

## ARCHITECTURAL DRAWINGS AS INVESTIGATING DEVICES

Architecture's Changing Scope in the 20th Century



"Boldly, Charitonidou's new book Architectural Drawings as Investigating Devices attempts to theorize the creative process itself by investigating the way luminary architects such as Corbusier, Mies van der Rohe, Aldo Rossi, Peter Eisenman, John Hejduk, Oswald Mathias Ungers, Bernard Tschumi and Rem Koolhaas produce their designs in conversation with the times. She argues that architectural drawings should be understood as dispositifs that function as virtual meetings points of the ideas of the designers, the needs of the eventual users of the buildings, and the desires of the developers funding the projects. In this way, she shows that the virtual is already material and a necessary part of and not just a preliminary to the actual. It is a rich and powerful book that will stimulate debate and thinking in the field of architecture for years to come".

Ian Buchanan, Professor of Cultural Studies, University of Wollongong, Australia

"This book contributes to the contemporary transient and dynamic relationship between the work of architecture, the spectator, and the user. While the architect seemingly remains extraneous to the longevity and crisis of the triangle, Marianna Charitonidou's retrospective agenda charts four generations of architects' contributions to the core idea of drawing, be it representational or abstract and diagrammatical. In each chapter, *Architectural Drawings as an Investigating Devices* provides a valuable discussion of the impact of socio-cultural and technological as it concerns the representation and reception of architecture. A timely reading as architecture departs from its past invisible ties with the city for a self-referential commodity form deserted in the megalopolis".

Gevork Hartoonian, Em. Professor of the History of Architecture, University of Canberra, Australia

"This book is an important contribution to our understanding of architectural design. Exploring the complex interplay of visual representation and architectural discourse, Marianna Charitonidou offers excellent and inspiring insight of how, over the last hundred years, leading Western architects used sketches and drawings as research and design tools, but also for shaping the roles of users and observers, and for architecture pedagogy".

Christian Gänshirt, Visiting Professor, Department of Architecture and Urban Studies, Politecnico di Milano, Italy



## Architectural Drawings as Investigating Devices

Architectural Drawings as Investigating Devices explores how the changing modes of representation in architecture and urbanism relate to the transformation of how the addressees of architecture and urbanism are conceived.

This book diagnoses the dominant epistemological debates in architecture and urbanism during the 20th and 21st centuries. It traces their transformations, paying special attention to Le Corbusier and Ludwig Mies van der Rohe's preference for perspective representation, to the diagrams of Team 10 architects, to the critiques of functionalism, and the upgrade of the artefactual value of architectural drawings in Aldo Rossi, John Hejduk, Peter Eisenman and Oswald Mathias Ungers, and, finally, to the reinvention of architectural programme through the event in Bernard Tschumi and the Office for Metropolitan Architecture (OMA). Particular emphasis is placed on the spirit of truth and clarity in modernist architecture, the relationship between the individual and the community in post-war era architecture, the decodification of design process as syntactic analogy and the paradigm of autonomy in the 1970s and 1980s architecture, the concern about the dynamic character of urban conditions and the potentialities hidden in architectural programme in the post-autonomy era.

This book is based on extensive archival research in Canada, the USA and Europe, and will be of interest to architects, artists, researchers and students in architecture, architectural history, theory, cultural theory, philosophy and aesthetics.

Dr. Ing. Marianna Charitonidou is Senior Lecturer in Architecture, Architect Engineer, Historian and Theorist of Architecture and Urbanism, Spatial Planner, Expert in Sustainable Environmental Design and Spatial and Environmental Justice, Urban Sociologist, and Curator. She is the Principal Investogator of the project Constantinos A. Doxiadis and Adriano Olivetti's Post-war Reconstruction Agendas in Greece and in Italy: Centralising and Decentralising Political Apparatus at the Department of Art Theory and History of Athens School of Fine Arts, and teaches architectural design studio, and history and theory of architecture, aesthetics, methods in architectural and urban research, urban sociology and urban design. She is Founder and Principal of Think Through Design Architectural, Urban and Landscape Design Studio.

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She curated the exhibition *The View from the Car: Autopia as a New Perceptual Regime* (ETH Zurich, 2021), has authored more than 90 peerreviewed scientific publications, and has presented her research at more than 100 international conferences. She has taught architecture, urban studies, landscape design, and history and theory of architecture at ETH Zurich, the National Technical University of Athens, the École Nationale Supérieure d'Architecture Paris Malaquais, the École Nationale Supérieure d'Architecture Paris La Villette, the École Nationale Supérieure d'Architecture de Versailles, and the University of Ioannina. She holds a PhD in Architectural Engineering (National Technical University of Athens), an MPhil Degree in Architecture and Urbanism (National Technical University of Athens), an MSc Degree in Sustainable Environmental Design (Architectural Association, London), and a Master Degree in Architectural Engineering (Aristotle University of Thessaloniki).



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## Architectural Drawings as Investigating Devices Architecture's Changing Scope in the 20th Century

Marianna Charitonidou



First published 2023 by Routledge 4 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN and by Routledge 605 Third Avenue, New York, NY 10158

Routledge is an imprint of the Taylor & Francis Group, an informa business

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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)

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British Library Cataloguing-in-Publication Data A catalogue record for this book is available from the British Library

ISBN: 978-1-032-43110-9 (hbk) ISBN: 978-1-032-44418-5 (pbk) ISBN: 978-1-003-37208-0 (ebk)

DOI: 10.4324/9781003372080

Typeset in Sabon by codeMantra



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## 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 thankful to the supervisor of my Ph.D. Dissertation George Parmenidis and to the advisors of my Ph.D. Dissertation Jean-Louis Cohen and Panavotis 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 the Faculty of Art Theory and History of Athens School of Fine arts, Tom Avermaete for mentoring me during my postdoctoral project entitled The Travelling Architect's Eye: Photography and the Automobile Vision at the Department of Architecture of ETH Zurich, Fredi Fischli and Niels Olsen for our great collaboration during the preparation of the exhibition The View from the Car: Autopia as a New Perceptual Regime that I curated at the Department of Architecture of ETH Zurich in 2021 and George Parmenidis for mentoring me during my postdoctoral project entitled The Fictional Addressee of Architecture as a Device for Exploring Post-colonial Culture: The Transformations of the Helleno-centric Approaches. I am also particularly grateful to Soraya Smithson and Simon Smithson for offering me the opportunity to discuss with them about the work of Alison and Peter Smithson.

I am extremely grateful to my supervisor Georgios Parmenidis. He has been always very supportive, trusted me and encouraged me throughout all the process. His intelligent comments enriched my work and synthesised the questions that are at the core of the present study. Our frequent conversations throughout the trajectory of the research on which this book is based played a defining role for the methodological strategy I have followed. His observations motivated me and always invited me to shed light on the interrelations between design and theory. Our discussions concerning the epistemological questions that this book examines kept alive the sense that praxis and theory interactions are essential for understanding what is at stake in the notational strategies employed by the architects I examine in this book.

I am very indebted to my advisor Jean-Louis Cohen. Since our first discussion on my Ph.D. Dissertation in 2014, I had the great opportunity to exchange with him on my research on a very regular basis. His insightful remarks during the archival research and the writing process were pivotal for this book. I am really grateful to him for sharing so generously with me his passion about architecture and its history. His seminars at the Collège de France were a great inspiration for me. I had the chance to follow his seminars the last five years on "Architecture and Politics in 20th-Century France" (2013–2014), "Russia's Americanism: Architecture, Industrial Design, Urban Planning" (2014–2015), "Architecture in Vichy France, 1940– 1944" (2015-2016), "Frank Gehry's itineraries: Architecture Between Art and the City" (2016-2017) and "Architecture as a Vehicle for Politics" (2017-2018). He also encouraged me to travel and arrange meetings with many scholars and professors on the opposite side of the Atlantic, an experience of great significance for my research, given its concern about the transatlantic exchanges, and was very supportive during my three stays in New York. He invited me to his seminars at the Institute of Fine Arts in New York University ("Frank Gehry's Architecture, from Los Angeles to the World, and Back") and at Princeton University School of Architecture. In parallel, I am grateful to him for having trusted me to write an essay entitled "L'AUA entre le Team 10 et le postmodernisme" as part of the catalogue of the exhibition "Une architecture de l'engagement: l'AUA 1960-1985" that Jean-Louis Cohen co-curated with Vanessa Grossman at the Cité de l'Architecture et du Patrimoine in Paris (Editions La Découverte et Cité de l'architecture & du patrimoine, 2015).

I am very indebted to Bernard Tschumi for the several stimulating conversations we had during my work on this book and on my Ph.D. Dissertation. I am also very grateful to him for having invited me to conduct archival research as Visiting Research Scholar at Columbia University's Graduate School of Architecture, Preservation and Planning. During my stay in New York, he invited me to his New York office and showed me how he works. His support during my stay in New York was defining for this Ph.D. Dissertation and gave me the opportunity to conduct research, essential for the present study, Avery Drawings and Archives Collection, part of Columbia University's Library. His guidance to conduct researches related in the archival material concerning the Centennial of the Graduate School of Architecture, Planning and Preservation was fundamental for my work.

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I am also grateful to Mary McLeod for having sponsored me in 2014 providing me access to the Avery Architectural and Fine Arts Library. I would also like to thank Arnaud Dercelles, who was very helpful and supportive during my researches at the Fondation Le Corbusier in Paris.

I am also extremely grateful to Pippo Ciorra for having accepted to be a reader and examiner of my Ph.D. thesis when I contacted him in early spring 2018. During my research as fellow at the École française de Rome, he invited me to the School of Architecture of Ascoli Piceno, University of Camerino, where he is Professor, to present my doctoral research project and he introduced me to a group of his students and collaborators that work on projects that have many affinities with mine. This opportunity was great and contributed to my enthusiasm to work hardly to complete the present study. In parallel, I had the chance to have various stimulating exchanges on my Ph.D. thesis with Pippo Ciorra during my stay and he invited me to an ensemble of events, conferences and exhibition openings, which are very close to my research interests. I could mention, for instance, the conference "L'architettura come confluenza di diverse discipline" by Umberto Napolitano (LAN), the event "Architettura. Sostanza di cose sperate. Scritti in onore di Franco Purini" and the opening of the exhibition "Gli Architetti di Zevi. Storia e controstoria dell'architettura italiana 1944-2000" ("Bruno Zevi's architects. History and counterhistory of Italian architecture 1944-2000"), which he co curated with Jean-Louis Cohen, all of them held at the Museo nazionale delle arti del XXI secolo (MAXXI), where Pippo Ciorra is Senior Curator. I would like to thank him for being so positive and helpful.

