

## **Introduction**

### **Architectural drawing as investigating Device**

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

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

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

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

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

the exchanges and the interaction between different parameters; in our case, the architect-conceiver, the observer and the user<sup>5</sup>.

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

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

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

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

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

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

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

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

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

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

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

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

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

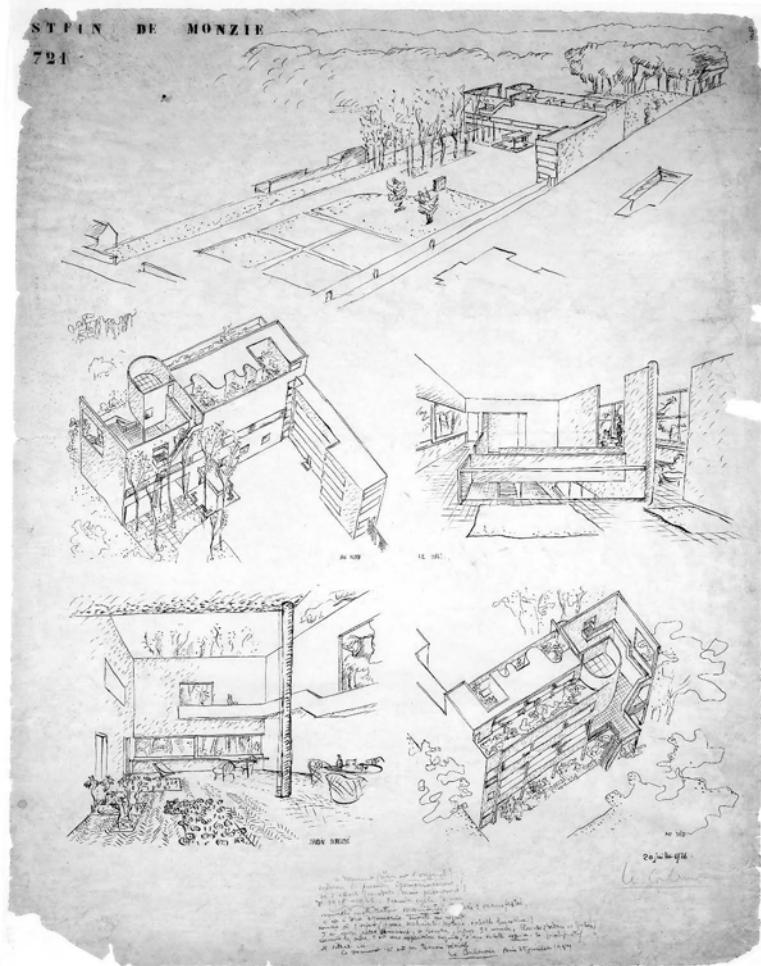
represents. The representational ambiguity produced by the visualization strategies elaborated by Mies van der Rohe provokes a non-possibility to take the distance that is inherent in the use of perspective and in the way the viewer sees images produced according to perspective. The contrast between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

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

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

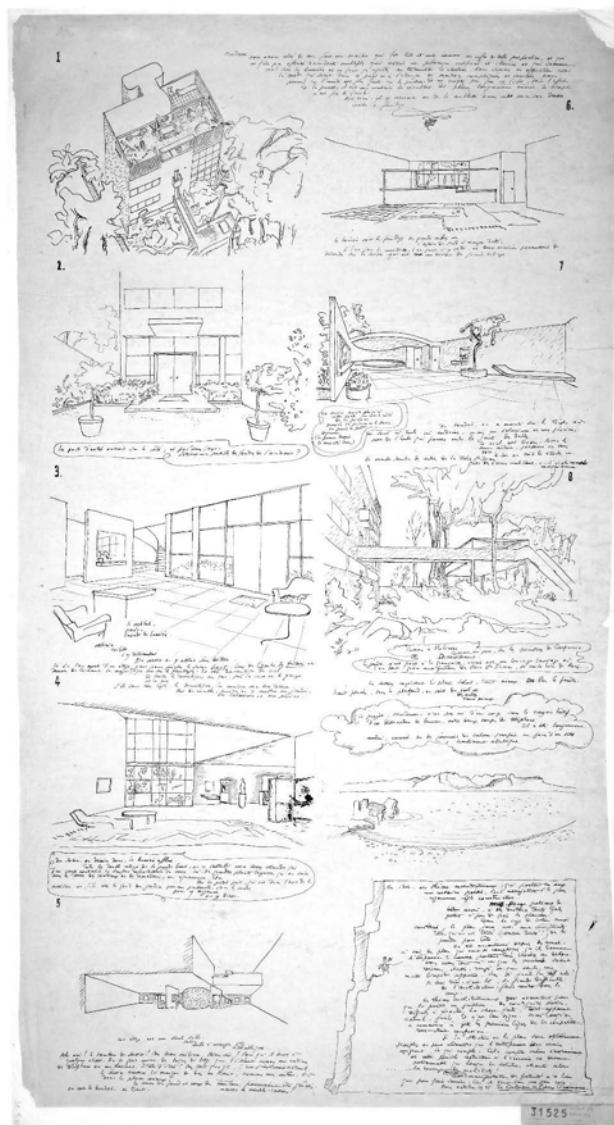
Banham also maintained that “[t]he objectivity of these standards resides, in the first case, in a belief in a normal man, an attractive though shadowy Figure whose dimensions Le Corbusier is prepared to vary from time to time and place to place, thus wrecking his claims to universality”<sup>17</sup>.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

