huxtable misinterpreted Rossi's approach is found in what Rossi writes in "Architecture for Museums": "I mean 'architecture' in a positive sense, as a creation inseparable from life and society"[43].

A series of collective exhibitions reflects the galloping fascination with architectural drawings' artifactual value and the prioritization of observers of architectural drawings over the inhabitants of spatial formations. In their majority, these exhibitions constituted instances of cross-fertilization between European and American participants. Such cases were exhibitions as: "10 Immagini Per Venezia: Mostra Dei Progetti Per Cannaregio Ovest", held in April 1980, including projects of Raimund Abraham, Carlo Aymonino, Peter Eisenman, John Hejduk, Bernhard Hoesli, Rafael Moneo, Veleriano Pastor, Gianugo Polesello, Aldo Rossi and Luciani Semerani; "Art by Architects", held at Rosa Esman Gallery in New York from 3 December 1980 to 9 January 1981, with drawings of Michael Graves, Eilleen Gray, Arata Isozaki, Louis Kahn, Andrew MacNair, Richard Meier, Michael Mostoller, Aldo Rossi, Cesar Pelli, Oswald Mathias Ungers, Stanley Tigerman, Susanna Torre, Lauretta Vinciarelli, Stanley Tigerman and Elia and Zoe Zenghelis; "Autonomous Architecture: The Work of Eight Contemporary Architects" at Harvard University's Fogg Art Museum, held from 2 December 1980 to 18 January 1981, with drawings of Aldo Rossi, Diana Agrest and Mario Gandelsonas, Mario Botta, Peter Eisenman, Rodilfo Machado, Jorge Silvetti and Oswald Mathias Ungers. Rossi's "Urban Composition with Red Tower" was shown in "Autonomous Architecture", while some his drawings for the Berlin Südliche Friedrichstadt were part of the

exhibition "Drawings by Architects" at Artworks gallery at the Yale Center for British Art building in spring 1982.

Francesco Dal Co was the curator of the exhibition "10 Immagini Per Venezia: Mostra Dei Progetti Per Cannaregio Ovest". Three years after this exhibition, he addressed a letter to the Secretary of the Jury of the Pritzker Architecture Prize, on 30 November 1982, where he wrote: "In my opinion it would be appropriate if the Jury of the Prize take in some consideration, for the next years, the work of the very well-known Italian architect Aldo Rossi. I am at your disposal to give you any further information about Mr. Rossi's work"[44].

Aldo Rossi writes in *The Architecture of the City*: "After arriving at its own specificity through its relationship with different realities, a form becomes a way of confronting reality"[45]. One aspect that is useful in order to better grasp how Rossi perceived this evolution of form is its comparison with Le Corbusier's understanding of architecture as playing of forms. Rossi privileged form over function, but did not wish to reduce architecture to a playing of forms. This becomes evident when he underlines that he had "never regarded architecture as a playing with forms"[46]. He insisted on the relationship of forms to reality and conceived forms "as being inseparable from reality"[47]. At the same time, he criticized the conception of forms as "deprived of engagement"[48]. An issue of his approach that could help us comprehend how he associates reality with the city is his following declaration: "For the architect this reality is reflected in the city."[49] From this phrase, it becomes evident that, for him, the city played the role of connecting architecture to reality. He believed that the impact of reality on architecture and the impact of reality of architecture are unavoidable.

In 1980, during a conference he gave at Pratt Institute in Brooklyn in New York, Rossi remarked: "I have stated that form is more important than function, not from a formalist position, but really from a historical point of view, that of the evolution of form in reality"[50]. For Rossi, the capacity of architecture to reflect reality is not related to function. This becomes evident when he argues that "[e]ven buildings which both historically and functionally seem to stand apart cannot but be affected by the reality in which they continue to exist, and this is irrespective of their function"[51].

6.2 Aldo Rossi's representations as transforming architectural and urban artefacts into objects of affection

Michael Sorkin, in "Drawings for Sale", draws a distinction between two levels of the impact of architectural drawings on their spectator, that is to say "the drawing as artifact and the drawing as the representation of certain ideas about some architecture". Sorkin also argues that the power of the impact of a drawing on its spectator depends on the interaction of these two different levels. He also underscores that "[a]rchitectural drawing almost inevitably contains a rhetorical element, the essay to produce conviction about the building's rightness"[52].

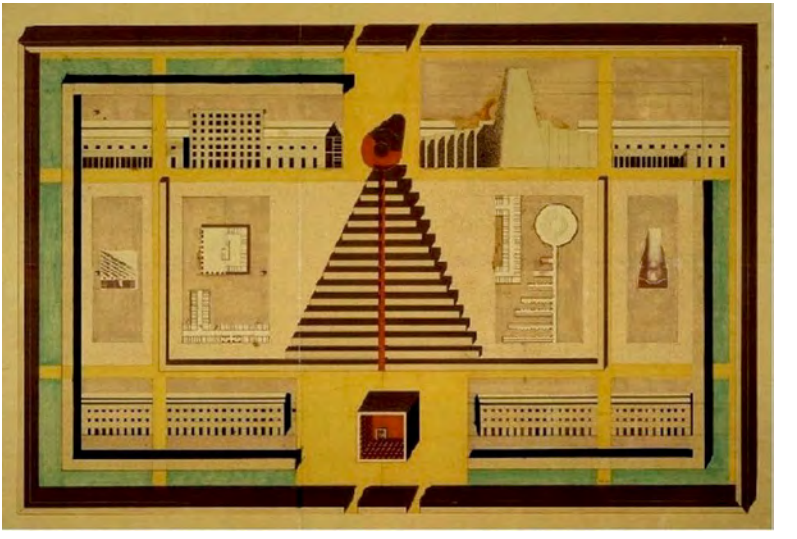
The architects through the design process address to the "observers", who are called to interpret their architectural representations, and, to the "users", who are destined to inhabit the spaces they conceive. In the case of Eisenman, Hejduk, Rossi and Ungers' approaches, the "observers" became more central and the "users". The critique of functionalism, the intensification of the interest in the reinvention of the modes of representation and the raise of architectural drawings to art-objects lead to a prioritization of the "observers" of architectural drawings over the inhabitants of architectural artefacts. However, the aforementioned architects, in their writings, insisted on the importance of human spatial experience.

Despite Rossi's insistence on "human living", "living history" and the experience of architectural artefacts as "objects of affection" — preoccupations that became even more important for him during his stays in the United States — the introduction of his theory and the exposure of his drawings to the American scene coincided with a prioritization of the observers' role over the inhabitants' role. In parallel, his interest in collective memory, despite his intention to take into account architecture's civic effectiveness, contributed to the transformation of inhabitants' experience into an abstract category. This seems paradoxical if we recall Rossi's interest, in "The Analogous City", in the dialectics of the concrete and the "capacity of the imagination born from the concrete"[53]. In a similar manner, the conception of the city as a "living collage" and the rejection of any unitary vision of urban reality, as expressed in "Cities within the city"[54], privileged observers over inhabitants.

The starting point of Rossi's pedagogy in the United States was the intention to capture the reality and the "living history" of American cities and culture. This intention was trapped between two opposing forces: a trend of raising of architectural drawings' artifactual value that was paralleled by an

appraisal of the individual poetic of architects' task, on the one hand, and a trend of establishing methods capable of rendering what is collective in the city architecture's primordial instrument and apparatus, on the other hand. The dialectic between the two aforementioned opposing forces could be grasped through the act "of seeing autobiography [...] as the nexus of collective history and creation" [55] and as their superimposition. As Rafael Moneo has remarked, Rossi's stance reminds us that "the architect does not act in a vacuum in radical solitude, but, on the contrary, knowing what is collective in the city he, as an individual, could penetrate the ground where architecture belongs, and make architecture"[56]. In the case of John Hejduk's approach "[t]he representation of architecture [...] is 'already' architecture, reality..."[57].

Figure 6.3. Aldo Rossi, Cimitero di San Cataldo: Il Gioco dell'Oca, 1972.

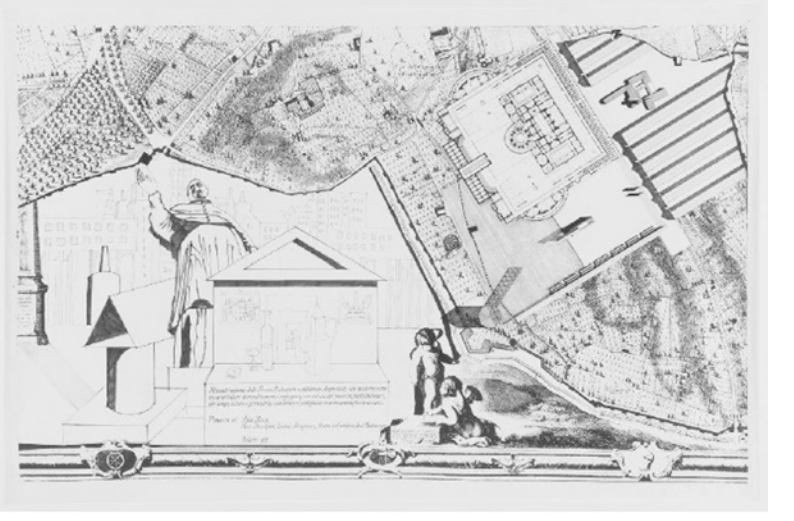


Credits: Aldo Rossi. L'archivio personale Disegni e progetti dalle collezioni del Museo nazionale delle arti del XXI secolo (MAXXI)

Rossi's insistence on the fact that "[a] knowledge of the city [...] enables us not only to understand architecture better, but also, above all as architects to design it"[58] and his belief that the act of drawing objects transforms objects

into objects of affection show that he did not wish to reduce his drawing practice to the objective per se of his architecture. His fascination with the "living history" of American cities reveals that he conceived architecture's individual and collective dimension as always intermixed and superimposed in a never-ending game and, in contrast to Hejduk, he would never be satisfied with an understanding of architecture's reality as architecture's representation, despite the fact that the way his work was interpreted in the United States contributed to the prioritization of the "observers" of architectural representations over the inhabitants of real space.

Figure 6.4. Aldo Rossi, Roma interrotta presentation drawing, 1977. Technique and media: Diazotype on paper. Dimensions: 91 x 139 cm (35 13/16 x 54 3/4 in.).



Credits: Aldo Rossi fonds, Canadian Centre for Architecture, Montréal, Reference number: AP142.S1.D43.P2.2. © Eredi Aldo Rossi/Fondazione Aldo Rossi

Rossi's design method was based on an understanding of the act of drawing as a means of transforming architectural and urban artefacts into objects of affection. For this reason, he always conceived compositional process as a mechanism of accumulation of meanings. His disapproval of any tabula rasa con-

ception of architectural forms and of the notion of invention, on the one hand, and his attraction to typology, repetition and living history, on the other hand, reflect his conviction that, firstly, the architect should never act in the vacuum and, secondly, architectural projects cannot refer to a totality, since they are always in a state of becoming and their character is always fragmentary. In his eyes, the individual autobiographical aspect of architects' creative process and the collective nature of urban reality are in a state of constant interchange. Any fixation to one of them would not satisfy Rossi's desire to capture architecture and city's vivid and evolving reality and their ceaseless interaction. His conception of architecture as inseparable from reality becomes evident when he underscored that he had "never regarded architecture as a playing with forms, as being unrelated to reality, deprived of engagement […] but on the contrary as being inseparable from reality"[59]. The elaboration of the concept of analogy helped him distance himself from a dialectical understanding of repetition, as it becomes evident in the following statement:

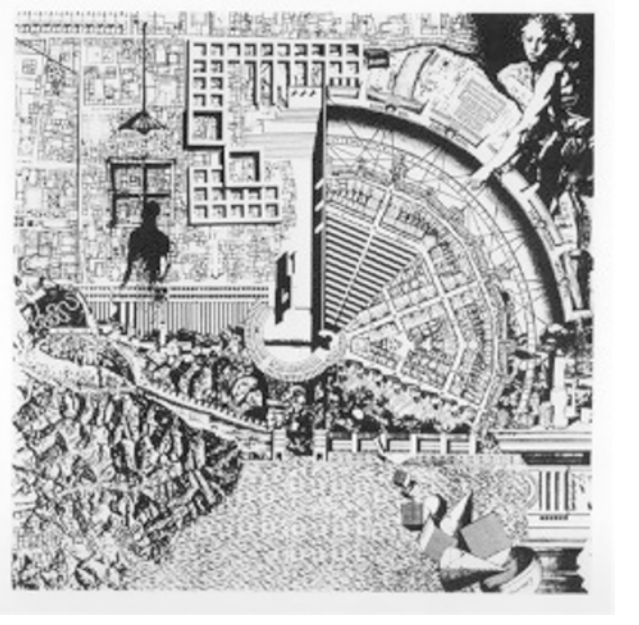
> I could believe that this is a sort of hopeless circle and it could be thought without a dialectic […] in reality it is not the emotions that prevail but the logical development of the facts, which inside themselves are completed or renewed without duplicating themselves perfectly.[60]

Rossi's stance is characterized by the use of different modes of representation in the same drawing, as, for example, in his drawing for the Cimitero di San Cataldo in Modena entitled "Il Gioco dell'Oca" drawn in 1972 (Figure 6.3), the presentation drawing for the exhibition "Roma interrotta", drawn in 1977 (Figure 6.4), but also the famous collage "La Città analoga" that Rossi produced in collaboration with Eraldo Consolascio, Bruno Reichlin and Fabio Reinhart for the 1976 Biennale di Venezia (Figure 6.5). In these cases, we are confronted with the use of plans, elevations, axonometric representation and perspective representation in the same drawing. Rossi's simultaneous use of elevations, bird's-eye axonometric views and distorted perspectives within the same drawing could be interpreted as an endeavor to enforce multiple viewpoints.

Rossi was particularly interested in the autobiographic character of architectural design process and in the uniqueness of how each individual interprets architectural and urban artefacts: "Hundreds and thousands of people can see the same thing, yet each perceives it in his own unique way. It is a little bit like love: One meets many people and nothing happens, and then falls in love with one destined person."[61] Manfredo Tafuri, in "The Theater of Memory", published in *Skyline* in 1979, argued that the "continuous frustration", which is

present in Rossi's work "becomes the opportunity for a restless renewal of the transformational games of materials reduced to a zero degree"[62].

Figure 6.5. Aldo Rossi, Eraldo Consolascio, Bruno Reichlin and Fabio Reinhart, La Città analoga presented at the 1976 Biennale di Venezia. The original drawing located at the centre of the collage is by Aldo Rossi. Technique: Collages of paper, felt, India ink, gouache and synthetic film on paper. Dimensions : 230 x 240 cm.



Credits: Gift of the Société des Amis du Musée national d'art moderne, 2012. Numéro d'inventaire: AM 2012-2-371

6.3 Aldo Rossi's understanding of the tension between individual and collective memory

Two issues that are important for understanding Rossi's thought are: firstly, the difference between the notion of "history" and the notion of "memory", and, secondly, the operative nature of memory. The concept of recollection-images, which we can find in Gilles Deleuze's *Cinema 2: The Time-Image*, is useful for analysing Aldo Rossi's conception of the relationship between memory and repetition. Deleuze draws on Henri Bergson's conception of "recollection-images". What is at the centre of Deleuze's analysis of "recollection-images" is that with them "a whole new sense of subjectivity appears"[63]. Following Nicolas de Warren, we could claim that "[r]ecollection-images are images of the past actualised in the present with a material support in the perceptual present"[64].

Rossi writes in his notebooks, the *Quaderni Azzuri*: "every work or part is the repetition of an occurrence, almost a ritual since it is the ritual and not the event that has a precise form"[65]. He also wrote in the introduction of the catalogue of his first solo exhibition in the United States: "with each return there is a change, little modifications and alterations that are developed in the direction of a different discourse"[66]. Peter Eisenman, in his preface to the American edition of Rossi's *L'architettura della città*, entitled "The Houses of Memory: The Texts of Analogue", refers to Jacques Derrida's *Writing and difference*. He highlights the difference between "memory" and "history" in Rossi's work: "in the city, memory begins where history ends"[67]. In order to understand Rossi's conception of "memory" and especially the distinction between individual and collective memory, we should take into account how Maurice Halbwachs examined the notion of "collective memory" in *La mémoire collective*[68], which was published posthumously. This book played a significant role for the theory that Rossi developed in *The Architecture of the City*[69]. One of the subtitles of the chapters of Rossi's book is "The Thesis of Maurice Halbwachs"[70]. Rossi draws on Halbwachs' theory in order to explain how the individual personality contributes to urban changes.[71] Rossi cites the following passage from Halbwachs' book entitled *La mémoire collective*:

> When a group is introduced into a part of space, it transforms it to its image, but at the same time, it yields and adapts itself to certain material things which resist it. It encloses itself in the framework that it has constructed. The image of the exterior environment and the stable rela-

> tionships that it maintains with it pass into the realm of idea that it has of itself.[72]

Paolo Jedlowski underscores that "Halbwachs showed how the images of the past conserved by individual and by societies are, more than a substantive reliving of the past". She also underlines that these images are also "products of active reconstructions"[73]. Two questions that are important for understanding the role of memory for architecture are the following: in what sense does memory constitute part of the aesthetic of architecture? What is the role that memory plays during the design process? Adrian Forty notes that the "the modern interest in 'memory' and architecture has been less concerned with intentional monuments than with the part played by memory in the perception of all works of architecture, whether intentional or not"[74]. John Ruskin noted in "The Lamp of Memory": "We may live without her [architecture], and worship without her, but we cannot remember without her."[75]

6.4 Aldo Rossi's interest in the vitality of the dynamic of the expansion of the city

Aldo Rossi was interested in identifying "the specific forces acting upon the city"[76]. He was against quantitative methods of analysis of the effects of urbanization, and positive vid-à-vis processes of investigation founded on the forces that act within architecture. In 1965, in the framework of the nineteenth congress of the Istituto Nazionale Urbanistica (INU), held in Venice, Rossi along with his colleagues Gianugo Polesello, Emile Mattioni and Luciano Semerani claimed:

> It is difficult, if not impossible to define the formal and spatial terms of urban transformation within the presumed global vision of planning, because planning often presumes a demiurgic design of the entire territory... From the point of view of the design of the city it is difficult to understand the exact meaning of expressions such as "open project". These expressions are similar to such very fashionable aesthetic categories as "open form", and they are mystifications in view of the fact that any design intervention addresses a problem by means of a form. It is only the possibility of a closed, defined form that permits other forms to emerge.[77]

The attitude of Rossi and his colleagues regarding the importance of well-defined form could be juxtaposed to the point of view described by the Smithsons: "In an open aesthetic, one senses that an architect is involved in a changing situation; in a closed aesthetic, an architect provides the solution to a problem which has been arbitrarily limited just for the sake of reaching formal definition"[78]. Alison and Peter Smithson, through this distinction they draw between open and closed aesthetic, they privileged open aesthetic and blamed certain architects for having overlooked the dynamic character of architecture because of their intention to maintain the specificity related to well defined architectural forms.

Aldo Rossi along with certain of his colleagues were doubtful vis-à-vis the focus of the debates on concepts such as "city-territory", "network", "open project" etc. They were convinced that the potential of the creative forces of architectural and urban design were embedded in the form making of architectural objects. Therefore, they maintained that the starting point should be the design of well-defined and determined architectural forms and not the abstract, quantitatively oriented procedures of urban analysis.

Aldo Rossi, in "La città e la periferia", referred to Pier Paolo Pasolini, Luchino Visconti, Federico Fellini and Michelangelo Antonioni and related contemporary city to urban periphery. He asserted that "[t]he face of the contemporary city is represented for the most part by the periphery, a great part of humanity is born, grows and lives in the urban peripheries". He perceived the suburbs as "vast zones of the modern city that depart from the old centres and in form show both the lacerations of extremely quick growth and a vitality that is intense and new"[79]. Despite his rejection of concepts such as "city-territory", "network", "open project", and "new dimension", he was particularly interested in the vitality embodied in the dynamic of the expansion of the city.

6.5 The import of the discourse around typology in the American scene

Typological thought presupposes two things: firstly, to discern basic types and, secondly, to see things in complementary relationships. For Rafael Moneo, "the type, rather than being a "frozen mechanism" to produce architecture, becomes a way of denying the past, as well as a way of looking at the future" [80]. On the contrary, for Rossi, the notion of typology does not seem to be related to the denying of the past[81]. Peter Eisenman underscores, in the preface of the Amer-

ican translation of *L'architettura della città*, that in the case of Rossi, "[t]ype is no longer a neutral structure found in history but rather an analytical and experimental structure which now can be used to operate in the skeleton of history; it becomes an apparatus, an instrument for analysis and measure"[82]. Rossi insists on the fact that the components of the city "are the results of history"[83]. The importance of this assertion becomes very evident when he mentions that "[t]he relationship of geometry and history, that is the history of the application of geometrical forms, is a constant characteristic in architecture."[84] Rossi is attracted by the phenomenon of evolution of the application of geometrical forms. In "Considerazioni sulla morfologia urbana e la tipologia edilizia", relates urban morphology to building types.[85]

Werner Oechslin reminds us that "[t]he discussion of typology was at the front ranks in architectural circles in the 1960s and early 1970s."[86] Terrance Goode, in "Typological Theory in the United States: The Consumption of Architectural "Authenticity"", underlines that "[b]y the mid-seventies, the typological project had been disseminated throughout the various enters of western European architectural culture."[87] An aspect of the concept of typology that is of great interest is its function as a link "between architectural iconicity, social function and form."[88] Stanislaus von Moos, in his *Le Corbusier: Elements of a Synthesis*, notes: "With architects like Aldo Rossi and theoreticians like Giulio Carlo Argan and Anthony Vidler, the concepts of 'type' and 'typology' defined by 18th-century authors like Quatremère de Quincy re-entered the bloodstream of architectural discussions around 1970"[89].

Vidler, in "The Third Typology", published in *Oppositions* in 1977, distinguishes three concepts of typology: that corresponding to the rationalist philosophy of the Enlightenment linked to Abbié Laugier, that emerging because of "the need to confront the question of mass production" associated with Le Corbusier and that related to Aldo Rossi and the brothers Krier[90]. In the first two cases, "architecture, made by man, was being compared and legitimized by another 'nature' outside itself", while in "the third typology, as exemplified in the work of the new Rationalists, however, there is no such attempt at validation. The columns, houses, and urban spaces, while linked in an unbreakable chain of continuity, refer only to their own nature as architectural elements, and their geometries are neither scientific nor technical but essentially architectural"[91]. Argan drew a parallel between typology in architecture and iconography in figurative arts. According to him, "it is legitimate to postulate the question of typology as a function both of the historical process

of architecture and also of the thinking and working process of individual architects."[92]

Goode is "especially interested in the ways in which typological theory, imported into the United States from Europe, was transformed [...] from a critical theory of architectural resistance, absorbed into the largely ameliorative project of post-modernism, and ultimately reduced to an instrument of the very forces that it was initially intended to oppose."[93] This observation is very relevant for understanding how Rossi's posture when imported in the United States was reduced to a poetic elaboration losing its political and civic dimension. Rossi's arrival to the United States is situated just after the import of the discourse around typology in the United States.

Oswald Mathias Ungers invited Léon Krier to Cornell University just one year before Aldo Rossi, that is to say in 1975. According to Wendy Ornelas, "[t]he Kriers have interpreted typology in a manner similar to the definition from Durand. Theirs is, as was Durand's, a "cookbook" method for the design of architecture. On the other hand, Aldo Rossi has emphasized, in his idea of type, the morphology of the composition."[94] An observation of Goode that I find worth noting in order to understand the specificity of the import of the discourse around typology in the American scene is the following: "Separated from their initial ideological context, there characteristic forms and representational idiosyncrasies of such "stars" of the typological movement as Aldo Rossi and the Krier brothers were eagerly received as images ready for immediate appropriation by students and practitioners alike"[95].

Kenneth Frampton, in the brief of the second-year design studio "Composite Perimeter Housing Prototype for Marcus Garvey park Village Extension" that he taught during the autumn semester at the Graduate School of Architecture and Planning at Columbia University in 1977, proclaimed that "architectural education and design practice should be typologically based and the nature of the relevant type form should be allowed to establish the generic parameters of the problem from the outset"[96]. Leandro Madrazo Agudin has underlined since 1995 the risks of assimilating type to typology: "In recent times, the term type has been used by architectural writers as synonymous with typology. Unfortunately, establishing this identity between type and typology has served to undermine some of the essential meanings conveyed by Type"[97]. Sam Jacoby underlines, in "Type versus typology Introduction", that "[t]ype originally denoted a medium of non-imitative reproduction", while "typology indicated a reasoning by analogy"[98].

6.6 Aldo Rossi's attitude toward typology and the urban facts of the American city

A main characteristic of "Rossi's attitude toward typology is his belief that, over time, architectural forms accumulate new meanings"[99]. For Rossi, "[b]arns, stables, factories, workshops" were "[o]bjects of affection that reveal ancient problems"[100]. Rossi related his "attachment to the objects" to the fact that "reproducing them, they become objects of affection"[101]. He referred to a "particular affection towards the things that we ourselves have brought about"[102]. For him, the act of drawing objects functioned as a way of transforming objects into objects of affection. Rossi remarked, in "The Meaning of Analogy in my Last Projects": "the most exciting experience I had visiting [American] cities […] is that they are loaded with living history"[103]. He also stated: "we have to reflect in architecture the vitality of experience". He highlighted that "[t]he myth of the American City, all new, efficient, etc. seems to […] to have been invented to sell a certain model of architecture"[104]. He related the falseness of this constructed image of the American City to modernist European architecture, as it becomes evident in his following words:

> I believe that by observing American towns, where people live mainly in one-family houses, we can question the abstract thesis of Le Corbusier and of the European Rationalists that the task of modern architecture is to design large apartment houses[105].

Rossi maintained that his theory of typology acquired a special value in the case of Manhattan because of the typology of the skyscraper. Aldo Rossi notes: "typology has a particular value [in] N.Y. or Manhattan with the type of the skyscraper"[106]. Rossi defined typology as it follows: "in fact by concept of typology I mean the concept of a form in which human living expresses itself in a concrete way."[107] Rossi, during his stays in the United States, he is not only interested in the typology of the skyscraper. He shows a particular interest for other typologies found in the American cities, such as huge complexes of one-family houses in California and mobile homes in Texas. This becomes evident from what he said to Diana Agrest, in 1979: "I have seen huge complexes of one-family houses in California and mobile-homes in Texas, as well as the new buildings in New York City, and, personally, I don't have any moralistic feelings toward these works; I even found them stimulating"[108].

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Chapter 7: Constantinos Doxiadis and Adriano Olivetti's role in reshaping the relationship between politics and urban planning

The chapter is developed around the following axes: firstly, it focuses on the examination of Constantinos A. Doxiadis and Adriano Olivetti's respective understanding of democracy; secondly, it presents their respective reconstruction models; thirdly, it analyses their respective stance vis-à-vis centralized and decentralized models of governing; finally, it examines their respective involvement in the European Recovery Program (ERP). The objective of the chapter is to shed light on how Doxiadis and Olivetti contributed to societal transformation, on the one hand, and the formation of national identity within the Greek and Italian post-war context respectively, on the other hand.

Important for grasping the Marshall Plan's impact on Greece is Doxiadis's role as undersecretary and director-general of the Ministry of Housing and Reconstruction between 1945 and 1948, as coordinator of the Greek Recovery Program and as undersecretary of the Ministry of Coordination between 1948 and 1950. Pivotal for understanding the Marshall Plan's impact on Italy is Olivetti's role within the study center of the UNRRA-CASAS housing committee, which was responsible for the development settlement schemes based on the model of the communitarian aggregation[1]. In many cases, renowned architects, who worked outside the agency's technical staff, were invited to design these settlement schemes.

The chapter aims to add the comparative layer, which is missing in existing studies. Additionally, it aims to clarify how Doxiadis and Olivetti conceptualized technocracy and its relation to politics in different ways. Among the existing studies on Doxiadis, I could mention Lefteris Theodosis' PhD dissertation *Victory over Chaos? Constantinos A. Doxiadis and Ekistics 1945–1975*[2], which is a monographic study on Doxiadis, while among the existing studies on Olivetti,

I could refer to Davide Cadeddu's *Reimagining Democracy: On the Political Project of Adriano Olivetti*[3] and AnnMarie Brennan's PhD dissertation *Olivetti: A Working Model of Utopia*[4]. The chapter is developed along an axis at the intersection between urban planning and politics. Among books devoted to similar questions are the volume *Architecture and the Welfare State*, edited by Mark Swenarton, Tom Avermaete and Dirk van den Heuvel[5], Kenny Cupers's *The Social Project: Housing Postwar France*[6], as well as the volume *Re-humanizing Architecture: New Forms of Community, 1950–1970 (East West Central: Re-Building Europe, 1950–1990)*, edited by Ákos Moravánszky, Judith Hopfengartner and Karl Kegler[7]. The first and the third are anthologies grouping together essays – each of them focused on a different national context – while the second is centered on the French context. Most of the existing books on this topic concern one national context or are edited volumes gathering chapters by various authors on different national contexts.

To the present there has been no comprehensive research placing the reconstruction efforts in Italy and in Greece within a comparative framework, in relation to the European Recovery Program (ERP). However, there are certain scholarly works focusing on Italo-American exchanges during the post-war period, with special emphasis on both the UNRRA-CASAS and Ina-Casa programs as well as on the role of Adriano Olivetti. One could refer, for instance, to Paolo Scrivano's *Building Transatlantic Italy: Architectural Dialogues with Postwar America*[8] and Stephanie Zeier Pilat's *Reconstructing Italy: The Ina-Casa Neighborhoods of the Postwar Era*[9]. Regarding Doxiadis, there are no comprehensive studies on his role as director-general of the Ministry of Housing and Reconstruction, and most of the scholarly articles analyzing his work do not focus on his political agenda and construction program, with the exception of Andreas Kakridis's "Rebuilding the Future: C. A. Doxiadis and the Greek Reconstruction Effort (1945–1950)"[10].

The main objective of this chapter is to provide a terrain of investigation situated at their intersection with architectural design and town planning, taking into account the interaction between social history, political history, economic history and transnational studies. Despite the fact that it mainly examines Doxiadis and Olivetti's agendas, the way it is developed aims to provide an understanding of the dominant models of urban design and town planning, during the post-war years, both in Greece and in Italy, thus challenging the monographic interest for the above-mentioned figures. The fact that both Doxiadis and Olivetti were important public figures and held significant political positions provides two case-studies allowing us to decipher what was at

stake in the political sphere in relation to the impact of the European Recovery Program (ERP) in Greece and Italy.

