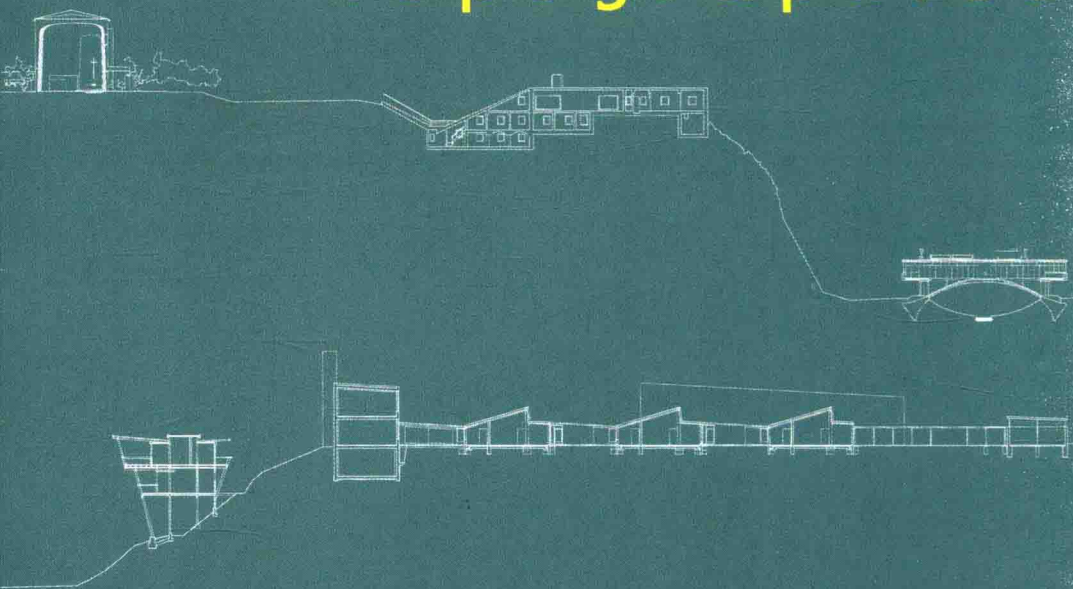
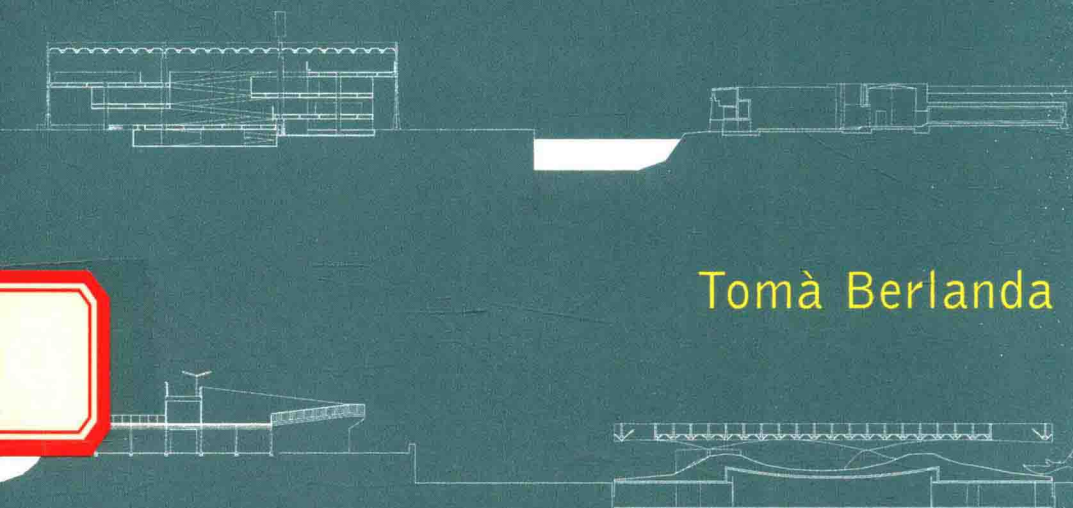


Architectural Topographies



A graphic lexicon of how buildings touch the ground



Tomà Berlanda



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Preface

This book is an expansion upon the research produced during my doctoral dissertation in architecture and building design at the Politecnico in Torino. The original investigation has been continued and further elaborated through teaching in different contexts, particularly at Syracuse and Cornell University, and most extensively during my years in Rwanda, at the Kigali Institute of Science and Technology. Professional practice and scholarly work in the “land of the thousand hills,” have especially reinforced the notion that the relationship between man-made transformations and ground is a privileged observation point for any architectural, urban, and landscape intervention.

What originated the reflection is the acknowledgment of an existing gap between recurrent statements on the importance of how buildings touch the ground and the lack of explicit criteria for such an assessment. Both in the analysis of built works and in pedagogical practice, these are conceived here as a constant habit of questioning the meaning that gives a sense of consciousness to our work. Hence the inspiration emerged to create a tool to recognize, analyze, choose and invent possible solutions within a logical concatenation. Something that would allow for, and at the same time overcome, the specificity of a single case: a device enabling the reading and interpretation of the relationship with the ground beyond the apparent heterogeneity of the practice.

This topographical lexicon is a tool that combines reality and invention. By establishing relationships between the heterogeneous elements which compose both explanatory texts and the built architectures, it helps to understand and explain works and statements, constructive details, and the differing visions of the world. Hopefully it will contribute to overcome the dichotomy between abstract pronouncements and architecture, in the writing of place.