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



Credits: Fondation Le Corbusier, Paris, FLC 31480

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



Credits: Fondation Le Corbusier, Paris, FLC 31525

## 0.2 Postwar engaged users as activators of social change

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## 0.5 From “property value” to “functional value” to “de-construction value” to “new perception and experience value”

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

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

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

## Notes

- 1 Marianna Charitonidou, “Architecture’s Addressees: Drawing as Investigating Device”, *villardjournal*, 2 (2020): 91–111, doi: <https://doi.org/10.2307/j.ctv160btcm.10>
- 2 Robin Evans, *The Projective Cast: Architecture and its Three Geometries* (Cambridge, Massachusetts: The MIT Press, 1995), xxxiv.
- 3 Charitonidou, “Frank Gehry’s non-trivial drawings as gestures: Drawlings and a kinaesthetic approach to architecture”, *Journal of Visual Art Practice*, 21(2) (2002): 147–174, doi: <https://doi.org/10.1080/14702029.2021.2022292>
- 4 Gilles Deleuze, “What is a Dispositif?”, in Timothy J. Armstrong, ed., *Michel Foucault, Philosopher* (Hemel Hempstead: Harvester Wheatsheaf, 1992), 159.
- 5 Charitonidou, “Frank Gehry’s Self-Twisting Uninterrupted Line: Gesture-Drawings as Indexes”, *Arts*, 10(1) (2021), doi: <https://doi.org/10.3390/arts10010016>
- 6 Sergueï M. Eisenstein cited in Gilbert Gorski, *Hybrid Drawing Techniques: Design Process and Presentation* (London; New York: Routledge, 2015), 1.
- 7 Le Corbusier, *The Athens Charter* (New York: Grossman, 1973), 142.

- 8 El Lissitzky, “A. and Pangeometry”, trans. Eric Dluhosch, in *Russia: An Architecture for World Revolution* (Cambridge, Massachusetts; London: The MIT Press, 1970), 146–149.
- 9 Charitonidou, “Mies van der Rohe’s Zeitwille: Baukunst between Universality and Individuality”, *Architecture and Culture*, 10(2) (2022): 243–271, doi: <https://doi.org/10.1080/20507828.2021.1945371>
- 10 Deleuze, Félix Guattari, *A Thousand Plateaus. Capitalism and Schizophrenia*, trans. and foreword by Brian Massumi (Minneapolis; London: University of Minnesota Press, 2007), 298.
- 11 Le Corbusier, Amédée Ozenfant, “Le purisme”, *L’Esprit Nouveau*, 4 (1921) : 369–386; Le Corbusier, Amédée Ozenfant, “Purism”, in Robert L. Herbert, ed., *Modern Artists on Art* (Mineola, New York : Dover Publications, 2000), 58.
- 12 Bruno Reichlin, “Jeanneret/Le Corbusier, Painter-Architect”, in Eve Blau, Nancy J. Troy, eds., *Architecture and Cubism* (Montreal; Cambridge, Massachusetts: Canadian Centre for Architecture/The MIT Press, 1997), 195–218.
- 13 Ibid.
- 14 Alois Rieg, “The Main Characteristics of the Late Roman Kunstwollen” (1901), in Christopher S. Wood, ed., *The Vienna School Reader. Politics and Art Historical Method in the 1930s* (New York: Zone Books, 2000), 87–104.
- 15 Erwin Panofsky, *Perspective as Symbolic Form*, trans. Christopher S. Wood (New York: Zone Books, 1991).
- 16 Reyner Banham, “The Modulor”, *The Burlington Magazine*, 97(628) (1955), 231.
- 17 Ibid.
- 18 Alison and Peter Smithson, “Cluster City: A New Shape for the Community”, *The Architectural Review*, 122(730) (1957): 333–36; Shadrach Woods, “Web”, *Le Carré bleu*, 3 (1962): 1–4.
- 19 Charitonidou, “The 1968 effects and civic responsibility in architecture and urban planning in the USA and Italy: Challenging ‘nuova dimensione’ and ‘urban renewal’”, *Urban, Planning and Transport Research*, 9(1) (2021): 549–578, doi: <https://doi.org/10.1080/21650020.2021.2001365>
- 20 Kenny Cupers, *The Social Project: Housing Postwar France* (Minneapolis: University of Minnesota Press, 2014), xix.
- 21 Kenny Cupers, “Introduction”, in Kenny Cupers, ed., *Use Matters: An Alternative History of Architecture* (London: Routledge, 2013), 7.

