

ARCHITECTURAL BORDERS AND TERRITORIES

MAPPING IN ARCHITECTURAL DISCOURSE

Place-Time Discontinuities

MARC SCHOONDERBEEK



ROUTLEDGE

Mapping in Architectural Discourse

This book explores the notion of mapping in architectural discourse. First locating, positioning and theorizing mapping, it then makes explicit the relationship between research and design in architecture through cartography and spatial analysis.

It proposes three distinct modalities: tool, operation and concept, showing how these methods lead to discursive aspects of architectural work and highlighting mapping as an instrument in developing architectural form. It emphasizes the importance of place and time as fundamental terms with which to understand the role of mapping. An investigation into architectural discourse, this book will appeal to academics and researchers within the discipline with a particular interest in theory, history and cartography.

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Mapping in Architectural Discourse

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Introduction

Let us develop: let us draw up a topographical plan and take a little journey to the land of better understanding. The first act of movement (line) takes us far beyond the dead point. After a short while we stop to get our breath (interrupted line or, if we stop several times, an articulated line). And now a glance back to see how far we have come (counter-movement). We consider the road in this direction and in that (bundles of lines). A river is in the way, we use a boat (wavy motion). Farther upstream we should have found a bridge (series of arches). On the other side we meet a man of like mind, who also wants to go where better understanding is to be found. At first we are so delighted that we agree (convergence), but little by little differences arise (two separate lines are drawn). A certain agitation on both sides (expression, dynamics, and psyche of the line).

We cross an unploughed field (area traversed by lines), then a dense wood. He gets lost, searches, and once even describes the classical movement of a running dog. I am no longer quite calm either: another river with fog (spatial element) over it. But soon the fog lifts. Some basket-weavers are returning home with their carts (the wheel). Accompanied by a child with the merriest curls (spiral movement). Later it grows dark and sultry (spatial element). A flash of lightning on the horizon (zigzag line). Over us there are still stars (field of points). Soon we come to our original lodging. Before we fall asleep, a number of memories come back to us, for a short trip of this kind leaves us full of impressions.

Paul Klee, 'Creative Credo' in: *The Thinking Eye, notebooks 1*

During the past few decades, 'mapping' has generally started to be appreciated as 'the conceptual glue linking the tangible world of buildings, cities and landscapes with the intangible world of social networks and electronic communications'.¹ For contemporary practices of mapping, this shift in attention has had some crucial consequences. For one, the critical elaboration that had, until recently, always guided the discussions regarding representation have made way for a more uncritical application of mapping, one that seems (obsessively) fascinated by the technological possibilities currently offered to the practices of mapping. The critical examination of the very dependency on representations nowadays seems to have been replaced by the unbridled exploration of digital means enabling mapping. Furthermore, out of

2 *Introduction*

this digitalization of map making and mapping follows the customization of map production as well. Mapping practices have become easily adjustable because of the extensively available and accessible databases, meaning maps also become more up to date as incorporation of new information (data) has become easier. Clearly, mapping in our current era has gained momentum, resulting in an impressive number of mappings that visualize networks, data sets, conversations, territories, topographies and topologies.

Since mapping has primarily been employed, during the past three decades, to analyze contemporary spatial conditions, the terminology that has been used while discussing mapping has, to a large extent, been determined by the very nature of those spatial conditions. During these decades, built environments have been diagnosed with an increased level of complexity, fragmentation and multiplicity, and architectural discourse has had considerable difficulties in coming to terms with this complexity and the consequential emergence of urban fields, intensities and forces that organize, control and order architectural works. The fascination for the 'real', which had dominated architecture up to the mid 1990s, was considered inapt simply because of the displayed inability to describe the very nature of the investigated conditions, let alone understanding them. More recently, the implementation of 'bottom-up' investigative strategies that study the daily uses and rituals these urban conditions accommodate have emerged in an attempt to offer a fundamentally different form of analysis than the factual analyses and theoretical statements that had dealt with urban conditions previously. Unfortunately, the development of a proper nomenclature for contemporary mapping practices has remained, also in architectural discourse, rather limited in specifying and thus explaining which terms are relevant for mapping in contemporary architectural discourse.