The reflections developed in this chapter come to fill this gap for Italy and Greece, suggesting a comparative point of view. More specifically, the chapter aims to contribute to the scholarship regarding the impact of the Americanization processes on European post-war architecture, placing the Greek and the Italian contexts in a comparative or relational frame. The choice to focus this comparative study on Greece and Italy is based on the fact that in both contexts, during the post-war years, the effort to reconceptualize national identity was very present, for different reasons in each of them since different political models were at stake. The chapter intends to examine the consequences that these models had upon urban design and architecture in Greece and Italy. This explains why as key players for this study have been chosen Doxiadis, for the case of Greece, and Olivetti, for the case of Italy.

The choice to analyze Doxiadis's vision of the reconstruction is based on the fact that he is one of the very rare cases in post-war Europe of a Figure simultaneously involved institutionally in politics, urban design and architecture, simultaneously occupying important political positions and suggesting such concrete urban and architectural plans for the reconstruction. In other words, a significant point of convergence between Doxiadis and Olivetti is their overall perspective within the post-war era. Both, instead of framing their practice and theory within the frontiers of specific disciplines, tried to reflect on strategies of reconstruction beyond conventional models. Their way of thinking at the intersection of different domains of practice explains why the examination of their activities is essential for understanding the interrelation between the question of national identity and the post-war reconstruction.

7.1 Constantinos A. Doxiadis and Adriano Olivetti and the formation of national identity in post-war Greece and Italy

To better grasp the differences and similarities between the political approach of the Greek architect town planner Constantinos A. Doxiadis and that of the Italian industrialist Adriano Olivetti, one should compare the directions that the reconstruction projects took after WWII in Italy and Greece. Greece was one of the countries most devastated by WWII, while Italy was selected because, in order to counter the debates on communism, America was very much

interested in influencing the fictions and agendas that accompanied the Italian post-WWII reconstruction. For these reasons, the formation of national identity in post-war Greece and Italy was a significant issue in various domains including architecture, urban design and cinema. For the aforementioned reasons the question of the formation of national identity in the post-war years in Greece and Italy was very present in various domains including architecture, urban design and cinema. The former exemplifies the post-war Greek technocratic élite, while the latter encapsulates the spirit of the post-war Italian entrepreneurial bourgeoisie. According to Andreas Kakridis, Doxiadis's stance should be understood within the context of the post-war apolitical technocratic élite[11].

To better grasp Doxiadis and Olivetti's visions, it is useful to examine Doxiadis's five-year mandate at the Ministry of Reconstruction, on the one hand, and on Olivetti's role as president of the Istituto Nazionale di Urbanistica (INU) from 1950 and vice-president of the United Nations Relief and Rehabilitation Administration (UNRRA)-CASAS program from 1959, on the other. The UNRRA-CASAS program, developed under the aegis of the United Nations, was a bi-national agency whose mission was to make use of funds from the European Recovery Program (ERP).

7.2 Adriano Olivetti's political agenda and the UNRRA-CASAS program

Adriano Olivetti's political agenda was based on his intention to think beyond the schism between the Social Democrats and the Communists, which dominated the post-war Italian political context. At the center of Olivetti's vision was the search for the elaboration of new models of civil cohabitation[12]. Of great significance for understanding Olivetti's political agenda is the way he conceived the relationship between democracy and community. Olivetti gave much importance to the relationship of citizens to institutions. Four seminal works for understanding Olivetti's vision are *L'ordine politico delle comunità*[13], *Per un'economia e politica comunitaria*[14], *Città dell'uomo*[15], and *Società, Stato, Comunità*[16]. As Franco Ferrarotti has underscored, in *La concreta utopia di Adriano Olivetti*, Olivetti's utopian vision could be characterised as "concrete utopia"[17] in the sense that his understanding of communities as concrete goes hand in hand with his conviction that communities are determined by geography and history[18].

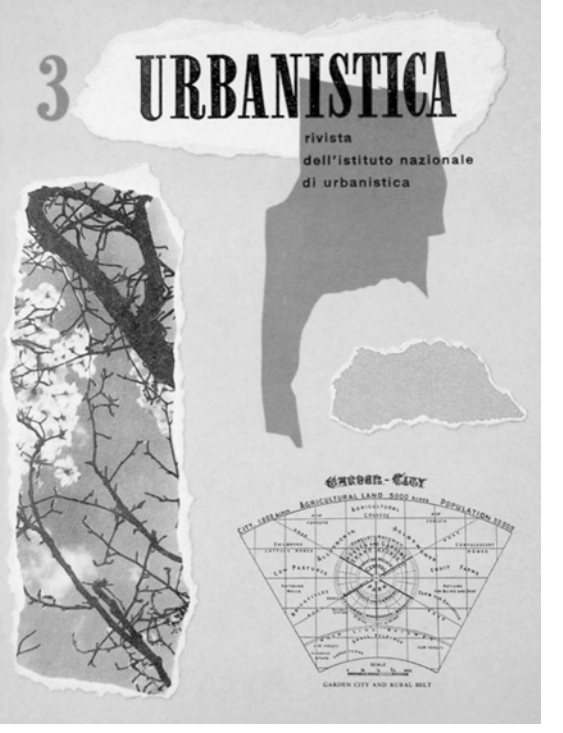
Adriano Olivetti played an important role in Italo-American exchanges as a member of the UNRRA-CASAS program's housing committee from 1951. His ideas had a significant impact on urbanistic approaches within the post-war Italian context. For him, urban planning was part of a broader political project. Since 1933, Olivetti was general manager of the typewriter factory founded by his father outside the Italian town of Ivrea. In 1947, he founded "Movimento Comunità". Giovanni Astengo, a graduate architect of the Politecnico di Torino, who was associated with the "Movimento Comunità", helped Olivetti reorganize *Urbanistica* (Figure 7.1) and became vice-president of the Istituto Nazionale di Urbanistica (INU) in 1950. In early 1952, Olivetti formed the Gruppo Tecnico Coordinamento Urbanistico del Canavese, which included the architects Ludovico Quaroni, Nello Renacco, and Annibale Fiocchi and the engineer Enrico Ranieri. Due to the projects initiated by Olivetti, Ivrea's population roughly doubled between the 1930s and 1960s. Olivetti was elected mayor of Ivrea in 1956 and became a member of parliament in the national government in 1958.

In April 1948, the Marshall Plan was authorized to offer economic assistance to reconstruction efforts in Western European economies decimated by WWII. UNRRA-CASAS operated from 1947 through 1963, when it became ISES, Istituto per lo Sviluppo dell'Edilizia Sociale [Institute for the Development of Social Housing]. For the Italian context, three programs that are related to the large-scale transformations of the post-war period are the European Recovery Program (ERP) and especially the UNRRA-CASAS program and the two Ina-Casa programs (1949–1956 and 1956–1963). The UNRRA-CASAS program was responsible for the construction of more than a thousand villages all over Italy. The mythologies that accompanied the conception of these villages are significant for unfolding the transformations of architecture's scope within the post-war Italian context.

The European Recovery Program (ERP) gave funds to UNRRA-CASAS for SVIMEZ (Associazione per lo Sviluppo dell'Industria nel Mezzogiorno) and then for the Casa per il Mezzogiorno, the Italian state agency for the development of the south, founded in 1950[19]. Significant for understanding the aesthetics related to post-war Southern Italy or "Mezzogiorno" are the photographs by American photojournalist Marjory Collins, especially those accompanying the "Viaggio ai 'Sassi' di Matera"[20], published in 1950 in *Comunità*, the journal that Adriano Olivetti founded in 1946 and which was published until 1960. Matera, which is in the Basilicata region, is related to the concept of "meridionalismo", which was elaborated to refer to the study of social, eco-

nomic and cultural problems in the South. A large part of its population still lived in the "sassi", which are a type of primitive houses. Olivetti's involvement in a detailed study of Matera will thus be carefully scrutinized. It included proposals for the requalification of its "sassi" and the new town of La Martella, directed by a group of American-based scholars, such as Federico G. Friedmann[21]. The team that worked on the requalification of Matera's "sassi" and La Martella consisted of Ludovico Quaroni, Federico Gorio, Michele Valori, Piero Maria Lugli and Luigi Agati thanks to funding granted by Olivetti.

Figure 7.1. The cover of the third issue of Urbanistica.



7.3 The Marshall Plan and the transatlantic exchanges in architecture, urban planning and the arts

Between 1948 and 1952, as Michael Holm remarks, in *The Marshall Plan: A New Deal for Europe,* due to the European Recovery Program (ERP), the United States were the principal benefactor of Western Europe's post-WWII recovery[22]. Some studies exist on the relationship of the Marshall Plan, with cinema, but there are no comprehensive analyses of the impact of the Marshall Plan on architectural and urban design methods in Europe. Regarding the studies on cinema, important are Maria Fritsche's *The American Marshall Plan Film Campaign and the Europeans: A Captivated Audience?*[23] and *Homemade Men in Postwar Austrian Cinema: Nationhood, Genre and Masculinity*[24]. Among the studies that have been centered on the analysis of the impact of the Marshall plan on Italian cinema are Paola Bonifazio's *Schooling in Modernity: The Politics of Sponsored Films in Postwar Italy*[25], Regina M. Longo's "Between Documentary and Neorealism: Marshall Plan Films in Italy (1948–1955)"[26] and Daniela Treveri Gennari's *Post-War Italian Cinema: American Intervention, Vatican Interests*[27].

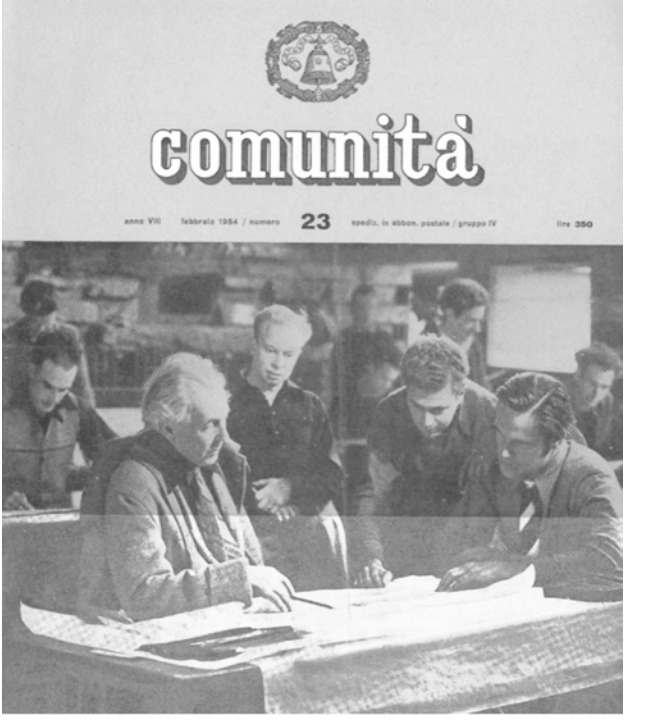
A number of studies address the role of design, painting, music and the media during the Cold War, but the domain of architecture has led to far fewer publications. However, some aspects related to architecture are addressed in *Cold War Modern: Design 1945–1970* edited by David Crowley and Jane Pavitt[28]. Creg Castillo, in *Cold War on the Home Front: The Soft Power of Midcentury Design*, examines how domestic environments were exploited to promote the superiority of either capitalism or socialism on both sides of the Iron Curtain, during the Cold War years[29], while *Music, Art and Diplomacy: East-West Cultural Interactions and the Cold War,* edited by Simo Mikkonen and Pekka Suutari, covers episodes involving art, classical music, theatre, dance and film during the decades following WWII[30].

At the center of Olivetti's vision was the search for an elaboration of a new civil cohabitation, on the one hand, and of models promoting democracy beyond political parties, on the other hand[31]. More specifically, he intended to bring into being ways that would permit to overcome both Marxism and capitalism. For this purpose, he established the political-cultural movement "Movimento Comunità" in 1947 in Ivrea, which dissolved in 1961, after his death[32] (Figure 7.2). Five years before its dissolution, in 1956, Olivetti was elected mayor of Ivrea, while in 1958 he became a member of parliament in the national government[33]. Adriano Olivetti's *Movimento di Comunità* was trying to shape new tools

intending to enhance social awareness and to promote the interaction between technology, sociology and political sciences[34].

To understand his political vision, one should take into account Olivetti's activities during the fall of 1957, when the Italian Republic was in the midst of its "economic boom" ("miracolo economico") and was part of a newly developed European economic community. Informative for understanding the magnitude of the Italian economic boom is Paolo Scrivano's remark that "[i]n the 15 years following the end of the war, Italy underwent dramatic social and economic change"[35].

Figure 7.2. The cover of the 23rd issue of Comunità.



Following Scrivano's approach in *Building Transatlantic Italy: Architectural Dialogues with Postwar America*, the role of Olivetti in the Italo-American exchanges should be situated within the larger realm of studies on Americanization[36]. Antonio Gramsci's "Americanism and Fordism" is useful in order to decipher the mechanisms involved in the "economic boom" of the 1960s in Italy and the way in which the process of Americanization is linked to the process of modernization during post-war reconstruction within the Italian context[37]. Another question that is worth mentioning is the extent to which the reinvention of the concept of the city by post-war Italian architects, and especially in relation to Olivetti's role as president of the Istituto Nazionale di Urbanistica (INU) and vice-president of the UNRRA-CASAS program, is linked to the hybridization of imported American models to Italy.

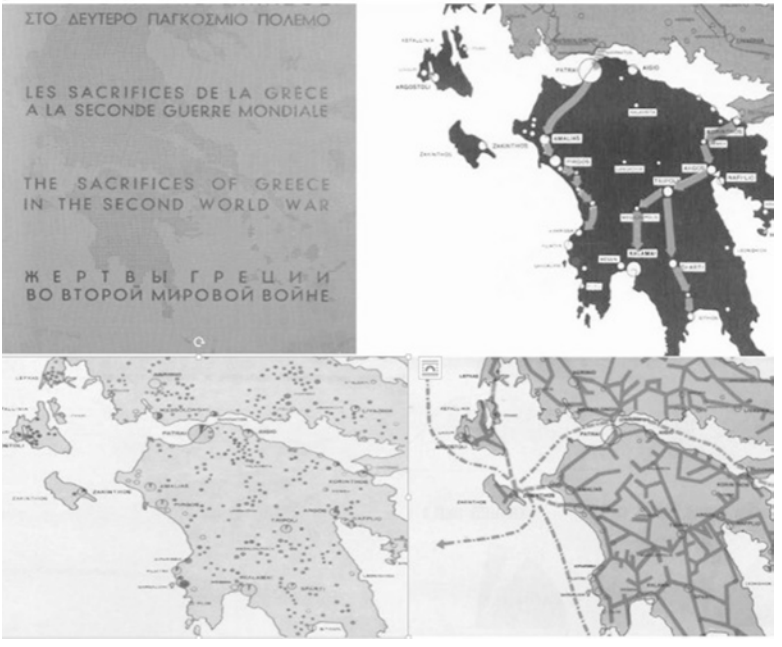
Worth-mentioning is the impact of The Joint Center for Urban Studies for the Italo-American exchanges concerning urban planning strategies during the post-war period[38]. The Joint Center for Urban Studies was a combined research center between Harvard and MIT established in Boston in 1959 in conjunction with the conference "The Historian and the City" and was supported by the Ford Foundation. It played an important role in the Italo-American exchanges, addressing intellectual and policy issues confronting a nation experiencing widespread demographic, economic and social changes, with dramatic and far-reaching effects on cities in particular.

7.4 Constantinos A. Doxiadis's political agenda and The Plan for the Survival of the Greek Nation

Important for understanding Doxiadis's political agenda is his role as undersecretary and director-general of the Ministry of Housing and Reconstruction between 1945 and 1948, as coordinator of the Greek Recovery Program and as undersecretary of the Ministry of Coordination between 1948 and 1950. In order to grasp the amplitude of the research that was led during the period when Doxiadis served as director-general of the Ministry of housing and Reconstruction, one must consider that 30 different research monographs on issues of rural housing, urban design, economic development and administrative reform were developed under Doxiadis's supervision. In parallel, around 35,000 new houses were constructed and 153,000 buildings were repaired. Amongst the tables included in a Report of the Ministry of Reconstruction published in 1948 is an estimate of the number of rooms repaired or built for

Civil War refugees by 30 June 1948, which totalled 36,272[39]. These numbers cover the period between 1948 and 1951 omitting data from the first years of the ministry's operation. Only completed houses are counted. Another 12,000 new houses and 32,000 repairs were in progress when the report was drafted in 1952.

Figure 7.3. Maps that were included in the exhibition "Such Was the War in Greece" curated by Constantinos A. Doxiadis.



Credits: Constantinos and Emma Doxiadis Foundation

Figure 7.4. Map that shows the destructions of the railway network in Greece during WW II. This map was included in the exhibition "Such Was the War in Greece" curated by Constantinos A. Doxiadis.

Credits: Constantinos and Emma Doxiadis Foundation

In order to better grasp the significance of Doxiadis's reconstruction efforts, one should bear in mind that Greece was among the most devastated countries to emerge from WWII. Doxiadis's efforts during the post-war years constitute an important component of development theory and planning in post-war Greece. According to Doxiadis's claims in "Ekistic Policy for the Reconstruction of Greece and a Twenty-year Plan", Greece lost 23 per cent of its

buildings during WWII, a higher percentage than any other European country[40].

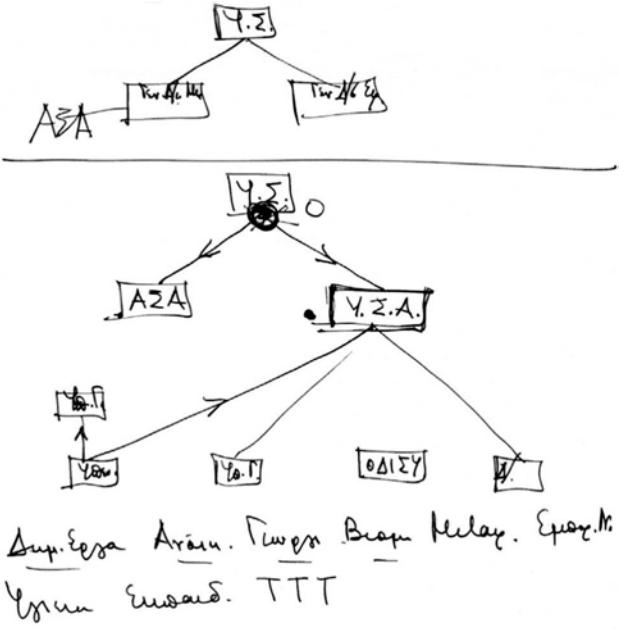
Figure 7.5. Map that shows the destructions of the villages in Greece that were burnt during WW II. This map was included in the exhibition "Such Was the War in Greece" curated by Constantinos A. Doxiadis.

Credits: Constantinos and Emma Doxiadis Foundation

In 1947, Doxiadis mounted a statistical exhibition entitled "Such Was the War in Greece"[41] (Figure 7.3, Figure 7.4, Figure 7.5). This exhibition displayed Greece's wartime depredations with thorough maps and photographs a few weeks after the Nazi withdrawal from Athens. Doxiadis was appointed undersecretary and director-general of the Ministry of Housing and Reconstruction between 1945 and 1948, coordinator of the Greek Recovery Program and undersecretary of the Ministry of Coordination between 1948 and 1950. During the

first three years he directed the Ministry of Housing and Reconstruction, 561 settlements were surveyed and 230 new urban plans were drafted.

Figure 7.6. Handwritten sketch of an organisation chart of the Greek Recovery Program Coordinating office (ΥΣΕΣΑ) at the Ministry of Coordination.

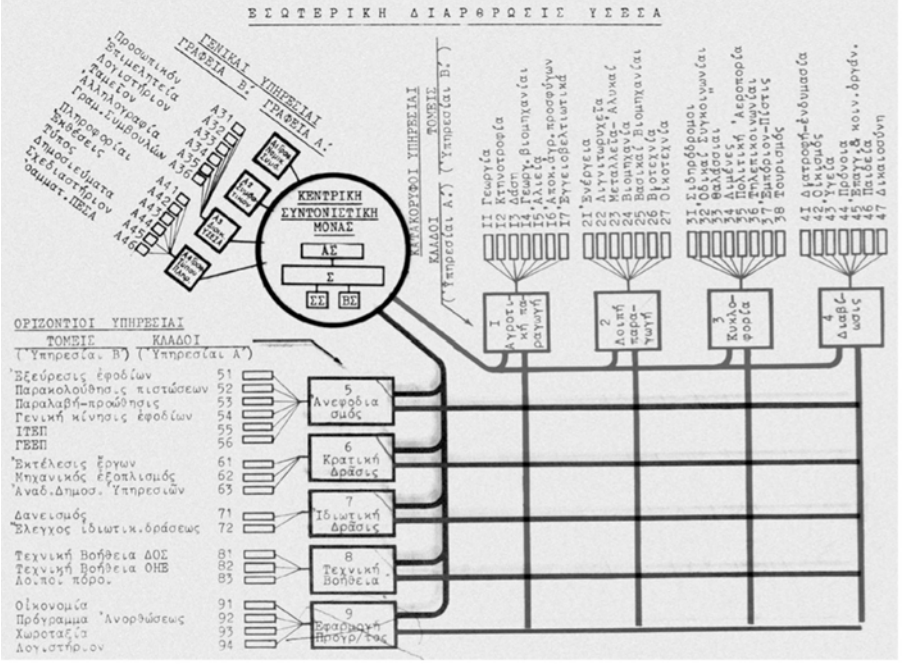


Credits: Constantinos and Emma Doxiadis Foundation

Of great interest for understanding Doxiadis's post-war reconstruction agenda is his *Survival Plan*, which is the product of a collaboration between Doxiadis and other specialists. Its official name was *Plan for the Survival of the Greek Nation*. The *Plan for the Survival of the Greek Nation*, which was drafted by Doxiadis and his colleagues between 1946 and 1947, is important for understanding Doxiadis's positions in relation to the Marshall Plan in Greece. The close reading of this document offers an understanding of the drive for modernization during the post-war years in Greece. What lies behind this

plan is Doxiadis's own theory of social evolution, which is based on a biological analogy between nations and living organisms. Characteristically, Doxiadis remarked somewhere between 1946 and 1947, in the *Plan for the Survival of the Greek Nation*: "nations are living organisms, evolving from primary and rudimentary forms to more integrated ones. As all living organisms, peoples go through various stages of development."[42] Of great importance for understanding the relationship between urban planning and politics in Doxiadis's thought is *Architecture in Transition*[43].

Figure 7.7. Organization chart of the Greek Recovery Program Coordinating office (ΥΣΕΣΑ) at the Ministry of Coordination.



Credits: Constantinos and Emma Doxiadis Foundation

The holistic and interdisciplinary view behind a handwritten sketch of an organization chart for the New Greek Recovery Programme by Doxiadis (Figure 7.6) and an internal organization chart of the Greek Recovery Program Coordinating office (ΥΣΕΣΑ) at the Ministry of Coordination (Figure 7.7) should be understood in relation to Doxiadis's concept of "ekistics", which Doxiadis coined in *Ekistic Analysis*[44], and was further developed in *Ekistics: An Introduction to the Science of Human Settlements*[45], "Ekistics, the Science of Human Settlements"[46], and *Ekistic policy for the reconstruction of Greece and a twenty-year plan*[47]. In Doxiadis's thought, ekistics operated at three levels: firstly, general ekistics; secondly, urban planning, and thirdly, building design and construction. Both holism and interdisciplinarity lie at the heart of Doxiadis's approach to the understanding of human progress. Doxiadis also drew a distinction between interdisciplinary and condisciplinary science. In "Ekistics, the Science of Human Settlements", Doxiadis underscored: "To achieve the needed knowledge and develop the science of human settlements we must move from an interdisciplinary to a condisciplinary science"[48].

7.5 Towards a conclusion or juxtaposing centralized and decentralized political apparatuses

Constantinos A. Doxiadis believed in the necessity of centralized state coordination. On the contrary, Olivetti considered a government of decentralized authority as the true expression of democracy, as becomes evident in *L'ordine politico delle comunità*, first published in 1945[49]. The objective of the chapter was to shed light on the tension between Doxiadis's preference for a centralized political apparatus and Olivetti's predilection for a decentralized one. More specifically, in 1945, Doxiadis, upon invitation by Prime Minister Nikolaos Plastiras, worked on the creation of a centralized state agency in charge of reconstruction. Doxiadis's reflection on centralized models of governing reflects his desire for complete control, which becomes evident in the following words, written during his first years of service at the Ministry of Reconstruction: "for such a colossal project to work, there can be only one competent Authority. This Authority was named the State Ekistic Authority because: (a) its power must emanate from the state, (b) the concept of ekistics, as a broader term of the science and policy of all housing problems, embraces all its competences, not just those of city-planning and building"[50].

What I tried to render explicit in this chapter is that centralized control and planning had for Constantinos A. Doxiadis a theoretical justification, which can also be found in Η πορεία των λαών [*The March of the Peoples*][51]. Adriano Olivetti, on the other hand, as becomes evident in *L'ordine politico delle comunità*, supported political decentralization, which, for him, referred to the implementation of urban and economic plans by the territorial communities and their organic coordination[52]. He believed that political decentralization could prevent both elitism and bureaucratism, which he understood as inherent to the two types of rationalization most discussed during post-war years, namely the scientific rationalization of industrial processes and the centralized planning favored by socialist countries. Their vision of politics is related to their agendas regarding urban planning strategies within the context of the post-war reconstruction.

Doxiadis had an image of scientific and economic progress as capable of rendering class and ideology irrelevant, while Olivetti was persuaded that the establishment of conditions that would provide the citizens with the sense of community relied on "expert technicians, politicians and scientists, who would work principally for the good of the people in the communities"[53]. For Olivetti, the communitarian dimension was the antidote against problems between citizens and governmental institutions. His strategy aimed to help men overcome the effects of depersonalization and alienation related to modernization and bureaucratization.

On the one hand, at the center of Olivetti's thought was his intention to reconcile men with technology. On the other hand, Doxiadis's vision was characterized by an image of science and economic progress as capable of rendering class and ideology irrelevant. Despite the fact that the vision of each was characterized by the so-called "technocratical fundamentalism"[54], their way of incorporating managerial and technocratic thought in the political apparatus differs a lot. More specifically, Doxiadis's vision regarding post-war reconstruction was characterized by top-down interventionism *par excellence*, while at the heart of Olivetti's humanistic socialism as the search for socialization without nationalization.

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15 Olivetti, *Città dell'uomo* (Milan: Edizioni di Comunità, 1952).
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Chapter 8: Giancarlo De Carlo's participatory design methods

Growth and flexibility in architectural organisms

This chapter examines the principles of Giancarlo De Carlo's design approach. It pays special attention to his critique of the modernist functionalist logic, which was based on a simplified understanding of users. De Carlo's participatory design approach was related to his intention to replace of the linear design process characterizing the modernist approaches with a non-hierarchical model. Such a non-hierarchical model was applied to the design of the Nuovo Villaggio Matteotti in Terni among other projects. A characteristic of the design approach applied in the case of the Nuovo Villaggio Matteotti is the attention paid to the role of inhabitants during the different phases of the design process.

This chapter also explores how De Carlo's "participatory design" criticized the functionalist approaches of pre-war modernist architects. It analyses De Carlo's theory and describes how it was made manifest in his architectural practice—particularly in the design for the Nuovo Villaggio Matteotti and the master plan for Urbino—in his teaching and exhibition activities, and in the manner his buildings were photographs and represented through drawings and sketches. The work of Giancarlo De Carlo and, especially, his design methods in the case of the Nuovo Villaggio Matteotti can help us reveal the myths of participatory design approaches within the framework of their endeavor to replace the representation of designers by a representation of users. At the core of this chapter is the intention to relate the potentials and limits of De Carlo's participatory design approach to more contemporary concepts such as "negotiated planning", "co-production", and "crossbenching". The chapter also aims to explore whether there is consistency between De Carlo's theory of participation and its application.

Giancarlo De Carlo believed that the failure of how functionalism was understood during the modernist era is related to the fact that it remained "too simple and unsophisticated compared with the complexity of reality". He was convinced that the task of contemporary architecture should be to prepare "a new environment for the new world" through the comprehension of "the world in its whole complexity" and the adaptation of architecture's scope to the "problems of the greater numbers, the larger scale, the widespread communication and participation"[1]. Two lectures that are pivotal for understanding De Carlo's conception of participation are a lecture he gave at Harvard University in 1967 and a lecture he delivered at the Royal Institution in London in 1978. The following statement, which was part of the lecture he gave at Harvard University in 1967, is of great importance for comprehending how he intended to reinvent the relationship between form and function: The so-called modern architecture—namely the rationalism of the twenties—stated that a dual and self-acting interrelation binds form and function: a function expresses itself through a peculiar form; a form must peculiarly express a function. For a long period, this dogma was very useful to clarify the field of reality and to dispel the clouds of architectural academicism[2].

In the same lecture, De Carlo identified two opposed approaches that characterized the architectural debates of the late sixties, which could be summarized in the schism between the modernist authoritarian patterns and the non-authoritarian ones. He maintained that the latter, which corresponded to "a new world trying to grow"[3], could enhance the transformation of society and renders the notions of peace, tolerance, and intelligence central for the field of architecture. De Carlo also related the interest of the modernist architects in the notion of function to their endeavor to reject academicism. He claimed that their reductive comprehension of the relationship between form and function was the main reason for which their functionalist intentions were turned into a "dogma". As John McKean reminds us, Giancarlo De Carlo "linked architecture's International Style with repressive order, sensing that Modernism, in its efforts to legitimize itself and locate itself historically, had succumbed to rigid bureaucratization and become formalist and prescriptive of aesthetic codes"[4]. De Carlo, apart from the modernist architects, also criticized Peter Eisenman's design processes by arguing that they were "abstract manipulation[s]". In parallel, he maintained that meaning should not be defined before the design process given that it is dependent of how the users conceive of it. More specifically, De Carlo placed particular emphasis on the methods in which users can "alter the process in order to give it life as they see it"[5].

In order to situate De Carlo's participatory design approach within a broader context of architects and urban planners interested in participation during the same years that De Carlo was active, it would be useful to refer, apart from the International Laboratory of Architecture and Urban Design (ILAUD)[6] in Italy, to groups such as the Atelier de recherche et d'action urbaines (ARAU) in Belgium[7] and the Serviço Ambulatório de Apoio Local (SAAL) in Portugal[8]. This would help us to contextualize De Carlo's participatory design approach in relation to other advocates of this approach. SAAL's participatory process was based on the intention to promote affordable and quality housing in Portugal[9]. SAAL should be interpreted in conjunction with the Portuguese revolution of 25 April 1974. Design Methods Group, Christopher Alexander, and Henry Sanoff among others, were also particularly interested in introducing participation in their design methods[10].

