

Layers of Contemporary Architecture

**edited by
Luigi Spinelli**

FrancoAngeli

Architectural Design and History

The Bookseries *Architectural Design and History* intends to explore the relationships between architectural design and the contemporary city, with a particular focus on the contexts where urban transformations relate to the preservation and promotion of historical heritage. By intersecting various theories, techniques and practices, the contributions aim at unfolding the complex identity of the architectural culture, fostering connections and exchanges among different disciplines, and enhancing a strategical and evolutionary conception of architectural heritage.

The Bookseries is promoted by the Polo Territoriale di Mantova of Politecnico di Milano, which is the seat of the UNESCO Chair in Architectural Preservation and Planning in World Heritage Cities. All the published volumes undergo a blind peer-review process, which the Scientific Committee manages through the cooperation of qualified external referees.

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Editorial coordination
Elena Montanari

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Tassinari/Vetta

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Preface

Guillermo Aranda-Mena

Architecture plays a unique role in safeguarding our collective memory. Through architecture we can navigate human ethnographies over time and space.

In *Les Lieux de Mémoire*, Pierre Nora stresses on the importance of nurturing our collective memory as a defining attribute of humankind. In his own words: «A *lieu de mémoire* is any significant entity, whether material or non-material in nature, which by dint of human will or the work of time has become a symbolic element of the memorial heritage of any community».

Layers of Contemporary Architecture is a thoughtful publication series about architecture, memory and authorship. In this publication, architects and academics have contributed a collection of fourteen scholarly essays reflecting on seminal architects and their role in the making of contemporary spaces well-grounded through heritage.

Architecture must engage with human narratives at its highest potential — «*la memoria colectiva*» —, not only to record rational knowledge as a cognitive process but also as a means for subjective stimuli for perceptual sensing. We inhabit the spaces of memory as a continuum, we are immersed in our environment; we can mute music, close a book, or throw a rug over a canvas, but we cannot shut our surroundings. Thus, architecture is instrumental in bringing spatial narratives through a design language. No other art form nor medium can blend theory, memory and narrative through space to the extent that architecture can.

The present: architecture is a patient witness of human life. It can capture and display idiosyncrasies, behaviour and emotions of our daily lives. It is a reliable instrument for ethnographic recording. On the receptive side, architecture is a medium by which humans can sense and experience such narratives. Although structurally static, architecture is dynamic through time and space; it can redeem humanity from a common pressing risk of social forgetting.

The past: only through reflection we can learn and engage at a deep level with our collective memory, and architecture is a vehicle to do so. The curated essays presented here transcend historicisms, stylistic and theoretical creed often found in scholarly publications. Thus, *Layers of Contemporary Architecture* provides a universal lens that allows one to engage with the discourse of past, memory and

identity in a contemporary fashion. The work is of international relevance, connecting the past with an emerging contemporaneity in architecture.

The future: *Layers of Contemporary Architecture* leverages the acclaimed success of *MantovArchitettura*, the annual architecture festival organized within the programme of the Unesco Chair in *Architectural Preservation and Planning in World Heritage Cities*, chaired at the Mantova Campus of Politecnico di Milano. This volume provides an opportunity to learn from a curated selection of eminent architects and keynote speakers at Mantovarchitettura. The content structure transverses four themes: overlapping, overlaying, resurfacing and recording. In so doing it provides the intertwined strata upon which the future is forged.

I much hope that *Layers of Contemporary Architecture* becomes a seminal scholarly resource present across schools of architecture, public libraries, and personal libraries of the young and not so young.

I.

Overlapping

Paulo David. Dwelling on the Land-sea Threshold: «Circular» Architecture

Barbara Bogoni

Madeira is the main of a small archipelago of tiny islands in the middle of the Atlantic Ocean, nearly one thousand kilometers away from the Portuguese continental mainland coastline and from the major centres of its architectural culture, from the schools and universities and from its public, economic and political life drives. A separated life condition, solitary and distant, where Paulo David refines a method of doing architecture that I call «circular», moving away from the island and returning back to it, borrowing from the island the matter itself, its materials, its culture, its tradition, its deep-rooted feeling.

The continual presence of Paulo David — who was trained at the Faculty of Architecture of the Technical University in Lisbon and, after collaborating with João Luís Carrilho da Graça and with Gonçalo Byrne, returned to his island to work — is a narration of his radical choice of preserving and bequeathing the building culture of a land rich in history and tradition, through a professedly contemporary design practice. As a matter of fact, the insular architecture by Paulo David attests to a total adhesion to the place, not in terms of the picturesque location, as much as for the deep acknowledgement of its cultural and material value and of the memories the place itself preserves and conveys. It represents the powerful evidence of the deep bond that links the architect to his home territory and expresses the successful entanglement between the landscape, tectonic and traditional elements and the piercing subtle awareness of the designer, who has the ability of reading even the tiniest signs that tradition, rituals, acts and meaning overlayed in time. The experience of the continuous check of the place is based on a thorough activity combining research, filing and design practice, which the architect carries on and questions through the discipline of analogy and cross-reference.

This exercise, as simple in its enunciation as it is complex and thorough in its implementation, finds in Paulo David's work some very peculiar implications, because it is subordinated (as almost every activity in Madeira) to the inevitable and extreme confrontation with the destructive forces of nature the island territory is recurrently and wildly overwhelmed by; and because it is subdued to the acceptance of scarcity and of the existence of unavoidable boundaries, which acquire, in that place, a character of absoluteness, completeness, timelessness; because it is subjugated to the acknowledgement of the several anti-

nomies the island contains — the foregone fluidity of its lavic core now solidified in harsh basaltic surfaces, the liquidness of the ocean waves breaking on the hard coastal rocks, the impassability of the fierce inland which the inhabitants oppose through their tireless and determined work, aimed, in the past as nowadays, to the conquest of the tiniest land plot to be converted in sustainable agricultural fields, the only assurance of the man survival on the island.

Tensions

Madeira is therefore a complex territory, where the force of elements — water and fire, earthquakes and volcanoes — did not really find a shore to rest on yet. There is no real beach in Madeira island, indeed. The North coast is unusable: the wind is strong, the sea is rough, the coastline uneven; on the South, the steep land spits (the so-called *lombas*) climbing from the island centre down to the coast outline a sequence of bays and inlets where the urban centres (towns and villages) were settled, harbored between high mountainsides in the valleys crossed by dangerous creeks that periodically grow and overflow. In those coves somewhere it is possible for the men and the houses to timidly overlook the water and to take sustainable advantage of the available natural resources: fish, landscape, climate.

Funchal, the capital city of the island, is a town which grew from the coastline to the inland, following the natural mainlines of the surrounding valleys. An historical centre made out of stone and basalt; of white and black; of military, cultural, religious, administrative stories; roads and motorways; luxuriant parks blooming with secular trees and flowers to be exported all around the world; a periferal development of small rural houses scattered at mid-hillside, in the middle of small plots of farmed land.

Four creeks characterized by a torrential regime — the so-called *ribeiras* —, flowing from the mountainous island center to their respective mouths, converge from three different directions right in the heart of the city. Water into water, the land in the middle.

The water is the greatest danger. Surrounded, sometimes besieged by the sea water, this territory longs for sweet water in the summer months, when it is threatened by the bushfires and the drought,

while bridle it in the winter time, when the flood menaces constantly remind of the past tragedies, the memory of which remains vivid.

The water is an ally. Beloved, it supplies food, landscapes, tourism; collected, driven and distributed, it allows the life of men, animals and vegetation, and it ensures the balanced cycle of agricultural production: more than two thousand and five hundred kilometers of canals and irrigation ditches — the *levadas* — have been built since the 15th century with a titanic work along the mountainsides, the slopes, the valleys, down to the coastal towns.

The water is an ample landscape. The whole town lays down as lava, spreading to the sea, appearing at its liquid horizon. The ocean is mobile, flat, languid, silent sometimes, more often impetuous. To the ocean, the inhabitants devote themselves and their strenght, their expectations, their daily work: «This people have the determined pride of the ones who know the power of things, the feeling of the supreme uselessness of life, which there is nothing else to oppose against but the force of a momentary, strictly necessary, order ...»¹.

The water is a linte, two lines indeed: the distant motionless inscrutable and eternally unattainable line of the horizon, and the ever-changing tormented line of the coast, dividing the water from the land, the very boundary between the concreteness of the material reality and the infinite mass of the oceanic uncertainty.

Paulo David's architecture, deeply rooted into the rocks, into the tradition, into the material and immaterial signs of the *locus*, dwells into the land, clings to it, and from the land overlooks, watches and embraces the water, allows for a difficult way of inhabiting in a kind of artificial landscape, both spectacular and serene, where the antinomies are broken and the tensions softened. The look aimed to the horizon, on this boundary the architect grounds and raises his work, gathering in his action the extent of the visible sea and the experience of the land.

On this limit, along this limit, through this limit the architect builds.

On

Firmly anchored to a rocky spur, overhanging the Atlantic Ocean, the arts centre in Calheta (*Centro das Artes de Casa das Mudas*, 2001-

04), reinterprets the primitive spatiality of the island, blended into the geologic matter, the existing buildings and the landscape, and re-designs it, hence merging it permanently with the place, suspended between the sea in front and the mountains behind, turning itself into a new place.

On the limit, some one hundred meters above the sea level, the building digs into the rock, finding itself some space into it, adapting to the coastal topography, redrawing its cross-section, melting into the ground like volcanic lava, and acquiring its definitive shape like lava meeting the water. The building is configured as a «stony concretion», and enhances the material and the geological layering through a continuous and homogeneous thin-slatted horizontally-arranged basalt cladding.

The building is inhabited by the sunlight and by the constant presence of the ocean, peeking out in the exterior spaces, in the stairs and in the open air corridors, in the central entrance patio, before seeking into the well-proportioned, multiple and differentiated interior spaces, carved into the rocks, divided and separated on the basis of function and vocation: the library and reading room, the auditorium, the exhibition rooms, the service spaces and storage rooms, the archives. The primitive model of the *furnas*² guided the distribution of the partially or totally hypogeal interior spaces, defining in section the distinctive organization of voids: subtracted from, super-imposed, linked by stairs and corridors.

To dwell on the limit becomes here the glorification of the surrounding landscapes — the mountain and the sea, as it was in the initial architect's purpose: «The building exists at the threshold between the ocean and the land — and is informed by the condition»³.

A new «oceanic and volcanic space» is hence born, a synthesis of several materic and figurative readings the architect carries on about his island (about the rough and jagged rocks, the cliffs and the spurs, the pebbles and gravel eroded by both water and time passing by); a synthesis of the patient study of the building tradition, of the supporting walls made out of stone; a synthesis of the desire to set the absolute marine light bursting in from the South and to gather and drive it into the interior of the gometric, abstract, intensely contemporary space containing life.

Along

The Salinas Maritime Boardwalk (2002-06) is a landscape design intervention developed along a short coastline section near *Câmara de Lobos*, on the Southern island shore. This work expresses and enhances the direct relation between the inland territory and the oceanic vastness, born out of necessity and vocation, as well as the attempt of improving the accessibility and giving a new vitality to the very location where water and lava dramatically met in the past, in a clash suddenly frozen in a rough and magnificent telluric landscape.

The intervention redesigns the rocky island coastline in order to make it walkable, redevelopping some common structures in the Madeira territory and assimilating in the narrow coastal spaces several existing traditional elements (such as retaining walls, terracing and platforms), it enhances the character and the textures of volcanic stone, and it turns even the tiniest sculptural element or spatial hint into visitable and inhabitable attachments. The natural unfolding of the path on the existing topography, along the coastline, appears as the result of the erosive action of the sea on the rocky cliff, a kind of an alliance between the desire of men to dwell on the coast limit and the vigour of sea water rhythmically breaking and carving new spaces in it, where previously unknown conflicting relations arise. The project seems to appease those conflicts and gently soften them through the domestication of stone, the control of the tide, and the gathering of the water in the pacific swimming pools plunged into the ocean.

In

The promenade in *Câmara de Lobos* ends in a powerful basaltic wall and spreads into a concrete terracing, which harbours the complex of *Piscinas do Atlântico* swimming pools, an architectural domestication of the spontaneous and primitive arising of the water — so unreachable and unusable in this rough location —, where it can be offered to the needs and use of men.

An extended slab, horizontal and abstract, spreads into the ocean, in a narrow inlet almost completely filled with harsh basaltic rocks, coming from the eruptive core of the island and settled in this place

since long ago. Similar to the rocks, people's gaze seems to linger onto this bay, which is topographically shaped into tiny accidental details, scattered and differentiated, showing multiple orientations and interactions between natural elements (water and rocks) and artificial ones (stonework and concrete), allowing the geometric design of the project to understand the nature of place, to transform it, and to re-interpret it while operating a transformation.

A few elements are composed and brought together, in order to provide the support and equipment for the touristic and leisure activities to happen in the solarium and in the swimming pools, along the path and in the panoramic viewpoint, with a concrete elevator shaft resolving the vertical accessibility problem, the coffee shop — transparent and light, laid on a cliff — and the dressing rooms — hidden in the massive thickness of the wall — both overlooking the platform. Higher, on the promontory, in a dominant position, the restaurant stands.

Between

The project of the panoramic restaurant (*Restaurante Miradouro*) and the urban gardens of *Jardins das Salinas* (2004-06), overlooking the swimming pools in an elevated position, retrieves harmoniously the topography of the ocean coastline and evokes both the long lost presence of the ancient salt ponds carved into the rocky spurs and the layout of farmed land plots.

Hanging out onto the ocean, the restaurant is housed in a delicate volume made of corten steel, defined geometrically and plastically, partially clad in thin wooden slats allowing a warm and embracing light into the interior rooms overlooking the sea.

A sequence of stairs and small terraces allows the passers-by to detect small changes in the maritime promenade, in the height of small segments, in the pauses to look at the landscape, in the seating points before regaining the stroll and experiencing the pleasure of dwelling in tiny open-air rooms or in the wider garden closing the path, located in a more open and dominating position. The gardens show again the same scheme and layout of the local rural plots, including their arbors for the vineyards (the so-called *latadas*), their stepped terraces, their split stones supporting walls (*poios*), their narrow paths between the

furrows, hence recalling the agricultural vocation of the island and celebrating the strenuous action of men who have been wrenching during the centuries tiny plots of land from the primitive natural territory and from the slopes swept by strong winds and flooded by torrential rains, in the struggle to farm some banana trees, some mangoes, some avocados.

«Thus the whole complex is built as if rewriting what exists. Geography, history, society, construction and time are valued and, in this case, used as building blocks»⁴.

Synthesis

Paulo David has an intimate and deep knowledge of his homeland, enhanced by the constant exercise of looking at it and of developing a theoretical insight and a design practice on it (and his unbuilt projects are the evidence of his commitment to knowledge and deep analysis, the necessary preconditions of every possible transformative operation on the territory). He transmits his awareness through an architecture blended with the landscape and the materials of the island — an architecture deeply rooted into the territory, into the tradition, into the signs of memory, both built or hidden below the layers of time and matter.

The projects presented here — all built *on*, *along*, *in* and *between* the Southern coastline of the island, on the land-water borderline, in a suspension between the rock and the sea, built out of both materials — enact the representation of several landscapes of Madeira and stage different and specific strategies of inhabiting the insular territory. Through these projects it is possible to have a glimpse to that atavistic, almost archetypal correspondence between matter and landscape, which is able to convert architecture into a necessary and irremovable presence in the natural landscape. Although recognizable in its shape as the result of the intervention of man into the nature — the very tool of transformation and artificialization of the existing territory —, Paulo David's architecture is able to enhance its continuity and identity, reconciling its tensions into an harmonic balance.

This is the «circular» architecture by Paulo David, with its unique and distinguished strategy of designing in section — a skill that is

a constant trait in both two-dimensional graphic signs and three-dimensional model-making —, a way to interpret the telluric-originated material layering visible in both the geological sections and in the architectural construction.

The research in the continuity in cross-sections drives Paulo David's work in an attempt of dissolving the boundary between architecture and topography and to achieve a synthesis between architecture and landscape. The ultimate aim of the architectural intervention is thus to be grafted into the landscape, to become landscape, to be landscape.

«To be landscape» represents the desire to unveil a way of living the space of the island through the architecture, the will of claiming back, or simply enhancing, a way of inhabiting the architectural space which is quintessentially from Madeira, thus designing an architecture which is itself Madeira⁵.

The building process of this «contemporary regional architecture» takes place as a progressive and paced sublimation of thought first, then of the sign and of the drawing, rigorously in black and white, apparently abstract and essential, which gradually lays down on paper the multiple peculiarities, stories, materials, thoughts, techniques, traditions, as well as it translates into a contemporary alphabet the rich language of the regional forms, thus describing the drama of the limits and of the antinomies, the fluid and the solid, the inside and the outside, the near and the distant. The infinity of the Ocean and the finite of the island, so closed, finished, solitary. In the meanwhile, Paulo David's design strategy generates an architecture dense of local spirit, able to unveil the overcoming of all opposition.

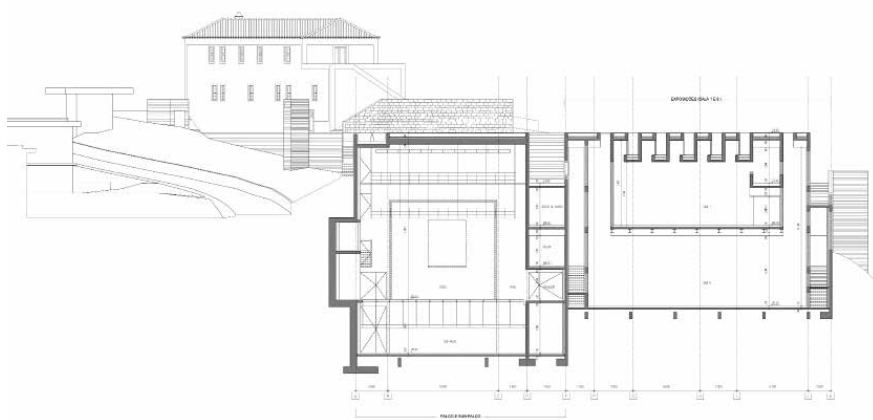
¹ H. Helder, *Un'isola in sketch*, in A. Gomes Fournier (ed.), *Nostalgia dei giorni atlantici*, Scrittura pura, Villa San Secondo 2005.

² The so-called *furnas* are ancient cavities carved into the stone and used as support structures to the main residential spaces in the rural houses in the inland. Although they were very common in the past, they are now completely obsolete or totally missing.

³ Paulo David, marginal note to a design sketch of *Casa das Mudaz*.

⁴ E. Tuñón, «Geografía como cuerpo y arquitectura como geografía / Geography as body and architecture as geography», *2G Monograph. Revista Internacional de Arquitectura*, Paulo David, 47, 2008, p. 11.

⁵ «*Architettura como paisagem*. Un'indagine sulla poetica di Paulo David», Dissertation by Matteo Ferrari, supervisor prof. Barbara Bogoni, Bachelor program in Architectural Design of the School of Architecture Urban Planning and Construction Engineering of Politecnico of Milan, A.Y. 2018-19.



Paulo David, *Centro das Artes de Casa das Mudas* (Madeira, Portugal 2001-04).

1 Transversal section
© Paulo David Arquitecto.

2 Overall view of the site
© Paulo David Arquitecto.



3 Plan of the roof level
© Paulo David Arquitecto.

4 View from the site
© Paulo David Arquitecto,
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5
View of the roof level
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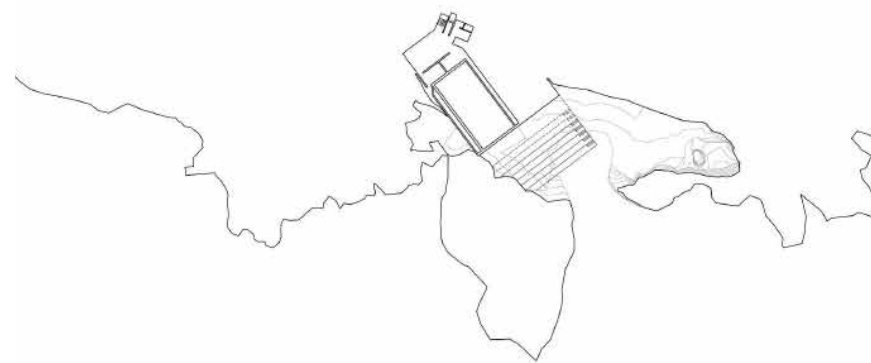
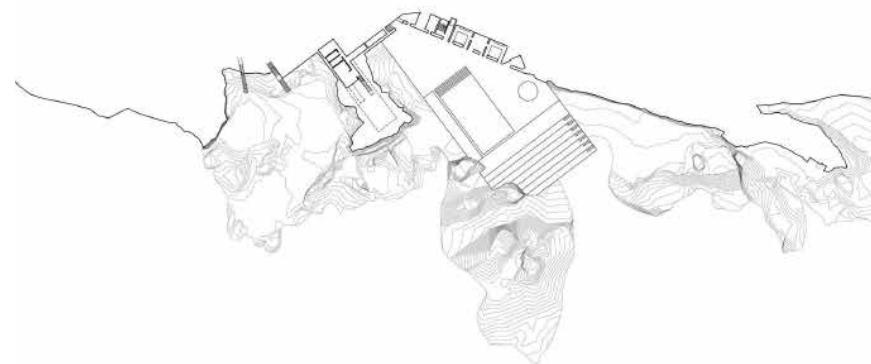
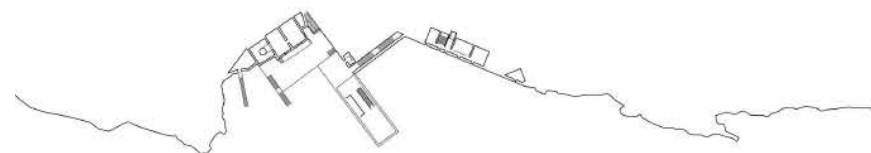
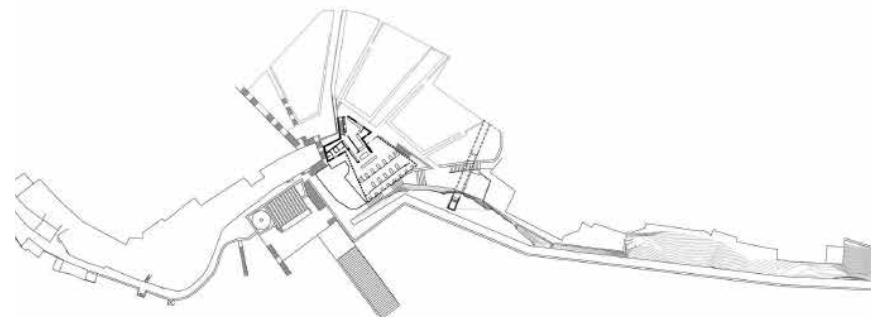
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View of the building
integrated into the cliff edge
© Paulo David Arquitecto,
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Paulo David, *Piscinas do Atlântico and Passeio Marítimo das Salinas* (Câmara de Lobos, Madeira, Portugal 2002-06).

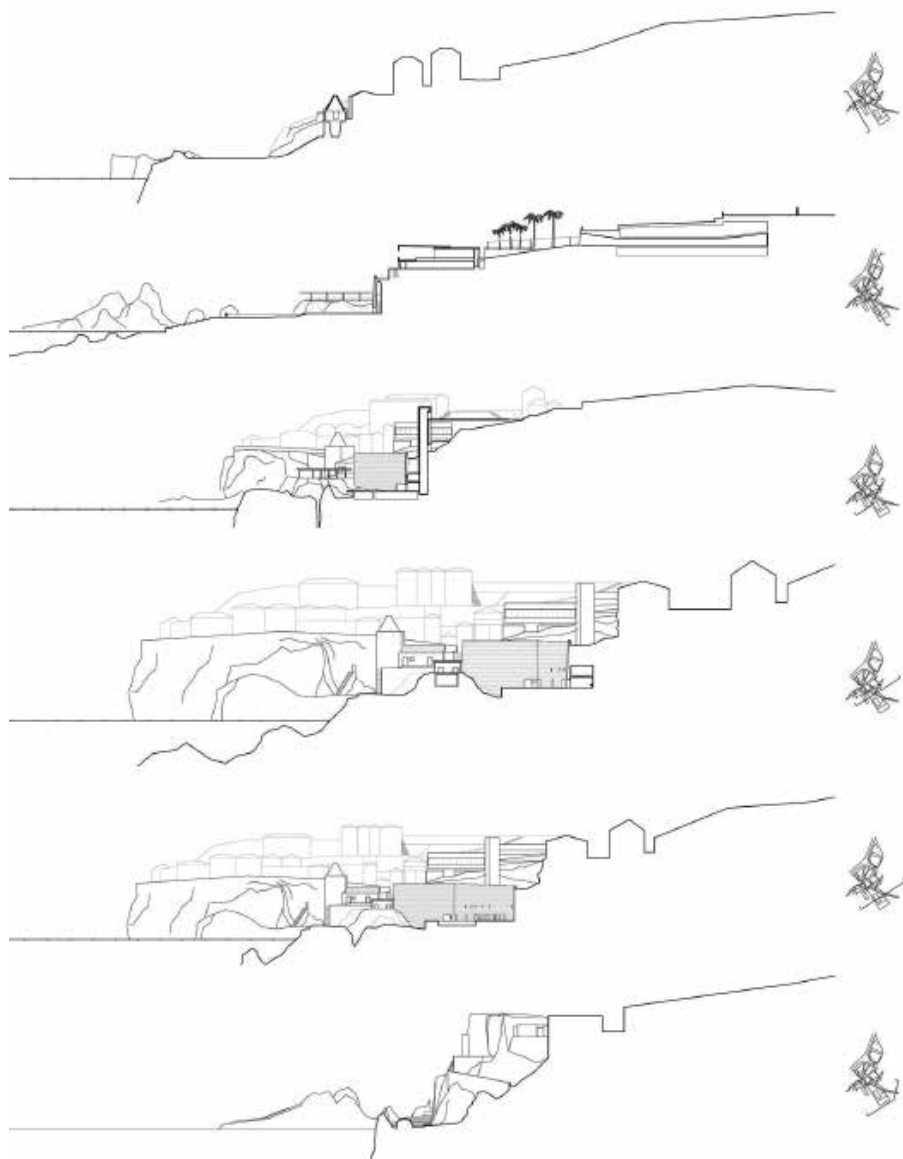
7 8 9

Views of the pools
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10

From the top, plans of the
restaurant level, of the
cafeteria level, of the pools
level, of the technical level
© Paulo David Arquitecto.



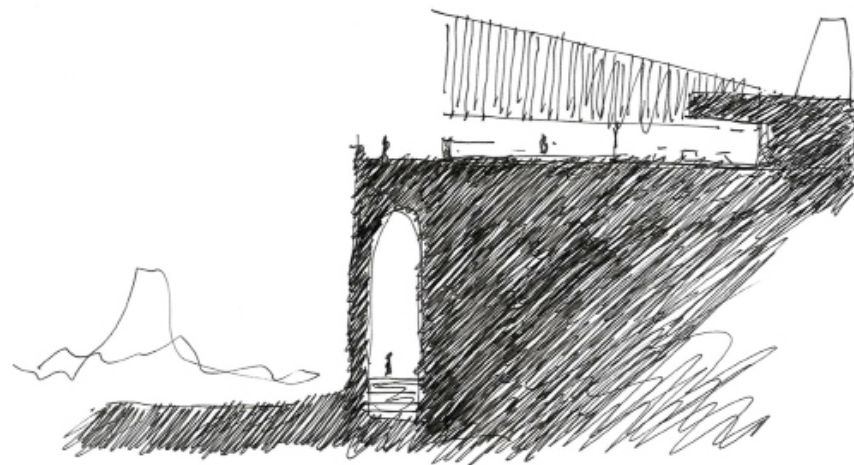
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Sections © Paulo David
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12
The promenade
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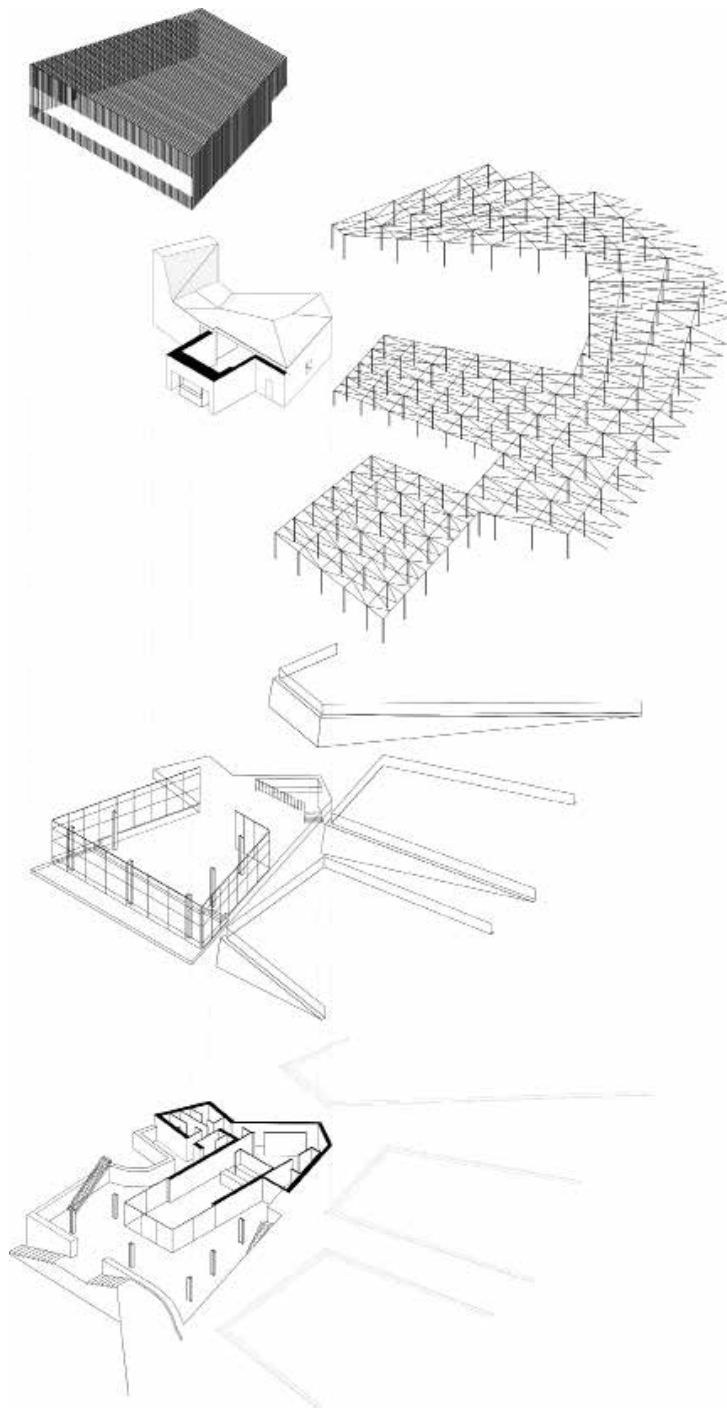
13 14
The promenade
© Paulo David Arquitecto,
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Paulo David, *Restaurante
Miradouro* (Madeira, Portugal
2004-06).

15
Sketch of the architect
© Paulo David Arquitecto.

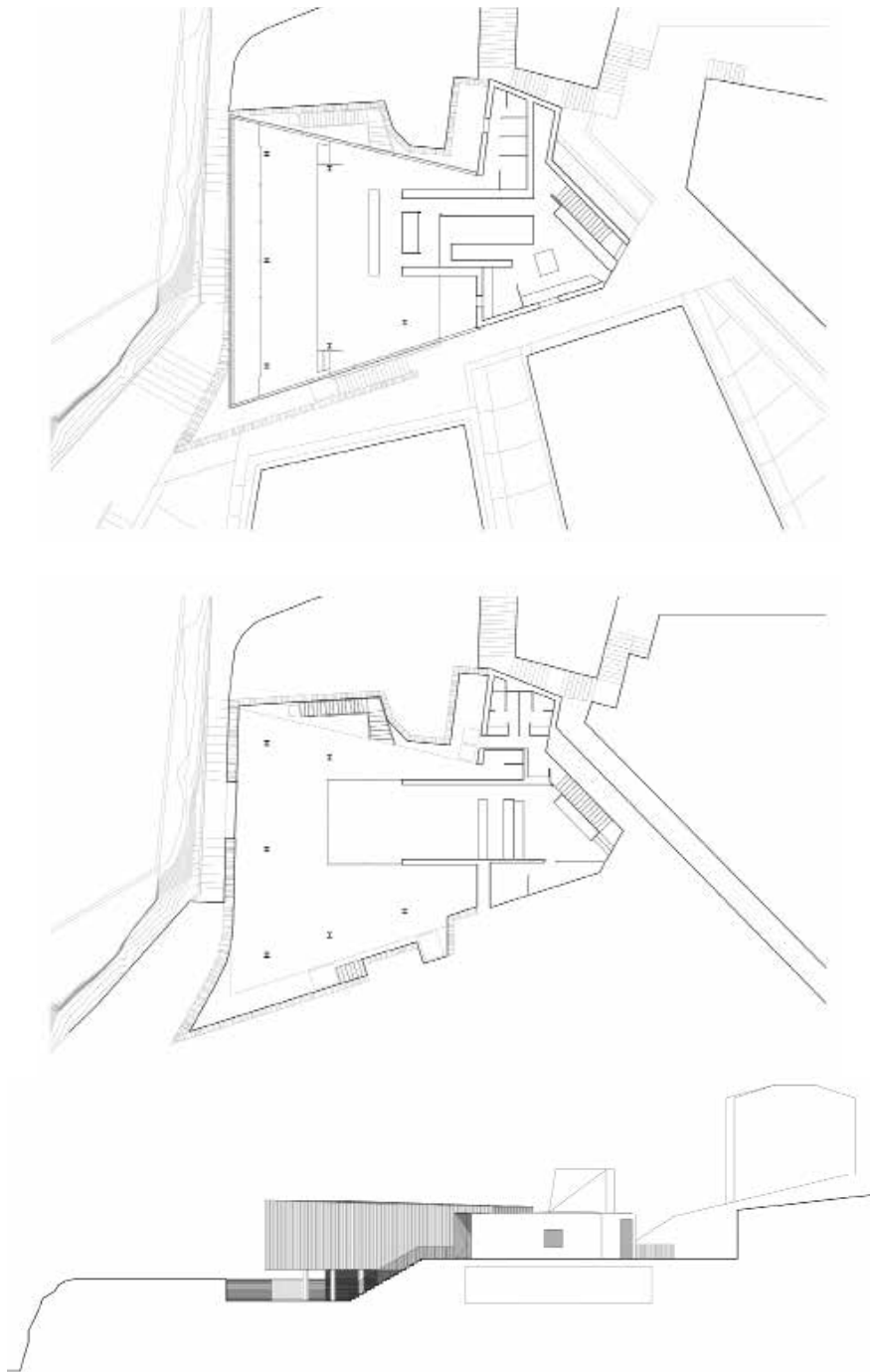
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Views of the restaurant
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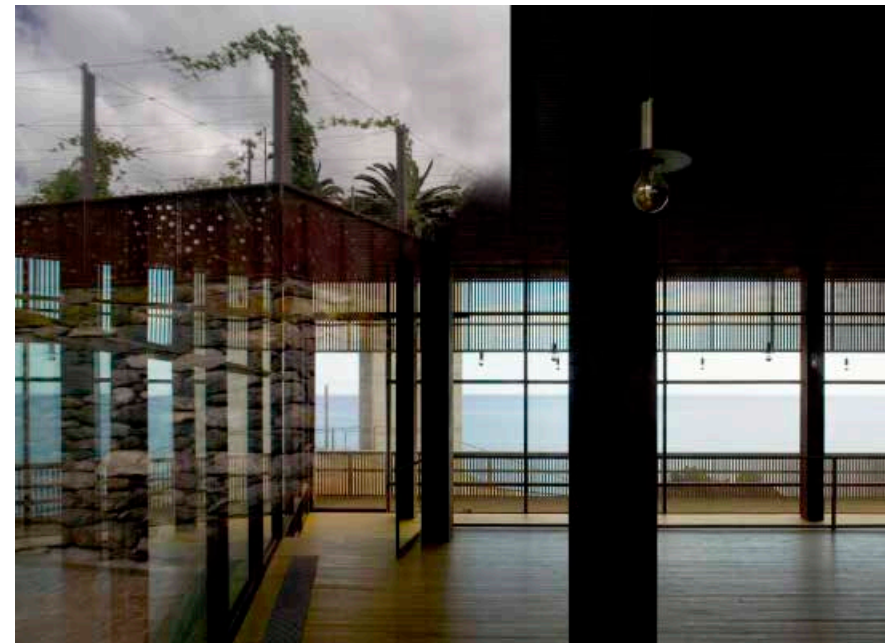
17
 Axonometric view
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18
 Views from the restaurant
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Plans and section
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22 23
The restaurant
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Marcio Kogan. History as a Co-author

Filippo Bricolo

At the beginning of this century, Marcio Kogan started a second part of his career by founding Studio mk27 in São Paulo, Brazil, along with a group of young Brazilian architects. This turning point in his profession coincided with the start of a journey that led him to become, in very little time, one of the most influential figures in Brazilian architecture, with one of the most sought-after studios in the world in the field of residential buildings. This development of his work was brought about through the creation of a long, happy succession of modern villas with a unique style, recognisable both for their revival of the great tradition of Brazilian modernist architecture and their close alignment with the requirements of the contemporary world. Analysing the reasons for this success, it is immediately evident that a strong contributing factor was the undeniable quality of his architecture, which is based on a series of highly controlled spatial frames conceived as cinematic shots. The expressive force that emerges from viewing the images that depict his architecture might appear to come in large part from this successful translation of the filmic gaze into architecture¹. From this particular aspect of his work, the world of communication connected to architecture has recognized the opportunity to obtain a great number of captivating images that are particularly suitable for a contemporary society constantly longing for narrative shots to post to the fast world of social media.

This growing interest from the media has led to a canonization of Kogan's work as a symbol of beautiful architecture, that is able to speak directly to people's hearts. On the other hand, this canonization has created a distance between his work and a certain militant part of the world of architectural criticism; a distance that, reinforcing itself over time, has prevented much widespread, thorough analysis of the depth that is really evident in his architectural research. Nevertheless, even at a glance, it is impossible to avoid noticing, in all his works, the unmistakeable signs of complex compositional and design-related mechanisms, and the traces of structured theoretical approaches that position Kogan and his studio's body of work completely outside the realm of mere professionalism. There has been an attempt to make up for this lack of analysis with the publication of the book *La casa Felice. Indagine su Marcio Kogan*². This text proposes an analytical reading of his architecture, aiming to highlight the profound structures

on which it is constructed. This initial research has then been taken further in new texts that have appeared in journals in the sector and monographs dedicated to the Brazilian studio's architecture³. These analyses have addressed, in increasing depth, the study of compositional models, narrative structures, and the topic of the evolution of this work through serialisation and variation.

However, in all these studies, one of the most interesting aspects that emerges from a reading of the works of Studio mk27 has not yet been fully analysed: the theme of time and memory. Observing the development of Kogan's architecture starting in the first few years of the 2000s, an intense radicalization of his approach to design is indeed evident and, from that point onwards, his work started to be obsessively built around stratification, and therefore time.

Every one of the numerous projects of the studio in the last twenty years has been structured around a composition of parts through the juxtaposition of autonomous elements, positioned in relation to each other. This is a use of one of the most ancient design methods in Western architecture: the paratactic model.

In this new project phase, the works created by the Studio were no longer presented as unitary spaces or organisms, but as a juxtaposition of a collection of self-contained, independent elements that are united in accordance with consolidated compositional principles. The systematic use of this design approach has determined the formation of new architectural constructions characterized by an apocryphal temporal depth, as if the buildings were the fruit of a succession of interventions carried out over a long period of time. Through this process, the Brazilian studio's architectural projects have started to become intensely loaded with narrative and memory.

This process, as anticipated, is a precise design method that has already been fully analysed by Martí Arís in his seminal text *Le variazioni dell'identità*⁴. According to Arís, «this is a habitual process in those architectural projects that openly display the complexity and fragmentation of their components, eluding any attempt to subjugate them to a single, overarching rule»⁵. The author cites the well-known examples of *Villa Adriana* in Tivoli, or the medieval convents formed by a «succession of spaces around which various different buildings have sprung up, each with its own disposition and structure»⁶, as well

as the works of Louis I. Kahn, which, despite the formal difference in their components, show a strong affinity with the work of Kogan. This is due to the fact that they establish, «with insistence, the objective of deconstructing the architectural complex of their constituent parts, aiming to bring out the form of each of them, so that they stand out independently [...]. Kahn is inspired by this very idea of progressive construction over time, which is expressed in the form of the convent, creating it, however, through the simultaneous, unified act of the project»⁷. Later in the text, when speaking of variation, he adds this passage that also seems perfectly appropriate for the body of work of Studio mk27: «These processes of transformation, produced over the course of time, can become tools in the context of a synchronous vision. Abstracting it from its temporal aspect, the idea of transformation creates the mental activity specific to the project. In this sense, through the project, it is possible to reconstruct that complex order conferred on architecture by time»⁸.

This declared presence of time is certainly recurrent in all of Kogan's works, allusively loading them with history. His complete dedication to this particular model marks his architecture as a strongly authorial experience, distinguishing his research from the tendency that, for simplicity, has always been indicated as a point of reference: international minimalism.

Minimalism, however, clearly differs from this type of project, in that among its main objectives is that of reducing complexity and achieving an expressive unit based on homogeneous spaces and volumes, characterised by a limited number of materials. This search for uniformity is not to be found in the work of the Studio, which is based instead on a balance of inhomogeneity, where the elements composing the project stand out for their declarative and radical formal independence. Furthermore, this autonomy of contained elements is the very aspect that distinguishes Kogan's approach to the compositional model of typological concatenation. Indeed, in the Studio's work, its components have always been detached and well-defined, and do not present any form of hybridization.

The presence of memory is not therefore loaded with transformative allusion, since the elements are juxtaposed in order to give the idea of having been added over time, but not of having been modified

over time. When analyzing Kogan's body of work, we can see that this criterion has been pursued unbendingly, and carried out with respect for a series of self-imposed, all-inclusive rules that have never been violated. This makes his research unique in creating a strong tension between the temporality created by the assembly of the components and the purity of those components themselves.

From the second decade of the 2000s, this particular approach to the compositional model of typological concatenation has been positively tested in a new context — that is, the context of a real relationship with history, creating projects that redevelop high-value pre-existing buildings. This new, previously unseen phase of the Studio's activity has brought out extremely interesting ideas, as the compositional model of apocryphal temporality has ended up developing in the context of real historical additions — in other words, in that relational system that the initial theoretical model had aimed to simulate. In this sense, what has ended up being formed is a hybrid where new, self-contained components have been added alongside existing constructions, used as an element of composition. This has determined a sort of positive counter-circuit of the system.

The first of these projects was Rio de Janeiro Municipal Theatre, in 2011, in the centre of the city. The project envisaged the transformation of an ex-industrial building, originally constructed in 1918 and registered as a Historical Landmark, into a multi-use educational and cultural complex linked to the Municipal Theatre. In terms of functionality, the project provided for the inclusion of various activities: a school to train young theatre technicians, a production centre for the props and elements making up the sets for the plays, and the museum (for the visitors interested in learning about the production and history of the institution). These functions were housed in different, new self-contained structures, using different materials for each of them (glass, exposed concrete, laminated panels and wood). The structures, with no subordinate connection between them, were added under the existing large metal covering of the connected building, which was kept and completely restored. This way, a strong poetic tension was created inside the original space, between the industrial past of the building (reclaimed from the structure) and the contemporary insertions designed to house the new life of the complex.

From a study of contemporary projects created by Studio mk27, a connection emerges between this work and Mororò House, designed during the same period, and constructed in 2015. The house, a new building, literally recreates the compositional principle of the theatre restoration project, with the construction from scratch of a cover made from metal trusses (clearly recalling that of the theatre), under which the different spaces of the house were positioned. This operation triggered a new aspect of circularity to the theme of time in architecture, as the initial model of concatenation, tested in the real temporal juxtaposition of the theatre, was then translated a second time back into the initial model, maintaining its radicalism.

A second intervention in a historical context was the creation of the Squirrel, between 2012 and 2017. This intervention envisaged the restoration of a modernist building designed in the 1960s by the Swiss architect Marc-Joseph Saugey, on the *Diagonal* in Barcelona. The existing architecture was conserved, and certain calibrated autonomous elements were added inside — which, in this case too, manifested as self-contained, stratified figures within the original architecture.

A third intervention was carried out through a temporary installation created in the courtyard of the *Litta Palace* in Milan, in April 2015. This intervention introduced the problem of how to intervene in a structure that already exists in the most respectful way possible, while simultaneously creating a new function for the space. The project envisaged the construction of a black marble platform, suspended 20 centimeters above the floor, building a new space that rested atop the original floor, creating the impression of one single, free space. Black beach chairs were distributed across this platform, sitting freely in the space, giving an air of informality and freedom. A translucent polycarbonate box extended from the marble base, working as a light that, at night, came alive and lit up the space. In this box was all of the supporting infra-structure necessary, as well as being a space to protect the speakers and visitors from inclement weather. The project envisaged the complete preservation of the existing building, and the insertion of autonomous, detached elements to form rituals of meaning. The contemporary elements were juxtaposed without being modified, and almost without touching the existing structure, hence maintaining complete integrity. In this way, the stratification of time was conjugated

into the imperfect, creating a level of synchronicity that allowed the different eras of the project to sit together without impairing each other⁹.

Considering the particular translation of the design model of composition in parts into a historical context, this synchronous sense has simultaneously evolved into a series of design experiments, developed through a collaboration between Marcio and Gabriel Kogan and the Polo Territoriale di Mantova of Politecnico di Milano, with a particular focus on the possible relationships between modern architecture and history, and between architectural composition and restoration projects.

This collaboration started in 2015¹⁰, and was developed especially through design workshops in which this synchronous approach has been meticulously tested. The project experimentation was focused on the design of a series of insertions within particular high-value architectural contexts in Verona and the surrounding areas, such as the ruins of the Villafranca and Valeggio Castles (and the *Seraglio* that connected them), the Austrian Arsenal complex in Verona, the *Castelvecchio* system, the double ring of the Verona city walls, and the river Adige urban system. In all these cases, they worked on the theme of paratactic composition with self-contained elements to form a new, simultaneous system through which history could coexist with the contemporary world. The new components were inserted using processes defined by a series of codified actions, hypothesising a taxonomy of insertion. For every macro-action, sub-actions were identified: juxtaposing (juxtaposing by moving away, juxtaposing in contrast, juxtaposing in connection, juxtaposing negatively), completing (completing from a fragment, completing by hiding, completing by adding, completing geometrically, completing by permeating), installing (installing by laying down, installing by hiding, installing by enveloping, installing by permeating, installing by mounting), protecting (protecting by raising, protecting without hiding, protecting in symbiosis, protecting by preserving, protecting by incorporating), filling (filling by replacing, filling a boundary, filling by delimiting, filling by generating), raising (raising by fusing, raising by repairing, raising by marking, raising autonomously, raising in antithesis). This approach to actions allowed them to explicitly and consciously bring the tools of architectural composition into the area of restoration of

ancient artifacts, aiming to force the rigidity of some configurations that still tend to divide the worlds of composition and restoration. The projects were developed with the conviction that the insertion of contemporary architecture into a historical context should be understood as a strongly compositional topic, and as such, that it can be studied and developed through the use of defined actions. These are existing, recognisable models used in all interventions for restoration, but they are not usually made explicit in an analytical and systemic way. The projects developed during this period in Mantova followed the path of a radical paratactic interpretation of restoration projects. To reinforce this experimentation, buildings based on constructive systems with a close relationship between form, space and tectonics were chosen as a starting point, such as castles built from bricks, or the city walls of Verona, built in stone. The new insertions, designed in unique materials, with a close relationship between form and construction, sit alongside these systems as if in virtuous close combat¹¹. This forms a sort of «double brutalism» that has put Brazilian modernism in dialogue with the material, compositional and expressive force of the historical structures, in a new alliance where history has been called in to become a co-author of the project.

1 In this regard, it is certainly not redundant to remember that, in the first part of his career, Marcio Kogan was active as a director.

2 F. Bricolo, *La casa Felice. Indagine su Marcio Kogan Studio mk27*, Letteraventidue Edizioni, Syracuse 2018.

3 See, for example, F. Bricolo, *O sistema mk27*, in «Marcio Kogan: studio mk27 2011-2018», *Monolito*, 41/42, São Paulo 2018, pp. 108-115.

4 C. M. Aris, *Le variazioni dell'identità. Il tipo in architettura*, CittàStudiEdizioni, Turin 1994.

5 Ivi, p. 120.

6 Ivi, p. 122.

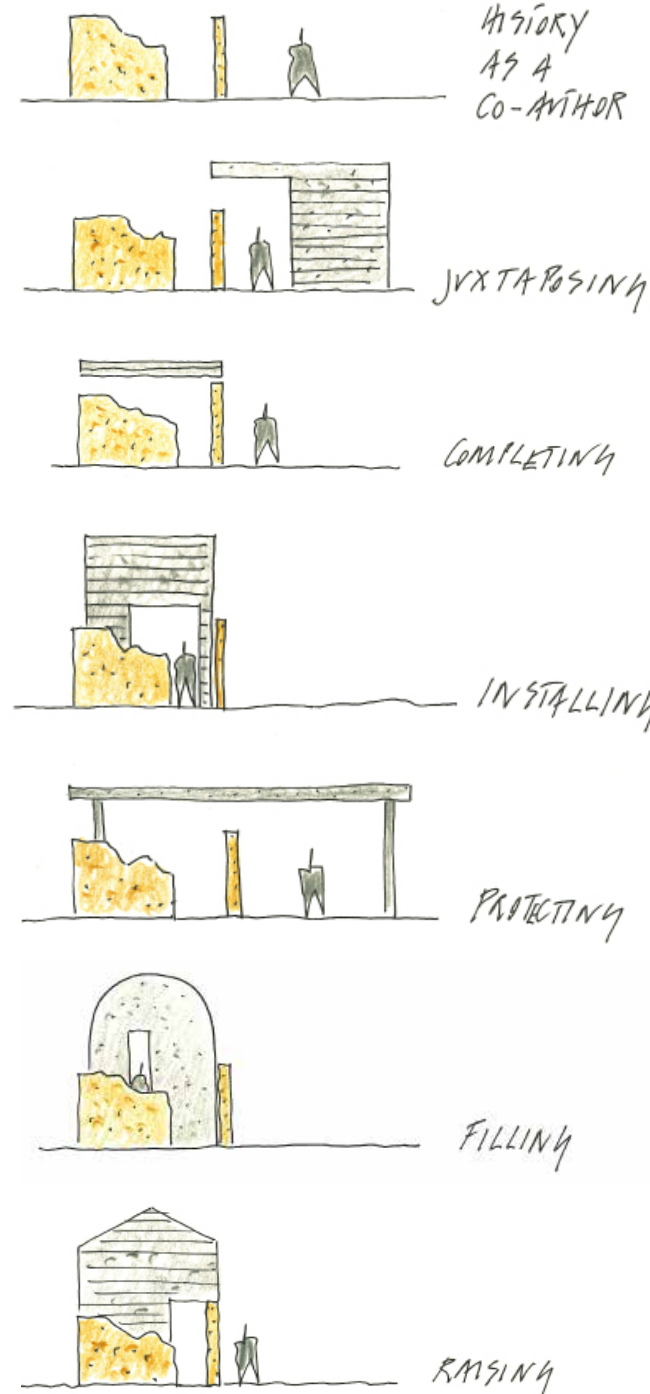
7 Ibidem.

8 C. M. Aris, *op. cit.*, p. 124.

9 F. Bricolo, *Edvard Ravnikar, Il memoriale di Kampor. La grammatica della memoria*, in L. Semerani (edited by), *Memoria, Ascesi, Rivoluzione. Studi sulla rappresentazione simbolica in architettura*, Marsilio, Padua 2006, pp. 98-167.

10 For a description of the collaboration between Marcio Kogan and the Mantua Territorial Centre at Politecnico di Milano, see E. Faroldi, *Postfazione. Scomposizioni architettoniche, la casa come laboratorio poetico*, in F. Bricolo, *La casa Felice, op. cit.*, pp. 149-157.

11 F. Bricolo, «Un virtuoso corpo a corpo. Werner Tscholl, Markus Scherer, Federico Bucci, Gennaro Postiglione e un dialogo sull'architettura moderna nel castello», *Technè*, 12, 2016, pp. 277-287.

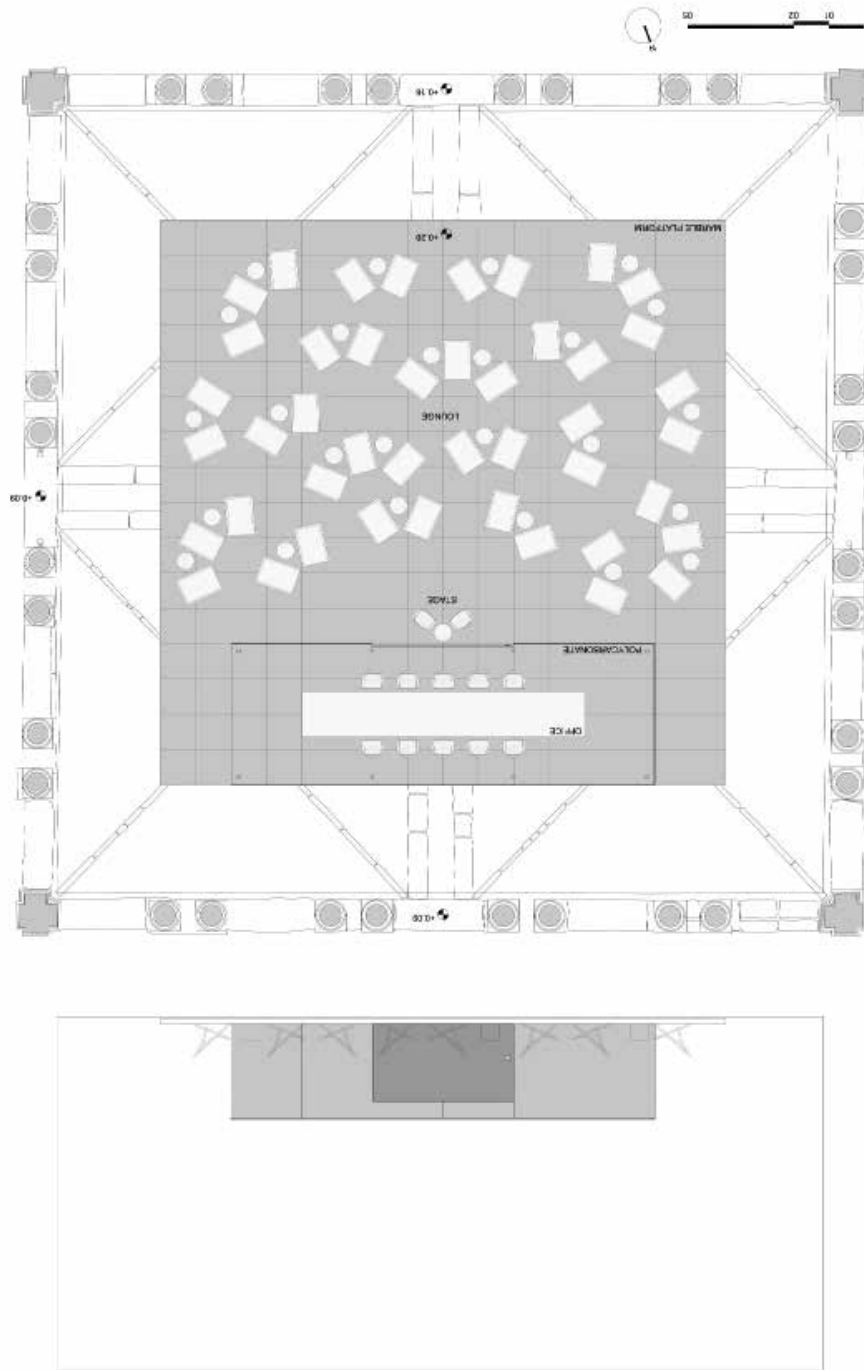


I Codified actions related to the possible interventions in historical contexts
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Marcio Kogan, Studio mk27,
proposal for the Municipal
Theatre (Rio de Janeiro,
Brazil 2011).