As a result, the use of mapping in architecture has seen a gradual change from urban mapping as a means to explore and contemplate future developmental implementations and consequences (i.e. towards projective reflexivity), to spatial mapping as a means to explore and investigate the multiplicity of contemporary urban and territorial conditions (i.e. towards spatial research and analysis). Mapping in architecture has thus started to focus more on scaled readings of spatial conditions in an attempt to indicate a possible informing of architectural construct itself. This book is precisely set out to clarify how cartographic means might enable architects to link spatial analysis to architectural production (whether in the form of a project, theory, history, analysis or critique).² The speculation on this direct relationship between analysis and production does not, to be clear, focus on the attempt to 'optimize' the fabrication of architectural work but rather seeks a more proper 'grounding' of the architectural work in its overall contextual setting, whether these contextual settings are metaphorical, theoretical, historical, factual or critical.

At first glance, it seems that the role of cartographic drawings in architecture³ are historically somehow considered more appropriate for urban planning or, at least, for the positioning of the architectural project within an

urban or territorial setting. Mapping is an enormously appreciated activity that has been given ample attention in recent times, and the potential and importance of mapping has been acclaimed advertently when strictly applied in spatial analyses. The direct employment of mapping in a process resulting in architectural work, however, is rather rare and a feature that has been discussed, considered and propagated but simultaneously surrounded by an imprecision that seems to have resulted in forms of idealization and myth making devoid of indicative proof or substantiation. By analyzing a number of particular examples in the course of this research, it has become increasingly clear that the consideration of mapping aimed at the production of architectural work has potential and that, simultaneously, this potential is not only in need of explication and clarification but in need of theorization as well.

From the outset, therefore, this investigation intended to stay within the strict boundaries of architectural production as much as possible and intended to discuss the use of maps and mapping resulting in architectural work primarily. Mapping, in this context, is discussed not as an alternative to spatial analyses but as a deliberate attempt to relate processes of spatial analysis to the formulation (or formation) of architectural work. This statement of intent of the present work results in a set of preliminary and immediate complications. First, the terminology to be used in this investigation posed some problems. The distinction between diagram, drawing, plan, *scenographia*, map, isometry, axonometric projection, mapping and sketch seems clear, but that clarity is obscured and not only by the absentmindedness in day-to-day use in architectural practice and other discursive activities. Both the intrinsic relatedness of the terms and the fact that the exact boundaries between the field of operations of these terms is difficult to determine contribute to the difficulty of determining a clear terminology. Yet mapping is considered to be able to exceed, potentially at least, all other categories of architectural drawings, since it has supposedly the capacity to include all characteristic features of the other, aforementioned drawing types. Even though the distinction between architectural drawings and cartographic drawings is disciplinary in nature, the intent of this argument is clear: the discussion to be developed should concentrate on the implementation (or use) of cartographic, rather than architectural, drawings in architecture.

Second, if indeed this research had set out to investigate the relevance and importance of cartographic, as opposed to architectural, drawings for the production of architectural work, another disciplinary problem arises, namely how the knowledge and tools from a discipline that is located outside architecture can be practically incorporated in architectural production. Cartography⁴ and architecture have, on the level of general disciplinary activities, commonalities in the emphasis on spatial ordering, spatial description, spatial exploration and representation. In addition, cartography and architecture might possibly be related in their joint interest in issues such as scale, notation, place, measure, organization, objects and territory. Yet beside the similarities

in disciplinary acts and thematic issues, which can already be mostly listed a-priori, the intended contribution of this investigation on mapping in architecture should be located precisely in the development of the conceptual ideas that find an overlap in both disciplines.

As a result of these considerations, the treatment of all material within this research project, whether architectural or non-architectural, is based on an investigative attitude that is not necessarily interested in chronological frameworks, in historical sequences, nor in successions, styles or movements. The (architectural) work itself is of importance, irrespective of temporal distances, and a willingness is needed to see close proximity in the mentality that forms the basis of architectural work understood as 'objects of thought' as well as performative activations.⁵ Moreover, any reflection on spatial interventions (and spatial intervention proposals) by means of architectural production is connected to the issue of 'meaning'. A to-be-developed theory of mapping in architecture should not be aimed at clarifying mapping as tool to '(re)solve problems' of architecture (or urbanism, or town planning), or not only at least, but articulate certain possible significations surrounding the (urban) context of a to-be-inserted object as well. Besides representing certain tangible aspects of the site or area under investigation, these possible significations should allow for a possible reflective understanding of an area, as well as for a visualization of the visible/invisible and the measurable/immeasurable characteristics of that context.