I am very indebted to Philippe Roger, who, during his seminars at the École des Hautes Études en Sciences Sociales (EHESS) in Paris, which I attended with great interest and enthusiasm during two years, transmitted me his passion for teaching and research. The various discussions we had during these years were very important for my trajectory and would love to thank him for sharing his very intelligent thoughts with me. I would also like to thank him for inviting me to several scientific events - many of them on the work of Roland Barthes and Émile Benveniste – and for discussing with me many interesting aspects treated in the journal Critique, which he directs. I admire his enthusiasm and intelligence. I would also like to thank Maristella Casciato for welcoming me at the Getty Research Institute in Los Angeles, where I conducted archival research in the Special Collections (Aldo Rossi papers, Revner Banham papers, Philip Johnson papers, Ada Louise Huxtable, among others). I am extremely indebted to my great friend Danielle Rago for making Los Angeles even more of a home to me. I am thankful to Diana Agrest and Mario Gandelsonas for devoting me time to discuss about their experience at the Institute for Architecture and Urban Studies. I am very grateful to Ariela Katz and Soline Nivet for inviting me to contribute to their seminar "Les conditions contemporaines du projet: représentations, narrations... fictions" at the École Nationale de Paris-Malaguais and for exchanging with on the methodology of my doctoral research.

I would also like to thank the Hellenic Foundation for Research and Innovation (H.F.R.I.), Columbia University, the Getty Research Institute (GRI), the Canadian Centre for Architecture (CCA), the Académie Française, the Cité Universitaire Internationale de Paris, the École française de Rome, the State Scholarships Foundation (IKY), Leventis Foundation, Stavros Niarchos Foundation and ETH Zürich Foundation for having supported my research projects.

Parts of the research on which this book is based were presented at international conferences. Among them I could refer to the following papers: "The Reconceptualization of the City's Ugliness between the 1950s and 1970s: The Exchanges between the British, Italian, and Australian Milieus" (38th Conference of the Society of Architectural Historians Australia and New Zealand (SAHANZ) "Ultra: Positions and Polarities Beyond Crisis", 10-13 November 2021), "Bernard Tschumi's Parc de La Villette as Reinvention of the Concept of Territory: 'Follies' as a Dispersed and Differentiated Reality" (13th Deleuze & Guattari Studies International Conference "Territorialities, Exterritorialities, Non-Territorialities", Faculty of Arts of Charles University, Prague, 7 July 2021), "From the Athens Charter to the Human Association: Challenging the Assumptions of the Charter of Habitat" (International Conference "Mapping the Spaces of Modernist Cities within the Context of CIAM's Athens Charter", ZRC SAZU, France Stele Institute of Art History, Nova Gorica, 26–28 August 2020), "Bernard Tschumi's Manhattan Transcripts as an exploration of unlikely confrontations: spatial praxis as a dispositif agencing spaces and events" (International Conference "DARE 2019: Machinic Assemblages of Desire. Third International Conference on Deleuze and Artistic Research", Orpheus Institute, Ghent, 9-11 December 2019), "Bauhäusler in Chicago: László Moholy-Nagy, Mies van der Rohe and the 'Re-invention' of Teaching Models" (International Conference "Initiations: Practices of Teaching First Year Design in Architecture", Department of Architecture, University of Cyprus, Cyprus, 23–25 October 2019), "Mies's Representations as Zeitwille: Großstadt between Impersonality and Autonomous Individual" (International Conference "Mies van der Rohe. The Architecture of the City", Politecnico di Milano, Milan, 18-19 October 2019), "OMA's Parc de La Villette and Perpetual Transcoding: The Diagram as Osmosis between Program and Territory" (12th Annual Deleuze & Guattari Studies conference "From Sense to Machinic Becoming", Royal Holloway, University of London, 10 July 2019), "An Action towards Humanization: Doorn Manifesto in a Transnational Perspective" (International Conference "Revisiting the Post-CIAM Generation: Debates, Proposals and Intellectual Framework", Escola Superior Artística do Porto (ESAP), Porto, 11-13 April 2019), "Suburbanization and Ugliness: The Aesthetic Appropriation of the Postwar Urban Reality in the Work of Aldo Rossi, Bruno Zevi and Ludovico Quaroni" (4th edition of the Lessons of Rome, Musée des Beaux-Arts de Lyon, 22 March 2019), "Aldo van Eyck's Critiques Against

Postmodernism as a Humanist Device: between the Notion of 'Configurative Discipline' and 'the Irritant Principle of Renewal'", annual conference of the Jaap Bakema Study Centre "The Irritant Principle of Renewal: 100 Years of Aldo & Hannie van Eyck", TU Delft, 28 November 2018), "Paperless Studios and the Articulation between the Analogue and the Digital: Geometry as Transformation of Architecture's Ontology", International Symposium "Scaffolds: Open Encounters with Society, Art and Architecture" organised by EPFL, 22-23 November 2018), "Aldo Rossi's transatlantic cross-fertilization: American 'urban facts' and reinvention of design methods" (International Conference "Aldo Rossu, Perspectives from the World", Politecnico di Milano, AUIC School, Milan, 11-13 June 2018), "A Microhistorical Genealogy of Aldo Rossi's Transatlantic Connections: transplantation and architectural pedagogues and historians" (international conference "Theory's History, 196X-199X Challenges in the historiography of architectural knowledge", KU Leuven, Brussels, 9 February 2017).

Special thanks go to the Fondation Le Corbusier in Paris, the Architectural Association Archives, the Smithson Family Collection, 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 and 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 of the Museum of Modern Art (MoMA) in New York City, the Het Nieuwe Instituut in Rotterdam, the Architectural Archives of the University of Pennsylvania in Philadelphia, the Ungers Archiv für Architekturwissenschaft (UAA) in Cologne, the Collezioni MAXXI Architettura at the Museo nazionale delle arti del XXI secolo in Rome, the Constantinos and Emma Doxiadis Foundation in Athens and the Drawing Matter Collections at Shatwell Farm in Somerset for offering me the opportunity to conduct extensive archival research in their archival resources and for authorising me to use the images included in this book. I am also very grateful to the Design History Society and two the two Trustees who reviewed anonymously my application for awarding me a Research Publication Grant. Special thanks go to the reviewers that reviewed anonymously my book manuscript for providing me with inspiring reflections regarding the theme of the book, and to Caroline Church and the Editorial Board of Routledge Research in Architecture book Series who supported me throughout the process of preparation of this book. I would also like to thank Gevork Hartoonian, Ian Buchanan and Christian Gänshirt for writing the short statements that appear in the back cover of the book. I am also particularly grateful to my family and loved ones for their support and their faith in my reflections and work.



## **Abbreviations**

AA Architectural Association

APAO Associazione per l'architettura organica CCA Canadian Centre for Architecture

CIAM Congrès International d'Architecture Moderne ETH Zurich Eidgenössische Technische Hochschule Zurich

FLC Fondation Le Corbusier

GSAPP Graduate School of Architecture, Planning and

Preservation

IAUS Institute for Architecture and Urban Studies

ICA Institute for Contemporary Art INA Istituto Nazionale Abitazioni INU Istituto Nazionale di Urbanistica

ISES Istituto per lo Sviluppo dell'Edilizia Sociale
IUAV Istituto Universitario di Architettura di Venezia
MAXXI Museo nazionale delle arti del XXI secolo
MIT Massachusetts Institute of Technology

MoMA Museum of Modern Art

OMA Office for Metropolitan Architecture

RCA Royal College of Art

UAA Ungers Archiv für Architekturwissenschaft

UNRRA United Nations Relief and Rehabilitation Administration



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## **Foreword**

### Gevork Hartoonian

Several photographs from the last century closely show Le Corbusier or Mies van der Rohe, among other architects, inspecting a project's model or staring at their drawings. What are architects looking for when checking the final scaled model of a project? That the proportions are correct; the composition matches the image or the diagram they had in mind at the start of the project. Or are they trying to understand what the observers, the absentee, would see and get away from after the completion of the building? Surprisingly, it has been a routine practice for detective officers, at least in Hollywood movies, to pin up photographic images of suspects on the wall, searching for clues to make the proper connection between an image and the crime narrative. Since the inception of film and photography and the importance given to images, not only the user's (client?) perception or, for that matter, misperception of their needs is presumably resolved in the planimetric organisation of the project, which, interestingly enough, remains invisible as long as the building operates appropriately. These queries, and many others, are at the heart of Marianna Charitonidou's ambitious project discussed in each chapter of this book. It highlights the gaps in reconciling spectators, "users", and architecture across four generations of architects, delineating the presumed divide between early modern and postwar architecture. This book is a timely read since Walter Benjamin's critical reflections on architecture's "touristic" appropriation of most buildings conceived and erected today in metropolitan cities worldwide.

Without calling it out, the author seemingly had considered the historiographic importance Kenneth Frampton has given to the work of the late Mies and Le Corbusier to bridge the generational gap under the auspices of monumentalisation. Charitonidou indexes the same gap as post-war architects tried to formulate different design strategies to accommodate the conflict of interest between the spectator and the work, which in the present full-fledge dissemination of the spectacle of commodity fetishism, is almost reduced to zero-degree importance. The reader, however, is reminded of the short passage when the advocates of the "participatory design" on both sides of the Atlantic attempted to charge architecture with meaning as the intellectual spectrum shifted from phenomenology to structuralism and

post-structuralism. Peter Eisenman's diagramatisation of the representational drawings of his early design work is the best barometer for checking the architectonic implications of these theoretical transformations. The complexity involved in understanding the diagram's evolution – what, for Charitonidou, delineates the passage from autonomy to post-autonomy—and its further complications in the work of Rem Koolhaas and Bernard Tschumi shattered the short-lived postmodernist simulation of historical quotations, let alone the advocacy for learning from the commercial strips of Las Vegas, not to mention Christopher Alexander's Pattern Language. The implied negativity is not an individual choice but belies "the crisis of the object" starting when capitalism usurped the historicity of the project of modernity circa the late 1930s. Dialectically, the continuity of crisis has been contingent on the internal contradiction of capitalism and the separation of architecture from its context, the city itself, a reason for the emergence of subsequent tendencies for autonomy.

Recalling Robin Evan's suggestion that episodic investigation is not fruitful unless it "intimate[s] something other than their unique occurrence", the book assemblages the complex rapport between representational drawings, the spectator, and the users or, for better or worse, the occupier of architectural space. One of the author's contributions is to highlight the heterogeneity informing each of these agencies by which one might be able to contextualise the work of architects mentioned earlier. Contrary to the early historiographies of architecture, the author underlines the delay involved in the architect's theorisation of their work and the structural changes solidifying the three agencies'- the work, the user and the observer- rapport with the work. Central to this proposition is the role representational drawings play in Mies's and Le Corbusier's persuasion of what Charitonidou discusses in terms of the tension between "universality and individuality". Under the presumed temporal homogeneity of the early modernist take on the Zeitgeist, the architect was positioned in the vanishing point of the humanist perspectival view to sustain a balance between the heavenly and the earthly, if not between the "assumed existence of a 'universal user' and what Revner Banham called 'a normal man'", seemingly in analogy to Le Corbusier's modular. Even if this one-dimensionality offers a plausible criticism of his early work, it is reductive to dismiss Mies's photomontages that had roots in the work of Berlin Dadaist artists, such as Hannah Hoch, even though both these architects attempted to present architecture worthy of the project of modernity as a totality.