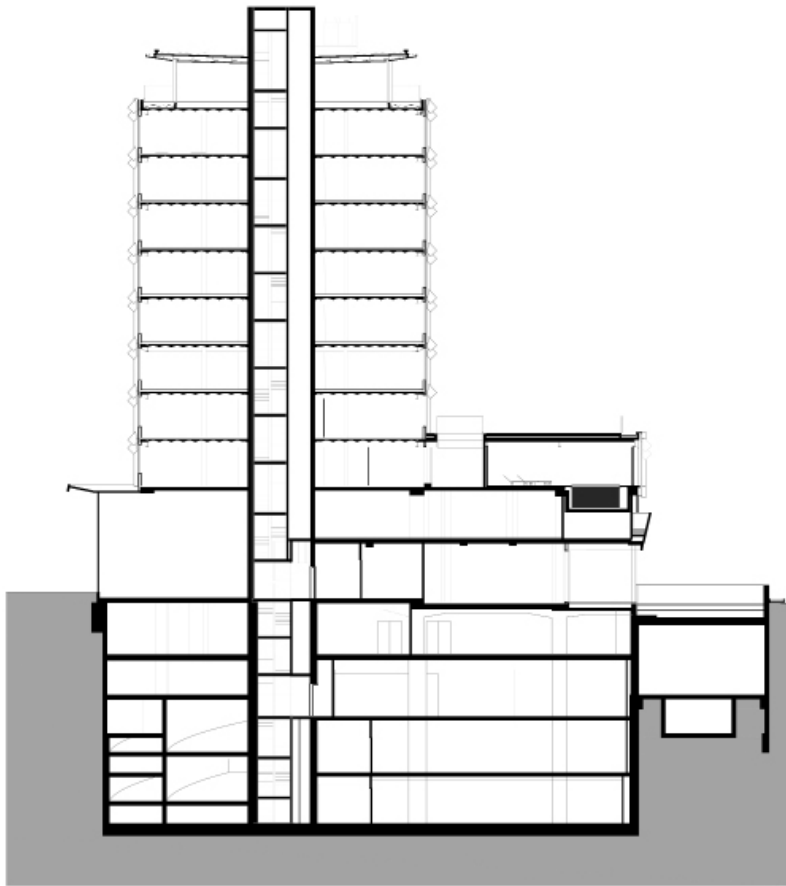
2 3 4 5 6
Models of the Theatre
© Studio mk27.



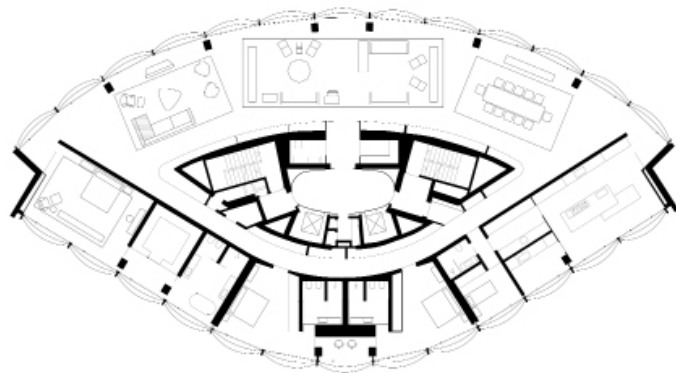
Marcio Kogan, Studio mk27,
Littabeach (Milan, Italy,
February-April 2015).

7 8
Plan and view of the
installation © Studio mk27.



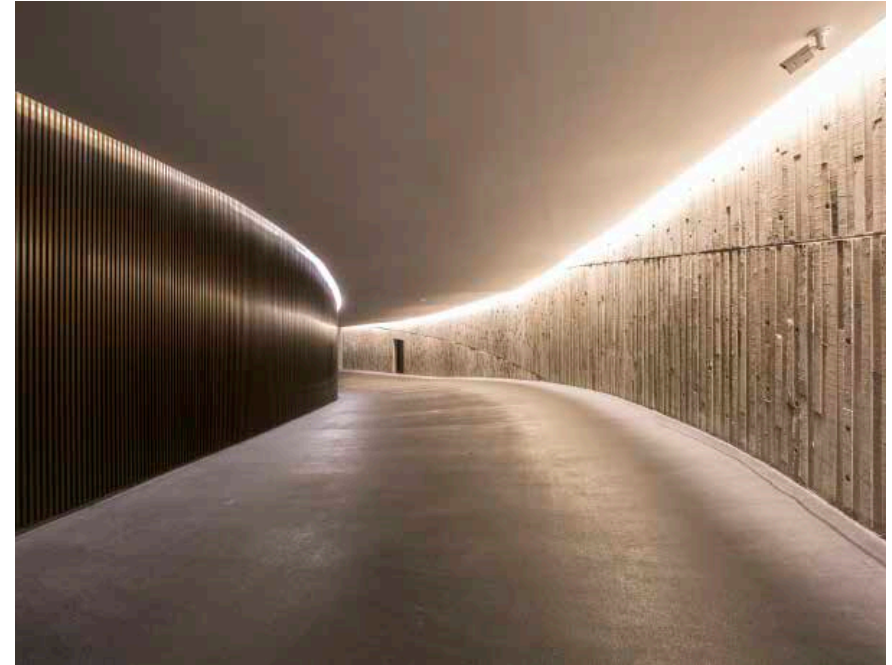


9



Marcio Kogan, Studio mk27,
Squirle (Barcelona, Spain
2012-17).

9
Section and plan
© Studio mk27.



10 11
Interior and exterior sights
© Studio mk27,
ph. Jonas Poulsen.

Cristián Undurraga. Educated Steadfastness

Claudia Tinazzi

- *La noción de tiempo en línea recta, de un tiempo unidimensional, usado en historia de la arquitectura y prácticamente generalizada hasta el cerebro de los arquitectos actuantes, ha falseado y falsea todo. Cuando se ha seguido el curso de las cosas en trechos de tiempo suficientemente vastos se comienza a percibir la palingenesis cada vez más claramente que el de la construcción paleontológica en uso: la filogénesis, que introduce la ley de causalidad en la arquitectura, de lo que ya dije otras veces para no volver ahora'.*

For more than two decades now, starting in the middle of the 1990s, Italian criticism has looked with steady admiration at contemporary Chilean architecture and at a group of young architects born between 1965 and 1970 in particular. After training at the Pontifical Catholic University of Chile, they crossed into the world carrying with them their talent, resourcefulness, and a true Latin American personality capable of interacting — and sometimes conflicting — with the panorama of international architecture. This group of professionals is not identified with any formal affinity or theoretical thought, and yet their complex, never-superficial non-uniformity underlies and encompasses — without requiring any label — a unity of topics, applications and needs whose roots are impossible not to trace in the complex history of their country. In Chile, this international regionalism was capable of building and long maintaining international ambition and personal interpretation in a constant balance between local tradition and global needs. Little investigation has been made as to the deeper reasons for this phenomenon which has yielded exhibitions around the world, the dedication of numerous monographs in international journals, and the recognition of Alejandro Aravena in 2016 with the most important prize in architecture². And even less has been done, especially in Italy, to study and understand the recent past of Chilean architecture that has found fertile points of contact with Europe and Italy throughout the 20th century³.

Cristián Undurraga, born in Santiago del Chile in 1954, pertains to the generation just before that of Alejandro Aravena, Smiljan Radic, Sebastián Irarrázaval, Cecilia Puga and Mathias Klotz. He belongs to that group of Chilean architects with up-close experience

— from within, one might say, and in all its phases — of that military government that was one of the fiercest dictatorships in the world.

It is therefore impossible for the authors to look at the architecture of this country, the architects of this faraway land, or even at the shared fascination for their projects without constantly comparing them to the history that, in this case, is more political and social than related to cities and monuments.

The educated steadfastness of Cristián Undurraga towards the city and architecture, the role of public space, the hegemonic pre-eminence of the landscape, the value of tradition — a steadfastness that we began to appreciate even more when he became Visiting Professor in the Master of Science in Architectural Design and History at the Mantova Campus of Politecnico di Milano, in 2019 — is undoubtedly the fruit of his experience within this fragment of his country's history, which architects began to respond to concretely starting with the Architecture Biennials (1977) organized by the Chilean Association of Architects, up to the foundation of CEDLA⁴.

Cristián experienced this constant shaping with professionalism, without expectations, within professional practice, poised between theory and practice, calling and sacrifice, values and technique. Today, his daily work between studio and interdisciplinary interaction seems close to what is known as «cultured professionalism», a phenomenon recognized in Italy during the reconstruction⁵.

For this reason, the architecture of Undurraga Devés Arquitectos, which Cristián formed in 1978 together with his wife Ana Luisa Devés, particularly pertains to that public and social sphere that is the mark of sensibility and responsibility towards the community. This sensibility is suitably adapted as much to public buildings — squares, cultural buildings, and schools, as well as numerous museums — as to social residential building, leading him to a serious, intelligent awareness of the landscape and history.

For Undurraga, working with history means conversing with the landscape through the project, preserving the memory of places or of their life.

For him, geography, «his geography», serves as constant inspiration, but it is also a concrete lesson. As he often says «We have the most active land on the planet». This silent presence of the Earth's

movement — often earthquakes — has perhaps developed Undurraga's construction sensitivity, becoming by now almost instinctive and naturally integrated into his work. In this way, the landscape — so unique — and tradition — so primitive at times — supplant any reasoning about the complex urban stratification more typical of European culture, which Cristián has always viewed with curiosity and passion.

Copious international recognition has undoubtedly made him an architect of the world, but as is often said, his love of Italy is a particular preference. This love openly refers to Aldo Rossi's work, *L'Architettura della Città*, which served as an accomplice and inspiration for his first project for Santiago, Chile, reworking the *Plaza de la Constitución* (1980).

But the relationship between Undurraga and Italy is also marked and solidified in our memory by two important prizes that Italy decided to bestow on this Chilean architect and his work in the span of about twenty years.

The first was the *Andrea Palladio International Prize* in 1991⁶ for his *Casa del Cerro* and the second, the *Frate Sole International Prize* for Sacred Architecture in 2012 for his *Capilla del Retiro*⁷.

The latter, a small religious building, was built in 1988 to the North of Santiago not far from the *Santuario Teresa de Los Andes* and in the vicinity of the *Santuario de Auco*. Designed to respond to the growing number of pilgrims, it is a mark of extreme simplification, with the architectural elements of the composition in an intelligent reduction that constructs the ceremonial space. Just two archetypal elements are chosen to define the hall: an excavation that delimits the enclosed space and a roof.

The project, a cornerstone of Undurraga's mature work, is a contemporary translation of the deepest sense of religious space. It falls with suitable naturalness within the series of religious buildings and — overcoming the specific geography of this particular part of the world — tirelessly attests to a timeline connecting different eras and spiritualities in adhering to the type of building, that is, an undivided space as the utmost expression of welcome within a shared rite.

Built in 2009 at the foot of Mount Carmel as the last physical element in a continuously growing devotional pilgrimage, the chapel focuses on the landscape as the main aspect to reinforce the sacred-

ness of the place, which compels the faithful to travel from every part of the country in search of silence and meditation in adoration of the first Chilean saint, who died at just twenty years of age and was canonized by Pope John Paul II in 1993.

In reality, the chapel — in the absolute predilection of the landscape in which it tries to immerse itself — is situated at the end of a visual axis that organizes the surrounding constructions. It concludes, without closing it, the plan of the convent, which is built compactly as a large open court hosting accommodation structures, a museum, and the crypt that holds the mortal remains of the young saint.

A green plain overlooked by the rough wild slope of the mountain embraces the excavation — the first gesture in the project's definition — precisely designed within the terrain by Undurraga. This irregular excavation resembles an archaeological dig for ancient temples and traditions; a primitive gesture imprinting the protected nature of the new collective architecture; an incision dressed with stone and a desired incompleteness.

A light yet solid roof closes the simple composition in two movements, working steadfastly on the dialogue and also on the contrast between the two protagonists: the sacred rock basin, well rooted in the land, and, nearly fluctuating in balance, the concrete closure. Two elements that attract each other but never touch. The entrance to the chapel is neither concealed nor on display. It pertains to the excavated fragments rendered necessary to define the sacred place and its permeability; the ramp that slowly descends into the Earth is found nearly by chance, arriving from the convent and drawn only by a golden Greek cross held above by a thin dark support.

«How can a heavy rock, capable of relating to the geography of the place, be constructed at the same time as a light rock capable of floating in the sky?», asks Undurraga, showing an image of Magritte's *The Castle of the Pyrenees*.

The roof is also a concrete cross traced by the intersection of four beams with great formal economy that transmits solid gravity and displays static proportions. The eight supports, the minimum number for this particular balance, are small fragments of concrete walls situated perpendicular to the box they sustain. A clear diagram, precise, with no uncertainties, a transcription of the best lessons in

statics. A fissure of air a few centimeters wide illustrates the tension between the dusty earth and the bright roof, whose height reveals the interior volume of the hall.

In principle, the image of Fosse Ardeatine Mausoleum designed in Rome by Mario Fiorentino in 1945-50⁸ does not seem far off. For the Chilean architect, however, the most evocative reference is the Ethiopian Church of Saint George, a symbol and part of that Holy City — *Lalibela* — hidden on the horizon and completely dug into the rock of the Ethiopian tableland 2.500 meters above sea level.

Archaic and modern, primitive and rational elements interact in each subsequent choice in the project. The strong modernity and incisiveness of the exterior is tempered inside the hall with a space substantially defined by matter and light. A large drum of reclaimed dark wood lines the roof, descending — hanging from the structure — to straddle the irregular stone recess, thereby deleting all contact with the outside.

The relationship with light in this building is therefore overturned. Undurraga contrasts the more canonical, archaic way of capturing natural light from above with a more transcendent method: light penetrates between the roof and the excavation, entering the sacred hall from below. A single space for religious assembly is created, a single shadowed environment that welcomes direct, non-hierarchical interaction between priest and pilgrims.

A few years later, in 2015, upon invitation to the *Triennale di Milano*⁹, Undurraga returned to reflect on the issue of religious architecture, using a brief dialogue between landscape and construction to re-establish a primitive relationship between man and nature: a bridge that unites the narrow fissure between dry land and an island and which supports a suspended chapel defined by a concrete plane supported by eight steel cables, four glass walls, and a few chairs to allow for meditation amid the rock and sea environment.

Cristián's sensitivity for the landscape in its close relationship to architecture cuts across all the work of Undurraga Deves Arquitectos. In particular, at notable points it underlines a course of intense dialogue between domestic space and the natural environment.

This private anthology of possible solutions finds similarities and differences in interpreting not only the single-family home, but especially in defining the nature of the place that in Chile presents

various subtleties within an extraordinary landscape culture and an innate respect on the part of architects without the need for limits: *Casa del Cerro* (1990), built as a large inhabited containment wall for a hill; *Casa Mirador* (2002), set on a natural relief as a massive volume of cement — a «refuge», in the words of the architect — that slowly opens to admire the chain of the Andes; *Casa del Lago* (2004), connected by a narrow bridge to the public footpath and built by juxtaposing a solid stone wall containing the vertical connections and service areas — the kitchen and bathrooms — and a prefabricated metal and glass structure adding three overlapping spaces for the bedrooms and collective areas overlooking the lake; or *Casa del Patio* (2007), which tries to enclose nature and the sky within the courtyard bordered by the entire space of the house, working with absolute modernity on an archetypal idea of living.

Within this portfolio, which today allows for sequential comparison, carrying value for the authors as a constructive search worthy of careful study, the Horizon Houses (2009) continue but do not conclude Cristián's reflection on the increasingly deep-rooted need to establish a courageous dialogue with the environment on a par with the greatness with which nature manifests itself there.

North of Zapallar, inland from the central coast of Chile, the Pacific Ocean, «contradicting its name — lashes relentlessly against the rocky cliffs»¹⁰. Amid this extraordinary landscape, on a tamed rock overlooking the sea, two nearly identical houses stand to face the ocean like two large inhabited beams. The terrain is a grand lookout 25 meters above sea level, a unique outpost that on clear days allows the gaze to reach the horizon and extend as far as the port of Valparaíso, 60 kilometers to the South. Faced with unprotected, 360-degree exposure — at once a benefit and a limitation of the place — the project first of all digs into the rock to define enclosed, protected places, filter spaces between inside and outside, as in the traditional South American lifestyle. Two large cavities, geometric but irregular and covered with stone to echo the rocks not far beyond, enclose courtyards designed by architecture and nature — stone, trees, and water — which suddenly reopen unfiltered towards the sea.

Above these open spaces, two bridge pavilions cross the entire area, clearly defining an inside and an outside with respect to the

sea and recalling a rational order by means of clear concrete profiles designed with a structural sincerity that is not afraid to impose its forms. These two elongated broken lines organize the spaces of the house longitudinally, with everything facing the ocean due to the orderly distribution of the urbanized space.

The supports of each longitudinal house, which would ideally be resting effortlessly and in balance on top of the existing fragments of nature, are actually three solid concrete partitions/pillars built into the overall composition of the rooms. Two supports near the two ends are included in the walls of the patio below, and the third support at the centre of the overhang accompanies the vertical appearance of the fireplace and of the staircase connecting the bridge with the protected open space.

The orientation and openings reflect with equal professionalism and technique on the ability of the architecture to encourage proper natural ventilation, in the best tradition of homes at different latitudes built knowingly in line with solar and temperature conditions. In this Chilean project, the windows open to the southwest to embrace the view of the sea, while the North-East windows take in sunlight and heat so that cross-ventilation and the constant sea breeze provide optimal temperature control. This idea of living seeks to organize a few built elements that recall the most authentic values in the landscape, a concrete way of living among nature thanks to architectural achievements.

The *Capilla del Ritiro*, like the many houses built over the years in this South American country, openly illustrates the strong attention and sensitivity to the landscape in the pressing interaction between what is natural and artificial. However, the project imagined for the Milan Expo 2015, which has also become an icon, perfectly summarizes the ongoing search that the Chilean architect has undertaken, starting from real, close contact with tradition, that is, with the full transmission of techniques, materials, and lifestyles typical of Chilean culture.

This search seems to be most clearly embraced starting with the Mapuche Social Housing (2009-11), where building techniques and traditional craftsmanship meet frankly in the definition of small 61-square-meter council houses in a neighbourhood North of Santiago.

For Cristián, Chilean traditions, the people who inhabited this land, and the raw material that Chile offers become a solid opportunity for the project and also a chance to reconstruct and display the history of his country.

El Amor de Chile (i.e. Love for Chile), the name given to the Chilean Pavilion at the Milan Expo 2015, instantly conveys the deepest meaning of this possibility. It expresses the social value underlying the large glulam beam imagined to be walked, crossed, inhabited after encountering it by surprise — like a suspended volume woven by hand — along the decumanus of the international fair.

Conceived as a large building that can be disassembled — as specified in the sharp request attached to the call published by the Chilean Government which commissioned the project — the pavilion does not reject expressive solidity. It alternates instead, depending on the point of view, between a massive volume measuring 65 x 15 x 15 meters and a precious three-dimensional perforated weave that allows natural light to decorate a generous space dedicated to conviviality. The distance from the building determines the two perceptions.

Once again, constructive sincerity describes the parts of the project. Six branched steel supports carry a large wooden bridge¹¹ that is nearly invisible from the outside, freeing the ground floor for an open public space in continuity with the paths and nearby arena for concerts and performances. A free space, a covered square furnished only with tables and benches displaying the art of Chilean hospitality.

To the side of this volume, a long steel ramp leads to the upper levels of the exhibition areas, which wind like a single *promenade* that seems to be immersed — thanks to large projectors — in different connected environments in the Chilean landscape. Another ramp takes us from the top of the building directly into the restaurant on the ground floor, where a long table — made of Patagonian wood following an undulating path that spans the pavilion for nearly fifty meters — embodies the experience of conviviality.

The cross section of the pavilion consists precisely of overlapping double-height spaces such as a small theatre and an exhibition hall, leaving the paths around the perimeter for visual contact with the outside from an elevated standpoint.

The steadfastness of the volume contrasts with utmost flexibility on the inside to encourage new desired uses. The courageous decision to be able to dismantle and reassemble the entire building at the end of the Milan Expo guided Undurraga in determining the maximum dimensions of the individual elements of the structure: 12 meters long.

Through its precise, meticulous working drawings, the project has become a great lesson in how temporariness need not represent any form of sacrifice in the architecture; on the contrary, it can serve as the basis for conscious cultural sustainability.

Thus, in 2016, the Pavilion was entirely reconstructed in the town of Temuco, in southern Chile, at the foot of the *Cerro Ñielol* natural monument, offering new interpretations for a building that is first and foremost a great space of reception and hospitality.

L'arte di costruire l'ospitalità (i.e. the Art of Building Hospitality), the title of one of his recent lectures¹², uses these three terms¹³ to describe the Chilean architect's point of view, which is not a point of arrival but conscious reasoning along a path that has engaged him for more than thirty years as a «cultured professional», never satisfied with his knowledge and passion.

1 J. Borchers, *Institución Arquitectónica / The Architectural Institution*, Editorial Andrés Bello, Santiago de Chile 1968, p. 203.

2 The Pritzker Architecture Prize is awarded each year to a living architect whose constructed works demonstrate a combination of talent, vision and social commitment.

3 For more information, see, among others, H. Torrent, G. Barcelos de Souza, *Lectures of the Architecture of the City in Latin America: an exchange between Argentinians and Chileans at the end of the 1970s*, in F. De Maio, A. Ferlenga, P. Montini Zimolo (eds.), *Aldo Rossi, la Storia di un libro. L'architettura della città, dal 1966 ad oggi / Aldo Rossi, the History of a Book. The Architecture of the City*, Il Poligrafo, Padua 2014.

4 CEDLA (Centro de Estudios de la Arquitectura) was created in 1977 and played a role in Chilean architectural culture similar to that of *La Escuelita* in Argentina (H. Torrent, G. Barcelos de Souza, *op. cit.*).

5 A. Samonà, *Ignazio Gardella e il professionismo italiano / Ignazio Gardella and Italian Professionalism*, Officina edizioni, Rome 1981.

6 Undurraga was honoured with the prize in its second edition, with a jury composed of James Stirling, Rafael Moneo, Manfredo Tafuri and Francesco Dal Co.

7 A. Vaccari (ed.), *Premio Internazionale di Architettura Sacra Frate Sole. V Edizione*, Skira, Milan 2012.

8 M. Ferrari, «Un involucro sospeso / A Suspended Cover», *Casabella*, 791, July 2010, p. 43.

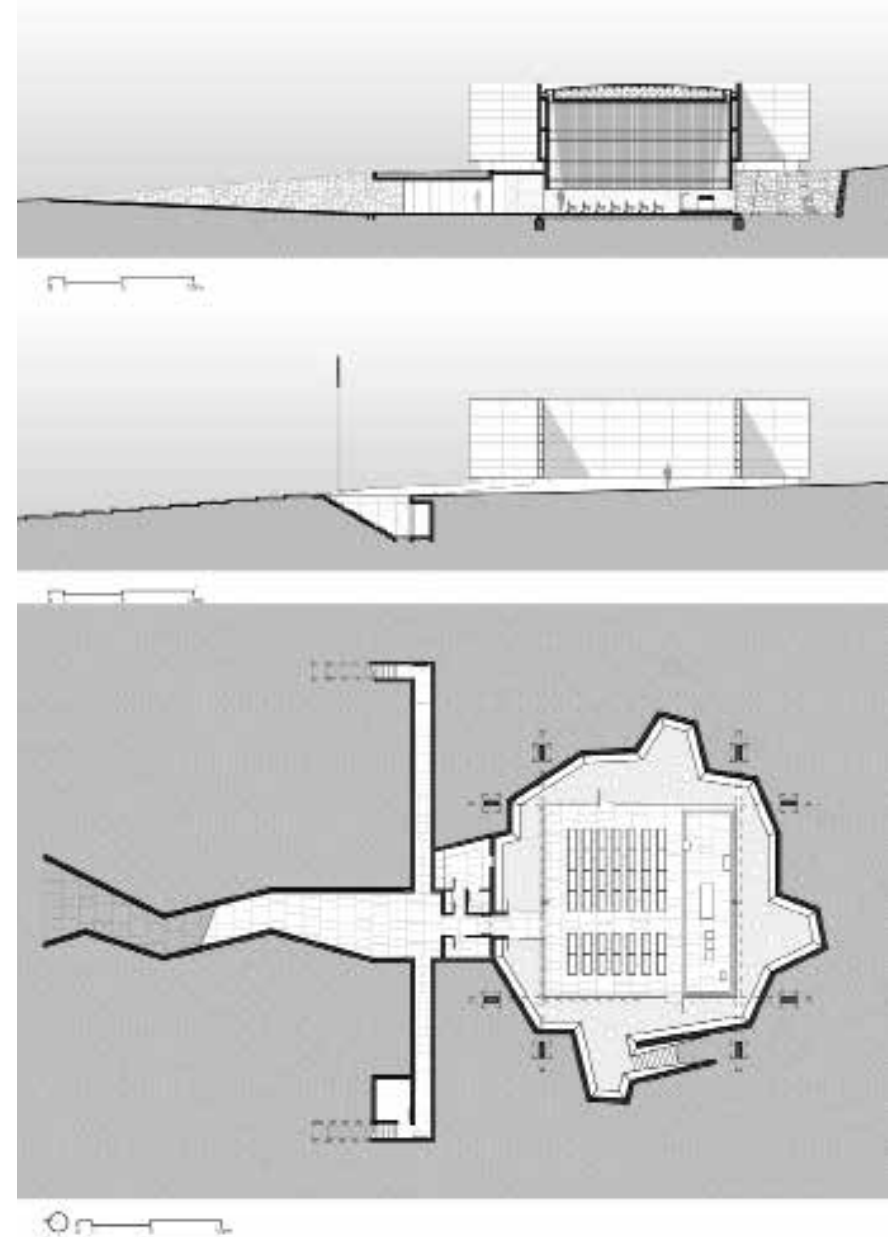
9 C. Tinazzi (ed.), *Sacri Monti e altre storie. L'Architettura come racconto / Sacred Mounts and Other Stories. Architecture as a Story*, Rubbettino Editore, Catanzaro 2015.

10 *Undurraga Deves 2000-2019, AV Monographs*, 217, Avisá, Madrid 2019.

11 Made of Monterey pine, one of the country's most exported products, used to show visitors that the forest surface in Chile is increasing, in contrast to the deforestation occurring on the rest of the planet.

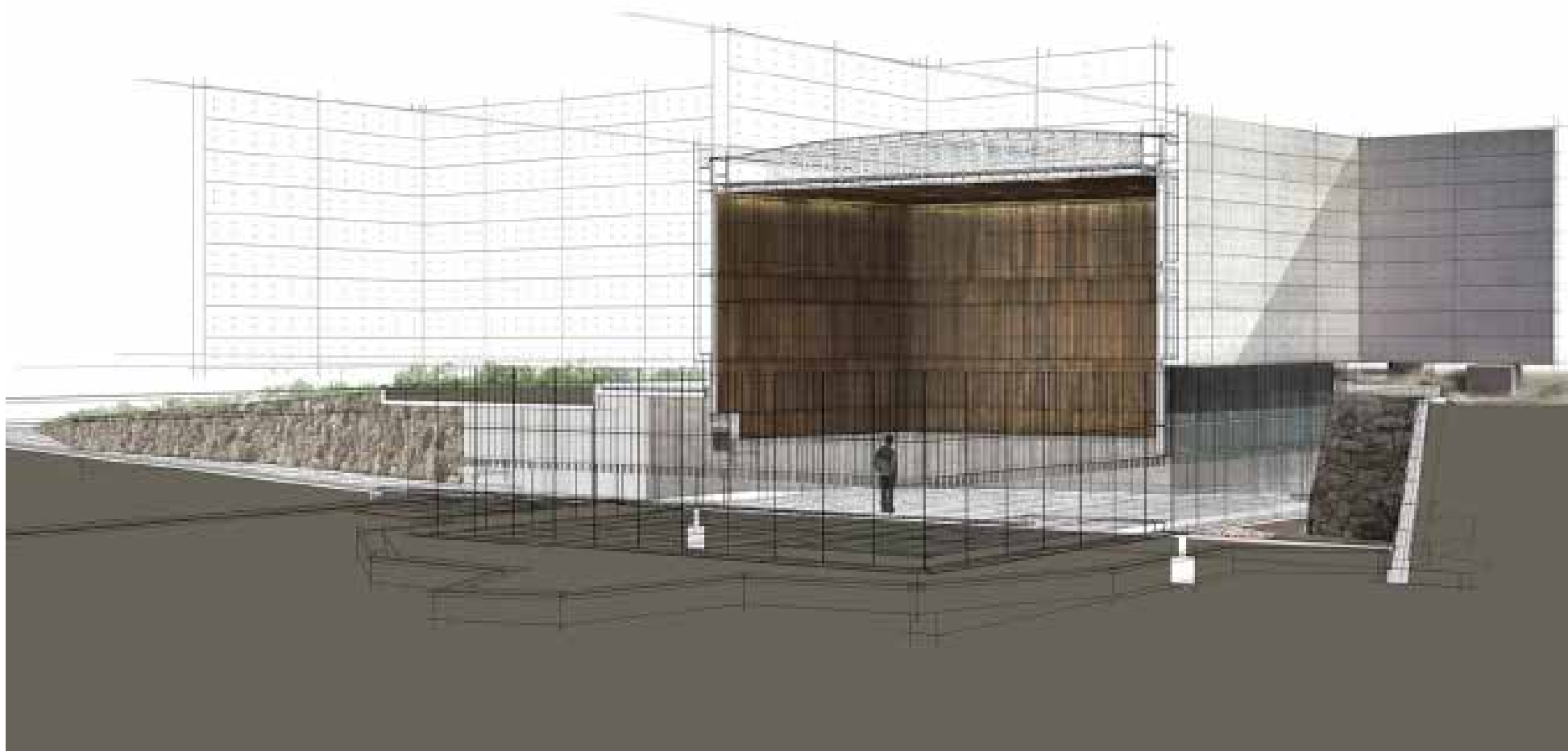
12 Lecture given within the *MantovArchitettura* program, on June 3, 2020.

13 C. Undurraga, «El Arte de construir la hospitalidad / The Art of Building Hospitality», in *Undurraga Deves 2000-2019, op. cit.*, pp. 106-111.



Cristián Undurraga,
Capilla del Retiro
(Auco, Chile 2008-09).

Sections and plan of the chapel
© Undurraga Devés
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2
Sectional perspective
© Undurraga Devés
Arquitectos.



3 4 5 6
Exterior and interior views
© Undurraga Devés
Arquitectos.



Cristián Undurraga,
Casas del Horizonte
(Zapallar, Chile 2007-09).

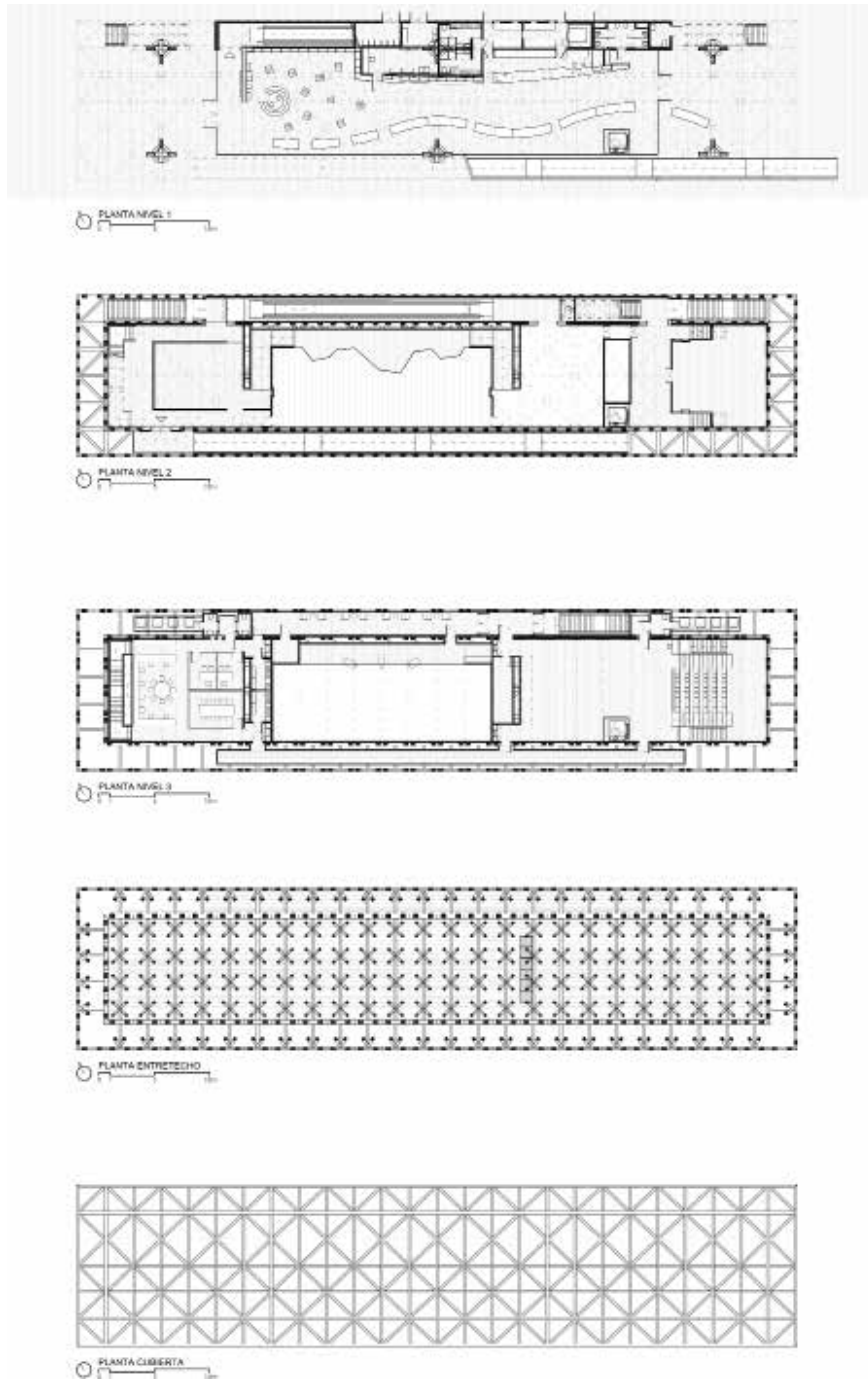
7
General plans of the first and
second level © Undurraga
Devés Arquitectos.



8
Overhead view of the context
© Undurraga Devés
Arquitectos.



9 10 11
Exterior and interior views
© Undurraga Devés
Arquitectos.



Cristián Undurraga,
Chilean Pavilion
(Expo Milano, Italy 2015).

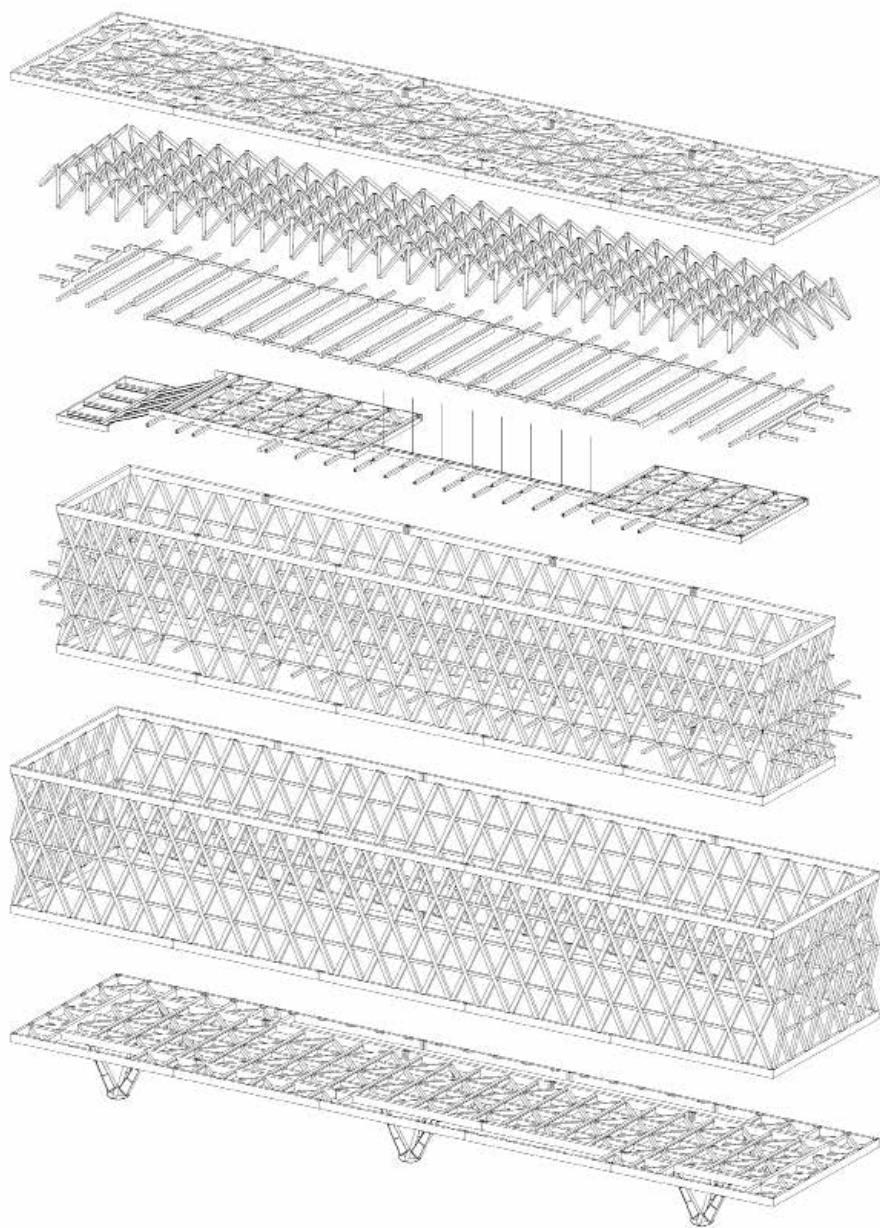
12
Plans © Undurraga Devés
Arquitectos.



13
Views of the pavilion built
in Milan (2015) © Undurraga
Devés Arquitectos.



14
Views of the pavilion
reconstructed in Temuco,
Chile (2016) © Undurraga
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15
Axonometry © Undurraga
Devés Arquitectos.



16
Interior view
© Undurraga Devés
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17
Exterior view
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Jonathan Sergison and Stephen Bates. Unwritten Rule Legacy

Helder Casal Ribeiro

Today the notion of heritage goes much beyond the academic *status quo* of frozen or bewitched architecture that must be simply worshiped or immaculately revered. Today heritage is understood as a consonance of traditions. Traditions in its various forms and significance, tangible and intangible, set on the crossing of cultures implying the notions of *value and respect* through an open cultural understanding and exchange.

One of the recent entries on this matter would be the new principles charter¹ presented in the 19th ICOMOS General Assembly which finally recognizes that rural landscape results from the interaction between man (population/communities), animals and nature, a bio-culture which underlines the place's physical and symbolical values and attributes. This interpretation opens the possibility of (re)thinking the built natural landscape and its spatial organization by identifying its latent order and sense of socio-cultural composition emphasizing its values and most of all comprehending the possible continuities and discontinuities within the needed exchanges or transformations. This dynamic reading will infer an open interpretation where rural landscape, and as such certain built architectural heritage, cannot be frozen or musealised or its character and meaning will be lost for future generations.

Each intervention, in their particular problem solving, should represent solutions and options that imply a rigorous organization set on — more than technical or functional purposes — the question of order and composition. Architecture is a reflection of this sense of order, and so it should be, with the notions on heritage and its in-depth survey/interpretation, accentuating key compositional themes as part of the solution at hand.

This *modus operandi* has been the guiding line for certain architectural practices for some years now, where the broad sense of value reflects a tempered respect mediated by the particular conditions and circumstances that inform each situation.

Today, we could say that the notions of heritage imply a social responsibility of a design that should start by the need to acknowledge the site specific cultural nuances, from a social stand point, sense of community and its traditions, and from an architectural point of view, urban mapping in its diverse built levels, i.e. meaning, footprint,

volume, rhythms, textures. This acknowledgement poses a prevailing sensorial topological approach over a functional typological analyses that allows for an open heritage reading, be it listed or collective memory status, where continuity can withhold distinctive expressions.

Sergison Bates (SBa) practice mirrors this cultural openness and its crossover values, be it on a collective circumstance or through individual endeavours, as a double based office informed by complementary individual teaching practices, lectures and affinities of the main partners.

Established in 1996 in London, their body of work has a clear sense of evolution and geographic growth where we could depict three merging moments, which could be referenced to three collections of illustrated essays written between 1996 and 2015², and published in *Papers* (2001), *Papers 2* (2007) and *Papers 3* (2016), that resume key concerns and design themes. The essays *Somewhere between ideas and places* (Papers), *On order proportion and grids* (Papers 2) and *The idea of comfort* (Papers 3) express the offices' systematic pursuit of specific architectural themes and notions as vital narrative enforcers.

The first moment linked to a sense of London architectural community, where meetings with Adam Caruso, Tony Fretton, Mark Pimlott, David Adjaye, the so-called «new British brutalism», will help set the practice's future intellectual *métier*. A practice hinged on Alison and Peter Smithson's writings and concepts³, where the first prize in a competition (1996) in association with Caruso St. John for a Pub in Walsall, West Midlands, valued by CAMRA Best Pub Award 1999, is an obvious starting statement. This first phase will be set mainly in United Kingdom and Ireland competitions and commissions, with some isolated incursions to Swedish competitions.

The second, linked to the opening to Belgium commissions, around 2004-05, enables the practice's projects to express, through precise design concepts, a clear volumetric and formal depiction of public commissions-briefs and a precise response to their idea on familiarity of the context. The third moment, a couple of years later, would be the opening up to swiss commissions with the direct consequence, in 2010, to their second office in Zurich, reinforcing Jonathan's comfort to swiss architectural and cultural approach where the sense of rigor and precision are key themes.

In these foundational moments/phases there are no grounding pre-set rules or guidelines, but informed approaches and procedures that are triggered by the nature of the commission and the character of its brief, putting into play the importance and significance of the cultural background of each geographic location within the evolution of their practice and the experience of building.

But it will be the way Jonathan Sergison and Stephen Bates have combined professional practice with individual teaching, lecturing and writing about architecture, alongside with their distinctive formative years with specific cultural affinities that we may better understand the open intake on culture and the pursue of an architecture driven with *precision* mediated by *tolerance*⁴.

Stephen Bates graduated from the Royal College of Art, gained professional experience in London and Barcelona and has held the Chair of Urbanism and Housing at the *Technische Universität München*, in Germany, since 2009.

Jonathan Sergison graduated from Architectural Association, worked in London for David Chipperfield and Tony Fretton and has been Professor of Architectural Design at the *Accademia di Architettura* in Mendrisio, in Switzerland, since 2008.

It is interesting to understand where and how each of the partner's formative experiences occurred and what individual references and notions transpire from these choices and practices.

Stephen's formative practices reference cities and cultures, and emphasize his teaching career in Munich, a school where the craft of architecture is key, while Jonathan is linked to authorial practices and currently teaches in Mendrisio, a school where the sense of authorship is crucial in their curriculum. The distinctive biographies are important points in framing the practice's layered personality and probably key to the openness for cultural crossover.

The role of Mark Tuff, who joined the practice in 1996 and became a partner in 2006, should also be accounted for in this open cultural approach gene. Graduated from the University of East London, he has gained professional practice with Feilden Clegg Bradley and taught at a number of UK Schools of Architecture, and at *Portuguese Universidade Autonoma de Lisboa*. His inclination for Portuguese architecture⁵, associated to Stephen's Spanish affinity, could also be an interesting

factor in informing a Mediterranean cultural approach where the sense of contamination or overlapping in simple reuse is valued.

The diverse nature of this tripod, graduation, formative practice and teaching activity is reinforced and amplified by the dual based practice since 2010, through their London and Zurich offices, linked respectively to each of the founder partners. The practice's DNA stems from this cultural diversity not in a mere collage or dispersion of thought, but on the contrary as a structured synthesis open to multiple discourses triggered by certain key themes or concerns, that have been amply analysed by scholars, such as Irina Davidovici, Martin Steinmann, Dirk Somers, Mark Pimplot, Christoph Grafe, Jan Peter Wingender, Jaapjan Berg and others.

Among many texts and interpretations, Irina Davidovici's *Tectonic Presence*, in *Sergison Bates architects: Buildings* (2012), Mark Pimplot's interview, and Jan Peter Wingender, Jaapjan Berg's *On tolerance and precision in the work of Sergison Bates Architects*, both in *El Croquis* 187 (2016), present an in-depth view and focus on the practice's main issues and themes.

Irina Davidovici, pushing forward the notion of two strategies in which the tectonics plays a more explicit role, structures her text through the themes «Concrete beams, brick infills», «Concrete frame» and «The depth of history», quoting T. S. Eliot — «a perception, not only of the pastness of the past, but of its presence; [...] a sense of the timeless as well as of the temporal and of the timeless and of the temporal together»⁶ — and reaffirming the ambiguous presence of the analysed buildings.

Mark Pimplot opens the interview stating he would like to discuss a series of themes or concerns in their work that have been implicit, if not explicit, from the beginning, in their published *Papers* and in their respective teaching programmes at Munich and Mendrisio. The six themes («Rooms and the interior», «Place and the City», «Form and Image», «Dwelling and Society», «Material and Making», «Atmosphere or Stimmung») express the broad scope of the intertwined conversation valued by crossover values and concerns, clearly set on the coming together of distinctive cultural affinities.

Jan Peter Wingender and Jaapjan Berg's title highlights two crucial notions, tolerance and precision, that have evolved greatly since

the beginning of SBa practice. The essay structured by four design themes («The Punctured Façade», «Concrete Rails and Brick piers», «Loadbearing Frames», «The Assembled façade») opens with a 1998 quote — «Tolerance is looseness, flexibility, space for interpretation. It is about pragmatism, but also about openness for future expression»⁷ — and concludes with an idea of Precision set on the exploration of refinement and the appropriation of materials within a specific tectonic strategy engaged with the construction industry enhanced by the quality of craftsmanship and insistent hands-on experience.

The imbedded evolution of the notions tolerance and precision in SBa's body of work, published *Papers* and individual teaching practices, could be inferred to the crossover values set on Anglo-Saxon pragmatism and Swiss spatial sophistication.

The crossover values of Anglo-Saxon pragmatism is set, not only on typological familiarity and culture of place but also on the layered tectonic expression of their designs, be it, in the geometric setting of their compositions through architectural sequences or the respective detailing, lining and skirting. An architectural expression that winks at a tactile and sensorial everyday sense of individual comfort layered by a time continuum expression, true to the building code of natural materials and their constructive and conservation techniques.

This layered tectonic expression is clearly expressed in their Studio House design, in Bethnal Green (London, 2000-04), through the softwood frame feeling conveyed in rear terrace elevation or the informal accuracy of the mortar slurry washed brick main façade. The juxtaposition of the different architectural elements, depicted by different materials with their particular constructive technique and tectonic expression, are rigorously calibrated and tight fitted into the plot's width.

This rhythmic juxtaposition, in the main elevation evokes a laid-back repetition effect with the imposing horizontal brick ribbons with thin irregular mortar giving a natural layered unfinished texture, attributing to the whole ensemble a sense of timelessness. A timelessness pursued with conviction and urban intent as expressed by SBa:

- The contradictory character of the [brick] wall, both monolithic and delicate, gives it a quiet awkwardness and imper-

fection which connects it with the flawed heroism of nearby industrial buildings. In this way, the building adds to the realism of the city condition «as Found»⁸.

On the other hand, Swiss spatial sophistication is hinged on a multi-lateral cultured artistic heritage set on the exploration of spatial refinement and material experimentation engaged with the strong construction industry tradition.

An insistent and precise systemization of construction techniques, material expression and structural solutions underline a tectonic integrity specific to authorial design themes and strategies set on technical efficiency versus spatial comfort and effectiveness.

These design themes place the notions of space, material and structure as a symphonic triad, seen as concepts to guide an architectural proposal which conceptualises construction in order to empower the quality of space and form, within different narratives or discourses.

This experimental approach is clearly expressed in the Urban Housing and Crèche, in Geneva (Switzerland, 2006-11) through the elegant character of a compact corner mass carved out by a network of vertical negatives that modulate a tectonic façade and integrate volumetrically the restlessness depicted from the urban atmosphere given by adjacent urban blocks and buildings.

The precise undulating volumetric composition evokes the symphonic triad with the synthesis of space, material and structure translated by loadbearing frame or grid, characterised by polished pre-cast concrete, carefully calibrated in its proportion, rhythm and chromatic expression.

As detailed by SBa, «The vertical emphasis given to the façades engages with the homogenous façades frontage of the 18th and 19th century city and the storey-height proportion of the Saugey towers. At a greater scale the tectonic stratification of top, middle and base, each quietly adjusted to describe programme, increases daylight penetration and achieves continuity with adjacent building lines»⁹.

Through the loadbearing frame theme, the ensemble synthesises the urban dialogue, programme description and technical requirements which translate the pursue of the clear expression of a precise

architectural notion/device, i.e. precision of thought in conceptualising construction without pre-set rules or dispositions.

Through these open cultural approaches and references, we can address the ideas and impact of Sergison Bates approach to specific heritage architecture. The Public Library in Blankenberge, Belgium (2004-11) and the House in Cadaqués, Catalonia, Spain (2008-11) are two distinctive examples that put into play the reading of time and meaning of presence within the context of practice and the experience of building.

The Public Library in Blankenberge, will be the first Belgium commission set in a small Flemish seaside town, involving the refurbishment and extension of a former 19th century school building listed as a local monument. The presence of the existing brick and stone building is valued by SBa through its presence and civic status on the main street front and through its collection of rooms with a particular proportion, meaning and sequence, implying surveying and cataloguing as a fundamental design tool in order to understand the existing character and its potential.

- We developed an «inventory of rooms» and pictured the activities of a library within it. The variety of spaces, some generous and tall, others small and intimate, all with windows looking out to the city, seemed fitting for a twenty first century library¹⁰.

The extension enhances this initial reading and respective in-depth study where the status of the street front is amplified by two lateral volumes, also in brick stripped by horizontal precast concrete rails, engaging in scale and rhythm emphasised by a continuous ribbon like structure that embraces the whole ensemble. This new-layered structure reshapes the incomplete rear façade of the building with a continuous horizontal volume which redefines the façade and adds a new circulation arcade, giving organizational clarity to the great variety of interior spaces. The urban dialogue between the modest residential architecture in the street and the proposed new public library is mediated and enhanced in a single volumetric gesture composition that retains the essential nature of the 19th century school building.

Hence, the composition implies two faces, the autonomous character of rooms in the interior underlining a particular atmosphere or *Stimmung*¹¹, on the one hand, and on the other the external expression towards the city set on tectonic stratification and repair between old and new proportioned within a clear sense of continuity, where base, middle and top, are quietly adjusted to value the memory and meaning of the monumental presence and civic character of the existing building.

In the case of the small house set on a narrow street inside the historic seaside town of Cadaqués, in Catalonia, Spain, involving a two storey dwelling and adjoining ruined structure, the design becomes, due to its imbedded cluster situation, an act of urban repair and infill with new construction framed by the meaning of Spanish cultural collectiveness, i.e. sense of community within the Mediterranean tradition, a collective memory reading.

This collectiveness is informed by the search of specific architectural references, in this case triggered by Spanish Costa Brava, as guidance and inspiration.

- Inspiration came from the lineage of architects who worked there in the 1950s and 1960s. José Coderch, Frederico Correa, Alfonso Milà, Peter Harden and Lanfranco Bombelli designed numerous beautiful houses, creating a rough but sophisticated and leisurely comfort using a critical regionalist approach. The house was intended to build respectfully on this legacy, in all its whiteness and weightiness¹².

The project, framed by a particular circumstance — Stephen Bates's shared holiday home, which made it a personal project — expresses, through an intuitive spatial ensemble, a *tour de force* of the notion of tolerance executed with a cunning precision.

A string of rooms, private and collective, are put into sequence where the abstract character of their form conveys a geometric ensemble of precisely spaced, dimensioned and proportioned parts with the new interwoven with the existing, be it in configuration restraint or single tectonic expression of an old foundation or wall fabric.

This open cultural dialogue extends to the chosen materials and the intended background atmosphere, be it patterned hydraulic cement

floor tiles from nearby Manresa, Mediterranean raw linen curtains, or white marble and simple painted walls, which SBa specifically denotes as being their first ever use of white paint in an interior. The option to furnish the home with 1950s furniture from England reinforces the coming together of the selected pre-existing features and the inclusion of new elements, in particular with their detailing and textures, bringing into light the significance of the sense of tolerance.

A deepened understanding of this notion can already be found, in the paper *Working with tolerance*¹³, in a foundational three-point statement:

- 1. Tolerance indicates an acknowledgement of the found conditions of a situation...
 2. Tolerance informs an approach to construction where structural solutions accommodate spatial ideas rather than dictate them...
 3. Tolerance offers tangible potentials for connecting spaces and provides systems which enable rather than prescribe use.

The referred tolerance can only be interpreted as a constant pursue for mediation, drawing on a negotiation process with the tangible and intangible, mainly set on the numerous imbedded conditions and their circumstance, where the ultimate goal is a search for balance. A balance that can only be adequately obtained through a highlighted precision of thought.

This *modus operandi*, that use rather than prescribe, craving on the impure, implies an open cultural contamination going beyond regulations, architectural references and construction traditions, set on the tactile and sensorial, substantiated by an unwritten rule legacy, where order, proportion and the idea of comfort frame emotional aspects of everyday life to come.

- 1 ICOMOS-IFLA Principles Concerning Rural Landscapes as Heritage, 2017.
- 2 *Papers*, essays written between 1996-2001; *Papers 2: Sergison Bates architects*, essays written between 2002 and 2007; *Papers 3: Sergison Bates architects*, essays written between 2008 and 2015.
- 3 Later the opportunity of the office to restore Upper Lawn Pavilion, built by Alison and Peter Smithson, will also be enlightening.
- 4 These key notions are present in their first *Papers* and title their monographic edition in *El Croquis*, 187, 2016.
- 5 «I am thinking of Mark Tuff's long-standing fascination with Portugal, and Stephen's connection to Catalunya». Sergison's statement in *Interview* by Mark Pimplot, in «Sergison Bates. Tolerance and Precision», *El Croquis*, 187, VI, 2016, p. 13.
- 6 T. S. Eliot, «Tradition and the Individual Talent», *The Egoist*, 6 (4), 1919, pp. 54-55.
- 7 «Idea, building, occupation and construction: Christoph Grafe in conversation

- with Stephen Bates and Jonathan Sergison», *OASE*, 49/50, 1998, p. 36.
- 8 S. Bates, J. Sergison, «Sergison Bates. Tolerance and Precision», *El Croquis*, 187, VI, 2016, p. 56.
- 9 Ivi, p. 127.
- 10 S. Bates, J. Sergison, *Sergison Bates architects: Buildings*, Quart Publishers, Lucerne 2012, p. 111.
- 11 «I have offered the German word *Stumming*, because it seems to capture the many-sidedness of what atmosphere is and the feeling or experience it might contribute to». In *Interview* by Mark Pimplot, *op. cit.*, p. 23.
- 12 S. Bates, J. Sergison, *Sergison Bates architects: Buildings*, *op. cit.*, p. 111.
- 13 S. Bates, J. Sergison, «Working with tolerance» (January 1999) and «More tolerance» (February 2000), in *Papers*, Publisher Sergison Bates architects, London, 2001.



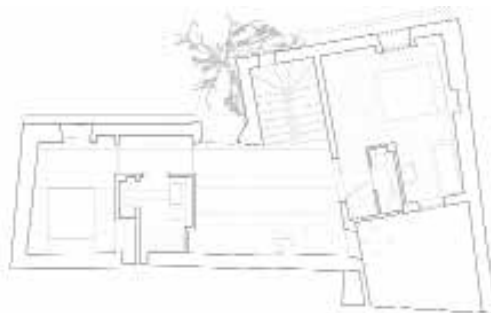
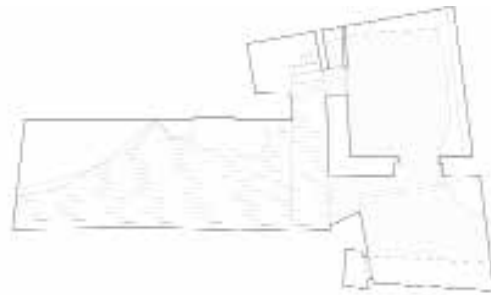
Sergison Bates architects,
Restoration of the Upper
Lawn Pavilion (Tisbury,
United Kingdom 2004).

1
The Upper Lawn (or Solar)
Pavilion designed in 1958 by
Alison and Peter Smithson as
their own weekend home
© Sergison Bates architects.



2 3 4
Exterior and interior views
© Sergison Bates architects.



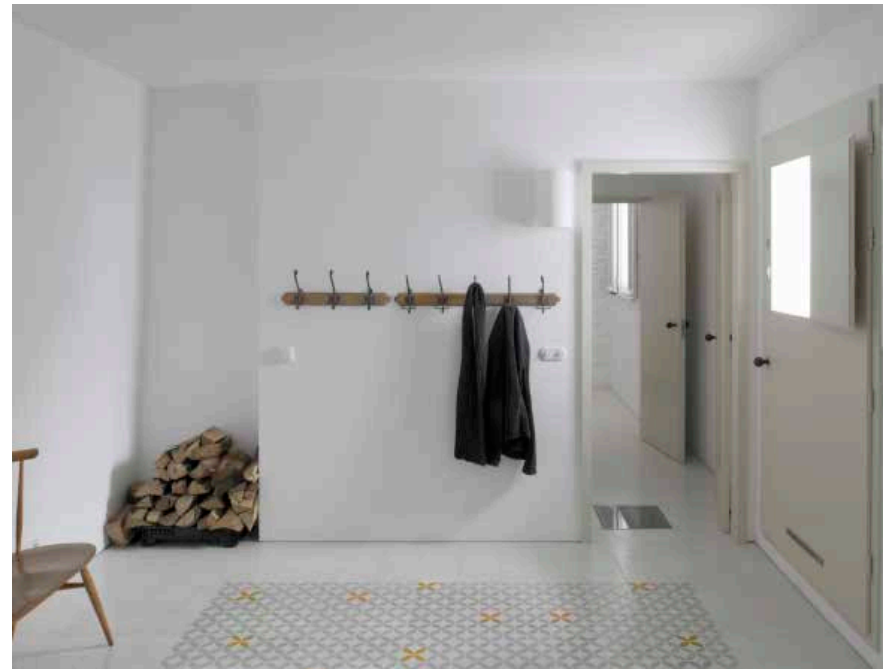


Sergison Bates architects,
Holiday house (Cadaqués,
Spain 2008-11).