The analysis, then, addresses what the work itself actually brings forward, within what context it was developed, within which framework it operates, what its contribution to the discourse is, and in which way it directs discourse itself. Additionally, the discussion has to clarify what kind of knowledge it reflects and contributes to, and what the work initiates, via the characteristics of the work itself. As Stan Allen has argued, the uniqueness of every architectural work seems to prevent architecture from developing a systematic body of knowledge (i.e. a 'theory') that would confirm its status as a discipline.⁶ Architectural production remains, according to Allen, too dependent on differing circumstances, and this lack of coherence will persist precisely because of architecture's need to intervene in material reality. As each act of mapping should be considered unique as well, the intent to formulate a theory of mapping in architecture faces the same problem. Apart from the difficulty to generalize mappings and thus enabling the formulation of a mapping theory, an additional problem is posed by the difficulty to define a terminology (in close relation to a set of instruments) that would be both appropriate and flexible enough to adapt itself to the mapping of situations never encountered before. To be able to address the specific characteristics of new or unknown situations, the development of an appropriate set of terms is needed that would enable a theoretical generalization while simultaneously allowing for, or anticipate, the possible emergence of the unique.

This book on mapping in architecture thus consists of two parts. The first part delineates the historical emergence of mapping as such followed

by an elaboration of the theory of mapping in architecture, resulting in the understanding of mapping as the production as well as the incorporation of 'place-time discontinuities'. It brings forward the understanding that the act of mapping produces spatial knowledge, which becomes projective as it produces sets of relationships that are both dynamic and spatial, the trajectories of which are offering both makers and readers of mappings an index of possibilities for architectural work. These possibilities, it is argued, can be made instrumental for architecture through the activation of the map for architectural construct. By clarifying the term 'activation', hopefully the provocative statement of Abrams and Hall will be sufficiently challenged, namely that 'perhaps *mapping* may even come to surpass *designing* as the term to express the complex but related practices underlying fields as seemingly disparate as architecture, biology, geography, interaction design, social network analysis, statistics, art, cartography, way-finding design and urban studies'.⁷ To be clear, mapping is not discussed as an alternative to design but as an act that potentially informs architectural design.

The second part of the book then discusses the different modalities with which to understand these place-time discontinuities. The three chapters of this part have thus been developed to address mapping with a specific focus on the notion of place (Chapter 3), on the temporal (Chapter 4) and on the notion of place-time (Chapter 5), respectively. This tripartite division elaborates the notions of place and time in relation to the very discontinuity mapping introduces. With respect to place, a redefinition of the understanding of 'chorography' is proposed, in which the act of measuring propels differentiation and opens the mapping act towards forms of ideation. With respect to time, an elaboration of 'aionology' as research field is offered, which, in mapping terms, generates a system of notation and a process of architectural formation. With respect to place-time, the term 'heterotopology' is introduced, a mapping act that initiates a contextual ordering and consequently generates theorization. The specific methodologies employed in each chapter follow the logic of this main structure, meaning they are different for each chapter and inherently follow the focus in each of them as well as the logic of the argumentation. Methods of inquiry thus range from historical inventory and positioning to comparative analysis, the study of cases, archival research, text and project analysis, theoretical explication and speculation.