Under the headers of "collaboration", "participatory design" and "co-production", participation is nowadays at the center of the debate on urban design. Architects and urban planners are developing new concepts, tools and roles to comply with these new participatory *modi operandi*. However, it seems that it is sometimes forgotten that the issue of participation has a longstanding history. Investigating the projects of ILAUD in Italy, the ARAU in Belgium, and the SAAL in Portugal, we can understand that participation in urban design practice can take many forms, from collective processes of design, to collaborative construction and common management. Comprehending the critical differences between these different approaches can help us to refine our theories and tools of urban design.

The participatory concern regarding the architectural and urban design processes has not only a long history in practice but also in urban design education. Various experimental initiatives with participation emerged in the domain of architectural pedagogy in the late sixties, often starting from student initiatives. Some important cases are those examined in "From Harlem to New Haven: The Emergence of the Advocacy Planning Movement in the late 1960s"[11]: The Architects' Resistance (TAR) – a group formed in 1968 by architecture students from Columbia University's Graduate School of Architecture, Planning and Preservation, MIT Department of Architecture, and Yale School of Architecture describing itself as "a communications network, a research group, and an action group … concerned about the social responsibility of architects and the framework within which architecture is practiced"[12], as well as the National Organization of Minority Architecture Students (NOMAS). Many of these groups emerged within the context of the struggles for civil

rights and thus made a plea to have non-hegemonic or 'other' voices heard in the urban design process. These initiatives explored how new concepts, roles and tools for participation could become part of the education of the architect and urban designer.

8.1 From representation of designers to representation of users: Revisiting Giancarlo De Carlo's conception of participation

Participatory design, which is also often referred to, in the literature, as community design, aims to recognize and legitimize the authority of users in the design process. It is based on the intention to promote democracy, and to invent mechanisms able to provide the users with the opportunity to participate in all the stages of the design process. For Giancarlo De Carlo, "it was vital to reconnect with the inhabitants"[13]. In "An Architecture of Participation", De Carlo refers to the intensification of the "dichotomy between architecture and reality", and criticizes the modern movement in architecture for having simplified the "interpretations of human and social behavior". His following remark regarding the modernist architects is of great significance for understanding his critique of the attitude of the modernist architects: "they were concerned with man as if he were a strictly individual subject within a strictly functional viewpoint". In parallel, De Carlo criticized the "neutrality of techniques" and wished to take "architecture away from the architects and […] [to give] it back to the people who use it". For instance, in his article entitled "An Architecture of Participation", he underlines that the mutation of the design process due to the adoption of participatory design models would have the following main consequences: "each phase of the operation becomes a phase of the design; the 'use' becomes a phase of the operation and, therefore, of the design; the different phases merge and the operation ceases to be linear, one-way, and self-sufficient."[14]

As John McKean has underscored, for De Carlo "[a]rchitecture requires that individuals and groups take responsibilities in the initiation processes, in the production processes, and in the inhabitation processes". McKean claims that "[w]here a programme contains inherent conflicts, it can be that De Carlo's design decisions – far from camouflaging or even reconciling these – expose and even dangerously engage them, offering foci for social behaviours to change". McKean raises the following question regarding De Carlo's participatory design approach: "Could a social determinism called "participation" replace the

architectural determinism of post-war Modernism, with its belief that clean, straight tall buildings would produce clear, straight tall citizens?[15].

In 1978, De Carlo delivered an Inaugural Thomas Cubitt Lecture at the Royal Institution in London entitled "Reflections of the Present State of Architecture". This lecture was focused on the relationship between architecture and morality or "deontology", to borrow his own expression. He highlighted that there was a necessity to found "a new relationship between morality and architecture" and to "invent a new type of client". He also remarked that participation breaks the hierarchy between the different stages of the design process, underscoring that "the moment of use is 'project'", because it involves changes suggested by critical evaluation". He paid particular attention to how "[t]he user [can become] [...] the real receiver of the operation, thus gaining the right to make his needs and values felt by competing in a dialectical confrontation will all the other actors at every stage of the process".

Giancarlo De Carlo shed light on the problematic nature of the "form follows function" dogma, maintaining that it is based on "pre-conceived schematisations of human behaviour". More specifically, he drew a distinction between two ways of understanding architecture: on the one hand, one based on the comprehension of architecture as "an autonomous activity which is self-defining by its own specialisation" and, on the other hand, one treating architecture "as a system of communication and expression that can be deciphered only if one knows the context in which the messages are emitted and received". In the same lecture, he underlined his preference for the second way of understanding architecture, and described his own conception of participatory design. He shed light on the mutation of the architect's role because of the replacement of "the idiocy of specialisation" by "the responsibility of competence", highlighting that this new role of the architects would be focused on the elaboration of design strategies that would permit the involvement of the users in the process of discerning the causes and effects accompanying the various decisions concerning the design strategies. Interestingly enough, he remarked regarding his conception of participatory design:

> The introduction of participation breaks this hierarchy between the operation's various stages and moments, and brings them all back to the same logic: the problematic logic of the "project". The programme the assignment of resources, and the choice of site become hypotheses that must be tested, and even be radically changed if they prove to have inappropriate causes or undesirable consequences.[16]

8.2 The Nuovo Villaggio Matteotti in Terni and the concept of participation

Analysing the design methods employed in the case of the Nuovo Villaggio Matteotti in Terni (1969–1974) can help us better understand De Carlo's conception of participation. For this project, which is one of the first cases of participatory design in Italy (Figure 8.1, Figure 8.2, Figure 8.3), De Carlo collaborated with a big interdisciplinary group of specialists, including engineer Vittorio Korach (1918–2014), sociologist Domenico De Masi[17], and architect and architectural historian Cesare De Seta (1941)[18]. At the time, Italian sociologist Fausto Colombo (b. 1955) and architect Valeria Fossati-Bellani (b. 1935) were employees of De Carlo's studio[19]. The project consisted of 15 typologies and 5 different housing units. The fact that Società Terni financed a part of the intervention[20] should be taken into account if we are trying to understand the tensions hidden behind the realization of this project. This company published the magazine *Terni*. In the tenth issue of this magazine that was published in September 1970, one can find photographs that show the different stages of the process that explain not only the ideas that lead to the project but most importantly the phases concerning the encounters with the future inhabitants.

Figure 8.1. Brochure for the exhibition was titled "For a new village Matteotti" ("Per un nuovo villaggio Matteotti") that took place at the Galleria Poliantea in Terni in late April 1970.

Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia

The interdisciplinary team that worked on this project paid particular attention to the meetings with the steelworkers and their families who were seriously involved in the decision-making processes. The first stage of the process had to do with bringing together the 1800 future inhabitants of the Nuovo Villaggio Matteotti. The aim of this process was to show the inhabitants the housing units within different national contexts through an exhibition of various models. As De Carlo remarked "[o]ne of the main purposes of this exhibition was to divert the attention of the inhabitants from the models normally offered in the market and which conditioned the popular imagination"[21]. De Carlo wrote in a letter he sent to Cesare De Masi in December 1969:

> The purpose of the exposition of the material we are preparing is to give the future inhabitants of the neighbourhood a series of information on ways of living different from those they have known or experienced so far[22].

The materials displayed in this exhibition included architectural drawings and photographs (Figure 8.1). Mimmo Jodice was hired to take photographs of the various meetings with the future inhabitants, the exhibition, and the different phases of construction of the project[23]. The exhibition was titled "For a new village Matteotti" ("Per un nuovo villaggio Matteotti") and took place at the Galleria Poliantea in Terni in late April 1970. It was curated by Cesare De Seta. De Carlo suggested to De Seta to choose some projects among approximately thirty projects to include in the exhibition. The list that De Carlo gave to De Seta included Westminster Court in Roxbury; Massachusetts by Carl Koch and Associates; the renovation of a residential zone in Santa Monica, California by the firm De Mars and Reay, Pietro Belluschi, and Charles Eames; and Housing in Coulsdon, Surrey, London, UK by Team 4 (Su Brumwell, Wendy Cheesman, Norman Foster, and Richard Rogers), among others. Finally, the projects that were chosen to be displayed in the exhibition were the following four: a housing complex in Ham Common, London and Preston by James Stirling and James Gowan; the Siedlung Halen in Bern, Switzerland by Atelier 5; a housing complex in Kingsbury, London by Clifford Wearden and Associates and Clifford Wearden; and St. Francis Square Cooperative in San Francisco by Marquis and Stoller architects. Three years later, a second exhibition devoted to the Nuovo Villaggio Matteotti was held from 13 to 17 October 1973 at the Galleria Poliantea as well (Figure 8.2, Figure 8.3, Figure 8.4).

This exhibition aimed to help the future inhabitants to choose their housing units. The seventeenth issue of the magazine *Terni*, which was published in

September 1973 before the opening of the second exhibition, brought together the general plan of the complex made up of 800 housing units; an ensemble photographs of the natural models; and several tables concerning the automobile and pedestrian circulation, the greenery, and the system of services spread throughout the new district (Figure 8.5).

Figure 8.2. Photograph taken during the second exhibition held at the Galleria Poliantea in Terni from 13 October 1973 to 17 October 1973.

Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia, foto/1/075

De Masi tried to explain the reasons behind the failure of the project of the Nuovo Villagio Matteotti, reminding us that this "initiative ended up being advantageous for five or six hundred people and very disadvantageous for 3500 workers". He also noted that what was built was "just a fragment of the original idea"[24]. More specifically, only 250 out of the 840 housing units were realized. What is enlightening regarding the process followed in the case of the Nuovo Villagio Matteotti is De Masi's article titled "Sociology and the new role

of users" published in *Casabella* in 1977. In this article, De Masi included a diagram that showed all the phases of the design process[25].

Figure 8.3. One of the phases of the participation of users in the definition of the Matteotti villaggio. Photograph taken during the second exhibition by Mimmo Jodice.

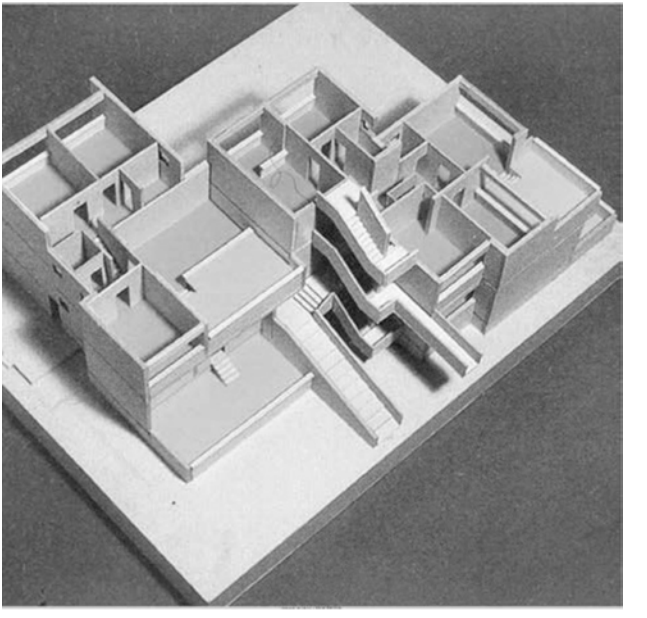
Credits: Photograph by Mimmo Jodice

De Carlo, in his essay titled "Architecture's public", which was originally published in Italian as "Il pubblico dell'architettura" in *Parametro* in 1970, noted that he saw participation as a process of transforming "architectural planning from the authoritarian act which it has been up to now, into a process"[26]. Noteworthy is the title of a section of this text: "Architecture is too important to be left to architects". He called for a metamorphosis concerning the relations of the architects with the inhabitants and insisted on the need to challenge the "the intrinsic aggressiveness of architecture and the forced passivity of the user must dissolve". He suggested the replacement of the users' passivity by what he calls "a condition of creative and decisional equivalence"[27]. De Carlo claimed that authoritarian architecture "begins with the premise that to resolve a problem it is necessary to reduce its variables to a minimum to make it constant and

therefore controllable"[28]. He juxtaposed authoritarian architecture with participatory architecture, which according to De Carlo, "calls into play as many variables as possible so that the result is multiple, open to change, rich in meanings that are accessible to everyone"[29]. De Carlo also related his conception of "creative participation" to his understanding of "disorder", as it becomes evident in his following words:

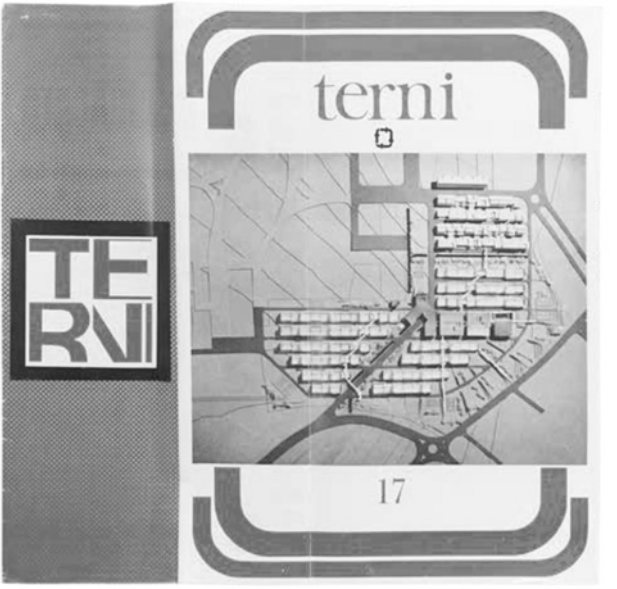
> Growth and flexibility in an architectural organism are not really possible except under a new conception of architectural quality. This new conception cannot be formulated except through a more attentive exploration of those phenomena of creative participation currently dismissed as 'disorder'[30].

Figure 8.4. Photograph of a physical model of Typology 5 that was displayed at the second exhibition at the Galleria Poliantea in Terni in October 1973.



Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia, foto/1/075

Figure 8.5. The cover of the seventeenth issue of the magazine Terni, which was published in September 1973.



Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia, atti/081

The design process of this project was not linear. As De Carlo remarks in his article titled "À la recherche d'une approche nouvelle: le nouveau village Matteotti à Terni" that was published in *Carré Bleu* in 1978, the aim of the design process of the Nuovo Villaggio Matteotti was to trigger a dialogue with the inhabitants. For this purpose, De Carlo launched the design process with the organisation of an exhibition of housing models that brought together examples from various countries. De Carlo's objective was to inform the prospective inhabitants of the Nuovo Villaggio Matteotti regarding "the models normally offered on the market and which conditioned the popular imagination"[31]. Some principles that characterized the design of this project was the idea that "[t]he building typology must be neither fragmented nor a single block" and the conviction that the "pedestrian walkways [should be] built in a scale proportioned to the individual's psychological needs: spaces that can be immediately per-

ceived, walkways that are both variable and inspiring, the presence of greenery, carefully chosen details"[32].

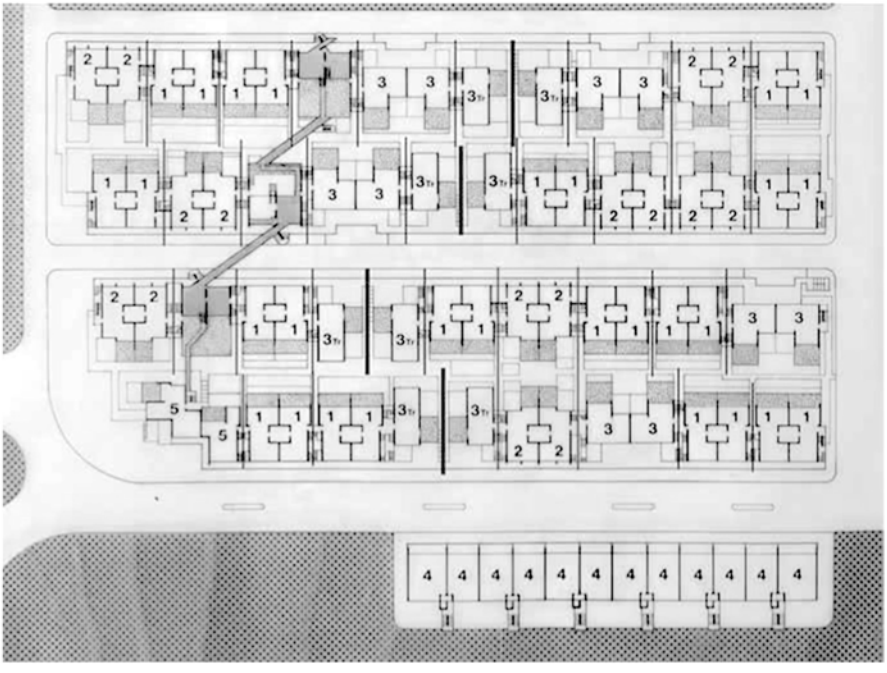
Pivotal for understanding De Carlo's conception of participation is his close relationship with anarchistic circles. De Carlo shared his interest in anarchistic ideas with intellectuals such as Elio Vittorini, Vittorio Sereni, Carlo Bo, and Italo Calvino[33]. He was passionate about several concepts of 19th century anarchist and socialist philosophy[34]. P. G. Raman, in trying to shed light on the specificity of De Carlo's understanding of cooperation, highlighted the differences between the Marxist and anarchist conception of cooperation. More specifically, Raman claimed that, while for Marxists a prerequisite for changing an established structure in society is to overcome the division between bourgeois class and proletarians, for anarchists "each stratum of society, because of its peculiar history, develops different traditions of cooperation"[35]. De Carlo remarked regarding his conception of participation:

> I think that participation is a complex process, which requires imagination and courage, projecting with deep transformations of the very substance of architecture. The aim is to achieve a multiple language able to adapt to changing circumstances, to the consumption of time that passes, to various levels of knowledge and perception, to the plural expectations of many possible interlocutors; a language composed of many equally significant strata..[36]

De Carlo was skeptical vis-à-vis Aldo Rossi's understanding of the notion of "type" and was supportive of the Renaissance comprehension of the concept of "type". More specifically, he had remarked regarding the Renaissance understanding of "type": "[t]he difference is fundamental, because the model is a hypothesis and not an axiom, a frame of reference and not of identification, a metaphor and not a truism; it is not to be reproduced, but imitated; it does not generate repetitions but connections; and it is the destiny of the model to be distorted"[37]. The types of dwellings that were designed for the Nuovo Villaggio Matteotti were the outcome of several meetings with the inhabitants. The exchanges with the inhabitants contributed to the formulation of certain hypotheses regarding their needs and resulted in the design of five typologies (Figure 8.6). In a later phase, the future inhabitants would have the opportunity to choose an alternative for their future apartment from a catalogue that would contain all the possible solutions including new ones, which would have resulted from the lived experiences of the older inhabitants of the housing units. The inhabitants themselves defined the manner the units were assembled. The

active participation of the inhabitants in the design process provoked a significant shift in the process of architectural composition. However, as McKean underscores, "[a]mong the paradoxes of Terni, where only a first small phase was realised, was the nimby embourgeoisement of the first occupants, keen to protect their amenity and preserve it from a further generation who might want to enlarge the project"[38].

Figure 8.6. Plans, sections, and views for one of the typologies of the Nuovo Villagio Matteotti neighbourhood project. Typology 3 TR 130/07, last update September 1971.



Credits: Comune di Terni, Archivio, Archivio Edilizia

Some questions that emerge when we revisit Giancarlo De Carlo's participatory design approach are whether it managed to overcome the authoritarian process of the architect as the director or controller of the design processes and to what extent it revealed the limits of participation[39]. An important source

for exploring to what extent the participation design approach model implemented in the Nuovo Villaggio Matteotti was successful is an interview that De Carlo gave to *Werk* in 1972. In this interview, De Carlo shed light on how he conceived the communication with the inhabitants in the case of the Nuovo Villaggio Matteotti[40]. Despite his intention to take into account their opinions, in many cases he insisted on trying to convince them that the idea of maintaining the identity of "a low-rise, high-density village was the best solution"[41].

8.3 Giancarlo De Carlo and the humanization of architecture: The real transformation of the world

De Carlo was interested in Le Corbusier's work and played an important role in the dissemination of his theories in Italy. For instance, during the post-war years, he edited a volume that brought together an ensemble of Le Corbusier's writings in Italian[42]. De Carlo was a member of the editorial board of *Domus* from 1945 to 1948 and of *Casabella Continuità* from 1954 to 1956. In 1956, he resigned from the editorial board of *Casabella Continuità* due to disagreements with Ernesto Nathan Rogers regarding the agenda of the magazine. Later on, in 1978, De Carlo founded *Spazio e Società* and was its director between 1978 and 2001[43]. De Carlo and Ernesto Nathan Rogers both played a protagonist role in this process of "re-humanisation" of architecture[44].

Despite their shared concern about the "re-humanisation" of architecture, their approaches had more differences than affinities. This explains why De Carlo decided to leave the editorial board of *Casabella Continuità* in 1956[45]. Manfredo Tafuri remarked that one of the reasons behind this decision of De Carlo was his "anti-formalism"[46]. The anti-formalist tendency of De Carlo became evident when he expressed his belief that architects are called to "choose between the aimless idealistic outbursts of the avant-garde and the development of a method based on reality"[47]. He related this tension to that "between utopia and the real transformation of the world"[48], as well to that between a conception of architecture as architecture of the drawing board and architectural interventions that are conceived as processes of continuous transformation even after their completion as built artefacts. De Carlo claimed that in the second case that corresponds to an understanding of architecture as a "real transformation of the world" special attention should be paid to how architecture is experienced on the daily basis by the inhabitants.

Luca Molinari, in "Theories and Practices of Re-humanizing Postwar Italian Architecture: Ernesto Nathan Rogers and Giancarlo De Carlo" discerns the affinities of the approaches of Giancarlo De Carlo and Ernesto Nathan Rogers. More specifically, he remarks that Rogers and De Carlo shared the intention to bring "the role of the human being as a prior argument in the re-definition of modern architecture"[49]. According to Molinari, the most significant points of convergence of Ernesto Nathan Rogers and Giancarlo De Carlo's points of view are their intentions to re-humanise post-war Italian architecture and the search for a subtle balance between modernity and history, as well as between preservation and renewal. De Carlo aimed to find this balance through the elaboration of the concept of "process planning" ("piano-processo") and is referred to below.

Through his projects, De Carlo aimed to contribute to "the real transformation of the world"[50]. The two concepts that are determining for the understanding of how De Carlo conceptualised the impact of architecture on reality are those of "guide project" ("progetto guida")[51] and "process planning". The former is related to "the organic relationship of a building to its city, and the city to its region", while the latter is linked to the promotion of "participation". As Benedict Zucchi has underlined, the concept of "guide project" is associated with De Carlo's "aspiration towards a clarity of method which makes the process accessible to the local community but is also intended to set an example, or act as a catalyst"[52].

Giancarlo De Carlo was aware of the contradictions "between the aimless idealistic impulses of the avant-gardes and the recourse to a method based on reality"[53]. He also shed light on the tensions between utopia and real transformation of the world and was particularly interested in how fashion is related to the notion of "habitus". As John McKean underlines, De Carlo privileged structural strategies instead of diagrams[54]. The prioritisation of structural strategies over diagrams should be interpreted in conjunction with his attraction to the translation of the architectural project into reality. A case in which De Carlo's concept of "process planning" was applied with great care is his masterplan for Urbino (1958–1964). De Carlo remarks, regarding this project, in *Urbino: la storia di una città e il piano della sua evoluzione urbanistica*: "the plan does not consider the renewal of the historic centre as a simple sanitation or upgrading of buildings, but as a radical restructuring of the city according to models and forms ensuring continuity between existing and new spatial patterns and new"[55]. His design for the masterplan for Urbino was derived from a close examination of the economic, spatial, and social conditions of Urbino[56]. Ea-

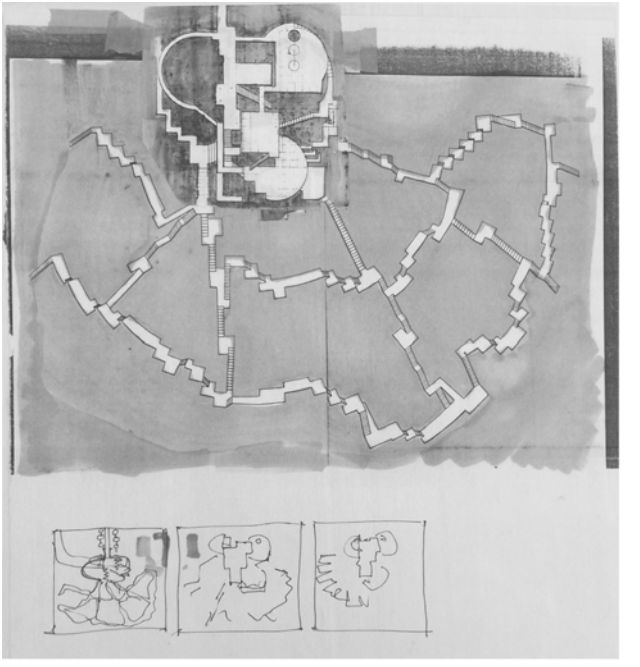
monn Canniffe has highlighted that this masterplan was "the great European archetype […] free of association with planned propaganda, and redolent of an urban life which emphasized community rather than order"[57]. The concept of "process planning" was also pivotal for the design strategy employed in the case of the University College in Urbino (1958–1976)[58] (Figure 8.7), for which he collaborated with Francesco Borella, who was an employee of the studio; Astolfo Sartori Sartori, who acted as a foreman; Lucio Seraghiti; and Vittorio Korach[59].

De Carlo's understanding of "process planning" should be interpreted in conjunction with his intention to replace "the traditional urban-centric perspective with a more current environmental perspective", as well as to his desire to eliminate "all the mechanical relationships and the zoning approach […] with a system of organic relationships"[60] As Luca Molinari has remarked, "Urbino and its history, landscape, community and the way people meet, live and move in the urban environment became crucial characters in the work of De Carlo"[61]. This is evident in the design strategies De Carlo elaborated in the case of the three colleges he designed for Urbino between 1973 and 1983: Il Tridente, La Vela, and L'Aquilone. Despite the fact that, in these projects, there was no participation in the sense of user involvement as in the case of the design for the Nuovo Villaggio Matteotti, his concern about the users was similarly central given that "the community's life [was teated,…] as the warm core of the design and functional program"[62]. However, instead of treating the Collegio del Colle as a strict "functional mechanism, [he aimed to enhance the humanity in students' daily lives"[63]. Even if the role of the daily experiences of the inhabitants were at the core of the design strategies in both the colleges in Urbino and the Nuovo Villaggio Matteotti in Terni, there was a shift in his focus. In the case of the former, we are confronted with an idealized understanding of the needs of the inhabitants, while in the case of the latter the whole design strategy was structured around the idea of bringing in the opinions of the inhabitants in the first place.

Giancarlo De Carlo believed that the main problem of the manner the modernist architects conceived the relationship between form and function was the fact that they reduced function "to a bare representation of conventional behaviors". He maintained that the notion of function should be transformed in a manner that would make it possible to "include the entire range of social behaviors, with all their contradictions and conflicts"[64]. De Carlo's design strategies were characterised by the intention to search for a genetic code. He was convinced that the capacity of architectural artefacts to transform a place depends on their capacity to contribute to the discovery of such a genetic code.

For instance, he remarked regarding his rehabilitation of the Ligurian mountain village of Colletta di Castelbianco (1993–1995): "What I started to look for was the genetic code. It became clear to me there was a code, and that I had to discover it to change the place. Anything I could have done out of this genetic code would have been a mistake"[65].

Figure 8.7. Giancarlo de Carlo, College del Colle student accommodation, Urbino, 1962–1966. Mass plan of the main building mounted in the plan of routes.



Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia

8.4 Giancarlo De Carlo and architectural pedagogy

Giancarlo De Carlo taught architecture and planning at the Istituto Universitario di Architettura di Venezia (IUAV) from 1955 through 1983. Until 1964, he taught a course entitled "The Elements of Architecture", and between 1964 and 1970, he taught "Territorial Planning". From 1983 to 1989, he taught architectural composition at the School of Architecture of the University of Genoa. In parallel, he was an Italian delegate to the Congrès internationaux d'architecture moderne (CIAM) since 1952. In 1976, Giancarlo De Carlo founded the International Laboratory of Architecture and Urban Design (ILAUD), an international summer school that was held between 1976 and 2003 in Urbino in Italy. It involved various international figures such Alison and Peter Smithson and other members of the Team 10, as well as Charles Moore, Donlyn Lyndon, Melvin Charney among other. The ILAUD intended to bring together students from universities around the world. The duration of the ILAUD seminars was two months. The vision of the ILAUD, which was very close to that of the Team 10, was characterised by the intention to shape alternative views in order to challenge the rigid methodologies of the modern movement. More specifically, it favoured anti-authoritarian participatory approaches. De Carlo was also the director of the journal *Spazio e Società* between 1978 and 2001. That same year he founded the ILAUD, De Carlo contributed with his proposal for the Nuovo Villaggio Matteotti to the exhibition "Europa/America: Architettura urbana, alternative suburbane" that Vittorio Gregotti curated in the framework of the Biennale di Venezia, to which Alison and Peter Smithson also participated among other[66].

In an interview he gave to Thierry Paquot and Ariella Masboungi in 1997, De Carlo underlined that the idea of participation became central to his approach in 1966, during his stay in the United States. De Carlo was appointed Visiting Professor in several schools of Architecture in the United States of America[67]. In 1966, Paul Rudolph invited him to teach as Visiting Professor at Yale University. Additionally, during the following years he was also De Carlo underlined appointed Visiting Professors in numerous universities and institutes in the United States of America, such as Massachusetts Institute of Technology, Harvard University, Cornell University, University of California, and Yale University. In 1978 – the year he founded *Spazio e Società* – De Carlo was appointed William B. and Charlotte Shepherd Davenport Visiting Professor at Yale University.

During the post-war era, and especially within the circle of Team 10, university buildings acquired an important place in architects' thought. Within such a context, the notions of university and education dominated the epistemology of architecture. Giancarlo De Carlo's project for the competition of the University College Dublin (1963–64) is note-worthy, since it epitomizes, in a similar way as the Free University of Berlin by Georges Candilis, Alexis Josic and Shadrach Woods, the intention of the architects to contribute to social transformation through the design of university buildings. De Carlo's article entitled "Why/How to Build School Buildings" published in *Harvard Educational Review* in 1969 is representative of this tendency[68]. In the same issue of *Harvard Educational Review*, Shadrach Woods published "The Education Bazaar", where he invited architects to "see the city as the total school, not the school as a 'micro-community'"[69].