5
Basement, ground floor,
mezzanine and first floor plans
© Sergison Bates architects.



6
Exterior view © Sergison
Bates architects.

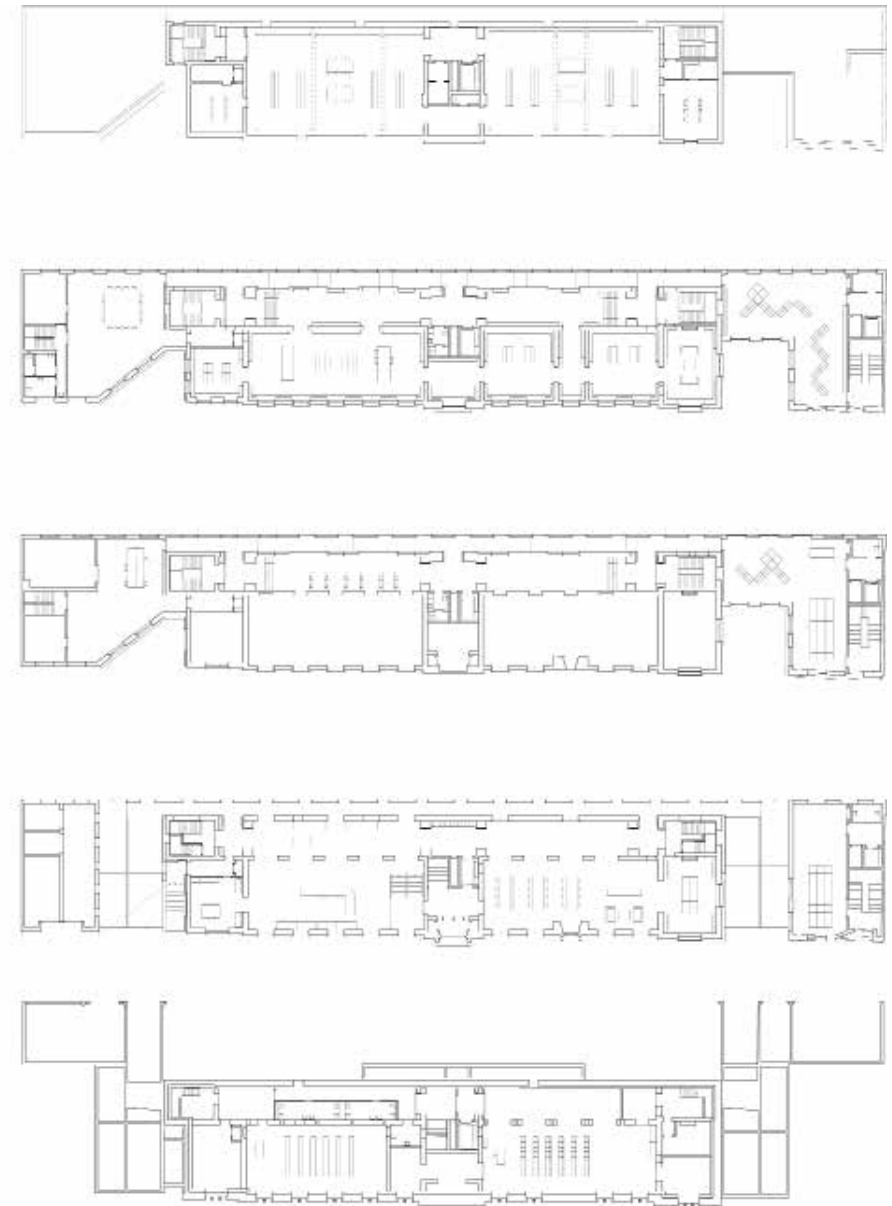


7 8 9
Exterior and interior views
© Sergison Bates architects.



Sergison Bates architects,
Public Library (Blankenberge,
Belgium 2004-11).

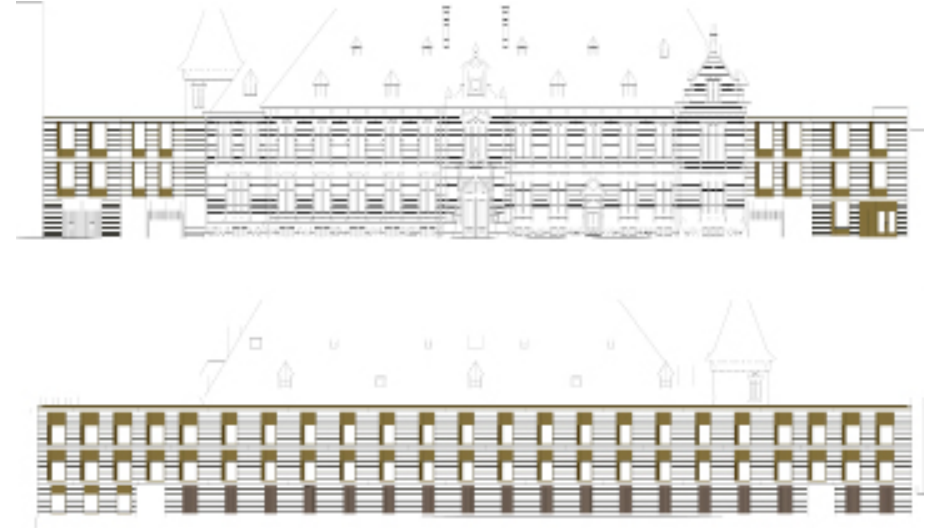
10
Main façade © Sergison Bates
architects.



11
Plans © Sergison Bates
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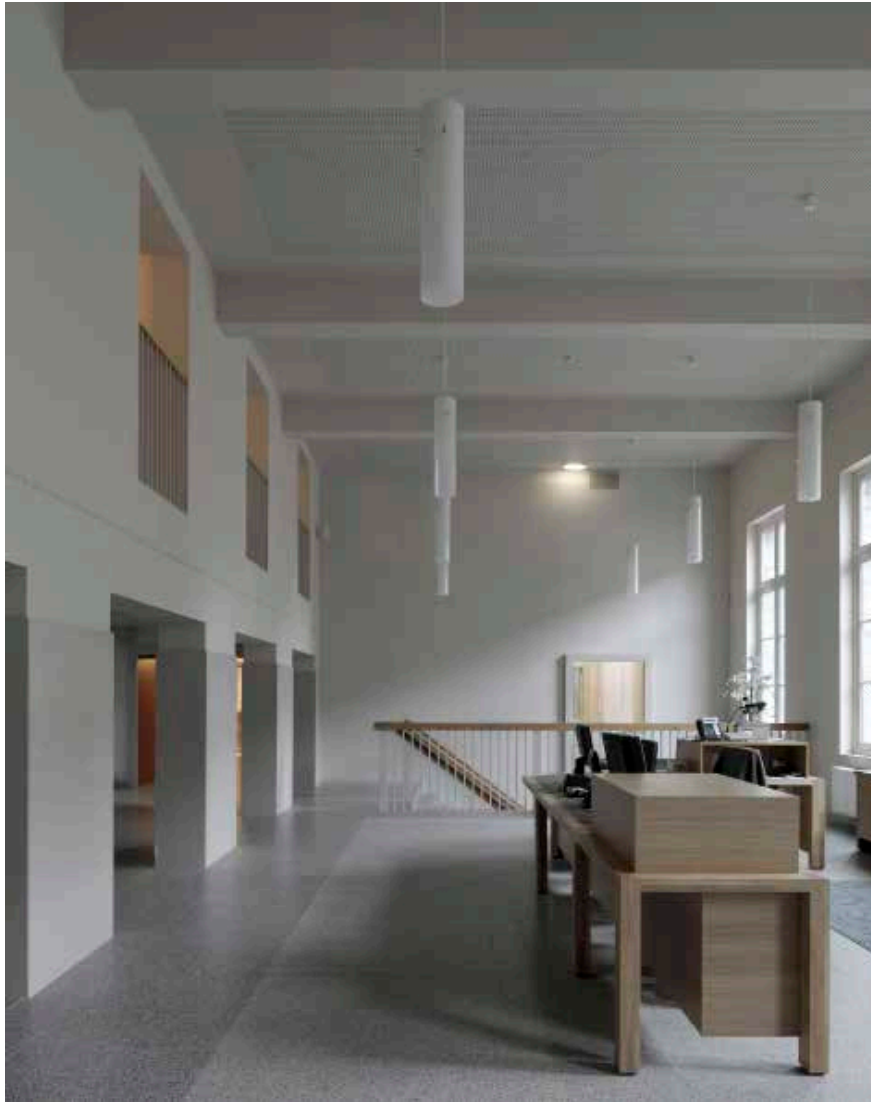


12
The new volume at the
Southern end of the historical
building © Sergison Bates
architects.



13
Elevations © Sergison Bates
architects.

14
The new façade © Sergison
Bates architects.



15 16
Interior sights © Sergison
Bates architects.

II.

Overlaying

Kengo Kuma. «Particlizing» the Memory

Marco Imperadori

— ... it is just the beginning. It is only the beginning of an architecture that continues to flow and vibrate¹.

Kengo Kuma is one of the most influential contemporary architect and also theoretician of Architecture. The reading of all his huge contribution to architectural critics (from the famous *Anti Object*² to all the recent monographies³ and essays) allows us to better understand his approach towards nature and built environment. More than that, it is by experiencing his own Architecture — which is the medium he uses in order to formulate what he writes — that we can really understand the originality and uniqueness of his method. Before starting to analyze some of his recent buildings, we should mention all the reflections written on Kuma by many famous critics. Among them, undoubtedly the most original is Mario Carpo⁴, Reyner Banham Professor at The Bartlett School of Architecture, UCL London, who has clearly underlined how Kuma uses the «Digital Discrete/Parametric» approach (which is extremely contemporary and technologically advanced in the design process) in a balanced way with artisanal craftsmanship and quality approach. This is very different from the so called «parametricism» beloved by Zaha Hadid (and Patrik Schumacher, of course), which has led to a “fluidity” (i.e. free curved surfaces, as Carpo highlights) of architecture and spaces that many times forgot the relationship with humans but also with nature and memory. Hadid was a student at the Columbia University in the same period Kuma was attending, but their paths have been clearly different in the approach to design tools and how they can affect spaces, architectures and relations. This challenge ended up with the well-known experience of the Tokyo Olympic Stadium (2021): Hadid’s proposal, which had won the competition, was abandoned due to unclear budget control problems and the huge volumetric approach to the site (in a very alien way); the project was then assigned to Kengo Kuma, after a second challenge with Toyo Ito, and it was completed perfectly in time, within the budget and with a clear *genius loci* (indeed the Stadium is fragmented in levels/layers with wood lattice particles, evoking a pagoda progression).

For Kuma, the relation with history, memory and nature is fundamental. The links among these entities — exogen and cultural, but always material — are given by humans in equilibrium and never in

domination. In order to do this, the starting point for him is always the material and its «fragmentation» — or, to use directly Kuma's word, *particlization*. To divide the surfaces, the skins, the structural elements, but also the spaces into small entities allow the users to feel to be «closer» to the material entity of the construction. According to Kuma, the «objects» — the «big boxes», as he calls them —, mainly built in concrete, are something anti-human and in many cases also «arrogant» towards both the existing city and nature.

In 1964, Kuma was a kid and wanted to be a veterinary; Tokyo was still a «short and small» city, in the sense that it was densely populated, but mainly made by single or two storeys wooden houses. He was «struck» by Kenzo Tange's Yoyogi Stadium (designed for the Olympics) and wanted to be an architect. But, with that building, Tokyo started to become «tall and big», and lost the «organic» and the smallness that were typical before, and that are so common in Asia. Kuma clearly remembers that time, and recalls: «I felt that if I become an architect, I could stay close to the people, face to face with human issues» — which is an idea very different from Tange's monumental approach.

To do this, textures and sizing of materials used in architecture matter as the size of the human body doesn't change, and any big thing is clearly against the weakness of our small bodies. Indeed Kuma always underlines how the architecture of the West (i.e. Europe and USA) is normally centered on «big boxes» (concrete as dominant), while the one of the East is based on «particles» (basically lines and dots, e.g. columns, tiles, scales, etc., where wood is the dominant)⁵.

After 1964 also in Japan the «big box» approach exploded, together with the economic growth, and the «particles-assembling» landscape was gradually lost. After Tange, the perfect followers were Kisho Kurokawa and Arata Isozaki, who, through the Metabolism, enhanced this trend both in practice and in the theoretical approach.

Kuma didn't want to follow that line, and he chose to be a Ph.D. scholar of Hiroshi Hara at Tokyo University. This path brought him to find curiosity in alternative and new mathematics to go beyond the «box approach» (which for him didn't change along time, from the ancient Greeks, the Romans, Leon Battista Alberti or Kurokawa-Isozaki). The mathematical concept of «Topology» was extremely illuminating; it introduced the notion of «aperture» as an essential

keyword for the relationship between architecture and human body, as it appeared so clearly in old wooden houses. According to the concept of «Topology», the relation human/material in architecture is independent from the size. This concept of «aperture», that was very much discussed with Hara, is clearly what has brought later to such projects as the Hiroshige Ando Museum (2000) and the recent Victoria and Albert Museum in Dundee (2018). The root of this notion, «topos», is to be found in place; this led also to «Topography», which means that landscape and architectural-scape are a joint together, without distinction (which, on the contrary, was typical of the 20th century approach).

Another very important mathematical tool, that he learned from Hara, was «discreteness», or «discrete type», which for him was the essence of many vernacular villages in Africa and drove Kuma to a different interpretation: the «small particle». This has also to do with the essence of everything around us which is physically made by small, infinitesimal entities. This brings a possible «modification» and «addition» in the life time, driving to a real organic approach.

When the 1990s economic bubble exploded, there were no more projects in Japan and the development of the «box» was stopped. Kuma had the chance to travel in Japan and visit many craftsmen and artisans using thin timbers (i.e. small sections), which made him reflect again on the role of architectural particles. These skilled people could be the future and the perpetuation of Japanese construction methods in contemporary architecture.

To sum up Kuma's intellectual path we can refer to these steps: *Discretization* (Sahara desert villages, Hiroshi Hara Ph.D. researches), *Computational Design* (New York, Columbia University), *Craftmanship* (Japan Mountains villages, Yusu-hara-Kochi prefecture).

Wood is clearly the core and the synthesis, an «old friend of humans» that allows both particle-type architecture and addition-type architecture, leading Kuma to the concept of «smallness», independently from the size, thanks to the «topological» approach. Basically this material brings him back to the time before 1964 Olympics, when Tokyo (so as many big cities in Japan) was a «soft place», before becoming covered of iron and concrete. The «softness and warmth»

left the space to a sprawled, vast and alienating city, where society was getting extremely individual. Kuma aims to bring back to the concept of *tasuekai* (i.e. help each other), where people can meet and feel together in co-dividual spaces (indeed his buildings always have common and gathering social spaces). He considered that, from the 1964 Olympics to the 2021 Olympics, an evolution in the way of conceiving architecture, memory, city and nature is possible, and this global sport event could be the catalyst of a change.

To provide a synthesis of Kuma's approach to memory/history, we can produce it by analyzing four of his recent buildings — each one exemplifying a different approach.

Memory of City/Landscape: Topography (V&A Museum, Dundee 2018)

With the Victoria and Albert Museum (V&A) in Dundee, Kuma shows how the «topography» is the conceptual reference and, at the same time, it influences the spaces both in the exterior and the interior of the building. The new urban skyline is clearly enhanced by the new volumetric river-shore created by the V&A⁶. A part of the building protrudes out towards the river Tay, like a vessel ready to take its way to the sea. The texture outside is clearly inspired by the Scottish stone cliffs and its fragmentation, dramatically underlined by shadows and light, making the whole volume closer to the human scale. This new cultural center for Scotland is in fact made by concrete; also the façade is composed by precast concrete slabs, anchored with stainless steel plates and joints, with a wedge shaped cross section. Shadows and natural randomness are a clear evocation of the rocky topography, and this is achieved also thanks to the rough surface of the blades, where the aggregates in concrete are visible thanks to water pressure washing. From one side, the relation with the town is set up by the material, which has the same color of the old stone used to build Dundee, and from the other by the walking path that connects the city center with the new landmark of the V&A.

Identifying the smallest unit size in the façade blades means to define the «unit» of the «small architecture». The unit/bar (250 x 250 millimeters) is the medium that creates the connection from the big cosmos, or the city, or the whole volume, to the small and precarious

dimensions of us, human being. This sort of «grain» allows even a big size building like the V&A to be translated into a small architecture, in a very democratic process of connection among people and nature/city. For Kuma, democracy is not about majority, but it is about smallness and softness of beauty.

The building hasn't any «cartesian» axes; its morphology is very organic and it creates a sort of «arch/cave» that reconnects the town to the river on the old warehouse area of Dundee, formerly occupied by industrial activities and now with a new future of livability.

V&A becomes an urban target, an architectural «lighthouse» that encourages people to once again walk towards the river Tay. This shows the importance of a «flow» that goes with and through the building, which is connected to the existing urban network and at the same time to the natural landscape of the river. Like in the famous Hiroshige Ando Museum (2000), people can walk and float around and also inside the building. The V&A looks really like if it was born from water, as a new communication space for the citizens who endures Scotland's harsh winter. In this rainy, chilly and foggy environment, typical of Scotland, the Lobby seems a kind of «town's living room», where people can freely enter, be protected and use many facilities. Also in the inside, materials are discretized, using random oak boards that bring the landscape effect also indoor, although the effect is warmer thanks to the use of beautiful massive wood. This space gives access to the other levels, that are also visually connected; it is a new communication hub, a real community core, even in the most extreme environmental conditions of wind and freeze.

Memory of City/History: Culture (Asakusa, Tokyo 2012)

Referring to Kengo Kuma's work, Joanna Kloppenburg recently wrote about «The Humble Revolution», and she quoted this very important sentence by him: «Architecture should not be the protagonist of the environment». And this is extremely true for this author, both in free landscape as well as in the urban context.

When he speaks about Tokyo, he often says that the «Darwinian evolutionary history of architecture», that brought so much steel and

concrete, has triggered the soul of the Japanese capital, which from «soft and small» became «hard and mineral». Throughout history, disasters have motivated people; the great 1923 earthquake and also the destruction produced by 1945 bombings pushed a reaction and triggered a huge effort in «mineralizing» Tokyo (the same happened in Lisbon after 1755 earthquake, in the Paris of Napoleon III and Haussmann, or in Chicago after the 1871 big fire).

But Tokyo (formerly *Edo*) was small, low rise, soft and had a human scale; all this was neglected in the realization of the actual «mega-city». The terrible disaster occurred in 2011 (Tohoku Tsunami) has clearly shown that, no matter what the material is, the «Power of Nature» will be always much stronger than any human artifact. For Kuma, going back to «small architecture»⁷ means exactly to try to go back to the human scale by taking down the buildings into fragments and particles — as exemplified in the Asakusa Culture Tourist Information Center⁸, which perfectly matches this purpose. While «big-ness» alienates humans from nature, the discretization in the building elements helps to recreate a bondage between these two entities.

The building is a tower of almost 40 meters, subdivided into eight levels; it appears as if eight small single wooden houses (that were once present in the place) were piled one onto the other. The small unit here can be detected both in the volume (in the single pitched roof houses) and in surface (in the lattice wood vertical sun-shading blades). All this creates a clear connection to the past, in a contemporary way, and the flow connects the architecture with the outside world.

The building is located in a very touristic place, just in front of Senso-Ji Temple, the pagoda and the *Kaminari-mon* (i.e. path of the gods), that drives the people to one of the most important Japanese Shinto Temples. The layered and superposed volumes are a clear balance to the layers of the old pagoda which is visually in touch with it. People can walk and float into the building from the free terrace on top or the restaurant, and down to all the public levels. The double level lobby welcomes tourists with services and information.

Memory of Craftmanship: Tradition/Innovation (Sunny Hills, Tokyo 2013)

- Architecture since the 20th century has been mainly built of concrete, which is massive, thus it is limited to professional workers who can participate in the construction process. On the contrary, we are interested in developing a democratic architecture which is made out of smaller and lighter elements, so that it opens the construction process to everyone no matter they are non-professional⁹.

Omotesando hills is one of the most exclusive borough of Tokyo, where top brands of fashion and luxury compete on the main road and cope their brand with architectures designed by famous authors like Tadao Ando, Herzog and de Meuron, MVRDV, Toyo Ito, Kisho Kurokawa, SANAA and others. But just walking back from the main road and the big buildings, the visitor can discover what is typical of Tokyo: many souls and many cities in one city. The pace slows down quickly and also the dimensions of the constructions. In this urban environment Kuma has designed the Sunny Hills shop, which is a brand of pineapple cake and juice from Taiwan (delicious indeed if you can try it)¹⁰. In the back streets of Aoyama, Kuma imagines a total innovation in architecture: a building where pillars and beams are not present at all. The construction looks like a grove, a self-bearing nest in which the slabs are directly connected. Everything is on four levels, plus the open terrace, and should resist to gravity and to very high seismic loads. Everything is in wood (the precious *Inoki*, the Japanese cypress); thin sections are connected by using the *jigokugumi* joint system (literally «hell like» assembly)¹¹, where multiple sticks, with a small section, are connected in inclined ways. The complication has been carefully designed with parametric softwares, and produced mainly with CNC cutting but with the assistance and fine tuning of special carpenters in wood.

In a way, Sunny Hills creates a small urban forest thanks to the small timber size (60 x 60 millimeters) of the load-bearing sticks that reminds tree branches. The structure is like woven together to create a porous morphology, where the outside is always connected with

the inside thanks to the intermediate space created by the structural groove. The connection is enhanced by light and shadows creating the *satori* effect, the experience of awakening which makes our soul to breathe.

In this building the relation with the city is clearly obtained by the scale and the porosity, but also by the «co-dividual» concept of the interior space: people enter and sit around a social table with others, anybody gets a small cake with green tea (for free) and, afterwards, anybody is free to purchase or to go. An incredible innovative concept that makes the space a vibrant social catalyst to go beyond the individuality and loneliness typical of Tokyo.

The relation with memory is given by the interpretation of tradition/innovation in the way wood is used for construction. Kuma goes clearly back to the «smallness» of the ancient Tokyo, which was made practically only in wood and washi/rice paper. He uses small sections but he designs them in a new way, exploiting new design tools, to create structural diffusion and redundancy which are efficient both aesthetically and for anti-seismic purposes. Also for the production, the wood has been cut with automatic machines that interpretate the parametric information, but in the final construction phase the «fine tuning» and joints were checked by special wood masters. In this way, Kuma preserves the tradition of wood and its carpenters (that are protected as heritage by Japanese Government), but at same time he evolves the process to fit the actual contemporary architectural debate.

Memory of Nature: Abstraction (Kodama, Arte Sella, Valsugana 2018)

Eastern and Western philosophy strongly meet in *Kodama*, in the beautiful surroundings of *Arte Sella*¹², the Contemporary Mountain¹³, and the forest of *Villa Strobele*. While the main elements of Western philosophy are Earth, Air, Water and Fire, the Eastern one has one more: the Void (the emptiness). The name of the pavilion, *Kodama*, is associated with a spirit in the beautiful forest of *Arte Sella*: in Japanese, *Ko* means «tree», and *Dama* means «spirit» or «sphere».

In *Kodama*, the void is amplified into three levels: the convexity outside the volume, the concavity inside and the porosity, the emptiness in-between. In order to achieve these spatial effects as an effective

representation of the design concept, many sketches, drawings and mock-ups have defined the first phase of the design process, towards a visual and practical experimentation.

Finally, the multiple interpretations of *void* — as convexity, concavity and emptiness in the porosity of the sphere — have been created by massive larch blades that now define the structure of the art piece. 58 millimeters in thickness, 300 millimeters in width and 1.000 millimeters in length are the three dimensions of the single larch particle, whose repetition origins the wooden, porous and spherical volume of *Kodama*, giving it the rhythm of a complex entity, but being at the same time a simple geometry. The concept of the wooden structure indeed had the aim to achieve a single and iconic volume made only by one element, as a particle of the whole. It is repeated, connected and exalted across the construction, following Kengo Kuma's theory of discretization and diffused structures, which leaves traces in many of his works, all around the world. In a way, it has also a reference to Hegel's philosophy of the elements, the particles and the whole together, as a synthesis.

Behind the wooden structure of *Kodama* and its capability to embrace and synthesize both the prime conceptual ideas of *emptiness* and *complexity through simplicity*, there is an extremely intense and complex design process, carried out after many experimental tests, mechanical calculations and virtual simulations. It has been an iterative process, balanced between theoretical validations and practical experimentations, towards the optimization of the wooden elements, their dimensions, the specific material, connections and, thus, mechanical behavior and final impact. Digital and parametrical models were used in order to control the geometry, assess the structural design and help the management of wooden pieces production, classification and assembly. Digitalizing the process means to gain a better control over each phase and procedures, and transferring the earlier ideas and sketches into an engineered knowledge.

In the end, the structure has been defined as a spherical volume built up by the interconnection of wooden plates (58 x 300 x 1.000 millimeters), and the repetition of a node of six panels along the whole geometry. No steel nails are present in the structure, except for the anchoring to foundations, realized using steel bars and bolts. The

elements are connected to each other by gravity, and their joints are fixed thanks to the deformations induced by humidity.

The construction processes of *Kodama* lasted five days (from April 16th, to April 20th, 2018). The first one was used to place the foundation's beams made in larch wood, and to fix the metal plates. The wooden structure, completely jointed without any metal connections, started on April 17th and continued for four days. D3Wood craftsmen (Marco and Claudio Clozza)¹⁴ mounted the different rings on the ground, in a lying position; once raised to the ground using three hoists, they were oriented so that the joints could be combined between the different levels. The most complicated situations involved 23 junctions on rings of about 5 meters in diameter, with a mounting tolerance of 1 millimeter. After the assembly of each ring, dimensions were controlled, provisional supports were positioned, and the perfect interpenetration of all the joints was verified. By adopting all these measures to respect the geometry of the design, the assembly was engaging and no changes were made to any element during construction.

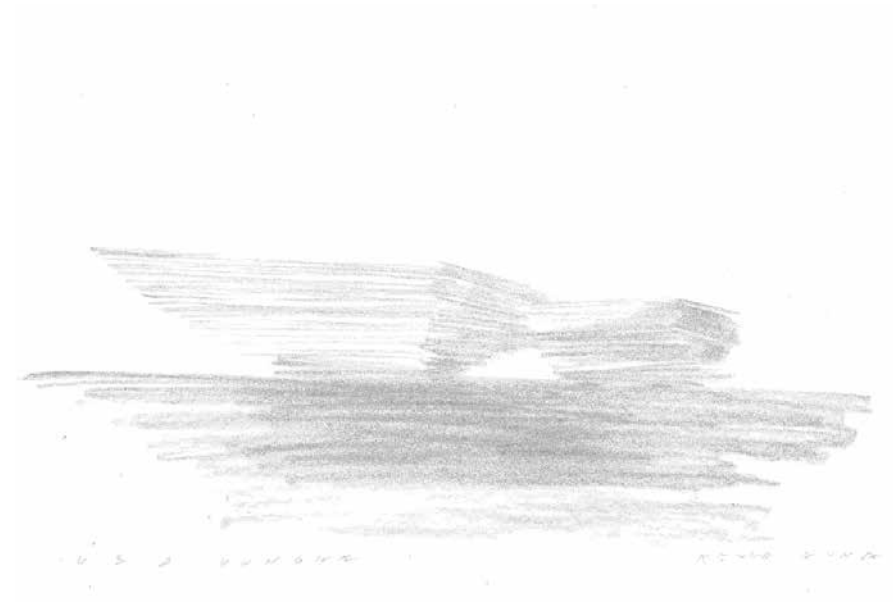
Kodama was presented at *Arte Sella* and, in partnership with Politecnico di Milano, in a *Lectio Magistralis* at Teatro Bibiena during *MantovArchitettura*, in the Spring of 2018. In the same year, in October, a terrible typhoon (Vaia) destroyed 18 millions of trees in all Italian Alps. *Arte Sella* was severely hit and also *Kodama* was destroyed for one third. Luckily the redundant structure was stiff enough and resilient to allow a refurbishment which, in accordance to Kengo Kuma, was made by showing the wound in an expressive way by burning the larch wood of the new additions (thus emulating the *kintsugi/yakisugi* technique); furthermore, a beautiful *Haiku* dedicated to the Wind was engraved on the wood.

At the end of this intense path of design, engineering and prototyping, *Kodama* proves to be a very poetic space. Kengo Kuma, the author of the new Olympic Stadium for Tokyo 2021, has conceived a landmark into a landscape, where nature accepts massive wood to «come back», and to decay and age through time and seasonal changes. This idyllic image is typical of the Japanese philosophy, indeed: beauty achieved with ephemerality, decay and imperfections given by the time as *Wabi Sabi* beauty.

Space itself remembers a Japanese tea-house in the open air, approaching it through big stepping stones from local mountains. The ceremony of tea and its aesthetics described by Okakura Tenshin¹⁵ finds a full expression within the project of *Kodama*, as well as the importance of light and shadows, created by the structure which brings us also to the core of the Japanese philosophy by Junichiro Tanizaki¹⁶. The real, only way to feel all of this experience, as Bruno Zevi may have said, can only be achieved by going around and inside *Kodama* in *Arte Sella*, becoming a part of it and of the forest.

Nature and humans join, thanks to the artifact, in a very harmonious and poetical way. The memory in this case is abstract, bringing us back to the primitivity, the ancestrality of the first shelters that humans built to create a space for themselves to protect from the outside forces: this is the genesis of all what we call Architecture.

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Kengo Kuma, Victoria and Albert Museum (Dundee, United Kingdom 2018).

1
Kengo Kuma's sketch
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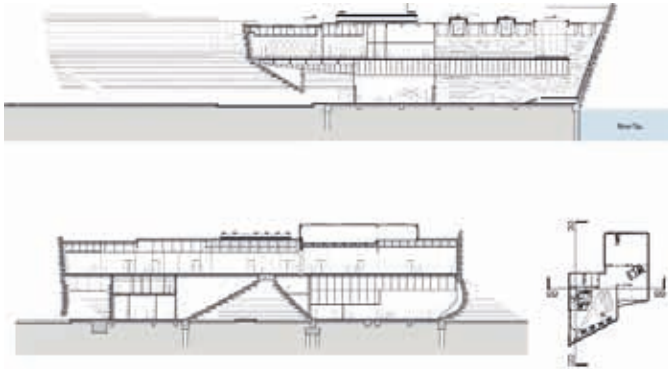
2
Exterior view © KKAA,
ph. Hufton Crow.



3 4
Ground floor plan and
galleries floor plan © KKAA.

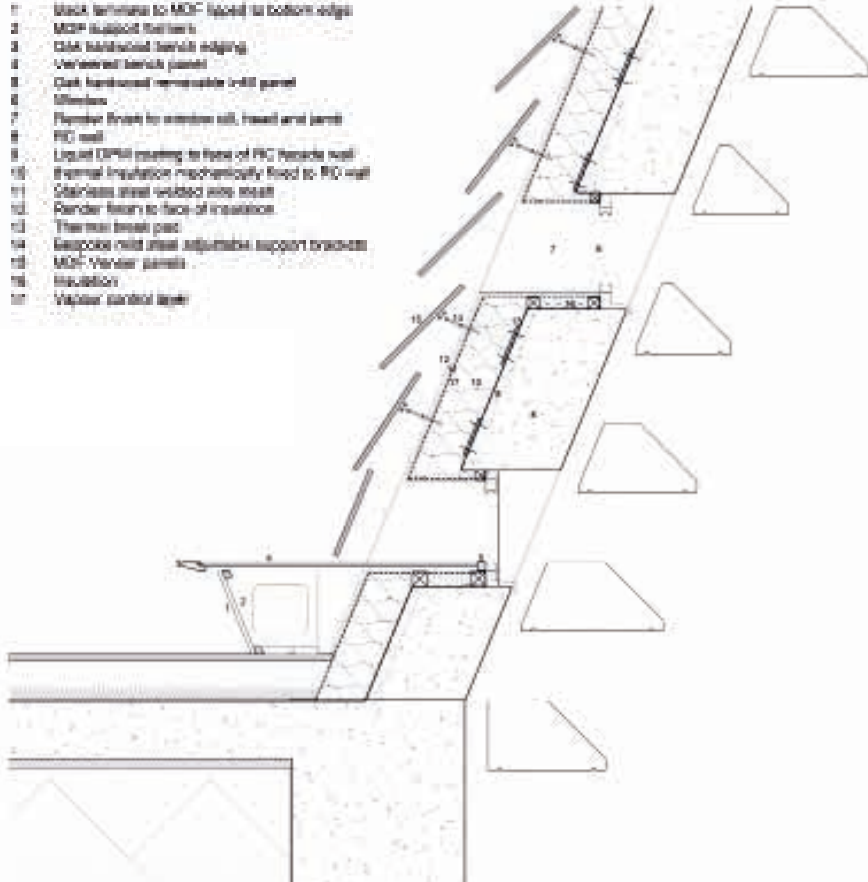


5
One of the sides of
the building © KKAA,
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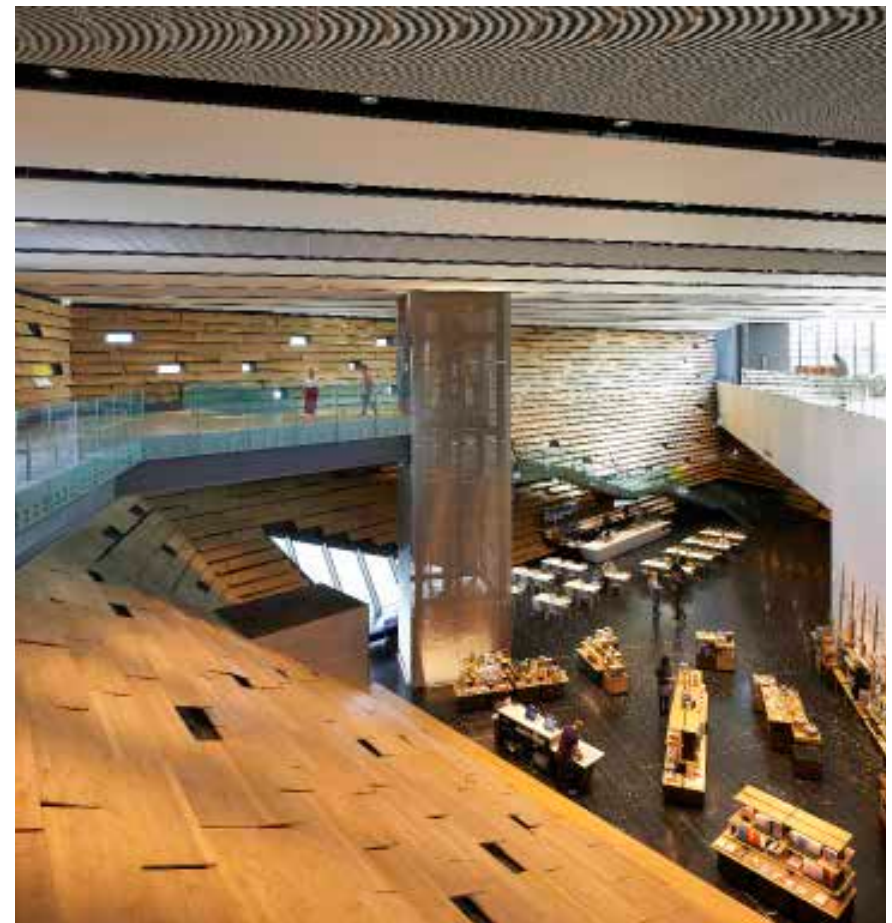
KEY

1. Block terminates to MOC (sloped to bottom edge)
2. MOC support fin/term
3. Oak horizontal finish edging
4. Veneered finish panel
5. Oak horizontal removable unit panel
6. Glulam
7. Plywood bracing to window sill, fixed steel joint
8. RC wall
9. Liquid DPM coating to face of RC facade wall
10. Thermal insulation mechanically fixed to RC wall
11. Stainless steel window into steel
12. Render finish to face of insulation
13. Thermal break post
14. Gascrete cold steel adjustable support brackets
15. MOC 'vender' panels
16. Insulation
17. Vapour control layer

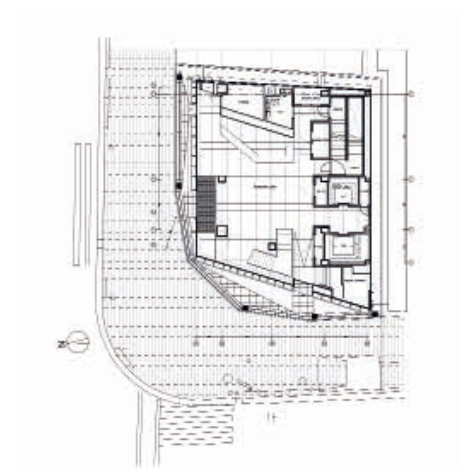
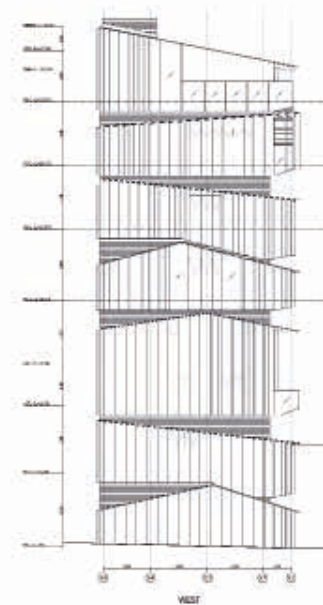
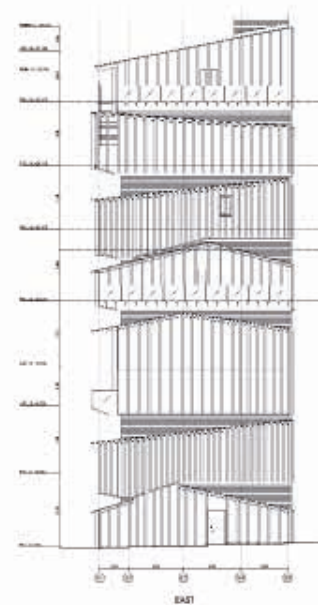
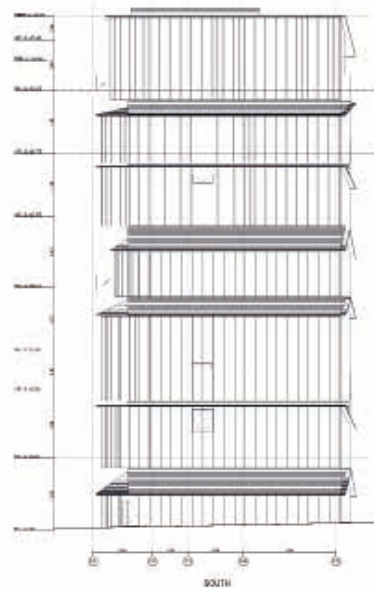
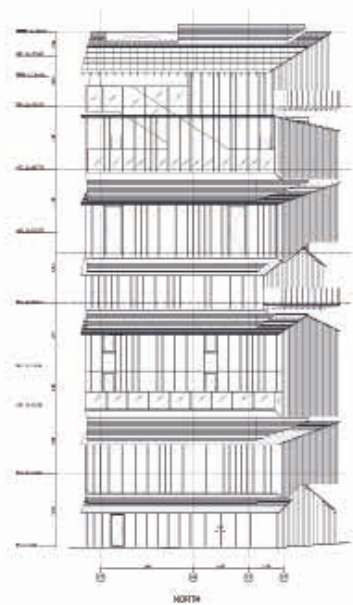


6
Sections © KKA.

7
External wall detail © KKA.



8 9
Interior views © KKA,
ph. Hufton Crow.



Kengo Kuma, Asakusa Culture Tourist Information Center (Tokyo, Japan 2012).

10 Elevations © KKAA.

11 Exterior view © KKAA, ph. Takeshi Yamagishi.

12 Ground floor plan and fifth floor plan © KKAA.



13
Exterior view © KKAA,
ph. Takeshi Yamagishi.



14 15
Interior spaces © KKAA,
ph. Takeshi Yamagishi.

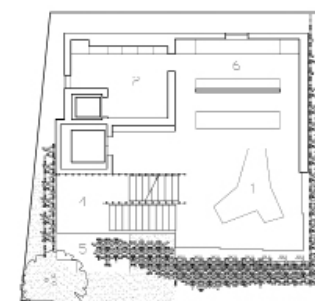
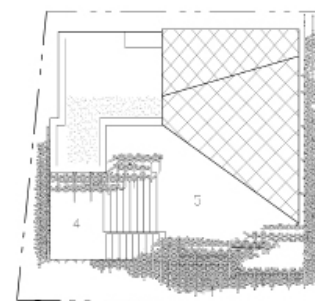




Kengo Kuma, Sunny Hills
(Tokyo, Japan 2013).

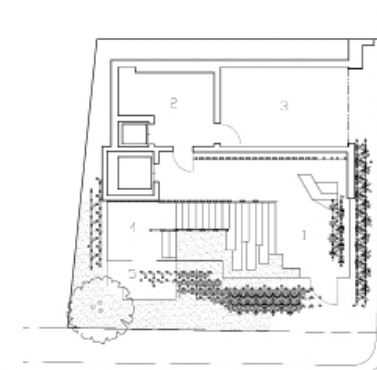
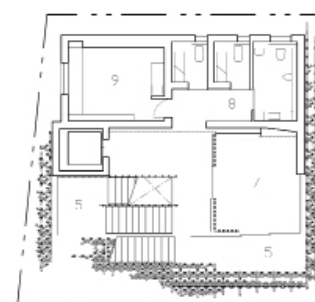
16
Kengo Kuma's sketch
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17
Exterior view © KKA,
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1st floor
2nd floor
3rd floor
4th floor
5th floor
6th floor
7th floor
8th floor
9th floor

S-L/200



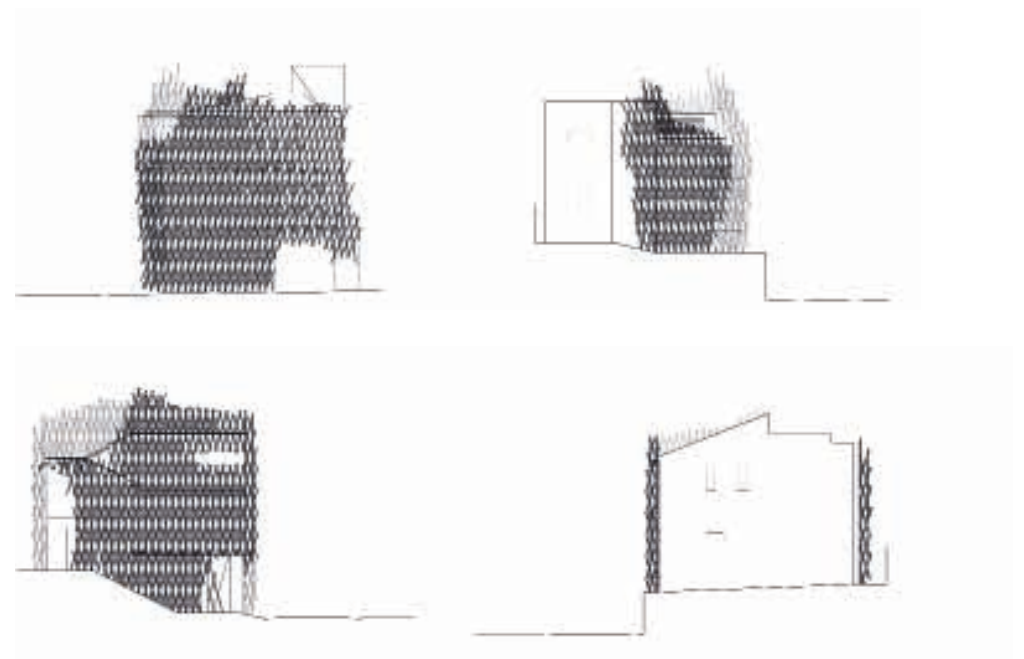
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Plans © KKA.



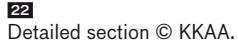
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Exterior view © KKAA,
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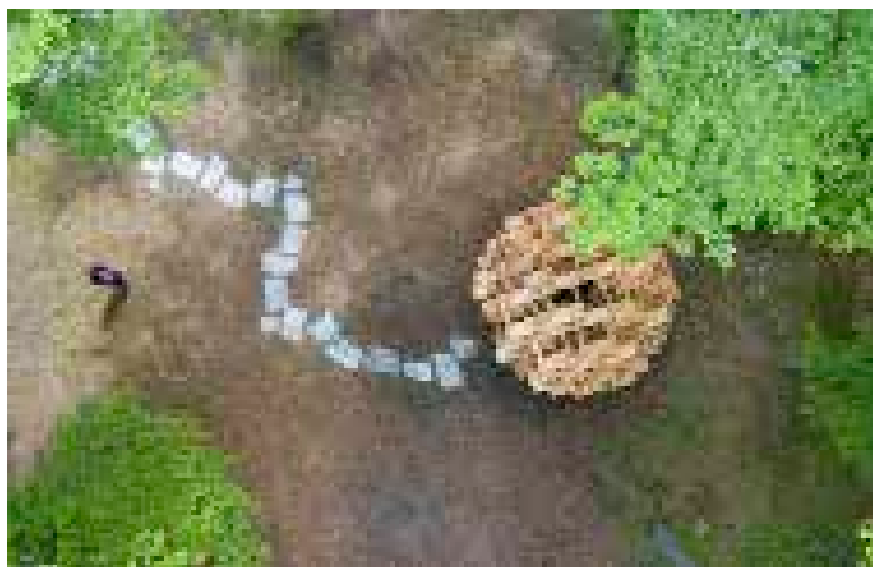
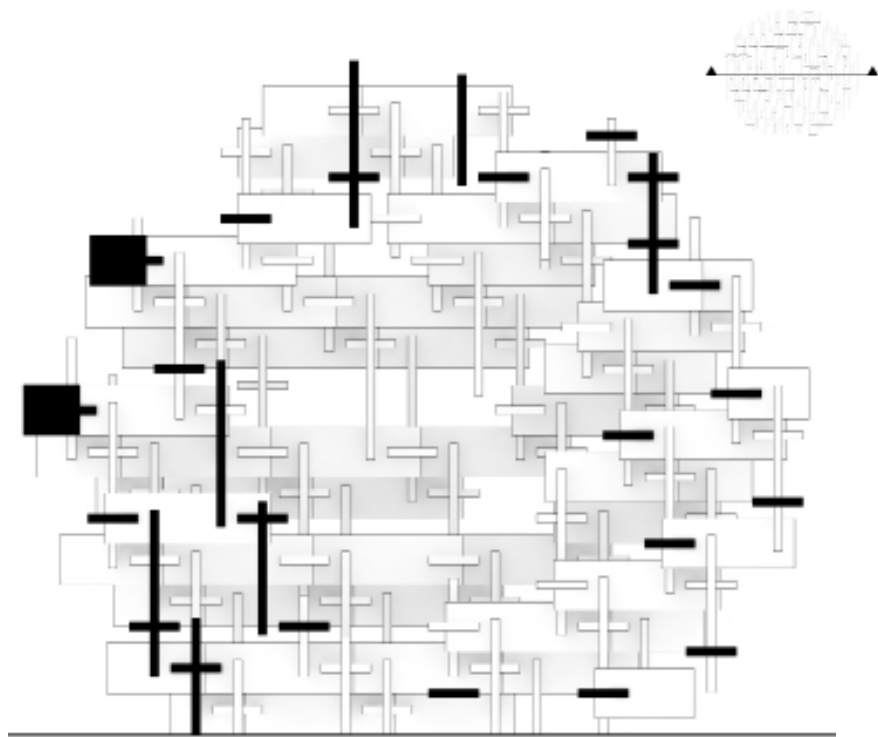


20
Exterior view © KKAA,
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21
Sections © KKAA.





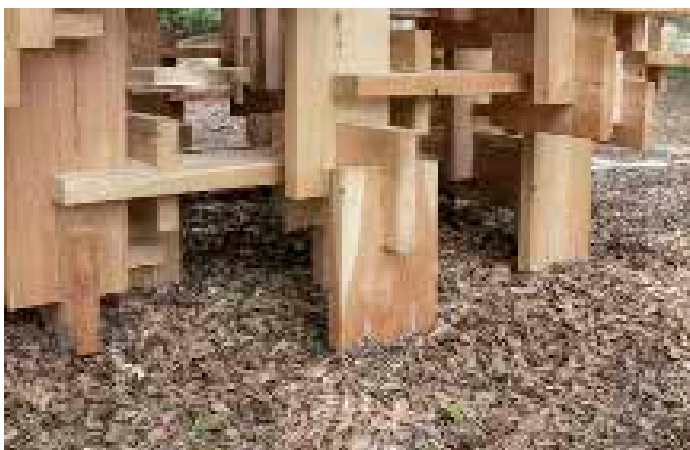
Kengo Kuma, *Kodama*
(Arte Sella, Valsugana,
Italy 2018).

23
Plan © KKA.

24
Aerial view © KKA.

25
Section © KKA.

26
Overall view © KKA.



27 28 29
 External and internal views
 © KKAA.



30
 Overall view, ph. Giacomo
 Bianchi.

Solano Benítez. Building the Future by Innovating Tradition

Marco Biagi

Paraguay hasn't got an history of architecture; at most, a tradition. Even if modern architecture has written memorable pages in the Latin American continent, it seems to have almost failed penetrating the borders of the innermost state of South America, sandwiched between giants as Argentina and Brazil, Bolivia to the west, largely surrounded by rivers' water, so much to be compared, by its most prominent writers, to an *isla sin mar* (Juan Bautista Rivarola Matto) or to a *pequeña isla rodeada de tierra* (Augusto Roa Bastos).

Le Corbusier visited its capital in 1929, at the end of his famous cycle of lectures held in Buenos Aires, Montevideo, São Paulo and Rio de Janeiro. He caught only the most folkloric aspect of the city, without reporting particular observations about the buildings or the urban planning: «Asunción seemed to me a joyful city — he writes — luxuriant, a fascinating city, with a simple, sunny cheerfulness, teeming with bright and fresh colors, all compatible with each other and linked together by the frenetic green of tropical trees».

The most important modern architecture to be visited in Asunción is a gift from the Brazilian government of Getúlio Vargas, the *Colegio Experimental Paraguay-Brasil*, designed in the 1950s by Afonso Eduardo Reidy on a hill in the barrio of Ita Pytâ Punta — which, in the Guaraní language, means «tip of the red stone» — overlooking a bend in the *Río Paraguay* and the horizontal expanse of the Chaco, to the North.

The horizontal structure, suspended on a porch that makes shade and frames the landscape, is characterized by a sloping elevation, paced by giant forks of reinforced concrete, very similar to that one of the contemporary *Museu de Arte Moderna* in Rio de Janeiro. The building — that had to be the first and never completed nucleus of the future University City — was to serve for the formation of a teaching staff for higher levels of education. Extensively modified over time, it is still in use today, but also showing signs of a long period of neglect, bearing witness to the indifference of local institutions regarding great civil architecture and cultural values it embodies, both in terms of conservation and of new initiatives.

Among the metropolises of Latin America, Asunción has a modest size. The capital city of Paraguay in fact has just over 500.000 inhabitants and reaches 2.600.000 units, including the conurbation of the

suburban municipalities — in total, a third of the overall population of the country. The extension of the urbanized area however is wide, formed by a variegated fabric of medium and low density buildings, interspersed with tropical green and bedewed in a capillary manner by private vehicular traffic. The downtown is small and vaguely decommissioned. There is a decadent atmosphere, of semi-abandonment and relative neglect: there are several closed premises and shops; ghost buildings are also frequent. In recent years, the downtown has suffered the demographic decline of the old residents and the new generations preferred to move to the suburbs in search of more convenient and safe housing solutions.

«In the streets of the center — Alberto Ferlenga wrote on the 786 issue of *Casabella*, in 2010 — the *cuadras* mark out an urban space originally composed of low buildings, with occasional widenings around abandoned remnants, like the station built by the English, or monuments that commemorate a tormented history, like the *Pantheon de los Heroes* that hosts the protagonists of the disastrous wars undertaken by the Country, or the presidential palace. While in the older part of the city time seems to have been blocked by the colonial layout, further on, in the outlying areas, the residential neighborhoods develop around shopping centers or streets that are not so different from those of many European or American cities».

In the dynamics that govern the future of the city, public initiative and competitions are certainly lacking. Conversely, private commissions predominate, mostly of residential, commercial and, in the alternative, tertiary nature, which generate a minute and unstable urban material, subject to processes of constant and rapid transformation, adaptation, replacement. A triumph of impermanence, in short, and a strictly utilitarian vision of architecture.

In such a context, which doesn't seem to offer prerequisites for the development of quality construction experiences, a group of architects and teachers between the ages of thirty and fifty has taken form a few years ago, operating in close contact with one another.

Their activities raised particular interest on the international contemporary architecture scene. The elder leaders are Javier Corvalán and Solano Benítez, born respectively in 1962 and 1963, joined by many exponents of the younger generations, including José Cubilla,

Sergio Ruggieri, Sergio Fanego with Larissa Rojas and Miguel Duarte, Francisco Tómboly with Sonia Carísimo and others.

Benítez studied at the *Universidad Nacional*, during the years of Stroessner's dictatorship; Corvalán at the *Católica*. After graduation, they both travelled — in Portugal and the United States, the first, in Italy, the latter — and they built up a network of personal and collective relationships and exchanges with more disciplinary evolved areas of the *Cone Sur*. With the Paulist school of Mendes da Rocha, for example, or the Argentine *côté* of authors from a generation prior to theirs (such as Pablo Beitía and Rafael Iglesia), and even more recently, with Alejandro Aravena and the young Chilean and Mexican architects.

Thanks also to these contacts and acquaintances, both Corvalán and Benítez have developed an attitude of great mental and cultural openness, fully updated but still calibrated on the experimental horizon of Modernism rather than on the affected mannerism of the contemporary architectural languages. It is an attitude free from complexes and inhibitions, able to use the limitations of an under-developed socio-economic context to convert them into incentives for research and innovation. A research which is devoted above all to deepening the structural and constructive dimension of architecture. In this regard, while Corvalán has often shown, in his professional career, to prefer the brutalist tectonics of reinforced concrete, tested in muscular exercises on balancing the masses, Benítez rather has always preferred to dedicate himself to explore, with brilliant ingenuity and open-minded nonconformity, the unexpressed potential of an even poorer, ordinary and only «apparently exhausted» material such as brick, in its multiple technical and aesthetic virtualities.

Focusing on terracotta meant, for him, to look for an intimate connection with the Paraguayan land; with the red vestiges of the ancient Jesuit *Reducciones*, whose monumental traces, along the two banks of the *Rio Paraná*, survive to evoke the epic of a failed communist utopia *ante litteram* and to testify, with their imposing foundation structures, the challenge of the anthropic to an overbearing and boundless nature. Finally, focusing on clay meant to start from the most immediately available resources and skills, assuming them with a realistic but not resigned attitude, with the ambition to reinvent and regenerate them each time in order to offer them new perspectives.

A contribution to that, obviously, was the organization of the building process, in which the designer still coincides quite often with the contractor and is called to solve problems of both constructive and structural nature during construction, in order to make up for the lack of means and economic resources. The classical «necessity mother of invention», in short. The imagination that overcomes the difficulties by devising new and unconventional solutions.

It is also for this reason, perhaps, that the architecture of Solano Benítez looks so fresh and «authentic» if compared to much of the current international production. Since the early 1990s, the Paraguayan architect has been conceiving and carrying out a personal path of study and knowledge on some possible «alternative» building uses of the *ladrillo*, exploiting each professional assignment as an opportunity for checking and testing the technical and application hypotheses elaborated in progress as a result and evolutionary variant of each other.

Already in the first headquarters of the *Gabinete de Arquitectura* — that was his very first work, completed in 1994 in the suburban sprawl of the municipality of *Villa Elisa*, within the metropolitan area of the Gran Asunción —, numerous embryonic intuitions appear that will give rise to deepening and meaningful developments in the subsequent projects.

First of all, the «paradoxical» idea of an *in folio* wall made of bricks arranged on edge, to save on material for the construction of a space of 100 square meters on a budget of just 5.000 dollars (when current construction costs ranged around 350 and 450 \$/square meter at the time). Furthermore, in order to counteract the instability of the thin wall and avoid the foreseeable «bulging» due to point load, a second singular idea was applied: to remove the section of the façade subject to maximum deflection, strengthening it with a Vierendeel truss in reinforced brick, also utilized as a *fenêtre en longueur*.