The destructive consequences of the war did shatter any vision of "normality" except the drive for mass consumption and the legitimisation of American popular consumer culture. The reader is reminded of the encounter between "consumerism and citizenship" that expanded the scope of identity issues to include several architectural tendencies, including British Brutalism, Italian Neorealism and New Humanism. The 1960s also witnessed the end of the utopic urban projects and the emergence of capitalistic

investment and planning of the city that, in return, offered an opportunity for architects to reiterate their authority through diverse theorisation of the concept of autonomy as the author turns her attention to the work and drawings of Aldo Rossi, Peter Eisenman and Oswald Mathias. Benefitting from the theoretical turn from structuralism to post-structuralism, these architects' drawings, particularly Eisenman's axonometric drawings, conjugated the observer's digestion of his early houses with the philosophical concept at the expense of dismissing the everyday needs of the users. We are then guided to a "post-autonomy" take on diagram drawings focusing on Rem Koolhaas and Bernard Tschumi's competition entries for the Parc de La Villette. In addition to these two architects' affiliation with the work of Russian Constructivism and an interest in the filmic technique of montage (Tschumi) and script (Koolhaas), the competition offered a remedy for the architect's lost opportunity to engage with the city through a limited extent. Charitonidou underlines the potentialities of the "interconnection of territorial and programmatic indeterminacy" as a design strategy to engage with the city. We are reminded of Tschumi's The Manhattan Transcripts, furnished with filmic montage as an analytical notation to juxtapose fragments from the "world of movement, the world of objects and the world of events".

Tschumi's choice of filmic montage against the traditional notational system informed by the perspectival regime, including the early and late avant-garde axonometric drawings, expanded the drawing purpose to include the centrality of the *event* to comprehend the very fragmentary experience of contemporary everyday life. Le Corbusier and Mies also appropriated this strategy, each differently, however. The author introduces Le Corbusier's concept of "patient search", by which the architect attempted to narrow the gap between a dusky mental image and the to-be architecture. Nothing short of this transformative process, from in-itself to for-itself, is suggested in Le Corbusier's page-long letter to Madam Meyer (1925) that combines a freehand axonometric view of the proposed house with explanatory filmic-looking visual cuts along with annotations. The idea to inform a third person, be it the client or the spectator, is also provoked in Mie's photomontages to the point that "the observer had become an element of the spatial construction of the building itself".

In the light of post-war capitalistic intervention in the city and the failure of the historical project of the avant-garde, the use and abuse of drawing attained a new momentum. The issue of turning architecture into a single object of phenomenological contemplation or otherwise, along with the colourful postmodernist images of simulated classical elements, gave way to the notion of history with an eye on the city as history. Aldo Rossi, for one, not only radicalised the idea of autonomy but also, writes Charitonidou, offered a design strategy that "was based on an understanding of the act of drawing as a means of transforming architectural and urban artifacts into objects of affection". The Italian Marxian sympathy for "collective

memory" that informed the early work of Rossi was more promising than the populist inclusiveness underpinning the work of Giancarlo De Carlo and Robert Venturi, and Denise Scott Brown, especially the latter's aspiration for learning from American mainstream architectural culture.

What should we make out of Charitonidou's exhaustive journey into the discursive formations of diverse architects listed in the contents of this book? The author has equally done comprehensive work to probe the suggested contingencies around the core idea of drawings, be it representational or conceptual. Along this path, the author guides us in the architect's mental life, at times with constructive philosophical observations and at other times with broad contextualisation of an architect's praxis. This book is an essential read toward a comprehensive exploration of the role of drawings as both a means of communication between the architect and the client and a poetic state of collectivity, a much-needed subject of attention at the present predicament of architecture under the auspices of digital reproducibility.

Apropos, not only has the drawing position changed, but in the technification of the design process and contrary to the filmic and photographic closeup, the image recedes from the viewer furthering the distance between the spectator – be it the architect or the user – once needed to comprehend and critique the work. In doing so, the spectacular image of the object jots towards the spectator as another emblem of the world of the commodity form that has saturated today's everyday life. Among many other issues, one consequence of the surface-oriented digital spectacle is the dismissal of detail. Even in late modern architecture, detail was treated as a closeup image, an enlargement of miniature drawings with a particular focus on the interconnectivity between different materials, labour and technique in anticipation of the expected tactile and aesthetics of the finished work. Not only Mies suggested that "God is in detail", but it is also part of Walter Benjamin's reflective judgement that "Just as the bloody fingerprint of a murderer on the page of a book says more than the text". Accordingly, a detail, either in drawing or model form, has the potential to close the gap between the architect's mental image of the work and the spectator's expectation. The dilemma this book leaves the reader in is how to welcome the technically motivated dismissal of the ideals of the architect's autonomy and yet hold on to the architecture's conspicuous rapport with fragmented tactile and tectonics deposited in the historicity of the culture of building.

#### Notes

- 1 Gevork Hartoonian, "The Drawing Position," *Architectural Review*, 14(3) (2009): 248-259.
- 2 See Esther Lesley's reflections on Henri Bergson in "Telescoping the Microscopic Object: Benjamin the Collector," in Alex Cole, ed., *The Optic of Walter Benjamin* (London: Black Dog Publishing Limited, 1999), 58–94.
- 3 Walter Benjamin, "The Author as a Producer," in Peter Demetz, ed., Reflections (New York: Harcourt Brace Jovanovich, Inc., 1978), 229.

## 1 Introduction

The point of departure in this book is the hypothesis that modes of representation can serve as tools in order to diagnose how the concept of observer and the concept of user in architecture have been transformed throughout time. The research methodology of the book is based on a parallel interpretation of architects' writings, drawings and pedagogical strategies and their connections. These three terrains of study are considered as the main areas of research of the book. Special attention is paid to showing how different architects responded to similar tensions. This strategy, instead of homogenising different architects' approaches, interpreting their design approaches as expressions of Zeitgeist-inspired generational tendencies, aims to show how architectural history research could overcome polarisations between internalist and externalist methods<sup>1</sup>. The term internalist methods refers to the approaches that tend to interpret architectural artefacts, either drawings or buildings, relying exclusively on formal evidence, while externalist methods refer to the perspectives that understand architectural artefacts as outcomes or reflections of forces that dominate architecture, excluding from architectural expression every force related to its own means of production and dissemination.

To the present, there are no comprehensive studies that manage to relate the transformations of the modes of representation to the mutations of the dominant, at different historical times, conceptions of the user and the observer. Despite the fact that there are some studies that aim to examine the implications of the use of certain modes of representation, focusing on various case studies, such as Alberto Pérez Gómez and Louise Pelletier's Architectural Representation and the Perspective Hinge published in 1997,<sup>2</sup> the volume Perspective, Projections and Design: Technologies of Architectural Representation that Mario Carpo and Frédérique Lemerle edited in 2007,<sup>3</sup> Robin Evans's book entitled The Projective Cast: Architecture and Its Three Geometries, published in 1995,<sup>4</sup> and Stan Allen's Practice: Architecture, Technique and Representation,<sup>5</sup> there are no exhaustive studies that relate the metamorphosis of the modes of representation to the dominant ways of understanding the concept of the user and the concept of the observer corresponding to different generations. Despite their concern about specific

DOI: 10.4324/9781003372080-1

#### 2 Introduction

questions regarding architectural representation, the existing studies on this topic do not manage to relate the evolution of the modes of representation to the epistemological mutations. In parallel, they do not inscribe, in a systematic way, the prioritisation of certain modes of representations in a general network of debates and tensions that characterise different generations.

Robin Evans notes in his introduction to 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". 6 This remark might be considered as a realisation of the significance of situating the episodes analysed in larger contexts. Reading Evans's observation, it becomes evident that he intended to overcome the incidental nature of the case studies that he examines in The Projective Cast: Architecture and Its Three Geometries and to inscribe them in a narration of historical mutations. His study, despite its remarkable depth and subtlety, did not organise in a systematic way the connection of the episodes to a larger context of evolution of the epistemological debates of architecture. In his introduction of his book, Evans also notes that "[t]he history of architectural projection is just beginning to be investigated". Five years later, Stan Allen's Practice: Architecture, Technique and Representation was published. The latter was organised in three parts that focused on drawings, buildings and media respectively. Despite its intellectual interest, this book did not aspire to establish a diachronic sequence of the transformation of the privileged modes of representation at each historical era. Two books that has certain affinities with my book is Tom Porter's book entitled The Architect's Eye<sup>8</sup> and Why Architects Draw.<sup>9</sup>

The lacuna that this book wishes to cover is the lack of systematic studies in the domain of architecture concerning the transformation of the modes of representation that are privileged at each historical era and the examination of the connections of this transformation with the dominant epistemological questions corresponding to different historical periods. Despite the fact that I focus on specific architects, my aspiration is to treat them in a way that renders comprehensible how their work and the strategies they elaborate in order to fabricate their drawings and teach are inscribed in the epistemological questions that dominated the generations on which the research on which this book is based is focused. The book also aspires to go beyond an interpretation of diachronic transformations as expressions of Zeitgeist-inspired generational tendencies. One could, thus, claim that the innovativeness of the book and the significance of its contribution to the existing scholarship lies in the effort to show how an analysis of the reorientations concerning the modes of representation can permit us to overcome the split between internalist and externalist methods. Moreover, it can offer us the opportunity to establish a strategy of interpretation that does not take for granted conventional taxonomies.

To avoid an *a posteriori* analysis of the creative processes of architectural projects, and to enlighten the very processes through which the projects are

carried out, the book aims to unfold the tensions and contradictions between the theorisation of these processes by their architects-conceivers and what I discern as intentions behind the projects. In some cases, as in the case of *The Manhattan Transcripts* by Bernard Tschumi, the theorisation of his projects by himself does not come *a posteriori*, but it takes place during the creative process and is a constitutive part of his design strategies. In other words, in the case of *The Manhattan Transcripts*, the experimentation with the notational devices is part of Tschumi's theoretical project. At the core of the book is the idea that the process of creation and the process of interpretation do not constitute separate steps. The book examines how these two processes interact during the architect's compositional practice.