Woods paid much attention to the interaction between the quality of education, the structure of society and the quality of life in the city. He believed that "the social structure affects and reacts to both the quality of education and the quality of life". In the aforementioned article, he aimed to respond to the dilemma whether the most efficient way to follow was to intensify the exchanges between social structure and education, accepting the spontaneity of their relationship or to try to control the impact that each of these parameters has on the other. To better grasp De Carlo's relations with Georges Candilis, Alexis Josic and Shadrach Woods we could bring to mind the exchanges of De Carlo with Candilis. The two men met for the first time in 1959 in Otterlo in the framework of the 11th Congrès Internationaux d'Architecture Moderne (CIAM).

8.5 Giancarlo De Carlo as exhibition curator

In the ninth Triennale of 1951, Giancarlo De Carlo co-curated with Ezio Cerutti and Giuseppe Samonà the show "Spontaneous Architecture" ("Architettura spontanea") (fig. 7). Three years later, he curated, in collaboration with Ludovico Quaroni and Carlo Doglio, the "Mostra dell'urbanistica" in the framework of the tenth Triennale di Milano of 1954. De Carlo underscored, in *Casabella*, that the intention of this exhibition was to "bring in the urban planning the collaboration of all the active forces of the culture that are involved in it and to devise the means that make possible an effective capillary participation of the community"[70]. Additionally, De Carlo curated the fourteenth Triennale di Milano of 1968. He chose as theme "The Great Number" ("Il

grande numero") and invited the contributors to respond to the question of the relationship between architecture and democracy in contemporary society.

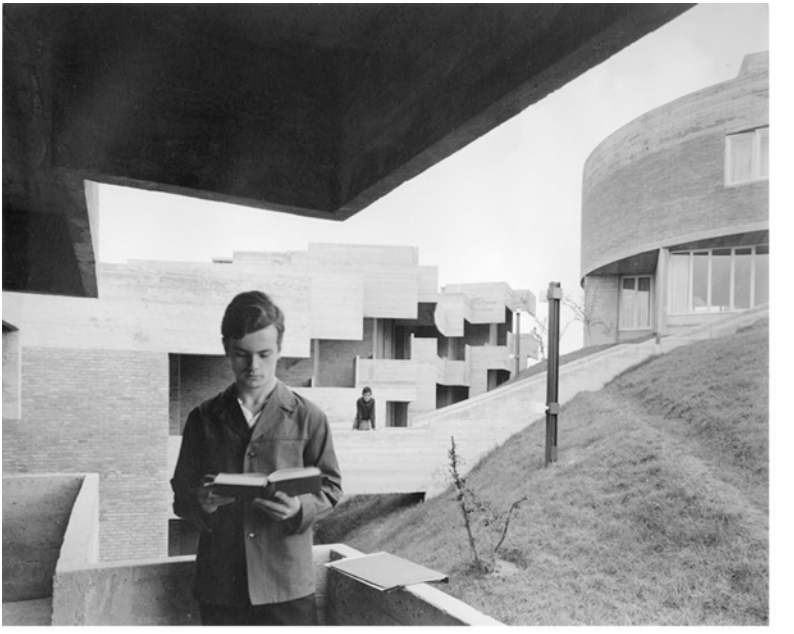
De Carlo's concern about the "great number" should be understood in conjunction with his preoccupations regarding the threats of mass society. He maintained that the "advent of mass society" was in disagreement with "a society inhabited by numerous federations of free and freethinking individuals". More specifically, he proclaimed that he was "not worried about large numbers, but [was] […] against this mass society, to which [he opposed] […] a large society of small groups forming and reforming according to the circumstances because their cement is the problem they experience and face together, which is always different"[71]. Among the architects that were invited to contribute to the fourteenth Triennale di Milano of 1968, were Hans Hollein, who curated the Austrian pavilion, Arata Isozaki, Alison and Peter Smithson, Shadrach Woods, Aldo van Eyck, Archigram, Archizoom and György Kepes. A crucial episode concerning the demand to incorporate social concerns in epistemology of architecture is the occupation by students of architecture of this Triennale di Milano of May 1968, which postponed its opening[72].

8.6 Around the presence of human figures in the photographs and drawings of Giancarlo De Carlo's buildings

The photographs of Collegio del Colle in Urbino by Cesare Colombo (1935–2016) (Figure 8.8, Figure 8.9) and those of the Nuovo Villaggio Matteotti by Mimmo Jodice (b. 1934) (Figure 8.10) played an important role in the dissemination of Giancarlo De Carlo's participatory design approach. These photographs communicated the importance of users for De Carlo's design approach. The manner the aforementioned projects were photographed contributed significantly to the formation of a specific conception of the observer and the user of architecture. In contrast to the photographs of De Carlo's aforementioned projects, the most known photographs of Ludwig Mies van der Rohe and Aldo Rossi's buildings are characterised by the absence of human presence[73]. Regarding this issue, one can recall the absence of human presence in the photographs that Luigi Ghirri (1943–1992) took of Rossi's San Cataldo Cemetery at Modena (1971–1973)[74] (Figure 8.11). In these photographs, the building stands alone in the snowy and empty environment. By contrast, in the photographs that Sandra Lousada took of the Alison and Peter Smithson's Robin Hood

Gardens (1969–1972), one can admire the intense presence of the figures of children playing in front of the building.

Figure 8.8. Giancarlo De Carlo's collegio del Colle, Urbino, 1962–1965. Dimensions of the photograph: 24 × 30 cm.



Credits: Photography by Cesare Colombo

De Carlo was conscious of the fact that the presence of human figures in the photographs of his buildings goes hand in hand with a specific interpretation of his architecture. He wrote regarding the absence of human figures in the photographs of buildings: "And isn't it quite astonishing, too, that buildings are never published in a magazine with people inside? The architecture critics never speak about the way a building answers the needs of its users?"[75]. This remark of De Carlo brings to mind François Penz's following observation, in *Cinematic Aided Design: An Everyday Life Approach to Architecture*: "To enrich our understanding of architecture with affect and lived experience is an at-

tempt to address Robin Evans' remark on the absence of the way human figures occupy 'even the most elaborately illustrated buildings'"[76]. Cesare Colombo, apart from the photographs of De Carlo's collegio del Colle in Urbino, also took some photographs of De Carlo's debates with Gianemilio Simonetti in front of the protesting students during the fourteenth Triennale di Milano of 1968. These photographs contributed significantly to the dissemination of the ideas of De Carlo's approach (Figure 8.12). This photograph depicts vividly "a crucial episode concerning the demand to incorporate social concerns in epistemology of architecture is the occupation by students of architecture of this Triennale di Milano of May 1968, which postponed its opening"[77].

The analysis of the human figures in Giancarlo De Carlo's sketches could also be useful for interpreting the role of inhabitants in his architectural thought. His special method of designing human figures as a continuation of his buildings and his drawings featuring the structure of trees inhabited by people are particularly thought-provoking (Figure 8.13). They can be interpreted as gestures that situate human life and nature on the same plane. Such an amalgam of human and natural cosmos is compatible with De Carlo's conception of architecture as a continuation of existing natural reality. Regarding this issue, it would be relevant to refer to his following remark regarding Urbino: "the ambivalence between nature and architecture is embodied most strikingly in Urbino itself"[78]. At the centre of De Carlo's stance was the desire to overcome this ambivalence. In other words, De Carlo intended to challenge the division between man-made and natural cosmos and to establish strategies that permit their osmosis. His intention to create such an osmosis between man-made and natural cosmos should be understood in conjunction with the fact that De Carlo was aware of the contradictions "between the aimless idealistic impulses of the avant-gardes and the recourse to a method based on reality"[79].

Figure 8.9. Collegio universitario del Colle in Urbino by Giancarlo De Carlo.

Photograph taken by a student during a student workshop held in Urbino in 1965. Credits: ZHdK Archive

Figure 8.10. Photograph of the Nuovo Villaggio Matteotti in Terni by Mimmo Jodice.

Credits: Mimmo Jodice

Figure 8.11. Aldo Rossi's Cemetery of San Cataldo, Modena. Chromogenic colour print. Dimensions : 40.5 × 50.6 cm.

Photograph taken in 1986 by Luigi Ghirri. Credits: Fondazione Luigi Ghirri

Figure 8.12. Giancarlo de Carlo debates with Gianemilio Simonetti as protesting students take over the fourteenth Milan Triennale in May 1968.

Photograph by Cesare Colombo. Credits: Cesare Colombo

Figure 8.13. Giancarlo De Carlo, Le ragioni dell'architettura.

Credits: Anne De Carlo

8.7 Towards a conclusion or problematizing participation: From "participation" to "co-production" to "negotiated planning" to "crossbenching"

The contemporary interest in methods of "collaboration", "participatory design", and "co-production" can learn from the long history of participation about how architecture and urban design can forge a critical relationship with civic engagement and social responsibility. Instead of repeating the concepts, roles, and tools that were tested some decades ago, it would be more relevant to engage more intensively with the historical examples and use them as a base for developing new critical approaches. Experiments such as TAR and NOMAS remind us that the issue of participation is not only the question of architectural and urban design practice but also—and maybe most urgently—the requirement of experiments and changes in architectural and urban design education.

Useful "for realizing the implication of the implementation of participation-oriented strategies is [the distinction,…] between the so-called "collaborative approaches" and the concept of "co-production"[80] and the concept of "negotiated planning", which Vanessa Watson has analysed in "Co-production and Collaboration in Planning: The Difference". As Watson has highlighted, "co-production, along with collaborative and communicative planning positions, assume a context of democracy, where "active citizens" are able and prepared to engage collectively and individually (with each other and with the state) to improve their material and political conditions"[81]. Understanding the concept of "negotiated planning" in relation to the growing interest in the common practices goes hand in hand with taking into consideration the actual "actors and power dynamics, involved," and "the 'virtuous cycle' of planning, infrastructure, and land."[82].

Another concept that is also interesting for relating the debates on participation to the current trends concerning urban transformation strategies is that of "crossbenching", which Markus Miessen has analysed in *Crossbenching: Toward Participation as Critical Spatial Practice* where he highlights that "[i]nstead of being interested in a simulation of participation, crossbench practice performs a non-illusory form of pragmatism"[83]. In order to grasp the significance of "crossbenching", we should take into consideration that the former "[c]rossbenching constitutes an operative practice"[84]. The great interest of the aforementioned approaches remain in their intention to break the myths in which participation was based, taking into account its potentials, but also challeng-

ing and going beyond it. The Nuovo Villaggio Matteotti constitutes a case that reveals the myths of participatory design approaches and of their endeavour to replace the representation of designers by a representation of users.

A remark by Giancarlo De Carlo that is of great significance for the comprehension of his participatory design approach is his claim that "[p]articipation implies the presence of the users during the whole course of the operation"[85]. The importance of this observation lies in the fact that it renders explicit that a transformation of how the architect conceives the users implies a reorganisation of the design process and a re-articulation of all the phases of the procedure. The point of departure of De Carlo's participatory design approach was the rejection of the linear design process of modernism, which, according to him, was based on the following three distinct phases: firstly, the definition of the problem; secondly, the elaboration of the solution; and thirdly, the evaluation of the results. The tension between control and freedom was of the utmost importance for the participatory design approaches that were at the centre of the epistemological debates during the sixties. According to De Carlo, the shift from modernist architecture to an architecture of participation implied a reorientation of architecture's scope and a shift from an organisation based on the aforementioned three distinct phases towards a non-hierarchical model of architectural design processes during which the user is welcome to participate in every phase.

Notes

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Chapter 9: Denise Scott Brown and the socio-anthropological meaning as new objectivity

Challenging functionalism through social patterns

This chapter examines how urban sociologist Herbert Gans's study for Levittown influenced Denise Scott Brown, Robert Venturi, and Steven Izenour's "Remedial Housing for Architects or Learning from Levittown" conducted in 1970 in collaboration with their students at Yale University. It takes as its starting point Scott Brown's endeavor to redefine functionalism in "Architecture as Patterns and Systems: Learning from Planning"[1], and "The Redefinition of Functionalism"[2], which are included in *Architecture as Signs and Systems: For a Mannerist Time*.

The intention to shape a new way of conceiving functionalism was already present in *Learning from Las Vegas*[3], where Robert Venturi, Denise Scott Brown and Steven Izenour promoted an understanding of Las Vegas as a pattern of activities. Particular emphasis is placed on Scott Brown's understanding of "active socioplastics", and on the impact of advocacy planning and urban sociology on her approach. At the core of the reflections developed in this chapter is the concept of "urban village" that Gans uses in *US in The Urban Villagers: Group and Class in the Life of Italian-Americans*[4] to shed light on the socio-anthropological aspects of inhabiting urban fabric

In 1952, Denise Scott Brown resettled in London to work as an architect, but, eventually, enrolled at the Architectural Association (AA). Two years after Scott Brown's arrival in London, in 1954, the Department of Tropical Architecture was formed at the AA. It was renamed Department of Tropical Studies in 1961. This department was led by Otto Koenigsberger and its core concern was the research on climatically responsive, energy conscious "Green Architecture"[5]. Scott Brown graduated from the AA Diploma and Certificate in Tropical Architecture in 1956[6]. Before studying in London, she studied at Witwater-

srand University at South Africa, starting in 1949. During her stay in London, she was particularly interested in the "urbanistic ideas of the New Brutalists"[7]. She has described the New Brutalists as "a movement of the 1950s and 1960s that related architecture to social realism"[8]. Scott Brown has mentioned regarding the British context when she relocated in London in 1952: "I landed in post-World War II England amidst the look-back-in-anger generation, in a society in upheaval, where social activism was part of education"[9].

Scott Brown has remarked that one of the main characteristics of the New Brutalists' ideology was the intention to shed light on what happened "in the streets of poor city neighborhoods". According to her, sociologists such as Michael Young and Peter Willmott[10], who invited "planners to understand how people lived in the East End of London, saying that those who had been bombed out of housing could not simply be moved to the suburban environment of the new towns", helped architects to realize how important was to try to understand the reasons for which "life on the streets was [for low-income citizens] a support system."[11] Scott Brown has also highlighted that "[b]efore Jane Jacobs, Young and Willmott voiced complaints against the social disruption induced by urban planning"[12].

Scott Brown stayed in London for six years, before resettling in Philadelphia in the United States to study planning at the Department of City Planning of the Graduate School of Fine Arts of the University of Pennsylvania. An aspect that is of great importance for understanding the reasons behind her decision to study there is the impact that Alison and Peter Smithson had on her thought. Peter Smithson encouraged her to go to the University of Pennsylvania to study planning. Characteristically, Scott Brown has remarked: "Peter Smithson recommended that we apply to the University of Pennsylvania because the architect Louis I. Kahn taught there"[13]. The fact that Alison and Peter Smithson had met Louis Kahn in the framework of the Team Ten meetings could explain this. Alison and Peter Smithson were influenced by Kahn's as it becomes evident in an essay authored by them that was focused on Kahn's work[14].

When Scott Brown arrived at the University of Pennsylvania, the Department of City Planning was significantly influenced by the methods of social sciences. The projects that were conducted in the framework of the Institute for Urban Studies of the Graduate School of Fine Arts at the University of Pennsylvania had not many connections with the dominant models during the same period at the Department of Architecture. An important Figure at the time within the context of Philadelphia, but also beyond it, was the famous architect Louis Kahn. Kahn had started teaching at Yale University in 1947.

In 1955, he was appointed Professor at the University of Pennsylvania, and in 1966, he became Cret Professor of Architecture modern ideas. When Denise Scott Brown arrive at University of Pennsylvania as a student in 1958, Kahn was teaching there. As Stanislaus von Moos has remarked, "Venturi had worked at Kahn's office for nine months in 1956–57"[15].

Denise Scott Brown, while studying at the University of Pennsylvania, took numerous social sciences courses. Among them the courses of Herbert Gans played an important role for her trajectory. During the same period, she collaborated with a number of social planners, and was involved in social planning in Philadelphia. Her engagement within the circles of social planners should be taken into account when one tries to understand how the exchanges between architects, urban planners and sociologists determined the formation of her pedagogical and design approach. Insightful is her remark that architects, instead of trying to adopt the perspective of sociologists, should try "to look at the information of sociology from an architectural viewpoint"[16].

One of the aspects that makes Scott Brown's viewpoint original is the fact that it aims to bring together her interest in the non-judgmental viewpoint of the "new objectivity" of Gans's understanding of urban sociology and her passion for the aesthetics of pop art. Regarding this issue, she has highlighted: "I like the fact that the influences upon us are the pop artist on one side and the sociologist on the other"[17]. Enlightening regarding how the sociological perspective meets the pop artist viewpoint are Scott Brown's following words:

> The forms of the pop landscape […] speak to our condition not only aesthetically but on many levels of necessity, from the social necessity to rehouse the poor without destroying them to the architectural necessity to produce buildings and environments that others will need and like[18].

9.1 Denise Scott Brown at the 1956 CIAM Summer School and the significance of planning

Among the aspects that could help us better understand her interest in planning and the reasons for which she decided to resettle in Philadelphia in order to study planning at the University of Pennsylvania are her participation to the CIAM Summer School in Venice, as well as the impact of Italian architect Giuseppe Vaccaro on her thought (Scott Brown 1996). In 1956, Denise and her first husband Robert Scott Brown, who died in 1959 in a car accident, par-

ticipated to the CIAM (Congrès Internationaux d'Architecture Moderne) Summer School in Venice[19]. During the same period, Robert Venturi, who would become the second husband of the second spent two years – from 1955 to 1956 – as visiting scholar in the Academy of Rome. During his stays in Italy, Venturi developed a friendship with Ernesto N. Rogers and, as Matino Stierli notes, was confronted with the question building in historically sensitive urban areas, which was a major issue in the post- war Italian architectural scene.

Denise and Robert Scott Brown assisted Vaccaro for his project "for Ina-Casa's Ponte Mammal neighbourhood on the northeast side of Rome"[20]. Characteristically, she remarks, in "Towards an 'Active Socioplastics'":

> Summer School in Venice and some weeks in the architecture office of Giuseppe Vaccaro in Rome reinforced our intention, first formulated at the AA, to continue our training in architecture via the study of city planning[21].

During the 1956 CIAM Summer School, Ludovico Quaroni delivered a keynote lecture entitled "The architect and town planning" on 14 September 1956. At the core of this lecture was the interrogation regarding the ways in which architects could have social responsibilities. Quaroni argued that key for enhancing architects' impact on society is the dissolution of the boundaries between town planning and architecture. He tried to explain "why [...] town planning [should] be the architects' concern", drawing a distinction between an understanding of function as object and an understanding of function as principle. He highlighted: "the latest development of the battle for modern art caused architecture to formulate as an object what is just a principle, namely that the form must rise from the functionalism"[22].

Quaroni's critique of functionalism could be interpreted as a critique of Le Corbusier's categorization of human actions into "dwelling, working, [and] cultivating mind and body", and of Le Corbusier's understanding of the user as "machine-man" and the house as "machine à habiter". Quaroni suggested a reinvention of the concept of function, challenging Le Corbusier's quantitative and simplistic understanding of function, and blaming him for neglecting the physical, special, psychological, and moral factors related to function. He asserted, during the aforementioned lecture: "not having fully digested the idea of function, in the long run, we identified it only with a question of form". Quaroni also argued that "function cannot be determined by means of mere square or cubic meters, since it is a compound of physical, special, psychologi-

cal, moral factors", and underscored the importance of understanding "architecture as a social function"[23].

Quaroni identified Le Corbusier and Frank Lloyd Wright as "the last specimen of that generation of architects, the founder of which was perhaps Brunelleschi", who without "having fully digested the idea of function […] identified it only with a question of form"[24]. He also underlined the importance of the architects' role in revealing the connections between the individual and the collective in society. According to Quaroni, a characteristic of contemporary city was the absence of a homogeneous structure. Quaroni used the concept of "marvellous city" to refer to this absence of homogeneity in urban structures. The notion of "urban architecture", which was dominant in the debates concerning architectural and urban epistemology and educational strategies in several schools of architecture in Italy during the 1960s, was at the core of Quaroni's thought. What I argue here is that Scott Brown was influenced by this keynote lecture of Quaroni, particularly as far as the critique of modernist functionalism and the dissolution of the distinction between architecture and town planning are concerned[25].

Ludovico Quaroni's aforementioned keynote lecture and his critique of Le Corbusier and modernist functionalist architecture and urbanism constituted an early encounter of Scott Brown with an analysis of the risks that a rigid understanding of the concept of function in architecture and urban planning entails, on the one hand, and the drawbacks of separating the practice of architecture and the practice of urban planning, on the other hand. Quaroni, eleven years later, in *La torre di Babele*[26], "argues that 'the modern city is really ugly' and that the neglected lesson of historic cities is the well-integrated synthesis of function, technology and aesthetics"[27]. Despite the commonalities between some aspects of Quaroni's critical view of modernist functionalism and Scott Brown's deferred judgement, Quaroni's analysis of "the tension between the historic and the modern city", and his choice to relate "the historic city's beauty to its 'clear design … and structure' [and the ugliness of] […] the modern city [to the fact that it is] […] 'chaotic'"[28] differs a lot from Scott Brown's posture, who seems to desire to understand the logic behind the complexity and patterns characterizing the post-war urban and suburban fabric.

9.2 Advocacy planning movement and the critiques of urban renewal

To grasp the specificity of the context of Philadelphia during the late 1950s, we should bear in mind the urban renewal efforts and the critiques of the advocacy planning movement. Scott Brown has commented on advocacy planners' critique of urban renewal program, highlighting that it "derived from the problem that urban renewal had become 'human removal'"[29]. She has also underscored that the main argument of advocacy planners was that architects and urban planners' "leadership had diverted urban renewal from a community support to a socially coercive boondoggle"[30]. In parallel, during this period, several universities in the United Sates launched programs in city planning or urban design. Among them is Harvard University that initiated its program on urban design two years before Scott Brown's arrival in the United States.

The pedagogical approach of the Department of City Planning at the University of Pennsylvania when Scott Brown resettled there was influenced by social sciences and New Left critiques. The activities and publications of Jane Jacobs are also of great significance for understanding the social aspects of the ideas of Scott Brown during those years. Among the texts of Jacobs that had an important impact on Scott Brown's thought is Jane Jacobs's articles entitled "The City's Threat to Open Land", "Redevelopment Today", and "What is a City?" published in *Architectural Forum* in 1958, that is to say the same year in which Scott Brown resettled in Philadelphia[31]. Scott Brown remarked concerning the context in Philadelphia in the 1950s and its relationship to what would later be called *New Left*:

> Here, long before it was visible in other places, was the elation that comes with the discovery and definition of a problem: poverty. The continued existence of poor people in America was a real discovery for students and faculty in the late 1950s. The social planning movement engulfed Penn's planning department[32].

In the early 1960s, one of the most important advocacy planners, Paul Davidoff, also taught at the City Planning Department of the University of Pennsylvania between 1958 and 1965. Davidoff was among the protagonists of Advocacy Planning movement in the United States. In his seminal article entitled "Advocacy and Pluralism in Planning" published in 1965, remarked that '[p]lanners should be able to engage in the political process as advocates of the interests both of government and of such other groups, organizations, or individuals who are

concerned with proposing policies for the future development of the community"[33].

David A. Crane, who was Scott Brown's student advisor at the University of Pennsylvania, also had an important impact on her, especially as far as the strategies employed in studio teaching are concerned[34]. As Clément Orillard reminds us, Crane collaborated with Kevin Lynch for the preparation of the maps and diagrams included in *The Image of the City*[35]. During the period Crane mentored Scott Brown, he worked on a conference focusing on urban design criticism[36]. In. 1959, Scott Brown started working as Crane's teaching assistant[37].

During the period that Scott Brown studied at the Department of City Planning of the University of Pennsylvania there was a tension between the pedagogical methods of social planners and studio-based teaching strategies. This tension is described by Scott-Brown as "the physical/non-physical debate"[38]. Gans used the expression "fallacy of physical determinism"[39] to refer to the tendency of urban planners to believe that "place shapes people's behavior"[40].

9.3 The impact of Herbert Gans's socio-anthropological perspective on Denise Scott Brown's approach

The University of Pennsylvania was one of the universities that hired sociologists to teach at their planning departments. An important Figure that taught there when Scott Brown arrived was urban sociologist Herbert Gans, who is mentioned in Paul Davidoff's seminal article "Advocacy and Pluralism in Planning"[41]. Between 1953 and 1971, Gans was affiliated with the Institute of Urban Studies of the University of Pennsylvania, the Center for Urban Education, and the MIT-Harvard Joint Center for Urban Studies. Along with Davidoff, he played an important role in the emergence of the advocacy planning movement in the United States. Scott Brown was particularly interested in Gans's "new objectivity", which aimed to relate "social life, popular culture and planning"[42].

Scott Brown's interest in the concept of "objectivity" goes back to her years at the AA, as it becomes evident in her following words: "The belief that architecture could save the world through objectivity and a brave use of technology was shared by many young architects at the AA"[43]. During her studies at the AA, Scott Brown had as student advisor German Jewish architect and urban planner Arthur Korn, who was then member of the MARS (Modern Architectural Research) group, which was active between 1933 and 1957. Scott Brown has

associated her interest in the concept of "active socioplastics" with the impact that Korn's ideas had on her. Regarding Arthur Korn's impact on Scott Brown's approach, one should bring to mind Korn's book entitled *History Builds the Town,* in which special attention is paid to the fact that "[t]here has been in history an infinite variety of towns differing in function, structure and components"[44]. At the core of Korn's analysis is the idea that the different forms of towns encountered in different societies are related to the economic and political structures of these societies.

Figure 9.1. Photograph of the West End by Herbert Gans, c. 1957.

Credits: Herbert Gans papers, 1944–2004, Columbia University Rare Book & Manuscript Library

While studying at the University of Pennsylvania, Scott Brown followed the courses of Gans, who was the first awardee of a PhD Degree from the Department of City Planning (1957)[45]. Gans, before joining the Department of City Planning at the University of Pennsylvania, was at the University of Chicago.

Important for Gans's approach was the work of Martin Meyerson and John Dyckmen[46]. Among Gans's books that influenced Scott Brown's approach is *US in The Urban Villagers: Group and Class in the Life of Italian-Americans*, in which the author examined the everyday life of the inhabitants in Boston's West End, a slum cleared area[47]. The aforementioned book constituted a critique of the urban renewal strategies in the West End in Boston. It was based on an eight-months *in situ* research conducted during a period preceding the demolition of this area. More specifically, Gans remarked regarding his study of Italian Americans in Boston's West End: "The West End was not really a slum, and although many of its inhabitants did have problems, these did not stem from the neighborhood."[48] (Figure 9.1)

Gans placed particular emphasis on the special characteristic of the environment and the community in Boston's West End, and analyzed the impact of urban renewal, gentrification and displacement on existing communities[49]. Characteristically, he remarks, in *US in The Urban Villagers: Group and Class in the Life of Italian-Americans*, that "[n]ot all city neighborhoods are urban villages"[50]. Reading Gans's book, one realizes that he intended to shed light on the socio-anthropological meaning of the concept of "urban village". More specifically, he defined "urban village" as a "city low-rent neighborhood typically one in which European immigrants – and more recently Negro and Puerto Rican – try to adapt their nonurban institutions and culture to the urban milieu"[51].

9.4 Learning from Levittown Studio: Towards a socio-anthropological perspective

In the photographs that Scott Brown took at South Street west of Broad Street in Philadelphia, one can discern the impact of Gans's approach on her perspective (Figure 9.2). Another seminal book by Gans is *The Levittowners: Ways of Life and Politics in a New Suburban Community*[52]. Three years after the publication of the latter, in 1970, Robert Venturi, Steven Izenour and Denise Scott Brown coordinated the study "Remedial Housing for Architects or Learning from Levittown", which was held in collaboration with their students at Yale University (Figure 9.3, Figure 9.4). In the themes addressed in the course entitled "Learning from Levittown Studio" that Robert Venturi, Denise Scott Brown, and Steven Izenour taught during the fall semester in 1970, we can easily discern the influence of Herbert Gans's work and an interest in depicting the iconographical and symbolic values of suburbia, which is based on the

intention to value the socio-anthropological dimension of the perception of architecture and the city. In the framework of the aforementioned course, special emphasis was placed on the analysis of the following aspects concern the profile of the citizens of Levittown: family organization, education, ambitions and values, attitudes, leisure, use of house, occupation, social contacts, media, possessions, orbits of mobility, and central investments.

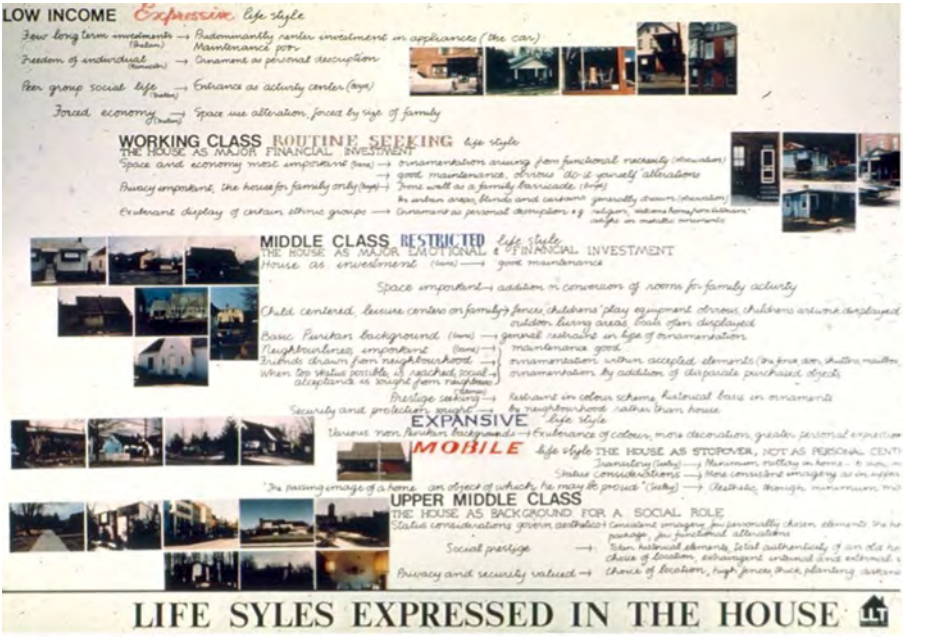
Figure 9.2. Photograph taken at South Street in Philadelphia by Denise Scott Brown.

Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

Of great interest is the way the groups of citizens were categorized in the posters produced. These groups were the following: (a) a first group concerning low income-black matriarchal families with 7 years of education, which were occupied mainly as workers and unemployed and corresponded to approximately 7% of the population of New Haven, (b) a second group concerning low income-Italian origin-urban families with 8 years of education, which were occupied mainly as operatives and laborers and corresponded to approximately 10% of New Haven (c) a third group concerning suburban-working class

families with 8–11 years of education, which were occupied mainly as operatives and laborers and corresponded to approximately 10% of the population of New Haven, (d) a fourth group concerning suburban-low-middle class families with High School and 2 years College education, which were occupied mainly as craftsmen, salesmen and clerical and laborers and corresponded to approximately 35% of the population of New Haven, and (e) a fifth group concerning upper-middle class families with 4 years College education, which were occupied mainly in business and corresponded to approximately 20% of the population of New Haven[53] (Figure 9.5).

Figure 9.3. Robert Venturi, Denise Scott Brown, and Steven Izenour, Learning from Levittown Studio, Fall 1970. Life Styles Expressed in the House.



Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

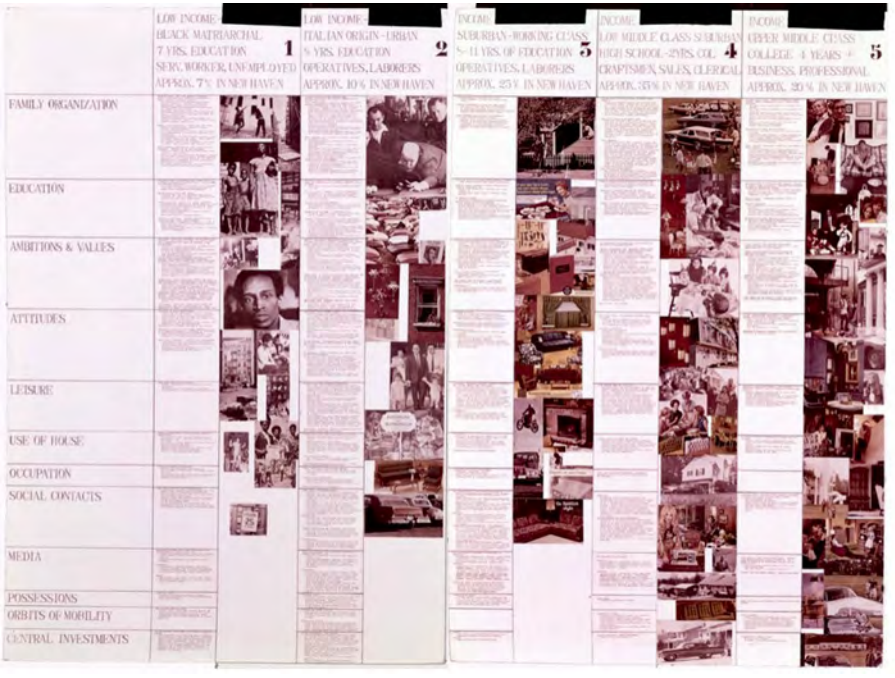
Figure 9.4. Robert Venturi, Denise Scott Brown, Steven Izenour, Learning from Levittown Studio, Fall 1970. Styling. Sprawl, Space & Imagery. Scanned from photo reproduction.

Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

Looking closely at the posters produced in the framework of the Learning from Levittown Studio, one distinguishes the emergence of new means of communications or signs that reveal a shift in the social and aesthetic parameters of architectural and urban perception. Despite the fact that the emergence of these new media is more related within the existing scholarship on Denise Scott Brown and Robert Venturi to their study of Las Vegas and their seminal *Learning from Las Vegas*[54], for which they collaborated with Steven Izenour as they did for Learning from Levittown Studio, we can see that they are very present, we can see that they are at the core of their visual analysis of Levittown as well. Several of the posters that were produced during the Learning from Levittown Studio were included in "Learning from Pop", which was published in *Casabellà* in 1971[55]. In this article, Scott Brown criticized Le Corbusier's approach, juxtaposing it to the strategies of analyzing the ways in which the in-

habitants of Levittown shape their environment. According to her, architects should take into account "what people do to building"[56].

Figure 9.5. Robert Venturi, Denise Scott Brown, Steven Izenour, Learning from Levittown Studio, Fall 1970. House style by income category in New Haven, CT. Photos and markers on poster board.



Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

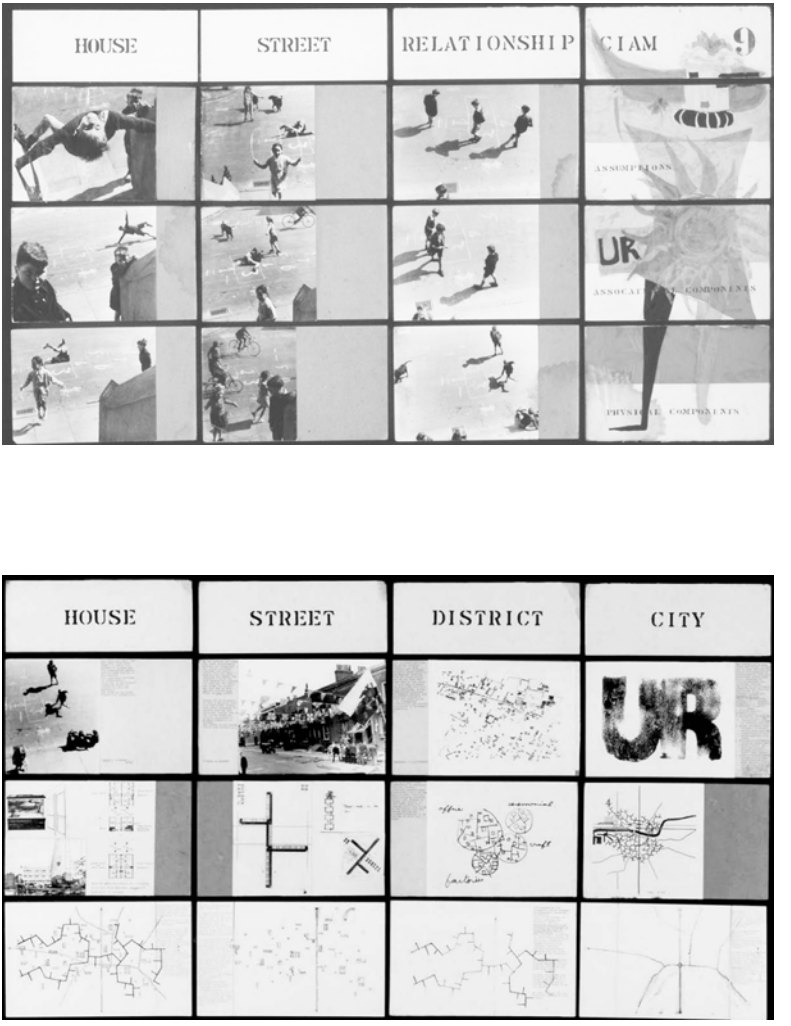
Scott Brown's concern about the cultural dimension of the way of life of the inhabitants of Levittown was also present in "Learning from Lutyens: Reply to Alison and Peter Smithson", which was originally published in 1969 in *RIBA Journal*[57]. In this text, which constituted a reply to two articles published in the same journal by Alison Smithson and Peter Smithson respectively[58], Scott Brown addressed the following question, which echoes Gans's socio-anthropological view:

> Are architect still so condescending about the "dreams" of the occupants of Levittown, and cavalier about the complex social and economic, as well as symbolic, bases of residential sprawl?[59]

There is a through-provoking graphic similarity between the poster produced in the framework of Learning from Levittown studio and Alison and Peter Smithson's representation in the case of the "Urban Re-identification Grid" shown at the 9th CIAM held in in Aix-en-Provence in France in 1953[60] (Figure 9.6a and Figure 9.6b), which constitutes a turning point regarding the conception of the inhabitants and the "humanization" of functionalism during the post-war era, and the grille "Housing Appropriate to the Valley Section"[61] (Figure 9.7a and Figure 9.7b), which was presented at the 10th CIAM held in Dubrovnik in Yugoslavia in 1956, that is to say the same year that the CIAM Summer School mentioned above took place in Venice.

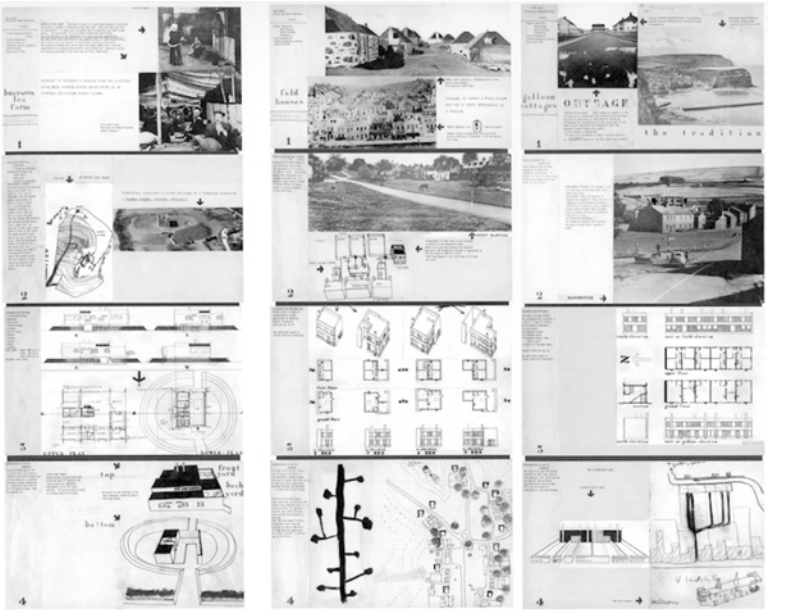
The critique of modernist functionalism, which is at the core of Scott Brown's thought, was also at the heart of the debates of Team Ten, which is also known as Team X or Team Ten and refers to the group of architects and urban planners, as well as other figures concerned about architecture and urbanism, which aim to challenge certain rigid ideas of the CIAM. Team Ten emerged in July 1953 during the 9th CIAM. Its creation should be understood in relation to the intention "to 're-humanise' architecture"[62] and urbanism. The Doorn Manifesto or 'Statement on Habitat' is considered to be the founding document of Team Ten. It was named after the city in which it was formulated and "signed in January 1954 by the architects Peter Smithson, John Voelcker, Jaap Bakema, Aldo van Eyck and Sandy van Ginkel and the social economist Hans Hovens-Greve"[63]. The main objectives of the Doorn Manifesto was "[t]he rediscovery of the "human" and the intensification of interest in proportions", and the establishment of design strategies aiming to "to produce towns in which 'vital human associations' [would be] [...] expressed'"[64]. It was in this manifesto that the "Team 10 presented their 'Scale of Association', which was a kind of re-interpretation of Patrick Geddes' Valley Section"[65]. (Figure 9.8)

Figure 9.6a, b. Alison and Peter Smithson, Urban Re-identification Grid, presented at the 9th CIAM in Aix-en-Provence in 1953.



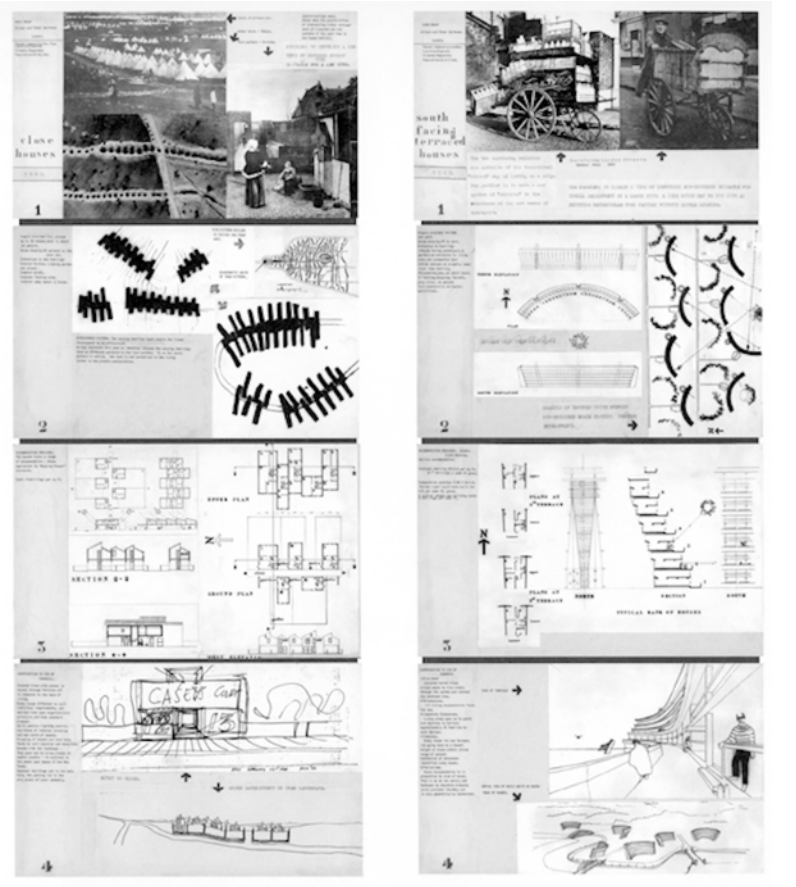
Credits: Smithson Family Collection

Figure 9.7a. Alison and Peter Smithson, part of the CIAM grille entitled "Housing Appropriate to the Valley Section" presented at the 10th CIAM.



Credits: Smithson Family Collection

Figure 9.7b. Alison and Peter Smithson, part of the CIAM grille entitled "Housing Appropriate to the Valley Section" presented at the 10th CIAM.

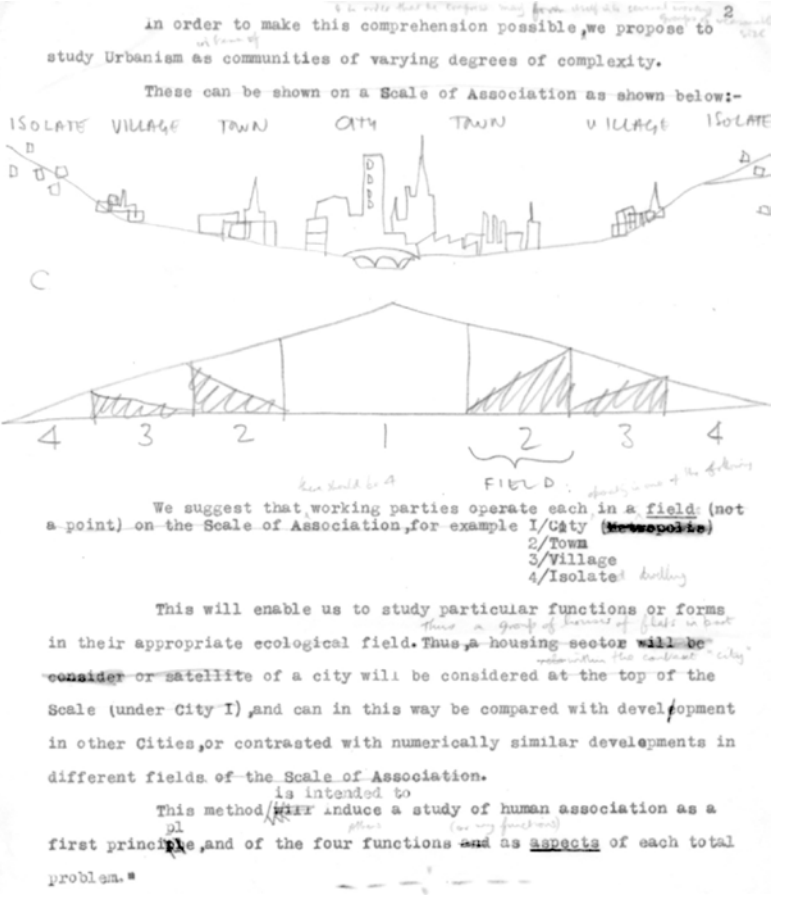


Credits: Smithson Family Collection

The concern about reinventing the way architectural and urban artefacts are inhabited is reflected in the theme of the ninth CIAM held in 1953 in Aix-en-Provence in France, which was the "Grid of Living." Through their "Urban Re-identification Grid", Alison and Peter Smithson expressed their ideas concerning the transformation conception of the user in architecture during the post-war years, criticizing the reductive of understanding urban reality during the modernist era[66]. Such a critique is also very present in Scott Brown's work and, more particularly in the posters produced during the Learning from Levittown Studio in collaboration with Robert Venturi, Steven Izenour, and their students. The "Urban Re-identification Grid" was organized around the concepts of "house," "street," "relationship," "district," and "city," which were important for the visual argumentation of Learning from Levittown Studio as well. Among the visual components included in the "Urban Re-identification Grid" were a photograph of Chisendale Road by Nigel Henderson (1951), who was along with Alison and Peter Smithson, Richard Hamilton, Eduardo Paolozzi, Lawrence Alloway, William Turnbull, John McHale, and Reyner Banham member of the Independent Group[67], as well as a "diagram showing the network of housing and streets in the air and their collage for the competition for the Golden Lane Housing project (1952)"[68].

In the grille entitled "Housing Appropriate to the Valley Section", Alison and Peter Smithson included a photograph taken in the island of Poros in Greece accompanied by the following remark: "Poros: Identical unit used throughout (other island villages have their own unit) give an identity of coherence – like red apples on a tree"[69] (Figure 9.9). Three years, in 1959, during the last CIAM held in Otterlo in the Netherlands, Peter Smithson, in his presentation, paid special attention to the open-ended morphologies he encountered during his travels in Greek coastal villages, placing particular emphasis on "the relationship between the aggregation of Greek villages and the social and cultural patterns of quotidian life of their inhabitants"[70]. This concern about associating the social and cultural patterns of quotidian life of their inhabitants with the architectural and urban morphologies has certain affinities with the study of Robert Venturi, Denise Scott Brown, Steven Izenour, and their students in Levittown.

Figure 9.8. Valley Section Diagram as included in Doorn Manifesto for CIAM meeting in Doorn, January 1954.



In order to make this comprehension possible, we propose to study Urbanism as communities of varying degrees of complexity.

These can be shown on a Scale of Association as shown below:-

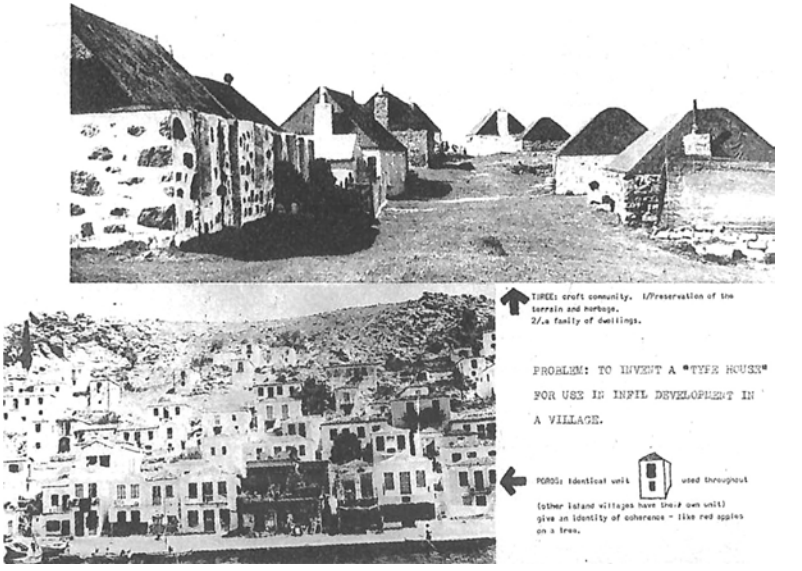
We suggest that working parties operate each in a field (not a point) on the Scale of Association, for example I/City (~~Metropolis~~)
2/Town
3/Village
4/Isolate

This will enable us to study particular functions or forms in their appropriate ecological field. Thus, a housing sector will be ~~consider or satellite~~ of a city will be considered at the top of the Scale (under City I), and can in this way be compared with development in other Cities, or contrasted with numerically similar developments in different fields of the Scale of Association.

This method is intended to induce a study of human association as a first principle, and of the four functions as aspects of each total problem.

Credits: Collection Het Nieuwe Instituut/TTEN (Team Ten archive), Rotterdam

Figure 9.9. Alison and Peter Smithson, photograph of Poros island in Greece showing the aggregation of units. Detail of CIAM grille entitled "Housing Appropriate to the Valley Section" presented at the 10th CIAM.



Credits: Smithson Family Collection

9.5 South Street in Philadelphia and a careful regard for people and existing architecture

In "The Positive Functions of Poverty", Herbert Gans, drawing upon Merton's conception of function, analyzed the "functions of poverty", identifying "functions for groups and aggregates", including "interest groups, socioeconomic classes, and other population aggregates, for example, those with shared values or similar statuses"[71]. Scott Brown and Venturi remarked in a text describing their study for South Street in Philadelphia:

> A rehabilitation of South Street, starting with what is there now rather than with utopian, non-refundable dreams and architectural monuments, with careful regard for people (residents and merchants) and existing

> architecture, would be a means for economic regeneration of the whole community, of much more than the street itself[72].

In the aforementioned description of South Street in Philadelphia, one can discern the care of Denise Scott Brown and Robert Venturi for respecting the choices of the inhabitants concerning the way space is experienced and transformed according to the cultural characteristics of the citizens. To grasp the context of the South Street in Philadelphia in the late 1960s, one should bear in mind the activities of the so-called "Citizens' Committee to Preserve and Develop the Crosstown Community" (CCPDCC), which was established in 1968 by African-American housing activist Alice Lipscomb, community leader George Dukes, and lawyer Robert Sugarman, and advocated that the viable characteristics of the street should be preserved.

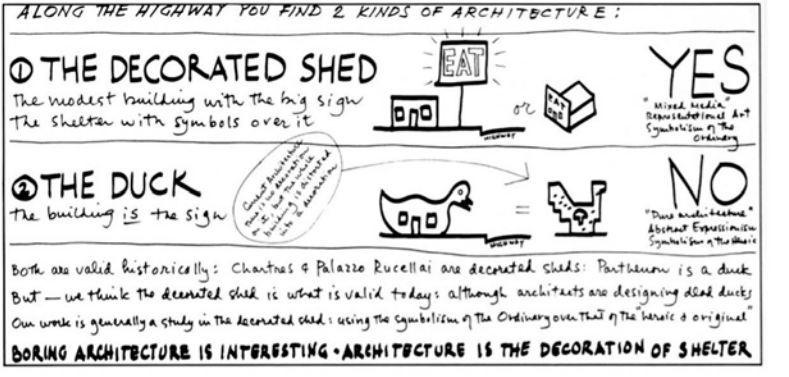
Robert Venturi and Denise Scott Brown were invited by the CCPDCC in order to show in a visual why an ensemble of features of the street were valuable and should not be ignored. At the core of the activities of the CCPCCC was the critique of the so-called "Crosstown Expressway", which had been approved to be sponsored by the Federal government. According to Sebastian Haumann, "[t]he intention of the collaboration was to develop an alternative plan for the 'Corridor' to fend off the City's intrusive proposals effectively"[73]. Scott Brown has noted, in "The Rise and Fall of Community Architecture", regarding their study of the South Street in Philadelphia: "One of the reasons they accepted us was that we had a concern in common. Bob Venturi, apart from being an architect, was a fruit merchant. He had inherited his father's business on South Street."[74]

9.6 The patterns of mapped data as signs of life

Denise Scott Brown first visited Las Vegas in 1965, during a trip to Los Angeles, where she was teaching at Berkeley for a short period. Scott Brown has remarked that their main objective in the case of their study on Las Vegas was to analyze "symbols in space"[75]. In order to conduct their analysis of "symbols in space", they chose to examine "the shapes, sizes and locations and symbolic content of signs to learn how people in cars would react to [them]"[76]. They decided to focus on Las Vegas because they considered it representative of the new type of urban form related to the intensified use of the car. In other words, for them, Las Vegas was representative of "the emerging automobile city". In

this sense, Las Vegas was chosen because, in their opinion, it constituted an "archetype" automobile city, to borrow Scott Brown's own expression. Perceiving Las Vegas as an "archetype" automobile city went hand in hand with believing that investigating closely how drivers react when confronted with "symbols in space" would also help them better understand the automobile vision characterizing other cities that are closely connected to the car such as Los Angeles (Figure 9.10). Regarding his issue, Scott Brown has underscored: "we examined the archetype, but our aim was to understand, from it, the automobile city – to understand the Los Angeles of that time"[77].

Figure 9.10. Robert Venturi, Denise Scott Brown, and Steven Izenour, Learning from Las Vegas. First edition, 1972.



Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

Scott Brown has remarked that "[i]n planning school, [she] [...] learned to understand complex urban orders by mapping urban systems and studying their patterns". She has always considered mapping as an important tool in both architecture, and urbanism. More specifically, she is convinced that "patterns of mapped data [can] help us to discover an order emerging from within – from what appears to be the chaos of the city – and to avoid imposing an artificial order from without". She understands mapping as a mechanism serving to reveal "what 'ought to be' from what 'is'"[78]. Scott Brown taught the so-called "Form, Forces and Functions Studio" at the University of Pennsyl-

vania. This studio placed particular emphasis on the interactions between urban activity, settlement patterns, topography, and transportation, and on the of activity intensity patterns. It was centered on urban design, and on the economic and social forces charactering urban design. This studio was a point of departure for developing a systematic planning approach.

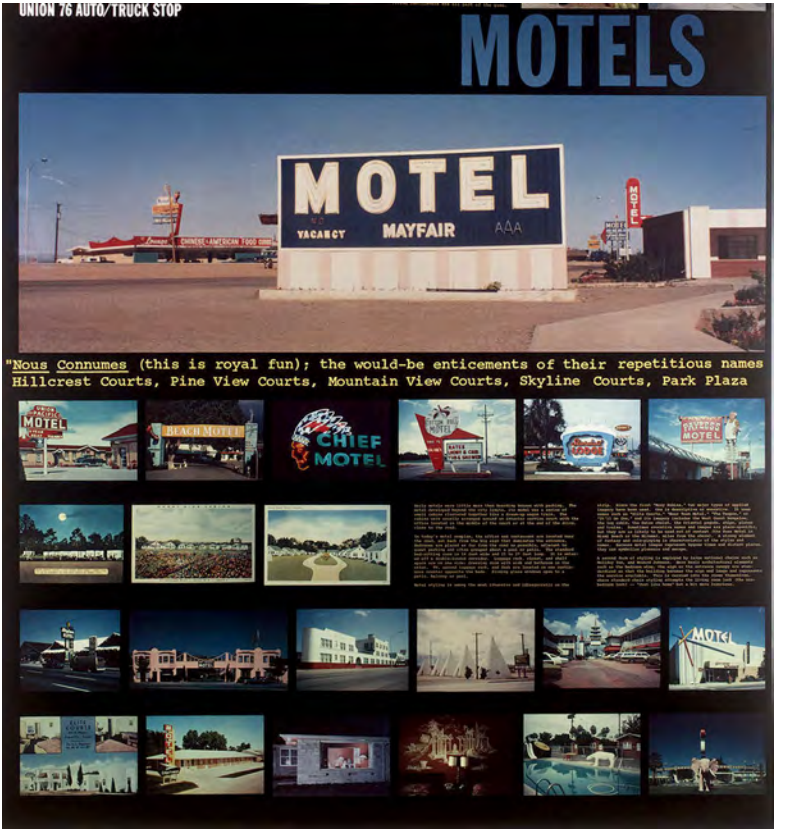
Another interesting case is the exhibit panel "Gas Stations" concerning the theme "Signs of Life: Symbols in the American City", which was among the outcomes of a study conducted between 1974 and 1976 by Robert Venturi, Denise Scott-Brown and John Rauch and was displayed at Renwick Gallery in Washington D.C. from 26 February through 31 October 1976 (Figure 9.11a and Figure 9.11b). In this exhibit panel, they juxtaposed different typologies of Gas stations. The exhibition also included the exhibit panels "Building as sign" (Figure 9.12a and Figure 9.12b) and "Themes & ideals of the American Suburb" (Figure 9.13, Figure 9.14). In the latter, one can read:

> Although the pluralism of American society is reflected in suburbia's residential symbolism, some ideals and aspirations are almost universal. These are widely expressed in most suburban (and urban) housing, for example, a longing for the rural life or for things "natural" and a nostalgia for an earlier, simpler time. Also, some pressures behind the drive to suburbia, for example, economic forces and developments in household appliances and leisure equipment, bear universally upon suburbanites and are reflected in their houses, as well as in the developers' advertising and the mass media.[79]

Figure 9.11a. Robert Venturi, John Rauch, and Denise Scott Brown, Architects and Planners, Signs of Life: Symbols in the American City Renwick Gallery, Washington D.C., 1974–1976. Part of Exhibit panel "Gas Stations".

Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

Figure 9.11b. Robert Venturi, John Rauch, and Denise Scott Brown, Architects and Planners, Signs of Life: Symbols in the American City Renwick Gallery, Washington D.C., 1974–1976. Part of Exhibit panel "Motels".



Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

Figure 9.12a. Robert Venturi, John Rauch, and Denise Scott Brown, Architects and Planners, Signs of Life: Symbols in the American City. Renwick Gallery, Washington D.C., 1974–1976. Part of Exhibit panel "Building as sign".

Figure 9.12b. Robert Venturi, John Rauch, and Denise Scott Brown, Architects and Planners, Signs of Life: Symbols in the American City. Renwick Gallery, Washington D.C., 1974–1976. Part of Exhibit panel "Building as sign".

Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

Figure 9.13. Robert Venturi, John Rauch, and Denise Scott Brown, Architects and Planners, Signs of Life: Symbols in the American City Renwick Gallery, Washington D.C., 1974–1976. Exhibit panel "Themes & ideals of the American Suburb".

Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

Figure 9.14. Robert Venturi, John Rauch, and Denise Scott Brown, Architects and Planners, Signs of Life: Symbols in the American City Renwick Gallery, Washington D.C., 1974–1976. Exhibit panel "Themes & ideals of the American Suburb".

Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

9.7 Towards a conclusion: Looking sociology from an architectural viewpoint

The intention to shape a new way of conceiving functionalism is present in *Learning from Las Vegas*, where Robert Venturi, Denise Scott-Brown and Steven Izenour promoted an understanding of "Las Vegas as a Pattern of Activities", arguing that a "city is a set of intertwined activities that form a pattern on the land", and that "Las Vegas Strip is not a chaotic sprawl but as set of activities whose pattern […] depends on the technology of movement and communication and the economic value of land"[80]. Telling is also the question that Scott Brown addresses, in "The Redefinition of Functionalism": "How 'functional' is

it to plan for the first users […] and not give thought to how it may adapt to generations of users in the unforeseeable future?"[81].