In addition, to prevent the «overturning» of the elevation, another invention is to add the contribution of IPE posts placed against the exterior and connected by slim webs of iron rod (to prevent «punching») to the reinforcements embedded in the mortar courses. Finally, it is worth noting — in the canopy over the entrance — the first appearance of a rudimentary segment of the slab in reinforced *ladrillo quebrado*,

an idea reprised and perfected later in the large suspended ceiling of the *Casa Abu y Font*.

The executive difficulties encountered during the vertical laying of bricks arranged on edge in the construction of his own atelier, leads Benítez — in the subsequent projects for a 3 in Asunción (1995-96, no longer existing) and above all in the restyling of the Unilever offices, in *Villa Elisa* again (2000-01) — to explore the practicality of a more convenient approach: the prefabrication of panels of different formats and sizes on the ground, which can then be assembled in the construction. In the making of the large sunscreen enclosure built to disguise the modest existing shed that contains the managerial headquarters of the important Anglo-Dutch multinational, the prefabricated partitions are stiffened by brick ribs, making it possible to reach formats of 2,5-3 meters in height, which can be installed as sloping parts, with a thickness at the edge of just 3 centimeters.

The next step, in *Casa Esmeraldina* (Asunción, 2002-03), inspired by Italo Calvino's *Città invisibili*, was to introduce *encofrados*, i.e. trainers, vertical wooden formworks that can be repositioned to speed up the construction of the thin masonry. This technique makes it easier and faster to shape a brick wall in the special «pleated» configuration that gives it strength through form and makes it suitable to support the layered bands of the sculptural and chiaroscuro curtain-diaphragm on the street.

In the large *Casa Abu y Font*, designed in 2004-06 for his mother and one of his six siblings, Solano uses the «megaron» section of Le Corbusier, one of the volumetric schemes favored by the Latin American architect, perfect for defense against the oppressive heat of the local climate. For the roof of the large living area on the ground floor, extending lengthwise from one end to the other of the building, opening completely onto two opposing patios thanks to wooden doors activated by a sophisticated system of pulleys and weights, the *bricoleur* Benítez experiments with the soft bending of a *losa de cerámica armada* of 19 meters in length, hung on two Vierendeel trusses with a span of 14 meters. The curved suspended ceiling is actually a sort of depressed vault that functions thanks to tensile strength and delicately shapes the unified space below. To make it, the architect augmented and rationalized the scheme first applied in the canopy of

the old *Gabinete*, making centring on which to place the bricks in a herringbone pattern, inclined by 30° with respect to the vertical position, making use of a 4 centimeters bed of sand. For every three brick courses (24 centimeters), in the transverse direction, and between the parallel rows (28 centimeters), in the longitudinal direction, reinforcement rods are inserted, while the whole arrangement is consolidated by an extremely fluid mortar that defies all standards and expectations with its optimal performance, since it releases part of its excess water to the brick and the sand, creating an ideal humid environment for the setting of the concrete. When the formwork has been stripped, the pebbled surface of the brick that lightens the slab is transformed into a vibrant visual finish for the living area below.

A few years later, the need to move the architecture studio into the basement level of the family home offered an opportunity for another experiment. The cutting of several load-bearing walls made it necessary to reinforce the slabs by grafting on atypical reticular struts in reinforced brick, made by using simple box frames of bricks with a triangular matrix as the formwork. These elements immediately revealed their enormous application potential, and today they probably represent the main area of research of the *Gabinete*. In this period, presumably, the connection arises among the research on the *in folio* walls and panels, the continuous surfaces with the «broken» brick embedded in conglomerates of reinforced and not-reinforced concrete, and the investigation of spatial structures with bars, based on the *Tridilosa* system patented in 1966 by the Mexican engineer Heberto Castillo (1928-97), in which the *ladrillo* is essentially used in the unconventional role of formwork.

The first line of research contains, for example, a work like *Casa L.A.* (Presidente Hayes, 2004-06), in which the zigzag walls of *Casa Esmeraldina* rise to an height of 7 meters thanks to the use of special *encofrados* — and, in spite of the fact that they are made with crushed material, that is rubble purchased by the cubic meter.

The second category covers, clearly enough, some of the more recent works, like the *Quincho* for *asado* made in the garden of the architect's sister Coral (Asunción, 2010), or the Sports center for the *Facultad de Arquitectura, Diseño y Arte* of *Universidad Nacional de Asunción* (Asunción, 2012-), currently being completed in the hinter-

land of the capital or, moreover, the installation «Rompiendo el sitio», which earned the *Gabinete* the Golden Lion at the 15th Venice Architecture Biennale in 2016.

Nevertheless, the project that leads up to the most recent experiments and marks an important moment of progress in the technique and formal research conducted by the *Gabinete de Arquitectura*, is undoubtedly the Children's Rehab Center for the Telethon Foundation, completed in 2011 at Lambaré, on the outskirts of Asunción. This is a detailed complex of spaces and equipment for physiotherapy and rehabilitation of disabled children or those with spinal lesions. Built with funds raised during the annual television marathon, the facility had to meet functional needs while also providing a symbolic, demonstrative image. The theme of rehabilitation has therefore been extended to the architecture, making it into a programmatic motif. Not only new construction, then, but also recovery and transformation of existing buildings, dismantling of edifices and *in situ* recycling of debris obtained from demolitions. For the first time, inside the administration block, the use of the centring and the broken brick have been tested in the production of a thin vault (4 centimeters thick) shaped as a catenary arch and reinforced by a diamond pattern of reinforcement ribbing. The same centring is then reutilized in a horizontal position to shape the curved panels and dividers. The next step was experimentation, in the green space of the garden, with a *boveda aligerada*, a lightened vault built in two versions with the method of prefabricated triangular formwork made with brick. Both versions serve as canopies and have a profile similar to a segmental arch. However, one located at the access to the area has a section of 25 centimeters, since the bricks are joined vertically, while the other, screening the entrance to the clinics, has a section of only 12 centimeters. Finally, another interesting technique is the application of flat brick in overturned pyramids, in *cerámica armada*, that loom like large umbrellas or trees over the upward gaze of youngsters immersed in hydrotherapy tubs, shaping the shade and functioning as compluvia to gather and store rainwater, guided to underground cisterns. The evident affinities with the work of Eladio Dieste are rebutted by Benítez by citing the specificity of his use of only common and often discarded materials, whereas the engineer from Uruguay usually applied certified, custom-made components.

Such a distancing recalls to mind the famous distinction between «scientific thought» and «wild thought» formulated by the French anthropologist Claude Lévi-Strauss in the early 1960s, which still today conveniently illustrates the difference between the contemporary universe of specialism, precision and technological disenchantment and the practice of building in the context of slower and more backward societies. Societies where for the architect, as well as for the *bricoleur* of Lévi-Strauss, «the rules of his game are always to make do with “whatever is at hand”, that is to say with a set of tools and materials which is always finite and is also heterogeneous because what it contains bears no relation to the current project, or indeed to any particular project, but is the contingent result of all the occasions there have been to renew or enrich the stock or to maintain it with the remains of previous constructions or destructions».

In the inventory of Benítez's works, Telethon Center is certainly the one that, in the most evident and detailed way, shows this particular condition of the profession and the interpretation proposed by the author. The complexity of the intervention, the variety and novelty of the constructive solutions, the quality of the spaces, the modulation of natural light and the richness of the textures and the material combinations are not simple performances or answers to practical needs, but they tell twenty years of field research, drawing both a self-portrait and a manifesto. They describe a personal vision of the city, the discipline and the world.

In the small but emblematic laboratory of Asunción, the relationship with the city is implemented through a process of continuous transformation: the urgency of the primary needs doesn't leave room for fetishism of conservation or musealization. Architecture is a function, a service, not a goal. In this sense, Benítez's architecture doesn't pursue forms and figures, but it acts on the level of the means and relations of production. By doing so, it expresses a substantial rootedness in the social and cultural context in which it operates. The challenge lies in the attempt to reinvent tradition, questioning its dictates and rethinking it from the beginning. In the words of Lévi-Strauss, it is a question of «renewing and enriching the stock of raw materials, tools and fungible signs», through the use of imagination and the enhancement of all the skills and energies involved in the building cycle.

The objective is not revolutionary in itself, because it doesn't break the limits of the situation in which it is confined, but, potentially and in perspective, it can represent a useful term of comparison and a possible source of inspiration even for more advanced realities, where the ongoing global environmental crisis requires anyway sustainable remedies and alternatives to the dominant economic development model.



Solano Benítez, *Casa Esmeraldina* (Asunción, Paraguay 2004).

1
The main front
© Leonardo Finotti.



Solano Benítez, *Casa Abu y Font* (Asunción, Paraguay 2006-07).

2
The main front
© Leonardo Finotti.



Solano Benítez, Children's
Rehab Center for the Telethon
Foundation (Lambaré,
Asunción, Paraguay 2010-11).

3
The entrance path
© Leonardo Finotti.



4
Structural framework
of the entrance path
© Leonardo Finotti.



5
Interior view of the main space
© Leonardo Finotti.

Angelo Bucci. Landscape, Paths and Thresholds

Joubert José Lancha,
Gabriel Braulio Botasso,
Simone Helena Tanoue Vizioli

In 2016 Angelo Bucci participated in *MantovArchitettura*. As he himself points out in the text *The Design of Dialogue*, each School will always have its gaps. Promoting relationships and exchanges among different Schools, even for a short period or by simply participating in a specific event, is always an occasion to reduce these gaps, and thus to get closer to what could be defined as a kind of «ideal School».

The architect Angelo Bucci graduated in 1987 from the Faculty of Architecture and Urbanism at the University of São Paulo (FAUUSP), where he completed his Ph.D. in 2005. In 1996 he started his participation in the studio *MMBB Arquitetos*, founded by Fernando de Mello Franco, Marta Moreira and Milton Braga, where he worked until 2002. In 2003 he inaugurated his own architecture studio, *SPBR Arquitetos*, based in the city of São Paulo. The architect's trajectory brings the legacy of the *Escola Paulista*, not only for his projects, but also for his critical contribution to the context of Brazilian Modern Architecture.

In recent years, his works have been gaining an increasingly critical eye and receiving several national and international awards. Bucci was nominated for the *Mies Crown Hall of the Americas* prize, from the Illinois Institute of Technology (2016), and presented at the XII *Bienal Internacional de Arquitectura de Buenos Aires*; his *Casa de Fim de Semana em São Paulo* (2014) was awarded at the IX *Bienal Iberoamericana de Arquitectura e Urbanismo* as well as with the *International Young Generation* prize (2009).

His trajectory as an architect has always been linked to his career as a professor. He has taught at the School of Architecture and Urbanism of the University of São Paulo (FAUUSP), and he has served as visiting professor in many international Schools — among which MIT (Cambridge, USA, 2016), ETH (Zurich, Switzerland, 2013-14), Yale University (New Haven, Connecticut, USA, 2013), Torcuato Di Tella (Buenos Aires, Argentina, 2010), IUAV (Venice, Italy, 2008), Harvard Graduate School of Design (Cambridge, Massachusetts, USA, 2008).

Angelo Bucci's Design Process

- [...] I believe it is of much help to keep a sketch which matches your motivations to the sight¹.

During his work, Bucci makes use of sketches, technical drawings, digital drawings, electronic and analogical models. Computers are used, but not as a means to replace the sketches — which he believes to be irreplaceable during his design process. As he said: «You can hold a conversation and expose your ideas as you talk — I have always believed that the project is a way of having a conversation»². Models are used and presented as the study of the building constructability and as fundamental elements for the investigation on the integration of the works to the context, which is a primary topic for the architect. Models of several projects are indeed visible in his office.

- [...] I believe there are many doors and many ways to get through them. For me, models have been of great help. A model is a way to put certain ideas to test — it simply does not mislead you. It can have some problems here and there, on its proportion or dimension, but it is possible to adjust these in the project [...]. I enjoy having a sketch that you consider as being the idea that is going to guide you throughout the work — as if it were the guide line: it is always good to have it down on a black board, because during the development process, when you have everyone sketching along, you can't miss the point of the project³.

Bucci defines the design difficulties as «challenges», since many of them are elaborated and put to test during the process, making it necessary to have an incessant verification of the applied strategies. «For me, making a project is more than coming up with a drawing. It is referring to it until the project is done»⁴.

Under the architect's perspective, the architectural space is always born out of a dialogue, according to the understanding of the conditioning variables of the project. Thereafter, the plan, the programs and the settings that define how the idea becomes Architecture are elaborated. This is when the importance of the freehand sketching is highlighted — it enables a structured thought that triggers many others, in a sequence of visions.

The architect's design process does not follow pre-conceived ideas, nor does Bucci bow down indisputably to the newest trends

that have taken over the architectural panorama. The specific context of the project in fact always has a pivotal role.

From the insertion of a new work in the territory, a «conflict» emerges. The Architecture highlights what is around it, providing a new perspective on the context; at the same time, also the surroundings develop a mutual feeling towards it. That does not mean accepting passively the topography and the geographic aspects (which Bucci refers to as «early Architecture»). Those aspects, however, are taken into consideration and developed in order to potentiate the building and, similarly, to have the building potentiate its surroundings. Every place, program or situation provides specific inputs, and lead to the definition of special solutions that respond to the distinctive features of the site.

The qualities of the symbiosis among the topography and the building, the relationship between inside and outside, and the findings the paths promote are guaranteed through the courtship between the built volumes and the free spaces, which are an evidently well-thought element. In Angelo Bucci's works, «empty» spaces are as important as the «filled» ones. Many elements that Zein⁵ considered prominent for the *Escola Paulista* are also part of Bucci's repertoire, such as the preference for single volumes. However, in case of several volumes, he ensures a clear hierarchy among them — an Architecture that comes from the upper portions to the lower ones seeking for the ground which, in Bucci's case, is generated through a suspension that does not unbound the projects from the territory, but rather strengthens it.

Three Houses, Three Approaches

It goes without saying that Bucci's works portray a quite distinctive design approach, always having the topography as a primary element. His houses establish new paths through their slabs, bringing new meanings to the territory.

Sometimes semi-underground, some others as a plain extrusion of the topography, his projects take advantage of the unevenness of the terraces, that embody the symbiosis between the building and the place itself. Their evident and highlighted elements, often in concrete (although the use of this material is not a rule, as Bucci would warn),

result in a clear and strict structure reinforced by the general concept of the project.

Among countless projects, this text has selected three houses that will be further discussed in terms of landscape, paths and thresholds, which represent the most important elements in Bucci's works.

Landscape — House in Ubatuba, 2007-08

The house in Ubatuba is located at the Tenório beach hill, in a 16 x 50 meters lot, characterized by a 50% slope in 28 meters, from the lowest to the highest point, where the house can be accessed. The territory had some preexisting vegetation, which was preserved. Considering such elements and aspects, Bucci decided to use very few support structures.

- There is an avoidance of the ground as a strategy. In other words, there is an avoidance of battling against that topography in order to get the project up. Only three columns touch the ground. These columns support two main beams which, in turn, compose the structure in reinforced concrete upon which all the slabs are anchored. In this way, the settings seem to float in the space among the threes; from each one of them, you have different sights of the landscape panorama⁶.

In order to avoid the risk of undermining the plot and contrasting the environmental legislation protecting the hill and the vegetation, the architect decided to suspend the building by leveling the last slab to the street level, 30 meters above the level of the beach, serving anyone who comes from the street, as a sort of an extended square (that is a feature also displayed in the house in Carapicuíba). When the pedestrians come from the street, they are able to see only the house roof and a swimming pool in-between the two beams — with a solarium and the beach right in the front of them. From the highest point, a hundred steps stairs leads to the original plot, which in turn gives access to the beach. The stairs links the three volumes of the house to the empty spaces, and such spaces are responsible for the startegical vision designed by Bucci for framing the coastal landscape.

The unevenness between the floors is also fundamental for the same reason. As stated by the owner of the house⁷: «[...] the delight of waking up and having the beach right there, right below our feet? [...] I see the waves going back and forth from my bathroom mirror while I shave». The beach can be seen from every room of the house, due to the unevenness of the floors.

Path — Weekend House in downtown São Paulo, 2013-14

Located in São Paulo city center, this house is one of Bucci's most emblematic projects. The owners commissioned such work in order to curb the inevitable traffic jam to go on a weekend getaway. After many debates on how to name it — is it a house? a refuge? —, the structure ended up being referred to as the «Weekend House». According to Bucci, the project was designed to contrast this residential space from the surrounding reality, by increasing its permeability as much as possible.

Through the construction of this house, Bucci altered an architectural argument he had been developing for years, by placing the pool on the highest point of the building, i.e. on the rooftop, 6 meters above the street level, so that it would receive sunlight as well as keep most of the building out of the ground. Since it is not a common approach in architecture, it is quite striking.

The pool was a key element for the project, and was always part of the owners' will since the very first sketch. To build a pool lane in the 10 x 25 meters lot was their main objective: «[...] we dreamt about having a pool, some gardens and a slab for sunbathing»⁸. However, taking the neighbors' reality into consideration (because they were surrounded by 6 meters tall walls), the owners were told that having a pool on the street level wouldn't be so effective due to the lack of sunlight. A displacement of the pool was suggested, not to the left nor to the right, but up, on the building's surface: «[...] so, if you want to have sunlight all day, you have got to be on the surface, and such surface is 6 meters away from the ground»⁹.

For this project, Bucci referred to different path gradients: after the hollow gates, which make the house visible from the street, you reach the inner courtyard on the ground level where there is no longer excessive exposition and you don't feel on the street anymore:

«[...] you are sheltered now. There is a secluded, private touch to it [...]»¹⁰. After climbing an external flight of stairs, you reach the pool, where according to the architect «[...] you expose yourself; although you haven't exactly exposed yourself [...], you don't feel that sheltered anymore, even though you haven't been indoors at all so far. You feel exposed however far you find yourself from the street»¹¹.

Thus this house is only uncovered through its multiple paths which can be chosen at the user's discretion: you don't exactly know where the building ends. The spaces offer different feelings and visuals, which makes it impossible to assimilate every aspect in only one overall look — the building perspires unconventionality.

Threshold — House in Carapicuíba, 2004-08

This house located in Carapicuíba (a city 30 km away from São Paulo) results from the partnership between Angelo Bucci and Alvaro Puntoni. It is also located in a plot with a rough topography, having 6 meters of unevenness between the street and the lowest point of the site. In the back of this plot, there is a grove and a stream. The owners planned on working from home, so the only volume that can be seen from the street is their office (3 x 25 meters large), projecting up from the building. It is suspended by two pillars over the access level, a large slab that works almost as a small square, i.e. an extension of the street below and above the building:

- [...] the owners wanted an office so that they could have clients over without having to go through the house. So that square is shared between the ones who go to the office and the ones who go to the house. The square does not belong either to the office or to the house, though¹².

Denying obvious designs, Bucci creates a square on the street level that extends itself over the largest volume of the house (below the street level); therefore, it presents itself as a viewpoint tower overlooking the woods in the surrounding lots. The openness of the access to the lot, as mentioned by Zein¹³, can be pointed out as one of the main features of Bucci's work.

This house counts on a clear gradient by displaying a «semi-public» quad, that can be enjoyed by the ones who live there as well by the ones who don't, by the suspended office (which, however private, is exposed and is open to an easy access) and by the central piece of the house, sunken and private, displaying a way more restricted access (made possible by a metallic bridge that connects the quad to the block). Bucci made a reference to the work of Vilanova Artigas:

- It is an honor to have a familiarity with a building such as the one Artigas designed for the School of Architecture at FAU-USP in São Paulo — a place where you never know whether you are inside or still outside. A «doorless building», we may say, although this is not a very accurate definition because saying «doorless» implies a building whose doors were removed. In this building, however, you simply don't know whether you are inside or outside. It accepted its condition of not having doors even before being conceptualized¹⁴.

The privacy gradients extend as you descend in the building; first, the inviting quad, that extends its reach to the passers-by on the street (hence offering a rare urbanity in contemporary cities); then the first lower level, where the social areas (such as living room, kitchen and utility room) are found, and the second lower level, even more secluded, containing the bedrooms and the pool. It is interesting to notice how the rough slope was transformed into a projective element rather than an obstacle — it is a welcoming void.

Bucci embodies an attitude which produces a type of Architecture that embraces the emptiness, and takes advantage of it as an asset; the interstices become as important as the closed spaces. That is how this game between lightness and density is established. The spaces are open strategically in order to welcome nature and the exterior, embracing the emptiness: «[...] this house was designed according to the topography aspects and the landscape»¹⁵. «The neighbors built retaining walls and filled the space with soil so that the house is on the street level. Our first measurement was to do exactly what is not commonly done: we suspended the office and built the rooms of the house on the lower portion»¹⁶.

Final Considerations

Through the works hereby presented, it is possible to notice how Angelo Bucci's projects depend upon the landscape: those projects were designed always having the context in mind — hence generating an untransferable complicity between the site and the Architectures: these are inserted in as a consequence of a sensitive reading of the place.

Topographic aspects mold the access to the building: the three houses are characterized by ground floor paths that receive and direct the flows of people — these paths being sometimes more secluded, some others more exposed. Similarly, it is possible to access any portion of the buildings from the ground level. Those projects are not impassable barriers to the territory: they pose as invitations to know it, instead. Even the last slab participates, actively serving its surface as a social space of the house — as a new opportunity for socializing right on top of the main portion of the building.

Such topographic and volumetric aspects confer privacy gradients as well as quality to the spaces. On the Weekend House, as an example, the open ground floor is the most «public» one while being the most secluded and welcoming; on the other hand, on the rooftop, the most «private» open space, you find more exposition and less receptiveness. The ground floors are open in such a way to provide transition spaces between the street and the building, by bridging it to the sidewalk and inviting the users towards the entrance. Thus, the inter-relationship between the public context and the private spaces of the houses is sought after and such boundaries are attenuated.

Bucci's works cannot be assimilated in one single overall look, they need to be discovered little by little. The paths are designed in consonance with the topography, conferring privileged perspectives to the site; the guidance of the flows through the topographic aspects (such as extrusions of the soil blocks) provide the projects with distinct ambiances, designed in relationship with the territory. All these features contribute in producing a poetic quality, that is one of the main features of Bucci's work — which are dwellings, invitations and delight.

1 Interview with Angelo Bucci, conducted by the authors on November 10, 2017 at SPBR arquitetos (São Paulo, Brazil).

2 Ibidem.

3 Ibidem.

4 A. Bucci, «Entrevistas», *Revista AU*, PINI, São Paulo 2012, p. 19.

5 R. Zein, «R. V. Depoimentos», *AU – Arquitetura e Urbanismo*, São Paulo, 17, April/May 1988, pp. 54-55.

6 SPBR ARQUITETOS, «Casa em Ubatuba», retrieved from <https://spbr.arq.br/project/0509/> (accessed on 10 December 2020).

7 A. Bucci, «Lição de engenharia», *Arquitetura & Construção*, São Paulo, 26 (8), August 2010, pp. 58-67, p. 64.

8 A. Bucci, «A praia é aqui», *Arquitetura & Construção*, São Paulo, 29 (12), December 2013, pp. 46-55 (p. 48).

9 R. Baratto, «Conversa com Angelo Bucci sobre a Casa de Fim de Semana», *ArchDaily Brasil*, 8 November 2014.

10 Interview with Angelo Bucci, November 10, 2017.

11 Ibidem.

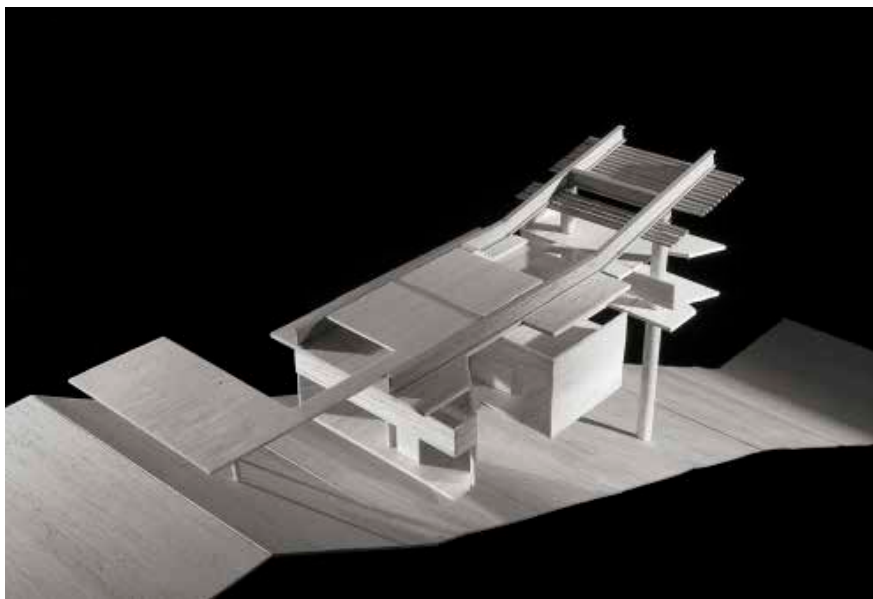
12 Ibidem.

13 R. Zein, «R. V. Depoimentos», *op. cit.*

14 Interview with Angelo Bucci, November 10, 2017.

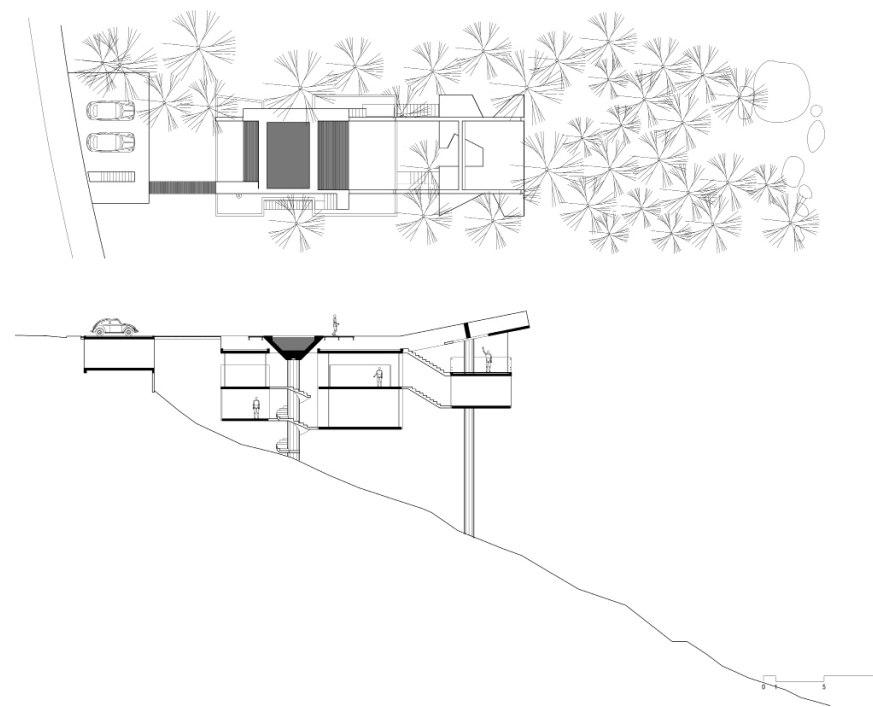
15 A. Bucci, «Casa en Carapicuíba», *Arquine*, Ciudad de Mexico, 49, 2009, pp. 44-49 (44).

16 A. Bucci, «Sobre o vazio que preenche», *Arquitetura e Urbanismo*, São Paulo, 24 (178), January 2009, pp. 16-23 (17).



Angelo Bucci, House in Ubatuba (Brazil 2007-08).

1 2
Maquette
© SPBR Arquitetos.



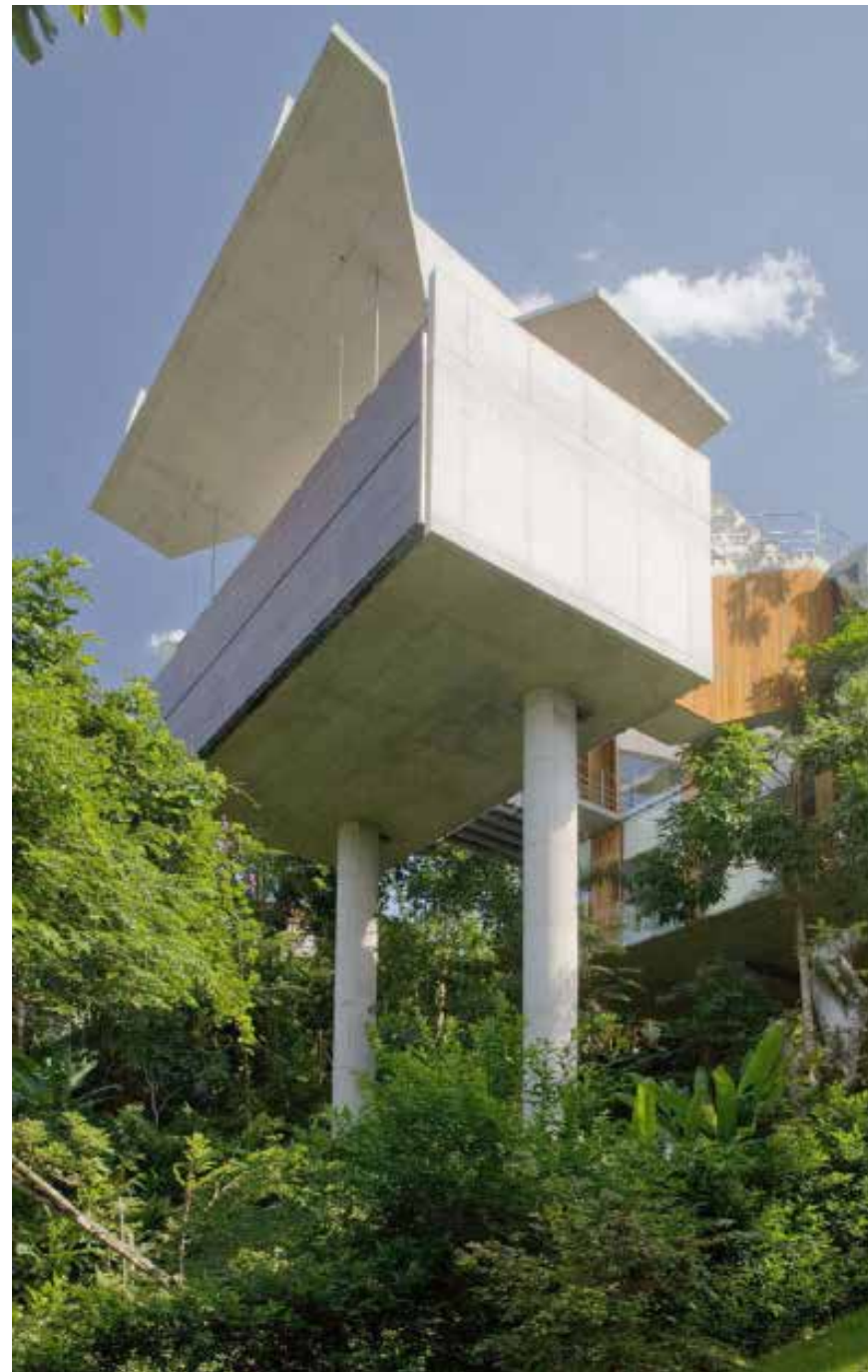
3
Plan and section
© SPBR Arquitetos

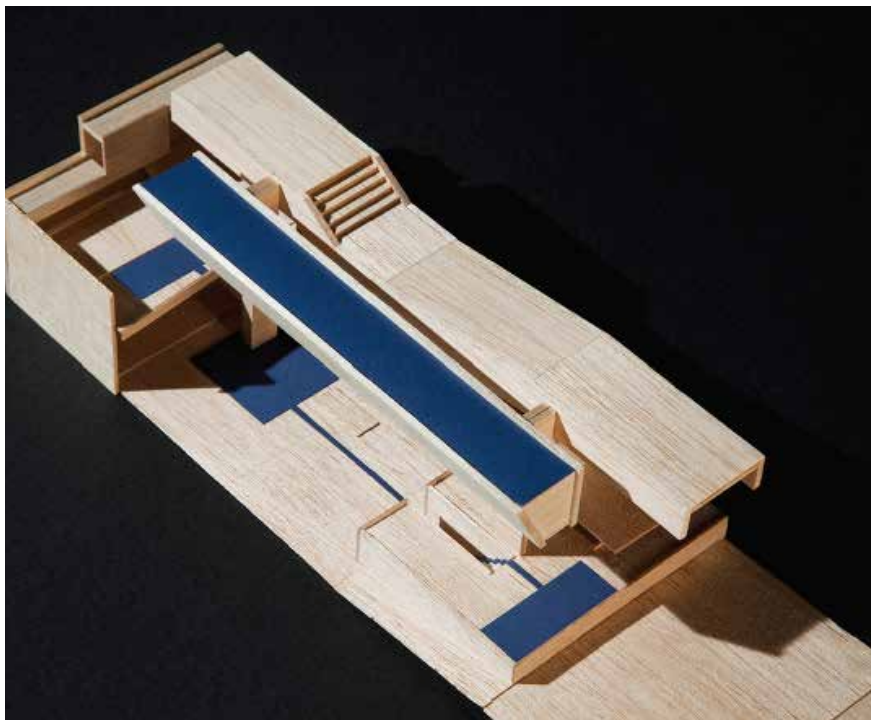


4
Access to the rooftop
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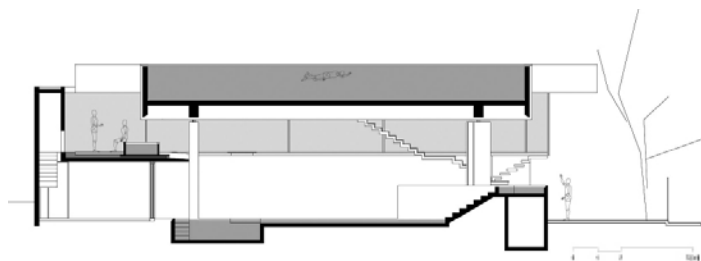
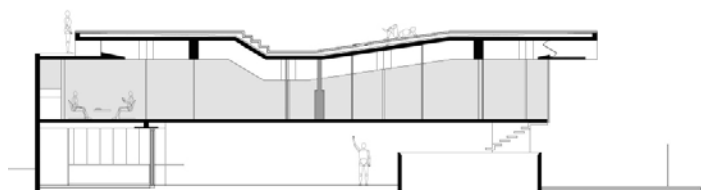
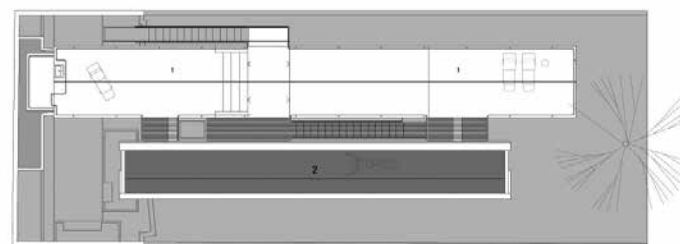
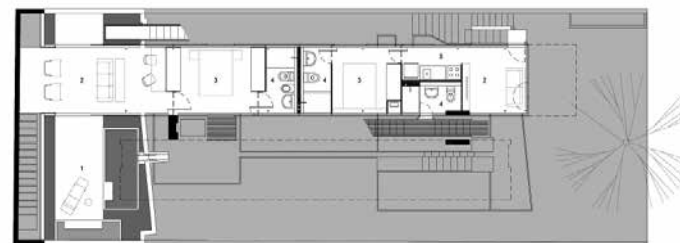
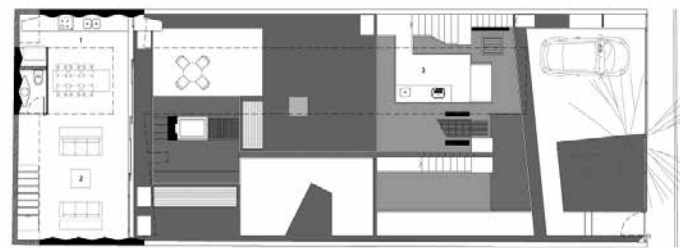
5 6 7
 Exterior and interior views
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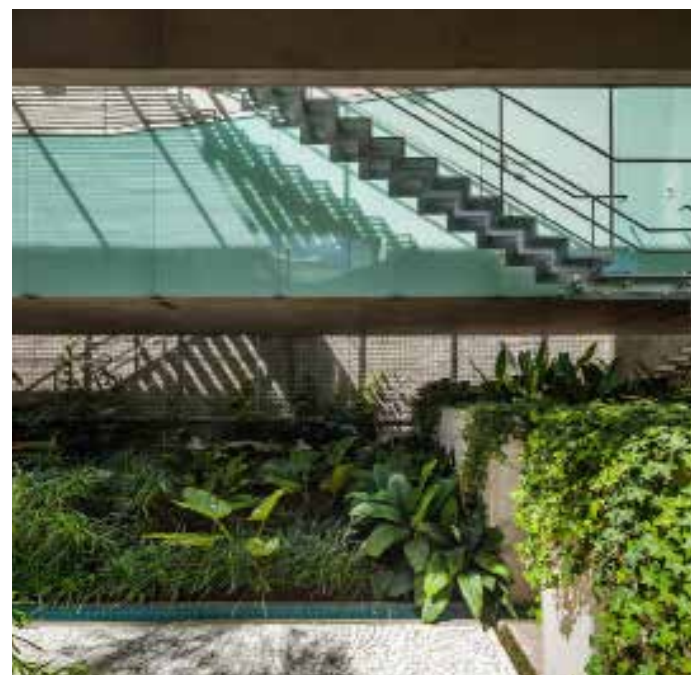


Angelo Bucci, Weekend House
(São Paulo, Brazil 2013-14).

8 9
Maquette
© SPBR Arquitetos.



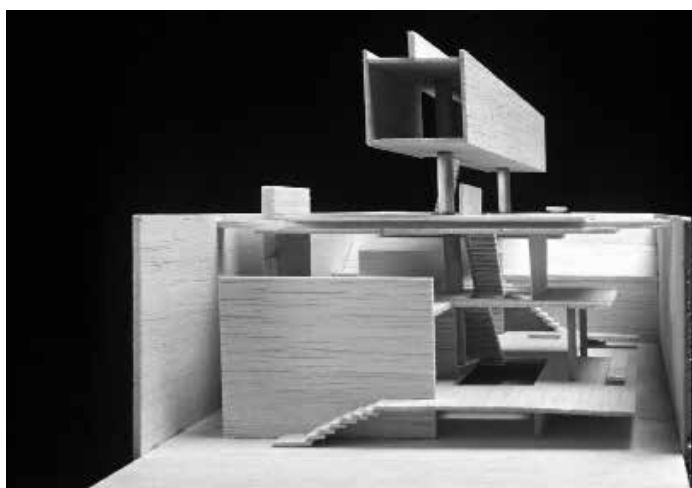
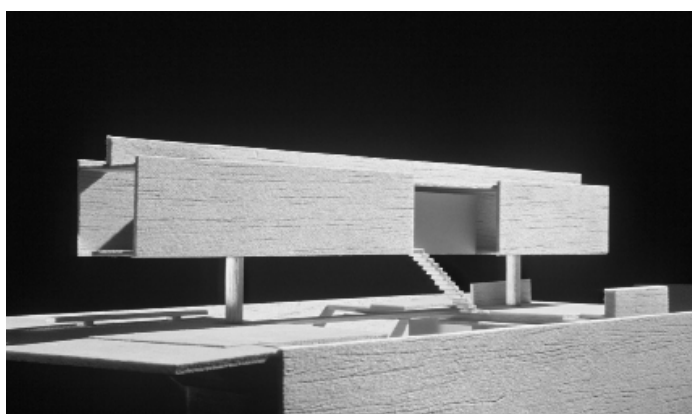
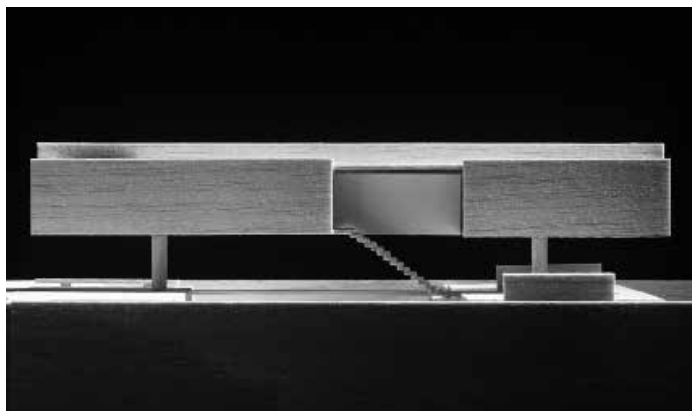
10
Ground floor, first floor,
second floor plans, and
longitudinal sections
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11 12 13 14
Exterior and interior views
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15 16 17 18
 Exterior and interior views
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Angelo Bucci, House
in Carapicuíba
(Brazil 2004-08).

19 20 21
Maquette
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22 23
Interior views
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24 25 26 27
Exterior and interior views
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III.

Resurfacing

Ángela García de Paredes and Ignacio Pedrosa. Architectures to Display Time in Space

Elena Montanari

Since the establishment of the studio¹, in 1990, the work of Ignacio Pedrosa and Ángela García de Paredes has been acknowledged for its outstanding quality, drawing on a cultivated approach and a profound constructive knowledge, that coalesce into a distinctive attitude to the practice of architectural design as a complex act creatively merging technical and intellectual tasks. The architects have been widely praised for the «incessant and discreet work» and their «reliability, professionalism and coherence»², both in their professional and academic commitment³. In particular José Ignacio Linazasoro has highlighted⁴ the «consistency» and «authenticity» of their approach, which avoids preconceptions, rejects the pretentiousness and the ephemeral self-referentiality of «trendy» architectures produced in series, and rather follows an «intelligent eclecticism», eluding the creation of new concepts, languages and «inventions» and pursuing the most efficient and proportioned answers to contextual questions. Essentially, their will to adapt the building to the contexts' complexity overcomes the search for self-representation.

This feature does not prevent Paredes and Pedrosa's architectures to gain authorship and recognizability, which have been nurtured in particular by the use of «sensitive membranes», a «telluric sense» and a «tectonic strength» — as highlighted by Richard Ingersoll, whose words have been chosen to introduce the visitors into the studio's website⁵ —, together with an «urban vision» and the particular attention to the cultural and social programme of public spaces, that shows up for example in the placing of new buildings along the site's borders in order to free central spaces and turn them into collective spatial occasions.

Notwithstanding, the design process grounding their work is based on an outstanding ability to «listen», interpret and elaborate the presences, the traces and the spatial-temporal relationships that characterize the past and the current history of the project site. This working condition produces everchanging outcomes, as it combines the architects' «high referential and constructive knowledge»⁶ with the specificities, limits and occasions characterizing each single context.

In Paredes and Pedrosa's approach, the situation of the space they interact with and its evolution throughout time are fundamental working tools, and their architectures are conceived as opportunities

to make the interplays among the stratified, tangible and symbolical traces of history visible.

Drawing on their sensitive contextual work, the capability of Paredes and Pedrosa's architecture to activate relationships, reenactments and cross references between the different layers of time embedded in a place does not ensue from the application of a precise «formula». Rather, it develops specifically, through the use of the inputs emerging from the critical reading of the single sites and the experimentation with different strategies, purposely elaborated to turn them into design tools. Consequently, each work results in the production of different forms.

Sometimes this ability sometimes ensues from the interpretation and assimilation of a place's specificity in the use of materials — as in their very first built work, the Town Hall in Valdemaqueda (1993-98), where the materials (i.e. concrete, wood and slate) were chosen to integrate the building into the setting by enhancing the chromatic continuity and, thereafter, to regard its stability in time. In some other contexts, this attitude draws on the elaboration of urban information, and at times it shows up in the quotation of cultural references — for example, in the Archaeological Museum in Almería (1998-2004), where the contrast between the white walls and the wooden ceiling recalls and reenacts the tradition of the local Hispano-Muslim architecture.

Evidently, this ability in using architecture to establish dialogues and connections among the different «times» of the project site even grows in those places where the architects are faced with the opportunity to operate on complex historical traces or remains. In these conditions, their works become time machines capable of connecting various dimensions, of making these connections visible — and thus of displaying time in space.

This distinctive capability of Paredes and Pedrosa becomes particularly evident in the transformative interventions on heritage buildings, which are interpreted not only as opportunities to activate a new chapter of the buildings' history but also as an occasion to put this history on display. The updates or the insertion of new elements related to the sites' refunctionalization are indeed exploited not merely to respond to a new programme; rather, they are also used to give emphasis to the physical and symbolical traces, to set up a dialogue between past

and present, and to orient the narration embedded in the architectural experience.

This task can be observed for example in the *Espacio Torner* in Cuenca (2003-05), an exhibition space dedicated to the work of abstract artist Gustavo Torner, located inside the late-Gothic church of the old Dominican convent, lying in an impressive site overlooking the cliffs of the river Huécar. The intervention was commissioned by the *Museo Nacional Centro de Arte Reina Sofía* in Madrid, the depository of some six hundred pieces donated by the author. The idea was to install forty important works in Torner's birth town⁷, and to arrange the celebratory collection in the severe place of contemplation of the desacralized church from the beginning of the 16th century, to be managed by the Torner Foundation. In this Gothic interior, Paredes and Pedrosa's strategy was based on the arrangement of exhibition devices that enable the new function of the place and, at the same time, contribute to the valorization of the architecture and the history of the church. The building was first restored, but any alteration was made to the volume — from the outside only the new revolving door open towards the cliff shows the intervention⁸. Also the inner space of the church was preserved in the original state, a part from the addition of a spatial structure aimed to display the art collection. These three-dimensional, white-painted wooden panels are freestanding and never touch the building's margins. The insertion of this micro-scale architecture — i.e. an independent structure inside a major one, modifying the space people directly interact with but avoiding any transformation to the macro-scale — has overlapped onto the architecture of the church an articulated but unitary element, which multiplies the building's experiential levels without distorting the scale of the religious room. The modules are quite high (4 meters), enough to shape a lower landscape within which visitors move. Nevertheless, if compared to the whole height of the church, they are very small, and thus do not alter the perception of the overall interior volume. The original vaults can be seen from any point, and the interplay between the two scales (the gothic high nave and the freestanding exhibition structure) is designed to enhance the view of the historical building. The achievement of this task is also enhanced through the light design. The modules are indeed used not only to display the artwork but also to house the lights that

illuminate the vaults — while the other necessary installation of new technical elements was realized through the remaking of the pavement, under which the updated fixtures are placed. On top of the modules, specific illumination sources are mounted in order to project warm yellowish lights towards the ceiling. This illumination strategy is meant to highlight the vaults and to allow visitors to see them properly, but also to emphasize the warm colour of the local stone that was used to build the church. The golden glare that this system attributes to the gothic construction also emphasizes the distinction between the historic structures and the new freestanding elements, which also draw on a different architectural language — an abstract one, that reflects the style of the displayed works⁹ and allows the church to remain the protagonist of the scene — and a varied atmosphere — resulting from a colder colour of its surfaces. Furthermore, one of the panels — the one facing the baroque chapel, that is the richest and most decorated space of the church — houses a «window» looking onto the precious sculptures — and thus enhances their display, by encouraging and orienting the view and the attention of the visitors.

The recurrent interest Paredes and Pedrosa developed to the enhancement of historical narratives also shows up in those interventions that do not explicitly relate to exhibitionary activities. This aspect can be detected, for example, in a residential work — the Two Houses in Oropesa (Toledo, 2011-15), where the architects rearranged the dialogue between different scales, realms and layers of time. The project site has an outstanding view onto the castle, i.e. the building at the core of the city, built in 1402 as the residence of a noble family from Toledo¹⁰. This same family promoted the construction of an unfinished aerial connection between the castle and the nearby *Iglesia Nuestra Señora de la Asunción*. The structure is supported by arches and walls that cut across the urban texture, and specifically intercept the two plots where Paredes and Pedrosa intervened. The site gathered three very small houses incrusting in the ancient walls of the city; the buildings were in ruin and their original structures had been altered by many additions and partitions. The wide brick arches crossed the plots along one of the façades, connected to two shared courtyards. Paredes and Pedrosa's project draws on the concept of adaptive reuse, based on the conservation of the exterior walls and the transformation of the

interior spaces, in order to reorganize them into two houses (for the two siblings that had commissioned the work)¹¹. The two asymmetrical units share one long, narrow patio, open in one side to the vision of the 16th century church tower, that forms a valuable backdrop. The two powerful brick arches, which are protected as historical monuments, link the structures together, and frame the view onto the church¹². The patio becomes the stage where a whirlwind of connections among the different layers of time gathered around this space are performed — i.e. the arched structure and the religious building (conveying the urban and collective dimension of the city), the old water well and the original openings (recalling the history of the site), the new openings (highlighting the present transformations), together with the application of new materials, which play a fundamental role in activating spatial-temporal cross references. This use of materials was conceived to balance conservation and innovation, and thus enriching the dialogue among different layers. Indeed, inside the houses the ancient brick and stonewalls (built with the traditional local rigging) were conserved but painted in white, to preserve the natural texture of the materials and to better integrate them with the surrounding textures. This dialogue

is even emphasized by the insertion of new elements — e.g. the staircases, realized with steel sheets — and the reparation of those that were damaged and had to be rebuilt — i.e. the roofs (that were fully disassembled, restored and re-built one meter higher, maintaining the wooden structure but creating a further level), the pavement and the lower part of the damaged ancient walls in the patio (that were covered with ceramic tiles reenacting the texture of the natural bricks).

The work of Paredes and Pedrosa draws on a diachronic vision of time, i.e. one which acknowledges the ordered and interconnected sequence of events and occurrences that operated on the space over the years — the observation, understanding and elaboration of which represent the pivotal components of the design process. Nevertheless, their interventions are conceived to offer an articulated vision of time, which, through their architecture, gets contorted, compressed, expanded and intertwined. In Paredes and Pedrosa's vision, the new state of the building is based on the compresence of the material, formal and cultural manifestations of time and space, where architecture allows us to read the continuity but also the gaps, the fractures and the scars

that have become part of the life of the structure. This vision results in highly relevant achievements especially in those sites that contain archaeological strata, which is a topic Paredes and Pedrosa had many (and various) opportunities to deal with. In these contexts, their interventions do not merely contribute to shelter, protect and reorganize the spaces — they also aim to consistently activate spatial-temporal relationships that signify and display time in space.

This capability is clearly visible in the Roman Villa *La Olmeda* (Palencia, 2000-09), where the architects were commissioned to design the protection and the visit of a 4th century A.D. roman villa, located in a natural context, where magnificent mosaics had remained hidden for centuries under a rural landscape¹³. In this intervention, Paredes and Pedrosa not only aimed at implementing a specific functional program but also meant to confront archaeology with modernity. This dialogue is enabled by various architectural solutions, that solve technical problems and at the same time trigger spatial-temporal relationships — e.g. the metal perforated façade providing homogenous lighting to the interior, that is covered by a light laminar roof organized in four vaults with a modular rhomboidal structure exposed in the inside as a coffered ceiling, abstractly reenacting the original «interiority» of place; the raised wooden floor joining all the archaeological zones, alternatively getting narrow and expanding with a disposition for an open display, to allow for the overall perception of the layout and entwining further information inside of it; the relationship between the geometry of the protective box and the «virtual» one of the roman villa; the space of the functional «rooms with the room», that were built with a translucent perimeter of metal mesh, as a frame for the mosaics that do not interfere with the wide metallic roof that covers the area. These elements are conceived to make visitors aware of the unitary identity that these fragments had in the past and to enable multiple and thorough views of the most interesting fragments (spaces, mosaics and relics); at the same time, while providing a clearer view of the history of the site, they also show the different layers of time. Paredes and Pedrosa's intervention does not shy away from emphasizing the discontinuity between two spatial systems that remain temporally, culturally and technically distant; the geometrical, physical and symbolic interplays that link them are clear but multi-directional and not obvious, and remain per-

meable to various experiences and interpretations. The modern architectural language of the contemporary «case» sets up a dialectic relationship with the Roman remains, without transcribing the historical signs and rather putting them on display in their found state — as they have a high evocative power of their own, and are capable to both recall the ancient landscape and witness the passage of time.

In this case, Paredes and Pedrosa's strategy draws on the concept of superimposition of the dialoguing parts. This same theme can be found in other works, but its outcomes vary depending on the specific situations, limits and occasions provided by the specific contexts. A particularly fruitful conjugation of the experimentation with intertwining layers can be observed in those project sites where the intervention is not centered on an archaeological project and rather historic remains are included within a wider, complex program merging different functions, objectives and layers, both physical and symbolic.

This is a working condition Paredes and Pedrosa has experimented more than once. For example, in the Public Library in Córdoba (2007-18), where the new building was conceived to interact with various tangible and intangible traces bearing witness of the past of the area. The use of architecture to trigger the integration among the layers of time embedded in the project site was developed through the application of different strategies. First of all, the presencing of the past can be detected from the «information» provided by the form and position of the building, being the general plan adapted to the historical layout of the 17th century gardens (hence reenacting and suggesting its structure). Foremost, the spatial program of the building is organized around the presence of a 10th century stone wall from the Caliphate Period. The archaeological site is integrated in the geometry of the new building, and in the lower level it interacts with the children's area, hence becoming part of the interior scape of the library. Furthermore, in this area triangular hanging lamps indicate the direction of the old streets, hence not only illuminating the remains and emphasizing the depth of the space, but also conveying information about one of the historical presences coexisting and showing up in the building.

A further opportunity to develop these themes was provided by the design of the Public Library in Ceuta (2007-14), an autonomous Spanish port cities on the Northern coast of Africa. The project site was

equivalently conditioned by a steep topography and a 14th century archaeological site testifying to the Berber Marinid dynasty (which reigned over Morocco and Islamic Spain), and bringing to light the orthogonal geometry of the ancient settlement (characterized by a orientation that is different from that of the actual urban grid)¹⁴. The interplay between such elements, together with the limited size of the area and the compactness of the city's texture, oriented Paredes and Pedrosa's proposal, based on the definition of a triangular geometry for the structure of the library, which stands right over the archaeological site, that is consider «as a new knowledge that must be conveyed»¹⁵. This choice aimed at valorizing and displaying the historical layers coexisting on the site as well as the urban value of the Arab city, that is somehow represented and exhibited in the geometry of the new building. This was conceived as a compact volume, a sort of treasure chest that preserves the archaeological area at the core of the structure — but also «Like a book, [as it] can be read by transmitting its information through its daily presence in the public space of the library»¹⁶. By wrapping them up in an aluminium-perforated skin (that reduces glare and solar gain, maximises the use of natural daylight and reduces long-term energy costs), the building isolates the remains from the outside world, but at the same time enables lively interactions with them in the interior spaces. The vertical organization of the volume revolves around seven triangular concrete pillars, whose base appears to grow out of the remains, establishing a link between the roots of the site and the development of its present form and function. Through their shape and position, these structural elements also contribute to highlight the layout of the archaeological layer, and to orient visual and physical accesses to the area. Especially in the first floors, openness and visual continuity are provided through the design of the layout, which guarantees horizontal and vertical connections among the different areas. The types of dialogue established between the ancient spaces and the building's present life are several. Above all, here archaeological finds are not only exhibited: they become a pivotal element in the users' experience but also in the design process carried out by Paredes and Pedrosa, who were able to activate them as a lively presence, bridging the different layers of time and space in a highly evocative «scenographic palimpsest»¹⁷.

Along the years, these architects have developed a variety of creative and effective ways to integrate the past time of a building into its present time, and to make this intertwining visible through the experience of space — for example, when they take the visitors along the exhibition path of the *Espacio Torner*, crossing the contemporary landscape of the freestanding panels but constantly immersing them in the imposing spatiality of the church; when they compose a Piranesian glimpse from the Oropesa Houses' courtyard, orchestrating the gathering and intertwining of the castle, the arches, the historical walls and the new materials in the same framework; when they structure the dialogic synergy between the container and the contained spaces in the *La Olmeda* site; and when they allow the archaeological finds to become the active players in the interior scapes of the libraries in Córdoba and Ceuta.

Through these experimentations, Paredes and Pedrosa have tested and disseminated several ways to enhance the experience of architectural space, to make the site's histories readable for today's users, and to plunge them into an immersive fruition, in which volumes, surfaces and materials operate as a sort of time machine. Overall, they have contributed to renovate the culture of architectural design in historical contexts. In this regard, by showing how to creatively intertwine cultural and technological instances and by demonstrating how powerfully eloquent can minor relics be in triggering major spatial-temporal experiences, they unfolded new themes and possibilities, and invited to rethink and expand the relationship between conservation and transformation. Within this field, they have developed a special capability to respond to functional and conservative needs and, at the same, to avoid the «freezing» of the time and the space of historical sites. This is a «risk» that continues to remain relevant (and recurrent) in the interventions in such contexts, and that Paredes and Pedrosa avoid by integrating the relics from the past into the present life of the building and its users, through the development of innovative strategies aimed to activate innovative ways to ingrate exhibitionary functions and dimensions into the project, and thus to operate beyond traditional musealization processes.