The goal of this book is thus twofold: to provide for an overview (by mentioning, naming, defining and explaining the various relevant aspects of mapping for architectural research, theory and design) and to develop a specific type of knowledge based on a number of relevant case studies. These case studies assist in framing and clarifying aspects of mapping with a specific architectural intent, namely as underlying representational devices that operate, more or less directly, towards an architectural intervention. As will be clarified, maps are socially constructed forms of knowledge as well as politically constructed forms of knowledge, but they are also and foremost spatially constructed forms of knowledge. The power of the map, to paraphrase

Wood,⁸ is that they display information spatially and more recent paradigm shifts in cartography have helped greatly to posit the overall importance of mapping as investigative tool or as a means to explore and investigate phenomena spatially.⁹ The relation between the territory and the map has, already for some time, been considered rather problematic, but to regard mapping as a discontinuous understanding of place and time allows for a less factual representation of spatial conditions and thus opens up the spatial ordering within a mapping towards a multiplicity of interpretations. In essence, the book's thesis proposes the notion of 'place-time discontinuity' in mapping as the fundamental aspect with which to understand and develop mapping's capacity to generate (new) forms of architecture.

Notes

- 1 Janet Abrams and Peter Hall, 'Where/Abouts', in: Abrams and Hall (eds.), *Else/Where: Mapping. New Cartographies of Networks and Territories* (Minneapolis: University of Minnesota Press, 2006), p. 12.
- 2 To keep the terminology in this argument clear: architectural work is considered to be the outcome of architectural production. Architectural work is, indeed, a project, a theory, an historical account, a spatial analysis or a critique. Drawings, renderings and models are in first instance architectural products, which can, in particular cases, constitute an architectural statement which turns them into architectural work.
- 3 I.e. urban plans, maps and mappings. The precise distinctions between these notions is clarified (and defined) at a later stage.
- 4 According to *Encyclopedia Britannica*, 'cartography' is 'the art and science of graphically representing a geographical area, usually on a flat surface such as a map or chart. It may involve the superimposition of political, cultural, or other nongeographical divisions onto the representation of a geographical area'. www.britannica.com/science/cartography [accessed 19 May 2019].
- 5 This investigation is therefore explicitly not an historical account of the issue of mapping in architectural discourse. In light of this statement, Manfredo Tafuri's remark that 'it is the problem, and not the object that concerns the historian' is still an appropriate reference for these ideas as well, since it offers a counter position. In this book, it is indeed the object (in terms of an 'architectural work') that is of concern and not an historical 'problem'. See Richard Ingersoll and Manfredo Tafuri, 'There Is No Criticism, Only History, Richard Ingersoll Interviews Manfredo Tafuri', in: 'The historical project of Manfredo Tafuri', *Casabella; International Architectural Review*, no. 619–620, January–February 1995, p. 97.
- 6 Stan Allen, *Practice: Architecture, Technique and Representation* (London: Routledge, 2003 (2000)), pp. xiv–xvi.
- 7 Abrams and Hall, op. cit., p. 17.
- 8 See Denis Wood, *The Power of Maps* (New York: The Guilford Press, 1992).
- 9 Pablo Iván Azócar Fernández and Manfred Ferdinand Buchroithner, *Paradigms in Cartography; An Epistemological Review of the 20th and 21st Centuries* (Berlin Heidelberg: Springer Verlag, 2014).

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Part 1

The emergent in mapping



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1 The historical emergence of ‘mapping’

Map use, subversivity and the digital

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1.1 Mental maps

With the publication of *The Image of the City*¹ in 1960, urban planner and scholar Kevin Lynch intended to make a set of planning tools for urban design available to a larger public of scholars, academics, practitioners and even non-professionals.² In the book, Lynch explicated how an individual’s experience of the city is the result of several navigations through the city over time, which is subsequently spatially organized in the individual’s mind. The accumulated knowledge of these navigational experiences of the city is, furthermore, formalized into a ‘mental map’.³ Investigating these mental maps had enabled Lynch to distinguish the underlying principles of the spatial experience of the city. *The Image of the City* publication actually came out of a larger research project, financed by the Rockefeller Foundation and titled ‘The Perceptual Form of the City’, which Lynch had started in 1954 together with Gyorgy Kepes.⁴ *The Image of the City* allowed Lynch to clarify the spatial entities that constitute the primary elements with which one moves and spatially orients oneself in a city. These five spatial elements were termed ‘paths’, ‘edges’, ‘districts’, ‘nodes’ and ‘landmarks’ by Lynch,⁵ and they formed ‘simply the raw material of the environmental image at the city scale’⁶ (Figure 1.1). Lynch’s insistence on the importance of analyzing mental maps with the specific purpose of understanding the individual’s experience of the city has since