Scott Brown's fascination with Gans's "new objectivity" goes hand in hand with her interest in the so-called non-judgmental perspective. Regarding this, she has noted: "But we don't say we don't judge. We say we defer judgement. In deferring it, we let more data into the judgement, we make the judgement more sensitive."[82] This process of deferring judgement is related to Robert Venturi, Denise Scott Brown and Steven Izenour's strategies of combining social and aesthetic parameters while choosing to focus on certain aspects of Las Vegas Strip. Scott Brown's following remark is enlightening concerning this: "Why do we accept certain aspects of the strip and not other aspects? The basis of that judgment is partly social, partly aesthetic."[83]

Denise Scott Brown's way of looking at architectural and urban forms was informed by both urban sociology and pop art. That explains why she believed that being in the middle can help you to learn from both. Her intention to reconcile these two perspectives – that informed by sociology and that informed by pop art – made her develop a critique not only vis-à-vis "the architects who say there's nothing we can learn from the sociologist", but also vis-à-vis "the sociologists [arguing] that […] architects [should] […] extend [their] […] conceptual framework"[84] in order to be able to grasp the specificities of urban sociology. Scott Brown has noted concerning the ways in which architects' tool are useful for reshaping sociologist' perspective: "I say we will have to extend their framework as well, since they have neither the tools nor the outlook to take it into our field themselves"[85].

To better grasp Scott Brown's conception of "active socioplastics", it would be useful to relate it to how Alison and Peter Smithson understood this concept given that she relates it to their design strategies[86]. For the Smithsons, "active socioplastics" referred to "the relationship between the built form and social practice"[87]. They drew upon Michael Young and Peter Willmott's anthropological perspective when they coined the term[88]. In 1953, Young founded the Institute of Community Studies in 1953. Scott Brown remarks, in "Towards an 'Active Socioplastics'" regarding Alison and Peter Smithson's interpretation of "active socioplastics":

> They used the term socioplastics to suggest tying together the social and the physical, creating physical containers for the social at different scales. The term active referred to the life of people on the streets and

> discovering means of learning about it – achieving vitality and allowing for change.[89]

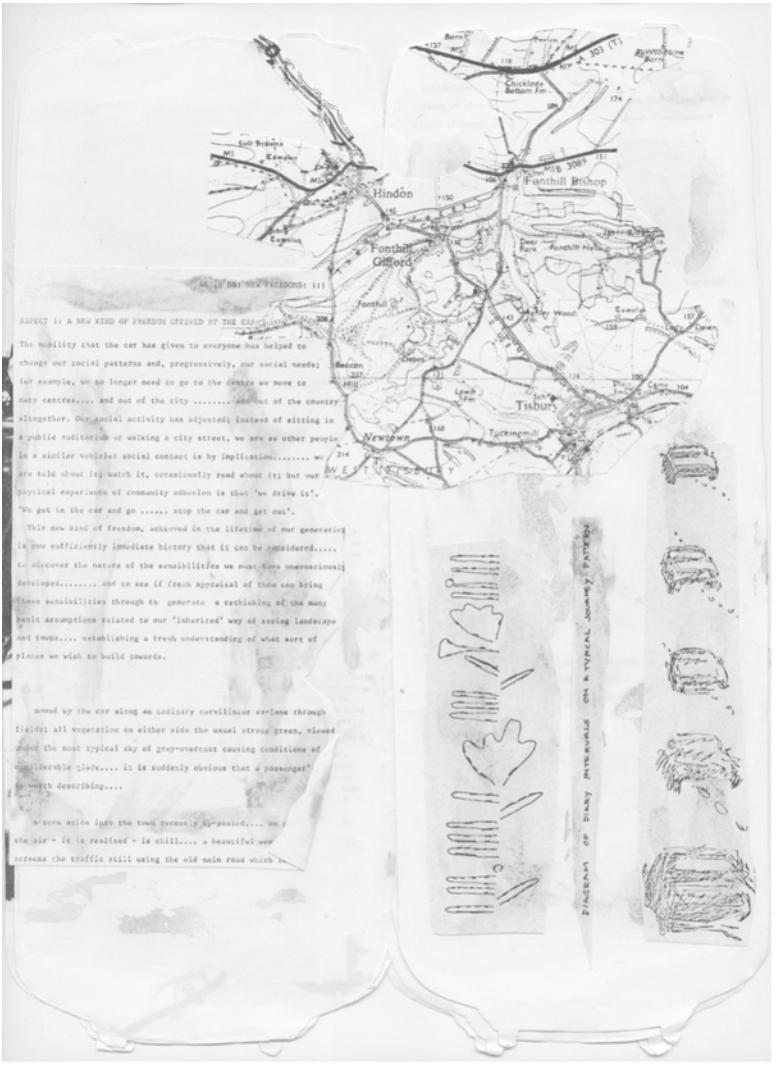
The concept of "active socioplastics" could also be related to the concepts of "as found" and "sensibility of place" in Alison and Peter Smithson's thought. According to Claude Lichtenstein and Thomas Schregenberger, the concept of the "[a]s found [refers to] […] the tendency to engage with what is there, to recognize the existing, to follow its traces with interest"[90]. An aspect of the "as found" that could be related to Scott Brown's view of urban reality its association with the "directness, immediacy, rawness, and material presence", and its "concern with the here and now"[91].

We could relate "[t]he interest of the Smithsons in the new social patterns and social needs that emerge thanks to the intensified presence of the car in quotidian life […] to their understanding of the concept of sensibility" of place[92]. Alison Smithson related the "as found" to "the new sensibility resulting from the moving view of landscape"[93].

The shared interest of Alison and Peter Smithson and Robert Venturi and Denise Scott Brown in the view from the car and in how automobile vision affects how urban and suburban landscapes are perceived, and their concern about how automobile vision pushes architects and urban planners to invent new visual tools to represent the perception of urban, and their design ideas should be interpreted in relation to the attention they paid to "active socioplastics", the "as found", "sensibility of place", and to the articulation between the social patterns of inhabitants and their material expression in the urban and suburban fabric[94] (Figure 9.15, Figure 9.16, Figure 9.17, Figure 9.18, Figure 9.19).

Scott Brown uses the expression "socioplastic praxis" to refer to the strategy of aligning "analysis and synthesis by mapping the patterns of relevant systems, [and] […] abstracting key variables and overlaying them to create further patterns"[95]. Her belief that through an attentive analysis of the existing patterns one can shape effective methods for creating, through architectural design and urban planning, patterns that take into account the social and cultural aspects of communities has certain affinities with Herbert Gans's perspective, which paid special attention to popular culture, everyday landscape, and existing social patterns. Gans's teaching helped Scott Brown refine her understanding of functionalism in architecture and urban planning, and challenge the modernist conception of functionalism.

Figure 9.15. Mock-up of double page spread for AS in DS: An Eye on the Road (Smithson 1983; 2001). Artwork by Alison Smithson, 1982.



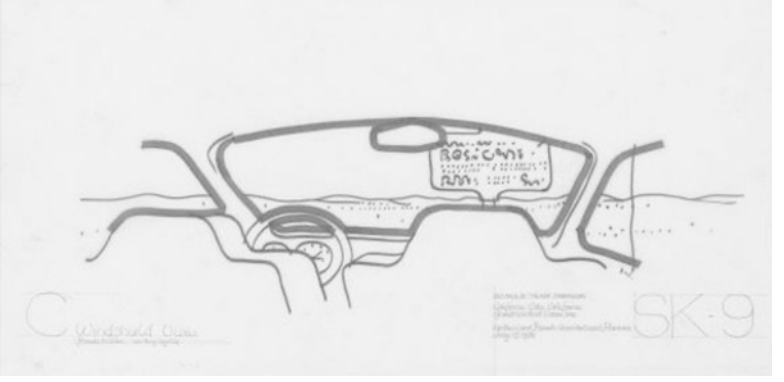
Credits: Smithson Family Collection

Figure 9.16. Page from photo album, 1973–1976. Top left: Picnic at Scaceber, Autumn 1973. Middle panorama, Six Mile, January/February 1974. Bottom: trees.

Photographs by Alison and Peter Smithson. Credits: Smithson Family Collection

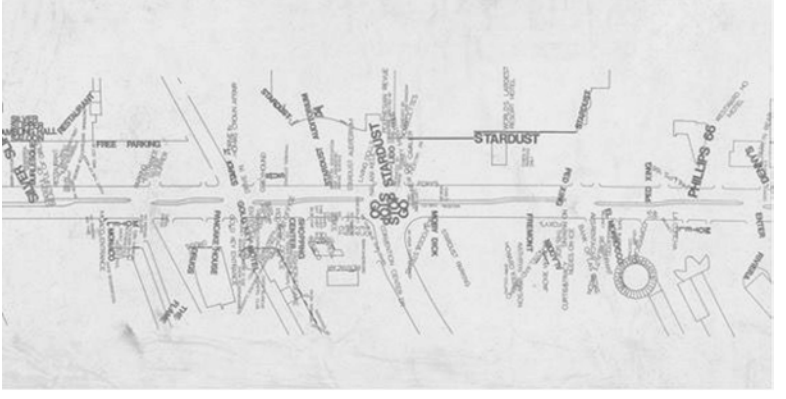
Characteristically, Scott Brown has underscored: "Gans rocked our ideas of functionalism"[96]. Among the main references of Gans concerning his critique of functionalism was the work of American sociologist Robert K. Merton[97]. At the core of Merton's approach was the critique of the assumptions on which functionalism in anthropology was based[98]. Scott-Brown's intention to challenge the conventional understanding of modernist functionalism should be interpreted in relation to her endeavor to address architecture and urban planning adopting an inter-disciplinary perspective based on the exchanges between anthropology, urban sociology, architecture and planning.

Figure 9.17. Robert Venturi, John Rauch and Denise Scott Brown, Architects and Planners. California City General Plan California City, California 1970–1971, not implemented. SK-9, 20 Mule Team Parkway, Windshield View Design sketch by Robert Venturi, 17 July 1970. Marker on paper.



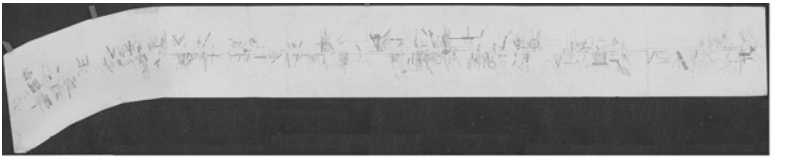
Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania Architectural Archives

Figure 9.18. Detail from Robert Venturi, Denise Scott Brown, and Steven Izenour Learning from Las Vegas Studio, Fall 1968. Word map, Las Vegas Strip, 1968.



Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

Figure 9.19. Robert Venturi, Denise Scott Brown, and Steven Izenour Learning from Las Vegas Studio, Fall 1968. Word map, Las Vegas Strip 1968.



Credits: Venturi, Scott Brown Collection, The Architectural Archives, University of Pennsylvania

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Chapter 10: Bernard Tschumi's politics of space
Architecture as instrument of sowcio-cultural change

This chapter examines the way in which Bernard Tschumi understood and discussed the concept of space during the 1970s, interpreting it in conjunction with his relationship with the so-called "London Conceptualists" whose concern was to embrace spatial experience. Tschumi's exchanges with the conceptual and performance art scene in London are pivotal for understanding his conception of space at the time. Special attention is hence paid to a number of exhibitions that epitomized the cross-fertilization between architecture and art, such as "Space: A Thousand Words" held at the Royal College of Art in 1975 and co-curated by Bernard Tschumi and RoseLee Goldberg. The importance of this exhibition for comprehending the role of space in Tschumi's thought lies in the fact that it aimed "[t]o reveal a change in attitudes towards the theories and the language of space", and thus to reinforce the contact of architecture with the very reality of spatial experience.

The chapter also explores the evolution of Tschumi's concerns about spatial praxis, addressing core issues of his 1970s pedagogical and design practice. Particular emphasis is placed upon his teaching strategies at the Architectural Association (AA) in London, and on an ensemble of projects on which he worked during his first forays in the United States of America such as "The Manhattan Transcripts", "The Screenplays" and "The 20th Century Follies"[1]. The chapter aims to render explicit how Tschumi's conception of urban experience as simultaneously space and event is closely related to his intention to challenge the cause-effect relationships dominating modernist views of the city. Of great significance for his understanding of urban conditions is Tschumi's claim that in architecture the materialization of concepts coincides with their simultaneous visual and social expression.

Bernard Tschumi, after studying at ETH Zurich with Bernhard Hoesli, had moved to Paris in 1967 to join the office of George Candilis, Alexis Josic

and Shadrach Woods, where he worked from September 1967 to May 1968 and met up with Fernando Montés, before returning back to Switzerland to finish his studies. Despite the fact that he had to return to ETH Zurich to graduate, during his Parisian sojourn Tschumi came into close contact with the student protests at the École de Beaux-Arts, and he was even once arrested as a result. In parallel, he was connected to the Unité Pédagogique d'Architecture n° 6, where Candilis taught at the time. He was also close to Christian de Portzamparc and Antoine Grumbach, whom he would invite some years later to participate in the exhibition on "A Space: A Thousand Words" at the Royal College of Art in London. Both de Portzamparc and Grumbach – along with Roland Castro, Dominique Montassut, Bernard Trilles and Hubert Tonka[2] – were involved in the journal *Melpomène* that was published by the students' association of the École de Beaux-Arts between 1958 and 1966.

Central for Tschumi's approach is the consideration that the historical moment at which he started his experimentations in the 1970s through teaching and drawing was characterized by a total split between social reality and utopian dreams. His stance could be interpreted as a reaction against the tendency of architects of the previous generation to focus upon the autonomy of architecture, rejecting the internalist approaches dominating the epistemological models in Modernist architecture. Relevant to grasping the shift that Tschumi's pedagogical and design practice triggered is his claim that "architecture's unique quality is that the means through which it materializes its concepts are also the means through which it expresses itself visually and socially"[3].

Pivotal to Tschumi's teaching and design in the period was his intention, on one hand, to transform the concept of program in architecture into a design strategy, and on the other, to take as a starting point of the design process the dynamic nature of urban conditions. Tschumi focused on the intellectual mutations that accompanied the shift from structuralism to post-structuralism, claiming that "[s]tructuralism referred to a totality"[4] and instead underlining the role that post-structuralism played in introducing the notion of the "decentered subject"[5] within architectural discourse and design practice. In his view, the most significant epistemological mutation to which his teaching and design practice aimed to contribute was thus a "rupture with the totalities"[6]. Particularly telling of his desire to challenge the cause-effect relationships and the totalities that made Modernist and internalist architectural discourse and practice dogmatic and non-relevant was the following statement – which would also be valuable for rethinking architectural design processes to-

day – in which he declared that "today there cannot be any opposition between drawings, words and architecture. They are simply different modes of interpretation"[7].

At the core of Tschumi's thought is the idea that "architectural narrative should never be addressed in a linear way"[8]. Instead, to place emphasis on the non-linearity of the architectural narrative, he employed the notion of an "aleatory narrative", drawing upon Roland Barthes' structural analysis of the components of literature. Tschumi's main intention was to shed light on the fact "that the components of a narration are interchangeable" and "not pre-determined", and that as such "[a]rchitecture never conveys a singular story"[9]. Tschumi was more interested in grasping "the character of a city at the very point where it contradicts itself"[10]. The point of departure of this reflection was his desire to explore the extent to which architectural narrative could exist and under what circumstances. Tschumi's definition of space was based on his very intention to conceive architecture independently from its historical determination and to invent devices that could distance it from the prevalence of the notions of form and typology, as were dominant in the epistemological debates of the preceding generation.

Tschumi's experimentation with the concepts of space, movement and use, and their continuous inter-exchanges, permitted him to go beyond an understanding of architecture limited by the boundaries of cultural and historical determination. His attraction to Cedric Price's incorporation of movements and events in the architectural design process, as presented in the case of the Fun Palace, was related to his conviction that architecture should aim to design "the conditions for architecture: instead of conditioning designs"[11]. Another significant point of reference of the early years of his teaching was Archizoom's No-Stop City. Tschumi shared with this group of Italian architects an ambition to "'verify where the system was going' by taking specific conceptual themes to an extreme"[12]. Despite his interest in Archizoom's theoretical approach, Tschumi however believed that their search for counter-design was nihilist and desperate, defining it as follows: "Being a devil's advocate, counter-design is aimed at creating an understanding in the people concerned by the implications of such developments on their everyday life, and at leading to their active rejection of such planning processes"[13]. For him, the weakness of Archizoom's position lay in the fact that it used as its means overtly architectural plans, which – according to his beliefs by the mid-1970s – were simply not effective given that "no built object could ever have an effect on the socio-economic structure of a reactionary society"[14].

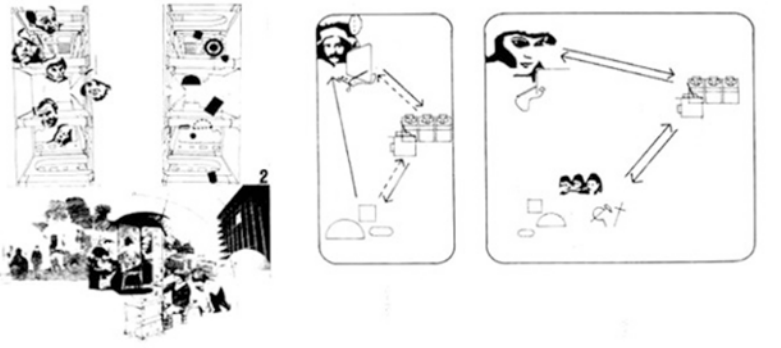
The importance that Bernard Tschumi attached instead to the kinesthetic experience of architecture was based on the assumption that within the same subject there are opposing tendencies and forces, and on his desire to employ design strategies capable of bringing architecture back to a consideration of real space and its experience. The exhibitions and teaching activities of Tschumi in London in the 1970s can thus be analyzed by shedding light on 'conjunctures' as a term. For him, conjunctures are created when certain interactions between events and circumstances trigger the emergence of a particular situation. Tschumi's intention to conceive architecture as simultaneously space and event becomes highly apparent in *The Manhattan Transcripts*, whose "explicit purpose is to transcribe things normally removed from conventional architectural representation, namely the complex relationship between spaces and their use; between the set and the script; between 'type' and 'program'; between objects and events"[15]. Marco De Michelis has highlighted that Tschumi's understanding of space, since his early career, has been complex in the sense that "it isn't space as a geometrical element but rather as it is connected with use, movement, and dynamics"[16].

10.1 Bernard Tschumi and May '68: Social concerns and teaching strategies

In 1970, Bernard Tschumi published along with Fernando Montès an article on "Do-It-Yourself-City" in *L'Architecture d'aujourd'hui*[17], and then, a year later, a joint piece with Martin Pawley on "The Beaux-Arts since '68" in *Architectural Design*[18]. The former essay started with the following phrases: "Situation. In the city cohabitate people, ideas and objects. Some have attracted the others, but their relations remain difficult and the profits of this cohabitation insufficient"[19]. Tschumi and Montès developed in their article a reflection on how urban conditions could be enhanced and on how the cohabitation of people, ideas and objects in the city can facilitate "urban success", thereby challenging the problem of "seclusion". They also claimed that "restricting the interaction [between people, ideas and objects] impoverishes"[20] the urban condition (Figure 10.1, Figure 10.2). A clear echo of the Situationists' writings and of the concept of "detournement" are present in this phrase used by Tschumi and Montès:

> I felt the need to see people talking and confronting experiences, expanding the field of knowledge, I was walking through the city through ancient objects that had come to a new existence[21].

Figure 10.1. Images from Fernando Montès, Bernard Tschumi, "Do-It-Yourself-City", L'Architecture d'aujourd'hui, 148 (1970): 98–105.

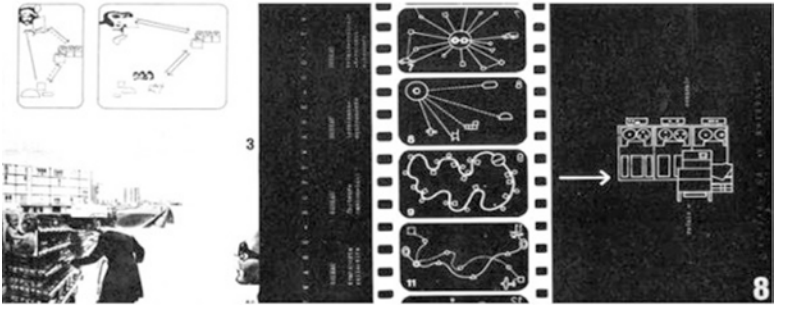


As Tahl Kaminer notes in *The Efficacy of Architecture: Political Contestation and Agency*, "the 'activities' outlined in Do-It-Yourself-City must be understood as an attempt to infuse the city – through architecture – with the social and cultural "content" that the barren, rigid, and repetitive modernist city did not offer, including the temporal and ephemeral"[22]. This tension between the Modernist city and that envisaged by the May '68 protestors in Paris lies at the core of Tschumi's conception of the role of space in architecture, and it is also pivotal for understanding the teaching strategies and social concerns he employed in his teaching at the Architectural Association.

Bernard Tschumi's first teaching experience was at the Architectural Association in London, where he started his trajectory as an educator by leading Diploma Unit 2. The brief he set for this design unit was entitled "Theory, Language, Attitudes". In January 1971, Tschumi took his AA unit students to visit the École des Beaux-Arts in Paris. Slightly later, two publications – titled *A Chronicle in Urban Politics*[23] and *Chronicles of Space 1974–1975*[24] (Figure 10.3) – gathered the material produced by students in Diploma Unit 2 during the 1973–74 and 1974–75 academic years. As their titles reveal, there had been a reorientation of Tschumi's interests from urban politics to issues relating to

space. Tschumi, however, remained concerned with grasping the potential for urban insurgency. This shift from urban politics to spatial theories was based upon his conviction that the unit, instead of "analysing the variables of architectural activities", should "deliberately concentrate on one constant, space"[25]. This change of focus in Tschumi's teaching was linked to his collaboration with Nigel Coates. The latter had been a Diploma student of Tschumi's during the 1973–74 academic year – the first year of Alvin Boyarsky's reshaped unit system at the AA – and later started assisting Tschumi as co-tutor in a new unit at the end of the 70s, as discussed below. Coates has remarked recently regarding this collaboration with Tschumi: "year-by-year I learned to use drawing as a tool to capture experience, giving prominence to the effect rather than objectifying the idea"[26]. A clear meeting point in Tschumi's and Coates's approaches was their understanding of notational strategies as critical tools in addressing the complex, interactive web of events that characterize the contemporary metropolitan condition.

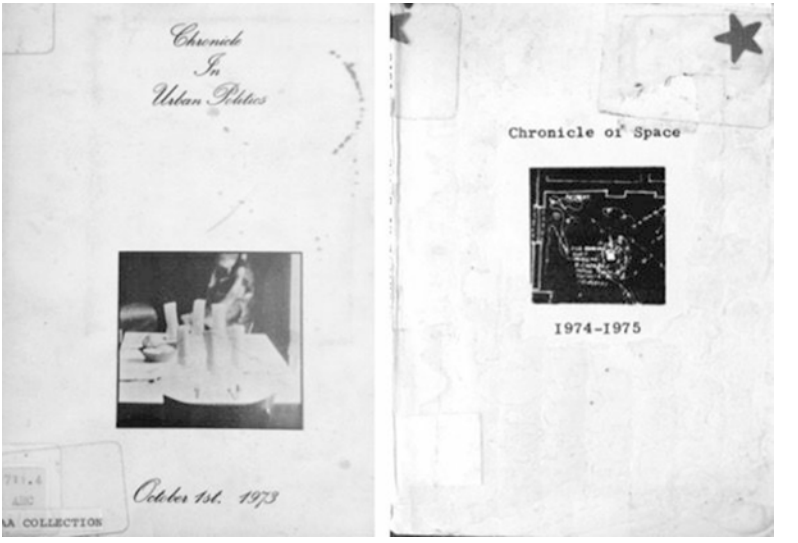
Figure 10.2. Images from Fernando Montès, Bernard Tschumi, "Do-It-Yourself-City", L'Architecture d'aujourd'hui, 148 (1970): 98–105.



In *A Chronicle in Urban Politics*, Tschumi declared that the Diploma Unit 2 was not focused on art, semiology or metaphysics but on politics. He suggests a distinction between politics in the institutional sense and politics in the ideological sense, highlighting that the scope of his design unit was to reinvent the definition of politics, taking distance from its institutional and ideological sense. He thus invited his students to understand "politics in a sense that has not been yet defined, and which perhaps must always remain undefined"[27].

Their work needed to be focused on the analysis of "the city in terms of social relationships and modes of production"[28], paying special attention to the relationship between revolutionary actions and everyday life. Among the best projects that the students submitted were "Marxist Playground" by Rosemary Ind, "Prison Park" by Nigel Coates, and "Five Spaces of a Day" by Jenny Lowe, all of them from 1973–74, as well as "Royal Mint Housing" in 1974–75 by Nigel Coates and Doug Branson.

Figure 10.3. Front cover of A Chronicle in Urban Politics recording the work of Tschumi's Diploma Unit 2 at the Architectural Association (left); Front cover of Chronicles of Space 1974–1975 (right).



The connection between the scope of Tschumi's Diploma Unit 2 and Henri Lefebvre's theoretical ideas is evident. Tschumi's pedagogical vision was focused on a critical analysis of the urban condition, inviting the students to reflect on points of convergence and divergence in understanding the dynamics of contemporary cities. Hence, during the early-1970s, Tschumi was captivated by Henri Lefebvre's distinction between the perceived, the conceived and the lived space as developed in *La Production de l'espace*[29]. This becomes evident

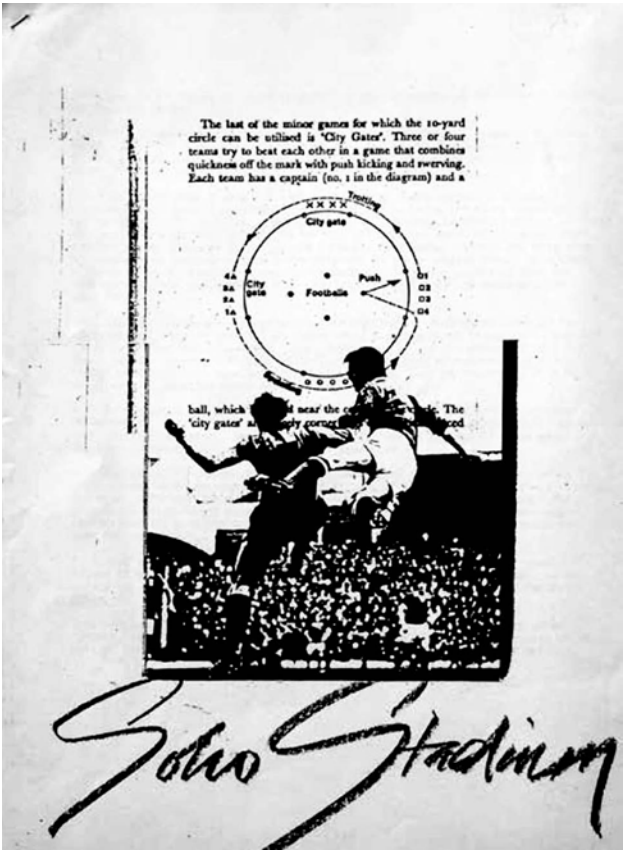
from the themes that he chose when teaching his unit at the AA. As Łukasz Stanek reminds us, Lefebvre's theory was based on the distinction between the physical field of nature and materiality, the mental field of logics and formal abstractions, and the social field – the latter being "the field of projects and projections, of symbols and utopias, of the imaginaire and . . . the désir"[30]. As additional key references for reflecting upon the city, he asked that students should also read Jean Baudrillard, Theodor Adorno, György Lukács and Walter Benjamin, among others. In parallel, Tschumi incorporated into the unit's concepts and tools a range of reflections drawn from various artistic disciplines such as photography, performance and conceptual art.

10.2 Diploma Unit 10 and the integration of space into pedagogy: Notation and events

Following the 1974–75 academic year, Bernard Tschumi took a two-year break from teaching to move to New York, as will be discussed below. By the late-1970s, however, he was again back running another AA design unit in London, this time assisted by Nigel Coates. The pedagogical vision for Diploma Unit 10 proved to be quite different from that of Diploma Unit 2 previously, given that, instead of using literary excerpts as the basis of the design programs, Tschumi and Coates put forward themes more related to the space and dynamics of the city. For their first year of teaching together, in 1977–78, their brief was titled "River Notations", whereas for the next academic year, in 1978–79, they named it "Soho Institutions" (Figure 10.4).

The 'River Notations' brief focused on the following six oppositions: programmatic content versus urban typology; urban typology versus spatial experience; spatial experience versus procedure; procedure versus building type; building type versus spatial sequence; and spatial sequence versus urban typology. The skepticism of Tschumi and Coates vis-à-vis the notion of typology should be highlighted. Despite the presence of the concept of typology as one of the above-mentioned tensions or conflicts being examined in the brief, Tschumi and Coates clearly noted that the concept of typology was employed "as a rational background for a series of intangible and disturbing factors which would ultimately alter the nature of the typologies"[31].

Figure 10.4. Bernard Tschumi and Nigel Coates, cover of the 'Soho Stadium' section of their 'Soho Institutions' brief for AA Diploma Unit 10 in 1978–79.

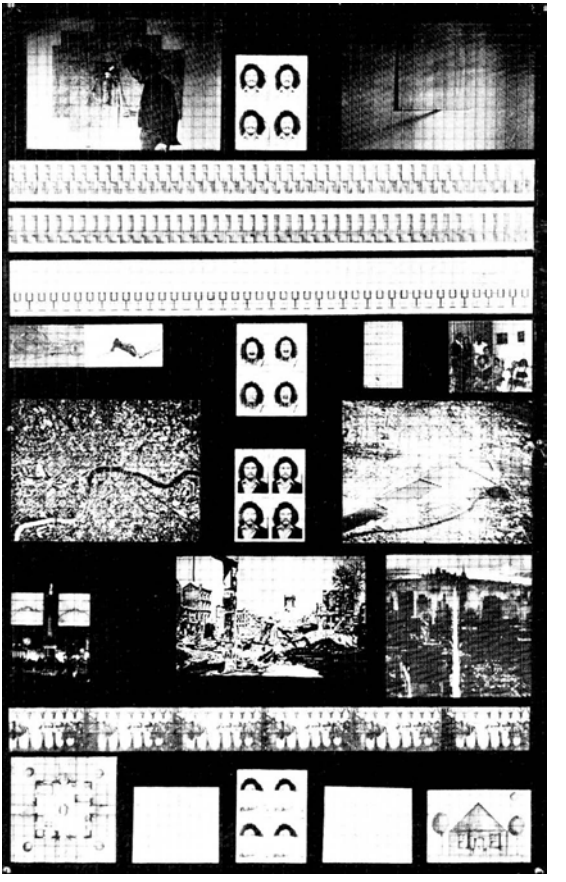


Credits: Courtesy of Bernard Tschumi Archives

Among the projects designed by their students in 1977–78 were John Ryba's "The Large Glass", which pointed out "the impossibility of providing a single reading of the city"[32] (Figure 10.5), and John Perver's "The Opera and its Double", which shed light on the fact that "[c]onventional architectural drawings often lead to a compartmentalised and broken series of visions" – with Perver suggesting the replacement of conventional architectural drawing by a nota-

tional system which, because of its syncretic nature, would be capable of imprinting "the voice of the architect"[33].