What the book proposes is that, in the field of architecture, the act of creation and ideology interact. It is for this very reason that it is interesting to demonstrate how the design of an architectural project, its inhabitation, and the interpretation of architectural composition constitute three cases that should not be understood in isolation given that they interact in ways that should not be reduced to a cause-and-effect relationship. The book argues that through the process of contextualising the drawings within a corpus of projects of the same architect or other architects can help us understand how the architects give sense to their act of architectural composition.

The specificity of architectural drawings in comparison with any other kind of drawings is also taken into account. In each architectural representation, because of the fact that the conception of form in architecture addresses to a use, the construction of a conception of user takes necessarily place. In parallel, when the observers of architectural drawings interpret them, they construct in their mind a translation of architectural drawings into space. The architectural drawings' main purpose is to activate the way the observers relate, in their mind, the drawings to effects of real spaces. The point of departure of this study is the observation that the conception of this translation changes throughout time. Architects, through the construction of their drawings, address to the observers of their drawings and to the users of the architectural artefacts that their practice aims to produce. The main objective of the book is to show how the dominance of the first or the second actor, that is to say the observer or the user, changes when we pass from one generation to the following. In other words, this book aims to show which parameter of the observer/user relationship becomes more central in architectural epistemology in each generation and to explain the reasons of the prioritisation of the one parameter over the other.

The term "architecture's addressee" is used in the book because it embraces the different status of subjects that interpret architectural drawings and artefacts. <sup>11</sup> In parallel, different terms were chosen to describe the addressee of architecture concerning the successive generations that are examined, because I intended to insist on the transitions regarding the status of the subjectivity of the addressee of architecture from generation to generation. For the generation of the modernists, what counts most is

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the individual and bourgeois character of architecture's addressee. For this reason. I chose to use the term "individual" when I refer to the addressee of architecture that concerns the generation corresponding to the modernist era. Despite the dominance of the bourgeois subject in modernist architecture, there are certain cases that are related to the construction of an antibourgeois subjectivity, such as the case of Hannes Meyer's Co-Op Zimmer (1926). 12 The idea of functionality was not so central in the modernist era, despite the existence of certain episodes that are related to "Taylorist analyses of bodily movement", 13 such as Margarete Schütte-Lihotzky's Frankfurt kitchen (1926). In this case, the kitchen functioned as the engine for the re-interpretation of the status of the housewife. The debate on existenzminimum, which took place in the framework of the 1929 Congrès International d'Architecture Moderne (CIAM), which was devoted to housing, is also important for understanding the status of the modernist user par excellence. The 1929 CIAM was focused on Frankfurt's ambitious housing programme and on international attempts to define the minimum habitable dwelling. 14 Michael K. Hays, in Modernism and the Posthumanist Subject: The Architecture of Hannes Meyer and Ludwig Hilberseimer, aimed to overcome "Giedion's notion that modern architectural objects provide visual symbols for the integral psychological self" and

to point to certain modern architectural that put into crisis the cognitive status of autonomous vision and the centered self for which that vision is a metaphor, and redirect our attention to those extrinsic processes that lie beyond individual aesthetic mastery.<sup>15</sup>

During the post-war era, the interest in the concepts of the user and standardisation of architecture was intensified. This was accompanied by a concern about the mass subject. The emergence of models as Ernst Neufert's *Architects' Data (Bauentwurfslehre)* (1936) played an important role for the reinforcement of the concerns about the concept of the user. <sup>16</sup> The shift from an understanding of architecture's addressee as individual towards its understanding as user occurred progressively. We could refer to the emergence of Neufert as a first sign of such a reorientation, but the most significant mutations occur after WWII and were related to the ambiguity between citizenship and consumerism, which is connoted when we use the term "user". For the aforementioned reasons, I employ the term "user" to refer to the addressee of architecture that concerns the generation of the post-war era. The term user is situated between the individual and the subject.

Regarding the 1970s and the era during which autonomy in architecture was at the core of the epistemological interest, what was at stake was a shift from an understanding of architecture's addressee as user towards a conception of architecture's addressee as subject 17. Comprehending architecture's addressee as subject instead and not as user implies that the meaning or signification of architecture cannot but be co-constructed by the architect

and the addressee. In other words, the term subject goes hand in hand with the complementarity between object and subject, as well as the complementarity between the architect and the addressee within the framework of the process of establishing meaning in architecture. In the case of the work of Peter Eisenman, for instance, the interpretation of architecture depends on the de-codification of architecture by its addressee. Finally, at the core of the work of Bernard Tschumi and the Office for Metropolitan Architecture (OMA) is the "multiple subject". <sup>18</sup>

#### Definitions and terminology

A dilemma to which I tried to respond is that of employing either the term "user" or the term "inhabitant". The Petit Robert dictionary defines the user – "usager" – as a "person who uses (a public service, the public domain)" and situates its emergence in the 1930s. According to Daniel Pinson, the term "use" appeared in the late 1960s in conjunction with the critique of the notion of "function" and of the reduction of architectural function to its technical performance. Alvar Aalto, in his essay entitled "The Humanizing of Architecture", written in 1940, argues that "[t]echnical functionalism is correct only if enlarged to cover even the psychological field. That is the only way to humanise architecture". Adrian Forty notes regarding the concept of "user":

the category of the "user" was a particular device by which modern societies, having deprived their members of the lived experience of space (by turning it into a mental abstraction) achieved the further irony of making the inhabitants of that space unable even to recognize themselves within it, by turning them into abstractions too. <sup>22</sup>

Insightful researches regarding the concept of the user are: Kenny Cupers's Concerning the User: The Experiment of Modern Urbanism in Postwar France 1955-1975, 23 the volume edited by the same author under the title Use Matters: An Alternative History of Architecture, 24 Jonathan Hill's Actions of Architecture: Architects and Creative Users, and especially its first section entitled "The Role of the User", 25 and Stephen Grabow's and Kent Spreckelmeyer's The Architecture of Use: Aesthetics and Function in Architectural Design.<sup>26</sup> For Paul Emmons and Andreea Mihalache, "[u]nlike the user with the absence of character, an inhabitant builds an edif ying habitus that is the cultural dressing of life's events". <sup>27</sup> Kenny Cupers underscores that "[t]he figure of the user had remained implicit in interwar modernism". 28 He also reminds us that 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".<sup>29</sup> What is worth-noting is that "[w]hile the notion of the user initially emerged in the context of industrialised production, mass production,

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and large-scale government intervention, it evolved to contest exactly those basic qualities of mass, scale, and uniformity". The term "user" is related to technocracy and consumerism. Jonathan Hill underlines the fact that the term "user" suggests "that using architecture is primarily a question of practicality", while Henri Lefebvre maintains that "[t]he user's space is lived—not represented (or conceived)". Lefebvre juxtaposes the abstract space corresponding to the architects, urbanists and planners with "the space of the everyday activities of users". For him the specificity of the users' space lies in the fact that it is concrete and subjective.

The distinction between the notions of function, use and programme is also significant for this study. Stanford Anderson argues, in "The Fiction of Function", that "if it was a fiction to treat functionalism as a crucial feature of even part of modernism, it is a grosser fiction to treat the whole of modernism as function". <sup>33</sup> Anthony Vidler, in "Toward a Theory of the Architectural Program", sheds light on the replacement of the logic "form follows function" with that of "form as, in a real sense, program and vice versa". <sup>34</sup>

The term "observe" derives from the Latin "observare", which is composed by "ob" and "servare". According to its Latin root "observare" means "to conform one's action to comply with". 35 Jonathan Crary, in his seminal book entitled Techniques of the Observer, sheds light on the interaction between the human visual response and the prepared mind. He places particular emphasis on the concept of "observer" <sup>36</sup>. The term "spectator" derives from the Latin "spectare", which means "to look at". Therefore, it becomes evident that the choice to employ the term "observer" instead of the term "spectator" is related to the intention to highlight the activity of adjustment from the side of the perceiver of the architectural drawing. As Crary reminds us "one who sees, as observer is more importantly one who sees within a prescribed set of possibilities. One who is embedded in a system of conventions and limitations". 37 The choice of the term "observer" implies an intention to highlight the importance of the impact of each parameter of the "heterogeneous system of discursive, social, technological and institutional relations". In other words, the decision to use the term "observer" is compatible with the conviction "[t]here is no observing subject prior to this continually shifting field". 38 To put it differently, the "term" "observer" is in accordance with an understanding of architectural drawings as *dispositifs*. Useful for analysing the relationship between the architectural representations and their observers, is the work of Maurice Merleau-Ponty, Georges Didi-Huberman and James Elkins in their Le visible et l'invisible, 39 Ce que nous voyons, ce qui nous regarde, 40 The Object Stares Back: On the Nature of Seeing<sup>41</sup> respectively.

### Architectural drawings as dispositifs

What interests me mostly regarding the concept of *dispositif*, which also explains why I decided to use it in order to analyse architectural drawings,

is that it does not treat all these heterogeneous systems – that is to say the object, subject, language, and so on – as homogeneous. In parallel, not only the different systems are characterised by heterogeneity, but the inside of each system is also understood as heterogeneous. In other words, the systems as composed by interacting forces that are at a continuous state of becoming, "always off balance", <sup>42</sup> 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 centre of the interest when an object of research is comprehended as *dispositif* are the relationships between all the parameters and the relationships between the interacting forces composing each parameter.

The comprehension of architectural drawings as *dispositif*s implies that they are understood as the meeting points of the exchanges and the interaction between different parameters: the architect-conceiver, the observer, the user and so on. The conception of each of the aforementioned parameters changes within time as we move from the one social, institutional, cultural, historical context to the other. What interests me is the transformation of the relationships between all the aforementioned parameters. My attraction to the notion of *dispositif* could be explained by the fact that my intention is to take into account the transformation of the conception of each parameter – the architect-conceiver, the observer and the user – and the transformation of their relationships.

A starting point of this research is the assumption that new conceptions of space and new modes of inhabitation are addressed through architectural design process before being theorised. These reinvented modes of assembling the real and the fictive dimension of architecture are addressed through written discourse much later than their concretisation though the establishment of specific *dispositifs* related to 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 theorisation through written discourse. This time lag is one of the parameters that my study intends to scrutinise.

My main intention is to demonstrate how the modes of representation elaborated by the architects under study vehicle different ways of constructing assemblages between the following agents: firstly, the conceiver 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, they take place encounters at three different levels: that of the design, that of the reception of architectural drawing by the viewer, and that of the inhabitation of constructed space. To better capture these three layers, we should think of them as two successive transitions: the first transition concerns the transference from the conceiver to the viewer, while, the second one, concerns the transition between the viewer and the inhabitant. The first transition corresponds to an exchange between two different subjects, while the second one corresponds

to a transition between two different modes of reception of the architectural *dispositif* by the same subject: its reception through the view of architectural drawings and its experience through the inhabitation of the constructed space.