22 Peter Eisenman, *Eisenman Inside Out: Selected Writings, 1963–1988* (New Haven: Yale University Press, 2004), 29.

23 Charles W. Morris, *Writings on the General Theory of Signs* (The Hague, Paris: Mouton, 1971), 28, 35.

24 Manfredo Tafuri, “Peter Eisenman: The Meditations of Icarus”, in Peter Eisenman, ed., *House X* (New York: Rizzoli, 1983).

25 Noam Chomsky, *Aspects of the Theory of Syntax* (Cambridge, Mass.: The MIT Press, 1969).

26 Peter Eisenman, “Appunti sull’architettura concettuale/Notes on Conceptual Architecture: Towards a Definition”, *Casabella*, 359–360 (1971): 49–58.

27 Rem Koolhaas, “The Surface”, unpublished manuscript, unpaginated; Gabriele Mastriglio, “Modernity and myth: Rem Koolhaas in New York”, *San Rocco*, 8 (2013): 84–98.

28 Elias Zenghelis, “The Aesthetics of the Present”, *Architectural Design*, 58(7/8) (1988), 67.

29 Nigel Coates, “Narrative Break-up”, in Nigel Coates, Bernard Tschumi, eds., *The Discourse of Events* (London: Architectural Association, 1983), 15.

30 Bernard Tschumi, *Architectural Manifestoes* (New York: Artists Space, 1978); Tschumi, *Architecture Concepts: Red is Not a Color* (New York: Rizzoli/Random House, 2012), 40.

31 Tschumi, *Architecture Concepts: Red is Not a Color*, 19.

32 Tschumi, *The Manhattan Transcripts* (London; New York: Academy Editions/St. Martin’s Press, 1994), 7.

33 Charitonidou, “Simultaneously Space and Event: Bernard Tschumi’s Conception of Architecture”, *ARENA Journal of Architectural Research*, 5(1) (2020), doi: <http://doi.org/10.5334/ajar.250>

34 Jean-Louis Cohen, “The Rational Rebel, or The Urban Agenda of OMA”, in Jacques Lucan, ed., *OMA-Rem Koolhaas: Architecture 1970–1990* (New York: Princeton Architectural Press, 1991).

35 Rem Koolhaas, Bruce Mau, Jennifer Sigler, *S,M,L,XL* (New York: The Monacelli Press, 1998), 923.

36 Koolhaas, Sarah Whiting, “A Conversation between Rem Koolhaas and Sarah Whiting”, *Assemblage*, 40 (1999), 46.

37 Tschumi, “Six Concepts”, manuscript, 199; Tschumi, *Architecture and Disjunction* (Cambridge, Mass.: MIT Press, 1994).

38 Tschumi, *Event-Cities 2* (Cambridge, Massachusetts: The MIT Press, 2000), 11.

39 Tschumi, “Parc de la Villette, Paris”, *Architectural Design*, 58(7/8) (1988), 33.

40 Ibid., 34.

41 Tschumi, *Cinégramme Folie : Le Parc de la Villette* (New York : Princeton Architectural Press, 1987), 4.

42 Ibid., iv.