Figure 10.5. John Ryba's project for "The Large Glass" in response for the "River Notations" brief.



Tschumi and Coates paid a great deal of attention to architecture's social relevance and formal invention. At the center of their pedagogical agenda for AA Diploma Unit 10 was the thesis that "[t]he insertion of programmatic el-

ements, movements or events implied breaking down some of the traditional components of architecture"[34]. In "Spaces and Events", an essay first published in *The Discourse of Events: Theme III*, which documented the work of students in Diploma Unit 10, Tschumi observed: "Our work argued that architecture – its social relevance and formal invention – could not be dissociated from the events that 'happened' in it"[35]. The novelty of Tschumi and Coates's teaching approach lay in their endeavor to conceive, conjointly, both program and representation, and thereby to treat the disjunctive articulation of these two aspects as a critical tool that aimed to address and analyze "some of the most controversial positions of past and present architectural ideologies"[36]. Tschumi also mentioned that "[h]istory may one day look upon this period as the moment of the loss of innocence in twentieth-century architecture: the moment when it became clear that neither super-technology, expressionist functionalism nor neo-Corbusianism could solve society's ills, and that architecture was not ideologically neutral"[37]. Reading these words, we are confronted with an enlightening realization concerning an important epistemological shift that was taking place in the late-1970s. Tschumi was now maintaining that different architects responded in diverse ways to this shift depending upon their own political and ideological views, claiming that even if that the attitudes of architects varied to a great extent, they all shared the sense of a "general loss of innocence"[38].

10.3 The Insurgent Space Catalogue

Alvin Boyarsky was chairman of the AA from 1971 to 1990; prior to then he had taught its summer school and founded the International Institute of Design (IID) in 1970. As such, he contributed greatly to the enhancement of the role of the AA as a kind of laboratory for an international network of architects and theorists. The IID was particularly instrumental in "shaping institutional identities and goals"[39]. As can be read in the IID's press release for the 1972 summer session, its objective was "to provide a unique opportunity for cross-fertilization and interchange, employing the resources of London". Boyarsky hoped that this session of the IID would present "a synthesis … sparked off by the conflicting attitudes represented towards the environment". In the framework for this session of the IID, Tschumi taught a seminar titled "Urban Insurgency". This seminar was structured around three parts: a first part called "The Environmental Trigger", which then became the title of an article that Tschumi was to publish three years later in the volume on *A Continuing Experiment: Learning*

and Teaching at the Architectural Association[40]; a second part of the seminar for which he chose the title "The Insurgent Use of Space"; and a third entitled "Towards New Urban Organisation".

Tschumi's intention was to collect the materials arising from the second part of the seminar, on "The Insurgent Use of Space", to create "a catalogue of 'détournement' within the formal properties of the city"[41]. The actual poster for Tschumi's seminar however listed four slightly different topics: "The Environmental Trigger", which was to take place during the first week and include a lecture by Tschumi; "Urban Definitions of Conflicts", a seminar group led by Fernando Montès; "The insurgent Space Catalogue", involving a talk by Tschumi and then a workshop that would produce the catalogue on the topic; and finally – most provocatively – "The Right to the Ghetto", a seminar to be taught by Tschumi and Brian Anson in collaboration with "people from Derry". The latter referred to the city of Derry in Northern Ireland, then at the height of the so-called 'Troubles'; just a few months earlier, on 30th January 1972, British paratroopers had indiscriminately shot 26 unarmed citizens in Derry, killing 14 of them, in an incident infamously known as "Bloody Sunday".

Brian Anson was an outspokenly radical Figure who also happened to be teaching design at the AA from 1971 to 1979, and someone open to discussing the armed struggle then being pursued by the Irish Republican Army. While tutoring at the AA, Anson also founded the Architects Revolutionary Council in 1974. On the school's undergraduate program was Intermediate Unit 1, which Anson ran until 1974–75 and which dealt with derelict areas and their socially excluded inhabitants, such as places like Derry. In 1975–76 Anson's design unit was switched to the postgraduate program to become Diploma Unit 8; for the 1976–77 academic year it was moved back as Intermediate Unit 5; and then in 1977–78 and 1978–79 it once again became Diploma Unit 8. Anson's fiery political rhetoric seemed in tune with Bernard Tschumi's evolving theoretical agendas.

10.4 Questioning architecture's function as an instrument of socio-cultural change

A question that Tschumi posed in "The Environmental Trigger", published in 1975, was that of the possibility of space functioning as an "instrument of social transformation" and "a means to change the relationship between the individual and the society by generating a new life-style". In this text, which was

published during the two-year period when Tschumi had stopped teaching at the AA, prior to start teaching Diploma Unit 10, he defined architecture as "the adaptation of space to the existing social structures". It is made evident that at this time, Tschumi was convinced that "[n]o spatial organization ever changes the socio-economic structure". His disbelief in the potential of architecture to contribute to social transformation pushed him to proclaim that "[t]he only possible architectural action of a revolutionary nature is rhetorical"[42].

Thus, for Tschumi, in this period before he started working on The Manhattan Transcripts series and began teaching in AA Diploma Unit 10, any gesture to translate institutional trends into architectural terms/notations was incapable of transforming a given reality. The approaches that Tschumi developed in both Diploma Unit 2 and Diploma Unit 10, as demonstrated respectively by *A Chronicle in Urban Politics* and by *Chronicles of Spaces 1974–1975*, obviously differed. Their common parameter was his interest in the complexity of urban conditions that characterized the metropolis; however, they seem to correspond to two distinct phases of his career. A reorientation of his view took place because of his encounter with the New York art scene, and as such "The Manhattan Transcripts" should be interpreted as the outcome of this shift – being closer to the agenda of Diploma Unit 10 than the framework he had used earlier for Diploma Unit 2. Bernard Tschumi by the late-1970s was much closer to the artistic circles of the so-called "Pictures Generation", which as Douglas Eklund points out, were concerned with the question of "how pictures of all kinds not only depict but also shape reality"[43].

Three important essays – Bernard Huet's "Formalisme – Réalisme"[44], Rem Koolhaas' "'Life in the Metropolis' or 'Culture of Congestion"[45], and Bernard Tschumi's "The Pleasure of Architecture: Its Function as an Instrument of Socio-Culture Change"[46] – were all published the same year, in 1977. In his essay, Tschumi explores how architecture can act "as an instrument of socio-cultural change", as the subtitle indicates. His text should be interpreted as a "polemical position" against "the realpolitik of resource planning" and its "quantifiable benefits". The reflections that he developed in this essay were based upon his conviction that "representations inevitably separate the sensual experience of a real space from the appreciation of rational concepts". He argued that the very force of the task of architects is related to an intention to dislocate and distort the conventions characterizing their environment. What lies behind this position is not destructiveness, but, on the contrary, an interest in the notions of excess and difference. Tschumi was dead-set against the "exceeding functionalist dogmas, semiotic systems, historical precedents or formalised products

of past social or economic constructs"[47]. His aim was to dismantle the elements of architecture and to transgress the rules of architecture.

10.5 Bernard Tschumi and the politics of space

While in London during the 1970s, Tschumi collaborated closely with the Institute for Contemporary Arts (ICA). His collaborations with this institute included the coordination of the "Architecture and Urbanism" lecture series, titled as "The Politics of Space", forming part of the framework for the ICA's French Programme in March 1973. More specifically, Tschumi intended "The Politics of Space" lecture series to examine the effect of space and architecture on society – a subject that was also at the center of the reflections of two leading French intellectuals, Henri Lefebvre and Anatole Kopp. The latter was at the time director of the École Spéciale d'Architecture in Paris. Tschumi invited both Lefebvre and Kopp to contribute to the ICA's lecture series. Other alternative suggested speakers were Herbert Tonka of the *Utopie* group, Manuel Castells and Françoise Choay[48]. Interestingly, Choay would serve, some years later, as a member of the jury that evaluated the proposals for the competition for the Parc de la Villette in Paris, which Tschumi won with his famous project. Moreover, within the framework of "The Politics of Space" lecture series, Tschumi met Jacques Derrida for the first time, with whom he would later exchange ideas about the Parc de la Villette project. The list of the invited participants in the lecture series was undoubtedly impressive, including Roland Barthes, Marguerite Duras, Claude Lévi-Strauss, Jean Paul Sartre, Simone de Beauvoir, Gilles Deleuze, Félix Guattari, Jacques Derrida, Raymond Aron, Tzvetan Todorov and Michael Foucault. In the event, Barthes, Lévi-Strauss, Sartre, de Beauvoir, Foucault and Lefebvre did not actually participate, whereas Gilles Deleuze and Félix Guattari, as the poster of the event informs us, did not talk in the ICA lecture series but in a parallel program held at the French Institute in Queensbury Place, some 3 kilometers away.

Lefebvre and Tschumi therefore did not encounter each other through the ICA's lecture series, but, from a letter that Henri Lefebvre sent to Jonathan Benthall[49] it would appear that they had already met, sometime in December 1972 or early-January 1973. Tschumi translated for the "The Politics of Space" lecture series a text by Lefebvre's titled "L'espace", as included in the latter's book on *Le Droit à la ville (suivi de) Espace et politique*[50]. In "L'espace", according to Tschumi, Lefebvre examines "space as it relates to social practice", and also "the relation-

ship between mental space (as perceived, represented) and social space (as built and produced, mainly urban space)"[51]. What interested Tschumi most about Lefebvre's theories was his triad of perceived, conceived and lived space. In his lecture handout, Tschumi underscored that for Lefebvre "[s]pace is essentially linked with the reproduction of the (social) relations of production"[52]. And as Tschumi wrote in the press release for the ICA's 'The Politics of Space' series:

> Lefebvre's approach, which is developed in the yet untranslated "Droit a la Ville" or "La Revolution Urbaine" can be articulated around two main themes. On one hand, space is political. Space is a product of the socio-economic structure. Space is "produced" by specific groups that take over space in order to exploit it, to transform it with profit, to manage it. Such an exploitation has led to contradictions between the interests of a power structure and the everyday life of the city inhabitants. But on the other hand, and despite these contradictions, an urban specificity emerges. This specificity proceeds from the use of the city rather than from its exchange value. Such a use, or an urban praxis, could be understood as an agent of spontaneous transformation of everyday life, within a new type of civilization – the Urban Society – and within a space that has become the "reborn place of finally expressed desires"[53].

For the September 1972 issue of *Architectural Design*, Tschumi wrote a review of Henri Lefebvre's *Le Droit à la Ville*, which had been published in French in 1968[54]. In his review, Tschumi remarked:

> Lefebvre sees urban space as the place "where there is something always happening". Although the city became a product that can be bought and sold, an urban specificity emerges. This specificity proceeds from the use of the city rather than from the exchange and its property value. Such a use, or urban praxis, can be understood as an agent of transformation of everyday life within an urban space which is "a projection of Society on the ground[55].

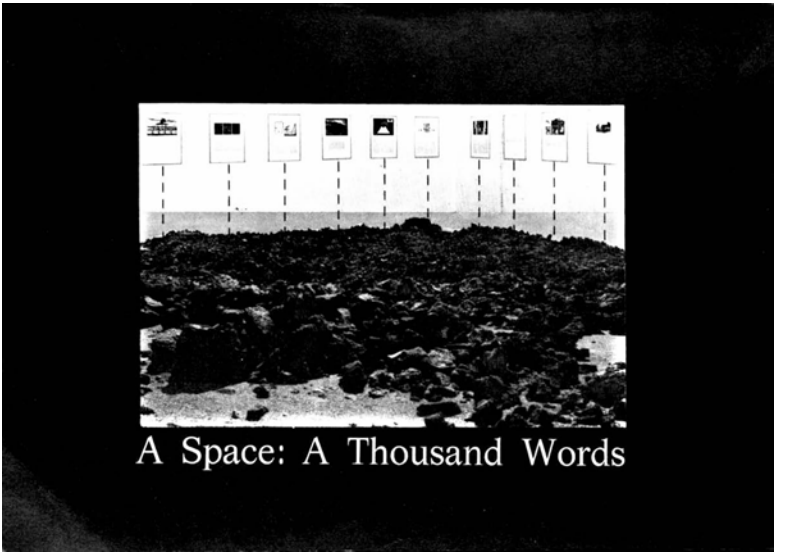
10.6 A Space: A Thousand Words

The first exhibition that Tschumi curated was 'A Space: A Thousand Words', as co-curated with RoseLee Goldberg. This exhibition was held in the gallery of the Royal College of Art in London from 7th February to 6th March 1975, a year

before he initiated "The Manhattan Transcripts" series. Goldberg and Tschumi had originally met in 1973 when the former was director of that gallery (Figure 10.6). Their 1975 show brought together 27 architects and artists such as Dan Graham, Daniel Buren, Fernando Montès, Leon van Schaik, Will Alsop, Peter Wilson, Zoe and Elia Zenghelis, Jeanne Sillett, Jenny Lowe, Roland Castro, Antoine Grumbach, Christian de Portzamparc, Gaetano Pesce, Gianni Pettena and Nigel Coates, among others. Each participant was invited to contribute to the display an unpublished photograph or drawing that depicted design(s), events(s), object(s) or painting(s), plus a text of no more than 1000 words. This complementarity between textual and visual means was aimed at rendering comprehensible the importance of the concept of space. Tschumi noted in his preface to *Questions of Space* that in the 1970s his thinking was dominated by "the relationship between politics and urban society", whereas by the early-1980s he had become more concerned about "the issues of disjunction and programme … [and] the concept of space". In that same text, he related this later intensification of his interest in space to its capacity to function as "the only common denominator within cities, architecture and social structures"[56].

This was certainly explicit in "A Space: A Thousand Words". As was mentioned in the initial announcement sent to the potential contributors on 15th August 1974, the exhibition's objective was "[t]o reveal a change in attitudes towards the theories and the language of space". Its starting point, therefore, was to pinpoint "emerging attitudes" concerning the links "between the theory and the language of space … and the everyday level of space". In parallel, the show aimed to shed light upon the relationship "between objective analysis and unconscious spheres", on the one hand, and "between socio-economic space and mental space"[57] on the other (Figure 10.7). Each contributor was asked to send one photographic reproduction — design(s), events(s), object(s) or painting(s) — and a written piece of no longer than 1000 words (Figure 10.8). The subsequent press release on 18th December 1974 declared: "the exhibition attempts to bring together those artists and architects whose concerns, directly or indirectly, are with developing a language and critique on the production of space"[58] (Figure 10.9). The heterogeneity of the participants was striking, although Rem Koolhaas figures on the exhibition invitation (Figure 10.10), he was not in the list of the contributors in the actual catalogue. Goldberg and Tschumi had intended for 28 contributions, but with Koolhaas' missing, it meant there were only 27 displays.

Figure 10.6. Catalogue cover for the exhibition on 'A Space: A Thousand Words' at the Royal College of Art in London from 7th February to 6th March 1975.

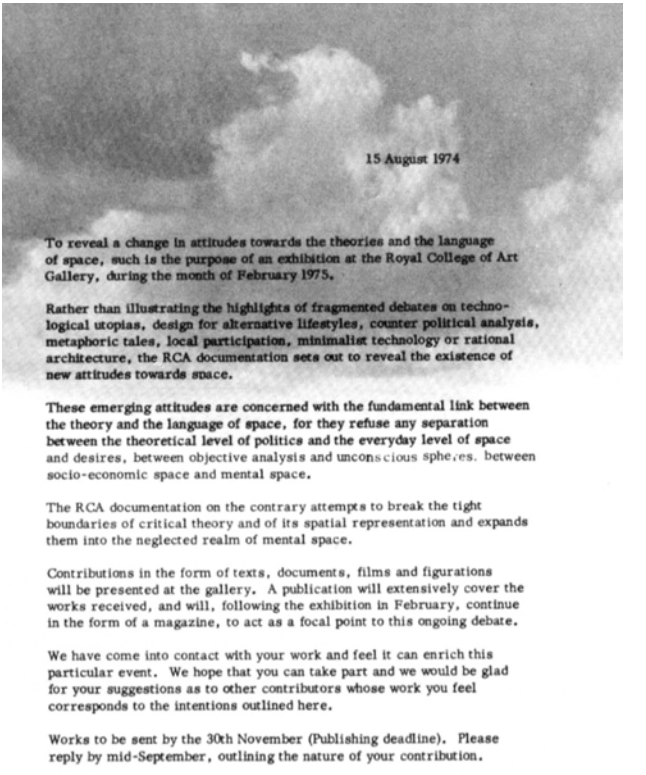


In his essay on "A Space is Worth a Thousand Words", published in the exhibition catalogue, Tschumi refers also to the concept of transparency – thereby echoing the interest of his former professor at ETH Zürich, Bernhard Hoesli, who had written on the topic along with Colin Rowe and Robert Slutzky[59]. In particular, Tschumi's comments came in wake of the careful distinction that Rowe and Slutzky drew in their seminal essay about "Transparency: Literal and Phenomenal"[60]. The term 'transparency' was indeed central in certain architectural debates at the time, as was evident from a letter from Slutzky to Hoesli on 12th March 1968: "Firstly, let me again thank you for your marvellous efforts re: Transparency. It is comforting to know that one can have a forum on the other side of the Atlantic, particularly when the 'literal' transparentists reign so supreme these days ..."[61].

Above all, however, the point of departure of "A Space: A Thousand Words" was the realization that the infusion of space with too many discourses was threatening space's capacity of resistance. Goldberg and Tschumi wished to reinforce the contact of architecture with the very reality of its spatial experience, as seen in the latter's statement that "the reduction of space to a mere reflec-

tion of other modes of thought was overlooking the fact that space was"[62]. The guiding principles for the exhibition were thus, on the one hand, the refusal of any separation between words and figurations, and on the other, an appreciation of the irreducible presence of space.

Figure 10.7. Announcement about the 'A Space: A Thousand Words' exhibition as was sent out to potential contributors on 15th August 1974.



15 August 1974

To reveal a change in attitudes towards the theories and the language of space, such is the purpose of an exhibition at the Royal College of Art Gallery, during the month of February 1975.

Rather than illustrating the highlights of fragmented debates on technological utopias, design for alternative lifestyles, counter political analysis, metaphoric tales, local participation, minimalist technology or rational architecture, the RCA documentation sets out to reveal the existence of new attitudes towards space.

These emerging attitudes are concerned with the fundamental link between the theory and the language of space, for they refuse any separation between the theoretical level of politics and the everyday level of space and desires, between objective analysis and unconscious spheres, between socio-economic space and mental space.

The RCA documentation on the contrary attempts to break the tight boundaries of critical theory and of its spatial representation and expands them into the neglected realm of mental space.

Contributions in the form of texts, documents, films and figurations will be presented at the gallery. A publication will extensively cover the works received, and will, following the exhibition in February, continue in the form of a magazine, to act as a focal point to this ongoing debate.

We have come into contact with your work and feel it can enrich this particular event. We hope that you can take part and we would be glad for your suggestions as to other contributors whose work you feel corresponds to the intentions outlined here.

Works to be sent by the 30th November (Publishing deadline). Please reply by mid-September, outlining the nature of your contribution.

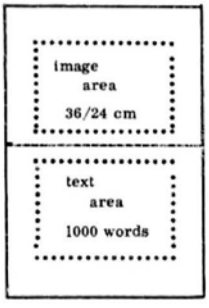
Credits: Courtesy of Bernard Tschumi Archives

Figure 10.8. Guidelines given to the contributors to the exhibition "A Space: A Thousand Words".

The direct relationship between the publication and the exhibition on the one hand, printing costs and restricted budget facilities on the other, have necessitated the following layout.

1. The publication will be of 72 pages (24 cm x 18cm or approx. 10" x 7") and will be a direct reduction of the exhibition panels. Each contribution will be displayed in a double spread.

2. Exhibition panels correspond to a double spread in the publication, twice the size. i.e. 48cm x 72cm (or approx 20" x 30"), laid vertically.



EACH CONTRIBUTOR SHOULD SEND ONLY:

(a) one photographic reproduction i.e. design(s), event(s), object(s), painting(s) etc., of any format but whose total surface is not larger than 36cm x 24cm. Several photographs which once added together come to 36 x 24 is of course possible. The material should not have been previously published.

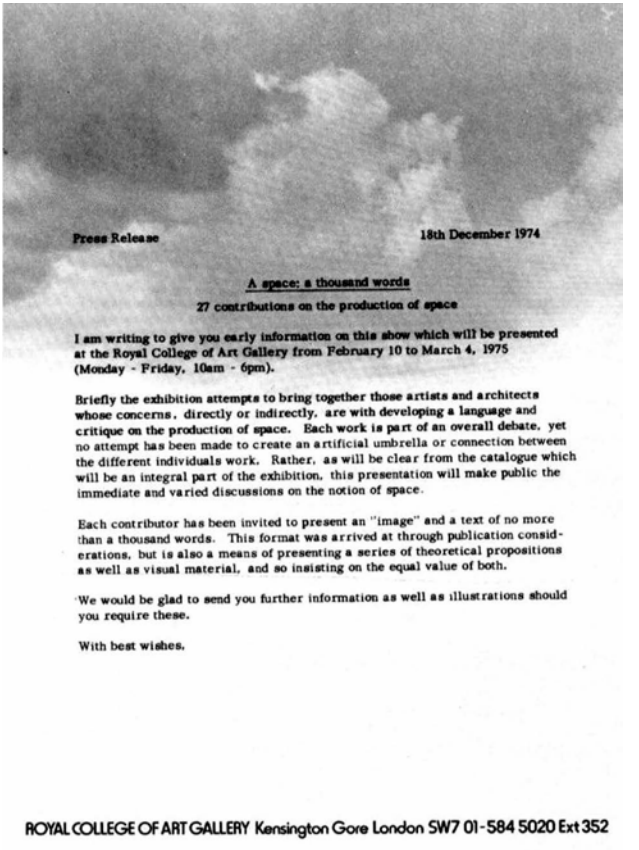
(b) a written piece, no longer than 1000 words (two typed A4 pages). Texts should be in English as translating facilities are not available. Typesetting of text will be taken care of by the organisers.

The submitted photographs and the typeset text will be mounted on respective panels by the exhibition organisers.

All contributions are to be received by the 30th November 1974 (Publishing deadline)

Credits: Courtesy of Bernard Tschumi Archives

Figure 10.9. Press release on 18th December 1974 for the exhibition "A Space: A Thousand Words".



Press Release 18th December 1974

A space: a thousand words

27 contributions on the production of space

I am writing to give you early information on this show which will be presented at the Royal College of Art Gallery from February 10 to March 4, 1975 (Monday - Friday, 10am - 6pm).

Briefly the exhibition attempts to bring together those artists and architects whose concerns, directly or indirectly, are with developing a language and critique on the production of space. Each work is part of an overall debate, yet no attempt has been made to create an artificial umbrella or connection between the different individuals work. Rather, as will be clear from the catalogue which will be an integral part of the exhibition, this presentation will make public the immediate and varied discussions on the notion of space.

Each contributor has been invited to present an "image" and a text of no more than a thousand words. This format was arrived at through publication considerations, but is also a means of presenting a series of theoretical propositions as well as visual material, and so insisting on the equal value of both.

We would be glad to send you further information as well as illustrations should you require these.

With best wishes.

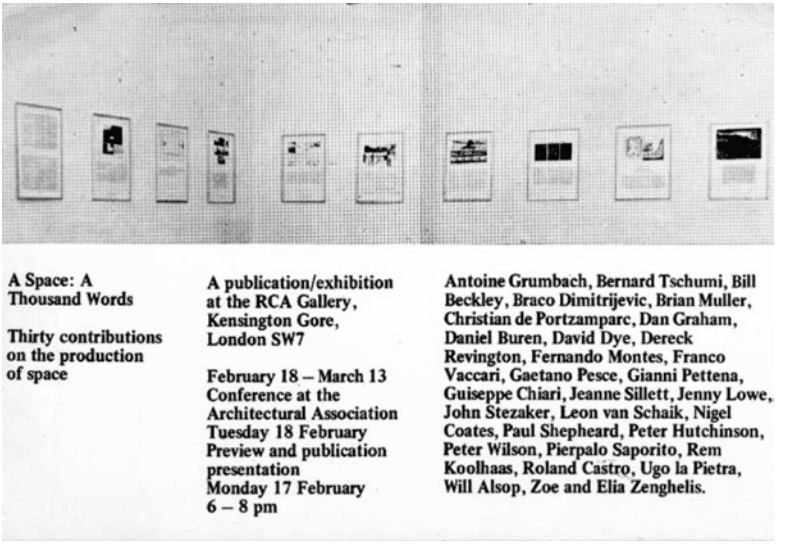
ROYAL COLLEGE OF ART GALLERY Kensington Gore London SW7 01-584 5020 Ext 352

Credits: Courtesy of Bernard Tschumi Archives

Tschumi acknowledges in "A Space is Worth a Thousand Words" the inseparability between signs and space, and between words and figurations, as part of the rediscoveries that accompanied the May'68 protests. What is particularly relevant for understanding how Tschumi conceived the relationship between writing and drawing is his argument that 'spatial concepts have been made by

the writings and drawings of space rather than by their built translations'. He also refers to the inseparability between '[t]he magic of space' and 'its theoretical discourse', claiming that "[a]ttitudes play with language, and theories play with attitudes". For Tschumi, "[t]he distinction between the talk about space and the creation of space vanishes"[63].

Figure 10.10. Invitation to "A Space: A Thousand Words" at the Royal College of Art Gallery.



Credits: Courtesy of Bernard Tschumi Archives

In a 1975 issue of *Studio International*, RoseLee Goldberg contributed an article titled "Space as Praxis"[64] while Tschumi wrote an essay titled "Questions of Space: The Pyramid and the Labyrinth (or the Architectural Paradox)"[65]. In this essay, Tschumi juxtaposed the information included in 24 numbered frames that included extracts and images from other authors to his own text: these included questions and references to projects such as Archizoom's No-Stop City and Aldo Rossi's Gallaratese housing block, and quotations such as from Manfredo Tafuri's "L'architecture dans le Boudoir", published in the third issue of *Oppositions* in 1974:

> The return to language is a proof of failure. It is necessary to examine to what degree such a failure is due to the intrinsic character of the architectural discipline and to what degree it is due to a still unresolved ambiguity[66].

Tschumi was thereby sharing with Tafuri the conviction that any reduction of architectural design to linguistic analogies was a negligence in terms of architecture's very logic.

10.7 The Manhattan Transcripts and the disjunction of the Metropolis

Key to understanding Tschumi's position at the time was his observation that "[a]bstracted from a use or a context, a building has no meaning". At the heart of this stance is the realization about a building that "as soon as it is used or contextualized – as soon as something happens in it – it acquires meaning"[67]. His conception of space was now clearly based on the idea that "space is transformed by events"[68], and that "architecture is the discourse of events, as much as the discourse of spaces"[69] . This means that the point of departure for "The Manhattan Transcripts" series was the observation that "architecture [is] … simultaneously space and event"[70] and that hence "[t]here is no architecture without action, no architecture without event, no architecture without program"[71]. In *Event-Cities: Praxis*, Tschumi reiterated his view that "there is no architecture without action or without program, and that architecture's importance resides in its ability to accelerate society's transformation through a careful agencing of spaces and events"[72].

Tschumi first moved to New York in 1975 to collaborate with the well-known Institute for Architecture and Urban Studies (IAUS), led by Peter Eisenman, which had invited him over. He started working on "The Manhattan Transcripts", and his research on Central Park during his time with the IAUS certainly fertilized, to a certain extent, the questions he was raising through this new project. Ideas from "The Manhattan Transcripts" were exhibited in four important solo exhibitions: at the Artists' Space Gallery in New York in 1978; at the AA in London in 1979; at the PS1 Gallery in New York in 1980; and then at the Max Protech Gallery in 1981, again in New York. The first of these shows, at the Artists' Space Gallery, which was titled 'Architectural Manifestoes' and was held from 8th to 29th April 1978, was in fact Tschumi's

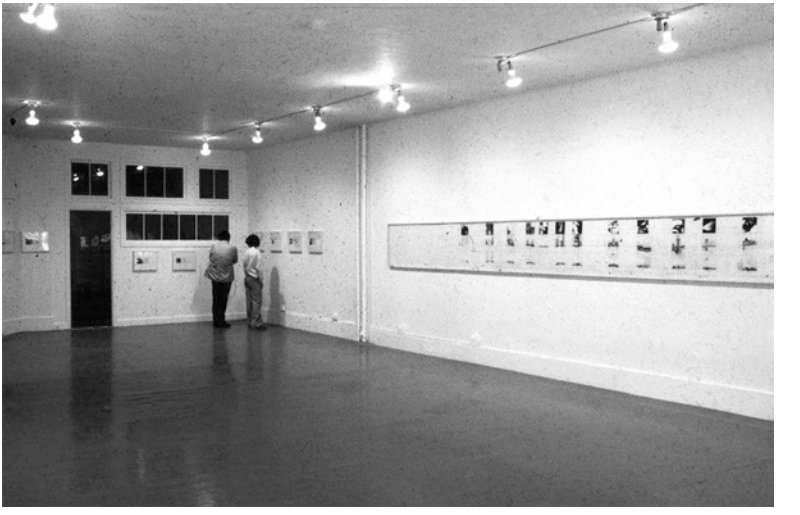
first solo exhibition of his work (Figure 10.11). On display were the following items from "The Manhattan Transcripts" series: "Manifesto 1: Fireworks" (1974); "Manifesto 2: Questions of Space, or The Box" (1975) (Figure 10.12); "Manifesto 3: Advertisements for Architecture" (1976); "Manifesto 4: Joyce's Garden" (1977); "Manifesto 5: Birth of an Angel" (1977); "Manifesto 6: The Park" (1977); "Manifesto 7: Border Crossing" (1978) (Figure 10.13); and "Manifesto 8: The Room" (1978). Of the last-mentioned, Tschumi wrote in the exhibition catalogue of its contrast to his other manifestoes: "While the others are plots or fantasies that desire a space to exist, here is a space that desires a plot"[73]. Tschumi went on to add that "[e]ach of the … works plays on the tension between ideas and real spaces, between abstract concepts and the sensuality of an implied spatial experience"[74]. Thus, the main argument of his 1978 exhibition was that architecture is "the tension between the concept and experience of space"[75].