Architects are obliged to pass through the visualisation of their ideas in order to convince the client and to communicate with them. Therefore, their task is characterised by a necessary translation through visual means. The visual means are their instruments for communicating their spatial *dispositifs*. The architectural representations are founded on the construction of fictions. Any choice of the architect to privilege certain modes of representation shows the level to which they intend to control the perception of the viewer and the way the user inhabits built space. For instance, the use of perspective is tied to the establishment of a specific way to view space and to imagine your movement through space. A characteristic of this way that is essential for this study in that it is pre-defined by the conceiver-architect.

An aspect that interests me is the fact that architects tend to use different modes or representation in order to produce the drawings that serve to capture their ideas and the drawings that serve to transmit their design concepts and proposals. To make this point explicit, I could refer to the fact that their way of drawing during the process of concretising their ideas through design and the modes of representation elaborated in order to produce the images that are destined to communicate their projects differ from each other. The architectural design process is not only a way of communicating a project to a viewer, it is also a way of capturing, concretising and giving form to their own ideas. The extent to which these two stages of architectural process are based on the use of the same modes of representation is a parameter that is also scrutinised in this book.

Two notions that are important for understanding how this book is organised are the notion of problem and the notion of *dispositif*. A characteristic of the concept of *dispositif*, which is significant for this research, is the fact that, apart from discursive forms of expression, it also refers to non-discursive forms of expressions, such as the drawings. Whereas the notion of *episteme* is primarily discursive in nature, a *dispositif* is more heterogeneous, designed to capture the links between the discursive and the non-discursive aspects. We could, thus, claim that the architectural drawings under study are understood as *dispositifs*. A pivotal question that is addressed here is how the drawings of the architects under study invoke special modes of visual attention. A second issue that is also at the heart of this research is the activity of translation from drawings to buildings. The aforementioned two activities are understood as *dispositifs*.

A problem, for Gilles Deleuze, is a means by which thought constructs itself. In *Difference and Repetition*, he notes: "The virtual possesses the reality of a task to be performed or a problem to be solved: it is the problem which orientates, conditions and engenders solutions, but these do not resemble the conditions of the problem".<sup>44</sup> In *What is Philosophy?*,

Gilles Deleuze and Félix Guattari underscore that "concepts are connected to problems without which they would have no meaning and which can themselves only be isolated or understood as their solution emerges". <sup>45</sup> Problems, for Deleuze, constitute the higher capacity of thought. Ernst Gombrich maintained that there are no disciplines, only problems <sup>46</sup>. As Thomas DaCosta Kaufmann reminds us, Gombrich "did not believe in the existence of disciplines, [...] [but emphasized] the role of problems". <sup>47</sup>

Regarding the concept of *dispositif*, the book draws mainly on the interpretation of the concept of *dispositif* of Michel Foucault. Gilles Deleuze writes in *Foucault*: "Knowledge is a practical assemblage, a 'mechanism' of statements and visibilities". <sup>48</sup> The translation of "dispositif" as "mechanism" is misleading. Gilles Deleuze defines Foucault's concept of *dispositif* as follows:

But what is a dispositif? In the first instance it is a tangle, a multilinear ensemble. It is composed of lines, each having a different nature. And the lines in the apparatus [dispositif] do not outline or surround systems which are each homogeneous in their own right, object, subject, language, and so on, but follow directions, trace balances which are always of balance, now drawing together and then distancing themselves from one another. Each line is broken and subject to changes in direction, bifurcating and forked, and subject to 'drifting'. Visible objects, affirmations which can be formulated, forces exercised and subjects in position are like vectors and tensors. Thus the three major aspects which Foucault successively distinguishes, Knowledge, Power and Subjectivity are by no means contours given once and for all, but series of variables which supplant one another. <sup>49</sup>

The best in order to understand the connotations of the term "dispositif" is to look at the definition given by Foucault:

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. Such are the elements of the apparatus [dispositif]. The apparatus [dispositif] itself is the system of relations that can be established between these elements.

Secondly, what I am trying to identify in this apparatus [dispositif] is precisely the nature of the connection that can exist between these heterogeneous elements. Thus, a particular discourse can figure at one time as the programme of an institution, and at another it can function as a means of justifying or masking a practice which itself remains silent, or as a secondary re-interpretation of this practice, opening out for it a new field of rationality.

In short, between these elements, whether discursive or nondiscursive, there is a sort of interplay of shifts of position and modifications of function which can also vary very widely.

Thirdly, I understand by the term "apparatus" a sort of-shall we say-formation which has as its major function at a given historical moment that of responding to an urgent need.<sup>50</sup>

The structure of the book is based on a generational organisation and it unfolds around four generations. For each generation, the research focuses on emblematic architects that affected significantly the epistemology of architecture of the corresponding generation. The narrative unfolds around two axes: one diachronic and one synchronic. The synchronic axis serves to shed light upon the different interpretations of similar concepts by the architects belonging to the same generational cluster, while the diachronic axis permits to grasp the ruptures regarding the transformation of the way they built the relationship of their design artefacts with the observer and the user. The means to diagnose these ruptures are the modes of representation employed by the architects under study, on the one hand, and the way the relationship between the discourse on architecture, the representation of architecture and the realisation of architecture changes, on the other hand.

Two aspects that are at the heart of the book are: how each of the architects under study conceive the "observers", who view and interpret their architectural representations and how through the design of buildings they shape a model of the "users", who are to inhabit the spaces they conceive. The way that the relationship between the observer and the user changes as we move from one generation to the next is one of the parameters examined in this book.

I could summarise the evolution of the way the observer and user are treated through architectural representation as follows. In the first generation, the observer was privileged in favour of the user, despite the dominant rhetoric claiming that function was the main purpose of the modernist architects. The observer was treated in a homogenised way. The relationship between the architect and the observer in the modernist era was not interactive. It was characterised by a mono-directional transmission from the architect towards the observer. This hypothesis is reinforced by the fact that perspective, which is a mode of representation based on a pre-defined way of how to view and interpret drawings, was the privileged mode of representation.

In the modernist era, architects tended to conceive their selves capable of orchestrating every detail of how drawings should be interpreted. The problems of such a hegemonic conception of their role were already apparent in the way the relationship between buildings and the city was treated. Two main tendencies of treating the building-city assemblage were apparent: the claustrophobic and the hegemonic. Ludwig Mies van der Rohe's interior perspectives' agoraphobic attitude is representative of the former, while Le

Corbusier's *Plan Voisin* is representative of the latter. Both extremes made apparent that the role of the architect as capable of orchestrating how the observers conceive their drawings and how users inhabit their spaces was problematic. The simplifications and generalisations on which their attitude was based pushed the next generation to recognise that the role of the architect in society is the most ambivalent issue to which architectural practice should try to respond.

In the modernist generation, in contrast with the modernist doctrine "form follows function", architectural drawings are characterised by an elitist vision and architects gave great importance to the observer. Despite the general conviction 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 invites us to problematise this assumption. Their rhetoric very often assumes that the user was the main addressee of their architectural design practice, but the revolutionising of the design practices and the way both architects disseminated their architectural approaches through photography, on the one hand, and through their involvement in the preparation of exhibitions on their own work, on the other hand, shows that the observer, in many cases, was much more defining for their architecture than the user. Michel Foucault employed the term dispositif in order to refer to the interaction between heterogeneous vectors, such as "visible objects, affirmations [...] formulated, forces exercised and subjects in position". 51

The study on which this book is based covers a period extending from the 1920s to the present. For each generation, the book focuses on certain emblematic architects that contributed significantly to the epistemological shifts of architecture. All the architects chosen were also educators, with the exception of Le Corbusier, who, while he never held a position of professor at any school of architecture, had exceptional skills in orchestrating the dissemination of his work that are characteristic of rather strong pedagogical ambitions. For instance, the way he gave his lectures by drawing and speaking simultaneously while improvising and the inventiveness with which he prepared every of his several books, combining visual and textual means, demonstrate the didactic determination of his attitude. Le Corbusier, in his Talks with Students, emphasises that he conceived his Œuvre Complète as his teaching manifesto. 52 The pedagogy of architecture is an important aspect of the research on which this book is based. One of the intentions in this book is to relate the transformation of the modes of transmission concerning the methods of treating an architectural project in the design studios of the schools of architecture under study to the mutation of the ways of producing architectural drawings. In order to be able to do this legitimately, I chose to focus the research on which this book is based on architects who used to teach or still teach design studios in architecture schools.

The narrative of the book is organised around the identification of the dominant modes of representation in each generation. A narration thread

around a diachronic axis serves to diagnose the generation-specific norms that characterise epistemology of architecture, on the one hand, and how the conceptions of the observer and the user are transformed, on the other hand. One can distinguish three aspects of the concept of "generation": the generation in the sense of succession, the generation in the sense of specific shared socialisation and the generation in the political sense 53. All the aforementioned aspects of the concept of "generation" are taken into account. What interests me is to examine under what conditions the architects that I analyse in this book share the same "fields of experience" and/or the same "horizon of expectation" and to examine how their way of fabricating architectural drawings reveal their "field of experience" and "horizon of expectation". My intention is to identify which aspects of their "fields of experience" and "horizon of expectation" are common and which are different. In parallel, I associate these similarities and differences with the national and institutional contexts of their teaching practice.

At the core of the book is the intention to examine how architects' conception of need, communication and control change in time and how the way they conceive the aforementioned notions affects their architectural design strategies. My hypothesis is that the transformation of the scope of architecture is not based on continuities, but rather on ruptures that provoke the emergence of new ways to give sense to the process of architectural composition. Even if the concepts that are employed are similar their signification necessarily changes as the conjuncture that triggers their elaboration differs as we move from generation to generation. For this reason, despite my intention to organise the book according to a diachronic narrative, I also aim to shed light on the fact that the epistemological debates concerning each generation should be conceived as autonomous units. Instead of providing an exhaustive analysis of the evolution of the scope of architecture, I provide a detailed analysis of the questions that are prevalent in the architectural stances of the architects examined. This analysis is based on an understanding of the episodes examined as part of the multiplicity that characterises each generation. I try to make clear that the choice to focus on certain episodes or certain architects does not imply that I assume that I evaluate them as more important than other episodes or architects that are not examined in the framework of this book. Such a focus was guided by my intention to reveal the subtleties of the episodes and the architects' stance in order to provide an overview of how each act of architectural composition can be analysed in a way that takes into account the multiplicity of the reality in which it is inscribed.

Alain Badiou, in his *Manifeste pour la philosophie*, notes that "[t]he procedures of truth, or generic procedures, are distinguished from the accumulation of knowledge by their eventual origin". <sup>54</sup> Taking as starting point the aforementioned distinction, one could claim that this book seeks to identify and analyse the generic procedures and the procedures of invention of the epistemology of architecture throughout the 20th and 21st centuries. In other

words, my goal is to reveal the truths that architecture generates from the beginning of the 20th century to the present. In order to do so, I take as fields of study the architectural drawings produced by the architects of the corpus of the research on which this book is based. I understand the architectural *dispositifs* that I examine as "assemblages of significations within a network of signs".

As Badiou notes in his article entitled "L'autonomie du processus esthétique", "by the author, we must not hear a creative subjectivity, a projective interiority". In a similar way, in the framework of this book, I do not understand the architects examined as neither creative subjectivities nor projective interiorities. In parallel, as Badiou argues regarding the concept of author, the concept of architect "is not a psychological concept, but exclusively a topical concept". In the same text, Badiou notes that "by real, we must understand the scientifically determined historical structure". The starting point of my research is Badiou's position that "an aesthetic mode of production is an invisible invariant structure that distributes binding functions between real elements so that these elements can function as ideological". 55 The book aims to decipher the aesthetic, conceptual and epistemological mutations in the architecture of the 20th and 21st centuries through the analysis of the conditions on which are based: the fabrication of architectural drawings and the instrumentalisation of certain modes of representation (perspective, axonometric representation, hybrid modes of representation, collage, etc.), by the architects examined.

Alain Badiou, in his Theory of the Subject, highlights the difference between the classical conception of subject, according to which the subject is understood as "an operator endowed with a double function". For Badiou, this double function of the "classical subject" consisted in the act of assigning "an irreducible being of the existent" and in the act of limiting "that which, from the 'remainder' of being, is accessible to knowledge". To borrow his own words, according to Badiou, the classical subject "partitions that which is immediately given and that which is mediately refused to experience". Badiou underscores that both Jean-Paul Sartre and Hegel inverted these two functions of the subject, each of them in their own way. The former claiming that "[t]he being of the subjective existent proves to be a being of nonbeing" and the latter maintaining that "[t]he limit of knowledge proves to be an unlimitation". In the same book, Badiou underscores that "Sartre holds on to a simple conception of the subject, [...] [according to which hel enumerates its strands, without being able to think their interlacing".56

One could assume that the concept of inhabitant that corresponds to the modernist era was based on the idea that the architect can function as an omniscient subject that is able to fabricate a concept of user. In this case, we could employ the terms "thing" and "user" in order to designate the architectural artefact and the inhabitant of architecture. In the modernist context, the relationship between the architect and the architectural artefact and the way the architect conceived the experience of the inhabitant was based on the assumption that the signification of the architectural artefact is not co-shaped through the experience of the inhabitant. In other words, in this case the scope of architecture did not take into account the role of co-creation by the inhabitant and their participation to the formulation of the sense of the act of architectural composition. The German term "Sachlichkeit" is more relevant than its English translation "objectivity". The shift from a mono-directional understanding of the architect's creative process towards a conception of the significance of architectural composition as the effect of a reinvention of the articulation between subject and object could be related to the shift from Sachlichkeit towards Neue Sachlichkeit.<sup>57</sup> This shift implies an understanding of the significance of images as dependent upon the relations between the components used by the creator and as dependent upon the reinvention of the relationship between the architect-conceiver and the inhabitant. Such a reorientation is pivotal for understanding the rupture that characterises the transformation of the scope of architecture as we pass from the first generation, whose conception of the user is universal and homogenising, to the second generation, whose conception of the inhabitant is culturally determined and was based on the assumption that the inhabitant can function as an important agent of change and played an important role in the way the architectural artefact used to take its meaning.

If I tried to relate this study to the state of art on the question of representation in architecture, I would refer to Stan Allen's *Practice: Architecture, Technique and Representation* and Robin Evans's *The Projective Cast: Architecture and Its Three Geometries.* What my research shares with the former is the intention to understand the drawing as notation and the conviction that drawings even if they try to simulate the effects of the real experience they "always fall short, freezing, diminishing, and trivializing [its] [...] complexity", while its meeting point with the latter is the interest in the potentialities and limits of architectural representation and in the ambiguity of the relationship between the fabrication and the interpretation of architectural drawings. As Allen notes, the preference of the term notation over the term drawing implies an intention to capture the "intangible properties of the real". <sup>58</sup> Evans also sheds light on the metaphoric function of geometry and on the complementarity between the geometric and atmospheric state of drawing. <sup>59</sup>

Regarding more recent researches focused on the question of architectural drawings, I could mention Jordan Scott Kauffman's PhD thesis entitled *Drawing on architecture: the socioaesthetics of architectural drawings,* 1970–1990. <sup>60</sup> Kauffman analyses the shift, which took place during the 1970s and 1980s, mainly in the New York scene, from understanding drawings as related to architectural design process towards a comprehension of drawings as autonomous from the architectural process and as aesthetic artefacts in and of themselves. In my own research, in contrast with

Kauffman's research, architectural drawings are understood here as *dispositifs* or devices of examination of my object of research and not as the object of research per se. In contrast with this study, the book concerns a longer period, examining a period of ten instead of two decades. In parallel, in my own study I treat architectural drawings as the investigating device that can serve to diagnose how the conception of the user and the observer changes. The object of research concerns mostly relationships than artefacts: the relationship between the drawing and the observer, the relationship between the architect-conceiver and the observer-perceiver, the relationship between the architect-conceiver and the user and the relationship between the observer and the user.

## Around the generational structure of the book

The choice to organise my research according to a generational structure is based on the hypothesis that the way architectural drawings are created, viewed, and understood is transformed when we move from one generation to the next. Instead of interpreting this transformation simply chronologically, my aim is to distinguish the tensions that characterised each generation and to comprehend them in a socially oriented manner. A methodological reference, which comes from the domain of art history, is Michael Baxandall, and especially his *Painting and Experience in Fifteenth-Century Italy*, where he introduced the notion of the "period eye". 61 As Margarita Dikovitskaya remarks, this notion permitted Baxandall to relate the production in art to social history. 62 Baxandall employed the concept of the "period eye" in order to describe the cultural conditions under which art in the Renaissance was created, viewed, and understood. His analysis was based on the assumption that viewing habits are culturally determined and on the hypothesis that individuals who belong to the same culture share experiences and ways of thinking that have an impact on the way they perceive images. I share this conviction and, for this reason, I embarked on this research project with the intention to examine how the modes of fabricating, viewing and interpreting drawings in architecture have changed over the last ten decades.

The term "generation" derives from the Latin verb "generare" (to produce, materially or intellectually) and from the substantive "generatio" (reproduction, the generation of men), themselves derived from the Greek "γίγνομαι" (to be born, to become), "γιγνώσκω" (to know), "γένος" (family, race) and "γένεσις" (the cause, the principle, the source of life). In order to clarify my methodological point of view, it would be useful to be precise that in the epistemological debates around the adoption of a generational approach there is a distinction between the sociological and the historical understanding of the notion of generation. The term generation is employed here in a historical sense. Historians focus mainly on how each generation is formed. The use of the concept of generation is part of a trend that gives ideas and culture the defining role in understanding history. Three questions that are

at the heart of the generational approach to history are: How do individuals become aware of belonging to a generation? What relationships do the different generations have with each other? To what extent is a generation constructed retrospectively? All these three questions are present in the way I investigate how the architects under study position themselves in relation to the generation to which they belong and to the previous generations. Reinhart Koselleck's *The Practice of Conceptual History: Timing History, Spacing Concepts* helped me understand why historians tend to seek concrete similarities to temporally frame the generation-specific units of experience, while Claudine Attias-Donfut's *Sociologie des générations: l'empreinte du temps* <sup>63</sup> was useful in order to comprehend the differences between the concept of generation and the concept of consciousness of generation.

The choice to focus on a generational understanding of the epistemological transformations in architecture is based on the adoption as main criterion of identification the common historical experiences that shaped the vision of the architects under study. It is essential to underline that generations here are not understood as homogeneous ensembles. Instead, they are conceived as composed of various conflicting forces. These conflicting forces composing each generation are characterised by their social, ideological and political determinations. It is also important to note that the feeling of belonging to a generation is formed not only horizontally, that is to say in relation to a given historical period, but also vertically, that is to in relation to the ties of filiation in a lineage linking successive generations.

The narrative of the book is organised around four generation-spanning sequences: a sequence corresponding to the modernist architects, such as Le Corbusier and Mies van der Rohe; as sequence corresponding to emblematic post-war architects which developed critical stances towards modernism and reinforced the cultural determinations of architecture, such as Ernesto Nathan Rogers and Team 10; a sequence corresponding to protagonist figures for the transatlantic exchanges during the 1970s and contributed to a great extent to the way architectural drawings are viewed, such as Peter Eisenman, Aldo Rossi and Oswald Mathias Ungers; and a sequence referring to architects that reinvented the role of programme rendering into compositional device, such as the Office for Metropolitan Architecture (OMA) and Bernard Tschumi. The recourse to "concrete commonalties that temporally frame generation-specific units of experience", as Reinhart Koselleck underscores, is an indispensable means of every modern social history that aims "to go beyond chronicling". The objective of the four generation-spanning sequences is to overcome chronicling and to enrich the hypotheses of this research. In other words, this generational organisation far from homogenising serves to privilege interpretation in favour of description. Koselleck underlines that "from the inception of history, it remains methodologically necessary to rely on primary sources not only to track down unique but also generation-specific, collected experiences". He also maintains that "[t]here are generation-specific conditions and outcomes, which overlap

with personal history but still refer to greater spans which create a common space of experience".<sup>64</sup> Following his approach, my aim here is to combine the analysis of unique and generation-specific experiences.

Moreover, the narrative of the book follows a synchronic and a diachronic axis. The synchronic axis serves to discern the variations of the aforementioned relationships in the same generation, while the diachronic one permits to diagnose the mutation of these relationships in the successive generations. The combination of both axis helps me avoid two risks: firstly, the risk of reducing what is at stake during the architectural design process to a mirroring of what happens to the larger sphere at a specific historic moment, interpreting architectural artefacts as effects of political, cultural, social, or other causes not belonging to the sphere of architecture; secondly, the risk of analysing architectural drawings in an isolated way that takes into account only the singular characteristics of forms and, because of the fear to relate them to the shared experience or the social becoming of a generation, fails to formulate any hypothesis that take into consideration the historical evolution of the problems analysed, on the one hand, and their connection to the political, cultural, social, or any other sphere that does not concern directly the architectural discipline.

The first generation, which includes Le Corbusier and Ludwig Mies van der Rohe, is characterised by the tendency to define in a holistic and homogenised way the "fictive user" and the "other". My analysis shows how during this period the construction of the "fictive user" is focused on the assumption of the existence of a "universal user". Representative of such a homogenised and generalisable approach is the *Modulor*, which is described by Le Corbusier as "harmonious measure to the human scale universally applicable to architecture and mechanics". As starting point for this research, I take the following claim of Reyner Banham regarding the stance of the generation of modernists:

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.