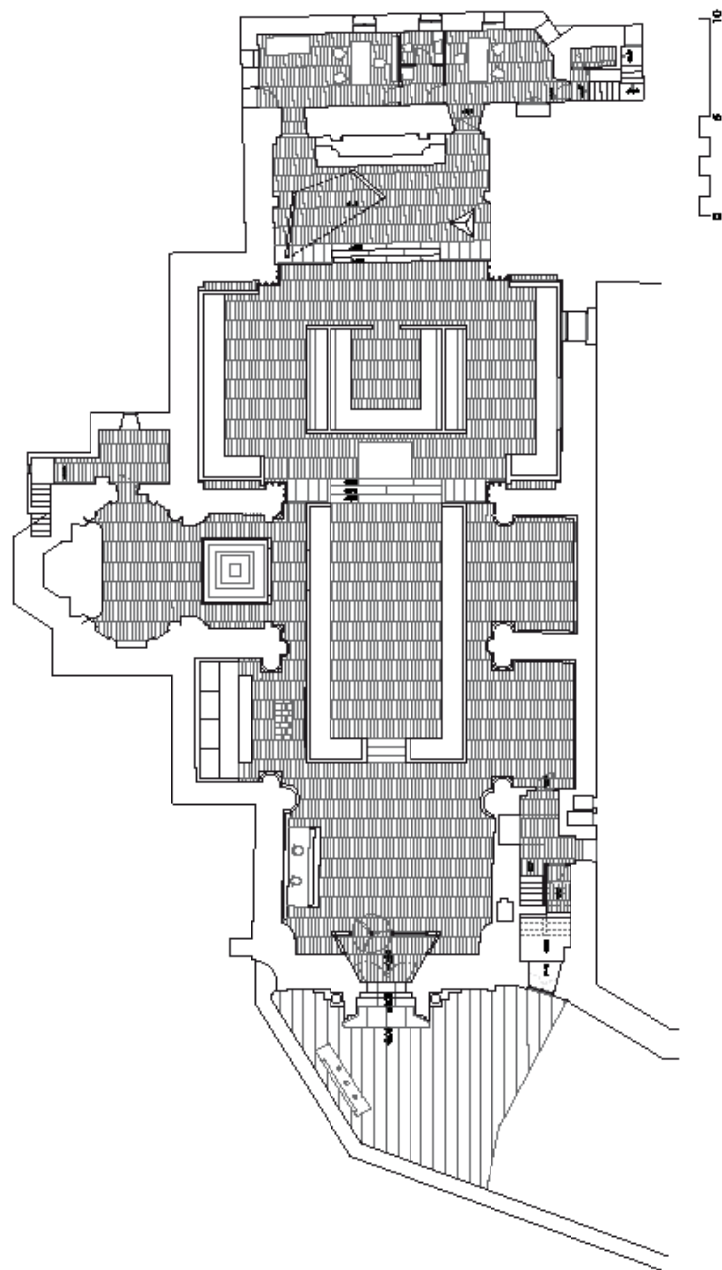
When engaged with the effort of enabling contemporary users to experience time through space, the work of an architect can some- ti-

mes be misinterpreted and confused with that of an archaeologist. The roles of these two figures may have some aspects in common, but their actions are driven by different aims and mindsets. This is a concept Paredes and Pedrosa often recall and expand in their conferences and lectures. «The attitude of architects towards archaeology is different from the one of archaeologists. These latter study the remains of the past eager to discover — through an almost scientific method — how the preceding societies were through the fragments that have come to us; their aim is particularly to preserve this past through the conservation of these fragments. Architects lack that nostalgia. [...] Regardless of the historical value of the fragments of the past, these are being incorporated into contemporary projects, becoming part of them, coalescing with other layers, and providing an added value to the new space. [...] Architectures from different times sit side by side: this seems to suggest a way of working with archaeological fragments, based on the interplay among the different layers, and where the new architecture assumes its temporality without imposing a definitive character»¹⁸.

The idea of incorporating the different layers of time in order to make them all be visible, vibrant and eloquent in the present space is at the core of the successful lesson provided by Paredes and Pedrosa in the field of architectural design in historical contexts. Their work proves not only that there are different strategies to display time in space, but also that architectures can have an exhibitionary task also when they are not meant to operate as exhibition spaces. As highlighted by its etymological origin, the term «exhibit» (combining two Latin words, the suffix *ex-*, i.e. out, and the verb *habeo*, i.e. to hold) refers to the act of «proffering», bringing to the attention, communicating and publicly displaying a relevant content. Paredes and Pedrosa's practice shows an innovative application of the exhibitionary task to architecture — one that is particularly valuable in the present «age of memory», characterized by the obsessive focus on the conservation and display of the traces of remote or near pasts, and within which the research of innovative strategies and tools for the design of effective interventions, capable to address the advancement of technical possibilities and the emergence of new cultural instances, plays a key role in establishing the future of contemporary scapes.

- 1 After graduating from the *Escuela de Arquitectura de Madrid* in 1982, Ignacio Pedrosa and Ángela García de Paredes started to work in the studio of José María García de Paredes Barreda (1924-90), Ángela's father, who was the author of some among the most renowned concert halls in Spain and has played a fundamental role in the education of the two architects.
- 2 E. Tuñón Álvarez, «Economía dell'essenziale», *Casabella*, 866, October 2016, p. 27.
- 3 Paredes and Pedrosa carry out research and teaching activities at the Architectural Design Department at the *Escuela de Arquitectura de Madrid*, and they critics and lecturers through several architectural academic and professional contexts in Europe and the Americas.
- 4 J. I. Linazasoro, «Luce del Sud. A proposito dell'opera di Paredes e Pedrosa», *Casabella*, 726, 2004, p. 38.
- 5 «The oeuvre of Paredes Pedrosa is characterized by its telluric sense and its tectonic strength, but above all by its inescapable public role», Richard Ingersoll (2016).
- 6 J. I. Linazasoro, *op. cit.*, p. 38.
- 7 Torner was born in Cuenca in 1925, and here had organized his first solo exhibition in 1955.
- 8 G. Torner, «Espacio Torner (Cuenca)», *R&R Restauración y Rehabilitación*, 108, 2008, pp. 38-47.

- 9 C. Slessor, «Sense of abstraction: this medieval Spanish church forms a powerful setting for modern abstract art», *The Architectural Review*, 1308, February 2006, pp. 70-73.
- 10 «Dos viviendas en la muralla, 2013-2016, Oropesa (Toledo)», *AV Monografías, Paredes Pedrosa 1990-2016*, 188, 2016, pp. 118-123.
- 11 C. Espegel, J. M. Lapuerta, *Dos viviendas in Oropesa*, in *Vivienda Colectiva en España 1992-2015*, General de Ediciones de Arquitectura, Valencia 2016, pp. 328-331.
- 12 A. Ayers, «Overarching ambition: Two houses, Oropesa, Spain by Paredes Pedrosa Arquitectos», *The Architectural Review*, 1449, March 2018, pp. 110-119.
- 13 «Villa Romana La Olmeda, 2000-2009, Pedrosa de la Vega (Palencia)», *AV Monografías, Paredes Pedrosa 1990-2016*, 188, 2016, pp. 50-57.
- 14 «Biblioteca Publica de Ceuta, 2007-2014, Ceuta», *AV Monografías, Paredes Pedrosa 1990-2016*, 188, 2016, pp. 86-95.
- 15 I. Pedrosa, A. García de Paredes, «The Dream of Space Produces Forms», *VLC arquitectura*, 6 (1), April 2019, p. 24.
- 16 Ibidem.
- 17 A. Zappa, «All'incrocio delle culture: la biblioteca di Ceuta, Paredes Pedrosa», *Casabella*, 826, June 2013, p. 82.
- 18 Excerpt from the conference that Ángela García de Paredes held within the *MantovArchitettura* program, 10 May 2017.

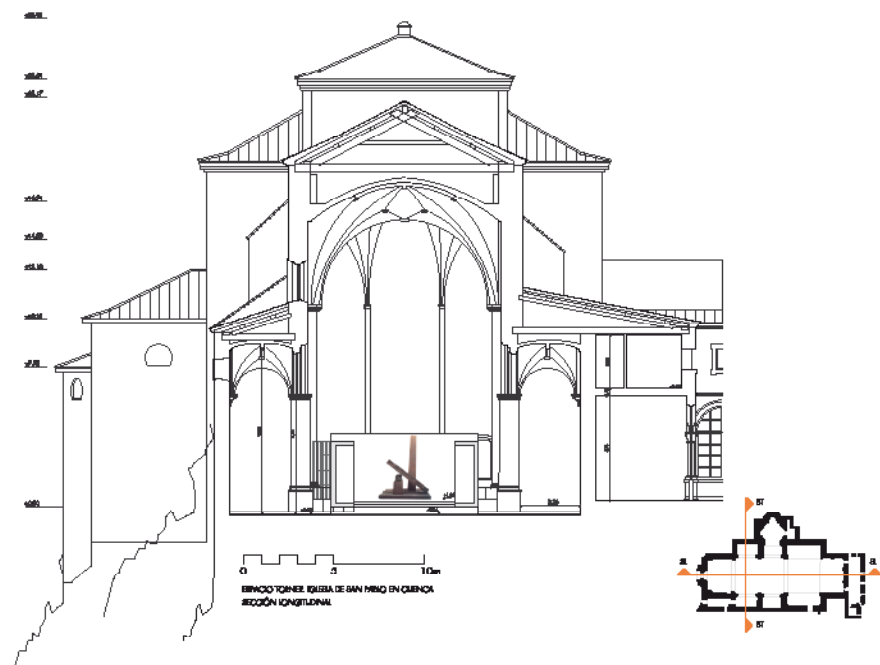


Paredes Pedrosa Arquitectos,
Espacio Torner (Cuenca, Spain
2003-05).

1
Plan © Paredes Pedrosa
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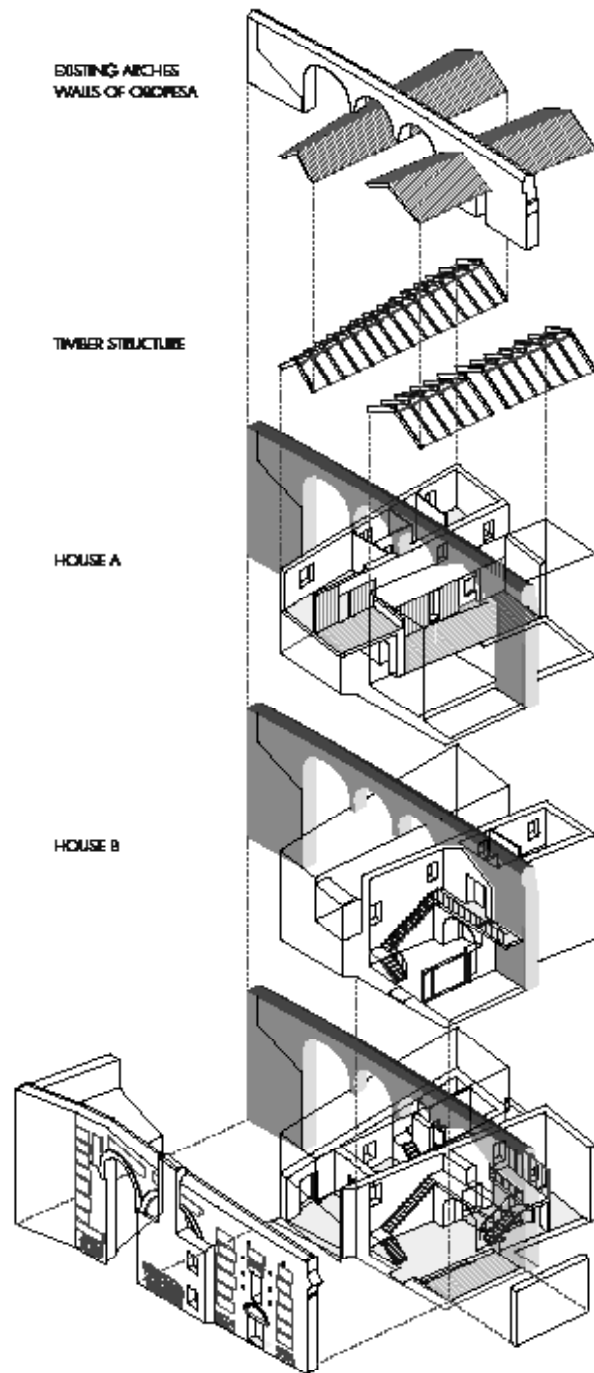
2
Interior view, at the visitors'
eye level © Paredes Pedrosa
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3 4
Elevations © Paredes Pedrosa
Arquitectos.



5
Interior view, from above
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Paredes Pedrosa Arquitectos,
Two Houses in Oropesa
(Toledo, Spain 2011-15).

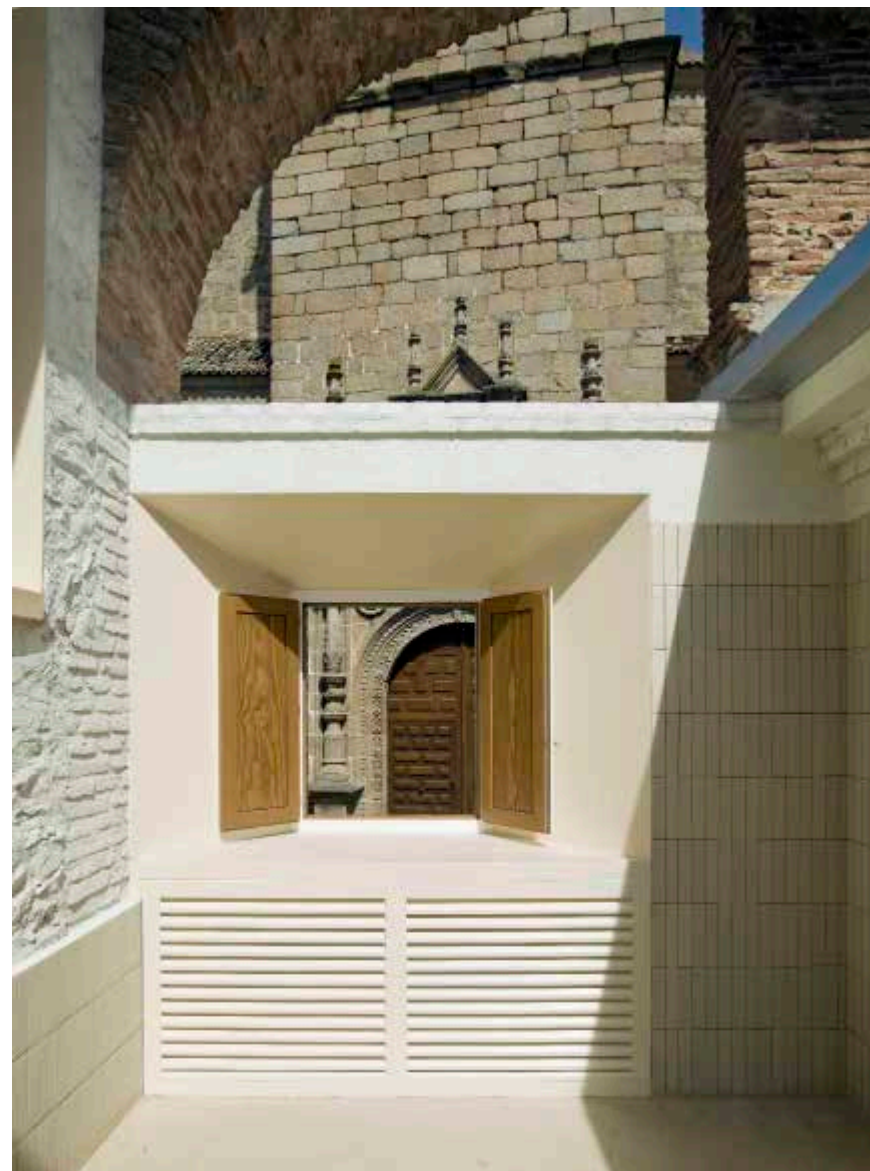
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Unfolded axonometric view
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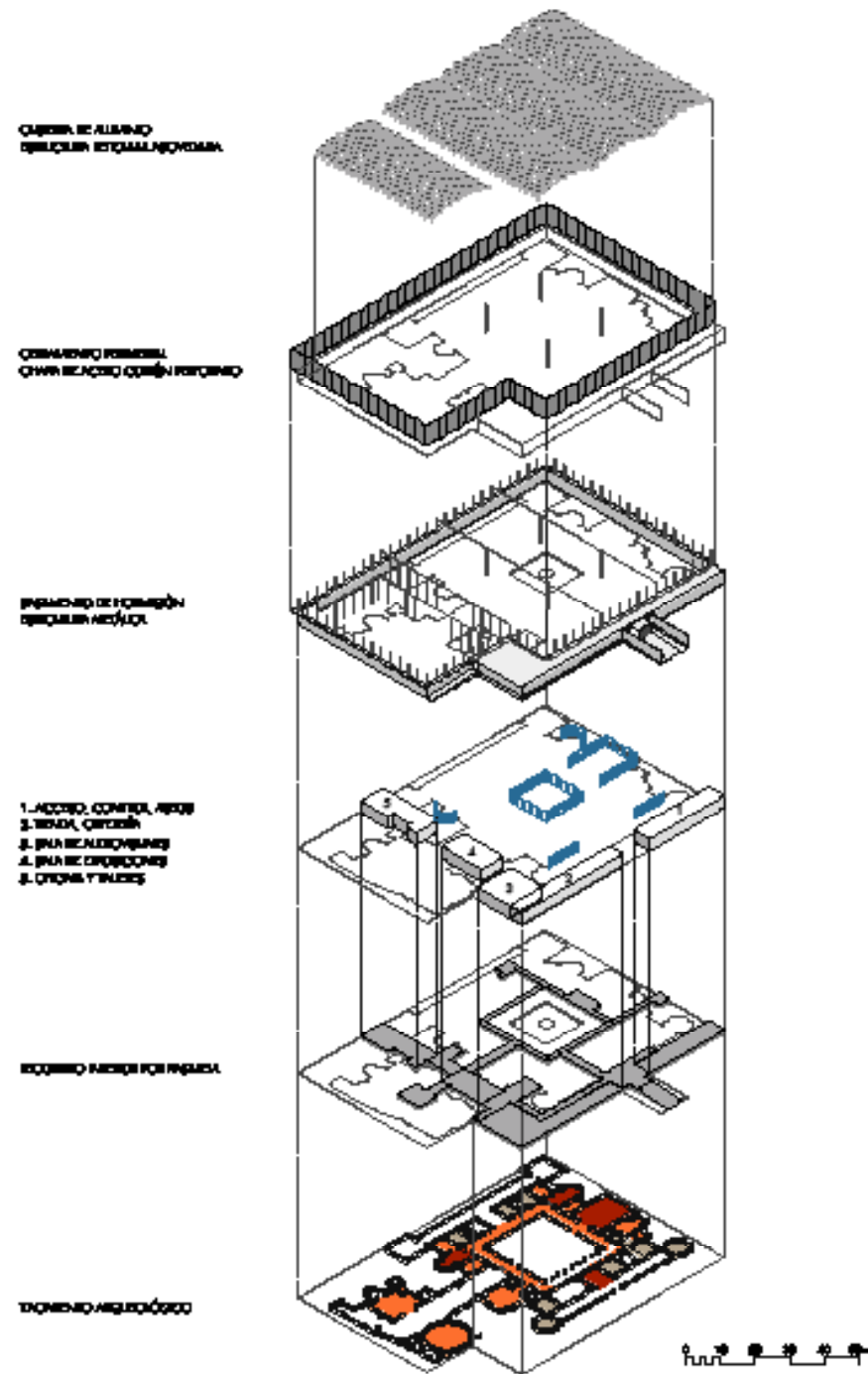


7
Overall view of the site
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89
Views from the interior
courtyards © Paredes Pedrosa
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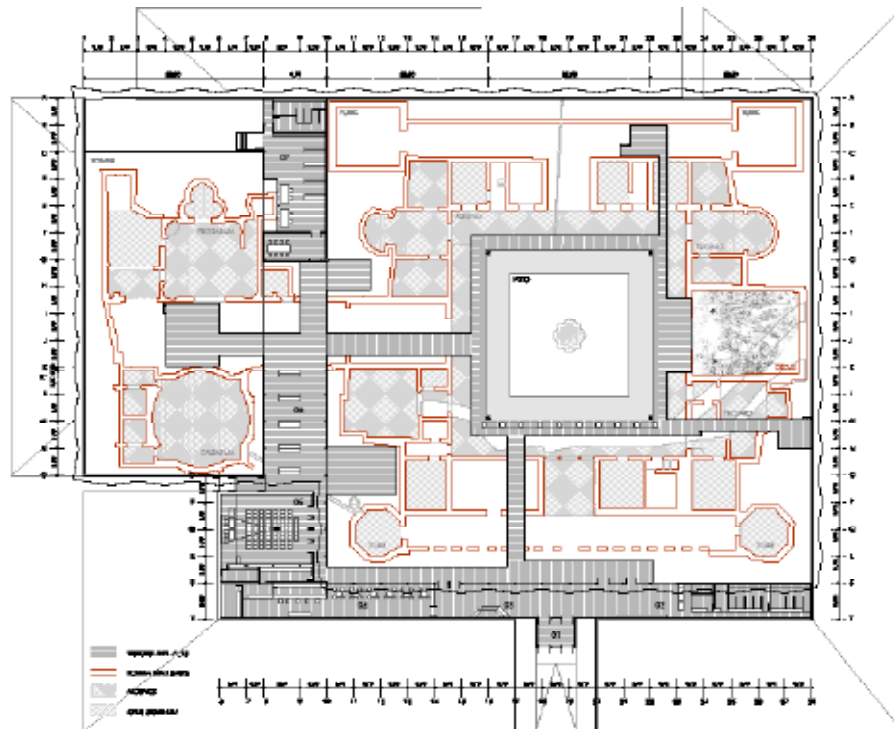
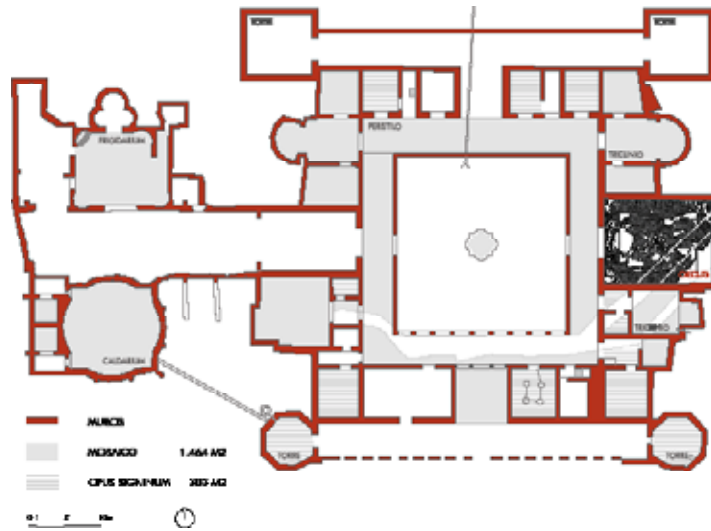


Paredes Pedrosa Arquitectos,
Roman Villa La Olmeda
(Palencia, Spain 2000-09).

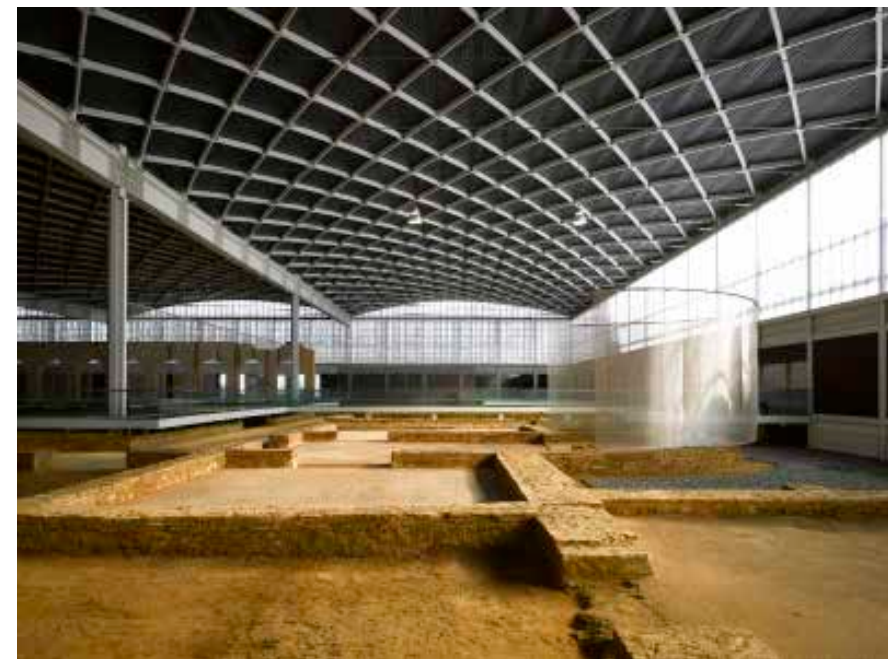
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Unfolded axonometric view
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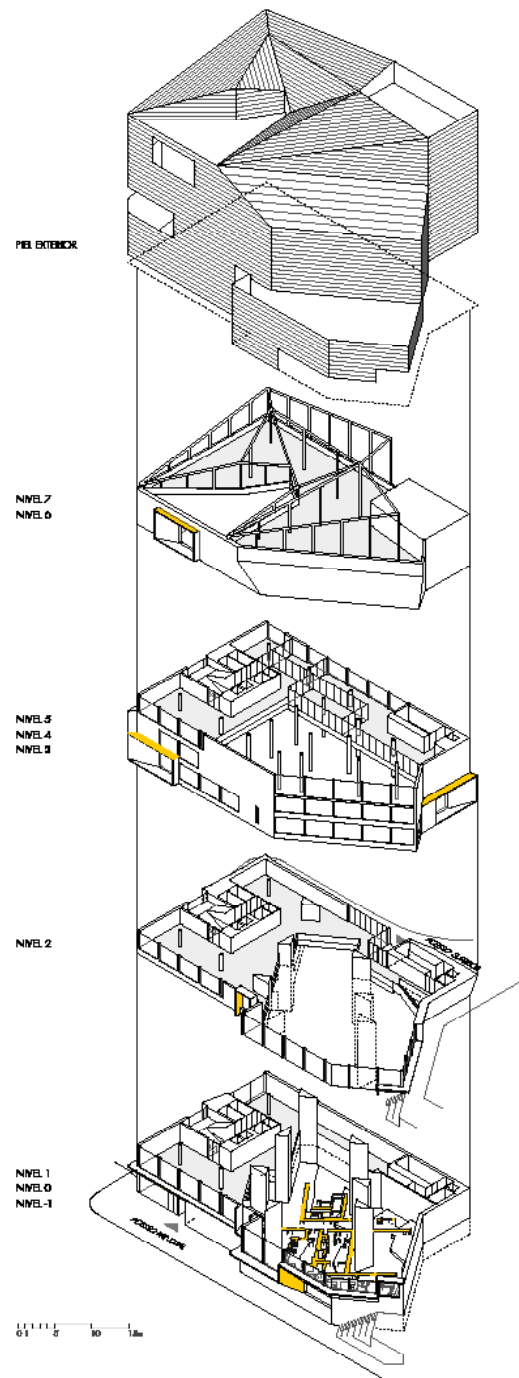
11
The main interior space
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12 13
Plans © Paredes Pedrosa
Arquitectos.



14 15
The main interior space
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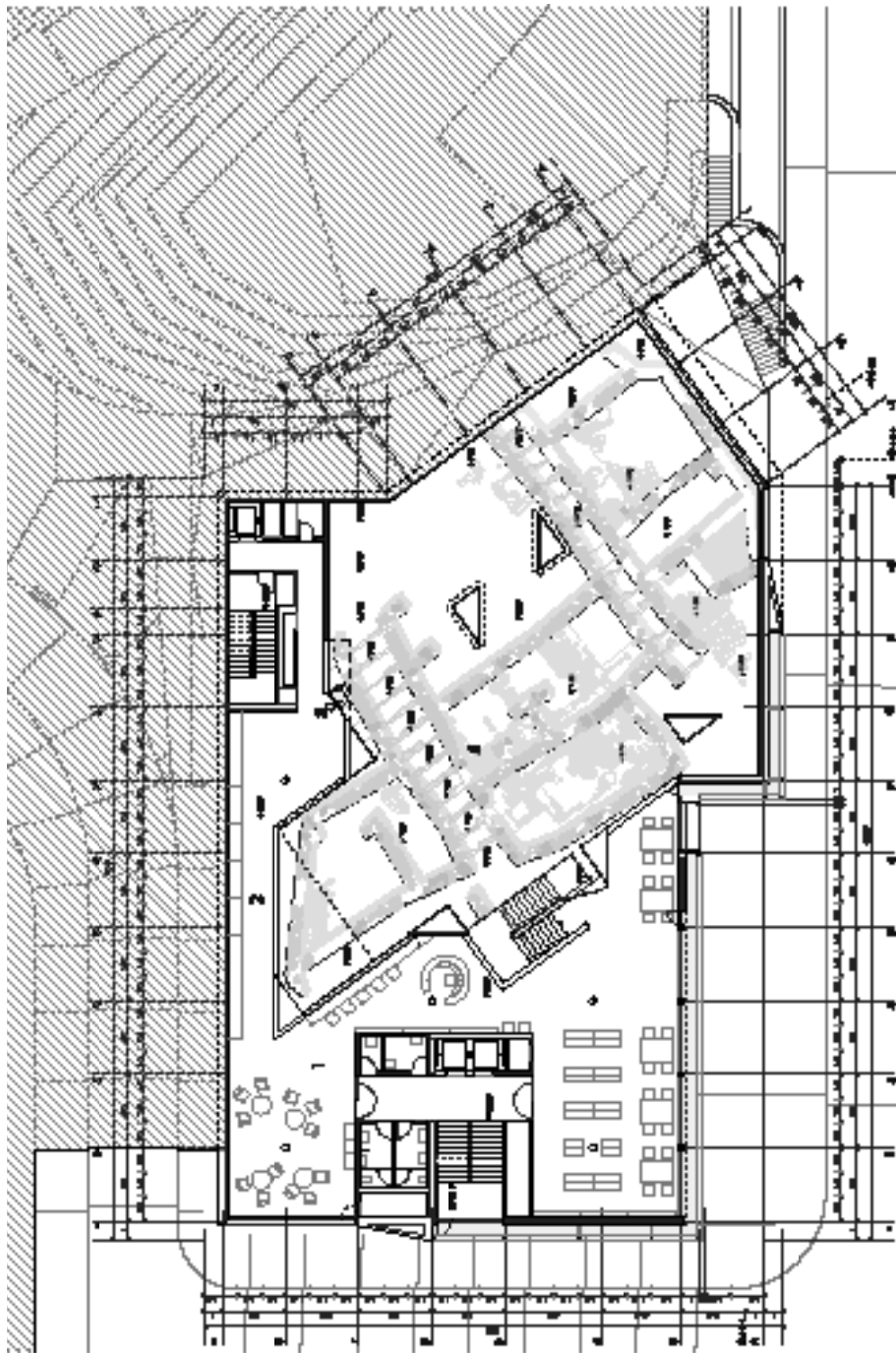


Paredes Pedrosa Arquitectos,
Public Library (Ceuta, Spain
2007-14)

16
Unfolded axonometric view
© Paredes Pedrosa
Arquitectos.



17
The interior space housing
the archaeological finds
© Paredes Pedrosa
Arquitectos.



18
Plan of the lower level
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19
View of the archaeological
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20
The interior space housing
the archaeological finds
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Níall McLaughlin. How Buildings Tell Parables

Luca Cardani

- Are buildings immutable artefacts, or are they what passes through them? They frame and endure the changing light of the day, comings and goings, the regular rhythms of use and the slow burn of weather. A building is built for a purpose, but it acquires new meanings over time. It is both an enduring physical presence and a mediator for known and imagined things that flow through it¹.

This thought on the life of architecture expresses the sense of working on history of the Irish architect Níall McLaughlin.

Each building, conceived, represented or realized, is an expression of its identity, of the ends and needs that led to its genesis, and at the same time, it becomes part of a representation of the world, capturing in its form tales of past stories and the potential of future stories, intertwining with the flow of things and fixing the places of life in architecture.

His practice — Níall McLaughlin Architects — based in London since 1990, is characterized by numerous interventions in the United Kingdom within pre-existences and historical contexts.

The relationship with the surroundings manifests itself at different scales, from the design of architectural systems related to the city and the landscape, to the design of significant and valuable small-scale buildings within complexes of historical value.

For example, suffice it to recall the New Student Accommodation for Somerville College at the University of Oxford, where the double linear building realizes an urban façade through repetition of loggias and two lantern towers that contain the atriums marking the joints between the system of streets and courtyards; or the Carmelite Prayer Room, a small, precious wooden architecture inside the church complex of St. Theresa in Dublin; or, finally, the project started in 2014 and recently completed in its first phase for the Jesus College of Cambridge², where the different scales of intervention (College's West Court, Auditorium and Forum) are completed through a spatial sequence, announced by the new front on the street that keeps together the different historical phases of the entire complex.

One of the characteristics of McLaughlin's work is partly related to his experience of architecture. In some of his lectures³ the architect

has recalled how his architectural education lies between two complementary approaches.

Firstly, a student education at the University College Dublin is connected to the canons of the tradition of the great masters of the 20th century, Mies van der Rohe and Khan in particular, under the guidance of such architects as Shane De Blacam and Robin Walker, who passed on and interpreted their lesson.

A subsequent education is focused on individuality, imagination, discovery and invention in architecture according to the pedagogy of the Bartlett School of Architecture University College of London, where McLaughlin is later involved in teaching activities.

These two apparently antithetical models join into his work that is unexceptionable for coherence and expressiveness of its technical construction, for the tactility and the measure of the composition in existing contexts, and for the narrative power released by the figures thus constructed.

The project of the Scotland Wing Extension and the Welcome Building for the Auckland Castle, started in 2012, expresses in an exemplary way these aspects and McLaughlin's approach in dealing with the history of the places and their interpretation in the project.

The site is the small city of Auckland, located in north-east England a few miles from the North Sea, in an area characterized by the Wear River route and a system of small towns, scattered across a landscape of low, rolling hills patterned by agricultural fields and forests. The life of this town is linked to the historic residence of the Bishop of County Durham, who from the 14th century established his seat in the Auckland Castle. This is an architectural complex consisting of buildings, gardens and a park, enlarged by several additions over time until the present day when McLaughlin was asked to design two interventions⁴.

The first design approach seems to lie precisely in the knowledge and interpretation of the history of the place and its material and immaterial characters. The careful observation of morphology and architecture together with the study of historical phases, through documents and iconography that depict the site's evolution, has helped to recognize two types of relationship dealing with the buildings design:

one facing outward established by the castle and the landscape; another internal to the architectural fabric, determined by the relationship over time between the town and the castle, first isolated and autonomous and then instead linked to the city thanks to a long *promenade*: a widened avenue connecting the city center to the castle defined by the perimeter walls of the palace, the access gate, the rows of trees and the house façades.

The project takes start from this reading and attempts to re-establish a new deep connection between the city and the castle along this *promenade* of architectural episodes. The two interventions in fact express this relationship through their significant location — one inside the castle's enclosure (Scotland Wing Museum of Faith), and the other close to but external — along the avenue overlooked by the town's collective buildings (Welcome Building).

The Welcome Building is located just outside the entrance gate on a significant intersection between the access axis and a bayonet-bending road, which has been running through the village since ancient times, connecting it to the north and south with other centers across the landscape. The building is placed on the corner of the stretched square of the *promenade* distinguishing itself from the fabric that defines it and grafting itself as an emerging element inside the square. This element is then oriented to accompany the direction of the *promenade* and leads towards the entrance arch, building on this side a representative front, as the first encounter for those coming from the road from south.

The representativeness aforementioned is accentuated by the analytical character of the composition, which places the building orthogonally juxtaposed to the boundary wall and detached from the fabric of houses folded diagonally. In this gap between two different orientations, the recess of the buildings creates a small access courtyard at the back, through the placement of a belvedere tower: it is a courtyard that invites to enter and shows the relationship between the new and the existing.

The Belvedere tower, set back from the road inside the courtyard, rises about twice the height of the surrounding fabrics, up to more than 30 meters, establishing a distance relationship with the surrounding area, with the main front facing the castle.

The Scotland Wing extension, on the other hand, relates to the internal construction elements of the entire Auckland Castle complex: a system of representative and service buildings developed from the first nucleus of 13th century St. Peter Church, that is the most remote part facing the landscape to the east with its apse, as shown in the historic views of Auckland.

The long Scotland Wing, built in the 16th century, extended the castle towards the city, building a setting along the *promenade*, with an extensive wall of stone arches with iron grilles that frames a scene of gardens and architectural facades extended horizontally towards the natural landscape.

In this system, the new Scotland Wing extension builds an interesting variation by placing itself orthogonally to the previous one, adjacent to the site of the castle's old farm and extending to this scenic access road. With this position and extension, the building defines two new courtyards, which become part of a sequence of internal gardens. The first is a long, narrow courtyard defined by the new wing and the highly historic building of the Westcott Lodge. It consists of an empty space for first reception that manifests the relationship between the new and the history, with the theatrical naturalness of a country courtyard. The second one, on the other side, faces the inner garden and the monumental complex of the Bishop's residence, whose value is enhanced by a green plateau that fits into the path of fenced gardens inside the castle.

Again, the new long and narrow gallery is juxtaposed to the Scotland Wing and connected to it through a lowered volume that works as a buffer between the two buildings, maintaining their formal autonomy without hybridization, and realizing the only access threshold for the visitors' museum itinerary.

The value of the new building is revealed through its position that reaches the road until it interrupts the historical trace of the wall of the access driveway. Here, the new building shows itself directly on the road, as the first building of the museum path: a backdrop that conceals and anticipates the discovery of the different parts of which the castle is composed.

As noted, the settlement choices, which give strength to the insertion by conforming the new elements to the plot of historic buildings,

are explicitly manifested through a composition made by analytical parts defined in distinct typological elements, which reveal an important aspect of McLaughlin's work.

The theme of the entrance building, strategically located and composed of two main parts, is interpreted through two archetypes that make up its meaning: a tower and a hall.

The typology of the hall is taken from the tradition of market halls in British towns, that are meeting places for the community consisting of a covered space open to relations with the city at ground level with an upper floor for public functions.

Similarly, the project interprets the place of reception to the city with a hall building on two levels: the ground floor is occupied by ticket office and info-point, while the upper floor by a hall for the meeting and exhibition, unobstructed and developed longitudinally.

This building is connected to the belvedere tower that recalls the memory of urban towers and bell towers. The origin of this analogy is due to the tower's dual role of seeing and being seen, and to the desire to represent the theme of welcoming with a typology open to relations with the territory. This analogy is also corroborated by the discovery of an archive document that demonstrates the existence of a tower in the city center that has been removed over time. The project evokes a distant and forgotten memory to re-present it with new forms and a new meaning in the present time.

And again, the extension of the Scotland Wing, destined to the Museum of Faith, is interpreted with the typology of the basilica, with a volume composed of two levels: a lower floor of substruction divided into a path of rooms, leading at the end through a staircase to the upper floor in a free aisle space.

McLaughlin finds in the basilica type the most evocative spatial structure to tell the sense of a space dedicated to the display of sacred objects but without the presence of ritual. As if to say that it is precisely the ambiguity of functions and values assumed by the type of Basilica in history, specifying itself in different buildings but without losing the generality of a hall layout oriented in one direction, that seems to be the most appropriate to evoke the ambiguous meaning of this Museum, which is a space that is not *sacralized* but protects the sacred.

The composition of these three types with each other and with the pre-existing context seems to be the result of an analogy with the memory of places and the city, built through the observation of the site, the study of history and the accumulation of a heritage of forms in which culture has expressed itself.

Heritage forms act as a collective memory becoming sources of inspiration for new meanings, and, thanks to the analogical thought, architectural forms assume a value beyond time and place and – re-appearing in the project – they re-establish their meaning.

This process of translating and narrating the value of the cultural forms of the site's heritage, achieved through a dialogue between an architectural thought with history, climaxes in the Auckland project with the way of construction. McLaughlin's work reveals a belief that construction – its principles, systems and building techniques – possess its own characters and a representative capacity which, through their declination in the architectural project, allow the character of the building to be expressed.

It is no coincidence that in his writings and speeches he often quotes Gottfried Semper, whose classification of building systems, qualities and meanings elaborated in his treatise on *The Style*⁵ is the basis of a thought that interprets construction as a mean to express the art of architecture.

Thus, the projects for Auckland fulfill themselves in construction, entrusting the narrative of their role in the city to the diversity of building systems. The Welcome Building placed close to the walls of the castle is made with a timber frame, which cites – as noted in the pages of the monograph *Twelve Halls*⁶ – the construction of medieval siege towers not to find its link with the context in the historicism of the language, but to evoke the same character of transgression in relation to the walls and the central avenue of the city. The mighty transparent frame made with the tectonics of wooden carpentry, expresses more than the provisional nature of a construction by jointed elements, the character of exceptionality of the building.

The character of the building is then defined by a careful work on the clarification of the relationships between the elements, which are reduced to their essentials, and on their meaningful connection which is typical of tectonic art.

The design of the frame system of the tower is modulated on the repetition of five trapezoidal figures pulled upwards until they close and stiffen in the cusps. These elements are then linked together by horizontal stringers and diagonal braces, modulated on the inter-floors of the stairs with a strongly vertical rhythm design.

The meaning of this tower, with a cantilevered belvedere terrace on the top floor, is precisely linked to the transparency of the building, to the projection towards the sky, to the feeling that wind can blow through it, opening it up towards boundless relationship.

The hall is similarly constructed with a system of right-angled trapezoidal timber portals that follow one another along the side of the building to create a continuous space within them. In this case too, the rhythm of the portals on the main facade realizes a regular rhythmic drawing, which narrates the opening of the upper floor and the unity of the space covered by the pitched roof with continuous sheet metal, rhythmized by joints according to the design of the portals.

The Museum of Faith is of opposite character, defined by the stereotomy of a single volume with double pitch, entirely in stone. The choice in this case seems to be motivated by two reasons.

The first lies in the desire to fit into the system of masonry buildings of the castle by addition, enhancing the variety of its morphological complexity, through the continuity of the material. Again, however, there is a specific focus on defining the built form to heighten the building's individual character in relation to its surroundings.

In fact, the second reason lies in the meaning of the building related to the custody and exhibition of sacred art, which is translated by a hermetic stone casket carved only on one side. This façade on the *promenade* shows a window in the middle of a frame, realized as a bas-relief shaping wall-heads and merging them with the back wall, thus giving a different value to the sides of the basilica volume.

Hence it is a shell, which from the outside anticipates the sense of respect for the fullness of its interior, with an inverted character designed to arouse astonishment for the revelation of the sacred objects here exposed.

Inside the casket, in fact, the roof is supported by a structure of iron trusses composed of thin galvanized and shiny elements: a filiform

skeleton with a tight rhythm that enriches the space, with an elegant pure geometric design and without joints that creates a plot of light and shadow enhancing the exhibition.

The construction of the stone envelope on the exterior reveals nothing other than the properties of the long, narrow basilica layout, but it is connoted with a detail that shows one of the most intriguing aspects of this work. In order to crown the roof, the façade ends with the intersection of two cusped elements projected towards the sky without structural functions.

McLaughlin quotes a few buildings from architectural history, such as the 10th-century stone church on St. Macdara Island and the Ise Grand Shrine in Japan, where this construction detail at the peak of the roof is used to further emphasize the form and reveal through a symbol the value associated with sacred significance in the history of architecture.

Specifically, the author talks about *skeuomorphs*:

- representations of older forms that are retained to allow us to make sense of the new. Sacred architecture often carries forward older construction elements that have acquired symbolic significance over time. It uses them in new arrangements and materials⁷.

Thus, he understands the addition of detail as decoration, that is, as a necessary moment of construction, to strengthen and make more explicit the character of the building. It is a way of understanding the relationship between construction and architecture that can be inscribed in a classic conception of decoration, for which, according to the categories outlined by Quatremère de Quincy⁸, by analogical, allegorical or ornamental use of decoration it is possible to translate the forms of construction into architectural forms, to make the sense of a building eloquent, «to reinforce the impressions it must produce»⁹.

Hence the formal definition of the detail is used as a pretext for constructing a symbolic form that resolves the technical aspect in a specific way, while at the same time representing meanings outside the practical value of the building, which are part of its history and its idea.

Beyond the specific value assigned to the symbol, what emerges with extraordinary evocative power in every Niall McLaughlin's work is the ability to achieve a narrative and figurative dimension, precisely through the representative use of constructive characters and their relationship with architecture.

We need only to think of his projects for common use buildings, such as the large skeleton raised above the sea of the Deal Fish Market (2006) or the textile covering of the poetic Park Pavilion for Preston (2000), and their ability to evoke other formal worlds through the forms of architecture.

In the Welcome Building, for example, it is manifested in the engravings on the ground floor infill panels that tell the history of the place, with a clear reference to the epigraph inscribed by Henri Labrouste on the base of the St. Genevieve Library in memory of the great authors of history. In a more theatrical way, instead, the decoration is shown in the vertical pivot shutters of the upper floor, which open from the wall like medieval banners «to display heraldic panels illustrating the development of the landscape over time»¹⁰.

Opening during the day and closing at night, these panels tell the story of the building in relation to the city, with a scenographic effect reminiscent of the English theatre tradition of mechanical and scenic apparatus, celebrated by Inigo Jones. This is a reference to the scenographic tradition that includes the metaphor between theater and city as a scene to represent the history of the city through the characters of the architecture.

In a short statement about the analyzed project, McLaughlin clarifies this inclusive viewpoint on the history and character of architectures:

- We are interested in buildings that tell parables about what they are for. [...] Exploring and extending this tradition, we hope to address the way buildings are at once actual and fictional, and represent both themselves and ourselves in time¹¹.

Thus, his architectures carefully specified in the relationship between the elements of the construction and the composition with respect to their use and to the site in which they are inserted, are

charged at the same time with a narrative value, to the point of hosting literal and symbolic formal references, which are outside architecture but inside the formal world.

The representativeness of McLaughlin's architecture is not a point of departure, but the outcome of a process of questioning about the meaning of the building, its relationship to the history and characters of places, and the precision of construction as architecture's primary means of expression. It is the course of the project, its evolution towards reality, that allows the form to take on values and links with the history of places, addressing issues emerging from the reasoning about the meaning of design.

This is how Niall McLaughlin Architects' buildings narrate parables, leading us to confront the imaginary with reality and becoming real in it through construction. The character and purpose of McLaughlin's work seem to lie in this ambition to know the stories/ parables of buildings, the desires and needs for which they are built, and to interpret them with the *words* of his architectural *vocabulary*. In this way, architecture takes shape in its own time, to become part of past and future history, to add a narrative and then blend in with it.

¹ N. McLaughlin, *Presences*, in *Twelve Halls*, edited by N. McLaughlin, E. Doll, Níall McLaughlin Architects, London 2018, p. 7.

² F. Serrazanetti, «Níall McLaughlin Architects, Jesus College, Cambridge, Regno Unito», *Casabella*, 902, October 2019, pp. 56-67.

³ N. McLaughlin, «Origins and Translations», *Public Lecture Series*, held at the Yale School of Architecture, January 22, 2015.

⁴ «In 2012 it was taken over by the Auckland Castle Trust, a regional charity, and is now being transformed into a destination of international significance for faith, art and heritage. In addition to the restoration of the 900-year-old Auckland Castle and the creation of a adjoining Faith Museum supported by National Lottery Fund (HLF), the Trust is also developing a reimagined 17th century walled garden, the

Mining Art Gallery, the Spanish Gallery and a welcome building nearby». N. McLaughlin, «Scotland Wing Extension and Welcome Building Auckland Castle», *Domus*, 1015, July-August 2017, p. 40.

⁵ G. Semper, *Der Stil in den technischen und tektonischen Künsten*, 1860-63, trans. *Lo Stile*, Laterza, Roma-Bari 1992.

⁶ N. McLaughlin, E. Doll, *Twelve Halls*, Níall McLaughlin Architects, London 2018.

⁷ N. McLaughlin, «Designing to incorporate history», *Domus*, 1015, July-August 2017, p. 42.

⁸ Q. de Quincy, *Dizionario Storico di Architettura*, 1832, Marsilio, Venice 1985.

⁹ Ivi, p. 183.

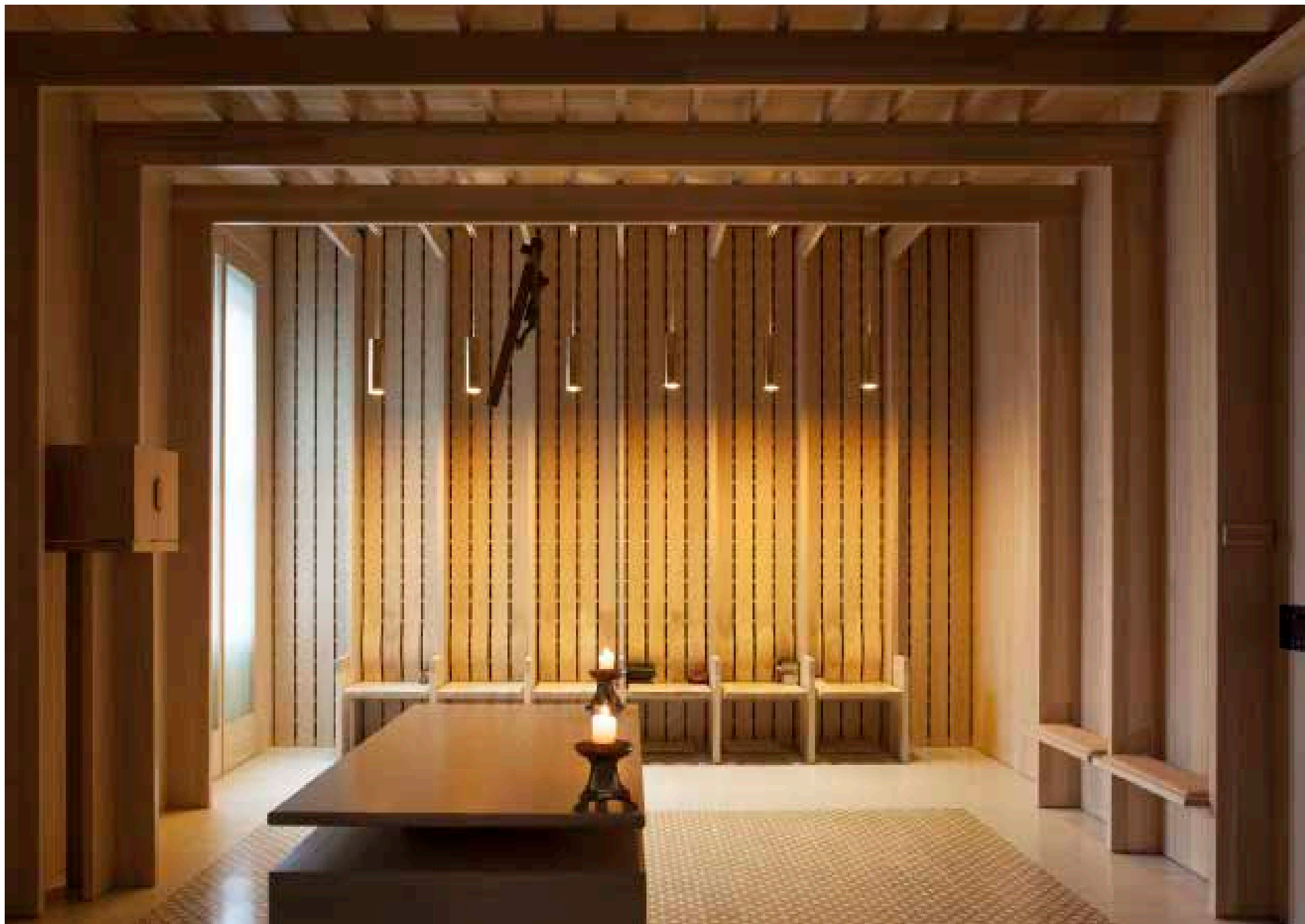
¹⁰ N. McLaughlin, «Designing to incorporate history», *op. cit.*, p. 42.

¹¹ Ibidem.



Níall McLaughlin, Student Housing at the Somerville College (Oxford, United Kingdom 2011-12).

1 2
Exterior and interior views
© Níall McLaughlin Architects.



Niall McLaughlin, Carmelite Prayer Room at St. Teresa's Priory (Dublin, Ireland 2016).

³ Interior of the chapel © Niall McLaughlin Architects.



Níall McLaughlin, Jesus College (Cambridge, United Kingdom 2014-17).

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Exterior and interior views
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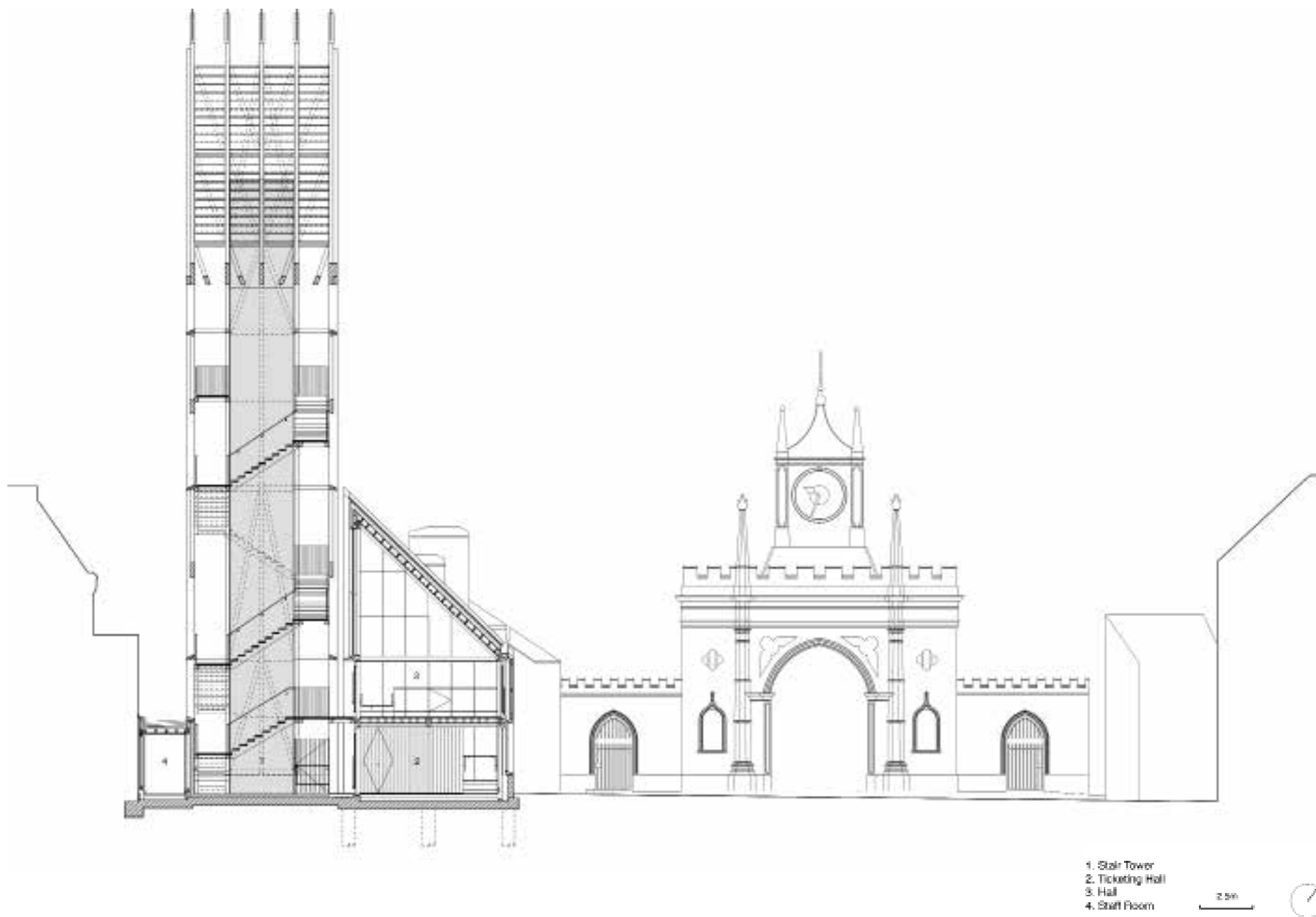
Niall McLaughlin, Scotland
Wing Extension and Welcome
Building at the Auckland Castle
(County Durham, United
Kingdom 2013-20).

7 8
Longitudinal section and
ground floor plan of the
Auckland Tower © Niall
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9 10
The Auckland Tower © Niall
McLaughlin Architects.