The representational strategies employed in "The Manhattan Transcripts", such as the combination of different perspectival views of the photographs and drawings included in the strips, require the observer to constantly change their point of view. Observers of these drawings when confronted with the "changing perspectives and angles [are forced to trace in their mind] … the effect of moving through space"[76]. Tschumi's notational strategies hence invite viewers to reconstruct in their mind an "embodied interaction"[77]. Another representational tactic in "The Manhattan Transcripts" is the vastly varying scales of the city, the buildings and their details. Through the simultaneous presentation and juxtaposition of scales, Tschumi was inviting observers to adjust their reading of these images so as to conceive them as part of the same semiotic assemblage – also contributing to the activation of a sense of motion whilst looking at the images.

Tschumi claims that the starting point for "The Manhattan Transcripts" was the "inevitable disjunction between use, form and social values", which in turn implied "a dynamic conception posed against a static definition of architecture"[78]. In the introduction to his book about the project, published in 1981, Tschumi explicitly juxtaposed the world of movements, the world of objects, and the world of events. In this sense, "The Manhattan Transcripts" stemmed from his realization that "architecture's sophisticated means of notation – elevations, axonometric, perspective views, and so on – … don't tell you anything about sound, touch, or the movement of bodies through spaces"[79]. Therefore, the project's objective was to go "beyond the conventional definition of use … [and] to explore unlikely confrontations"[80], and thereby to reorganize the connections between space, event and movement. Through

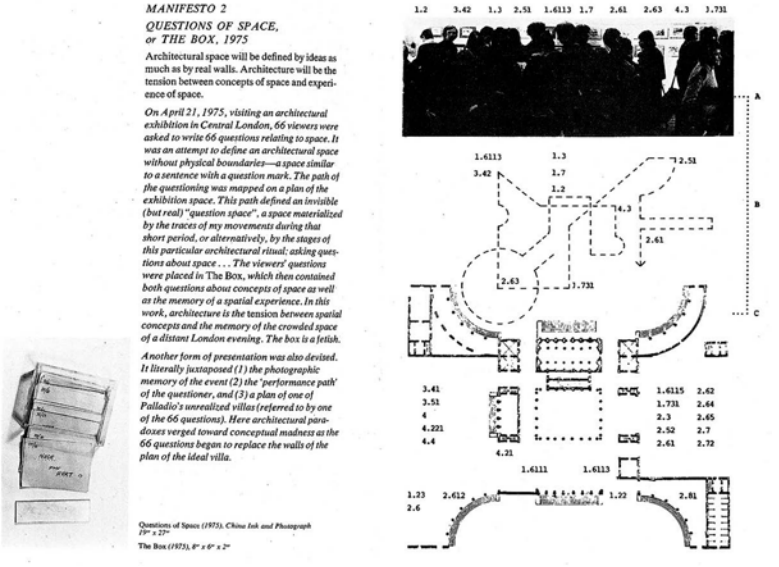
this series of 'theoretical' projects, on which he worked from 1976 through until 1981, his aim was nothing less than to reinvent architecture's modes of notation (Figure 10.14). For "The Manhattan Transcripts" series, Tschumi instead employed three autonomous systems that were intended to address the conflict between events, spaces and movements. In doing so, "The Manhattan Transcripts" were linked to his first encounter with the art scene in 1970s New York, and thus were "aimed at grasping domains, which, though normally excluded from most architectural theory, are indispensable to work at the margins, or limits, or architecture"[81].

Figure 10.11. Bernard Tschumi's solo exhibition on "Architectural Manifestoes" at the Artists Space Gallery in New York (April 1978).



Credits: Courtesy of Bernard Tschumi Archives

Figure 10.12. Bernard Tschumi, "Manifesto 2: Questions of Space, or The Box" (1975), in Bernard Tschumi, Architectural Manifestoes (exhibition catalogue) (New York: Artists Space, 1978).



MANIFESTO 2

QUESTIONS OF SPACE, or THE BOX, 1975

Architectural space will be defined by ideas as much as by real walls. Architecture will be the tension between concepts of space and experience of space.

On April 21, 1975, visiting an architectural exhibition in Central London, 66 viewers were asked to write 66 questions relating to space. It was an attempt to define an architectural space without physical boundaries—a space similar to a sentence with a question mark. The path of the questioning was mapped on a plan of the exhibition space. This path defined an invisible (but real) "question space", a space materialized by the traces of my movements during that short period, or alternatively, by the stages of this particular architectural ritual: asking questions about space . . . The viewers' questions were placed in The Box, *which then contained both questions about concepts of space as well as the memory of a spatial experience. In this work, architecture is the* tension *between spatial concepts and the memory of the crowded space of a distant London evening. The box is a fetish.*

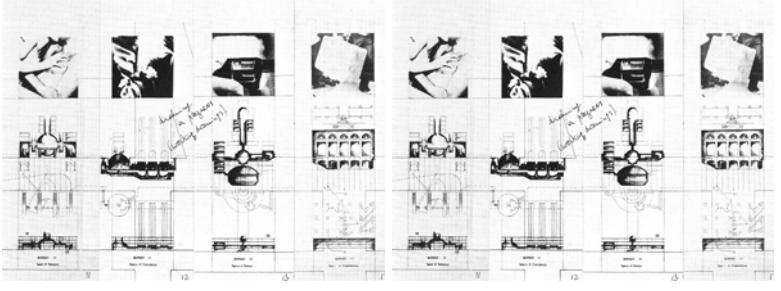
Another form of presentation was also devised. It literally juxtaposed (1) the photographic memory of the event (2) the 'performance path' of the questioner, and (3) a plan of one of Palladio's unrealized villas (referred to by one of the 66 questions). Here architectural paradoxes verged toward conceptual madness as the 66 questions began to replace the walls of the plan of the ideal villa.

Questions of Space (1975), China Ink and Photograph 19" x 27"

The Box (1975), 8" x 6" x 2"

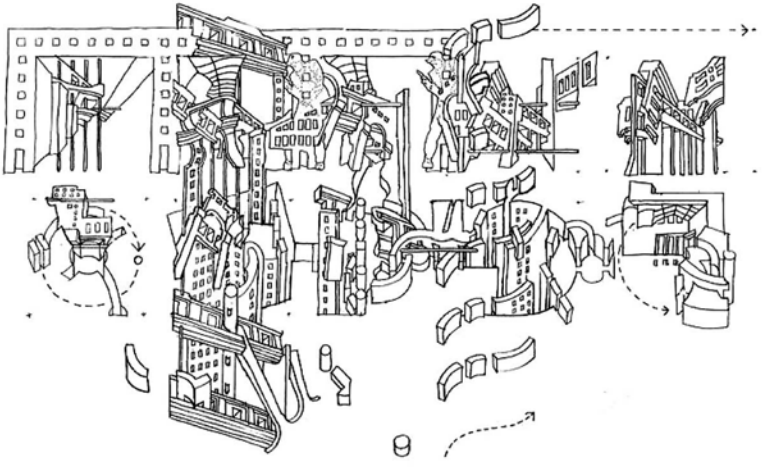
Credits: Courtesy of Bernard Tschumi Archives

Figure 10.13. Bernard Tschumi, "Border Crossing" (1978), in Bernard Tschumi, Architectural Manifestoes (exhibition catalogue) (New York: Artists Space, 1978).



Credits: Courtesy of Bernard Tschumi Archives

Figure 10.14. Bernard Tschumi, sketch for The Manhattan Transcripts (1977).



Credits: Courtesy of Bernard Tschumi Archives

Tschumi has since described "The Manhattan Transcripts" series as theoretical propositions executed through drawing. The project consists of four episodes which transcribe imagined events within real locales in Manhattan: "The Park" uncovers a murder in Central Park; "The Street (Border Crossing)" chronicles the movement of a person drifting through violent and sexual events on 42nd Street; "The Tower (The Fall)" depicts a vertiginous fall from a skyscraper; and 'The Block' illustrates five unlikely events occurring in separate courtyards within one city block. This last-mentioned item – the fourth and last episode of "The Manhattan Transcripts" series – was first exhibited at Max Protetch gallery in 1981, accompanied by the publication of the homonymous book. "The Block" was organized into five horizontal and three vertical sequences. The vertical ones correspond to object, movement and event respectively.

Tschumi states that, in the case of "The Manhattan Transcripts", "[t]he relationship of one frame to the next is indispensable insofar as no analysis of any one frame can accurately reveal how the space was handled altogether"[82]. In his view, the project's meaning is produced in a cumulative way, given that it "does not depend merely on a single frame (such as a façade), but on a succes-

sion of frames or spaces"[83]. Tschumi's interest in inventing cumulative ways of acquiring meaning through visual representation led him to draw a distinction between five kinds of sequences: the repetitive, the disjunctive, the distorted, the fade-in, and the insertive sequence. To grasp the relationship between "The Manhattan Transcripts" and the actuality of life in New York, we should bear in mind that, despite the fact that their strategies are based on the elaboration of "fragments of a given reality", their capacity to challenge conventional architectural signs was deliberately based on the use of "abstract concepts"[84].

The notion of montage is crucial in understanding the intentions behind the visual strategies used in *The Manhattan Transcripts*. Montage is the technique of selecting, editing and piecing together separate sections or fragments. The way that Tschumi conceived montage in this project departed from certain core ideas of Sergei Eisenstein, the celebrated 1920s Soviet film director. The distinction between and emotionally exciting and moving story and the logical exposition of facts, as outlined by Eisenstein in *The Film Sense*[85], was pivotal for Tschumi's endeavors in "The Manhattan Transcripts". Tschumi's incorporation of montage served to deconstruct any logic of understanding architectural design based on dichotomies between parts and whole. As he argues, "The Manhattan Transcripts" did "not attempt to transcend the contradictions between object, man, and event in order to bring them in a new synthesis"; instead, the objective was "to maintain these contradictions in a dynamic manner, in a new relationship of indifference, reciprocity, or conflict"[86].

Also influential was Eisenstein's use of montage to induce a shift in the spectator's perception from a passive stance to an active one. In "The Manhattan Transcripts", Tschumi sought to challenge the way architectural drawings are interpreted by pushing the observers/interpreters of the drawings to adopt a viewpoint based on the proposition that "there is no architecture without … movement"[87]. Similarly, Tschumi wrote in his introduction to *Architecture and Disjunction* that "there is no social or political change without the movements and programs that transgress supposedly stable institutionality, architectural or otherwise; that there is no architecture without everyday life, movement, and action" – and that it is the most dynamic aspects of their disjunctions that suggest "a new definition of architecture"[88]. His aim was thus to invent modes of architectural notation that would be able to activate a sensation of movement and action in the viewer's mind.

Eisenstein and Tschumi also shared an interest in "signifying incompletion", thereby implicitly inviting the spectator, as Jonathan Hill has noted, "to

attempt to complete the montage"[89]. This brings to mind Tschumi's remark that "looking at the Transcripts also means constructing them"[90]. Eisenstein believed that montage's strength "lies in the fact that it involves the spectator's emotions and reason"[91], which meant that his main intention was to force the spectator "to follow the same creative path that the authors followed when creating the image"[92]. The point of this tactic for Eisenstein was to shift the way in which the spectator is understood and treated. More specifically, he rejected any conception of the viewer that reduced their activity of observing to a simple practice of just seeing the depicted elements which constituted the visual assemblage on show. On the contrary, Eisenstein's objective was to shape tools that could support his conviction that the spectator when confronted with visual images should experience "the dynamic process of the emergence and formation of the image"[93].

The notational strategies that Tschumi employed in "The Manhattan Transcripts" thus aimed to "trigger desire for architecture", replacing function with fiction. He even used the motto "Form follows Fiction" to highlight his desire to challenge conventional "functional and moral standards"[94]. His preference for the term "action" over that of "function" led to his desire to convert both action and program into integral parts of architecture. For this reason, he replaced conventional plans with new types of architectural notation.

There were of course other projects by Bernard Tschumi around the time that reinforced or supplemented his thinking for "The Manhattan Transcripts". The latter clearly shared an aim with "The Screenplays", which sought to "explore the relation between events ("the program") and architectural spaces, on one hand, and transformational devices of a sequential nature, on the other"[95]. For example, "Domino Distortion", which was a part of this other series, comprises three parallel distorted strips that expressed Tschumi's opposition to the emblematic, yet entirely static, Domino diagram as drawn by Le Corbusier back in 1914–15. From 1979 Tschumi was also working on "The 20th Century Follies" series. It consisted of works for New York, London, Toronto, Middleburg in Holland, and Kassel in Germany. The fifth part of this series, titled "The Broadway Follies", was exhibited in "Follies: Architecture for the Late-Twentieth-Century Landscape", a show held at Leo Castelli Gallery in New York and then the James Corcoran Gallery in Los Angeles in 1983. Tschumi situated his "follies" along Broadway in New York, beginning at the Customs House and ending in the Bronx. The elaboration of filmic metaphors – such as repetition, distortion, superimposition and fading – was again central to this project, which displayed elevations of the follies mounted onto black

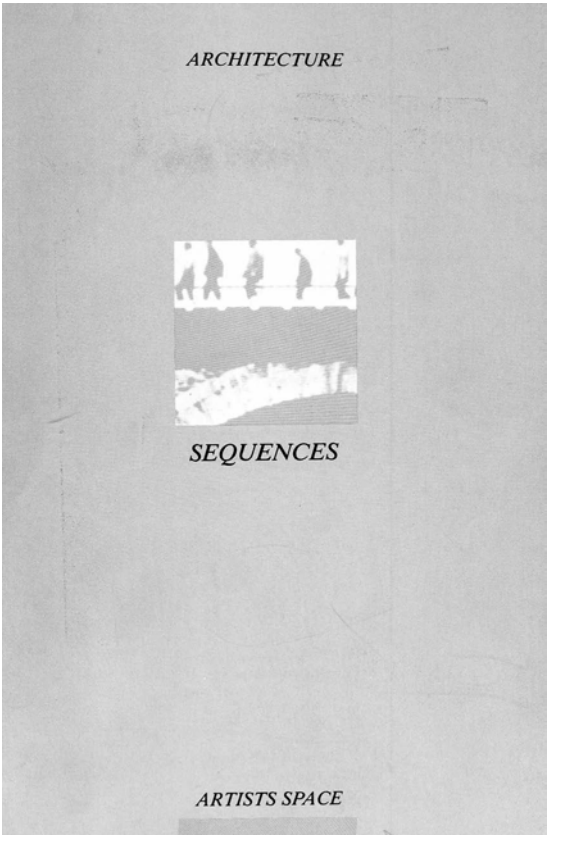
mats and held in black frames. The analogy between the way in which they were mounted and the sequence of a filmstrip was striking. Apart from these drawings, Tschumi also exhibited six models in "Follies: Architecture for the Late-Twentieth-Century Landscape". Here his purpose was to distinguish five strategies to relate the "follies" to the wider city: in other words, "single object, pair of objects, linear sequence of objects, randomly scattered objects and objects on a point grid". As such, "The Broadway Follies" was based on the strategy of "linear sequence of objects", while the last category was identified by his entry for the 1982 competition to design the Parc de La Villette in Paris. In his text for the exhibition catalogue, Tschumi wrote that his aim with "The Broadway Follies" was again to couple a transformational and spatial sequence[96].

Following his co-curation with RoseLee Goldberg of "A Space: A Thousand Words" in London in 1975, Tschumi then curated another exhibition six years later titled "Architecture: Sequences" (Figure 10.15). This time, Tschumi brought together drawings, etchings, photographs, models and little books that focused on the theme of "sequence" and were created by Philippe Guerrier, Jenny Lowe, Lorna McNeur, Deborah Oliver and Peter Wilson. The exhibition was held at Artists' Space Gallery in New York from 17th January to 28th February 1981. Tschumi observed in his preface to exhibition catalogue:

> Instead of trying to herald some new movement and because of the respective concerns often differ, I have emphasized a further common ground in this work, namely the idea of "sequence". Always present in architecture, regardless of generation or ideological allegiance, the architectural sequence is of considerable interest insofar as it allies notions of route as well as ritual, movement as well as method, program as well as narrative[97].

For this catalogue, Tschumi authored essay titled "Sequences" in which he defined three kinds of sequences that were present in every architectural work: transformational, spatial and programmatic sequence. He underscored the fact that in the first case "the sequential transformation … becomes its own theoretical object, insofar as the process becomes the result, while the sum of transformations is all that counts, rather than the outcome of the final transformation"[98]. This statement represents the culmination of his line of thought going back to the early-1970s, expressed now however through very different words and projects.

Figure 10.15. Catalogue cover for Tschumi's exhibition on "Architecture: Sequences" at the Artists Space Gallery in New York (1981).



Credits: Courtesy of Bernard Tschumi Archives

10.8 Conclusion: Around the relevance of Bernard Tschumi's thought for current debates

Bernard Tschumi wished to transform the architectural program into a compositional device, using urban conditions as a starting point for the design process. The way in which he reinvented the notion of the user of architecture

needs to be comprehended in relation to his affirmative attitude towards the disjunction between predetermined uses for buildings and urban spaces, and the actual uses invented by users. Tschumi's concern with uncovering the potentialities hidden in the architectural program is closely related to his conception of the role of space within architectural epistemology. In his opinion, program – in contrast to function – is defined by activities and actions and not by conventions. In other words, program permits the architect to challenge the conventional correlations between function and form.

The point of departure for Tschumi's approach is the conviction that there is no obligatory relationship between the architectural signifier and the programmatic signified. Instead, he argues in *Event-Cities: Praxis* that "all architecture is inextricably linked to our urban condition and that each of the projects featured [in this volume] is first and foremost a constituent element of our global system of cities"[99]. He maintains that "[w]hat distinguishes these projects … is the manner in which their programmatic dimension becomes as much a part of their architecture as of their use', thus highlighting the necessity to replace 'the static notions of form and function … by attention to the actions that occur inside and around buildings – to the movement of bodies, to activities to aspirations"[100].

In this sense, Tschumi's approach is characterized by a desire to convert the experiences of the city into instruments capable of redefining actual urban conditions. In *Event-Cities: 2*, he remarks regarding his approach:

> The projects always begin from an urban condition and a program. They then try to uncover potentialities hidden in the program, site, or circumstances, whether economic, social, or cultural. Dynamic forces and/or intensely public spaces are encouraged; a concept is identified; and, eventually, a form arrived at, so as to reinforce or qualify the concept[101].

The value today of reconsidering Tschumi's ideas from the 1970s and early-80s lies in his interest in the dialectic between social praxis and spatial forms, and in his questioning of whether it is language that precedes socio-economic context or the opposite. To grasp the relevance of his thought for the contemporary context it is important to remember that his experimentation with modes of representation helped to make us realize that architecture should always try to reinvent its own tools. The fact that the current context is characterized by the questioning of fundamentals about how we inhabit architectural space makes Tschumi's interrogations into the experience of spatial conditions even more relevant.

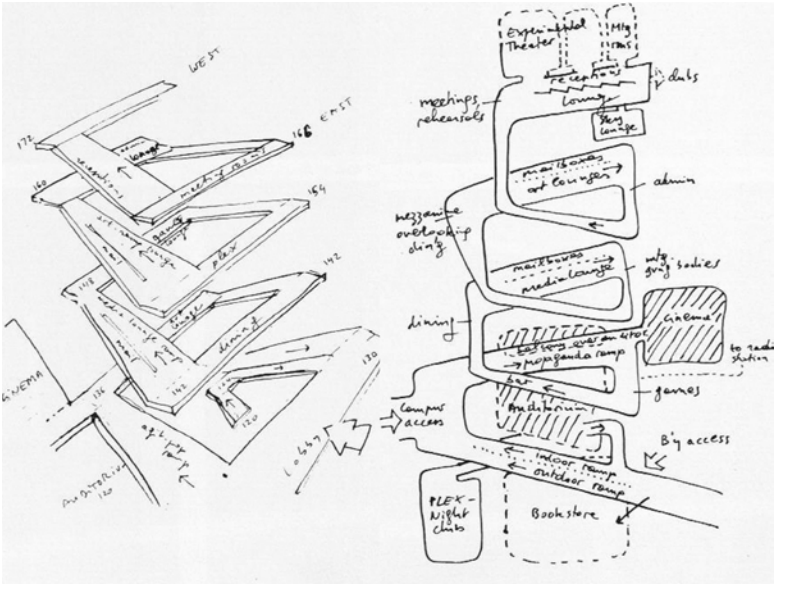
Now that the public sphere of urban conditions is under threat worldwide due to the Covid-19 virus outbreak in early-2020, it is even clearer that the reinvention of the ways in which the city is lived in needs to be part of the scope of architects. Within such a context, the theoretical perspective developed by Bernard Tschumi during the 1970s through his writing, teaching and design practice, is useful in reflecting upon what is happening in our cities today, nearly fifty years later. Within the current conditions caused by the pandemic, citizens are being called upon to reimagine how they experience threshold spaces like the balcony, on the one hand, and public space generally on the other. The ideas presented by Tschumi and Montès in "Do-It-Yourself-City" as to how people, ideas and objects might co-habit in the city to facilitate "urban success" and challenge "social seclusion" appear to be very timely[102].

In parallel, the reflections of Tschumi in "The Environmental Trigger" about "the adaptation of space to the existing social structures [and the role of planners as] translators of the formal structures of society [who intend to] … turn urban conflicts into new urban structures"[103] likewise seems highly relevant to the current debates around social inequalities in our cities. Tschumi's endeavor in that essay to draw attention to environmental issues is also useful in problematizing contemporary conditions. More specifically, his position in regard to the impact of environmental actions on the transformation of social structures can enrich current debates about the interchange between environmental and social issues: "If building or architecture, or planning … is never going to have any effect on the structure of society, revolutionary actions of environmental nature are part of a process that will"[104].

Despite this relevance of Tschumi's discourse from his early career to contemporary concerns, our understanding of his thinking during those years needs to be fully contextualized. To do so, it is useful to situate Tschumi's thought within a process of epistemological shifts that can relate it to his intention not only to oppose the Modernist tradition but also the debates about the appraisal of typologies that were in fashion during the 1970s. Tschumi, referring to his interest in epistemological shifts, used the expression "Architecture against itself"[105] to describe the process whereby new concepts emerged through ruptures. Tschumi's rejection of Modernist and Rationalist approaches became overtly evident in his description of his competition entry for the Parc de La Villette, noting that his aim was "neither to change styles while retaining a traditional content, nor to fit the proposed program into a conventional mould, whether neo-classical, neo-romantic or neo-modernist"[106]. On the contrary, he wanted to invent "new programmatic

developments … [and to] create a new model in which program form, and ideology all play integral roles"[107].

Figure 10.16. Bernard Tschumi, circulation diagrams for the Lerner Hall Student Center, Columbia University, New York.



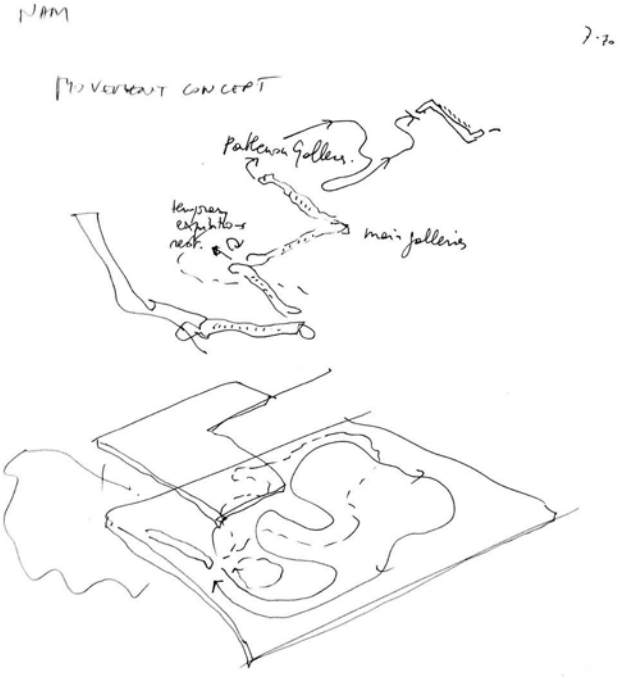
Credits: Courtesy of Bernard Tschumi Archives

Despite his disapproval of the rigidness of Modernism in the 1970s and early-80s, we can see in retrospect that Tschumi incorporated into his thinking some aspects of modernist architecture that were compatible with his wish to embrace unpredictability in the experience of space. In an article entitled "Through a Broken Lens", published in the framework of the *ANY* series, Tschumi defined program as "the repetition of activities located in spaces and intersected by movement"[108]. He stressed that "program-spaces belong to a single homogeneous and predictable space", whereas "the movement within them is generally heterogeneous and often unpredictable"[109]. Tschumi related the unpredictability of the movement within spaces to Gilles Deleuze's concep-

tion of movement-image – as explained in *Cinema 1: The Movement Image*[110] – and associated the distinction between homogeneous and heterogeneous movement within space to the distinction between "dialectical" and "organic" architecture, reminding us that, in the framework of his architectural education at ETH Zürich, where his mentor had been Bernhard Hoesli, "organic" architecture was typically linked to Frank Lloyd Wright's work whereas "dialectical" architecture was associated with Le Corbusier. Tschumi also remarked that the distinction between "organic" and "dialectical" architecture was not based upon any kind of value judgement, but referred to two divergent attitudes towards the process of making: "[t]he organic was about continuity, a so-called organic spatial continuum … [while] the dialectical was about opposition"[111].

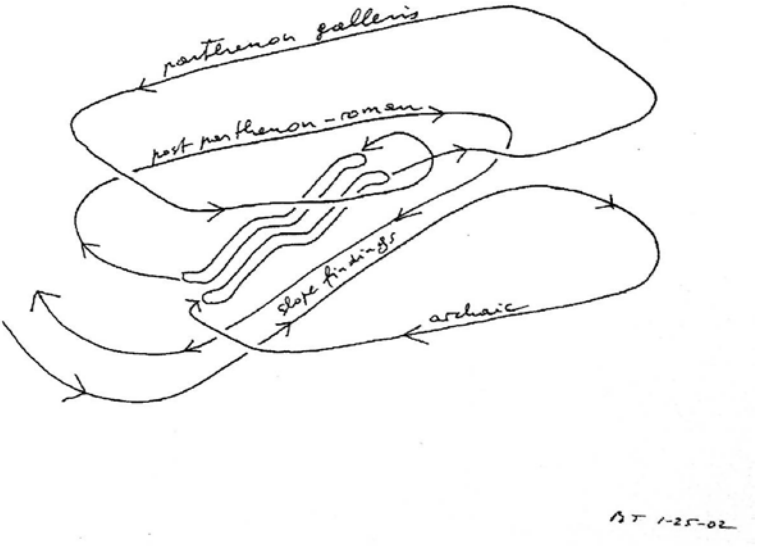
In contrast to "dialectical" architecture, which was judged mainly on formal criteria, Tschumi's own understanding of architecture came to be based on the potentialities that are activated whenever "two systems – a static spatial structure and a dynamic movement vectorization (ramps, stairs, catwalks, etc.) – … intersect and make an event out of their planned or chance encounter"[112]. This design approach is evident in many of Tschumi's projects, which are based on the idea that "programmed activities, when strategically located, can change an unprogrammed space (the in-between)"[113]. In his more recent designs, Tschumi's interest in architecture's bodily experience and in the continuity that characterizes "organic' architecture, as described above, is expressed in the numerous free-hand circulation diagrams he produces for schemes such as the Lerner Hall Student Center at Columbia University in New York (1994–99) (Figure 10.16) and the Acropolis Museum in Athens (2001–09) (Figure 10.17, Figure 10.18).

Figure 10.17. Bernard Tschumi, concept circulation diagrams for the Acropolis Museum in Athens, Greece.



Credits: Courtesy of Bernard Tschumi Archives

Figure 10.18. Bernard Tschumi, circulation diagram for the Acropolis Museum as drawn on 25 January 2002.



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Tschumi's disapproval of any typologically oriented architectural discourse in the 1970s was rooted in his belief that any interpretation of architecture that prioritizes historical processes over mental processes of formation of space gets trapped in a specific political *status quo*. This explains why he was so much in favor of instability and indeterminacy in design, and of the dynamic aspect of architecture generally. His thinking and practice aimed at reawakening the importance of the building's user, but in a new form based upon the idea that the disjunction between predetermined uses and those uses invented by the users was to be desired – and thus not something that must be controlled or avoided. Tschumi was especially interested in the dialectic between social praxis and spatial forms, raising the question as to whether such a dialectic is possible. He understood real space as the product of social praxis and ideal space as the product of mental processes, thereby asking whether language precedes our socio-economic conditions, or not. Another aspect of his theoretical position that is also thought-provoking in relation to current debates, was

his insistence on the fact that "[a]ny attempt to isolate a cultural attack from a political context is doomed to failure"[114]. In contrast to the majority of the environmentally oriented discourses then and now, Tschumi's aim was always to illuminate the interrelation between environmental consciousness and social change, both of which are urgently needed today.

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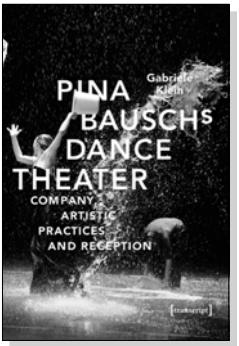

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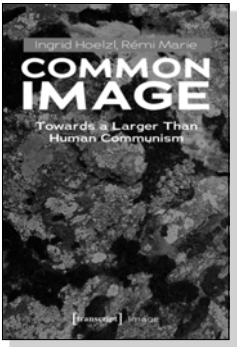

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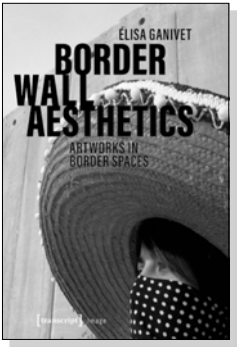

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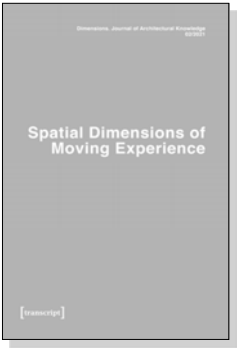

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