## 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.<sup>65</sup>

For Le Corbusier, the architect was the authority on living, as it becomes evident from what he declares in the *Athens Charter (Charte d'Athènes)*. 66

He maintained there that the role of the architect is to know what is best for humans, posing the following question:

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?<sup>67</sup>

A paradox that is explored in the book is the fact that Mies van der Rohe and Le Corbusier privileged the use of perspective as mode of representation, despite their predilection for the avant-garde anti-subjectivist tendencies, which disapproved the use of perspective and grant the use of axonometric representation or other modes of representation opposed to the assumptions of perspective. The analysis of the way in which both architects use perspective helps me investigate the tension between fiction and reality, on the one hand, and the relationship between the universal and the individual, on the other hand. In order to investigate how the architects under study treat the tension between individuality and universality, I examine to what extent they believe that the means of their architectural composition process should be generalisable and universally understandable and transmissible. Special attention is paid to show how Mies van der Rohe and Le Corbusier reinvented certain conventions of perspective representation and to shed light on the specific contribution of each of them to the revolutionising of certain norms of perspective.

During the post-war era, the users become very important because they are conceived as actors of change in society. My analysis for the second generation, which was characterised by a cultural turn, is focused on the work of Ludovico Quaroni (1911–1987), Ernesto Nathan Rogers (1909–1969) and Team 10.68 The members of Team 10 on whom my analysis focuses are Aldo van Eyck (1918–1999), Giancarlo De Carlo (1919–2005), the couple Alison M. Smithson (1928–1993) and Peter D. Smithson (1923–2003), and the trio Candilis-Josic-Woods.<sup>69'</sup> My hypothesis is that in this generation the concepts of the "fictive user" and the "other" are defined according to national contexts. In 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. They are interpreted as responses to the identity crisis in the postwar era. Each of these labels is related to a specific ethnocentric character.

During the post-war era, the identity crisis of the post-war era; secondly, they paid attention to the everyday; thirdly, they were related to the intention to build for the masses. The architects aimed to respond to the

urgent need for mass housing. The concept of user corresponding to this generation was culturally determined and the architectural and urban assemblages were conceived as unfinished and in a state of becoming. The architects analysed here tended to employ modes of representation that put forward the status of architectural and urban artefacts as unfinished. In parallel, ethnographic concerns became central preoccupations for the architects of this generation, as in the case of Aldo van Eyck, who was interested in the architecture of the Dogon culture.<sup>70</sup>

A concept that is useful for analysing the epistemological debates during the post-war era is that of "individual-community assemblage". In order to grasp the significance of the individual-community assemblages for the post-war architects, we should bear in mind that the fascination with the everyday in the post-war era was linked to the idea that inhabitants can function as agents of transformation of society. A feature that is examined is the rejection of any understanding of the individual-community assemblage as complete. Symptomatic of the conception of habitat as an expression the individual-community articulation, on the one hand, and of the rejection of any understanding of the individual-community assemblage as complete, on the other hand, is Aldo van Eyck's thesis, claiming that "[t]he habitat [...] becomes the counter form of the complete individual-community, with individual and community being more than part and whole". 71 The idea of additive composition and dynamic aggregation of successive elements constituted a common preoccupation of the architects under study in the "Chapter 4 entitled "Individual-community assemblages in post-war era architecture: The dissolution of universality"".

A common characteristic of the design processes and modes of representation of the architects examined in this part is the fascination with the constantly unsettled urbanistic assemblages and the projects in continuous becoming. Such examples are Alison and Peter Smithson's Cluster City diagrams, Shadrach Woods's "stem" and "web", 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. Concepts as "city-territory" (*città territorio*), "network", "open project" and "new dimension" (*nuova dimensione*) acquired a central role in architectural discourse during this period.<sup>72</sup> What I examine is the impact that the dominance of the open project as compositional device had on the transformation of the concept of the user.

In this book, I also analyse how ugliness was instrumentalised as a productive category in post-war Italian architecture. More specifically, I examine how Rogers and Quaroni views towards ugliness incorporated post-war urban reality. During the same period, in a different national context, in Great Britain, the New Brutalists developed an anti-art and anti-beauty aesthetics, which was presented in Banham's emblematic article "The New Brutalism". The incorporation of ugliness in the architectural discourse

is linked to the change of the conception of architecture's user. The "way of life" and the "sensibility of place" were important parameters of the discourse of Alison and Peter Smithson. Banham in his aforementioned article referred to Alison and Peter Smithson's stance and treated them as main protagonists of The New Brutalism. Despite the divergences between the Smithsons' and Banham's interpretation of the transformation of the way of life, which have been highlighted by Dirk van den Heuvel, <sup>74</sup> the reinvention of the experience of inhabitation and the ethical implications of the ways of life was central for both. The Smithsons' *Changing the Art of Inhabitation: Mies' Pieces, Eames' Dreams, The Smithsons* shows how important was the reshaping of the way spaces are inhabited for them. <sup>75</sup>

What is at the centre of my analysis is the examination of the moral aspects of the way in which the concept of the user was reinvented. The moral implications of the role of the user and its responsibility for the transformation of society are related to the reinvention of the aesthetic criteria. City's ugliness acquired a positive role and functioned as a reminder for the responsibility of the user and the architect in the process of transformation of society. This explains why architecture and urban design were treated as terrains of encounter between the individual and the community. I employ the expression individual-community assemblage in order to refer to this tendency of the post-war architects to conceive their practice as devices that served to invite users to understand how responsible they are for the transformation of society.

A strategy of fabrication of drawings that is analysed is Alison and Peter Smithson's use of photographs of existing celebrities, such as Marilyn Monroe and Joe DiMaggio, the French actor Gérard Philipe and the first prime minister of independent India Jawaharlal Nehru. The Alison and Peter Smithson's tactic of introducing figures that were protagonists in the news in their drawings of projects concerning social housing buildings, such as the collages for the Golden Lane Estate project (1953), show that they tended to reinvent through their architecture the established reality. Golden Lane Estate, which occupies an area flattened by wartime bombing, was one of the most defining public housing projects of the post WWII reconstruction in Great Britain. It was rather provocative to introduce in council housing blocks of flats famous figures. The contrast between their anti-aesthetic stance and the use of figures that were part of the present culture could be interpreted as an invitation to change existing reality and its conventions. The incorporation of existing figures in the image functions as a gesture of integration in the architectural representation of fragments of existing context and reality.

The tension between New Brutalist anti-art and anti-beauty aesthetics and Neorealism's anti-aesthetic and anti-elitist stance is insightful for recognising what was at stake in post-war debates. In parallel, this tension is useful for understanding how the notion of ugliness was related to the question of morality in post-war architecture scene. Moreover, I also unfold Tendenza

and Neorealist architecture's debates around the notion of ugliness, taking as main actors Rogers, for the former, and Quaroni, for the latter. I analyse their respective positions regarding post-war city and explain how they perceived the relation of post-war suburbanisation to the city's uglification. My aim is to demonstrate how ugliness was instrumentalised as a productive category in post-war Italian architecture and how Rogers, Quaroni's aesthetic views towards ugliness incorporated post-war urban reality.

The Tendenza and the Neorealist architecture shared their interest in the intensification of architects' responsibility, the reestablishment of the relationship between reality and utopia and the critique of modernist homogenised and impersonal functionalism. <sup>76</sup> The Neorealist approach constitutes an endeavour to conceive ugliness as a path to the real putting forward the reality of post-war Italian city. Neorealism's intention to recuperate the immediacy of reality instrumentalised and aestheticised urban ugliness. The endeavour of transforming ugly features of the urban landscape into architectural instruments of social and moral engagement was at the heart of Neorealist approach. In the context of post-war Italy, architects often aimed to transform ugly elements into devices of reflection about how one's aesthetic criteria interferes with the meaning they give to reality. The Tiburtino district, designed by Ludovico Quaroni and Mario Ridolfi, is often interpreted as a Neorealist expression in architecture. In this case, Quaroni and Ridolfi conceived the construction of social housing in a suburban neighbourhood of post-war Rome as a way to contribute to citizens' moral engagement towards life. This transformation of the norms according to which a city is judged as beautiful or ugly was paralleled with a shift from aesthetic criteria to politic, ethic, moral, social and civic criteria. As Stephanie Zeier Pilat notes,

[t]he designers of the Tiburtino deliberately appropriated popular traditions in such an exaggerated way in part because it offered a way to reject Fascism and reach back to a less tainted past that could form the cultural and spiritual basis for the new Italian nation.<sup>77</sup>

Ludovico Quaroni and Ernesto Nathan Rogers intended to reinvent the relationship between utopia and reality. Quaroni's approach is characterised by the belief in the potential of imaginary reality to revitalise urban design. In *La torre di Babele*, he expressed his belief "in the creative value of utopia – of an imaginary reality [...] that [...] holds the seeds for revitalizing a process like urban planning that has lost its capacity for energetic response". His conception of utopia's creative force as imaginary reality, capable of revitalising urban planning processes, brings to mind Rogers' understanding of "utopia of reality" as "teleological charge that projects the present into the possible future". Rogers underscored utopia's capacity "to transform reality in its deepest essence, in the moral and political, as well as in the didactic and pedagogical fields". 79

For the third generation, I focus on the analysis of the modes of representation of John Heiduk (1929-2000), Peter Eisenman (1932-), Aldo Rossi (1931-1997) and Oswald Mathias Ungers (1926-2007). My main objective is to show how their approaches are related to the tension between the individual and the collective. A common characteristic of their respective approaches is their endeavour to redefine architectural design process towards the schism between the individual and the collective. This tension, in many cases, as in the case of Rossi, took the form of opposition between individual and collective memory. Useful for interpreting the design strategies of John Heiduk, Peter Eisenman, Aldo Rossi and Oswald Mathias Ungers is the analysis of the tension between individual expression and civic responsibility. During the 1970s and the 1980s, a transformation of the status of architectural drawings was also held. Architectural drawings entered the art galleries of New York and the observer became the protagonist of the dissemination of architectural knowledge. The supremacy of the observer over the user provoked important epistemological mutations and transformed significantly the role of the architect and architectural drawings and their relationship with society. At the core of the book is the intention to discern which mode of representation was privileged. With the exception of Rossi, all the other architects privileged axonometric representation.

A relationship that is investigated is that between the concept of "intertextuality"80 and "intericonicity". The first concept has been broadly theorised, while the second still remains a concept that has not been analysed meticulously. My research aims to show the potentials of the concept of "intericonicity" for understanding how methods of representations are transposed and transformed not only when they are used by different architects, but also within the work of the same architect in different periods of his life. The elaboration of the concept of "intertextuality" in the analysis of architectural drawings is tricky. In order to respond to these risks, certain scholars, as Thomas Hensel, propose the concept of "intericonicity" as the visual analogous of the concept of "intertextuality". 81 This concept intends to respond to the gap that exists because of the fact that the concept of "intertextuality" is not sufficient to designate certain modii of visual references. The importance of the concept of "intericonicity" is apparent in the following words of Jean-Luc Godard: "There is no picture, there are only images. And there is a certain form of assembling images: as soon as there are two, there are three. [...] There is no image, there are only relations of images". 82 Another distinction that has been also taken into account in this research is that between the concept of "hypertextuality" and the concept of "hypericonicity".

Regarding Hejduk's prioritisation of axonometric representation, what is scrutinised is the way he related axonometric to the erasure of illusion of depth. His strategies in the case of the design of the Diamond House B (1962–1967), the Bernstein House (1968) and the Wall House 2 or A. E.

Bye House (1973) are the climax of his intention to erase any sense of depth through specific tricks that are examined in the book. Special attention is paid to the explanation of how Hejduk rendered isometric representations two-dimensional. In parallel, the intentions that lie behind this strategy of privileging two-dimensional sense are scrutinised. The book also examines why Eisenman and Hejduk's conception of architectural composition is time-oriented, shedding light on the ways in which different architects treat time-oriented interpretation of architectural drawings and incorporate representability of time in architectural representation.

Regarding Rossi's understanding of the act of drawing, what is of interest for this study is the way he understood repetition, and his disapproval of the notion of invention. He conceived every architectural drawing he produced as a "repetition of an occurrence, almost a ritual", arguing that "it is the ritual and not the event that has a precise form". <sup>83</sup> His preference for the ritual over the event can explain his rejection of the notion of invention. Rossi's scepticism vis-à-vis the notion of invention could also be interpreted as part of his endeavour to reject whatever is not part of existent reality. He associated the rejection of inventiveness with the "abandoning [of] the task of searching for the threshold, which divides, or which simply represents the borderline between personal experience and artistic experience". <sup>84</sup>

Two other aspects of Rossi's approach that are analysed are: firstly, his understanding of the act of drawing as a means of transforming architectural and urban artefacts into objects of affection; secondly, the way that the encounter with the "living history" of different cities enable architects "not only to understand architecture better, but also, above all as architects to design it". 85 This position is related to the importance he gives to the "geography of experience" and to the interaction between individual and collective memory drawing mainly on Maurice Halbwachs's conception of "collective memory". 86 An aspect of Rossi's approach to design that is extremely relevant for this study is the fact that each of his drawings is treated as a reiteration of recollections, impressions and obsessions that always re-emerge.<sup>87</sup> He is against any gesture of limiting his method of drawing according to specific objective syntactic rules, as Eisenman does in his House series. In Rossi's case, every drawing is an effort to capture an imprint of reality and it is exactly the reiteration and the network of all the drawings as expression of the same ritual that is at the very centre of the way he understands the transition that takes place when he draws an impression of the city's fragments on the paper. The addressee par excellence of Rossi's drawings is the subject that is ready to suspend his perception in order to wait for the next drawing. The significance and the semantic value of each drawing lie on its relationship with the network of drawings which are constantly reiterated in a tireless game to grasp the "living history" of cities. The fragmentary character of each of his drawings is like an invitation to the next drawing. We could, thus, assume that what is at stake in Rossi's case is a dispositif of a network of drawings that aims to

capture this always-escaping, but at the same time, always-present sense of the city. The cities that are the contexts of the *mise-en-scène* of his fragments change and shape new amalgams of cities, as new imaginary cities, but the sense of what he labels "living history" of cities is what he always tried to grasp and reiterate.

Another aspect of the creative processes of Aldo Rossi, John Hejduk, Peter Eisenman and Oswald Mathias Ungers that is explored in this book is the desire to free architecture from functionalism. Such an intention is defining for the theoretical and design strategies of Rossi, Eisenman and Ungers. Rossi, as he stated in the interview he gave to Diana Agrest for *Skyline* in 1979, conceived as a point of departure of his theoretical and design approach the need to free architecture from functionalism. <sup>88</sup> In *Architecture of the City*, Rossi referred to a "critique of naïve functionalism", maintaining that "any explanation of urban artefacts in terms of function must be rejected". <sup>89</sup> He also sustained that when one reduces architecture to a way to respond to the question "for what purpose?", they risk developing an approach that does not manage to incorporate "an analysis of what is real". <sup>90</sup> It becomes, thus, evident, that in Rossi's eyes the critique of functionalism is as a way to enlarge architecture in such a way that would permit to take as a starting point of the design process the close understanding of reality.

Of great interest for this study are the differences of the strategies of Rossi and Eisenman regarding how they introduced the critique of functionalism in their design process. Despite the fact that both share the conviction that functionalism is reductive and should be left behind, they elaborate very different theoretical and design strategies in order to establish an architectural approach against functionalism. More specifically, what I argue here is that the path of Rossi to avoid functionalism is the understanding of the real, while the means of Eisenman to reject functionalism is to ignore the real. To put it differently, Eisenman's rejection of functionalism takes the form of contempt or ignorance of the user of architecture.

The critique of functionalism was also present in the preoccupations of Ungers, who notes, in *Architecture as Theme*, regarding his disapproval of blind pure functionalism:

The need for a thematization of architecture means nothing if not moving away from the blind alley of pure functionalism or — at the other end of the spectrum — from stylistic aberrations and a return to the essential content of architectural language.<sup>91</sup>

In the aforementioned declaration, it becomes evident that Ungers was set against pure functionalism and autonomy of architecture, seeing both tendencies as reductive. He diagnoses two dangers: that of pure functionalism and that of the rigid autonomy of architecture, that is to say of an understanding of architecture based on its reduction to language and stylistic expression. This position of Ungers makes clear that he was conscious that

an obsessive critique of functionalism engenders the risks of leaving behind the concern that architecture necessarily addresses to a use. He seems to be aware that such an omission of architecture's concern with the user can enclose architecture into the trap of syntactic games, excluding architects' responsibility for the way their artefacts will be experienced by users.

I also analyse Eisenman, Hejduk, Rossi and Ungers's receptive conceptions of the relationship between fragments and totality, either regarding the city and its units or regarding the elliptic character of architectural conception and its progressive concretisation through repetition, as in the case of Rossi, and the impact of the evolution of time on the design procedure, as in the case of Hejduk. The latter maintained that the initial fragmentary images, which is the starting point of architectural design process, becomes progressively more concrete through the formation of "a series of images one after the other over a period of time". <sup>92</sup> An emerging tendency characterising this generation was the rejection of any unitary image of the city. Instead, the dominant trend was to invent strategies of conceiving urban reality as "a living collage, a union of fragments". <sup>93</sup> The notion of fragment became central for Rossi, Ungers and Hejduk.

The approaches of both Tschumi and the Office for Metropolitan Architecture (OMA) are characterised by a rejection of the preconceived idea of the user. They both reject the idea that the architect can function as omniscient subject that is able to fabricate a concept of user. I examine to what extent their approaches have contributed to the establishment of conditions that permit to the users to have a new kind of no normative understanding of their perception of space and their movement in it. In order to unfold the epistemological shift from the generation examined in the third and fourth chapter, I compare Rossi's concept of "urban facts" (fatti urbani) and Tschumi's concept of "event-cities", and Rossi's understanding of type with Tschumi's understanding of "concept-form". Tschumi notes, in: "A concept-form differs from a type in that it is not bound by history or historical context". 94 Tschumi's concept-form, in contrast with type, takes distance from any kind of symbolic identification or *a priori* meaning. 95 Tschumi differentiates himself from Rossi's typological analysis, underlying that "analogies between typological forms and concept-forms are not necessarily relevant". 96 He also takes distance from the linguistic analogies and the structuralist references that dominated Peter Eisenman's approach, highlighting that "[o]ne cannot construct a theory of concept-forms based on linguistic analogies in the way structuralism looked at types, because concept-forms do not originate in history". 97 In the first three volumes of the *Event Cities* series, 98 for instance, Tschumi avoided the elaboration of the notion of form. In Event Cities 4, he explains this avoidance as follows: "Form did not need to be discussed because it was always seen as the result of an architectural strategy, never as a starting point". 99 This brings to mind Mies's conception of the starting point of the creative process as superior in relation to the result, which is evident in his following declaration: "We do not evaluate the result but the starting point of the creative process". 100

Regarding Tschumi and Koolhaas's approach, my intention is to discern the differences and affinities of their understanding of urban reality in The Manhattan Transcripts and Delirious New York respectively. Koolhaas commenting on "The City of the Captive Globe" (1972) referred to the notions of archipelago and "Cities within Cities", echoing Ungers's theory. He also referred to a tripartite organisation of grid, lobotomy and schism. A question that is examined is how the aforementioned tripartite organisation to which Koolhaas referred could be related to Tschumi's formulation of three worlds The Manhattan Transcripts, that is to say the world of movements, the world of objects and the world of events. Koolhaas also argued that "[t]he more each island celebrates different values, the more the unity of the archipelago as system is reinforced". 101 In the introduction of 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 102. In order to better grasp what is at stake in Tschumi and Koolhaas's approaches, I examine to what extent Koolhaas's understanding of archipelago could be related to Tschumi's notion of disjunction. Taking as point of departure the idea that the tension between form and programme is very central in the work of both Tschumi and Koolhaas, I aim to discern the differences of their conceptions of programme.

## Between the "fictive" and the "real" inhabitant

In the framework of this book, architectural representations are understood as pragmatic systems aiming at a use. Architecture encompasses everyday reality, and in so doing, inevitably, provides a framework of social life. Thanks to the fact that the designed space is destined to be inhabited, during the design process, the genesis of a conception of inhabitant takes, necessarily, place. The architects during their endeavour to represent an eventual space formation, they fabricate a relationship between a conception of "fictive" and a conception of "real" inhabitant. The book aims to trace a history of the mutation of the status of this relationship, responding to the following question: how could we trace a genealogy of the epistemology of architecture as a genealogy of the construction of this relationship? The aim is to discern how the relationship between the "fictive" and the "real" inhabitant is conceived in the modes of representing the different aspects of the project: sketches, plans, models, photomontage, perspectives, axonometric representations, etc. In order to do so, the book examines the relationship of these artefacts with the real. A starting point of this research is the adoption of Sergueï Eisenstein's following point of view: "When ideas are detached from the media used to transmit them, they are cut off from the historical forces that shaped them". 103

Certain of the questions to which I wish to respond are the following: do the artefacts that each of the architects under study produces correspond to a certain kind of "fictive" inhabitant? What is the status of the relationship