11
 Transversal section © Niall
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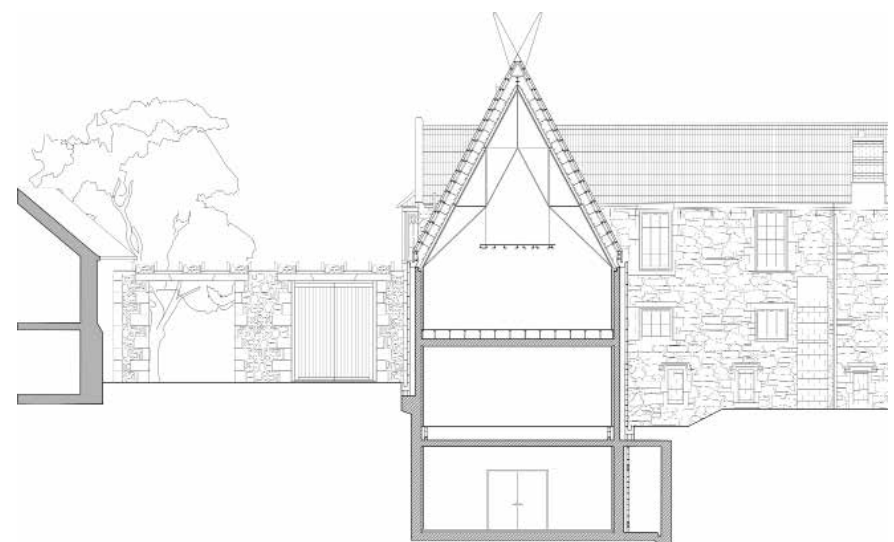


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Exterior and interior views
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14
The Tower © Niall
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15 16
Interior view and section of
the Scotland Wing © Niall
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João Nunes. Interaction as a Dimension of Landscape Design

Carlo Peraboni

One Topic and Three Issues as a Premise

The topic I would like to address is that of the design of interaction and the forms it takes in transitional places, in the «in-between» space: places of strategic value which become essential elements in re-development projects. These are marginal areas and the edges of cities, places which allow for the completion of connection networks capable of linking together multiple functions; though hemmed in, these are spaces which — in conjunction with the reclamation of disused or underused areas — allow for significant urban portions to be redesigned; they are places which, due to both their position and their size, are potentially able to perform important functions for the environment and the landscape¹. And it is precisely this plural value² which piques interest in understanding how design can analyse — interpret — in detail its content and define its intervention strategies, studying the features of its proximity and becoming an interpreter to translate the relationships which substantiate and characterise these areas.

In order to do this, I have chosen to observe the work of Portuguese architect and landscape architect João Nunes, selecting works which interpret landscape design as the result of a continuous interaction of the relationship between man and his territory, as well as landscape design as the result of a conscious relationship between anthropic action and the inherent values of a territory that has not yet been anthropised.

The design experiences selected here refer to an idea of interaction that is characterised by a recognisability of its own, often made less distinct and more confused by comparison with the totalising identity of the urban sprawl or the territorial whole to which these areas belong. In the approach championed by João Nunes, these projects work on the recognition of complex and articulated morphology — in no way attributable to the form of a clear-cut border — which, by its nature, can be represented by a solid line that can only be crossed where expressly allowed; these are presented as an articulated set of situations and occasions, as porous and permeable spaces, open at multiple points to seeking out contacts and contaminations³.

These places are not neutral spaces. They are spaces that have participated, either directly or in complementary terms, in the process of urban production and are, themselves, just as much the result

of a transformation of meaning as the other parts of the city. They represent a residual space, often marginal and overlooked, which nonetheless becomes essential when preparing urban redevelopment plans and urban regeneration projects. These spaces, in the many and varied forms that they can take and the different locations in which they can be found, are above all — and this is the principle which governs the proposed reading — possible spaces for a project capable of addressing, in a progressive and extended way, issues such as waste, discomfort, health and safety, identifying rules and opportunities to transform them that are capable of enhancing the contexts they are part of, connecting them and establishing virtuous correspondences⁴.

And it is this characterisation that demands that any design have a multi-scalar vision — i.e. a vision which allows for a project to be prepared for the margins, whether they are considered individually or as a system, defined by their potential and the capacities that they express in relation to the issues of urban design.

By virtue of their relationship with the processes of transformation that have taken place, designing these areas becomes a process aimed at recognising the identities and potential of a place: it must take on the characteristics of generality that belong to an overall vision, whilst at the same time demonstrating the strength to respond to multiple objectives, integrating them with each other and anticipating the result of the transformations that are planned⁵.

The landscape value of these projects, that is made quite explicit in the works of João Nunes, becomes the ability to anticipate, through the prefiguration of the possible design morphologies, those solutions that can guide the project towards achieving an overall quality capable of characterising these spaces and remaining in time: in other words, operating in the direction of a contextualisation of each urban element so as to avoid — through the promotion of and respect for the existing relationships — the risk of incurring the phenomenon that Rafael Moneo defines as «the solitude of buildings»⁶.

Designing the interaction between anthropic elements and natural spaces cannot be an action divorced from a reflection on the theme of the growth model of the contemporary city and the tools that urban design uses to define its spread. The extension of the city involves portions of the territory that are inhabited in different ways, which is in

some cases the result of a process of urbanisation that is rooted in time, and in others, the result of much more recent growth. The physical representation of these different forms of urbanisation is that of a territory characterised by a high degree of differentiation in the settlement fabrics that constitute it, where the networks of relationships both material and immaterial reveal some situations of great dynamism, as well as some of great marginality⁷. What we can recognise in this is an interweaving of urban centres with their own histories, each with a different consistency and population density; a sequence of settlement morphologies dating back to different eras and resulting from different social fabrics, from small-scale and industrial manufacturing as well as tertiary and commercial activities with links to different lifestyles and patterns of living. This is a territory that lends itself to multiple descriptions and metaphors, such as infinite city and metropolitan region: definitions which highlight its prevailing characteristics without, by doing so, denying other, additional interpretations.

In this context, we often use the term «margin» — and, as we will see later on, the terms «boundary» and «edge» — to describe phenomena which depart from the concept that is traditionally used and conveyed by the history of the city. Interaction in the design of the contemporary city takes on a range of very different dimensions, values and meanings. The space of a project always corresponds to a specific situation which cannot be abstracted from the context it belongs to, from the sense and relationships of proximity which can and must guide the formal solutions of the design. The urban sprawl we are referring to is made up of highly diverse territories, punctuated with multiple urban centres, natural networks and anthropic infrastructures, green and wooded areas, cultivated and equipped areas. These suggest a working method involving reading approaches, interpretative criteria and design opportunities that can never be repetitive; quite the contrary, it can be an opportunity for new forms of intervention and the construction of new relationships, new landscapes.

Understanding these contexts requires an articulated, multidisciplinary approach in the sense that it calls for going beyond the interpretative models accepted and recognised by the disciplines that produced them and overcoming the limits of communication between the different paradigms of knowledge. The predominant interpretative

problems are those related to the processes of transformation of the existing, for which it is no longer sufficient to operate according to an incremental logic that is broadly oriented towards satisfying demand; any transformations must emphasise the complexity of the relationship networks present within any given settlement area. In this sense, needs must be recognised through analytical processes constructed in a way that allows them to be integrated with interpretations and approaches based on multiple criteria and capable of generating syntheses of a systemic nature. Design actions must be up to the challenge of articulating the quantities and qualities of the offer by establishing new contextual relationships and allowing for more detailed solutions.

In comprehending the physical and social fragmentation of the territory of the expanding city, the hypothesis becomes one of using, as a criterion for interpretation, that which takes interaction as its practice of mediation between different situations, in which boundaries constitute the space where unprecedented approaches to design can be implemented in order to identify actions capable of shaping the city, approaches that are congruent with the characteristics of the places in question. A place of superimposition capable of giving meaning to a project which reads the landscape, amenable to specific solutions that are adaptable over time⁸.

These observations are tied to the complexity of the various meanings that can be attributed to the term «interaction» and, at the same time, serve to confirm that research aimed at design requires us to favour an interpretative meaning that is open to the knowledge of different disciplines and to develop a perspective capable of aiming for a series of long-term objectives, typically environmental ones, together with a multitude of interventions for the maintenance and restoration of the assets present and the construction of new artefacts which instead belong to the needs of everyday life.

Reading Projects as a Strategy for Understanding the Theme of Interaction

Reading João Nunes' projects based on these premises means acknowledging the ability of landscape design to read the relationships between spaces and the various morphologies of the built environment,

lending weight to the different aspects which contribute to giving each transformation project meaning, especially in the difficult decision of which functions to install and their sizing.

In the projects analysed here, the theme of interaction is approached by proposing a key to interpretation, namely the need to seek a balance — at times a challenging task — between the need to protect or safeguard the assets already present, on one hand, and the need to enhance the areas they exist in, on the other.

This, as already mentioned, requires the use of a systemic approach which involves an integrated interpretation of the potential and limitations offered by each place with respect to a system of multiple relationships: from the broader ones of long-term scenarios, to the intermediate ones of spatial congruity and temporal priorities, to the detailed ones regarding content and relationships of proximity.

The projects recognise that these places cannot be interpreted solely as places of comparison between fullness and emptiness, and that they are instead areas of transition and contact between heterogeneous built systems and different, articulated types of open space; they become complex elements of the territory, produced by means of a dialogue, a relationship between different entities.

The design of these places must be developed starting with an observation and interpretation of their changes, through the activation of a systemic exploratory function which allows for strategic design choices to be identified and steered towards progress.

The experiences selected represent different ways of approaching the issue of designing transitional spaces: an issue which has, in recent years, sparked a great many reflections and significant in-depth studies within our discipline.

It is no mean feat to try to unequivocally define the significance of this typology of areas, which limit and define the urban system but, at the same time, exist in continuity with a heterogeneous system of elements; this is an operation which requires a capacity for interpretation oriented in multiple directions and inextricably linked to an understanding of the relationships that characterise the constituent elements of these areas.

The experiences selected here refer to an idea of interaction that is characterised by a recognisability of its own, often less distinct and

more confused within the totalising identity of the urban sprawl or the territorial whole to which these areas belong. These areas often appear to have no recognisable morphology — in no way attributable to the form of a clear-cut border — which, by its nature, can be represented by a solid line that can only be crossed where expressly allowed; these are presented as an articulated set of situations and occasions, as porous and permeable spaces, open at multiple points to seeking out contacts and contaminations. Places that represent the historical permanence of elements that structure the urban and environmental form, but at the same time, express the latent and heterogeneous potential of the territory.

Etar de Alcântara, 2005-11

The project, the apparent aim of which is to recompose and reconfigure the morphology of the Alcântara Valley, expresses a strongly systemic approach to the landscape which is intended to promote the heterogeneity of the characteristics of the elements present. This promotion of the distinct yet complementary elements, both in terms of morphology and in terms of readability and relevance, allows for the action of recomposition to be read as the definition of a plurality of connections, both physical and perceptive, used in a way which serves to promote the regeneration of the Valley's landscape values.

The project uses a landscape code capable of positively emphasising the stratification of the different elements in an effort to harmonise the different types of infrastructure present. The meaning of the infrastructure — understood as a structure which links and connects different elements — is reinterpreted in an attempt to lend continuity to the existing relationships and establish a perceptual dialogue capable of reconnecting the two sides of the valley, separated by the technological structures and facilities of the Alcântara wastewater treatment centre.

The idea of redeveloping the landscape is to reclaim the memory of the complex and composite morphology of the valley — located within the hilly landscape surrounding Lisbon, which was traditionally linked to the production of vegetables, resulting in a composite image in which the highly parcellised fields took on different colours and densities.

This image is reinterpreted by the project through the creation of a system of stratified, composite elements which lend structure to signs and passageways located at different heights on the slope. This structuring action has been complemented by the provision of a layer of soil capable of supporting an active, diverse plant cover that is rich in biodiversity.

This solution is functional to the insertion of the buildings and facilities into the morphology of the surrounding area, and is capable of generating a visual and ecological connection which can promote the sense of anthropic action and reclaim the sense of identity of a pre-existing anthropic semiology.

A project with a strong systemic significance in which the interaction involves all of the landscape structures that comprise it. Structures configured as suspended units, equipped with a storm-water drainage and runoff system which is capable of ensuring controlled drainage and preventing the occurrence of dangerous overflow phenomena.

In short, this is a project which is capable of providing multiple, functional responses, placing the focus of the landscape squarely back on a structure that, whilst problematic from the point of view of its interference, is indispensable for the sustainability of the Lisbon metropolitan area.

Linear Park, Ourém, 2003-05

The aim of this project is the construction of an urban space which can meet a variety of needs; indeed, it involves intervening in a context rich in different urban elements and characterised by a highly complex territory. As such, it becomes necessary to check the possible intervention solutions against multiple issues and to orient the project towards seeking out new connections in an attempt to identify a variety of forms of use which can reunite the urban fringes and edges that are present, with a view to lending them a new meaning and a new form of identity.

The main issue is unquestionably the need to create a relational space which can connect the anthropic environment with the system of open spaces of environmental importance located south of the ur-

ban centre. On the one hand, then, the aim is to qualify the riparian area of the Seça river stream, making its design and functionality fit for purpose; on the other, it is to promote an appropriate relationship between the urban fabric and the natural space of the stream, working in such a way as to resolve certain existing situations of conflict and helping to make the different parts which constitute this urban «edge» coherent and connectable.

Lastly, the project inserts a new urban element into this context, entrusting it with the task of characterising the entire intervention by developing a new centrality, articulated around two key facilities: the Conference Centre and the new Municipal Market. Both of these are equipped with gathering spaces, meeting rooms, areas for the use of the community which consequently become catalysts for collective functions.

The interest of the project lies in the careful attention given to the theme of temporary and complementary use: these functions represent elements of collective interest, but the market only runs one day a week. The challenge of the project is therefore identifying complementary forms of use capable of connecting the public spaces to the system of natural elements in a way that ensures that this space is used extensively and for a long time.

The approach used to identify the design actions exploits the terms «boundary» and «margin» as tools to investigate the relationships between the different phenomena involved and to offer new interpretations of the same urban partitions. A strategy for suggesting unusual combinations and conceiving new urban contexts with forms of renewed urbanity and new expressive languages. Succession, sedimentation, continuity and harmonious balance are the strategies implemented to recognise the timings that govern the landscape, acknowledging how they differ from those of everyday life.

Conclusions

The theme of interaction involves the processes of extension of anthropic activities to a considerable extent, as well as highlighting the need to define new design strategies capable of making explicit the relationships between the assets defined by infrastructural layouts

and urban frameworks and the environments increasingly being interfered with by settlement activities. Relationships which take on different forms and degrees of significance, but which elicit reflection on the settlement criteria and morphological rules to be used to guide the construction of individual buildings and the transformations of the various areas of intervention. These rules take on a certain value in the context of the landscape where they create relationships between traces of the past, identity values, constructing views and perceptions which can cast light upon a system of profound relationships⁹.

João Nunes' projects work with balance and harmony, seeking to build (or rebuild) these relationships through an idea of design geared towards producing landscape situations capable of making the theme of interaction both readable and valuable.

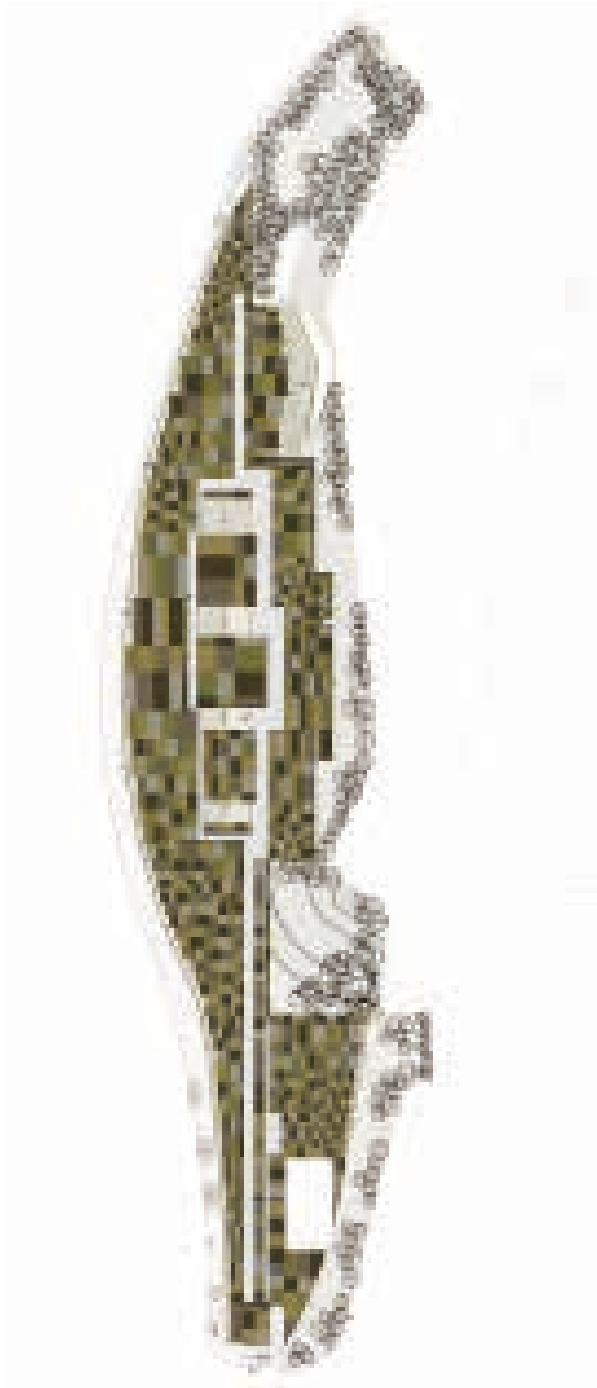
Projects capable of recognising the value of transformation, in the sense of an opportunity to produce a multitude of relationships; relationships which can form another layer on top of the existing networks and integrate with one another, placing a positive emphasis on the heterogeneity and complexity of the space. Projects that exist as an exemplary representation of the desire to relate and engage with transformation in order to enhance its regenerative potential, whilst at the same time to work synergistically¹⁰ with the many and varied urban elements that characterise the different contexts of intervention and constitute essential contextual elements for triggering a process of redefining a new structure of the urban space.

- 1 C. Peraboni, *Reti ecologiche e infrastrutture verdi*, Maggioli, Rimini 2010.
- 2 M. C. Treu, D. Palazzo (eds.), *Margini: Descrizioni, strategie, progetti*, Alinea, Firenze 2006.
- 3 N. Gallent, *Planning on the Edge: The Context for Planning at the Rural-urban Fringe*, Routledge, New York 2006.
- 4 P. Baldeschi, *Paesaggio e territorio*, Le Lettere, Firenze 2011.
- 5 N. Gallent, *Planning on the Edge*, op. cit.
- 6 R. Moneo, *La solitudine degli edifici ed altri scritti*, Allemandi, Torino 2004.
- 7 B. Lino, *Periferie in trasformazione. Riflessi dai «margini» delle città*, Alinea, Firenze 2013.
- 8 R. Gambino, *Conservare, innovare: Paesaggio, ambiente e territorio*, UTET, Torino 1997.
- 9 C. Waldheim, *Landscape As Urbanism: A General Theory*, Princeton University Press, Princeton 2016.
- 10 P. Belanger, *Landscape as Infrastructure: A Base Primer*, Routledge, New York 2016.



João Nunes, *Etar de Alcântara* (Lisboa, Portugal 2005-11).

1 Overall view of the intervention, reconfiguring the morphology of the Alcântara Valley ©PROAP.



2 General plan, promoting a plurality of physical and perceptive connections ©PROAP.

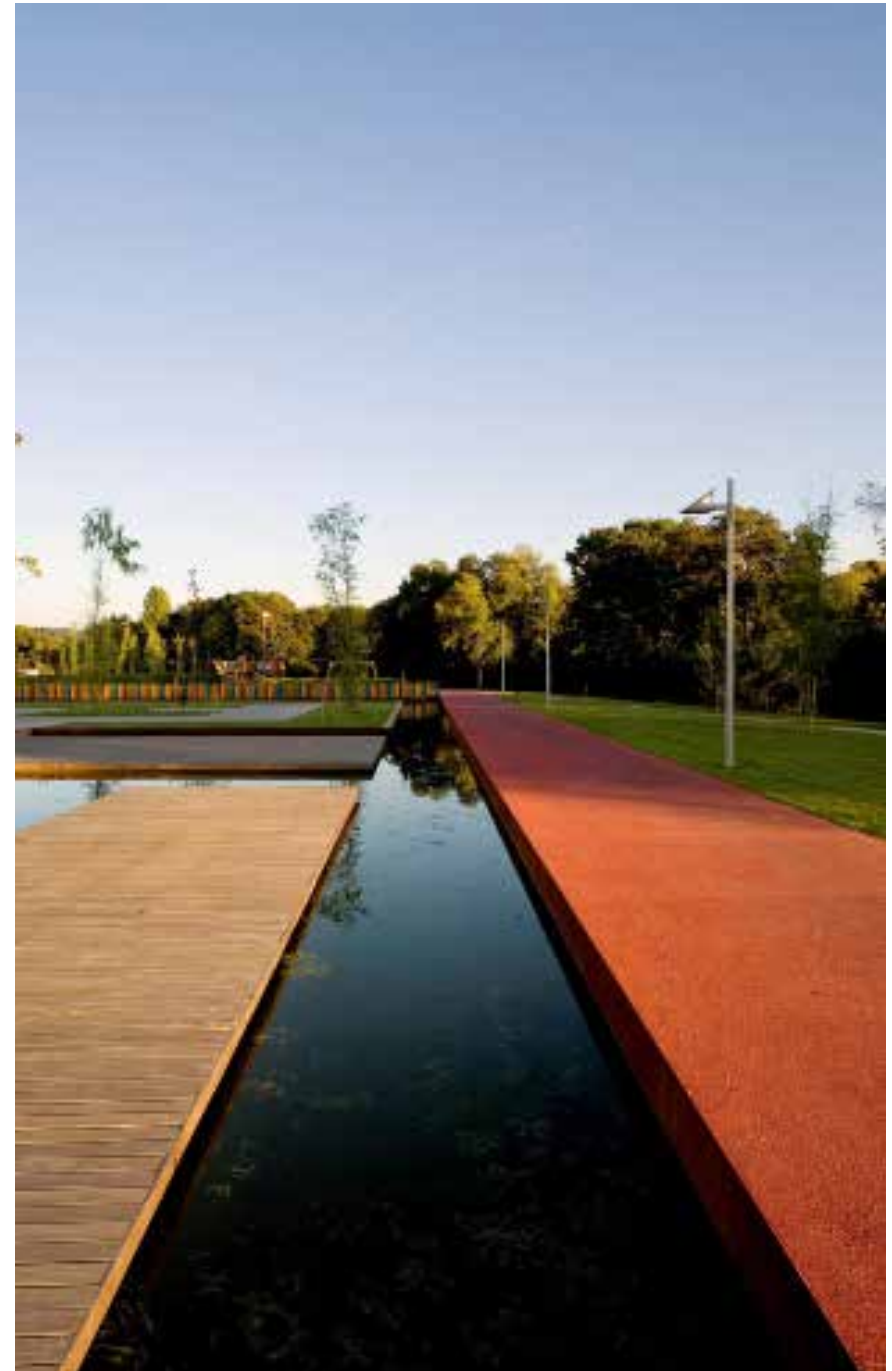


3 4 Views of the site, highlighting the heterogeneous system of elements ©PROAP.



João Nunes, *Parque Linear de Ourém* (Ourém, Portugal 2003-05).

5 General plan, highlighting the heterogeneity of elements ©PROAP.

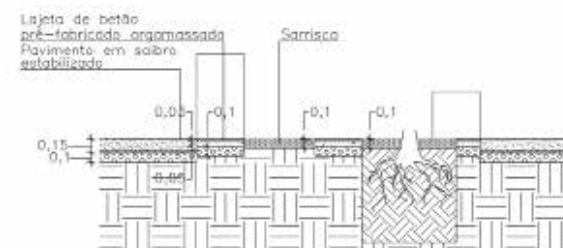
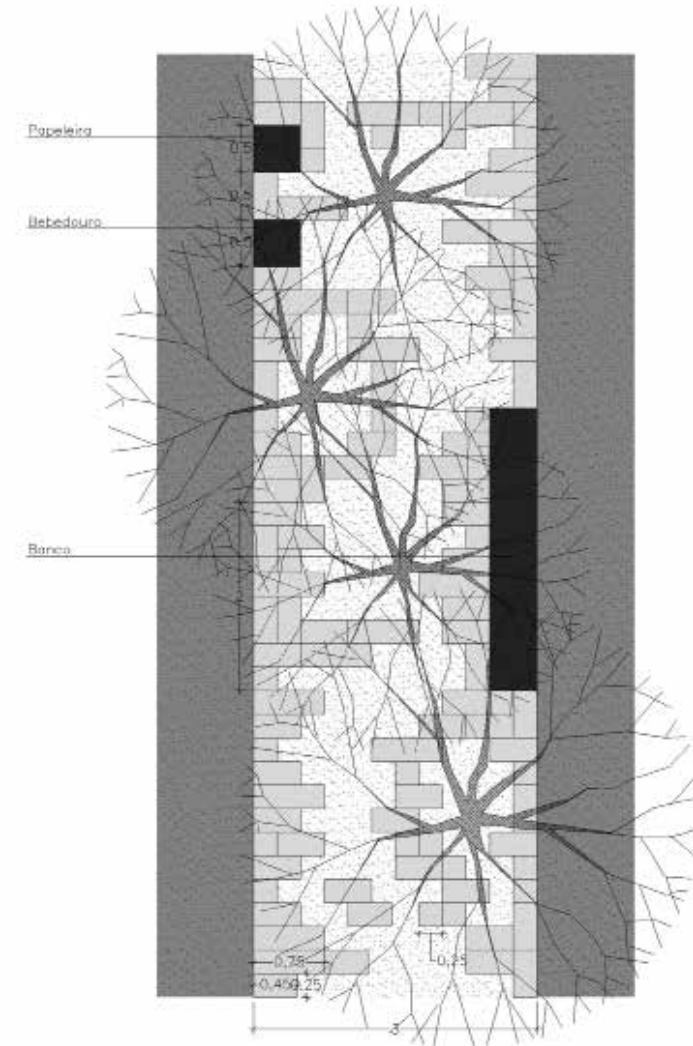


6 Overall view of the intervention, with shapes and colors defining new relations and constituting a new urban edge ©PROAP.



7 8

Views of the site; urban space is designed to meet a variety of needs ©PROAP.



9

The attentive design of details, which creates a coherent and connectable environment ©PROAP.

IV.

Recording

Rafael Moneo. The Space and Time of Architecture

Veronica Ferrari

The architect Rafael Moneo is known as a multifaceted personality: architect-designer, intellectual who deals with theoretical questions, professor and active member of the University. He stands out for his extraordinary dedication to architecture and its infinite variations. The Moneo architect, especially through travel and the experience of architecture (as Rogers' understands it), studies architecture of all times, nurturing his personal design research as a professional. The Moneo intellectual studies and analyzes the architectural work of the Masters in search of the different reasons underlying the formal and constructive choices and of a specific architectural thought. The Moneo professor is responsible for transmitting the true message of architecture to students and new generations of architects. He does not separate the elements of its practice. He manages critical discourse and architectural practice in profound and fundamental ways.

Rafael Moneo's architecture is characterized by a high quality of space and a wealth of meanings. It is based on a design method that is not self-referential, and rather is capable of adapting to individual places, situations and contexts, by developing specific and always different works. Moneo has an in-depth knowledge of history and a cultured conception of architecture, which are combined with a constructive mastery acquired thanks to the study of traditional techniques and the desire for experimentation with new techniques and materials. He also cares particularly about the social and collective aspect of architecture: for him, it is essential to have «a careful consideration of the ethical dimension of architecture as a necessary act to transform buildings and things to favour life and its course»².

For Moneo, the architectural context is a decisive factor, but what really generates the project is the idea that it can function in a social and physical context. He confronts with the block, and its edges and boundaries; he works on the compactness of the urban block, on the density of the settlement, and on the enhancement of the land used, and thus demonstrates that he has the analytical ability to interpret the conditions that characterize the building. In his projects, he gives a personal interpretation of the site and of the relationships that exist between place and city or environment. Consequently, each of his works is the result of the interpretation of the place and a personal previous experience. However, each project presents itself as new, different and

singular, a sign of the evolution and enrichment of an architectural thought dominated by spatial and constructive inventiveness.

Moneo supports the materiality of architecture, according to which «a building cannot be the mere expression of an idea, it must undergo a process of materialization»³. The materiality of the building is manifested through what we can experience. The definition of materials and surfaces is a fundamental act in Moneo's architecture, inspired and shaped by the history and construction processes of the place, to connect with the stratification of the material culture of the context.

Working in addition is a peculiarity of many projects managed by Moneo, where «in addition» refers not only to the physical construction but also to the philological construction of the place, in line with the existing artefacts. «It is intrinsic to Moneo's version of the world that the architect makes a minor intervention in the many-layered continuity of a place — a continuity which long precedes him, and which will probably long outlast him»⁴. It is with this in mind that Moneo creates the National Museum of Roman Art in Mérida (1980-86), located on the site of the former Roman colony of *Emerita Augusta*.

In 1979, the architect was commissioned by the Spanish government to design and build a new museum — to replace the museum built in the first half of the 19th century —, next to one of the oldest Roman theatres. The entrance to the building takes place from the South-East side at a higher level than the excavation area. The building is a modern and revisited version of the basilica; the exhibition spaces are organized on the upper level, while on the lower level, you can admire the expanse of the remains and archaeological finds of the ancient Roman city. From this floor, an underground tunnel branches off to lead the visitors directly into the theatre — to which Moneo alludes in the structure that overlooks the excavations, using triple-band arches. In the entire project, a fundamental role is played by the light that penetrates from the perimetral window and from the large skylights cut out from the concrete slabs. The light penetrates through the openings and radiates the ancient sediments and the new brick structures with warm light, enhancing the joints and the texture effect. Moneo's purpose in this project is to carry out a reflective contextualization of the

new museum through the memory of Roman construction methods and contemporary architectural and exhibition elements: hence the key to this work is the balance between these two parts.

In this project Moneo used bricks — modern ones, but shaped according to Roman proportions. They are used with a dry joint, without bedding mortar, to overshadow the unitary image of the architectural element in favour of a decomposed image and texture. The buttresses that make up the front of the museum help to evoke one of the cardinal principles of Roman architecture: *firmitas*, the solidity of the building. The orthogonal mesh on which the museum structures are unloaded overlaps the oblique course of the archaeological remains, as if to find roots in the Roman age of the city. Here the constructive element of the arch — with its proportions and its repetition — becomes a compositional principle: arch as space, but also as a trace, as texture, and as the ordering element of the spaces and forms of a new historical stratification.

«I like to see buildings which are engrained in the city and thinking to the city as broader light than just a single building, a single object; I like to see buildings able to collaborate and to create this broader sense of the scenography where life happens. It means, in my view, to keep the founding stone for just taking some help when thinking about architecture. Much more than just seeing the buildings as isolated, self-standing volumes»⁵. For Moneo, the new architecture must fit harmoniously into the context and take part in the urban backdrop that forms the scene to life. In the scenario of a contemporary city, in constant evolution, it is essential to re-establish a dialogue between the new building and the urban scape. According to Aldo Rossi, the city is built over time and, while growing on itself, «it acquires awareness and memory of itself. In its construction, the original reasons remain, but at the same time the city specifies and modifies the reasons for its development»⁶. Contemporary architecture thus takes on the character of a fragment, a piece, capable of enriching the context as well as of adopting the principles of the built environment and reinterpreting them through forms and technologies that are typical of its contemporaneity. The new intervention is configured as a piece of a mosaic capable of connecting to the surrounding urban fabric and, in turn, of becoming part of it.

In the project for the Murcia Town Hall (1991-98), the square has the function of being the fulcrum of social life — from ancient Greece to the Middle Ages to the Renaissance, and still today —, where the important relationship between the built and the void can undergo variations, as long as the balances remain unaltered. The new building closes one side of the *Plaza Cardenal Belluga*, located on the north of the river Segura, hence becoming part of the urban backdrop together with the *Iglesia Catedral de Santa María* and the Bishop's palace. The Town Hall fits into the surrounding context as a completion element able of merging with the existing fabrics. Moneo knows the constructive, social and political logics that, in different eras, have characterized the shaping and the evolution of the space — in this case, of the square and the buildings on its perimeter. He studies in depth the historical fabric on which he has to intervene, and from it he assimilates measures and proportions, and reinvents its characters. In this project, Moneo seems to want to revive the space through the reference to a medieval spirit by establishing new connections between the Cathedral and the Town Hall, as in the past political and religious power faced each other. He overlooks the oblique orientation of the pre-existing building — an 18th-century house — and rather gives the new construction a different setting, in search of a comparison with the Cathedral. However, Moneo still considers the previous alignment, and integrates it within the project through the design of a lowered patio that leads to the cafeteria. The most representative element of the work is the façade, covered in sandstone typical of the place. The main front is the device with which Moneo establishes a visual link with the Cathedral: indeed the Town Hall façade, with its progressive emptying, as it rises, seems to imitate the Cathedral. Moneo probably finds inspiration in the urban fabric for the composition of the front. He chooses stone as the finishing material of the building — a noble and meaningful material, bright and vibrant under the sunlight, that was wisely used by Iberian architects, hence it refers to the tradition of the Murcia region. The entrance to the building is located laterally, on *Calle Frenería*, exactly in line with *Calle Polo de Medina*. Here the building bends slightly to widen the view of the square, partially anticipating it to those coming from the historic center. The side fronts are discreet; they seek a relationship with the streets that they overlook through measured and

proportionate openings. The composition of the square recalls, in a way, Giorgio De Chirico's metaphysical townscapes, in regard to the quality of space and the relationships among the buildings.

The interplay with the context established by the project for the expansion of the Atocha Station in Madrid is of a different nature. In Atocha, the rhetoric leaves room for the physicality of architecture — as Moneo says, «the architectural unit of components is not as crucial in Atocha as it is in Mérida»⁷. The project for Atocha involved the construction of a new station for local train and buses, and a parking lot. Moneo's solution was to build a new access platform at the head of the station — from the intersection of *Calle Alfonso XII* and *Avenida Ciudad de Barcelona* —, by overturning the pre-existing accesses. The play of layers introduced by Moneo separates departures and arrivals, controlling their flows and paths, and putting users at the centre. Indeed «the Atocha Station project was based on a strategy which gave priority to the idea of urban continuity»⁸.

The Atocha station (which in Spanish refers to the word «noon») is located in the South- East area of the city, and was built between 1888 and 1892. The Art Nouveau structure, in iron and glass, was designed by Alberto del Palacio Elissagne, in collaboration with Gustave Eiffel. The station is located along the *Paseo del Prado*, the promenade that separates the *Parque de El Retiro* from the historic center. In 1984 a competition was launched; it required the restoration and recovery of the 19th century station and its extension, and the redevelopment of the surrounding urban area.

The noblest purpose of the intervention — which involved an area of more than 200.000 square meters — was to become the hub of a new urban regeneration process. The project by Rafael Moneo, that won of the competition, organizes a complex planimetric articulation including new buildings that flank the existing one, new public open spaces, and new paths that intertwine and cross the entire project — and become the lifeblood of the site. Moneo elaborates a solution that revolves around the transit and the spaces of movement, that are distinctive elements of the station. He works on the mix of volumes, functions and paths, which he articulates on different levels by exploiting the height difference between tracks and the urban grounds, so as to create new spaces for relating to the urban environment.

The large space that used to house the tracks is transformed into an immense greenhouse, that holds a tropical botanical garden that extends over an area of 4.000 square meters, in which plants from all over the world and some animals have been introduced. The environment, characterized by large flower beds alternating with pedestrian paths, reproduces a warm humid habitat suitable for hosting plants and animals. Natural lighting and radiation are guaranteed by the skylights to which artificial lighting is added. Numerous commercial and hospitality activities overlook this green space and have contributed to transform it into a meeting place for citizens and visitors. Outside the building, on the North-East side, Moneo designs another space dedicated to the city — a lowered square from which you can access the *Paseo del Prado*.

Moneo intervenes on an urban node that had remained unsolved for some time, with a project with a highly innovative character from the point of view of the aggregative logic of the spaces as well as of the connections that can establish an harmonious dialogue between all the parts. It is interesting to highlight how Moneo personally interprets the memory of a place with a dominant and representative function such as the station. He argues that architectural typology, despite its typing nature, can prove to be dynamic and flexible in favour to the changes that the passage of time and society impose.

Those in Mérida, Murcia and Madrid — and other European projects — are interventions that propose real urban resolutions, and are opposed to more free and self-referential American projects — such as the Museum of Fine Arts in Houston (1992-2000), belonging to that category of architectures characterized by the «arbitrariness of form», as Moneo himself defines them. The context is however always decisive for Moneo, so much so that it influences the approach and the choices related to each intervention, in continuity or through a clear detachment from it.

Another great theme of reflection that interests Moneo is time — the temporality of architecture, and how time acts on it. Time is the most powerful and least linear variable with which a designer must measure himself: such terms as duration, pre-existence, permanence, monument, memory are essential for Moneo, just as they were food for thought for Jørn Utzon, his master, and numerous other great

architects of the international scene of the 20th century. According to Siegfried Giedion, time and space, and their relationship, form one of the founding paradigms of architecture⁹. Through his architecture, Rafael Moneo communicates a strong interest in the reciprocity of this relationship and its manifestations. «Some projects by Rafael Moneo dance, while others are in procession», stated Josep Quetglas in the essay *The Dance and the Procession*. The shape of time in the architecture of Rafael Moneo¹⁰ tries to define the temporality and the relationship with time. The dancing buildings are characterized by their own, self-defined and self-referential time and space, while those in procession fall within a set time, defined and cadenced by events.

In Moneo's vision, history plays a fundamental role in the education of the architect: «an architectural initiation today includes, in my opinion, a strong familiarity with history, a history that is no longer a warehouse of forms or a laboratory of styles, but that offers simply the material to think about both the evolution of architecture and how architects operated in the past»¹¹. For him, as an architect, it is essential to know history to create a memory. «To know the tradition means understanding the meaning and needs that have generated certain forms in the past»¹²: this is how, in his works, Moneo manages to translate the spirit of history thanks to a strong work of abstraction that starts from the analysis of reality and is configured through the reworking of forms in a modern key. He is interested in history — a set of facts distributed over time, that is not remembered because they were not experienced in the first person or because the people who experienced such events are no longer alive — as a trace and as a guide, but also in the collective and social-historical memory: indeed, «there are infinite collective memories, but only one story»¹³.

Moneo retains necessary to establish a relationship between memory and the modernity of which he is a part, through the reworking of the experience of the past to give a new meaning to the present. He said that modernity is «a continuously reiterated dimension in history, the desire for change and the search for the new that characterizes every movement and cultural intention»¹⁴. He reflects in-depth on the meaning of the word *memory* in architecture: memory as stratification, as the basic material of the project. For him memory is a continuous, uninterrupted flow, in which even the present will soon be deposited

and stratified in us as a memory, becoming memory. He works through the concept of memory by identifying within it the permanent elements and the ephemeral ones — be they the shape, the typology, the architectural language, the textures, or the materials — to help build a new memory. The city is the place where collective memory is manifested, and «Moneo's architecture is rooted in a re-examination of the traditional city and a reconsideration of the basis of architectural language»¹⁵.

Moneo's projects recognize the right value to the existing, and consider the surroundings both as one of the starting points of the project as well as the new protagonists of the place, bringing new rules and new connections: «to modify means precisely searching for a different design method, that is only in some ways opposed to that of the past, and in which attention is primarily placed on the problem of meaning, of relations, that is, with what belongs to the context, to its actuality and materiality, to its history, to its function in the process of social reproduction, to its constitutive rule»¹⁶. Moneo's attitude towards design suggests the lack of an essential rule, in favour of a flexible, functional, and dedicated method for each intervention.

¹ E. N. Rogers, *Esperienza dell'architettura*, Einaudi, Turin 1958, Skira, Milan 1997.

² G. Leoni, «Rafael Moneo: architettura come architettura», *Area*, 67, March-April 2003, p. 8.

³ Ivi, p. 20.

⁴ W. J. R. Curtis, «Rafael Moneo. Pieces of city, memories of ruins», in *Rafael Moneo 1990-1994*, *El Croquis*, 64, 1994, p. 48.

⁵ Excerpt from the John Hejduk Soundings Lecture, «Learning architecture», Rafael Moneo with Sara Whiting, Harvard GSD, September 14, 2020.

⁶ A. Rossi, *L'architettura della città*, Marsilio, Padova 1966, Il Saggiatore, Milan, 2018, p. 12.

⁷ A. Zaera, «Conversation with Rafael Moneo», in *Rafael Moneo 1990-1994*, *op. cit.*, p. 15.

⁸ From the description of the Atocha project on the Moneo's website, <http://rafaelmoneo.com/en/projects/atocha-station-enlargement>.

⁹ S. Giedion, *Space, Time and Architecture*, Harvard University Press, Cambridge 1942, trad. it. *Spazio, tempo e architettura: Lo sviluppo di una nuova tradizione*, Hoepli, Milan 1954.

¹⁰ J. Quetglas, «The Dance and the Procession. The Shape of Time in the Architecture of Rafael Moneo», in *Rafael Moneo 1990-1994*, *op. cit.*, pp. 27-45.

¹¹ M. Casamonti, *Rafael Moneo*, Motta Architettura, Milan 2008, p. 92.

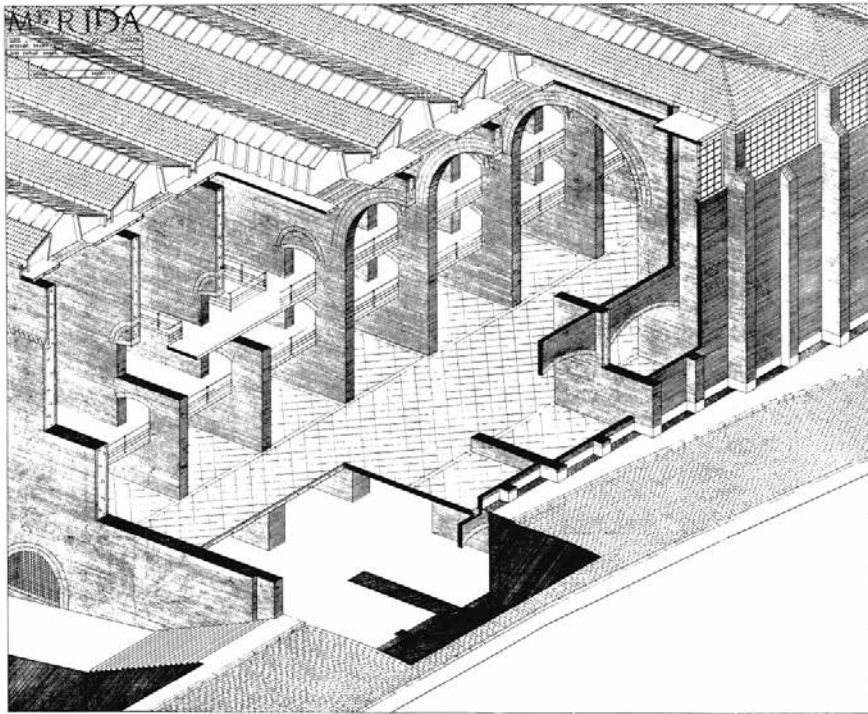
¹² E. N. Rogers, *Esperienza dell'architettura*, *op. cit.*, p. 267.

¹³ M. Halbwachs, *La mémoire collective*, Presses Universitaires de France, Paris 1950, transl. Unicopli, Milan 2001, p. 155.

¹⁴ M. Casamonti, *Rafael Moneo*, *op. cit.*, p. 26.

¹⁵ W. J. R. Curtis, «Rafael Moneo. Pieces of city, memories of ruins», *op. cit.*, p. 47.

¹⁶ B. Secchi, «Le condizioni sono cambiate», *Casabella*, 498-499, January-February 1984, p. 12.



Rafael Moneo, National Museum of Roman Art (Mérida, Spain 1980-86).

1 Axonometric view
© Rafael Moneo.

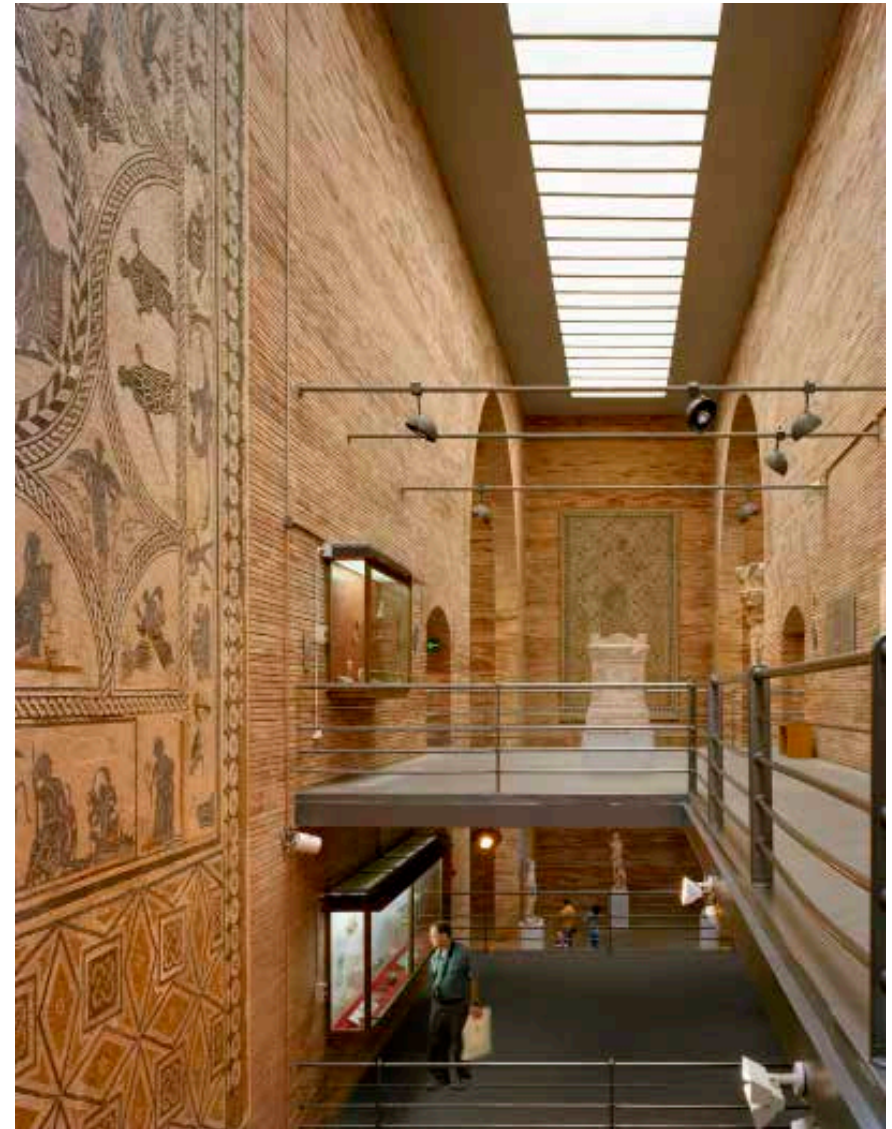
2 Urban view of the building © Rafael Moneo, ph. M. Morán.



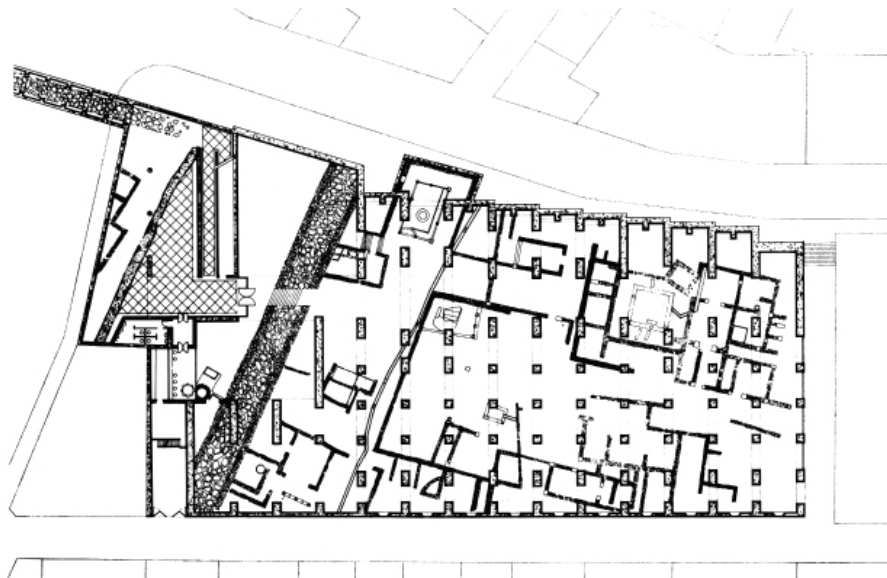
3 Interior view © Rafael Moneo, ph. M. Morán.



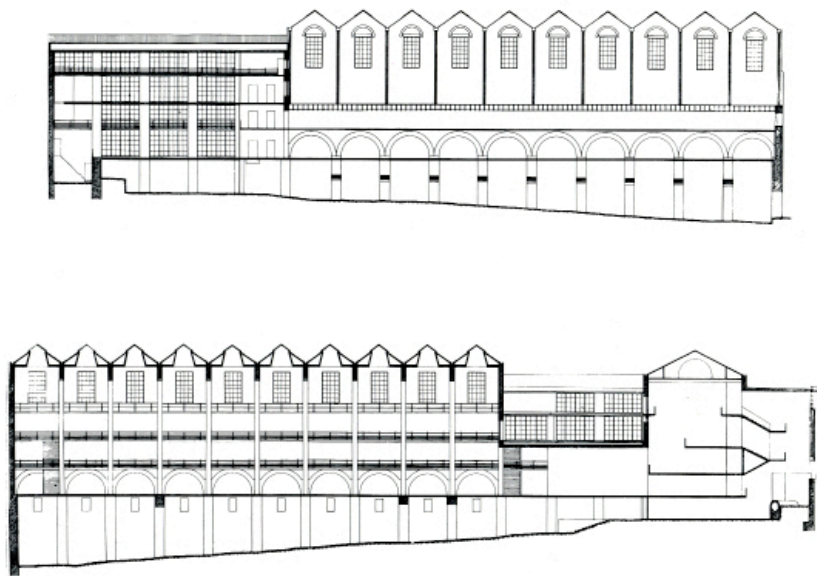
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Interior view © Rafael
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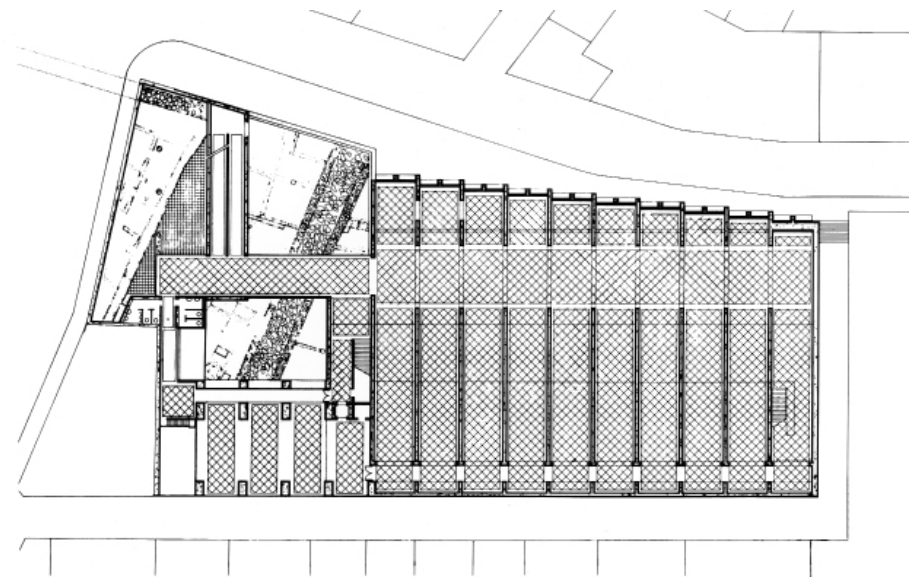
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Interior view © Rafael Moneo,
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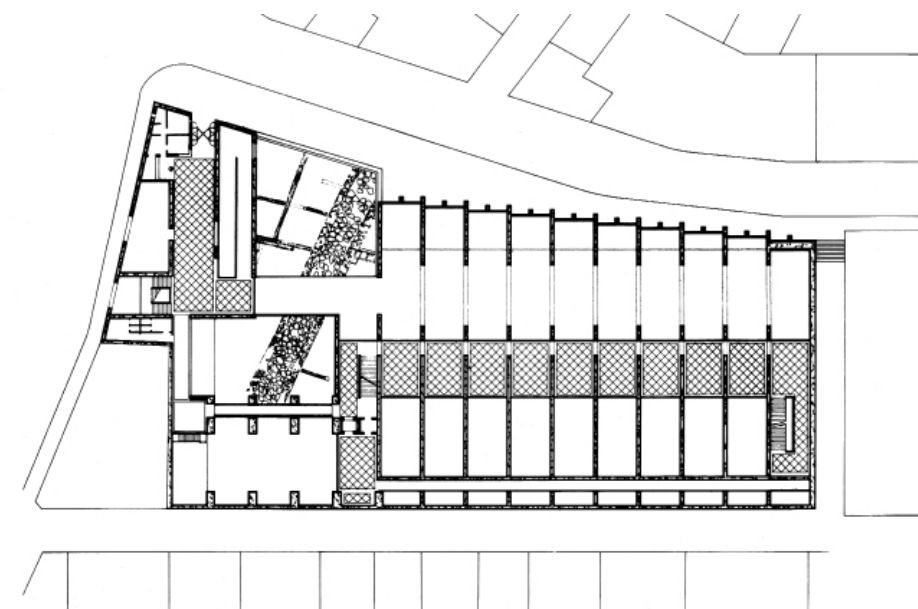
6
Plan of the ruins level
© Rafael Moneo.



7 8
Longitudinal sections
© Rafael Moneo.



9 10
Plan of the nave level and
plan of the broadwalk level
© Rafael Moneo.

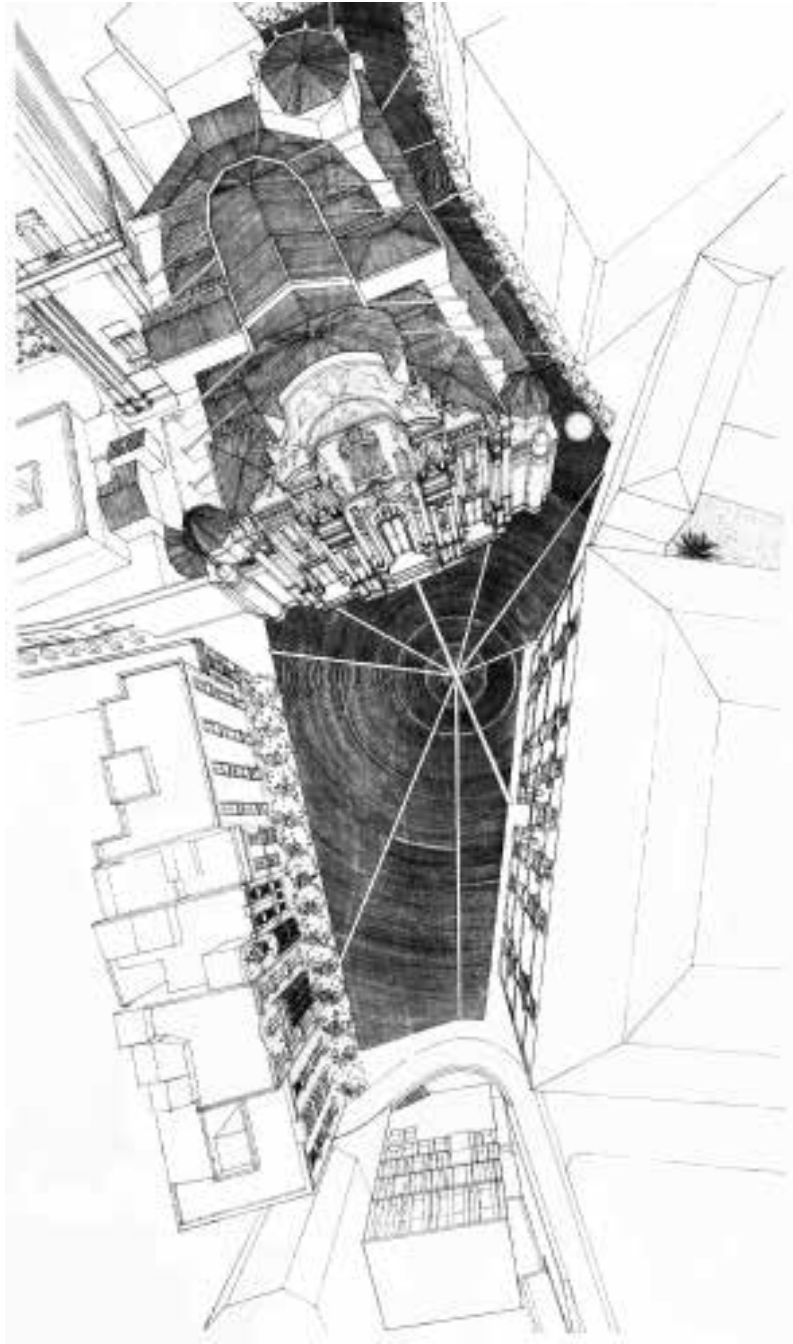




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Interior view © Rafael
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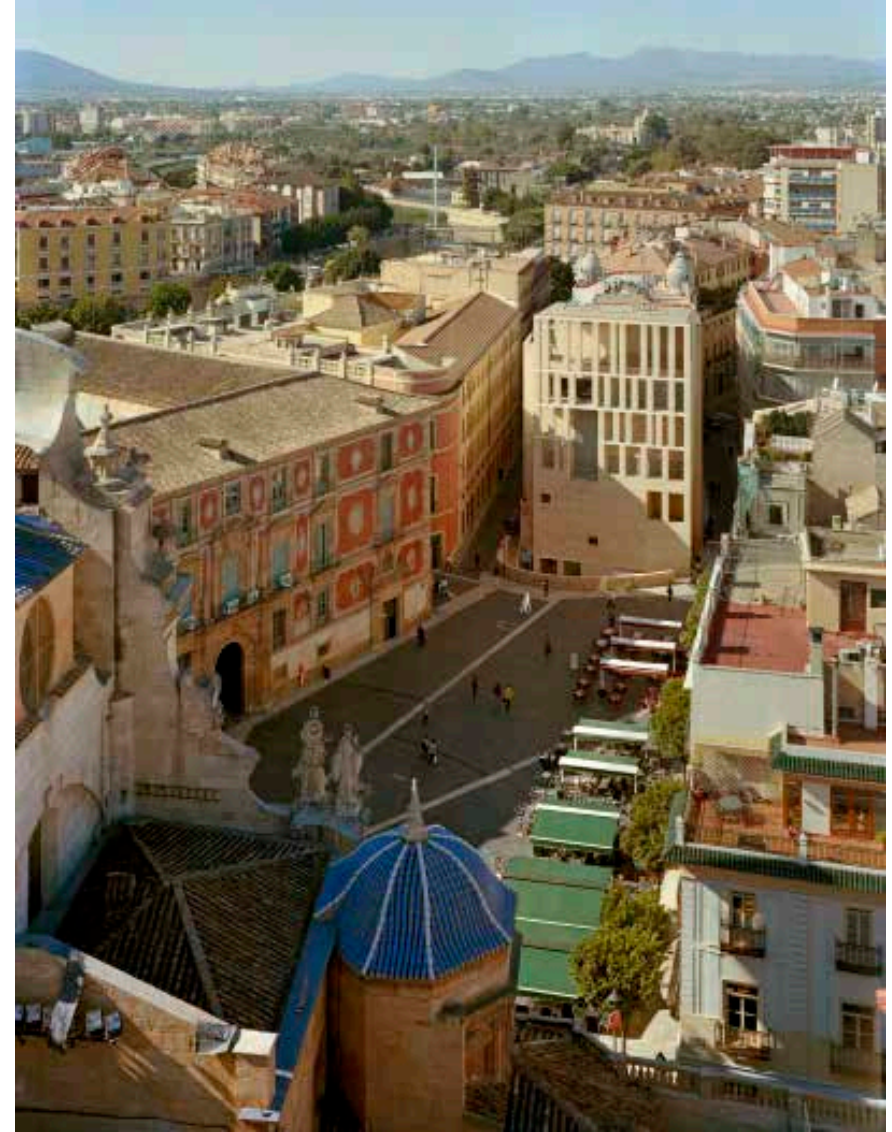


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Interior view © Rafael
Moneo, ph. M. Morán.

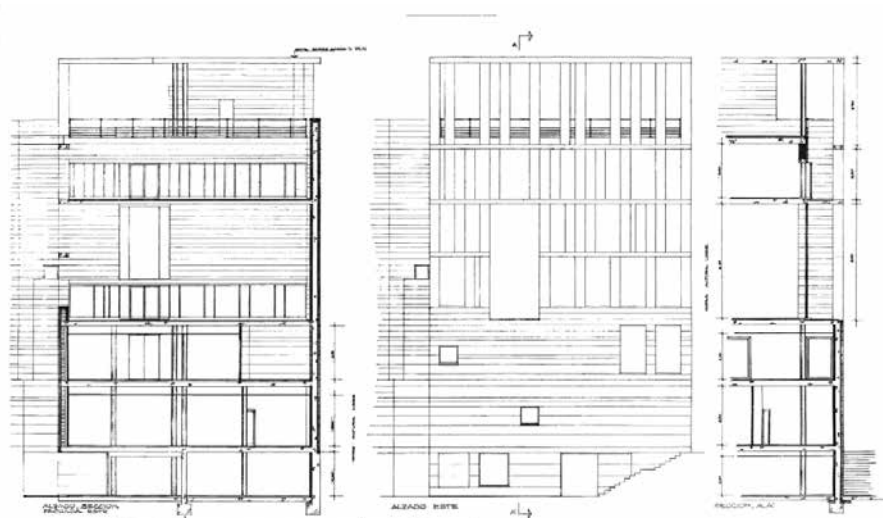


Rafael Moneo, Town Hall
(Murcia, Spain 1991-98).

13
Perspective view of the site
© Rafael Moneo.



14
Overhead view of the
square © Rafael Moneo.



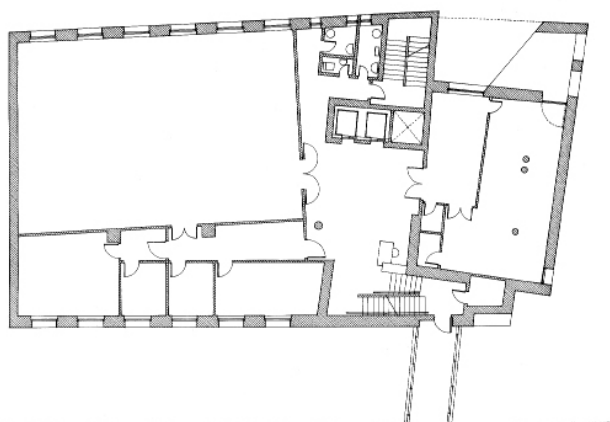
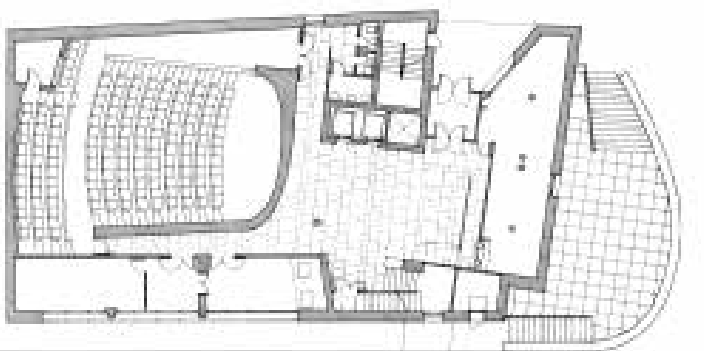
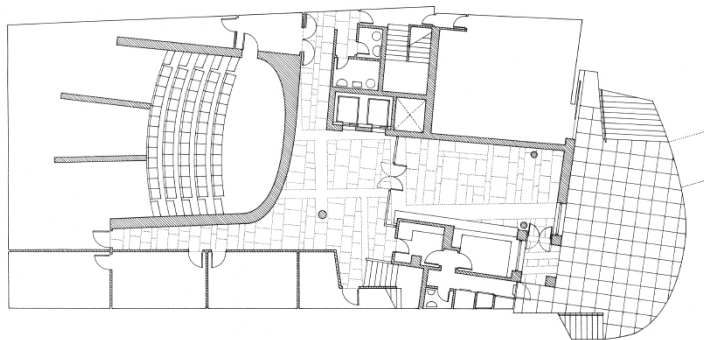
15
Transversal section and main elevation © Rafael Moneo.

16
The main front of the building © Rafael Moneo, ph. M. Morán.



17
Urban section © Rafael Moneo.

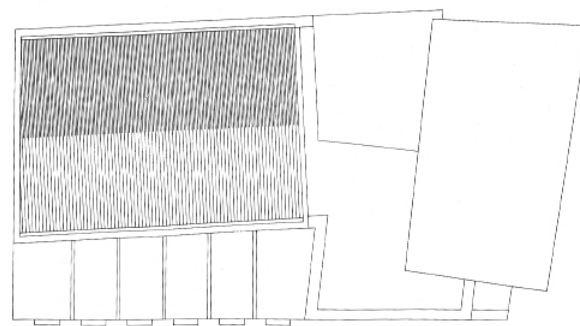
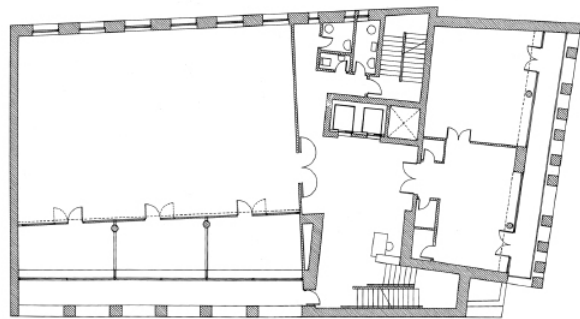
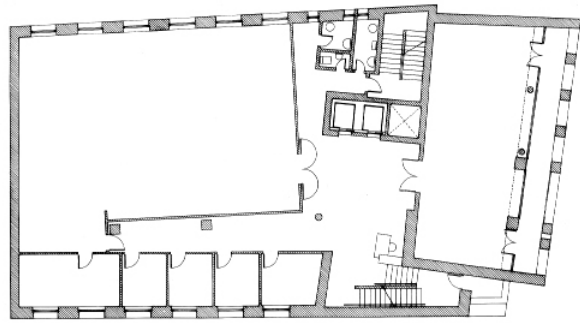
18
View of the Cathedral from the Town Hall © Rafael Moneo, ph. M. Morán.



19 20 21
Basement, ground floor
and mezzanine plans
© Rafael Moneo.



22
Exterior view © Rafael
Moneo, ph. M. Morán.



23 24 25
First floor, third floor
and roof plans
© Rafael Moneo.



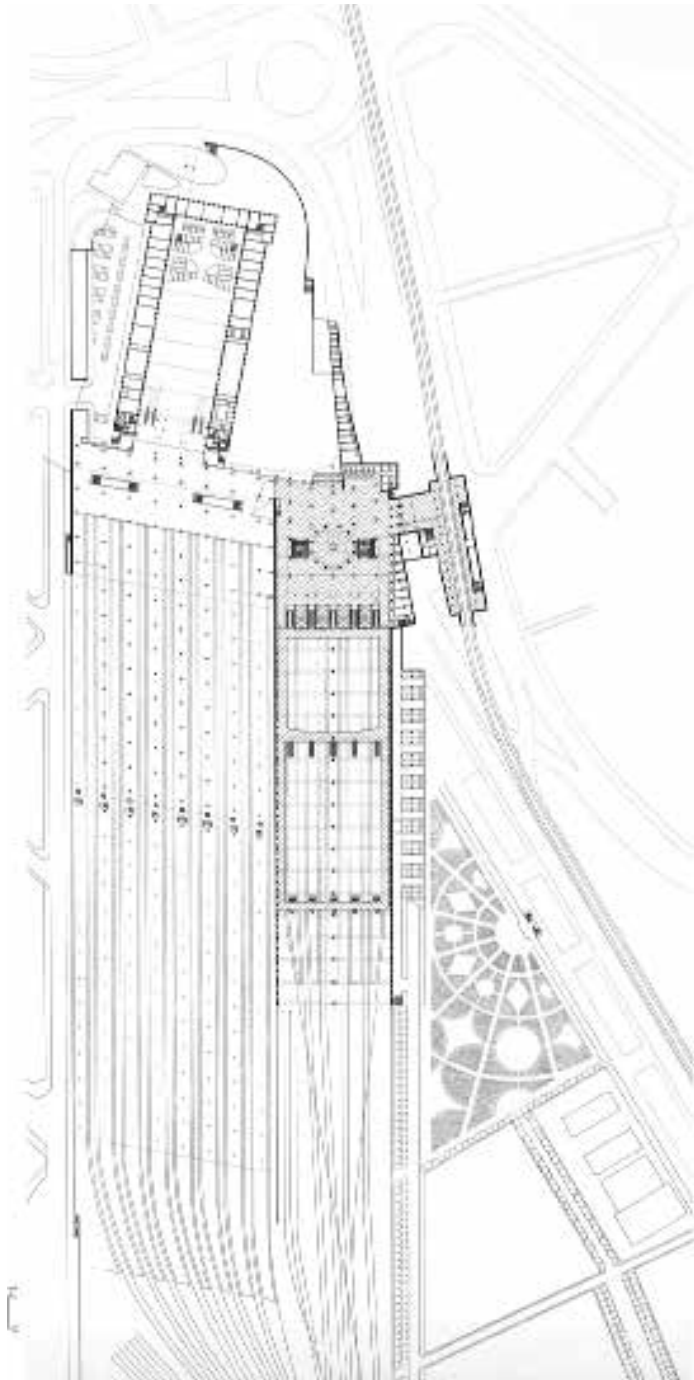
26
Exterior view © Rafael
Moneo, ph. M. Morán.



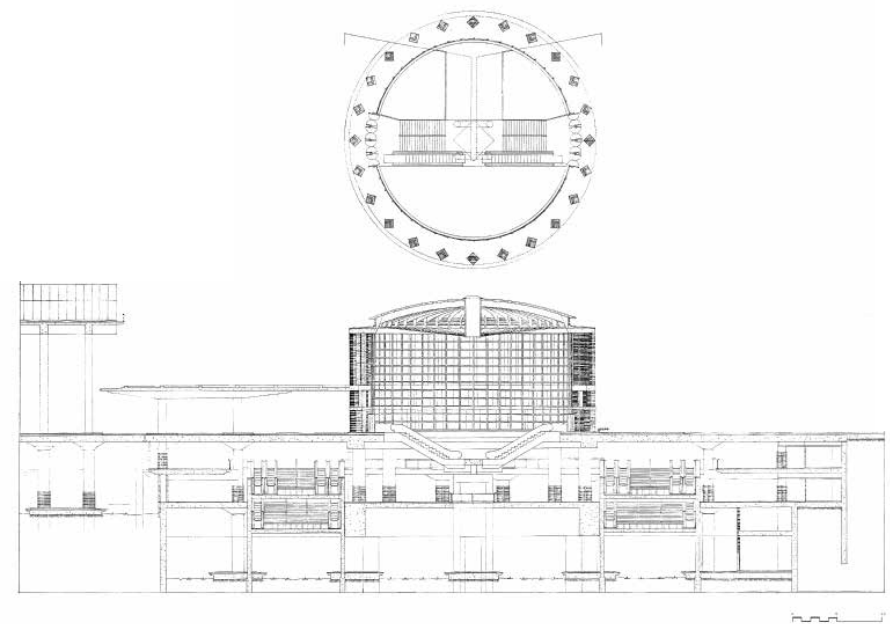
Rafael Moneo, Expansion of the Atocha Station (Madrid, Spain 1984-2012).

27

Overall view of the Atocha Station © Rafael Moneo, ph. M. Morán.



28
General plan © Rafael Moneo.



29
View of the new pedestrian
access © Rafael Moneo,
ph. M. Morán.

30
Plan and section of
the pedestrian access
© Rafael Moneo.



31
Interior view of the
new pedestrian access
© Rafael Moneo,
ph. M. Morán.



32
Interior view © Rafael
Moneo, ph. M. Morán.

Sean Godsell. Incremental Consistency

Matteo Moscatelli

Architecture, Construction, History

Considering that one of the most evident drifts of the design culture comes from the diffusion of ever more superficial approaches, where the relationship between architecture and construction is no longer seen as a field of exploration and experimentation but as the result of a mere choice from a catalogue, and where the results of these makeshift aggregations aren't expression of any individuality and specificity, an analysis of Sean Godsell's work offers an occasion for reflecting about the tools and the goals of our profession and about the importance of developing a project with the awareness of a clear method.

On the one hand, it is an exemplary reference for the attention devoted to the construction problems. This aspect is the natural consequence of a responsible approach that avoids the standardized proposal, whose repeatability produces an inexorable contribution to the progressive homogenization of taste, in favor of solutions that are always accurate, personal and appropriate with the peculiarities of the circumstances; that aims to an economy of resources intended as pursuit of essentiality, in an idea of frankness that requires «to give an account of each nut and each bolt»¹; that conceives the project in a continuous change of scale, where the indications obtained solving the joints can imply modifications also at a wider level, in a constant oscillation between the detail and the building, the cell and the organism; that finally represents the necessity of adopting a slow process for meticulously documenting the structural setting and for verifying the correctness of the connections and their coherency with the overall configuration².

On the other hand, as we can appreciate by reading his most recent writings and interviews, it is a precious lesson about the interweaving between architecture and history, according with a vision based on references that come both from his personal imaginary, as wide as the memory of the previous design experiences, and from the multiple expressions of the evolution of our discipline, that range with a large cultural openness from the settlement models of the first inhabitants of the Australian territory to the works of Western architecture masters as Michelangelo, Palladio, Le Corbusier and Terragni.

The first field is fed by his professional formation — started with his father, with whom he had the possibility of visiting the construction site since he was a child — and by the approach the daily activities of the project are interpreted with, significantly conceiving each detail as the heir of the lesson of its predecessors³, according with an incremental method based on the improvement given by the constant and patient trying and trying again, as in a permanent research laboratory. An example of a component that was progressively updated between the first and the latest interventions is the one of the cladding, that evolved from a shading device (as in the Kew House or in the Carter/Tucker House) to a shading and filtering device (as in the Peninsula House or in the CIPEA House), and moved from these configurations to a sophisticated energy source (as in the unbuilt Westwood House)⁴, hence becoming one of the most fertile trajectories of investigation in the context of his production.

The second field derives from a relationship that is even more articulated, for the typological heterogeneity of the cultural references he takes inspiration from and for the modalities their reinterpretations are applied. Three recent works in the Federal State of Victoria, where most of his buildings are concentrated, allow us to explore the specificity of these sources. They consist in one of the first and one of the latest houses he completed and, among them, one of the most important interventions set in an urban context: even if the results appear different, for the ways they are related with the place and for the experimentation with a specific typology, we can recognize the recursivity of a common methodological principle, founded on the idea of anchoring in history but, at the same time, of recombining the suggestions emerged analyzing the singularity of the circumstances and the new needs of the contemporaneity, especially the ones about the protection of the interior spaces, the energy saving and the distributive flexibility.

The Evolution of a Building Type

Located south of Melbourne, beyond the Port Phillip bay, and completed just after the opening of his firm, the Carter/Tucker House (1998-2000) is one of the few with a vertical development designed by Godsell.

Stranded into the side of a dune, a condition that determines its volumetric configuration and the organization of the accesses, the building consists of three levels: the lower one for the guests, the intermediate one for the owner, and the upper one for living and eating with a view towards the rural landscape and for the activities of a daylight photographic studio.

The project is inspired by a reflection about the transformation over time of the house, and of the parts that compose it, through an interpretation of *history as evolution of a specific building typology*.

The layout of the living environment, in particular, is the result of an investigation about the relationship between the verandah and the aisle, and about the multiple role they acquired in Eastern and Western architecture. As Godsell himself detected, Chinese, Japanese and Australian architecture show in fact different interpretations of this kind of space: in the first «the aisle is a fluid outer building continuous around the perimeter of the inner building»; in the second «the aisle (*gejin*) is not continuous when added to a structure (*hisashi*) but is a fluid space when an inner building is partitioned (*hedate*) to cause an aisle to be formed»; in the constructions of the Australian outback, instead, the aisle «is also surrounded by fluid space (verandah) which is sometimes partly enclosed by or glass to form an indoor-outdoor space (sun-room)»⁵.

The different ways of conceiving the principles of continuity and fluidity, compared with other expressions of the East Asian culture, characterize a part of the Australian house that still today is determinant for its specificity and recognizability, triggering surveys and researches also in literature, in theatre and in the arts⁶ aimed to outline its details, its different declinations and its multi-disciplinary representations. In Godsell's work, however, the verandah never appears as a nostalgic quotation or as an uncritical reproposal. It becomes instead an alternative laneway, an adaptable threshold, a flexible space without a pre-determined use, a «placeholder for a broader notion of spatial type», for using Philippe Goad's words⁷.

In the particular case of the Carter/Tucker House, the introduction of the verandah derives from a reinterpretation that makes it an implicit presence, an indirect expression, a component that was studied and then recreated using a process that is similar, according

with its author, «to that which Braque and Picasso employed in their Analytical Cubist paintings of last century»⁸.

Even if its traditional configuration is not immediately perceivable, the verandah is here a fundamental device for the interior organization. The cladding in wooden laths of the outer surface can be opened, allowing to generate a sort of tent along the whole perimeter. This homogeneous skin, apparently coplanar, can be arranged in different ways following the needs of the owners in terms of shading and visual permeability.

As in the reference that is explicitly quoted in the project description — the Nine Square Grids House in Kanagawa (1997) by Shigeru Ban, where the layout can be combined in multiple modalities, starting from the corridor formed by the overhang of the monolithic slab roof⁹ — the uses of the building imply a change of its layout through a dynamic interpretation of the interior distribution, allowing the aisle to materialize with fluidity in the façade. At the intermediate floor, for instance, the space can be subdivided in two parts thanks to a sliding wall: the aisle, defined by the introduction of a service block, becomes a room, while the bedroom becomes a verandah that, according to season, can be opened or closed thanks to the sliding movement of the panels.

The development of the fluidity is made more evident by the separation of the central service block from the sides of the volume, in order not to interrupt the flows within this zone of the house. From outside, the possibility of opening or closing the wooden texture that occupies the whole façade allows to establish new visual hierarchies depending on the observer's position. From inside, the variability of the skin allows to strengthen the effects of the light alterations during the day, thanks to the different intensities and gradations it penetrates into the building¹⁰.

The Carter/Tucker House seems in this sense emblematic of an operative strategy that has a starting point in the deepening of a typological theme as the verandah — examined in different architectural cultures and deepened in its morphological and construction specificities — and that has a result in a more abstract and indirect reinterpretation that becomes more easily adaptable to the needs of the inhabitants and to the environmental circumstances thanks to the distributive flexibility of the interior space.

The Lesson of the Masters

The second project of our survey is the RMIT Design Hub (2007-12), a composite complex that houses a series of activities connected with the design research and the post-graduate formation of the Royal Melbourne Institute of Technology.

This recent intervention, thanks also to the writings that testified its gestation, is the one where we can more clearly appreciate an idea of *history as the lesson of the masters*, from the ancient to the 20th century architecture.

The suggestion for the solution of the access, for instance, ensued from the study of Michelangelo. The front door to the RMIT Design Hub, where a small door allows to enter a wide space, derives from the door-within-a-door of the Laurentian Library in Florence (1519-34), where the big staircase can be reached through a little passage¹¹.

For the organization of the interior flows, instead, Godsell looks at the labyrinth of the *Danteum* (1938) by Giuseppe Terragni: the idea of creating an intriguing movement of people on a concealed circulation pattern is here expressed in the conformation of the stairs, that link all the levels but whose access is not immediately visible.

For its mono-material character, another mentioned reference is Le Corbusier¹². The *Couvent Sainte-Marie-de-la-Tourette* (1953-57), one of his favorite buildings, is a single and unitary structure constituted by an articulated functional program and by a refined distributive complexity. The RMIT Design Hub is characterized by the same configuration but, differently from the solitary monolith in Eveux, introduces a principle of flexibility that mirrors the idea of incidental cross-pollination fostered by the school and determines the interior layout, thought for supporting activities that, by nature, evolve, change and adapt.

For the definition of the vertical surfaces, finally, the inspiration comes from two other authors: one is Andrea Palladio, whose principle of the four layered-façade influenced directly the design of the elevations of the Archive building; the other is instead Louis Sullivan, for the importance given to the ornament in the characterization of the volume that emerges in projects as the Wainwright Building in St. Louis (1890-91) and the Guaranty Building in Buffalo (1894-96)¹³.

Besides the clarity of the imaginary its configuration descends from, the lesson offered by the analysis of the RMIT Design Hub originates also from another important methodological assumption, that consists in the way its references are reinterpreted and in the role of the differences that determine its peculiarity and contemporaneity.

One aspect naturally includes the choices of the materials for the façade, here constituted by an adaptative skin made by double glasses, an automated shading device made by transparent discs mounted on horizontal and vertical aluminum axes, and a system of air intakes and water vaporizers that are fed by the rainwater collection system on the roof and that transform it in a passive cooling system.

The other aspect regards the conception of the cladding — that turns from static to dynamic — and the periodicity of its potential modifications, that are implemented not only in the short-term as in the Carter/Tucker House, with the possibility in any moment of modifying its setup according with specific needs, but also in the long-term that coincides with the building life itself: the outer skin, in fact, incorporates an automated sun shading system and photovoltaic cells designed in order to be easily updated when the research about solar technology will be furtherly improved, with the final purpose of satisfying, in a not far future, the energetic needs of the whole structure.

The Identifying Characters of a Territory

This way of establishing a dialogue with the past, as seen in these two cases, could appear the result of an approach that is not necessarily related with the place: the suggestions are get from architectural typologies that are not properly local, and the authors we mentioned belong to the history of Western architecture and to works that are built in cities and countries that, at least geographically, are very far from this region.

The building that allows us to recognize the central role of the local culture and indeed forces us to backtrack along several choices of other previous interventions, is the House in the Hills in Barrabool (2015-18), a significant example of the interpretation of *history as the identifying characters of a territory*.

In this small structure, whose site is excised from a working sheep farm, and situated in a part of the country where the winds are particularly cold, Godsell crystallizes the necessity of protection from the atmospheric conditions that influenced the way of living of everybody has ever wanted to settle here, from the actual inhabitants to the first man who set foot in this region: «in the outback, any constructed shelter can mean the difference between life and death — shade from the intense heat, height above the flooding river», he noted in the presentation of the project, «so that these simple often weather-ravaged structures assume a more profound meaning»¹⁴.

This is the reflection that led to look for an effective answer to create a protection from the environmental circumstances, defining a sophisticated square roof whose configuration allows to provide both a screen versus the wind and a protection from the sunlight according with the different intensities and degrees that depend on the time of the day and on the day of the year. In the same way, the introduction of an isolated volume in a wide territory reminds the primordial gesture of modifying a virgin land for the first time, of marking a place in a landscape whose end is the horizon, of interacting with the temperature and the air, with the light and the shadows.

Patrick White, the Australian writer and novelist (winner of the Nobel Prize for Literature in 1973), described the unicity of moments like this in his *The Tree of Man*, offering a clear representation of the clash between ancient and new, and between natural and artificial transformations that overlapped and stratified in this barren and boundless land. The book just opens with a suggestive scene in the bush that seems to be set in the same landscape that surrounds the House: «Then the man took an axe and struck the side of a hairy tree, more to hear the sound than for any other reason. And the sound was cold and loud. The man struck the tree and struck till several white chips had fallen. He looked at the scar in the side of the tree. The silence was immense. It was the first time anything like that had happened in the bush»¹⁵.

Talking about the different expressions of history identified by Godsell, the first impression is that from a certain point of view — for the components of the local identity that evokes, that make it at the same time a shelter and a place-maker, an anonymous and a unique

construction — this is one of the projects by Godsell where we can more clearly discern the traces of the most authentic Australian identity. And probably it's just here, in the cultural synthesis that can sprout between the first colonial architecture and the regional reality of the South-Eastern Asia, where we can provide a legitimate field, using his words, «from which can emerge a genuine local architecture that both captures our past and acknowledges our future»¹⁶.

Talking about the method, instead, the House confirms the continuity of the red thread behind the interventions we analyzed until now, where history — here impersonated by any Australian inhabitant of the recent and remote past — suggests the starting point, and the incremental approach towards the definition of the details — here expressed by the level of definition of the roof system — is an essential requirement for solving with consistency, once again, contemporary necessities with updated tools and technologies.

Architecture and Time

Five years ago, after a visit in Melbourne at the RMIT Design Hub, I remember a stimulating discussion with Godsell about the importance of the temporal component in some buildings of his, starting from several words from *The Shape of Time* by George Kubler that I found quite appropriate for the reference to the relationship between permanence and mutation¹⁷ in his work.

The projects we illustrated in this short Australian itinerary, as many times highlighted, compose a lesson about the typological and construction experimentation and about the necessity of a sensibility addressed both to the human and the territorial dimension in the creative process. But in the same way, reviewing them through Kubler's words, they suggest how important can be the role of time — the one that is just passed, and the one that is yet to come — in the definition of a method.

Looking forward, time is here conceived as the place of the possible scenarios, an aspect that emerges in the choice of interior spaces that can change according with the needs of the user (the Carter/Tucker House), of technological components that can be substituted following the evolution of the research (the RMIT Design Hub), of

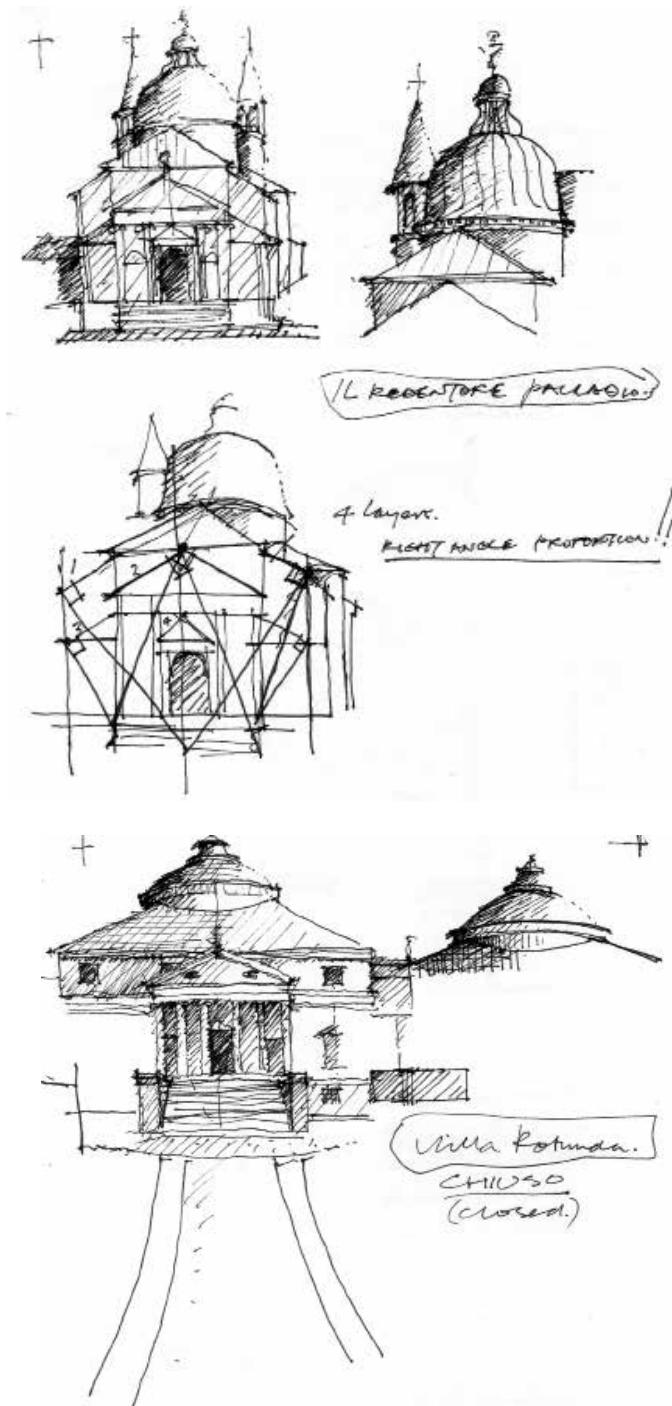
devices that can be opened and closed to provide shade or to protect from the wind (the House in the Hills), and that determine mutations that can develop both in the short time of the day — making the building a kind of hourglass of time¹⁸, as underlined by Francesco Dal Co — and in the long term of the years, ready to integrate the upgrades of the technological evolution.

Looking backward, time is instead intended as the place of memory, the product of the fertile superimposition of references that can be direct or indirect, individual and common.

In Sean Godsell's work, for the impressions aroused by these almost thirty years of activity, what develops and grows over time, what inspires and defines a way of approaching the design phase, is therefore not only the refinement of the details, their harmonic integration in the built organisms and their remarkable technological complexity. But it is also, examining the intentions behind their conception, the equally important connection with a multifaceted cultural identity like the Australian one. That is constituted by history and traditions, alternations and overlappings, and whose peculiarity is the result — as we recorded in these works — of an intertwining between aboriginal and colonial culture, between western and eastern references, between new ways of building and new ways of living.

- 1 F. Chiorino, «Il vecchio ponte della ferrovia rivive», *Casabella*, 807, 2011, p. 27.
- 2 L. Van Schaik, «A conversation with Sean Godsell», *El Croquis*, 165, 2013, p. 18.
- 3 «This is evidenced for example in the ongoing refinement of the outer skin in my work where each new building inherits information from its predecessors». S. Godsell, «About the project representation», *Casabella*, 763, 2008, pp. 123-124.
- 4 From an interview with the author, 14 September 2020.
- 5 J. Pallasmaa, «Sean Godsell's tough subtlety», *El Croquis*, 165, 2013, p. 29.
- 6 P. Drew, *Veranda: Embracing Place*, Angus & Robertson, Sydney 1992.
- 7 P. Goad, *Finding Australia*, in S. Godsell, *Houses*, Thames & Hudson, London 2019, p. 12.
- 8 J. Pallasmaa, *op. cit.*, p. 29.
- 9 S. Godsell, *Houses*, Thames & Hudson, London 2019, p. 35.
- 10 M. Daguerre, *Twenty Houses by Twenty Architects* (2003), Phaidon Press, New York 2005, p. 89.

- 11 L. Van Schaik, *Sean Godsell: Enigma vs stravaganza*, in *Sean Godsell. Opere e progetti*, Electa, Milan 2004, p. 25.
- 12 From an interview with the author, 14 September 2020.
- 13 L. Van Schaik, *op. cit.*, 2013, p. 9.
- 14 S. Godsell, *op. cit.*, 2019, p. 175.
- 15 P. White, *The Tree of Man* (1955), Penguin Modern Classics, London 1978, p. 9.
- 16 S. Godsell, *Local Architecture*, in S. Godsell, *Houses*, *op. cit.*, p. 20.
- 17 «Human desires in every present instant are torn between the replica and the invention, between the desire to return to the known patterns, and the desire to escape it by a new variation». G. Kubler, *The Shape of Time*, Yale University Press, New Haven and London 1962, p. 72.
- 18 «The enclosures of Godsell's constructions function like hourglasses; measuring the passage of the hours, they make their function explicit by generating figures that the planes send back as images that spring from the slow movement of the life on the patterns that transform it into shadows». F. Dal Co, «Disconcerting suitability and efficacy of intelligence», *Casabella*, 815-816, July-August 2012, p. 161.



I
 Sean Godsell's sketches
 (1985) of *Chiesa del
 Redentore* and *Villa Rotonda*
 by Andrea Palladio © Sean
 Godsell Architects.

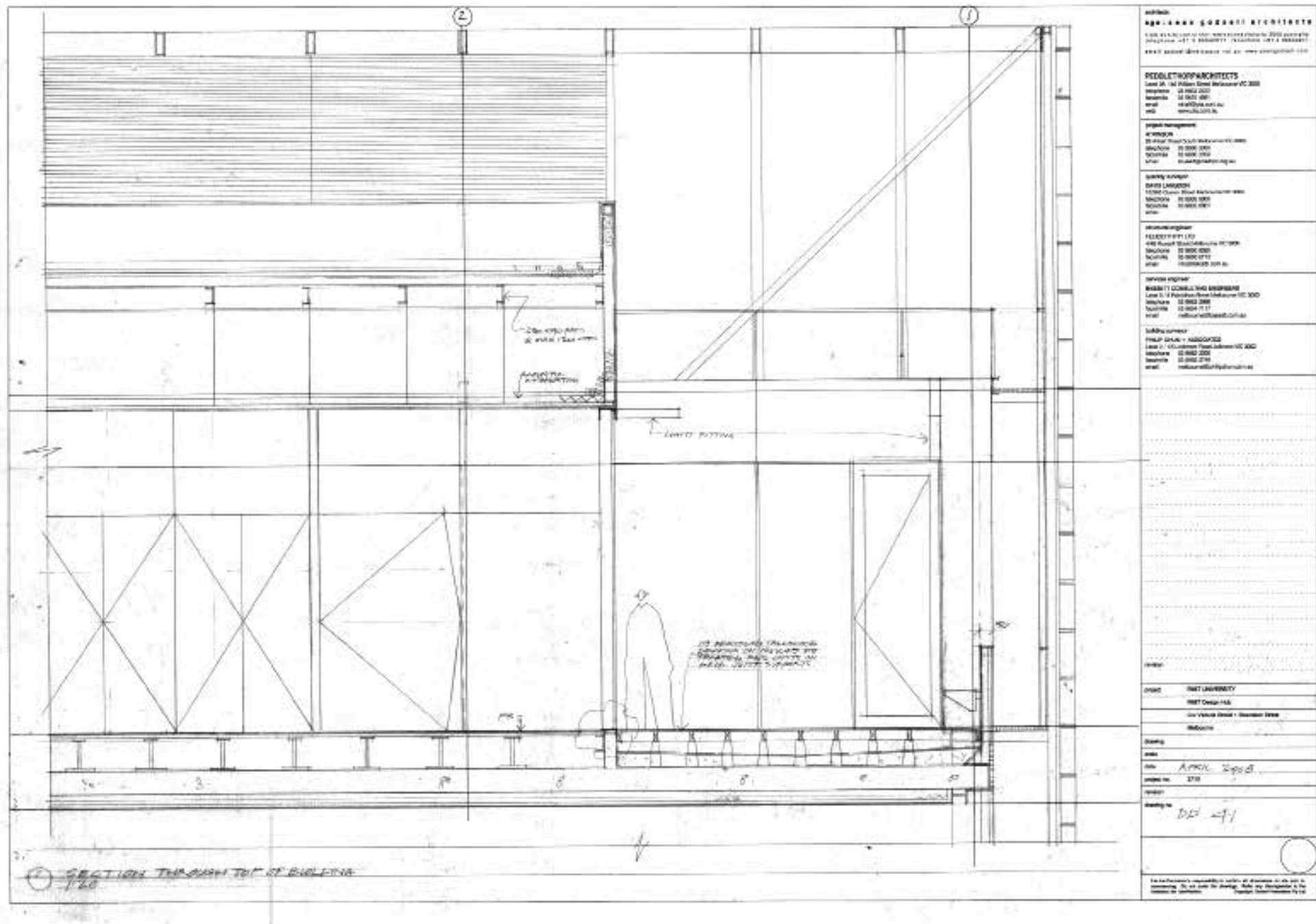


Sean Godsell, Carter/Tucker House (Breamlea, Victoria, Australia 1998-2000).

2 Exterior view with the operable screen open © Sean Godsell Architects.



3 4 Exterior view of the Eastern and of the South-Western façades © Sean Godsell Architects.

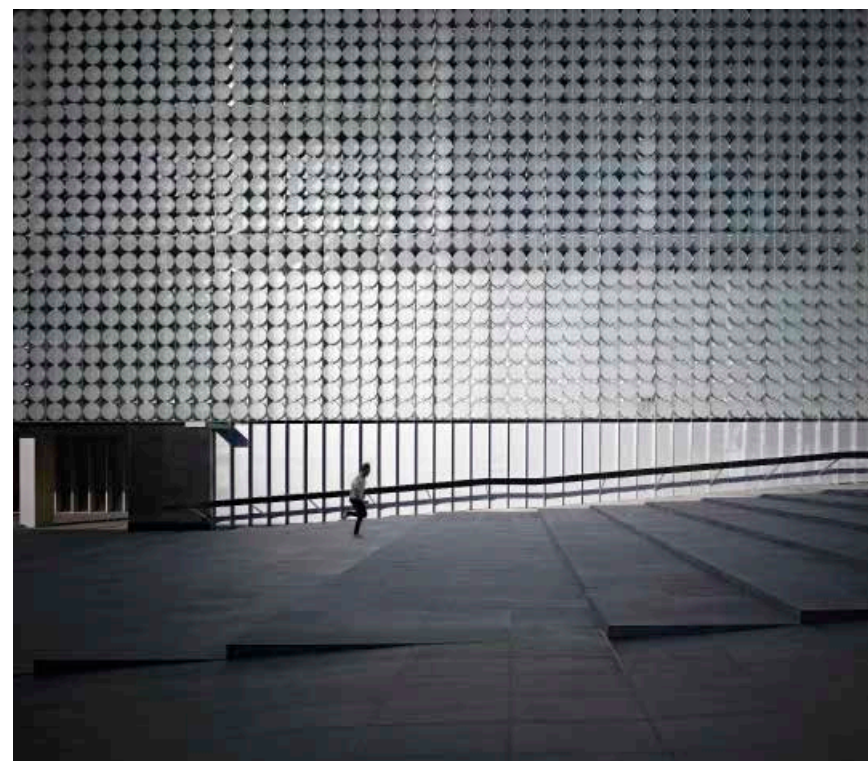
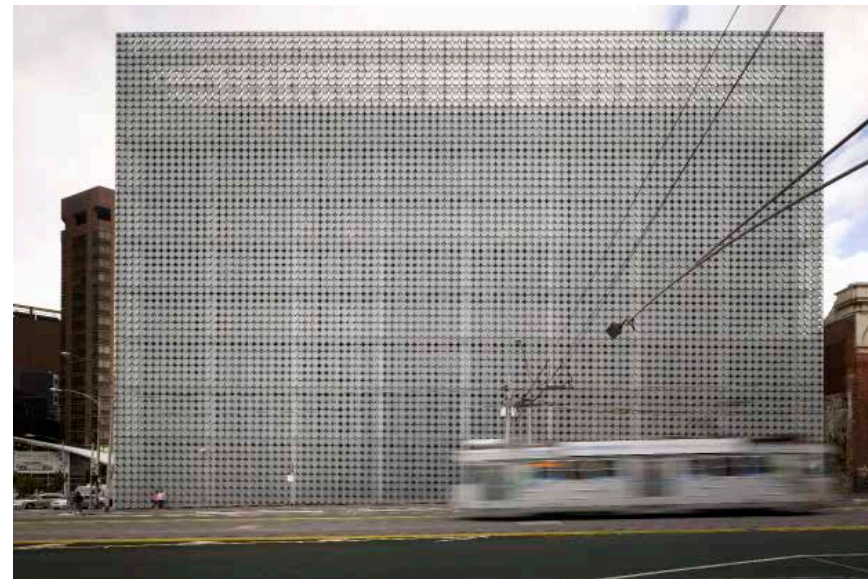


Sean Godsell, RMIT Design
Hub (Melbourne, Victoria,
Australia 2007-12).

5
Section of the upper
level © Sean Godsell
Architects.



7
Entrance of the archive
building © Sean Godsell
Architects.



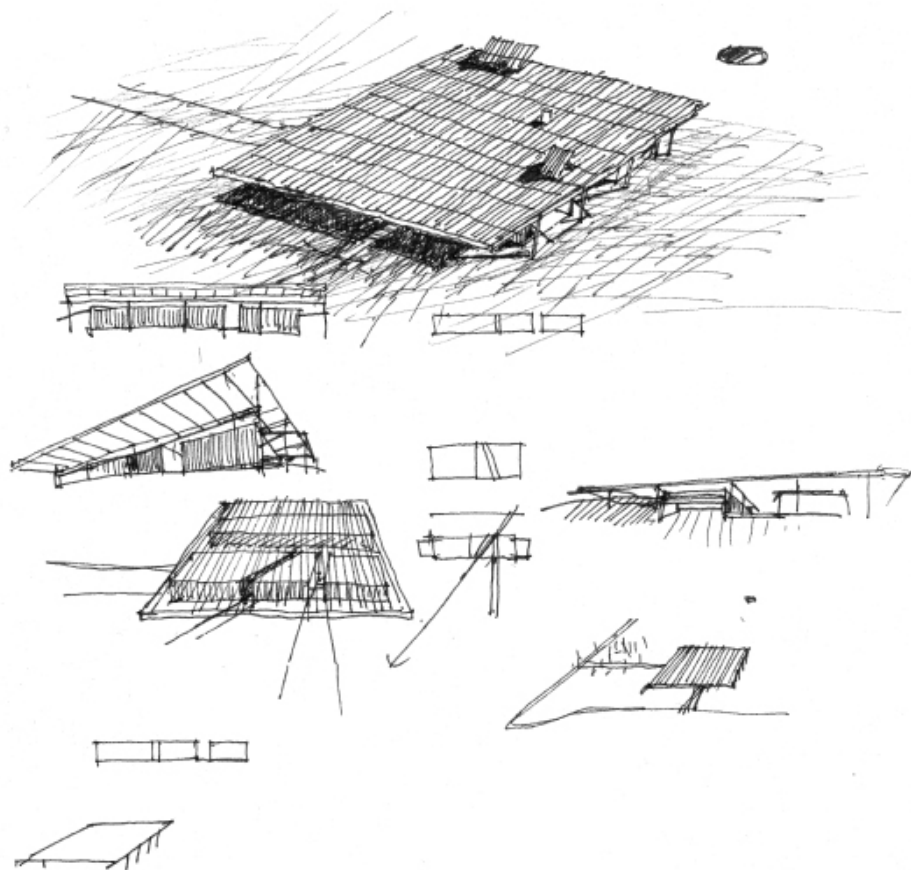
8 9
View of the Eastern and
of the Western façades
© Sean Godsell Architects.



10
The loggia of the archive
building © Sean Godsell
Architects.



11
The roof terrace © Sean
Godsell Architects.



Sean Godsell, House in the Hills (Barrabool, Victoria, Australia 2015-18).

12 The architect's sketches of the parasol roof © Sean Godsell Architects.



13 14 15 The roof screens, closed and open, and the exterior view © Sean Godsell Architects.



16 17
Interior views © Sean
Godsell Architects.



18
The protected outdoor
space © Sean Godsell
Architects.

Paulo Mendes da Rocha. What is Architecture?

Martin Corullon

— *Tu pisavas nos astros, distraída
Sem saber que a ventura desta vida
É a cabrocha, o luar e o violão¹.*

The search for definition is the very definition of our work. However, by working with Paulo Mendes da Rocha we learned that, in addition to definitions, we always must pursue architecture as an instrument of political action and of transformation of the world.

This unanswered question — what is architecture? — is permanent in the everyday practice of architecture. The conventional training of the architect opens up thousands of possibilities: work in public institutions and governments, luxury interior design, ephemeral structures, regional development plans, residential projects, establishment of urban policies for development and social housing, artistic work and many other possible projects. The question could also take on the formulation: «What projects do we want to do?». But which perspective shall we look from to evaluate the almost infinite possibility of projects which we could devote ourselves to?

This is the very way I follow to evaluate the fundamental importance of those who came before us: they are permanent references when making choices, taking positions, and facing the projects that arise as possibilities. From this point of view, Paulo Mendes da Rocha has been a great presence. Not only for those who worked daily with him, but for all those who came in contact with his coherent and accurate attitude in this ocean of possibilities — so as were, in their time, both Vilanova Artigas, architect and professor, and Flavio Motta, philosopher and professor, who somehow intervened in the formation of Mendes da Rocha's worldview.

I had the privilege of having a long professional relationship with Paulo Mendes da Rocha — since 1993, still as a student, to the recent days — developing projects and practicing in an interaction that shaped my vision about the facts of the world, beyond the profession, escaping from the stereotype of the master apprentice relationship. A relationship like the one I am referring to has both an affective, subjective dimension and an objective, technical dimension. This is a dimension that gives someone the tools not only about «how» to do, but mainly about «what» to do.

In this text, therefore, I would like to make a reflection on these less obvious dimensions of his influences. In the last twenty years, the work of many important Brazilian architects turned out to get again a certain resonance in the global architectural culture. After the period of great attention to the work produced until the 1960s, Brazil became somehow self-isolated from production in the rest of the world.

Led by Oscar Niemeyer and driven by the unlikely construction of Brasília, with the radical plan by Lucio Costa and its very original palaces and buildings, that period of Brazilian architecture represented a dissonant event in the overall history of modern architecture. It was only at the beginnings of the new millennium, however, that important Brazilian buildings — such as the ones that Lina Bo Bardi and Paulo Mendes da Rocha designed starting from the 1960s — became the object of a new curiosity and recognition outside Brazil, putting the country back again in the worldwide debate.

A new generation — in which I include myself — circulates quite actively amongst schools, lectures and international events, and from my particular experience in this environment I could notice some surprise with the rather explicit connection between contemporary production and the production dating back to forty or fifty years ago. Outside Brazil, the production of the last century became history and, as such, it is considered only as a reference, often appreciated just for its formal aspects or for quite different reasons than the meaning this production really had at that time. We the Brazilians, on the contrary, maintain an attitude towards many issues and questions, and a way of thinking and designing that is highly affected by a specific tradition.

This phenomenon may have been forged in this context of isolation I was referring to, but it is also linked to the peculiar circumstances of our urban environment and the technical conditions of a country standing in the periphery of development. We have never had the classical tradition or the technological advancement of the European and North American countries. In addition, some Schools of Architecture, as it is the case of FAUUSP, originated in the Polytechnic School and not in the Fine Arts School — like it generally occurred in several other countries around the world.

Our architecture therefore deals less with the formal and compositional aspects, or visual aspects, and much more with its constructive,

structural and infrastructural aspects, although it has a very incipient, very rudimentary construction industry. These unique paradoxes and circumstances are quite peculiar characteristics that have passed down between successive generations of architects.

Hence, in the foreign view about our production, it is also common to notice an emphasis on certain aspects that we do not value so much, such as the proportions, or the quality and appearance of the used materials. They do not understand the matrix of our architecture and often their perception is limited to the visible, related to their own categories.

Our matrix loads the architecture that we produce with an urgency and a very peculiar political dimension: the one of thinking about architecture as a transforming tool of the world around us, relying on scarce resources, and not as an erudite research into the history of architecture itself; as a way to transform the territory, the nature, be it the virgin forest or the built nature, in the form of our cities — this violent and unequal process, fruit of a colonial mentality still extremely present today. In these processes, the projects we can think of act as «things», a transformed matter that in its turn has the capacity to transform life. This idea is perhaps the most valuable lesson I learned in the years of working with Paulo.

MuBE

I first collaborated with Paulo Mendes da Rocha in the project for the Brazilian Museum of Sculpture (MuBE), in São Paulo. It was 1994, in the final phase of construction, and it was up to me to design the bodyguards and handrails that became a reference detail for several projects.

The museum is built taking advantage of the natural four meters slope of the site, which an open public square levels to its highest elevation, determining a partially hypogeal space where the program of the project is fully accommodated. Above this square, a 40 meters span suspended slab, 1,80 meter thick, with no direct relationship with functional spaces, produces a shaded area and a mark on the landscape. This great «flying stone» acts as a synthesis of some operations that are so characteristic of Brazilian architecture.

Spaces without a name or defined function, open to spontaneous appropriation, give the main meaning to several fundamental buildings in our recent history, such as the marquee of Parque Ibirapuera, built by Oscar Niemeyer in 1954, the Faculty of Architecture of the University of São Paulo, with its great central hall, designed by João Batista Vilanova Artigas in 1969, or the Art Museum of São Paulo (MASP), realized by Lina Bo Bardi in 1968, with its span-free suspension that opens the main avenue of the city to the public use and to the landscape.

Expo 70 Osaka

The project for the Brazilian pavilion at the Universal Exhibition in Osaka, Japan, designed by Paulo Mendes da Rocha in 1969 and built in 1970, finds its original memory in a quote of *Chão de Estrelas*. A wide concrete cover, with two large beams and a roof pierced by skylights allowing the sunlight through, lands on only four supports. These supports look like dunes, as the terrain forms gentle hills on which they rest. Under this great cover, an exhibition was installed running through the history of art produced in Brazil, following an itinerary designed by Flavio Motta which represented the great tragedies and the great richness of the Country. The sun, when passing through this translucent grid, projected on this uneven floor a screen of light points, just as the moon crossed the zinc ceiling in the popular song by Silvio Caldas, whose final verse says:

— *A porta do barraco era sem trinco
Mas a lua, furando o nosso zinco
Salpicava de estrelas nosso chão
Tu pisavas nos astros, distraída
Sem saber que a ventura desta vida
É a cabrocha, o luar e o violão².*

How to provide a hundreds-of-tons-heavy concrete structure of an amount of poetry apt to comment and to highlight in a different way the conflicts so present in our daily life? How to transform inert matter into something that dialogues and directly transforms the ways of using the city, the ways of perceiving it?

This ability to associate poetically such powerful images to a work of architecture is enormously worth. Not only for the beauty of the associations, but for the ability to unite popular culture with high-ranking engineering, allowing all knowledge to collaborate in the construction of a new meaning and of an erotic vision of existence.

Cais das Artes

More recently, in 2007, we started a project in Vitória, capital of the state of *Espírito Santo*: a commission from the state government for an art museum and a large theater in the city where Paulo Mendes da Rocha was born in 1928.

In this project, which I had — still very young — the privilege of coordinating from the initial concept to the building phase, some of the recurring characteristics of Mendes da Rocha's work are present. A structure with a large span, suspended from the ground, allows free access to the entire floor of the area in which it settles, and incorporates in a permanent way the landscape into the spaces of the complex. In this case the landscape is simultaneously natural — large granite masses that emerge from the sea — and built — the Jesuit convent on the top of the mountain and the cargo ships sailing towards the port of Vitória.

In the *Cais das Artes*, the relationship between nature and construction appears again, explicit and reinforced, in the settlement and in the shape of buildings, and becomes also loaded with affections and memories of the very life experienced by Mendes da Rocha in those same enclosures, since childhood.

With maturity, there seems to be a purification of the understanding of the world, a reduction to essential ideas. Without simplifying, the absurdities of the world are expressed in a direct and not at all complex way: the stupidity of individual transport clogging the cities, the profound contradiction between the idea of teaching and the possibility of making a profit from it, the statement that cities are built to make conversation possible, or that those who are afraid of the city center are afraid of freedom. These are all simple formulations that, if taken up in fact by everybody, would make the world a very different place, in a radicality that does not bend to apparent complexity.

These tiny examples, listed here, of the way of being and thinking of Paulo Mendes da Rocha were repeated by him whenever he had the opportunity to speak publicly. However, it is not just an intellectually constructed discourse. It is an inseparable part of his way of being. It is a consequence of a way of doing things — quintessential of architecture — that is thought of in the very moment it's being done.

The way we work varies greatly among ourselves. The very way of doing a project may be invented again every time. Generally speaking, we start from a description of an architectural object, which was formed from a very clear idea about what is the problem that a specific project wants to give an answer to. Starting from this description, often without a drawing or a model, in the office we make a first test, from which we will debug the solutions in working sessions together, on the computer screen. As a matter of fact, the design sessions become moments where the relations between the making of the material thing and the meaning it may acquire in the field of political action are put into practice. And the idea, the original intention, remains intact throughout the process. The form varies, if unfolds, the technical solutions are improved, the project formalization continues being in process for some time, until it reaches a point where it resolves the functional issues, the structural coherence etc. But at no time the purpose — the idea that supports that project — disappears from the horizon; it rather remains until the end. And this radical coherence is a virtue that we pursue in our practice and that seems, occasionally, unreachable.

1 «You stepped on the stars, absent-minded / Not knowing that the bliss of this life / It's the young mulatto girl, the moonlight and the guitar», Extract from the song *Chão de Estrelas*, by Silvio Caldas and Orestes Barbosa (1937).

2 From the same song: «The shack door had no lock / But the moon, piercing our zinc / Sprinkled stars on our floor / You stepped on the stars, absent-minded / Not knowing that the bliss of this life / It's the young mulatto girl, the moonlight and the guitar».



12
João Batista Vilanova Artigas,
*Faculdade de Arquitetura e
Urbanismo da Universidade de
São Paulo* (Brazil 1961-69).





Paulo Mendes da Rocha,
Museu Brasileiro de Escultura,
 MuBE (São Paulo, Brazil
 1987-95).

3
 Overview of the ground
 level scape.



4 5
Overview of the ground
level scape.



67
Overview of the ground
level scape.



Paulo Mendes da Rocha +
Metro Arquitetos, *Cais das Artes*
(Vitória, Brazil 2007-ongoing).

8 Overview of the area.



9 Detail of the construction
site.

Diébédo Francis Kéré. Primitive Forms of the Contemporary

Alessio Battistella, Camillo Magni

In recent years it has been possible to detect great interest on the part of architects operating in the Western world regarding the architecture being made in the «South». This interest is also confirmed by a stimulating debate, where one of the most significant moments was the Venice Biennale of 2016. The focus can be attributed to various factors: the originality of the solutions, resulting from research in which the responses are produced by design culture, rather than absolute faith in technology; freedom of expression, where constraints are seen as part of the disciplinary ambit itself, more than a system of often anachronistic norms; and a sort of pursuit of meaning in relation to the profession of the architect, which leads to immediate effects in terms of social sustainability.

In this framework, Diébédo Francis Kéré represents a special case, because he was born and raised in the South of the world, in Burkina Faso, but was trained as an architect in Germany, where he works today. This pathway makes him the perfect intermediary between two worlds. His work is strongly rooted to places, in an awareness of what it means to interpret specific locations in the construction of the identity of specific communities. Likewise, Kéré demonstrates conscious mastery of the tools of composition, which lead him to develop his own language that has become a reference point among architects operating in the Western world. Kéré is a careful observer of the reality in which he intervenes, able to interpret its landscape, materials and customs, the people who will inhabit the buildings, and the construction systems, combining knowledge acquired in Europe with traditional methods. This approach enables him to interpret the most appropriate technologies, namely those that best respond to the cultural, social, economic and technological context in which they are applied, in terms of production and maintenance. Therefore the best response to a technical problem is not the one that is most advanced in technical terms, but the one that is most adaptable to the context, and capable of augmenting its autonomy. This interpretation has been clarified by the German philosopher and economist E. F. Schumacher, in his 1973 publication *Small is Beautiful, Economics as if People Mattered*, in which, through the concept of «intermediate technologies», he identifies correct praxis in terms of the mediation between the primitive technology of developing countries and the advanced technology

of the so-called developed nations. To explain the application of this to architecture, it seems useful to turn to the definition Enrico Guidoni provides for primitive architecture in his 1975 publication, *Architettura primitiva*:

- The expression of the spatial activities of a pre-state society that occupies a given territory while conserving a high degree of economic-political independence with respect to other societies with which it is in contact. The definition in these terms has the advantage — since it does not rely on the external aspects of architecture, but on the economic-political structure that produces it — of getting past the old misunderstanding of the “primitive” as an inferior cultural level, a phase left behind by the more advanced societies.

This is a fundamental point if we want to understand the importance of Kéré’s contribution to the architectural debate today. To get beyond a supposed hierarchy between architecture conceived and implemented in Western countries and architecture designed and implemented in the countries of the South of the world is fundamental for an objective reading of architectural quality.

One area of research that is yielding more and more stimulating impressions observes primitive architecture as an independent praxis that generates independent systems, in turn. We are thinking about the work of Julia Watson, *Lo—TEK: Design by Radical Indigenism*, published in 2020, where the search for a set of forms of expertise, practices and beliefs passed down in primitive cultures over time reveals refined systems capable of functioning in a sustainable way inside complex ecosystems. Kéré’s work represents the synthesis of types of knowledge derived from primitive architecture and interpreted through a contemporary language, in which his European training is perceptible.

Before him, there was a master architect who traced a pathway for sustainable development based on economic-political independence from other cultures. Hassan Fathy, with his theoretical work and experimentation in architecture, shed light on the quality of works made with local materials and techniques, adapted for contemporary languages and uses. The Egyptian architect did not passively submit to

the influence of the dominant Western culture, but made it his own, interpreting it and adapting it to the context.

Just as Hassan Fathy was able to find the natural interpretation of his own space-time in primitive architecture, so Kéré becomes the natural interpreter of his own places of origin. His architecture has its foundations in the fundamental reasoning of construction and protection from the environment. Nothing is granted to form as a gratuitous end in itself.

As often happens among architects operating in the South of the world, the form is suggested by the techniques utilized and the nature of the materials. Therefore, as forcefully characterizing elements in Kéré’s projects we find large bases to protect against rain and humidity rising from the ground, and wide roofs required for protection from sunlight and rain, whose water has to be recovered as preparation for inevitable drought. Designing in these places means going back to basics in order to maximize results. Here we can observe the primal meaning of construction, where every gesture, every detail is the consequence of a process of knowledge based on experience. In Kéré’s buildings we can recognize the archetype of shelter, in which the form is a direct consequence of the relations with the environment in which that shelter is inserted and from which it protects itself.

To describe and understand the various themes that set the character of the works of Francis Kéré, on the following pages we will attempt to analyze in greater depth four works of architecture produced in recent years. They are buildings quite different from one another, built in Burkina Faso over a very wide time span: from the early experiments in 2004 to the latest, more sophisticated constructions in 2019. In spite of the differences, we can clearly perceive shared characteristics that set the design work of Kéré apart.

Lycée Schorge Secondary School, 2018

Located in the third most populous city of Burkina Faso, the Lycée Schorge Secondary School attempts to set a new standard of excellence in education for this region. Kéré’s objective is to come to terms with the memory of primitive architecture, to project it into the contemporary world through an innovative design that can become an iconic landmark.

To do this, the use of materials takes on a fundamental role. Local materials represent a direct relationship with the memory of places, narrated through textures, colors, heaviness or lightness. Materials make a direct link to history and trace a path for the contemporary. In this case, the use of laterite, a local rock type rich in iron and aluminium, gives the building a particular reddish hue. The material is easy to shape in the form of blocks and provides excellent levels of thermal inertia, translating into environmental comfort. The whole building is wrapped in a system of sunscreens made with eucalyptus wood, a widespread local species used to create a sort of second skin for the building. The system prevents overheating of the walls, creating a shady zone while above all generating a space for socializing. This circulation system surrounding the building becomes a place in which to spend time, a reference point for the community, in which to wait for the start of classes or to gather when the school is closed. It is a semi-public buffer zone, a sort of hybrid between the loggia and the portico. With this operation Kéré redefines the hierarchy of front and back, granting equal importance to the two façades that thrive on different uses and functions.

The circular footprint of the building is the result of observation of the context, where the typical central layout of buildings responds to the need for protection against wind and dust. The central arrangement becomes an opportunity for the creation of a public space to host informal gatherings, assemblies and celebrations, for the school and the neighboring community. The nine modules that fan out to form the building are joined two by two with a triangular vertical element that permits rotation of the classrooms, making the building introverted and creating a protected circular central space. These vertical parts function as wind towers, regulating the internal temperature of the rooms, while also taking on a forceful formal value, becoming true landmarks for the surrounding territory.

In the Lycée Schorge we can find various solutions aimed at boosting the building's level of comfort: the wind towers, the cross-ventilation combined with a low-tech system of cooling through evaporation, as well as shading systems and the thermal inertia of local materials. These are all solutions that should not be interpreted exclusively in technical terms, because they make explicit reference to the

history of these specific places, a heritage of memory whose roots lie in primitive architecture.

The Center for Health and Social Welfare, Laongo, 2012-14

The second project analyzed stands out for the originality of its design and for its distance from the traditional approach used by Kéré. It is the new Center for Health and Social Welfare built in the surprising village of Laongo, as part of the Opera Village project.

The Opera Village is an extraordinary local architectural experiment, the result of collaboration between Francis Kéré and the late Christoph Schlingensiefel, the iconic theater and film director and a key figure of the German cultural scene. Schlingensiefel was first drawn to Kéré by his fascination with the element of participation that underlies many of Kéré Architecture's projects, which he likened to Joseph Beuys' idea of social sculpture.

An integral part of this experiment has been the construction of a new Center for Health and Social Welfare geared towards providing basic health and medical resources for the local population in Laongo and the surrounding areas. The project stems from very clear typological reflections: a dense construction formed by the succession of many rooms organized around three small patios that define the layout of three functionally separate areas. The center consists of three units organized around a central waiting zone: dentistry, gynecology and obstetrics, and general medicine.

The facility has been provided with examination rooms, inpatient wards and staff offices. Special attention has been paid to visitors and families of patients, thanks to several shaded courtyards for gathering and waiting. Each sector is covered by a large roof with an opening at the middle to bring light into the central patio. This solution increases climate comfort for the interiors, through the construction of spaces protected from solar radiation, and through the ventilation of the internal spaces through the patios.

The playful fenestration design emerged from study of various vantage points of standing, seated, or bedridden individuals, including children. The windows are arranged like picture frames, with each individual view focused on a single part of the landscape.

In keeping with the material aesthetic and ecology of the Opera Village, local clay and laterite stone were used in the double-envelope construction of the walls for extra rain protection. Locally available eucalyptus wood, a species seen as an environmental nuisance since it contributes to desertification, has been used to line the suspended ceilings and covered walkways of the center.

Dano Secondary School, Dano, 2006-07

The Dano Secondary School is one of the most famous buildings created by Kéré in the early part of his career, and represents one of the icons of African contemporary architecture. The quality of the project lies in its ability to express the distinctive characteristics of a new way of designing in the contexts of the Global South. The following traits are of particular significance: simplicity of composition, efficacy of construction, iconic image, and the extraordinary ability to do a lot with a little. This building develops several themes that clearly emerged in the previous Gando Primary School, constructed in 2001. In particular, the construction type, the planimetric arrangement, the use of materials and the creation of a large roof are the architectural elements existing in both projects, which in the early 2000s set the character of the design research of Francis Kéré over the next two decades.

The primary objective of this project was to design a sustainable building appropriate for the climate conditions in this part of Africa. Again in this case, laterite stone has been utilized, a material that is abundant in this region. This material has the extraordinary virtue of offering excellent thermal performance while granting a massive, solid character to the construction. The entire composition is organized around the module of the single block, which repeats to form a simple, linear facility. The construction parts have been combined in a clear, simple way: a reinforced concrete base separates the construction from the ground, raising it by about 40 centimeters to protect against the problems caused by rain. The load-bearing walls resting on the base are made of laterite blocks, which in turn support a system of beams in reinforced concrete, with the function of connecting the construction and sharing out the weight of the roof. This room plays a fundamental role and represents the entire project with an iconic form: in corru-

gated sheet metal, it has a geometric design of small vaults supported by a complex system of iron beams. The upper surface is joined with a suspended ceiling that protects the internal spaces against the hot sunlight. The large size of the roof protects the external masonry and provides the whole building with an ample quantity of shade, facilitating natural ventilation and increasing thermal comfort.

The building is oriented along an East-West axis and the roof has a substantial overhang in order to reduce the amount of sunlight received by the walls. The building consists of three classrooms, a computer room and office space. There is also a covered outdoor «conversation pit», comparable to a classroom in size. The students can sit here during break times.

Natural ventilation is achieved by means of slits in the suspended ceiling, the slope of the corrugated metal roof and the shuttered windows. This is a more sustainable solution than the often-copied Western model of construction, according to which artificial air conditioning would be required in this part of the world.

This entire project was carried out in cooperation with young people, who had been trained in previous projects sponsored by Kéré's foundation. Through this operational model, the local work-force gained not only a newfound appreciation of traditional building materials, but also further experience, training and education.

Gando Teachers' Housing, Gando, 2004

The teachers' housing complex was one of the first buildings made at Gando, after the construction of the Primary School. Unlike most of the works designed by Kéré, this one has a residential function, with an appearance very different from his other buildings. The facility was designed to attract teachers to the countryside, as well as to promote the use of earth as a sustainable and durable building material.

The small size of the houses made it possible to reinterpret traditional residential types, and to experiment with new construction techniques aimed at formulating a model that can be implemented, adapted and utilized by the local population.

The houses were organized as a series of adaptable modules, each of comparable size to the traditional round huts typically found in this

region. Single modules can be combined in various ways into a larger composite whole. The simplicity of the design and the minimized use of purchased materials mean that the system can be easily applied by the inhabitants of the area.

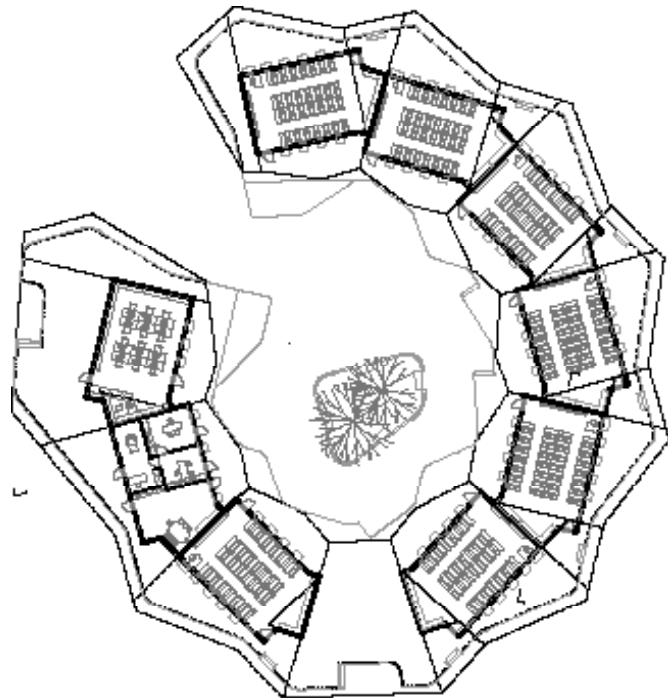
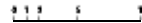
The six houses for teachers and their families are arranged in a wide arc to the South of the school complex. This curved layout is reminiscent of a traditional Burkinabè compound. The roofs are barrel vaults constructed from stabilized earth blocks. This construction method, previously unheard of in this region, makes use of local resources and is climatically efficient. To protect the building from rising dampness, the adobe walls with a thickness of 40 centimeters stand on a foundation of concrete poured in place and granite stones. The community produced around 15,000 blocks, each 40x20x10 centimeters, at a rate of between 600 and 1,000 per day.

A tie beam connecting the walls bears the roof load in each module. The roof is a layer of reinforced concrete poured on site into permanent shuttering of compressed stabilized earth blocks (CSEBs). The roof heights alternate between 100 and 150 centimeters; therefore when they overlap a sickle-shaped opening is formed, and serves as a means of ventilating the interior and providing daylight. Generous roof overhangs protect the walls from moisture. In traditional Burkinabè houses, a special type of thin loam rendering — mixed with vegetable juice and cow dung — is applied to the outer walls as a protective layer of about 3 centimeters against weathering. Unfortunately, these components are of little use in the rainy season and attract termites which can eventually destroy the walls. In the teachers' housing, the traditional organic components of the rendering were replaced with bitumen. The final step of the construction is the tamping of the clay floor to create a smooth, homogeneous surface. The enthusiastic involvement of the people of Gando was the key to the success of this project. Everyone gained not only new skills but also a sense of responsibility, awareness and sensitivity to both the traditional and the innovative aspects of building.

Conclusion

The works of architecture of Kéré are capable of narrating the context in which they are built, and of narrating Africa. The buildings have an inseparable relationship with the places that host them. Materials, geometries, shadows, light, construction systems and colors speak not only of the relationship between the construction and the surrounding environment, but also of how these buildings were made, through what forms of knowledge, with what kind of labor and craftsmanship, conveying a sense of the cultural character they set out to achieve. In this sense, the authorship of Kéré is vividly recognizable, yet at the same time it vanishes into a wider-ranging narrative, in which the inhabitants are the true protagonists.

We observe these works with the disciplinary interest of discovering how the lessons they convey can be applied to our contexts as well; they do not embody an interpretation of the *genius loci* described by Christian Norberg-Schulz, but a more radical way of understanding architecture as a primitive form of making, in which the simplicity of the construction is expressed through its suitability for the place in which it arises, and the respect for the technical, structural, economic and cultural capacities that permit its construction. We recognize the value of these works of architecture, their originality and autonomy with respect to a globalized debate on architecture that tends to uniformly standardize its language. We can observe how these projects manage to be independent of the logic of the market, opting instead for the pursuit of rationality in construction, to reduce costs rather than reducing compositional efficacy. These are works that represent a different way of thinking about architecture. It is in these principles that we can discover the great value of Diébédo Francis Kéré and its capacity to become an example that can also be exported into our contexts.



Diébédo Francis Kéré,
Lycée Schorge Secondary
School (Koudougou,
Burkina Faso 2018).

1
Section, plan and elevation
© Kéré Architecture.

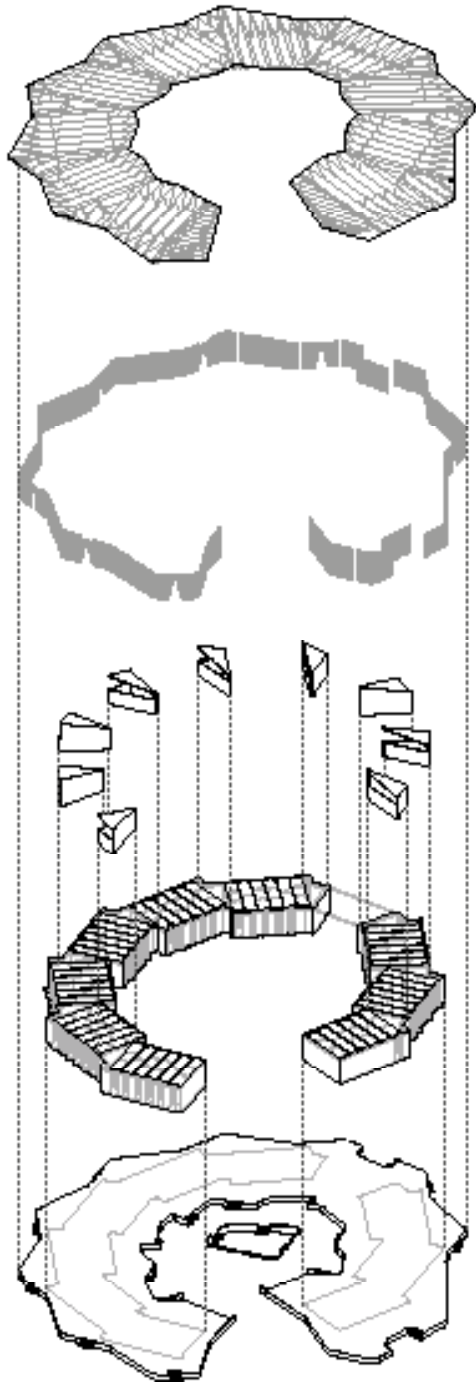


2
Detail of the façade
@ Kéré Architecture.

3
View of the building
@ Kéré Architecture,
ph. Andrea Maretto.



4
View of the building
@ Kéré Architecture,
ph. Andrea Maretti.



Metal Roof

Wood Screen

Wind Tunnels

Vaulted Classrooms

Concrete Platform

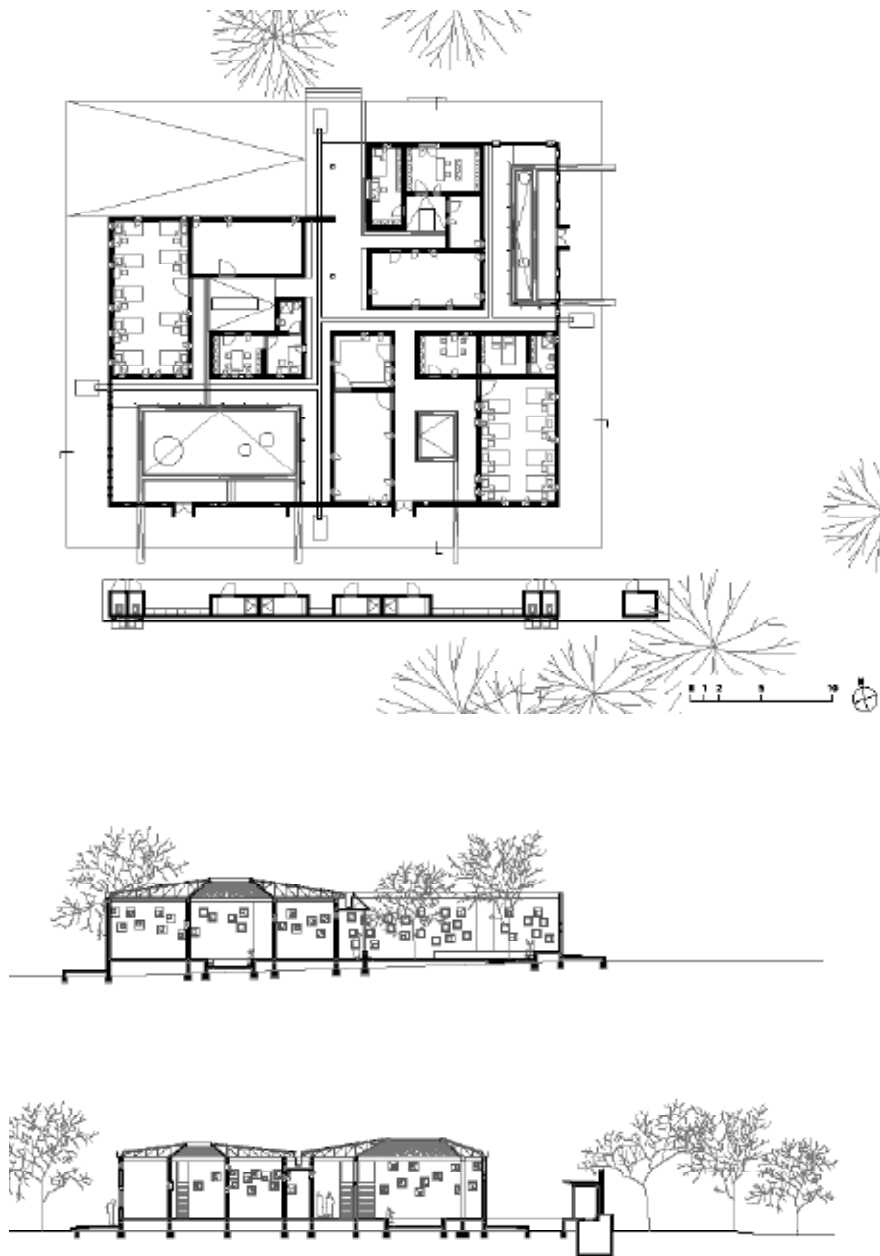
5
Exploded axonometry
© Kéré Architecture.



6 7
Detail of the border spaces
@ Kéré Architecture,
ph. Andrea Maretto.



8
Overview of the inner
courtyard @ Kéré
Architecture,
ph. Andrea Maretto.



Diébédo Francis Kéré,
Center for Health and Social
Welfare (Laongo, Burkina
Faso 2012-14).

9
Plan and sections
© Kéré Architecture.



10
Overview of the building
© Kéré Architecture,
ph. Erik-Jan Ouwerkerk.



11
Detail of the façade
© Kéré Architecture.



12
Detail of an entrance
@ Kéré Architecture,
ph. Erik-Jan Ouwerkerk.

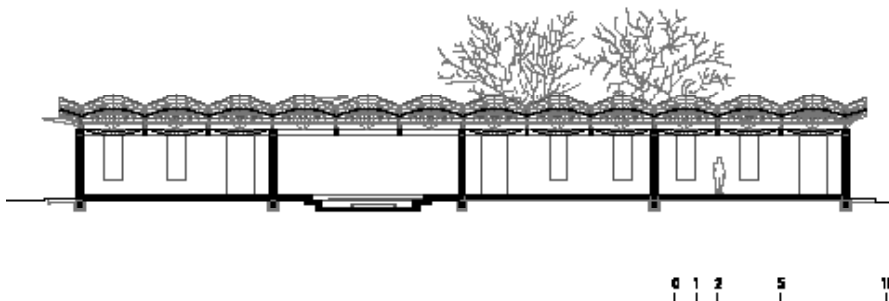
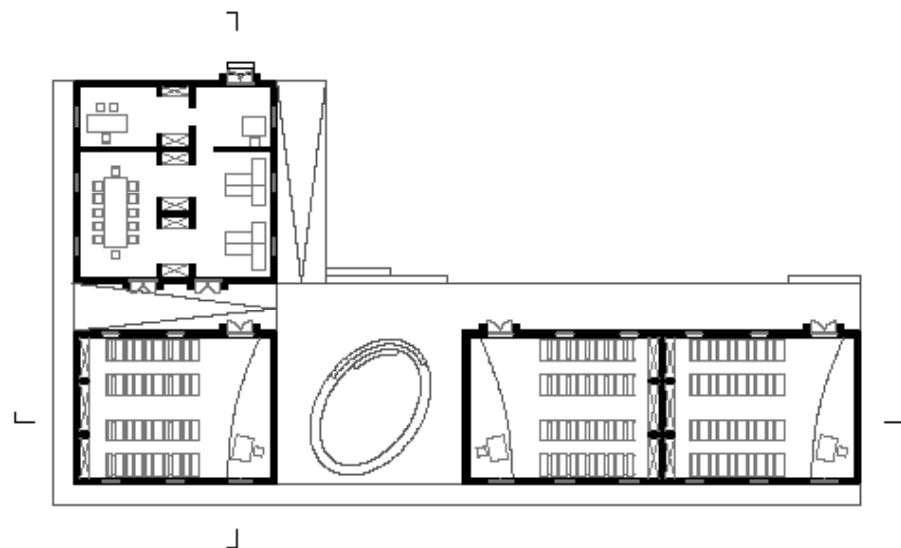


13
One of the inner courtyards
© Kéré Architecture.



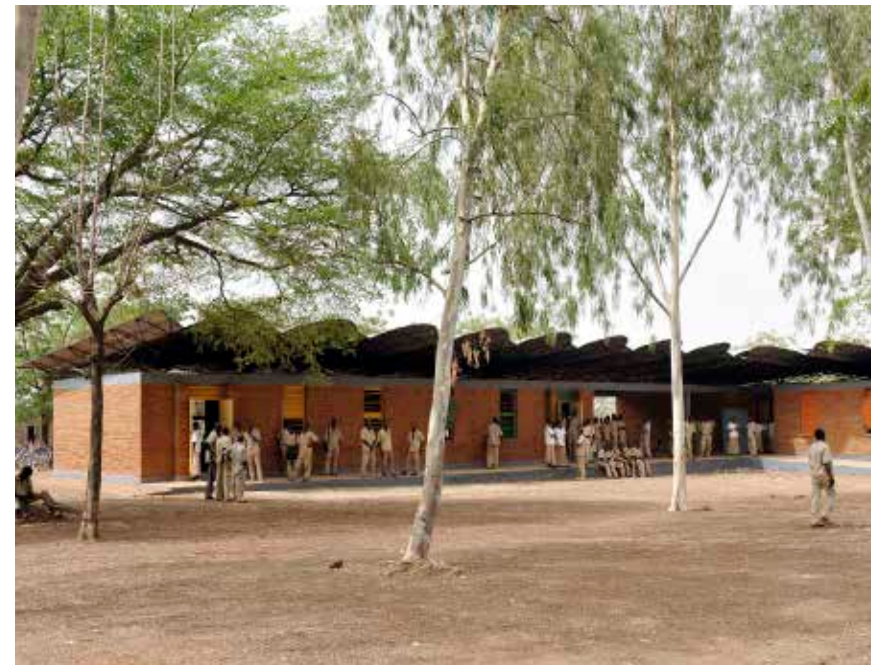
14 15
Interior spaces
@ Kéré Architecture,
ph. Erik-Jan Ouwerkerk.





Diébédo Francis Kéré,
Secondary School (Dano,
Burkina Faso 2006-07).

16
Plan and sections
© Kéré Architecture.



17
Overview of the building
© Kéré Architecture,
ph. Erik-Jan Ouwerkerk.

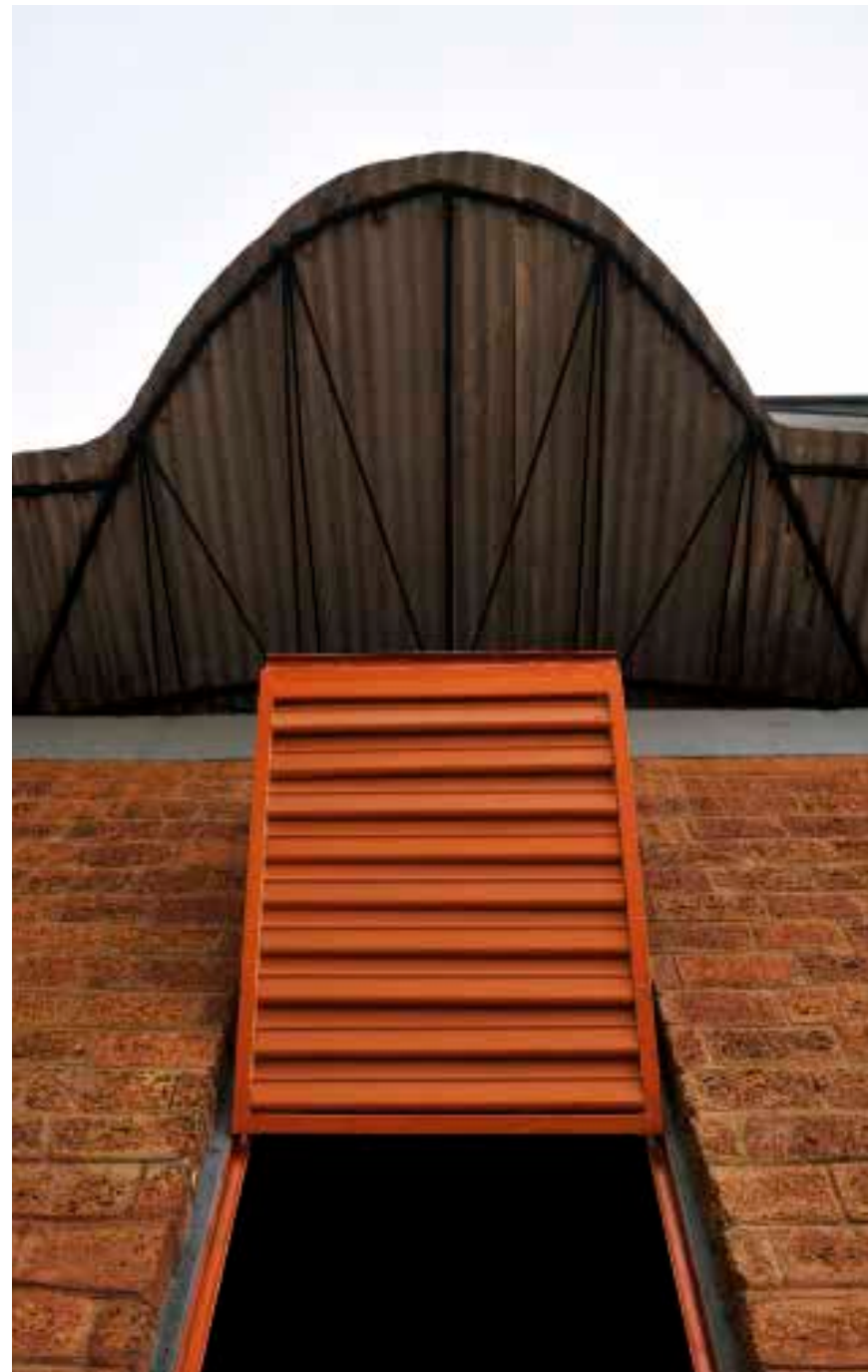
18
Detail of the façade
© Kéré Architecture.



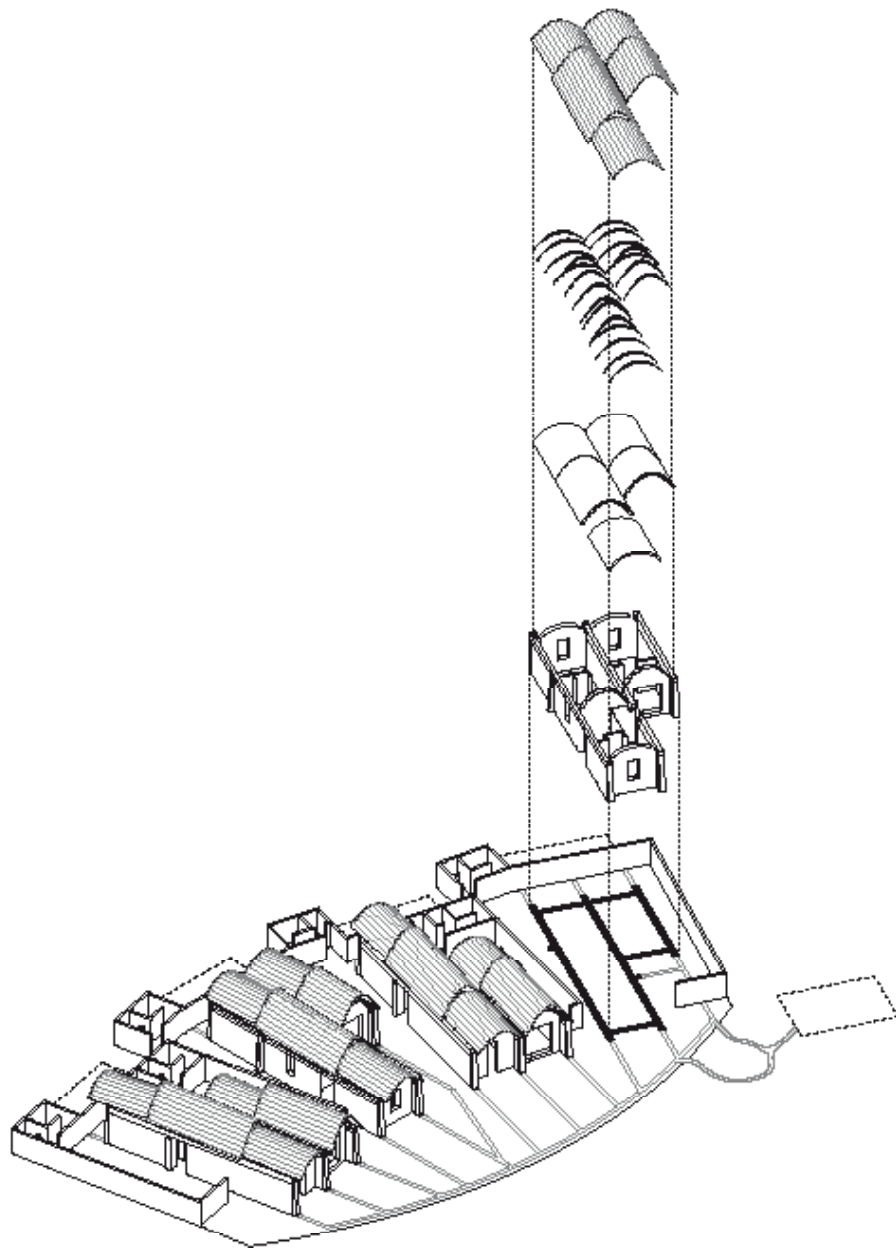
19
View of the semi-open space © Kéré Architecture.



20
View of one of the classrooms © Kéré Architecture.



21
Detail of the façade
@ Kéré Architecture,
ph. Erik-Jan Ouwerkerk.

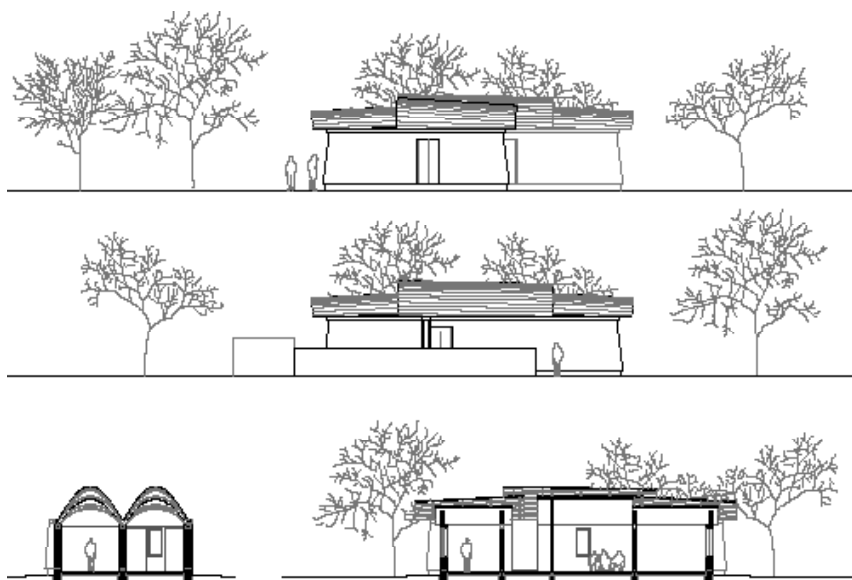
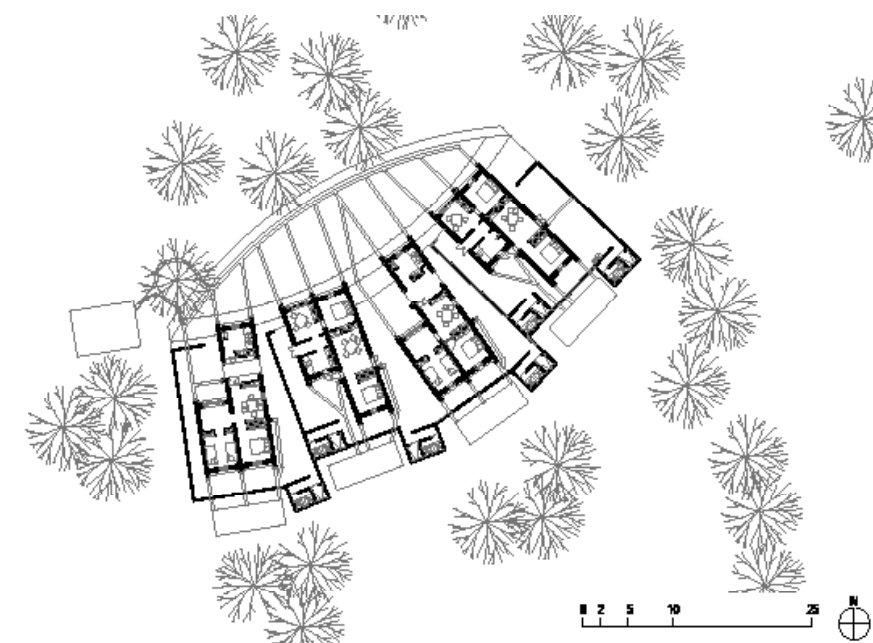


Diébédo Francis Kéré,
Teachers' Housing (Gando,
Burkina Faso 2004).

22
Exploded axonometry
© Kéré Architecture.



23 24
Views of the front
@ Kéré Architecture,
ph. Erik-Jan Ouwerkerk.



25
Plan and sections © Kéré
Architecture.



26
Detail of the building
© Kéré Architecture,
ph. Erik-Jan Ouwerkerk.

Layers

Luigi Spinelli

- A layer of whitish clay
a band of clayey sand
a layer of volcanic dust
a deposit of marine debris
a perforated limestone vein
from infiltrations of high saline rate
a red Cretaceous syncline
on a bed of Precambrian moraines
a considerable mantle of lava
that presses on the clay made shale
a layer of pure silicates
over a vein of metamorphic gneiss
a lava flow of magmatic granite
a late Devonian raid
another granite rich in feldspar
whole eras weighing on the last ones
traces of life on this planet

In 1968, the Argentine poet Juan Rodolfo Wilcock describes the heterogeneity of the unstoppable deposit of time, with an insistent image that can metaphorically represent the aspects with which the contemporary project is confronted with the theme of memory. The outcomes of this book show, to those who want to look at them, a research that does not renounce a reflection on the stratification of experiences and cultures. The result of the deposit of collective or personal contents in contemporary architecture constitutes its theoretical depth, contributes to the representation of an image, organizes its constitutive hierarchy, establishes a relationship with the context.

In its more material sense, which refers to the images of geology, the overlapping generated by sedimentation respects an established order and a positional hierarchy. The oldest layers are on the bottom; more and more recent ones cover them over time. Each stratiform element is identifiable by characters of distinctive identity and homogeneity, and it has consolidated in a recognizable portion of time and in constant physical conditions. This result of the overlapping action constitutes a protected legacy, which in human work is not only a sort

of secured bank deposit, but above all is the useful result of patience and experience over time.

The tectonic layering is present in the Madeira landscape in which Paulo David operates — a physical overlap of pergola terraces and split stone retaining walls, engraved by the narrow paths of local crops. It is also the sedimentation of stories, traditions and cultural meanings, visible in the signs of a strong nature, harsh in its elements. The materials of this difficultly passable landscape, constantly subjected to confrontation with the wild force of nature, are the liquid volcanic lava, violently cooled in contact with a second material: the water conveyed by sudden streams and the surrounding ocean, bearing at the same time danger and luck. A fusion of basalt stone characterizes the rugged surfaces of the island's limits as well as the textures of the black and white stone houses of the historic center. David shows a deep and sensitive knowledge of the traces of this territory, a deep bond rooted with intensity, that does not allow for transformations, but rather always integrations through analogue references to materials and colors. The architect's action works in section in the redesign of the territory, transversely with respect to the geological layering.

From the beginning of this century, also the approach of the Brazilian architect Marcio Kogan shows more and more interest in the theme of layering over time. It is an approach that relies on a paratactic model, based on a composition generated by the juxtaposition of closed and independent elements. This re-composition process does not concern the themes of typological evolution or hybridization: each element rigorously maintains its own autonomy, in a balance that respects the formal abstraction of each component. The design approach, however, alludes to addition rather than to transformation, as occurs in buildings following the juxtaposition of interventions in the depth of a time span, during which they acquire memory and the possibility of narration. This relationship with history — or rather with «apocryphal temporality» — has been effectively reflected in the projects of the last decade, in the redevelopment and addition to existing historical structures: in Rio de Janeiro, in the transformation of an early 20th century industrial building into a multifunctional cultural complex connected to the Municipal Theater, and in the Barcelona

Diagonal, in the recovery of a 1960s Modernist building by the Swiss architect Saugey, with the new identity of «the Squirrel».

Cristián Undurraga knows the lesson of the geography of his land: he possesses the aware instinct of the continuous silent activity of the earth, even when this does not manifest itself dramatically in a real earthquake. This multi-layered geography is a constant inspiration towards the knowledge of a unique landscape, which fosters the dialogue between nature and the work of men. The constructive sincerity of the *Capilla del Retiro* results into the construction of the liturgical space with only two archetypal elements: an excavation in the ground, bearing an archaeological memory, and a roof that assumes the modern image of a light device. From the awareness of the underground restlessness of this geography, a constructive sensitivity and a simplification to the minimum terms of the elements of the composition naturally derive, which are translated into a formal expression and in the adoption of an essential technology, such as that of laminated wood. Undurraga bases his ethical approach to his research on the theme of construction, extended to architecture and public spaces as well as to social housing, with a community sensitivity that he himself identifies as «the art of building hospitality».

In the practice of Jonathan Sergison and Stephen Bates it is a legacy of unwritten rules that comes from the training, experience and sensitivity of the two architects. A practice that manifests itself in the expression of a layered tectonics, drawing on the volumes of their urban architectures through calibrated overlappings and combinations of different architectural elements and materials, between pre-existing and new interventions. Thus in the Urban Housing and Crèche, in Geneva, the compact angular volume is modulated in overlapping parts by the supporting frame, each of which describes the program in a simple way. In the expansion of a 19th century school in the Public Library in Blankenberge, the extreme variety of the interior spaces is expressed towards the city through the size of the superimposed windows in the tectonic layering of the façade. Both architectures are characterized by a careful dialogue with the surrounding buildings, based on the interpretation of their respective urban atmospheres. The ability of the architects to recognize and assimilate the specific aspects of a place, whether expressed by architectural characteristics and rhythms or by

cultural and social sharing, shows a necessary assumption of responsibility in the intervention on the heritage.

When the layer, by revealing the infinitesimal dimension of the elements deposited in it, becomes thinner until it becomes a veil, or a film, until it loses the characteristics of thickness and opacity, we can speak of overlaying. This type of layering manifests itself in meteorology — where the layer is a uniform horizontal cloud of such thickness as to let the light of the sun or the moon shine through — or in ecology — where the living forms of a particular environment live in layers at different altitudes, depending on the needs of natural light or humidity. In the artistic disciplines, the fresco and watercolor techniques overlay a glaze that highlights the grain of the support. The work of a contemporary artist like Emilio Isgrò does not only involve the subtraction of words, but rather it involves the physical operation of the overlaying of a thin layer of paint or ink on the paper sheet or canvas. Marcel Duchamp conducted experiments in the field of photography throughout his artistic activity, going beyond the action of the machine that picks up fragments of reality with the direct intervention of the photographer, to verify new potentialities. The adjective ultrathin, or *inframine*, concerns incorporeal phenomena that cannot be perceived directly, except by the human brain, and opens to the fourth dimension. Duchamp describes some examples of this immateriality: the space between the front and the back of a sheet of paper, the people who cross the subway doors at the last moment, the X-rays, the reflections of light on surfaces and mirrors, a painting on glass seen from the unpainted side. In cinematographic projections, the montage and superimposition experiments in René Claire's film *Entr'Acte* use images that refer to each other in order to evoke, with the use of fading, something more than what they show. Through the reference to many and different practices, this type of layering can be described as the overlay of images so thin as to be transparent, enabling the projection of the underlying layers, enriching the vision with vibration and movement, involving imagination and dream.

Similarly, in Kengo Kuma's design method, the layering of memory refers to the concept of deposit of small particles or fragments, the infinitesimal units of which our universe is built. Kuma observed

this in the spontaneous villages of the Sahara and in the work of wood craftsmen in Japan. This theory of discretization, of mathematical origin and organic results, manifests itself in several aspects. First of all, it appears in compliance with the artisanal tradition of using wood in construction, with a contemporary interpretation, advanced tools of computational design and a parametric approach — as in the Sunny Hills store in Tokyo. Kuma claims the democratic nature of a construction process based on small and light elements, within the reach of anyone who is not a professional. Secondly, discretization manifests itself in the mnemonic relationship with nature through its abstraction in the primordial call to protection, and through its balance with it by means of the reduction of elements, surfaces and spaces to a human scale. In the simple architecture of *Kodama* at *Arte Sella*, Kuma adds the void, an oriental element, to the four elements of Western philosophy. Finally, it manifests itself in the recovery of the relationship between architecture and the human scale of the built environment, through the adoption of topological figures, regardless of the size of the elements, and the concept of topography — applied in the Victoria and Albert Museum in Dundee, where the concrete washed with water evokes the natural randomness of the rock and the lamellar element on the facade constitutes the smallest unit of measurement.

Solano Benítez's approach, in analogy with that of Kengo Kuma, works on the discretization of minute elements: instead of wood, he applies it through the use of the brick, the *ladrillo*. An apparently modest material, which has not exhausted the expressiveness of its multiple values. Benítez enhances its potential with a personal search for new and unconventional solutions at the service of a technique and a constructive use that is renewed and verified in any professional experience. The Paraguayan architect thus maintains a strong bond with the territory and with the local culture, starting from the resources and skills available on site. At the same time, he projects this traditional material towards the future, infusing it with a new authenticity, with new employment prospects. Above all, and unlike others, he is not pleased with the aesthetic result, but acts on the production, redeeming the conditions of an economically underdeveloped context by means of experimental and innovative ways of organizing the construction site.

The process to which the work of Angelo Bucci relies on refers to the theme of the projection, that crosses the layers of the operational phases of the architectural project. The overlay of several working tools that are not mutually exclusive — freehand sketches, technical and computerized drawings, physical and digital models — accompanies the projection into the third dimension of volumetric consequentialities, the sequence of ideas and the control of strategies. It is in this structure of thought that the architect faces the «challenge» of the design. One of the constant elements of this projective process is the topography of the place, which in Bucci's houses is not opposed nor modified, but rather is involved and supported in the process of foundation and simultaneous re-signification of the ground. The way of going through these architectures overturns the traditional section, rooted on the ground and growing upwards, adopts the slopes and irregularities of the ground as an element of the place with a projective value, and establishes new paths and new privacy gradients through the use of layers and terraces. This attitude is also supported by the theme of the threshold, the interface between inside and outside, which is inserted in the paths at the points where the relationship with the landscape is set. Bucci's assertion «there are many doors and many ways to get through them», and the admiration for the architecture of Vilanova Artigas, where «you simply don't know whether you are inside or outside», explain the architect's interest.

A stratigraphy deeply perforates the layers to reconstruct the dating of the overlapping phases, through the analysis of their homogeneity, consistency and arrangement. Hybrid materials resurface from the depths — as in an overturned version of the *Cretto* by Burri — as they are made up in different moments and situations, mixed and contaminated with each other, evidence of the cyclical character of history. A bit like what has happened in recent decades in the social and economic fields, with the remixing of the vertical overlapping of income brackets or classes, due to globalization. Important indicators emerge in the section of the excavation, such as fossils, testifying to previous forms of life, or incoherent and unconsolidated joints that testify to a sudden fracture in the overlapping. The design and research in architecture have the ability to revive the buried layers and re-

compose them in a new surface design, to act in section by overlapping writings, to probe the interstices caused by discontinuities.

The archaeological layers are the material with which Angela García de Paredes and Ignacio García Pedrosa are often confronted, being frequently engaged in contexts characterized by the deposit of history. Their design approach is not limited to an intelligent — and not self-representative — reading of the complexities of each specific context; above all it shows the ability to intertwine and make visible symbolic relationships and references among the different temporal layers of a place, in a dialogue between tradition and innovation. Their vision of time is articulated, it reads not only its continuity but also its lacerations, distortions and scars. Their approach sometimes operates with the adoption of a particular material, or with historical citations or urban references; it transforms their architectures into devices that visualize time in space. The results do not correspond to a frozen museum practice, nor to the work of the archaeologist. By renewing the culture of the project in historical contexts, they show the ability to graft the previous phases into the current life of the city, renewing the history of the site with an episode of its own time.

The architectures of Niall McLaughlin — the Centre for Contemporary Irish Culture in Kenmare and the projects for the Scotland Wing Extension and the Welcome Building of the Auckland Castle — have a contemporary identity of their own, and are representative of the meanings and motivations that generated them. At the same time, events and meanings of the past, belonging to the world of forms, emerge from the layering of collective memory. These architectures therefore take on a narrative value, and tell parables: the imaginary is confronted with reality and, by reappearing in the project through the architect's evocative vocabulary, it inspires and recomposes new future meanings. To engage in temporal stratification by assuming, through analogy, values that go beyond the sequence between past and future, involves a reflection on the history and life of architecture, and on the meanings of the forms of the past. This method reminds us of the image of the old Finn — in Joyce's *Finnegans Wake* — who, lying on the bank of the Anna Liffey river, observes the history of Ireland and the world deposited along the river of life passing through his mind.

João Nunes works on spaces of transition and overlapping of meaning, which result from the re-emergence of temporal layering and once again in play for a new role. His research is based on strategies of interaction and rebalancing between the system of natural values and the forms of human settlement action. Interaction is intended as a mediation practice between complex situations and different occasions, as an activity of research and recognition of the processes of anthropization and transformation of the territory and the identity traces that have overlapped and integrated over time, as well as a project strategy for the recomposition of settlement paths. The scale is that of the landscape project, due to the relationships and variety of the elements involved. An example of this recomposition approach is the reconfiguration of the morphology of the Alcântara Valley and of the numerous elements it includes, enhancing the stratification of the signs that characterize the slopes at different altitudes. Another example is the intervention of the Ourém Linear Park, which re-orientates the connections and redefines the margins, in search of new uses and a new identity of the place.

If the layer is constituted by the deposit of events, and if these, by settling down, become memories, the overlapping becomes the recorded trace of time and memory, something like a musical track that intertwines or overlaps with numerous others. The reactions to this backup of memory can be different: the habit of normal daily life, which is repeated every day, with its same spaces and objects, the wounds of the violence of war or the relentlessness of nature, inflicted on the surface of things, the persistence and indelibility of images and places, or the ability to re-read, listen to or view again, at different times, hence obtaining deep and different emotions.

The meaning that Rafael Moneo gives to memory is that of a layering based on a continuous and unstoppable flow, where modernity will also settle, by becoming the last layer of self-awareness. The layering of memory becomes the trace for the action of the contemporary architect, through the reworking of the more or less permanent phenomena of the past: typology, shape, materials, language. Moneo's architectural culture is able to produce an extremely wealthy range of meanings, with the help of the abstraction of the messages of the past,

and achieves modern formal results without betraying the original values. At the same time, it expresses itself with evident materiality and constructive clarity. His experience denies self-referentiality, and adapts to a personal interpretation of different places, situations and contexts. This happens for example in the Madrid Atocha Station, with the interpretation of a representative typology such as that of the railway station through the changes and needs that evolved over time. Moneo's architectures therefore fit into the rhythmic flow of time, or «dance» in time and space, as Josep Questglas says, with the freedom to reflect on how time is one of the most powerful variables for a designer.

Sean Godsell's action is characterized by an incremental method of patient layering of his research over time, an overlapping of heterogeneous references, direct or indirect, which may come from the experience of an architect or from personal imagery. A first family of references ensues from the study on the evolution of building types, not only of the settlement model originating in Australia but also of other Western specificities. The project for the Carter/Tucker House, for example, stems from a reflection on the transformation of the relationship between some parts that constitute the house, between the distribution corridor and the veranda understood in different cultures. A second source of reference is the lesson of the masters of the long history of Western architecture, from Michelangelo to Palladio to Le Corbusier, as it appears in the Royal Melbourne Institute of Technology Design Hub. The dialogue with the past is also expressed through the knowledge of the identity characters of the territory and of the multifaceted culture in which Godsell operates: in Australia, where the colonial culture is intertwined with the aboriginal one, different traditions overlap and alternate in the way of building and living. The House in the Hills in Barrabool is an example of this application of the characteristics of the territory. By interweaving architecture and history, Godsell adopts a methodological attitude where the role of time becomes important, understood as a place of memory but also a place for experimenting with the needs of contemporaneity.

In the daily practice of the Brazilian architect Paulo Mendes da Rocha, the question about the meaning of making architecture is constantly present. This attitude also has to do with the record of time in

the architect's work, in this important political tool for transforming human life on our planet. The ways in which this practice is carried out research the structural aspects and the memory of tradition and popular culture, rather than the formal and intellectualistic aspects, and are reinvented in each project, in the face of the available resources, seeking the adhesion between one's actions and thinking. Over time Mendes da Rocha has refined his poetics and his thoughts on the world and its absurdities, moving more and more towards essentiality, carrying out a continuous search for coherence in practice and refining his ability to associate his architectures to images that are powerful and full of memory.

Finally, if there is a way of interpreting the memory of places through the contemporary spaces of everyday life, this happens in the architecture of Diébédo Francis Kéré. His creations are strongly rooted in the specific community identity and building culture of Burkina Faso, in the conditions of light and shadow, in the colors and in the simple and effective geometries of his land. The memory of the places is revealed in each of its architectures through the materials available on site, such as laterite, a rock rich in iron and aluminum, that give it a reddish color, or eucalyptus wood, which are renewed with the aim of an updating of technology and image. The ability to interpret the memory of the primitive tradition and the primary needs for protection from the environment in which Kéré operates, are thus summarized through a contemporary language that also owes a lot to its European formation.



■
Alta Valle Bormida, 2003,
ph. Marco Introini.

Guillermo Aranda-Mena is Professor in Property, Construction and Project Management at the Royal Melbourne Institute of Technology, and Visiting Professor at the University of Applied Sciences and Arts Northwestern Switzerland and Politecnico di Milano.

Alessio Battistella teaches at Università di Camerino, Politecnico di Torino and at the School of Sustainability in Bologna, and is director of the cooperative *ARCò Architettura e Cooperazione*.

Marco Biagi is Professor in Architectural Design at the Department of Architecture, Built Environment and Construction Engineering of Politecnico di Milano.

Barbara Bogoni is Professor in Architectural and Urban Design at the Department of Architecture and Urban Studies of Politecnico di Milano.

Gabriel Brailio Botasso is Ph.D. in Architectural Theory and History at the Institute of Architecture and Urbanism of São Carlos of the University of São Paulo.

Filippo Bricolo is Professor in Architectural Design at the Department of Architecture, Built Environment and Construction Engineering of Politecnico di Milano.

Luca Cardani is Professor in Architectural Design at the Department of Architecture, Built Environment and Construction Engineering of Politecnico di Milano.

Helder Casal Ribeiro is Professor in Architectural Design at the *Faculdade de Arquitectura da Universidade do Porto*, where he is member of the Study Centre of Architecture and Urbanism.

Martin Corullon is Visiting Professor at the *Escola da Cidade* and the *Univesidade Paulista* in São Paulo and at Politecnico di Milano, and director of the São Paulo-based practice *METRO arquitetos*.

Veronica Ferrari is Post-doc Research Fellow at the Department of Architecture and Urban Studies of Politecnico di Milano.

Marco Imperadori is Professor in Building Production at the Department of Architecture, Built Environment and Construction Engineering of Politecnico di Milano, where he also serves as Rector's delegate for Far East Asia.

Joubert José Lancha is Professor at the Institute of Architecture and Urbanism of the University of São Paulo, where he is Director of the Institute of Architecture and Urbanism.

Camillo Magni is Professor in Architectural Design at Politecnico di Milano, where he serves as Director of the Design for Development in the Global South Master.

Elena Montanari is Professor in Interior Architecture and Exhibition Design at the Department of Architecture and Urban Studies of Politecnico di Milano.

Matteo Moscatelli is Professor in Architectural Design at the Department of Architecture and Urban Studies of Politecnico di Milano.

Carlo Peraboni is Professor in Urban Design and Landscape at the Department of Architecture and Urban Studies of Politecnico di Milano.

Luigi Spinelli is Professor in Architectural Design at the Department of Architecture and Urban Studies of Politecnico di Milano.

Simone Helena Tanoue Vizioli is Professor at the Institute of Architecture and Urbanism of the University of São Paulo, where she is the President of the International Cooperation Commission.

Claudia Tinazzi is Professor in Architectural and Urban Design at the Department of Architecture, Built Environment and Construction Engineering of Politecnico di Milano.

The fourteen critical essays included in the book explore the work of architects who have significantly interpreted the layering of history and memory in the contemporary context: Paulo David, Marcio Kogan, Cristián Undurraga, Jonathan Sergison and Stephen Bates, Kengo Kuma, Solano Benítez, Angelo Bucci, Ángela García de Paredes and Ignacio Pedrosa, Níall McLaughlin, João Nunes, Rafael Moneo, Sean Godsell, Paulo Mendes da Rocha, Diébedo Francis Kéré.

The volume aims at critically reflecting on the work of these protagonists of the international architecture culture, who have lectured within the Mantovarchitettura programme and fostered the debate between professional experience and university teaching.



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