Kigali, Rwanda, June 2013

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Introduction

The quest for architectural topographies

Before placing stone on stone, man placed a stone on the ground to recognize a site in the midst of an unknown universe, in order to take account of it and modify it.

Vittorio Gregotti¹

The trajectory that translates a conceptual design in a built, structurally stable and properly placed architecture in space, finds a crucial moment in the way in which the building touches the ground. In their statements, architects and critics have long shared the awareness that this unavoidable encounter constitutes an integral part of the design and is intimately connected to the attitude one holds with regard to the site and with the relationship between artefact and nature. Often, however, this recognition does not go beyond a rhetorical call for the need of anchoring the building to the ground, to be realized by means of a non-specified topographic sensibility. "Great" architects elaborate their own personal repertoire more or less consciously, but the attention to the geographical nature of places, to the form of the terrain, and to the topographical singularities is not mechanically translated into built form, neither is it easy to establish the mediating moments. Furthermore, even critical analysis, which mostly deals with the link between ground and artefact in terms of poetic vision or architectural language, does not always place these elements in relationship with the built solutions, which are invented or readapted case by case.

Assuming that this relationship can be reduced to a limited number of elemental situations, to which an exceptionally rich variety of built answers are given, the first phase of the research was devoted to an investigation of buildings and projects to explore how the relationship with the ground is prefigured and materialized in each of them, and to the reading of theoretical texts and monographs. The temporal framework considered is that of the last 100 years, from the beginning

of the modern movement until the dissolution of disciplinary boundaries between architecture and landscape architecture, whereas the field of investigation expands over different geographical and cultural areas.

The decision not to start from a preconceived list of hypothetical situations, but from the built works, in order to re-trace their constitutive elements, seemed coherent with the intention of decomposing and framing the theme from a point of view that coincides with that of the architect who discovers the site before the project, conceives its relationship with the construction, and builds it tectonically. To this end, the collected documentation has been re-elaborated and represented graphically through sections. These appear to be the most appropriate means of representation, not only to show the vertical relationship between the various strata, but to reveal and synthesize all relationships between ground and architecture. As Carol J. Burns puts it: "conveying the topographic qualities of both building and setting in the baseline, the horizon line, and the profile line, the section shows the relationship between site and building in phenomenological terms and not in geometric terms."²

Sections underscore the new configuration generated by the solidarity between earth and artefact, which is different from the one the line of the ground and building would have if considered separately. They show how the materialization of this link can be reduced to three primary situations, depending on whether the main aspect is the interlock, adjacency, or separation. This does not represent in and of itself an original discovery, but bears implications whose comprehension requires the overcoming both of the simple geometric description of the earth's profile, intended as a line with no thickness, and of the uncritical classification of constructive details that allow for buildings to either penetrate the ground, simply place themselves upon it, or entail with it a punctual and limited contact. Each design is of course influenced by technical and financial constraints, as well as by the features of its site. But when looked upon as physical realizations of very diverse ideas on architecture and landscape, all the case studies pertaining to the first half of the twentieth century—Frank Lloyd Wright's Usonian houses, Le Corbusier's buildings on pilotis, the first terraced houses by Mies van der Rohe and his later unbuilt bridge structures, Richard Neutra's, Rudolph Schindler's, and Alvar Aalto's architectures—can be read as the result of a constant reflection on the encounter with the ground, although not systemically expressed by the authors nor investigated by scholars. Even more directly connected to the idea of meeting

the ground are projects by architects who constantly and explicitly recognize the importance of the topic, both from a theoretical standpoint and as the conceptual generator of their work. Among them, Steven Holl, who towards the end of the 1970s, identified the topic as one of the crucial nodes of the relationship between architecture and place, and continued this investigation in his later work. According to him: "the relation between things is the focus, rather than the object-type. The zero point of such a relation is a section at the surface of the earth."³ The Y House in the Catskills mountains (1997–9) is a built manifesto of this statement. In Holl's words: "the house occupies the hill and the site through three primary relationships: in the ground, on the ground and over the ground. The portion over the ground is suspended, cantilevered above the portion in the ground."⁴

In more recent years the use of materials and load bearing structures that do not require a traditional foundation platform has become more common, and technology now allows for inexpensive means of moving the ground and disrupting its configuration. Therefore, raised, stacked, inflated, vectorial, carved, exposed, and inscribed are adjectives entered in current vocabulary, which, by objectifying the noun "ground" extend the meaning of modifications operated by architecture, to involve both building and transformed soil. But interlock, adherence, and separation remain the categories from which all types can be derived. Whether they refer to the entirety of a project or portions of it, or appear simultaneously in the same building, they are at the same time concrete material phenomena and abstractions, which synthetically represent an idea and desire to either belong or keep the distance from the terrestrial contingency and its laws.

Sections provide clues to the authors' intentions. In order to understand them it is important, on the one hand, to take a closer look and reduce the observation field to uncover the tectonic solutions, and on the other to integrate the reading with sketches, statements, narrative elements condensing, and representing the architect's position towards a specific location. Thus the way in which a building is related to the ground loses any geometrical abstraction and reveals itself as a significant evidence of the approach to place. It is a theme Christian Norberg Schulz examines within the more general dialectic relation between place and architecture. Referencing Martin Heidegger's thought, specifically the passage on the "temple that stands on the ground and towers into the air,"⁵ he states that: